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THE STRUCTURE OF MOTIVES MEDIATING MORAL JUDGMENT

Ву

DeWayne Moore

A DISSERTATION

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ABSTRACT

THE STRUCTURE OF MOTIVES MEDIATING MORAL JUDGMENT

By

DeWayne Moore

The present investigation was aimed at making a contribution to the literature on moral judgment and helping behavior. In the context of the traditional moral judgment paradigm, the present research concerned both the independent and dependent variables.

Two studies sought to identify groups of motives for not helping salient to adults and children. Motives, fortuitously chosen, have served as independent variables in several studies. Thus, in the first study, which used college students as subjects, a set of 17 motives for not helping were obtained through open-ended procedures and analyzed using multidimensional scaling (MDS) and cluster analysis. The MDS results revealed an evaluative dimension and a second dimension which ranged from motives which could be used to predict not helping to motives which could not. The clustering results revealed a single cluster containing most of the bad motives. The remaining

clusters were interpreted as apathy, lack of reciprocity, and inhibition.

In a second study, similar procedures were used to examine the motive structures of fifth- and ninth-graders. The fifth-graders generated 16 nonredundant motives for not helping. The MDS results revealed an evaluative dimension ("right-wrong") and a second dimension which ranged from motives having something to do with the person to motives having something to do with the situation. The clustering results, again, revealed a single cluster containing most of the bad motives. The "good" motives formed three clusters. One contained items bearing on the temporal cost of helping. The two remaining clusters concerned the characteristics of the victim. One referred to the victim's independence, while the other suggested that the victim was not a nice person.

The ninth-graders generated 17 motives for not helping. The MDS results revealed a control dimension (Under the actor's control—not under actor's control") and an intentionality dimension. The clustering solution revealed three clusters. The largest cluster contained items dealing primarily with either apathy or lack of empathy. A second "bad" cluster contained items having to do with negative affect toward the victim. The single "good" cluster concerned the temporal cost of helping.

The third study examined the dependent variables in the moral judgment paradigm. The primary aim of this

study was to specify the relationships among different types of judgments. College students were asked to judge several different moral events. Based on factor analytic work, evaluation of the actor, evaluation of the actor's behavior, and liking of the actor formed a moral evaluation index. Responsibility of the actor, blame attributed to the actor, and causality formed a responsibility index. Judgments were also obtained for retribution to the victim ("actor should apologize to victim"), intentionality of the actor, and fairness (justice) of what happened to the victim. Based on the moral judgment, equity, and ethics literature, a path model was proposed. The model indicated that the event was first seen as just or unjust. perception influenced whether or not the actor was perceived as intending the outcome, whether or not the actor was held responsible, and finally how the actor was evaluated and whether or not the victim deserved some form of retribution. Intentionality, which was influenced by the perception of Justice, influenced the attribution of responsibility, and evaluation and retribution. Finally the attribution of responsibility, while influenced by Justice and Intentionality, also influenced Evaluation and Retribution. The path coefficients indicated that intentionality could profitably be dropped from the model. Thus, this more parsimonious model was adequate.

To, for, and because of my mother and her parents

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CHAPTER I

INTRODUCTION

Social cognition has been defined in many ways. Flavell (1978) recently offered the following definition:

Social cognition can be defined as any sort of cognition that takes human psychological and social phenomena as its affect. It therefore includes our conceptions ('naive theories'), knowledge, inferences, and observations concerning our own and other people's feelings, perceptions, motives, intentions, thoughts, personality traits, social interactions, moral and other norms (social, legal) and numerous other contents of our social world (p. 43).

Perhaps one of the earliest and most succinct definitions was suggested in a statement by Epictetus (first century A.D.), "Men are disturbed not by things but by the views they take of them."

The focus of the present investigation is on the "views" children and adults take of moral events and how that affects their judgments. Helping, or more accurately, not helping was chosen as the moral event to study. As Mussen and Eisenberg-Berg (1977) note, very little is known about why people help or fail to help others. On the basis of theory or speculation, many behavioral scientists have attributed to people motives for helping or not helping (for example, guilt, apathy, gain approval,

empathy, etc.). But, with very few exceptions
(Eisenberg-Berg & Neal, 1979) investigators have not
examined people's motives for prosocial or antisocial
actions directly. Thus, the present investigation was
aimed at making contributions to the literature on both
moral judgment and helping behavior.

In the context of the traditional moral judgment paradigm, the present research concerns both the independent and dependent variables. Two studies sought to identify groups of motives salient to children and adults. Motives, fortuitously chosen, have served as independent variables in several studies (see Keasey, 1978, for a review).

Finally, a third study examined the dependent variables in the moral judgment paradigm. The aim of this study was to examine different types of judgments, i.e., evaluation, responsibility, etc., and specify the relationships among them.

Thus, three studies are presented. A general review of the moral judgment literature is presented first, followed by the three studies. Reviews of the specific issues precede each study.

Review of the Moral Judgment Literature

Largely as a result of the impact of attribution theory on social and personality psychology, developmentalists are beginning to examine the structure of

causal thinking in the context of social and behavioral phenomena (Karniol & Ross, 1976; Weiner & Kun, in press). The structure of causal thinking refers to any real or perceived relationship between events that influences moral evaluation. The content of a child's causal thinking is likely to be very different from the content of an adult's causal thinking, as Piaget's research documents; however, the structure of a child's and an adult's causal thinking could conceivably be the same.

Since this body of work deals with the evaluation of social and behavioral events, Piaget's (1932) discussion of the concept of intentionality is relevant. As will become clear, this work has not examined notions of causality, or in the present context, the reason or purposes for an action, but rather the focus has been on the evaluation of moral behavior.

From interviews with 5 to 13-year-old children,
Piaget identified what he believed to be two major stages
of moral development. The developmentally earlier stages
he alternately called heteronomous morality, moral
realism, or morality of constraint; the later stage he
called autonomous morality or morality of cooperation.
Embedded within these two broad stages were as many as
11 different aspects of moral reasoning (Hoffman, 1970;
Lickona, 1976). Only the objective/subjective concept of
responsibility, however, has direct relevance to the

concept of intentionality. Objective responsibility refers to the tendency to judge acts mainly by their material results, whereas subjective responsibility refers to the tendency to stress the intentions of the person being judged. Piaget's primary interest was in the relative influence of these two types of responsibility on children's judgments of others' actions. As Keasey (1978) notes, Piaget was well aware of the methodological difficulties involved in assessing their relative influence. realized that "pure observation is the only sure method, but it allows for the acquisition of no more than a small number of fragmentary facts" (p. 107). Thus, instead, Piaget chose to study how children evaluate hypothetical children on the basis of a pair of stories, each of which describes the actions of a single child. The child in one of the stories accidentally causes a relatively large amount of damage while acting from some good intention, such as a desire to help, and the child in the other story causes a small amount of damage while acting either from malice or greed. Piaget noted that a child may actually use intentionality long before he is conscious of the principle of intentionality. Thus, there is a time lag between the child's direct evaluations of daily life and the child's verbal judgments of the behavior of others. Piaget (1965) states,

As far as he, the child himself is concerned he succeeds fairly soon (at about 3-4, when the first 'whys' and the interest in motivation begins) in

differentiating intentional faults from involuntary breaches of the moral code. And soon after this he learns to excuse himself by the plea of 'not on purpose.' But when it comes to the deeds of those around him, things appear in a very different light . . . To put it differently, moral realism will last longer with regard to the evaluation of other people's conduct than with regard to that of one's own (p. 183).

The results of Piaget's observations and subsequent replication studies (Bandura & McDonald, 1963; Boehm, 1962; Boehm & Nass, 1962; Grinder, 1964; Johnson, 1962; Lerner, 1937; MacRae, 1954; Whiteman & Kosier, 1964) suggest that children's use of subjective responsibility increases with age. Furthermore objective and subjective responsibility do not appear to represent distinct stages.

More recently, interest in the relative influence of objective and subjective responsibility on moral judgment has declined. According to Keasey (1978), most investigators since 1970 have been asking a very different question than Piaget. The general focus of this question seems to be the age at which children first begin to use intentionality in making judgments. Thus the methodological criticisms and innovations reviewed here and elsewhere (Keasey, 1973; Karniol, 1978), reflect an interest in this new question.

Several researchers have indicated that intentionality and consequences are confounded in Piaget's original stories (Berg-Cross, 1975; Costanzo et al., 1973); Hebble, 1971; Shantz, 1975). Imamoglu (1975) argued that because of this, there are at least three plausible rival

hypotheses for the objective responsibility evidenced by young children. They may be (1) unable to discriminate between intentional and accidental occurrences, or (2) unaware of the significance of intentionality for moral judgments, or (3) simply find the consequences to be a more salient cue within Piaget's paradigm. Furthermore, as Shantz (1975) points out, the motive (good or bad) and the responsibility for the outcome or consequences (accidental or intended outcome) are often confounded. Good motives have included a desire to help, attempts to be generous, permissible fun, honesty, obedience, and to win a game. Bad outcomes have resulted from sneezing, being tired and hence not adequately careful or thoughtful, not knowing a particular piece of information in order to foresee the outcome, tripping, dropping something, moving too quickly, and an unspecified occurrence termed accidental. Bad intentions have included anger, which may or may not have been intended to produce the consequences, greed, sheer caprice, ignoring injunctions of authority. All of these may or may not be intended to produce a bad outcome. Finally, the recipient of the outcome has included the actor, father, mother, sister, friend, object, and stranger. As Sedlak (1973; reported in Shantz, 1975) notes, the finding that a young child's moral judgments are based largely on outcome may be due to the fact that outcome magnitude or levels has been the only aspect of the story systematically varied.

Hebble (1971), in his dissertation research, was perhaps the first to unconfound intent and consequences in Piaget's stories. He included two additional combinations: a good motive followed by light damage and a bad motive followed by heavy damage, thus generating a 2 x 2 design. Also, instead of requiring the subjects to compare the behavior of the two story actors, he asked them to judge individually the behavior of the actor in each story by using a four-point rating scale. Subjects were first through sixth graders and each was assigned a ratio score which indicated the extent to which they were basing their naughtiness rating on intent. The analysis of variance yielded a significant main effect for grades, with the biggest shift to intent-based judgments occurring between the third and fourth grades (between nine and ten years). Even the ratings of the first graders, however, yielded an intent ordering of the combinations: good intent-low outcome, good intent-high outcome, bad intent-low outcome, and bad intent-high outcome.

Gutkin (1972) attempted to determine the relative weight given to damage and intentional factors in the judgments of first, third, and fifth graders by using the traditional forced-choice format. However, he extended the number of combinations of good (G) or bad (B) intent and high (H) or low (L) damage to six: (A) GH vs. BL, (B) GL vs. BL, (C) GH vs. BH, (D) GH vs. GL, (E) BH vs. BL, and (F)

GL vs. BH. Since the results of a pilot study indicated that the story pairs A and F, C and B, and D and E did not differ significantly from each other, only Types A, B, and E were included in the main study. Gutkin interpreted his results as suggesting that the development of intentional basis of judgments can be represented by four stages. the first, children judged the two story actors as equally naughty when they produced equal amounts of damage, regardless of differences in intentionality. At the second stage, judgments based on intent were made only when consequences were identical (Type B), not when damage varied. At the third stage, judgments based on intent were made to Type B and A, but not to Type E, indicating that when only consequences varied, judgments were based on consequences alone. Finally, children at the last stage considered intentionality more important than consequences for all stories.

Subsequent studies provide evidence that intentionality judgments are affected by the severity of the consequences, at least up to age ten (Armsby, 1971), and by whether the consequences are directed toward people or objects with more subjective judgments for people (Berg-Cross, 1975; Imamoglu, 1975). The medium of presentation has also been examined. Chandler et al. (1973) found that first graders gave significantly more subjective responses to videotape, but Berndt and Berndt (1975) found no differences among 4-, 8-, and 11-year-olds. Gottlieb et al.

(1977) portrayed outcome or intent pictorially. They expected that young children (4-5 years old) would use that bit of information illustrated by the picture. There was no evidence, however, to support this hypothesis.

Keasey (1978) notes that the contradictory findings with regard to the relative effectiveness of stories versus visual presentation in eliciting subjective responses from young children would seem to hinge upon the relative salience of the two components in each medium. It is quite possible that within either medium one component could be operationally given greater salience than the other. At this point the most that can be said is that intentions have no intrinsically greater salience for visual presentation, as the Chandler et al. (1973) study originally suggested.

Several studies have examined order effects in moral judgments (Gottlieb et al., 1977; Feldman et al., 1976; Parsons et al., 1976; Nummedal and Bass, 1976).

These researchers noted that intent and consequence information are always presented in the same order, with consequences second. Thus, the finding that young children use consequence more than intent may, in many cases, simply reflect a recency effect. In general, the results from these studies support this hypothesis, but order reversals seldom lead to an absolute reversal of the importance of intent and consequence information. However, the judgments of younger children (4-7 years) tend to be dependent on the

information presented last, while for the older children, ratings reflect an integration of both kinds of information.

Keasey (1977) found that six-year-olds used significantly more intentionality concepts in their reasoning when exposed to stories in which they (vs. someone else) were the central story character. Nummedal and Bass (1976) with slightly older subjects failed to find any effect for the self- vs. other-oriented stories. The crucial difference here would seem to be the age of the subjects.

Shantz (1975) and Keasey (in press) note that motive and intentionality are often confounded in studies of moral judgment. The concept of intentionality does not deal with what a particular motive might have been but rather whether the action was intentional or accidental.

Keasey (1978) concluded, and he appears to be correct, that only two studies (Berndt and Berndt, 1975; Peterson and Keasey, 1976; reported in Keasey, 1978) have examined the intentionality/motive distinction. Berndt and Berndt were interested in three questions: (1) Do young children understand the concept of motive? (2) Do young children understand the accidental/intentional distinction? (3) When do motives and intentionality begin to affect children's evaluations? Seventy-two children from three age groups--4-11, 8-2, 11-2--were presented with videotapes and stories which portrayed an actor who intentionally or

accidentally injured another for either good or bad motives. Children's understanding of motives and intentionality were assessed from their descriptions of what happened in the different stories and videotapes. The results revealed that children of all ages understood the concepts of motive and intentionality. At all ages, evaluations were affected by motives, but intentionality affected only grade school children's evaluations.

Peterson and Keasey presented children from three age groups--3-8, 4-4, 4-11--with three stories that all ended with identical positive outcomes. The outcome resulted from either an accident or a good or bad motive. The dependent measures included reaction times, evaluative ratings, comprehension, and reasoning. The ratings by children at all three age levels clearly differentiated between actors with good versus bad motives. Children at all three age levels were unable to systematically differentiate accidents from either good or bad motives. Furthermore, while about a quarter of the reasons children gave for their evaluations of story characters with either good or bad motives reflected a correct understanding of the actor's motive, only one child out of 36 gave a reason for his evaluation of the accident which came close to being accurate.

The results from these findings suggest that the ability to differentiate good and bad motives begins as

early as age three and continues to improve up to age eight or nine. Furthermore, intentionality does not seem to affect children's evaluations until about six years of age.

The purpose of the present research is to determine whether motives are more complex than just good or bad, to determine whether motives, other than good and bad, influence moral judgment, and to determine the relationships among different measures of moral judgment.

CHAPTER II

THE STRUCTURE OF MOTIVES:

A PILOT STUDY

Several studies have examined the influence of motives, i.e., the reason or purpose for an action, on moral judgment. The usual procedure in these studies is to present subjects a brief story describing the actions of a hypothetical person (actor). The actor causes either a good or bad outcome from either a good or bad motive. Good motives have included a desire to help (MacRae, 1954; Berndt, 1977; Chandler, Greenspan, and Barenboim, 1973; Stuart, 1967; Weiner and Peter, 1973; Whiteman and Kosier, 1964), attempts to prepare a nice surprise for the parent (Whiteman and Kosier, 1964), obeying the parent (Whiteman and Kosier, 1964; Berg-Cross, 1975), sharing (Berndt, 1977), a desire to clean one's room (Costanzo, Coie, Grumet, and Farnill, 1973), and altruism (Berndt and Berndt, 1973). motives have included not wanting to help (Weiner and Peter, 1973), a desire to fight (Whiteman et al., 1964), disobeying parents (Whiteman et al., 1964; Berg-Cross, 1975), displaced aggression (Berndt and Berndt, 1975, instrumental aggression (Berndt, 1977; Berndt and Berndt,

1975), a desire to finish quickly (Bandura and McDonald, 1963), an intent to steal something (Johnson, 1962), hostile aggression (Berndt, 1977), a desire to mess up one's room (Costanzo et al., 1973), and a desire to paint the family cat (Chandler et al., 1973). Moreover, the outcome in these stories is frequently unintended or accidental. All of these investigators have chosen the motives to present to subjects intuitively, fortuitously, or according to criteria which may have little to do with obtaining motives representative of the ones subjects would actually use if given an opportunity to explain an actor's moral behavior.

These procedures can be criticized for two reasons. First, they restrict subjects to a few possible motives for an actor's behavior. Second, the motives supplied by the experimenter may not be representative of the motives the subjects would use if given an opportunity to explain the actor's behavior. Finally, the structure of motives for moral behavior may be more complex than the simply evaluative. There may be several dimensions or types of motives, other than just good or bad that influence moral judgment. Finally, as Sedlak (1973; reported in Shantz, 1975) notes, the finding that a young child's moral judgments are based largely on outcome may be due to the fact that outcome magnitude has been the only aspect of the story systematically varied. It therefore

seems clear that if we are to understand the development of moral judgment, a more systematic examination of the motives for moral behavior is needed.

The purpose, then, of the present research is to examine the structure of motives underlying moral behavior. Several lines of research suggest what that structure might be. Clearly, the moral judgment literature suggests that evaluation is an important dimension of motives. Furthermore, the attributional analyses of Weiner and his associates (Weiner, Frieze, Kukla, Reed, and Rosenbaum, 1971; Weiner, 1974) suggest the importance of prediction, or knowing what to expect. Weiner and his colleagues have found that stable causal attributions for success and failure are related to future predictions.

Paulson (1972) also emphasizes the observer's need to predict behavior. Paulson notes that an observer, by appealing to a stable or dispositional motive to explain an actor's behavior can thereby predict that person's behavior more confidently in the future. Paulson did not report any data to support his discussion, however.

Since the focus of the present paper is specifically concerned with motives for not helping, the literature on helping behavior suggests several types of motives that could potentially influence moral judgment. For example, moods (Berkowitz and Connor, 1966), attractiveness (Daniels and Berkowitz, 1963), reciprocity (Gouldner, 1960; Blau,

1964), and the costs of helping (Blau, 1968) all influence helping behavior. These factors, or others, may also influence moral judgment.

As this brief review suggests, the structure of motives underlying moral behaviors may be more complex than the simple dichotomy of good or bad. Motives may aid in the prediction of behavior, or observers may make distinctions among several types of motives, e.g., reciprocity, cost, etc.

There are several ways of examining these hypotheses. Attribution researchers (reviewed in Weiner, 1974) have typically presented theoretically derived causal explanations to subjects and then examined their effects. For example, subjects could be presented stories containing motives which are assumed to differ in several ways. Subjects' evaluations could then be examined. Such an approach, however, may prematurely crystallize subjects' views of motives. Another approach would be to allow the structure to be determined by the data, in contrast to imposing an a priori theoretical structure on people's responses. Exploratory designs and data-analytic procedures are required to determine what motive structures are real and important to subjects.

A study was conducted to examine the structure of motives underlying moral behavior through the application of inductive methods. That is, a set of motives were

obtained through open-ended procedures and judgments concerning these motives were subsequently analyzed using exploratory techniques.

The exploratory techniques used were multidimensional scaling (Shepard, Romney and Nerlove, 1972) and cluster analysis (Johnson, 1967). Briefly, the purpose of multidimensional scaling (MDS) is to mathematically structure the stimuli under consideration. The input required for MDS is a measure of distance/proximity among the stimuli. MDS decomposes the distance measure into a multidimensional space. The space is derived such that the distances between any two stimuli in the space is monotonically related to the original dissimilarity measure. MDS locates each stimulus in a spatial configuration or "map." Examination of this map allows one to determine the most important stimuli and the interrelationships among In addition, clustering techniques, which accept the same type of input, can be used to locate or interpret typologies, as opposed to dimensions, in the multidimensional space. The clusters which result from the analysis can be drawn in the multidimensional space as loops around the relevant stimulus points. One can then identify some characteristic common to the stimuli in the cluster. These procedures will result in the mapping of the structure of motives for not helping.

Method

Selection of Stimuli

Nine female and two male undergraduates supplied motives for someone's (X's) failure to help someone else (Y) in three situations. The situations were selected from the literature on helping behavior and moral judgment.

Each subject was instructed to give four to six reasons or purposes for X's failure to help Y. Subjects were told that in each case X intended not to help Y. The situations, in order of presentation were:

- 1. Y (a person) dropped a bundle of computer cards
 while walking to class. X (another person)
 walked by without offering to help Y pick them
 up. Why didn't X help Y?
- 2. A child comes up to an adult and asks for help getting home. The adult does not help. Why didn't the adult help the child?
- 3. B (a person) asked C (another person) to help staple questionnaires together. C refused to help. Why did C refuse to help B?

This procedure resulted in 123 responses. This list was screened by eliminating redundant responses (27), responses that indicated the event was accidental (23), and several responses that were not classifiable as either motives or accidents (13), e.g., B didn't know how to use a stapler, B was afraid of staplers. This resulted in a list of 17 motives. The 17 motives and the frequencies with which they were mentioned are presented in Figure 1.

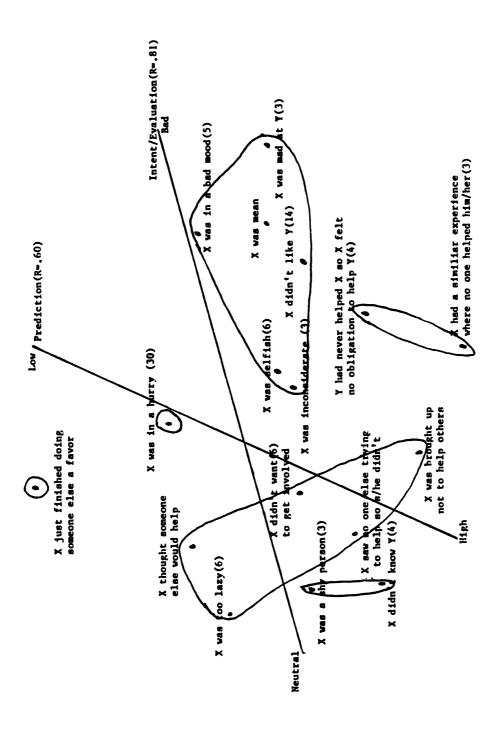


Figure 1. Multidimensional Scaling Solution and Clusters from the Pilot Study.

Distance Ratings

I then obtained dissimilarity ratings from 17 male and 22 female undergraduates on all possible pairings of the 17 motives for not helping. A random order of the resulting 136 pairs were rated on a nine point scale. All subjects received the same order of pairings. These ratings were used as the distance measure for input into the MDS program and the clustering program.

Evaluation and Predictability Ratings

Finally, in order to support empirically the interpretations of the MDS solution, 9 male and 21 female undergraduates rated the 17 motives on two scales: evaluation and predictability. These data were obtained after interpreting the MDS solution. For the evaluation scale, subjects were instructed to rate each motive on a scale from 1 (X had bad intentions toward Y) to 9 (X had neutral intentions toward Y).

These same subjects also rated the motives on a predictability scale. Subjects were instructed to indicate on a nine point scale how likely it would be for X to help Y in the future if a similar situation arose.

Results and Discussion

First, since some motives were mentioned more often than others, the ratings were weighted to reflect the frequency with which the motives were attributed to the

actor's behavior in the first phase of the study. Thus, the most important motives, i.e., those mentioned most often, were given the most weight in the analysis. The dissimilarity ratings were then subjected to a MDS analysis using the KYST computer algorithm (Kruskal, Young, and Seery, 1973). Preliminary solutions were obtained in spaces of one, two, three, and four dimensions.

A badness-of-fit measure, termed "stress," which may range from 0.0 to 1.0, was calculated for each solution. The larger the stress figure the worse the fit between the MDS solution and the original dissimilarity ratings. stress value (Kruskal's Stress Formula 1) for each of the four solutions, respectively, were .38, .16, .09, .06. Since the stress value declines relatively little from dimensions 3 to 4, these values suggest an optimal three dimensional solution. According to Kruskal (Kruskal and Wish, 1977), stress of .09 represents a fair to good fit. But while the first two dimensions were relatively easy to interpret, a meaningful interpretation of the third dimension is not apparent. In addition, the utility of a two-dimensional scheme is supported by the results of the clustering analysis, which are easily represented within this two dimensional space. These considerations thus suggest that the two dimensional solution best describes the present data. The solution is represented graphically in Figure 1.

Inspection of this solution suggests that Dimension l is a continuum ranging from neutral intent toward Y to bad intent toward Y. At the neutral end of the dimension are "shy," "didn't know Y," and "lazy." At the other end of the dimension are "mad at Y," "mean," and "didn't like Y."

Empirical support for this interpretation was obtained from the evaluation ratings. These ratings served as the dependent variable in a linear multiple regression. The two independent variables were the motive coordinates along Dimension 1 and 2. The obtained multiple R, R = .81 (p < .001), provides an indication that evaluation is an important property of these motives. A graphic depiction of these results is also provided in Figure 1. The vector representing the evaluation scale has been projected into the two dimensional space by the use of b coefficients obtained for each of the independent variables.

The actual placement of the vectors is accomplished by the use of the <u>b</u> coefficients obtained for each of the predictor variable from the results of the multiple regression analysis. Specifically, the <u>b</u> coefficients provide the coordinates for the vector within the MDS space. For example, the <u>b</u> coefficient associated with the first dimension predictor variable gives the location of the vector along the first dimension, while the <u>b</u> coefficient associated with the second dimension predictor variable gives the location of the vector along the second dimension,

and so on. As used here, this procedure results in the placement of vectors in locations that maximize the amount of shared variance between the MDS space and the external ratings.

Motives for not helping thus appear to be conceptualized by respondents as bad or "less bad" (neutral). Noteworthy too is that this evaluative distinction emerges as a dimension, and not a dichotomy (good/bad).

Dimension 2 was interpreted as a predictability or consistency dimension. The stimuli at one end of the dimension ("just finished doing someone else a favor," "though someone else would help," and "in a hurry") provide little information about what X might do in the future. The stimuli at the other end of the dimension, however, ("brought up not to help," "X was in a similar position and not helped," "shy"), suggest that X would probably not help Y in the future (high predictability).

The R value obtained from fitting the predictability scale to the two-dimensional space was .60, p < .05 (see Figure 1). Thus, empirical support was also obtained for the interpretation of Dimension 2 as a predictability dimension.

As can be seen in Figure 1, the fitted vectors are somewhat oblique. This suggests that "bad" motives are less predictable than neutral motives. In general, the

cosine of the angle between any two vectors can be taken as the correlation between the two scales. Discrepancies may arise, however, and are explainable in terms of the variance not shared by the MDS space and external ratings. Thus, within the unshared and unaccounted for variance lies the source of potential discrepancies.

In order to determine the typological structure of the motives, a hierarchical clustering procedure (UPGMA, Rolph, 1970) was used. This analysis technique accepts the same type of measure for input as does MDS. The clustering solution has been represented graphically in Figure 1 by superimposing the results onto the two-dimensional space.

The largest cluster contains items concerning X's bad intentions toward Y, e.g., "mad at Y," "mean," etc.

This cluster, containing most of the bad intent items, suggests a typological structure rather than a dimensional structure.

The neutral items form several clusters, suggesting that their structure is considerably more complex than that of items pertaining to bad intent. The cluster containing "didn't know Y" and "shy" represents the neutral end of the evaluative dimension and can be interpreted as an inhibition cluster. A second, relatively large cluster, is composed of motives generally reflecting apathy, e.g., "didn't want to get involved," "saw no one else helping," etc. Another group, containing the items "Y never helped

X" and "X had a similar experience where no one helped him/her," suggests the lack of reciprocity as a reason for not helping. This cluster, incidentally, is negatively evaluated.

The major purpose of the pilot study was to suggest that the influence of motives on moral judgment is more complex than previously recognized. Shantz (1975) and Keasey (1978) have pointed out that motives (good or bad) and intent (accidental or intended outcomes) are often confounded in moral judgment research. Even when this is not the case, however, the motives presented to the subject may vary in several, previously unrecognized ways, and thus represent an additional confound. The present research suggests that motives may differ in a variety of ways, each possibly having a different influence on moral judgment. For example, moral judgment may be influenced by whether the motive attributed to the actor's behavior reflects apathy, reciprocity, or high predictability, etc. If we are to understand the development of moral judgment, a more systematic examination and control of the seemingly complex structure of the motives for moral behavior is needed.

The results of the pilot study, while suggestive, were somewhat dissappointing for two reasons. First, the stress values were relatively high, although substantially below that of a random input (Stenson & Knoll, 1969).

There are several possible reasons for the relatively high

The first consideration must be the small number stress. of subjects who made distance ratings, only 39. Perhaps a larger sample would have reduced the error in the MDS Second, the situation from which the motives were obtained must be considered. The situations represented one emergency (the lost child), one nonemergency and a request (the questionnaires) and one non emergency and no request for help (the dropped computer cards). high stress values may have resulted from the heterogeneous events used to obtain the motives. A related consideration is that the sex of the actors in the stories was not specified. This may have been another source of random error. Finally, the motives selected may not have been a representative sample. Only two males and nine females supplied the motives for the analysis. Perhaps a more representative sample of motives could have been obtained with a larger group of subjects in the first phase of the study.

The second dissappointing aspect of the pilot study concerned the lack of strong support for the interpretation of Dimension 2 (predictability). The R value (.60) for the predictability scale, while significant, was not too impressive. Of course, each of the criticisms mentioned above could have served to attenuate this multiple correlation. In addition, the instructions for the predictability scale may not have been completely clear. Predicting X's behavior given his/her motives is a more complex

task than simply evaluating the motives. Thus, care must be taken to communicate the nature of the dimension to subjects. For these reasons, this study has since been replicated (Moore, 1979).

In general, however, the results of the pilot study support the original hypotheses about the structure of motives and suggest two major issues which should be examined. The first issue concerns the development of motive structures, and the second concerns the influence of these different structures on moral judgment.

CHAPTER III

STUDY 1: THE DEVELOPMENT OF MOTIVE STRUCTURES

The hypotheses for Study 1 concern the developmental changes in the structure of motives. Piaget

(Inhelder & Piaget, 1958), Vygotsky (1962), and Werner

(1961) have all argued that an individual's cognitions

about events undergo important qualitative changes between

childhood and adolescence. In particular, Werner's

"orthogenetic principle" states that "whenever development

occurs, it procedes from a state of relative globality and

lack of differentiation to a state of increasing dif
ferentiation, articulation, and hierarchic integration"

(Werner, 1957, p. 126).

A number of studies of children's perception of personality have been conducted within the framework of Werner's (1948) organismic theory (Collin, 1958; Signell, 1966; Scarlett, Press, & Crockett, 1971; Peevers & Secord, 1973; Bigner, 1974; Olshan, 1970, reported in Rosenberg & Sedlak, 1972). In general, this research suggests that with increasing age, other people are viewed in a more interpersonal, complex and abstract manner.

Finally in two studies it was demonstrated that self-concept development parallels the developmental sequence of person perception (Montemayor & Eisen, 1977; Bannister & Agnew, 1976). For example, working within personal construct theory (Kelly, 1955), Bannister & Agnew found, among other things, a progressive elaboration of children's constructs about the self.

The results of these studies demonstrate the utility of applying the cognitive-structural approach to the development of both person perception and self-conception. The purpose of Study 1 is to extend this perspective to another aspect of social cognition, namely moral judgment.

Based upon this orientation, it is predicted that young children will conceive of motives underlying moral behavior in simpler terms than will older children. Specifically, the data for older children will reveal more interpretable dimensions and types of motives than will the data for the younger children.

Method

Subjects

Subjects were fifth- and ninth-graders from local schools. Three considerations guided the selection of these age groups. First, the skills required to perform the tasks are fairly complex. Younger subjects might find the task too difficult. Of course, if fifth graders

evidence a complex motive structure (i.e., more than simple evaluation), then adapting the task for younger subjects would be justified in a future study. Second, these age groups were selected because they reflect two distinct stages of cognitive functioning: concrete and formal operational. Finally the subjects represent a fairly broad age range. The likelihood of discovering developmental differences was thereby increased as a result of these last two considerations.

Selection of the Stimuli

Thirty females and thirty males from each of the two age groups supplied motives for a person's (X's) failure to help someone else (Y) in two situations. The subjects were instructed to give one or two reasons or purposes for X's failure to help Y in each instance. Subjects were told that X intended not to help Y. Specifically, half the subjects were presented the following:

John was walking to class one morning and dropped all his books and homework papers on the ground. He needed help so he could get them picked in time for class. So he asked one of his classmates who was walking by to help him pick up his books and papers. John's classmate said he wouldn't help. John didn't get to class on time. Why didn't the classmate help John? See if you can think of one or two reasons why John's classmate didn't help.

and

Bob was in the library trying to get a book down from the top shelf, but he could not reach it. So he asked a classmate, who could reach it, to get it down. But the classmate said he wouldn't help. Bob had to do without the book. Why didn't the classmate help Bob? See if you can think of one or two reasons why Bob's classmate didn't help. For the other half of the subjects in each grade, the stories were the same except that "John got to class on time" and "Bob got the book by himself." For the younger subjects, the instructions and stories were read by a male experimenter. All subjects had written copies of the stories.

The responses were screened for each age group to eliminate redundant responses and responses mentioned by only one person within an age group. This resulted in lists of 16 and 17 motives for the fifth- and ninth-graders, respectively (see Table 1).

Distance Ratings

Distance ratings were then obtained from 15 male and 24 female children from the fifth and from 17 male and 21 female children from the ninth grade on all possible pairings of the motives from within each grade (120 and 136 pairs, respecitively). In other words, the motives obtained from the fifth graders formed one set of pairings and were rated by fifth graders. The motives obtained from the ninth graders formed another set of pairings and were rated by ninth graders. For each grade a random order of the pairs were rated on a five-point scale. Half the subjects received one order and half the subjects received a reversed order. In addition, the pairs were read by a male experimenter to the younger subjects. These ratings

Table 1.--Motives Generated by Fifth- and Ninth-Graders.

Ninth Grade

Bill didn't want to help Bill was in a hurry Bill didn't like Greg Bill and Greg weren't friends Bill had something else to do Bill didn't want to be bothered Bill didn't have time Bill wanted to be mean Bill thought Greg could do Bill was lazy it himself Bill was mad at Greg When Bill needed help, Greg didn't help Bill didn't want to be late Bill was too busy Bill didn't want to be seen helping someone Bill was thinking only of himself Bill had to go

Fifth Grade

Greg didn't ask nicely Greg never helps his classmates Bob didn't like Greg Bob didn't want to waste his time Bob didn't want to be late Bob was thinking only of himself Bob was too busy Bob didn't think Greg needed help Bob didn't want to help Bob had something else to do Bob didn't feel like helping Greg had been mean Bob didn't have time Bob was rude Bob was selfish Bob was in a hurry

were used as the distance measure for input into the MDS program and the clustering program.

External Ratings

In order to determine whether empirical support existed for the interpretations of the MDS solution, 9 males and 17 females from the fifth grade and 16 males and 8 females from the ninth grade rated the motives on several five-point scales thought to be relevant to moral judgment (Harvey & Rule, 1978; Passer, 1978). For the fifth-graders the scales were accidental -- on purpose, right--wrong, intended--didn't intend, good--bad, something to do with X--something to do with situation, under X's control--not under X's control, X is predictable--X is not predictable, and stable reason--unstable reason. For the ninth-graders, the scales were the same but with one addition: temporary reason--permanent reason. Time constraints dictated, in part, the number of scales used by the children. The scales were presented in a random order. In addition, the motives within each scale were presented in one of two random orders.

Results: Fifth Graders

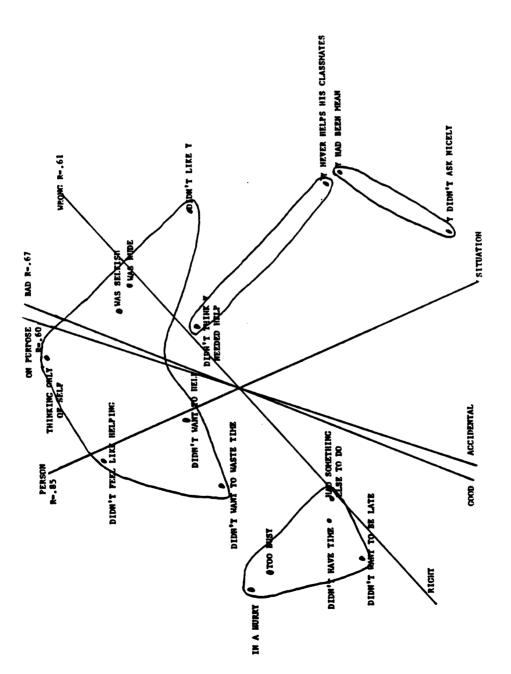
The dissimilarity ratings were subjected to an MDS analysis using the KYST computer algorithm (Kruskal, Young, & Seery, 1973). Preliminary solutions were obtained in one, two, three, and four dimensions. The stress values (Kruskal's Stress Formula 1) for each of the four solutions,

respectively, were .26, .17, .10, .07. Since the stress value declines relatively little from dimensions 3 to 4, these values suggest a three dimensional solution. (Stress of .10 represents a fair to good fit, Kruskal & Wish, 1977).

easy to interpret, meaningful interpretation of the third dimension is not apparent. In addition, the utility of a two-dimensional scheme is supported both by the results of the clustering analysis, which are easily represented within this two-dimensional space, and the external ratings. These considerations thus suggest that the two-dimensional solution best describes the present data. The solution is represented graphically in Figure 2. Figure 2 also shows the vectors of four external ratings. Each vector indicates one of the characteristics of the motives for not helping. Each vector of Figure 2 is also tagged with its multiple correlation coefficient.

The highest multiple R was obtained for the "person-situation" scale, R = .85. Thus, person-situation and the two-dimensional conceptualization of motive for not helping share 72 percent (R^2) of common variance. Therefore, "person-situation" is strongly related to the fifth-graders' understanding of the 16 motives.

In order to demonstrate that the relationships displayed in Figure 2 are not capitalizing on chance, tests of significance were conducted on the results of each



Multidimensional Scaling Solution and Clusters for Fifth-Graders. Figure 2.

multiple regression analysis. Those with multiple Rs over .60 were significant at the .05 level (only vectors with significant multiple Rs are presented).

The positions of the vectors relative to each other provide information about their interrelatedness. The vectors representing "on purpose--accidental" and "good--bad" are placed close together. This proximity is consistent with the high correlation between the two scales (r - .84). Moreover, the vectors representing "person-situation" and "right--wrong" are nearly orthogonal to each other. Again, this is consistent with the near zero correlation between the two scales (r = .08).

Several properties are obviously not needed to interpret a two-dimensional space. Moreover, there are alternative pairs of properties, all with high R values, which can be used to interpret this space. The pairs of properties which provide the most information about the two-dimensional space are those with high R values and low intercorrelations. In Figure 2, those would be "person-situation" and "right--wrong."

In order to determine the typological structure of the motives (i.e., types of motives), a hierarchical clustering procedure (Johnson, 1967) was used. The clustering solution has been represented graphically in Figure 2 by superimposing the results onto the two-dimensional space.

The largest cluster contains items concerning X's bad motives. In fact, all the negatively evaluated motives are in this cluster, suggesting a typological structure rather than a dimensional structure. Noteworthy also is that items having to do with both apathy, e.g., "didn't feel like helping," "didn't want to help," etc., and selfishness, or lack of empathy, are included in the same cluster.

The "good" motives form three clusters rather than one, suggesting that their structure is more complex than that of "bad" motives. The largest of these clusters contains items bearing on the temporal cost of helping and indicates that time is a factor in not helping. The remaining two clusters concern the characteristics of the victim (Y). One refers more to Y's independence, while the other suggests that Y is not a nice person.

The results from both the MDS and cluster analysis suggest that children ten years of age have a relatively complex view of motives for not helping. Indeed, their conceptualization is both dimensional and typological.

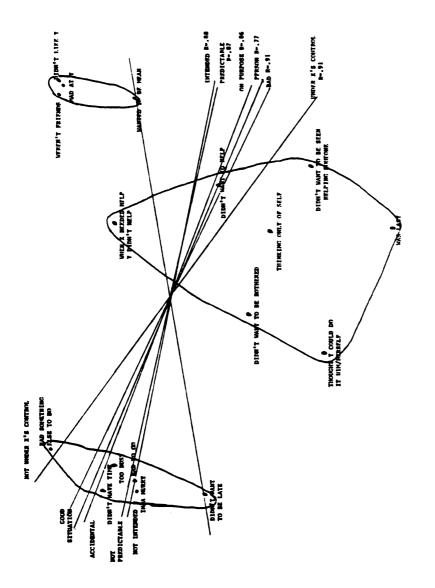
Results: Ninth Grade

The dissimilarity ratings of the ninth graders were also subjected to an MDS analysis using the KYST computer algorithm. Preliminary solutions were obtained in one, two, three, and four dimensions. The stress values (Kruskal's Stress Formula 1) for each of the four solutions,

respectively, were .35, .18, .11, .08. Based on interpretability, external ratings, and the clustering analysis, the two-dimensional solution was chosen as best describing the data. The solution is represented graphically in Figure 3. In addition, Figure 3 presents the vectors of the six external ratings with significant R values.

The vectors in Figure 3 indicate moderate to high correlations among the scales. Indeed, the correlations range from .89 ("accidental-on purpose" and "situation-person") to .48 ("under X's control-not under X's control" and "temporary-permanent"). In Figure 3, the pairs of properties that provide the most information about the space are "under X's control-not under X's control" and "temporary-permanent" or "intended-not intended." Note that evaluation (good-bad) is highly related to control (r = .92).

The clustering solution (Johnson, 1967) is also represented in Figure 3. The largest cluster contains items which tend to be negatively evaluated. Moreover, the items in this cluster deal primarily with either apathy or lack of empathy (selfishness). A second "bad" cluster contains items having to do with negative affect toward Y. The single "good" cluster contains items such as "too busy" and "didn't have time," indicating that the temporal cost of helping is too high.



Multidimensional Scaling Solution and Clusters for Ninth-Graders. Figure 3.

Discussion

A major hypothesis of the present research concerned age-related differences in the conceptual structure of motives. Werner's (1948) organismic theory posits development as a process of transition from global, undifferentiated states to states of greater differentiation and hierarchical organization. Thus, developmental differences in the number of dimensions and clusters were expected. However, a comparison of Figures 2 and 3 indicates very few differences between fifth- and ninth-graders' views of motives.

For both age groups the temporal cost of helping is a salient typology. The concern with the cost of helping tends also to be the cluster most favorably evaluated.

Apathy combined with selfishness or a lack of empathy is also a salient typology for both age groups. It is interesting to note that research with adults has revealed that this cluster is differentiated into separate apathy and selfishness clusters (Moore, 1979). Thus, apathy and selfishness are perceived similarly by the 10-and 15-year-old children but not by adults. For all age groups, apathy and selfishness are associated with negative evaluations and attributions of responsibility.

For the fifth-graders, there were two clusters concerned with the characteristics of the victim (Y). One suggests something about Y's independence, e.g., "didn't need help," while the other implies that Y is not a nice

person and thus not deserving of help, e.g., "Y has been mean." This latter cluster clearly embodies an affective component while the previous one does not.

The ninth grade data revealed a single cluster concerning the characteristics of Y. It too is clearly affective, e.g., "didn't like Y."

Thus, with respect to the typological structure of motives, the similarities between the two age groups are more apparent than the differences. The only noteworthy increase in complexity occurs at the adult level (see Figure 4).

The dimensional structure of the data also reveals few differences between the fifth- and ninth-graders. The stress values for the MDS solutions are remarkably similar, indicating that two or possibly three dimensions are characteristic of each age group. Furthermore, the interrelatedness of the vectors representing the external property ratings also fails to indicate an increase in complexity and differentiation. In fact, the angle between person-situation and right-wrong is larger than the angle between temporary-permanent and not under X's control-under X's control, suggesting less differentiation for the ninth-graders. Indeed, the angle size among the properties rated by fifth-graders is similar to the angle size among the properties rated by adults (Moore, 1979).

It is also clear that the meaning of the dimensions are different for the different age groups. For the

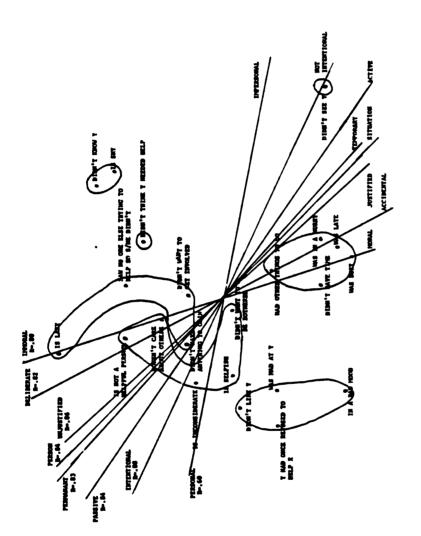


Figure 4.--Multidimensional Scaling Solution and Clusters for Adults (from Moore, 1979).

fifth-graders, <u>person-situation</u> and <u>right-wrong</u> best describe the MDS space. For the ninth-graders, <u>under control-not under control</u> and <u>temporary-permanent</u> best describes the space.

There are several reasons why this difference in the semantic space might occur. First, since the content of the items differs across age groups, different properties may be needed to explain the distances among the motives. A related issue is that some motives are mentioned by one age group but not by another. This could change the semantic space in significant ways. The results of two studies done with adults (Moore, 1979) in which it was found that the addition of a few motives changed the semantic space provides some support for this interpretation. Finally, the subjective meaning of the property ratings may indeed differ for the different ages. Thus, person-situation and right-wrong may be the most salient dimensions for fifth-graders, while not under X's control-under X's control and temporary-permanent are the most salient dimensions for ninth-graders.

A comparison of Figures 2 and 3 suggests there may be less differentiation and complexity on the part of ninth-graders. While these differences may be trivial they may also reflect the cognitive characteristics of the subjects.

Several studies indicate that self-focused attention is associated with performance decrements (e.g., Brockner, 1979). Since individuals in early adolescence are

relatively more self-conscious than children or older adolescents (Elkind, 1967; Elkind & Bower, 1979), this may be related to the relatively undifferentiated structure of the ninth-grader's data.

The self-consciousness, or self-focused attention, of early adolescence may be related to lack of differentiation in cognitive structures for two reasons. First, given that they are highly self-conscious and that attentional capacities are finite, young adolescents may not be able to devote sufficient attention to the task. Secondly, the self-consciousness of young adolescents may be directed at their own negative characteristics (Mischel, Ebbisen, & Zeiss, 1976), thereby prompting an elevated anxiety level for this age group. Such anxiety would be likely to impair performance, particularly on complex tasks (e.g., Spence, Farber, & McFann, 1956). Thus, an hypothesis for future research is that a decrease in cognitive complexity may occur in early adolescence and that the lack of complexity is mediated by individual differences in selfconsciousness or self-focused attention.

CHAPTER IV

STUDY 2: THE INFLUENCE OF MOTIVES ON MORAL JUDGMENT

The results of the pilot study suggest that motives are indeed more complex than previously recognized. The purpose of Study 2 was to examine the influence different types of motives have on moral judgment. The present study also focused on several moral judgment variables besides evaluation.

The research on moral judgment has been concerned with the evaluation of the actor or harmdoer. This view of moral judgment can be traced back to Plato and Aristotle who conceived of morality in terms of dispositions or traits of character (Frankena, 1963). David Hume held a similar view (Frankena, 1963). More recently, Leslie Stephan (1882) stated the view in these words,

. . . morality is internal. The moral law . . . has to be expressed in the form, "be this," not in the form, "do this." . . . the true moral law says "hate not," instead of "kill not." . . . the only mode of stating the moral law must be as a rule of character.

Moral judgments, however, not only involve judgments about the person, but also judgments about the action or behavior. Frankena (1963) refers to the former as

judgments of moral value and the latter as judgments of moral obligation. The issue of morally right action or behavior has been the concern of philosophers such as Socrates, Hobbes, and J. S. Mill, among others (Frankena, 1963). Research on moral judgment, however, has focused on judgments of moral value and not judgments of moral obligation. The present study is designed to examine the influence of motives on judgments of both the person and the action.

Besides judging actions as right or wrong, or persons as good or bad, moral judgment involves the attribution of moral responsibility. Only if an agent is judged responsible for an event do we make moral judgments. Aristotle, Aquinas, Dante, Moore, and Kant among others, have been concerned about moral responsibility (Adkins, 1960; Bourke, 1968; Ferm, 1956).

While several studies have examined attributions of responsibility, only Harris (1977) examined both responsibility and badness. The interpretation of his results, however, are complicated by several factors. First, while purporting to assess attributions of responsibility his actual measure was a rating of causality. Responsibility and causality may be quite similar, but their relationship should be determined empirically. Second, Harris investigated Heider's (1958) five levels of responsibility attribution. Thus the paradigm is not

directly comparable to the traditional moral judgment paradigm. The stimulus stories, for example, varied in a number of characteristics besides intentionality, e.g., foreseeability and freedom. Third, the relationship between ratings of causality must be inferred from the graphs. No correlations or statistical comparisons were reported. It appears, however, that for intentional acts, attributions of causality and attributions of badness are roughly the same, about 6.5 on a nine-point scale. For nonintentional acts, attributions of causality were about 4.0 while badness attributions were about 1.0. Thus, perceived causality appears to be a necessary but not sufficient component of moral judgment.

The present study will examine the relationship between perceptions of both causality and responsibility and perceived badness of both the actor and the action.

Another component of moral judgment is blame. Praise or blame for an action appears to be related to moral responsibility (Gert, 1973; Ewing, 1953). A person is worthy of praise or blame to the extent that she/he is morally responsible for the event in question. Researchers, however, have not employed blame as a dependent measure in studies of moral judgment.

Justice, or reciprocity and equity, is clearly an important component of morality (Rawls, 1971). The principle of reciprocity (shu) can be traced back to

Confucius (Ferm, 1956). Indeed, social exchange theorists characterize the development of morality as the development of competence in equity and reciprocity (Wegner, 1975). These writers suggest that responsibility, causality (Lerner, Miller, Holmes, 1977) and restitution (Walster, Berschied, and Walster, 1977) are all components of moral judgment. For example, an event is perceived as unjust if a person is seen to be the cause of, or at least responsible for, someone's undesirable outcome. Such circumstances should result in more severe moral judgments. This notion implies that a harmdoer should compensate the victim (Walster, Berschied, and Walster, 1977). Thus moral judgment involves judgment of restitution or compensation. The present study will examine these issues.

Furthermore, liking may be related to moral judgment (Austin, Walster, and Utne, 1977). Among other things, liking can serve as a justification for a bad outcome. Thus the victim will be disliked and the harmdoer liked. Liking can also serve to compensate or punish another. Thus previous research has documented the eagerness of impartial observers to reward the deprived with public praise and to punish the overbenefited with public condemnation (Walster, Walster, Abrahams, and Brown, 1966; Lincoln and Levinger, 1972). This indicates that a victim will be liked and a harmdoer disliked to the extent that the event is perceived as unjust.

Hypotheses

Based on the foregoing discussion, the following predictions were made.

- Evaluation of the actor and the actor's behavior
 will be influenced by the different motive types.
- Judgments of blame, responsibility, and causality will be influenced by the different motive types.
- Victims will be liked and harmdoers disliked to the extent that the event is perceived as unjust.
- 4. Victims will be disliked and harmdoers liked to the extent that the event is perceived as just.
- 5. The victim should be compensated (i.e., an apology from the harmdoer) to the extent the event is perceived as unjust.
- 6. The actor and the actor's behavior will be negatively evaluated to the extent the event is perceived as unjust.
- 7. The actor and the actor's behavior will be negatively evaluated to the extent the outcome is seen as intended.

Method

Subjects

Subjects were 80 males and 80 females from introductory psychology classes.

Procedure

A motive for not helping was chosen from each of seven clusters obtained in a previous study (Moore, 1979). Eighty subjects were asked to evaluate (see Table 2 for evaluative criteria) seven situations (see Table 3, Form A) in which only the motive for not helping was varied. Half of these subjects evaluated a male-male pair and half evaluated a female-female pair. Finally, 80 subjects evaluated five situations (see Table 3, Form B) which were constructed by taking a second motive from each cluster (two clusters contained only one item). This was done in order to determine if there were evaluative differences between motives within clusters. Thus, parallel forms were constructed.

Results

Previous factor analytic work (Moore, 1979) indicated that several of the dependent variables could be combined into indexes of moral evaluation and responsibility. The evaluation of actor, evaluation of actor's behavior, and liking of actor formed the moral evaluation index. Responsibility of actor, blame attributed to actor, and causality formed the responsibility index. The reliabilities (Cronbach's alpha) for the evaluation and responsibility measures ranged from .68 to .87 and from .69 to .72, respectively, for the seven motive types. The mean reliability was .76 for evaluation and .77 for responsibility.

Table 2.--Moral Judgment Questions.

1. How would you evaluate X's (the person who didn't help) behavior?

good

bad

2. How responsible is X for Y (person in need of help) not getting to class on time?

very responsible

not responsible

3. What is X likely to do if Y needs help picking up his computer cards again?

not predictable (hard to say) likely not to help to say

4. Should X be blamed for not helping Y?

not blamed at all

blamed a great deal

5. Do you think you would like X?

like him

dislike him

6. How would you evaluate X as a person?

good person

bad person

7. Did X cause Y to be late for class?

did cause him to be late

did not cause him to be late

8. Should X apologize to Y?

should apologize

should not apologize

9. Is what happened to Y fair or just?

not fair

fair

10. Do you think you would like Y?

like him

dislike him

11. Did X intend for Y to be late for class?

did intend

did not intend

All questions were rated on a nine-point scale.

Form A

Esther asks Liz to help her pick up her computer cards. Liz doesn't help because she is selfish. Esther doesn't get to class on time.

Nancy asks Julie to help pick up her computer cards. Julie doesn't help because she doesn't think Nancy needs help. Nancy doesn't get to class on time.

Ellen asks Sara to help pick up her computer cards. Sara doesn't help because she is a shy person. Ellen doesn't get to class on time.

Sally asks Kay to help pick up her computer cards. Kay doesn't help because she doesn't hear Sally. Sally doesn't get to class on time.

Mary asks Laura to help her pick up her computer cards. Laura doesn't help because she doesn't like Mary. Mary doesn't get to class on time.

Jane asks Barbara to help her pick up her computer cards. Barbara doesn't help because she is in a hurry. Jane doesn't get to class on time.

Lisa asks Debbie to help pick up her computer cards. Debbie doesn't help because she doesn't want to get involved. Lisa doesn't get to class on time.

Form B

Esther asks Liz to help her pick up her computer cards. Liz doesn't help because she is inconsiderate. Esther doesn't get to class on time.

Ellen asks Sara to help pick up her computer cards. Sara doesn't help because she doesn't know Ellen. Ellen doesn't get to class on time.

Lisa asks Debbie to help pick up her computer cards. Debbie doesn't help because she saw no one else trying to help. Lisa doesn't get to class on time.

Mary asks Laura to help her pick up her computer cards. Laura doesn't help because she is mad at Mary. Mary doesn't get to class on time.

Jane asks Barbara to help her pick up her computer cards. Barbara doesn't help because she doesn't have time. Jane doesn't get to class on time.

Because of limitation of the multivariate programs available on the MSU computer, several multivariate analyses of variance (MANOVA) had to be performed. To determine the effects of sex of subject (SS) and sex of actor (SA) on judgments, a 2 x 2 MANOVA was performed on the ratings for each of the seven motive types.

The MANOVA revealed no SA by SS interaction. For SA, the MANOVA revealed a significant effect for shyness, F(7,70) = 2.35, p < .03. The univariate analysis revealed only that college students expect female actors to apologize to the victims more so than male actors, F(1,76) = 9.98, p < .005. For doesn't like, the MANOVA was significant, F(7,70) = 2.28, p < .04. The univariate analysis revealed only that more intent was attributed to female actors, F(1,76) = 4.79, p < .03. There were no other effects for SA. In addition, there were no effects for SS.

In order to examine the effects for motive type (MT), the data were collapsed across SS and analyzed separately for SA. For male actors, the MANOVA revealed a significant effect, F(42,1362) = 7.62, p < .00001. Table 4 summarizes the results of the univariate analyses and the deviation or nominal contrasts.

All seven univariate F's were significant. The nominal contrasts revealed that for the <u>selfish</u> MT, the male actor is seen as responsible, "bad," predictable, and as having intended the outcome. In addition the event is seen as unjust and the victim is not liked. For the shy MT, the

Table 4.--Mean Deviation Scores from Grand Mean by Motive Type--Male Actors.

| | | | | Motive Type | e c | | | , |
|-------------------------|---------------------|---------------------|-------------------------|---------------------|--------------------|---------------------|-----------------------|---------|
| Judgments | Selfish | Shy | Not Like | Hurry | Not Involved | Not See | Not Need Help | Ф |
| Responsibility | -2.30 ^b | 1.425 | 175 | 4.95 ^e | 80 | 8.025 ^e | -11.125 ^e | 27.32** |
| Evaluation | 5.25 ^e | -2.125 ^c | 2.05 ^c | -3.725 ^e | 3.625 ^e | -5.60 ^e | .525 | 47.70** |
| Predictability | 3.325 ^e | .325 | 3.125 ^e | -1.575 ^d | 2.875 ^e | -2.425 ^e | -5.875 ^e | 45.34** |
| Apology | 375 | 1.300 ^c | 1.025 ^c | q006° | 000. | 2.275 ^e | -5.125 ^e | 9.53** |
| Just | .800 | 100 | 150 | 900° | 200 | 850 ^c | 1.4 ^e | **66*9 |
| Like victim | .550 | .425 ^b | .575 | 000. | .150 | .075 | -1.775 ^e | 2.72* |
| Intent | -2.025 ^e | | -1.850 ^c | 1.350 ^e | 375 | 1.925 ^e | 175 | 30.16** |
| ^a df = 6,234 | | | b < .05. | .05. | | , o | c _p < .01. | |
| d _p < .001. | | | e _p < .0001. | .0001. | | | | |
| *p < .01. | | | > d** | **p < .00001. | | | | |

actor is evaluated positively, viewed as not owing the victim an apology, and as having not intended the outcome. For not like, the actor is predictable and the outcome is not intended. When the actor is in a hurry, he is not held responsible, is positively evaluated, is not predictable, and the event is perceived as just. For the not involved MT, the actor is negatively evaluated and the behavior is viewed as predictable. For not seeing the victim, the actor is seen as not responsible, "good," not predictable, not owing the victim an apology and as not intending the outcome. In addition the event is perceived as just. Finally, when the actor believes the victim does not need help, the actor is seen as responsible, not predictable and owing the victim an apology. Furthermore, the victim is "liked" and the event is perceived as unjust.

As would be expected, the results for the female actor were similar to the results for male actor. The MANOVA revealed a significant effect, F(42,1362) = 9.42, p < .00001. Table 5 summarizes the results of both the univariate analyses and the nominal contrasts.

All but one of the univariate F's were significant. There was no effect for <u>liking of victim</u>. The nominal contrasts revealed that for <u>selfish</u>, the female actor is seen as responsible, "bad," predictable and as having intended the outcome. For <u>shy</u>, the actor is viewed as "good" and the behavior is predictable. For <u>not like</u>, the behavior is considered predictable and the outcome is viewed as intended.

Table 5.--Mean Deviation Scores from Grand Mean by Motive Type--Female Actors.

| | | | | Motive Type | 9 | | | ı |
|------------------------|---------------------|---------------------|-------------------------|---------------------|--------------------|---------------------|---------------------|--------|
| Judgments | Selfish | Shy | Not Like | Hurry | Not Involved | Not See | Not Need Help | g G |
| Responsibility | -2.350 ^b | 1.000 | 700 | 5.125 ^e | -1.275 | 11.200 ^e | -13.000° | 44.89* |
| Evaluation | 5.075 ^e | -2.900 ^d | 009. | -3.450 ^e | 2.050 ^C | -7.950 ^e | 6.575 ^e | 58.85* |
| Predictability | 3.500 ^e | 1.225 ^b | 3.625 ^e | -1.725 ^d | 3.025 ^e | -2.800 ^e | -6.850 ^e | 48.77* |
| Apology | 775 | 300 | .400 | .650 | 600 | 2.725 ^e | -2.100 ^e | 17.25* |
| Just | .525 | .025 | 475 | -1.200 ^d | .275 | -1.475 ^e | 2.325 ^e | 11.21* |
| Like victim | 025 | 200 | 050 | 200 | .075 | 225 | .625 | .64 |
| Intent | 2.225 ^e | .700 | 2.600 ^e | .725 | 800 | 1.900 ^e | -7.35 ^e | *60.08 |
| adf = 6.234 | | | b < .05. | .56 | | °p < .01. | .01. | |
| d _p < .001. | | | e _p < .0001. | .1001 | | > d * | *p < .00001. | |

When the actor is in a hurry, she is not held responsible, is positively evaluated, the behavior is seen as unpredictable, and the event is considered just. For <a href="https://www.number.com/number

So, far, the analyses have shown that motives from the different clusters do indeed influence moral judgments. It is possible that motives from within each cluster may differentially affect judgments. If this were true, it would indicate that while there is important variation between clusters, there is also variation within clusters.

In order to examine this possibility, a second motive was selected from each of the five clusters (two clusters contained only one motive). A 2(SA) by 2(SS) by 2(Motive) MANOVA was performed on each of the five clusters. There were no SS effects and the SA effects paralleled those reported earlier and will not be reported here.

The MANOVA performed on the first cluster compared selfish with inconsiderate. The effect was significant, F(7,146) = 5.377, p < .00005. The univariate analysis revealed that more responsibility was attributed for

inconsiderate, F(1,152) = 6.184, p < .05; selfish was more negatively evaluated, F(1,152) = 11.028, p < .001; selfish was more predictable, F(1,52) = 14.253, p < .0005; and apology was prescribed more for selfish, F(1,152) = 9.990, p < .005; selfish was more unjust, F(1,152) = 6.753, p < .01; and more intent was attributed for selfish, F(1,152) = 19.785, p < .00005.

The second MANOVA compared shy with didn't know victim. The MANOVA was significant, F(7,146) = 6.729, p < .00001. The univariate analysis revealed that shy was more positively evaluated, F(1,152) = 5.686, p < .05; an apology was prescribed more for shy, F(1,152) = 12.818, p < .0005; the event was seen as more unjust for shy, F(1,152) = 9.272, p < .005; and victim was liked more for shy, F(1,52) = 5.594, p < .05.

The third MANOVA compared not like with mad at. Again, the MANOVA was significant, F(7,146) = 25.213, p < .00001. The univariate F's revealed that not like was more negatively evaluated, F(1,152) = 13.052, p < .0005; not like was more predictable, F(1,152) = 165.557, p < .00001; and that more intent was attributed to not like, F(1,152) = 10.213, p < .005.

The fourth MANOVA, which compared in a hurry with didn't have time was also significant, F(7,146) = 5.653, p < .00001. The univariate analysis revealed that more responsibility was attributed to the actor who was in a hurry, F(1,152) = 10.603, p < .005; the actor in a hurry

should apologize, F(1,152) = 16.355, p < .0001; the actor who was in a <u>hurry</u> was more negatively evaluated, F(1,152) = 20.427, p < .00001; for in a <u>hurry</u> the event was more unjust, F(1,152) = 10.436, p < .005; and that for in a <u>hurry</u> more intent was attributed to the actor, F(1,152) = 7.556, p < .01.

Finally, the MANOVA comparing didn't want to get involved with saw no one else helping was significant, F(7,146) = 4.407, p < .005. The only significant univariate effect was for predictability. The behavior was more predictable for involved than for saw no one else helping, F(1,152) = 23.032, p < .00001.

A major hypothesis concerned the relationships among the dependent variables. The aim was to identify a set of variables that would predict moral evaluation and moral retribution. There are two related techniques which can be used to study several variables and the relationships among hem. The less restricted technique is multiple regression (Cohen & Cohen, 1975). The second technique, path analysis (Heise, 1975), requires additional assumptions and can be used only when the causal priorities among the variables is understood (Heise, 1969; Land, 1969). Both techniques are presented here.

It was hypothesized that three factors would predict evaluation of the actor and retribution to the victim. The perception of the event as unjust, the intentionality of the actor, and the responsibility of the actor were expected to

predict both evaluation and retribution. Since there seemed to be a logical ordering to the independent variables the hierarchical regression model (Cohen & Cohen, 1975) was used. The variables were entered into the regression equation in the following order: justice, intentionality and responsibility.

The results of the multiple regression analyses are summarized in Tables 6 through 12. The multiple R's for Evaluation range from .46 to .65 with a mean R of .52. For Retribution, the R's range from .38 to .67 with a mean of .52.

By inspecting the standardized regression coefficients (Beta) for each of the three independent variables, one can determine the relative contribution of each of the independent variables to the overall relationship. The Beta's can be interpreted as partial correlations. Looking first at the regression performed on evaluation of actor, the Beta's for Justice range from .18 to .39 with a mean of .32. For Intentionality the Beta's ranged from -.02 to -.26 with a mean of -.08. For responsibility the Beta's ranged from -.09 to -.36 with a mean of -.22.

Turning next to the regression performed on Retribution, the Beta's for Justice ranged from .002 to -.34 with a mean of -.20. For Intentionality the Beta's ranged from -.10 to .33 with a mean of .10. For Responsibility, the Beta's ranged from .01 to .54 with a mean of .34.

Table 6.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the N = 80Selfish Condition (Hierarchical Model).

| Variable | R ² | R ² Change | Mult. R | Simple R | B* | Beta** | ı× | SD | Overall F | Q, |
|-----------------|----------------|--------------------------|-------------|-------------|--------------------------|-------------|--------|-------|--------------|------|
| (a) Actor | | | | | | | | | | |
| Justice | .2083 | . 2083 | .4564 | .4564 | .4594 | .3216 | 6.375 | 2.015 | 20.525 | .001 |
| Intentionality | .2130 | .0046 | .4615 | 2385 | 2329E-01 | 0213 | 4.338 | 2.629 | 10.417 | .001 |
| Responsibility | .2401 | .0272 | .4900 | 4135 | 9740E-01 | 2134 | 11.688 | 908.9 | 8.005 | .001 |
| (b) Retribution | | 1 1 1 1 | ! ! ! | 1 1 1 | | 1 1 1 1 1 1 | | 1 1 | ! ! ! | 1 |
| Justice | 9601. | .1096 | .3311 | .3311 | 1795E.02 | .0018 | ત | q | 9.604 | .003 |
| Intentionality | .1736 | .0640 | .4167 | .3610 | .1278 | .1638 | | | 8.089 | .001 |
| Responsibility | .2937 | .1201 | .5420 | .5215 | .1460 | .4487 | | | 10,535 | .001 |
| | | | | | | | | | | |

*Unstandardized regression coefficient.

**Standardized regression coefficient.

Ameans same as in (a).

 $^{\mathrm{b}}$ Standard deviations are the same as in (a).

Table 7.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the Shy Condition (Hierarchical Model). N=80

| ın the | in the <u>Sny</u> Condition | | lerarchi | (Hierarchical Model). N = 80 | N = 80 | | | | | |
|-----------------|-----------------------------|--------------------------|---------------------|------------------------------|---------------------------|-------|----------------------|----------------|---------------------------|------|
| Variable | R ² | R ² Change | Mult. R | Simple R | æ | Beta | ı× | SD | Overall F | Ъ |
| (a) Actor | | | | | | | | | | |
| Justice | . 2654 | .2654 | .5152 | .5152 | .7291 | .3845 | 5.675 | 1.854 | 28.182 | .001 |
| Intentionality | .2657 | .0003 | .5155 | 0085 | .1687 | .0958 | 7.388 | 1.997 | 13.932 | .001 |
| Responsibility | .3455 | .0798 | .5879 | 4485 | 2031 | 3350 | 15.225 | 5.721 | 13.372 | .001 |
| (b) Retribution | | 1 | | | ' | | ; | | ! | |
| Justice | .1007 | .1007 | .3173 | 3173 | 2344 | 1862 | | | 8.732 | .004 |
| Intentionality | .1617 | .0610 | .4021 | .2415 | .1520 | .1300 | | | 7.426 | .001 |
| Responsibility | .2470 | .0853 | .4970 | .4580 | .1394 | .3417 | | | 8.308 | .001 |
| | | | | | | | | | | |

Table 8.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the $\frac{\text{Like}}{\text{Condition}}$ (Hierarchical Model). N = 80.

| Variable | R ² | R ² Change | Mult. R | Simple R | В | Beta | ı× | SD | Overall F | C4 |
|---|----------------|--------------------------|------------------|---------------------|--------------------------------|-------|----------------------|-----------------|---------------------------|-----------|
| (a) Actor | | | | | | | | | | |
| Justice | .1980 | .1980 | .4450 | .4450 | .7393 | .3690 | 5.400 | 2.072 | 19.257 | .001 |
| Intentionality | .2402 | .0422 | .4901 | 2760 | 2689 | 1672 | 4.238 | 2.582 | 12.171 | .001 |
| sponsibility | .2436 | .0034 | .4936 | 3871 | 5197E-01 | 0859 | 13.575 | 6.865 | 8.158 | .001 |
| (b) Retribution | ! ! ! | | ! ! ! ! | | ' | | 1 | ! | ' | |
| Justice | .1538 | .1538 | .3922 | 3922 | 4164 | 3346 | | | 14.180 | .001 |
| Intentionality | .2605 | .1067 | .5104 | .3867 | .3277 | .3280 | | | 13.562 | .001 |
| Responsibility | .2605 | 0000. | .5104 | .3778 | .2421E-02 | .0064 | | | 8.925 | .001 |
| *************************************** | | | | | | | | | | |

Table 9.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the Hurry Condition (Hierarchical Model). N = 80

| Variable | R ² | R Change | Mult. R | Mult. Simple R R | Ф | Beta | ı× | SD | Overall F | Ъ |
|-----------------|------------------|----------------|----------------------|---------------------|-----------------------|---------------------|----------------------|---------------------|--------------|-----------|
| (a) Actor | | | | | | | | | | |
| Justice | .3007 | .3007 | . 5483 | . 5483 | .7498 | .3433 | 4.663 | 2.031 | 33.535 | .001 |
| Intentionality | .4074 | .1068 | .6383 | 4946 | 6315 | 2632 | 7.500 | 1.849 | 26.470 | .001 |
| Responsibility | .4276 | .0202 | .6539 | 5479 | 1463 | 1994 | 19.050 | 6.046 | 18.927 | .001 |
| (b) Retribution | | | : | | , 1 1 1 1 | | ! | | , | |
| Justice | .0176 | .0176 | .1325 | 1325 | 2493 | 1845 | | | 1.393 | .241 |
| Intentionality | .0726 | .0550 | .2694 | .2657 | .3286E-01 | .0221 | | | 3.012 | .055 |
| Responsibility | .2188 | .1462 | .4678 | .4425 | .2434 | . 5363 | | | 7.093 | .001 |
| | | | | | | | | | | |

Table 10.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the $\frac{\text{Involved}}{\text{Condition}}$ Condition (Hierarchical Model). N = 80

| Variable | R ² | R ² Change | Mult. R | Simple R | В | Beta | ı× | SD | Overall F | ď |
|-----------------|----------------|--------------------------|----------------------|-------------|-----------|-------|---------------------|-------|--------------|-----------|
| (a) Actor | | | | | | | | | | |
| Justice | .2143 | .2143 | .4629 | .4629 | .6781 | .3687 | 5.750 | 1.984 | 21.275 | .001 |
| Intentionality | .2314 | .0171 | .4810 | 2888 | 1570 | 1016 | 5.875 | 2.362 | 11.590 | .001 |
| sponsibili | .2371 | | .4869 | 3647 | 6539E-01 | 1016 | 12.975 | 5.670 | 7.873 | .001 |
| (b) Retribution | | | 1 | | | | | | | |
| Justice | .2145 | .2145 | .4632 | 4632 | 2500 | 2469 | | | 21.304 | .001 |
| Intentionality | . 2990 | .0845 | .5468 | .4381 | .1870 | .2201 | | | 16.423 | .001 |
| Responsibility | .3314 | .0324 | .5757 | .4991 | .8561E-01 | .2418 | | | 12.558 | .001 |
| | | | | | | | | | | |

Table 11.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the Doesn't See Condition (Hierarchical Model). N = 80

| Variable | R ² | R ² Change | Mult. R | Simple R | В | Beta | ı× | SD | Overall F | Дı |
|-----------------|----------------|--------------------------|---|-------------|--------------------------------|---------------------|---------------------|---------------------|----------------------|---------------|
| (a) Actor | | | | | | | | | | |
| Justice | .1437 | .1437 | .3790 | .3790 | . 5088 | .2848 | 4.550 | 1.961 | 13.084 | .001 |
| Intentionality | .1476 | .0039 | .3841 | 1727 | 9530E-01 | 0386 | 8.375 | 1.418 | 6.664 | .002 |
| esponsibility | .1986 | .0510 | .4456 | 3471 | .1905 | 2419 | 23.625 | 4.448 | 6.277 | .001 |
| (b) Retribution | | | 1 | | ' | ' | ! ! |
| Justice | .0672 | .0672 | .2593 | 2593 | 0.2474 | 1766 | | | 5.620 | .020 |
| Intentionality | .0682 | .0010 | .2611 | .0475 | 1279 | 0660 | | | 2.817 | 990. |
| Responsibility | .1464 | .0782 | .3826 | .3464 | .1850 | . 2994 | | | 4.343 | .007 |
| | | | *************************************** | | | | | | | |

Table 12.--Results of Regression Analysis Performed on Evaluation of Actor (a) and Retribution (b) in the Doesn't Need Help Condition (Hierarchical Model). N = 80

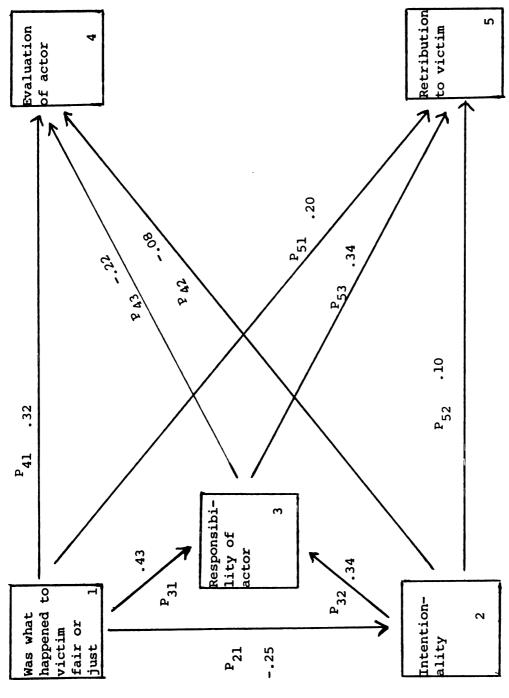
| Variable | R ² | R ² Change | Mult. R | Simple R | В | Beta | ı× | SD | Overall F | Q. |
|-----------------|----------------|--------------------------|----------------------|--|--------------------------|-------|---------------------|----------------------|---------------------------|------|
| (a) Actor | | | | | | | | | | |
| Justice | .1426 | .1426 | .3776 | .3776 | .4121 | .1833 | 5.713 | 1.956 | 12.974 | .001 |
| Intentionality | .1743 | .0317 | .4175 | 2352 | 9711E-01 | 0503 | 6.463 | 2.278 | 8.127 | .001 |
| sponsibili | .2509 | .0766 | . 5009 | 4751 | 2450 | 3576 | 14.013 | 6.423 | 8.485 | .001 |
| (b) Retribution | ! ! ! | , | ; | | | 1 | | , | ' | |
| Justice | .2692 | .2692 | .5188 | 5188 | 3079 | 2554 | | | 28.728 | .001 |
| Intentionality | .2781 | 6800. | .5273 | .1747 | 1025 | 0660 | | | 14.829 | .001 |
| Responsibility | .4495 | .1714 | .6704 | .6249 | .1964 | .5350 | | | 20.685 | .001 |
| | | | | The state of the s | | | | | | |

As the multiple regression analysis makes clear, Justice, Intentionality, and Responsibility account for a large portion of the variance in both Evaluation of the actor and Retribution to the victim. However, by examining the Beta's, it becomes clear that Justice and Responsibility are responsible for most of the shared variance with Evaluation and Retribution, while Intentionality could be omitted from the regression equation with little affect on the R values.

A related technique for presenting these data is path analysis. As used here, it is more as a heuristic (Asher, 1976) than anything else, since all of the assumptions required by the technique are probably not being met. For example, the causal ordering proposed here is only an hypothesis and will likely be revised as more data become available and as there is more theoretical development. Finally, there is certainly measurement error involved in the model and possibly specification error. These factors highlight the tentative nature with which the model is being presented.

The path diagram with the average path coefficients is presented in Figure 5. Path analysis cannot, of course, "prove" the validity of the causal assumptions that are built into a model. It simply provides a useful means for estimating the strengths of the different connections.

Based on the moral judgment, equity, and ethics literature, the model present in Figure 5 was postulated.



The Path Analytic Model for Moral Judgments with the Ordinary Least Squares Estimates of Path Coefficients. Figure 5.

The reasoning behind the present model is that the event is first seen as just or unjust. That perception, whatever it may be, influences whether or not the actor is perceived as intending the outcome, whether or not the actor is held responsible, and finally how the actor is evaluated and whether or not the victim deserves some form of retribution. Intentionality, which is influenced by the perception of Justice, influences the attribution of responsibility, and evaluation and retribution. Finally, the attribution of responsibility, while influenced by Justice and Intentionality, also influences Evaluation and Retribution.

The path coefficients for each of the seven MT's are presented in Table 13. The path coefficients are standardized partial regression coefficients based on a series of multiple regression analyses (the one exception is path P21 which is the zero-order product-moment correlation between variables 1 and 2). An inspection of Table 13 indicates that most of the p42 and p52 paths are very small, suggesting that these links could profitably be removed. This is a process which Heise (1969) describes as "theory trimming," designed to make a theory more parsimonious. The idea is to see whether a simplified path model can be used to reconstruct the original correlation matrix with some degree of accuracy. The observed minus predicted correlations with the p42 and p52 links omitted are presented in Table 14. Clearly, the differences between the two

Table 13.--Path Coefficients for Each of the Seven Motive Types (N = 80).

| | | | | | Motive Type | уре | | |
|-----------------|---------|-----|------|-------|-------------|---------------|---------------------|---------------------|
| Path Link | Selfish | Shy | Like | Hurry | Involved | Didn't See | Didn't Need Help | Path Coefficient |
| P41 | .33 | .39 | .37 | .34 | .37 | .29 | .18 | .32 |
| P ₅₁ | 00. | 19 | 33 | 19 | 24 | 18 | 26 | 20 |
| P ₃₁ | 49 | 40 | 48 | 44 | 44 | 31 | 46 | 43 |
| $^{P}_{21}$ | 39 | .02 | 17 | 34 | 36 | 30 | 16 | 25 |
| P ₅₂ | .16 | .13 | .33 | .03 | .22 | 90 | 60. | .10 |
| P42 | 02 | 60. | 17 | 26 | 11 | 04 | 05 | 08 |
| P32 | .25 | .35 | .48 | . 42 | .37 | .11 | .37 | .34 |
| P43 | 21 | 33 | 09 | 22 | 60 | 25 | 36 | 22 |
| P ₅₃ | .45 | .34 | .01 | .53 | .24 | .30 | .52 | .34 |
| | | | | | | | | |

Table 14.--Observed Minus Predicted Correlations Between Variables 4 and 5 for Full and Reduced Path Model.

| | Full Model | Reduced Model |
|------------------|------------|---------------|
| Selfish | 24 | 24 |
| Shy | .01 | .02 |
| Like | 18 | 21 |
| Hurry | 02 | 03 |
| Involved | 14 | 15 |
| Didn't see | .10 | .10 |
| Didn't need help | 02 | 02 |

models are slight. Thus, the more parsimonious model is equally adequate and should be preferred.

Discussion

The results from the present investigation address questions concerning both the independent and dependent variables in the moral judgment paradigm. With regard to the independent variables, the study was concerned with the effects of different motive types, sex of actors, and sex of subjects on moral judgments. With regard to the dependent variables, the present study was aimed at identifying a set of stable relationships among a group of moral judgment variables. The discussion will first address the issues raised by the experimental results and then address the results of the correlational analyses.

The aim of the experimental manipulations in the first part of the study was to determine whether different types of motives for not helping influenced moral judgment. As Tables 13 and 14 clearly indicate, the effects for the different motives are quite large. Just looking at the effects on Evaluation, the usual dependent measure in the moral judgment paradigm, all but one of the Motive Types is significant. Thus, motive information is an important component of the moral evaluation of adults.

While several studies (Berndt & Berndt, 1975; Rule & Duker, 1973; Rule et al., 1974; Weiner & Peter, 1973) have found that good and bad motives differentially affect evaluation, there has been a diversity of ways in which good and bad motives have been operationalized. The present study is the first to empirically generate motives and then empirically determine their influences on evaluation. For example, is "thinking the victim doesn't need help" a good or bad motive? Perhaps surprisingly, it is the most negatively evaluated of the seven motives.

The results from the present study would also appear to have more external validity than previous studies which supplied subjects with motive information. Since the motives used here were generated by the subjects themselves the results are more likely to generalize to evaluations of not helping which occur outside the laboratory. The motive information was not chosen intuitively by the experimenter but generated by the subjects and thus should be more

representative of motives people actually attribute to others who fail to help in nonemergency situations.

While there were clearly judgmental differences in motives taken from different clusters, there were also judgmental differences in motives taken from within clusters. Thus, for example, motives having to do with the temporal cost of helping are not judged uniformly. The results concerning the differences between motives from the same cluster illustrates that while the clusters contain motives that seem to go together, they are not evaluated the same. These data also suggest that the results from one study in which the researcher intuitively selected a "bad" motive cannot be generalized to another study in which the researcher selected a different "bad" motive. Clearly, more systematic examination and control of motive information is needed.

Finally, it should be noted that there were no sex of subject differences in moral judgment and only two sex of actor differences in judgment. Indeed most studies of moral judgment find no sex differences (Hebble, 1971; Gutkin, 1972; Chandler et al., 1973).

The present investigation also sought to identify a group of moral judgment variables that would predict evaluation of the actor and retribution to the victim. The principle of justice, or equality and fairness, is central to theories of morality (Aristotle, 1974; Ross, 1939; Bedau, 1971; Plato, 1974). Thus, justice was the crucial variable in the model of moral judgment presented here. The

perception of justice was clearly associated with the perception of intentionality, attribution of responsibility, evaluation and retribution. Moreover, data now being analyzed suggests that the perception of the actor's behavior as being justified (i.e., just or fair) significantly improves the model. The path coefficients tend to be more stable across situations and the fit between the observed and predicted correlations is somewhat improved. Therefore, justice with respect to what happened to the victim and to the actor's behavior is a major component of moral judgment.

Intentionality was also hypothesized to be an important variable in moral judgment. In fact, Shantz (1975) concludes that Piaget's work (1965) on moral development, and the many replications, are concerned primarily with intentionality. However, Shantz also uses intentionality, blame, responsibility and motive interchangeably. But even so, intentionality does seem to be central to the moral judgment literature (Keasey, 1978). Thus, it was surprising to find that intentionality did not relate to either moral evaluation or retribution. In fact, data currently being analyzed suggests that intentionality could be profitably omitted from the model presented here.

It was also hypothesized that judgments of responsibility would be central to moral judgment. In fact, it may be said that we cannot make moral evaluations of someone or their actions unless they are responsible for what they do (Frankena & Granrose, 1974). Given that in

philosophy there is a conceptual distinction between moral evaluation and responsibility, it is surprising to see the failure of psychologists to distinguish clearly between these two major constructs (Shaw & Sculzer, 1964; Walster, 1966; Ross & diTecco, 1975; Shantz, 1975). However, it is also surprising to see reviews in which it is argued that moral evaluation and responsibility are independent (Rule & Nesdale, 1976; Pepitone, 1975). Pepitone (1976), for example, has argued that while personal responsibility is not attributed to the perpetrator of an accident, he or she may nevertheless be negatively evaluated. Pepitone identified negligence or carelessness as important. according to Hieder (1958) people can be held responsible for consequences they might have foreseen. The "accident" occurred because the perpetrator was negligent and he or she is thus held responsible and perhaps negatively evaluated. Pepitone may be confusing intent with responsibility. Clearly, the outcome of an "accident" could not be intended. Intentionality refers specifically to whether an outcome is intentional or accidental. Responsibility, on the other hand, refers to (1) the cause of the outcome being internal to the person, i.e., he or she was not compelled to act by someone or something external, and (2) the act is not a result of any ignorance not brought about by one's own previous choices. This was Aristotle's definition and one generally accepted today (Frankena, 1963; Frankena & Granrose, 1974).

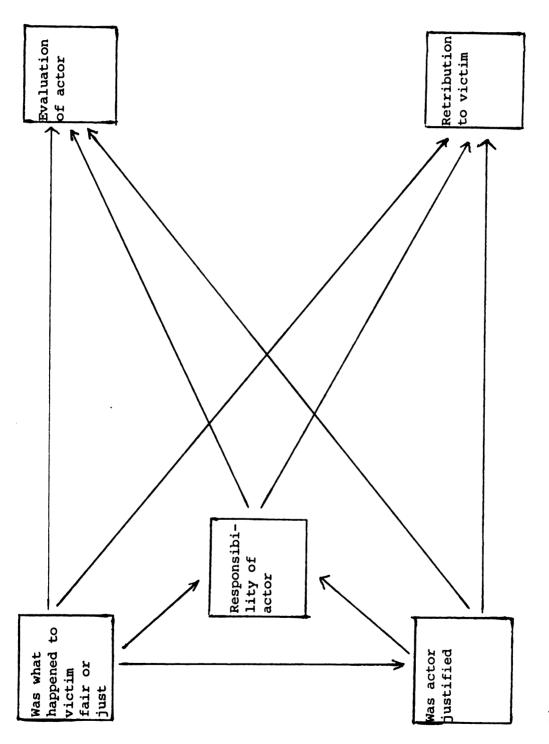
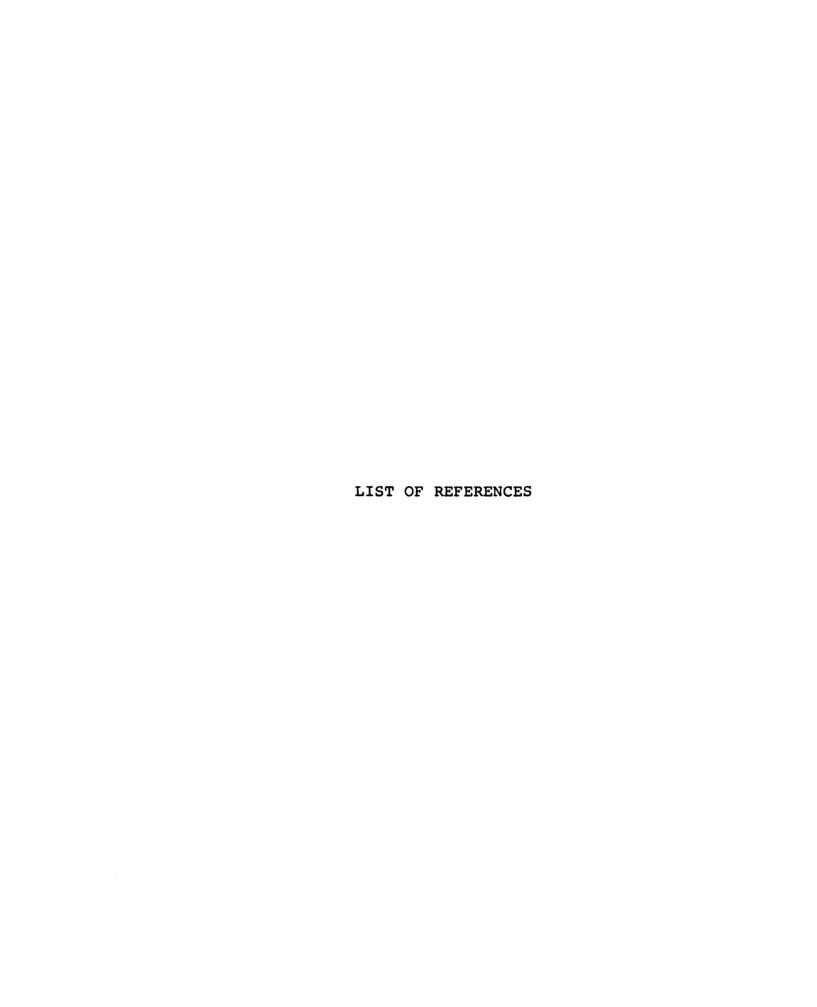


Figure 6. Proposed Causal Model of Moral Judgment.

As defined here, judgments of responsibility were expected to influence retribution to the victim and moral evaluation of the actor. This hypothesis was clearly supported. The path coefficients from responsibility to retribution and evaluation were significant and relatively stable across situations.

With these considerations in mind, a revised model of moral judgment is presented in Figure 6. The model is identical to the one proposed earlier but with one significant change. Intentionality has been dropped and replaced with fairness of the actor's behavior. It is possible that this model will need revision as there are new theoretical developments and as additional data become available. The primary aim in constructing a causal model that may reflect causal processes in moral judgment is to facilitate the clearer statement of hypotheses and to generate additional insights into the topic. Figure 6 simply represents a preliminary attempt to construct a causal model of moral judgment.



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LIST OF REFERENCES

- Adkins, A. W. H. Merit and responsibility: A study in Greek values. London: Oxford University Press, 1960.
- Aristotle. Distributive justice. In W. K. Frankena & J. T. Granrose (Eds.) Introductory Reading in Ethics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.
- Asher, H. B. <u>Causal modeling</u>. Sage University Paper series on Quantitative Applications in the Social Sciences. Series No. 07-003. Beverly Hills: Sage Publications, 1976.
- Austin, W., Walster, E., & Utne, M. K. Equity and the law:
 The effect of a harmdoer's "suffering in the act"
 on liking and assigned punishment. In L.
 Berkowitz and E. Walster (Eds.) Advances in
 Experimental Social Psychology (Vol. 9). New York:
 Academic Press, 1976.
- Bandura, A., & McDonald, F. J. The influence of social reinforcement and the behavior of models in shaping children's moral judgments. Journal of Abnormal and Social Psychology, 1963, 67, 274-281.
- Bannister, D., & Agnew, J. The child's construing of self.
 In J. C. Cole (Ed.) Nebraska Symposium on Motivation (Vol. 24). Lincoln, Nebraska: University of
 Nebraska Press, 1976.
- Bedau, H. A. (ed.) Justice and equality. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.
- Berg-Cross, L. G. Intentionality, degree of damage, and moral judgments. Child Development, 1975, 46, 970-974.
- Berkowitz, L., & Connor, W. H. Success, failure, and social responsibility. <u>Journal of Personality and Social Psychology</u>, 1966, <u>4</u>, 664-669.

- Berndt, T. J. The effect of reciprocity norms on moral judgment and causal attribution. Child Development, 1977, 48, 1322-1330.
- Berndt, T. J., & Berndt, E. G. Children's use of motives and intentionality in person perception and moral judgment. Child Development, 1975, 46, 904-912.
- Bigner, J. J. A Wernerian developmental analysis of children's descriptions of siblings. Child Development, 1974, 45, 317-323.
- Blau, P. M. Exchange and power in social life. New York: Wiley, 1964.
- Blau, P. M. Social exchange. In D. L. Sills (Ed.) International Encyclopedia of the Social Sciences (Vol. 7). New York: MacMillan, 1968, 452-457.
- Boehm, L. The development of conscience: A comparison of American children of different mental and socioeconomic levels. Child Development, 1962, 33, 575-590.
- Boehm, L., & Nass, M. L. Social class differences in conscience development. Child Development, 1962, 33, 565-574.
- Bourke, V. J. <u>History of ethics</u>. Garden City, New York: Doubleday & Company, Inc., 1968.
- Brockner, J. Self-esteem, self-consciousness, and task performance: Replications, extensions, and possible explanations. Journal of Personality and Social Psychology, 1979, 37, 447-461.
- Chandler, M. J., Greenspan, S., & Barenboim, C. Judgments of intentionality in response to video-taped and verbally presented moral dilemmas: the medium is the message. Child Development, 1973, 44, 315-320.
- Cohen, J., & Cohen, P. Applied multiple regression/correlation analysis for the behavioral sciences.

 Hillsdale, New Jersey: Laurence Erlbaum Associates, 1975.
- Costanzo, P. R., Coie, J. D., Grumet, J. F., & Farnill, D. A reexamination of the effects of intent and consequence on children's moral judgments. Child Development, 1973, 44, 154-161.

- Daniels, L. R., & Berkowitz, L. Liking and response to dependency relationships. Human Relations, 1963, 16, 141-148.
- Eisenberg-Berg, N. & Neal, C. Children's moral reasoning about their own spontaneous behavior. Developmental Psychology, 1979, 15, 228-229.
- Elkind, D. Egocentrism in adolescence. Child Development, 1967, 38, 1025-1034.
- Elkind, D. & Bowen, R. Imaginary audience behavior in children and adolescents. <u>Developmental Psychology</u>, 1979, 15, 38-44.
- Feldman, N. S., Klasson, E. C., Parsons, J. E., Rholes, W. S., & Ruble, D. N. Order of information presentation and children's moral judgments. Child Development, 1976, 47, 556-559.
- Ferm, V. Encyclopedia of morals. New York: Philosophical Library, 1956.
- Flavell, J. H. The development of knowledge about visual perception. In C. B. Keasey (Ed.) Nebraska Symposium on Motivation (Vol. 25). Lincoln, Nebraska: University of Nebraska Press, 1978.
- Frankena, W. K. Ethics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.
- Frankena, W. K., & Granrose, J. T. (Eds.) <u>Introductory</u> readings in ethics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.
- Gollin, E. S. Organizational characteristics of social judgment: a developmental investigation. <u>Journal</u> of Personality, 1958, 52, 39-42.
- Gottlieb, D. E., Taylor, S. E., & Ruderman, A. Cognitive bases of children's moral judgments. <u>Developmental Psychology</u>, 1977, <u>13</u>, 547-556.
- Gouldner, A. W. The norm of reciprocity: A preliminary statement. American Sociological Review, 1960, 25, 161-178.
- Grinder, R. E. Relations between behavioral and cognitive dimensions of conscience in middle childhood.

 Child Development, 1964, 35, 881-893.

- Gutkin, D. C. The effects of systematic story changes on intentionality in children's moral judgments. Child Development, 1972, 43, 187-195.
- Harris, B. Developmental differences in the attribution of responsibility. <u>Developmental Psychology</u>, 1977, 13, 257-265.
- Harvey, M. D., & Rule, B. G. Moral evaluations and judgments of responsibility. Personality and Social Psychology Bulletin, 1978, 4, 583-588.
- Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.
- Heise, D. Problems in path analysis and causal inference. In E. Borgatta & G. Bohrnsted (Eds.) <u>Sociological</u> <u>Methodology</u>, 1969. San Francisco: Jossey-Bass, 1969.
- Heise, D. <u>Causal analysis</u>. New York: John Wiley & Sons, 1975.
- Hoffman, M. L. Moral development. In P. H. Mussen (Ed.)

 Carmichael's manual of child psychology (Vol. 2).

 New York: Wiley, 1970, 261-359.
- Imamoglu, E. O. Children's awareness and usage of intention cues. Child Development, 1975, 46, 39-45.
- Inhelder, B., & Piaget, J. The growth of logical thinking from childhood to adolescence. New York: Basic Books, 1958.
- Johnson, R. E. A study of children's moral judgments. Child Development, 1962, 33, 327-354.
- Johnson, S. C. Hierarchical clustering schemes. <u>Psychometrika</u>, 1967, <u>38</u>, 241-254.
- Karniol, R., & Ross, M. The development of causal attribution in social perception. <u>Journal of Personality</u> and <u>Social Psychology</u>, 1976, 34, 455-464.
- Keasey, C. B. Children's developing awareness and usage of intentionality and motives. In C. B. Keasey (Ed.)

 Nebraska Symposium on Motivation (Vol. 25).

 Lincoln, Nebraska: University of Nebraska Press,
 1978.

- Kelly, G. A. A theory of personality: The psychology of personal constructs. New York: Norton, 1955.
- Kruskal, J. B., & Wish, M. <u>Multidimensional scaling</u>. Beverly Hills: Sage <u>Publications</u>, 1978.
- Land, K. C. Principles of path analysis. In E. Borgatta & G. Bohrnstedt (Eds.) Sociological Methodology 1969. San Francisco: Jossey-Bass, 1969.
- Lerner, E. Constraint areas and the moral judgment of children. Menasta, Wisconsin: George Banta, 1937.
- Lerner, M. J., Miller, D. T., & Holmes, J. G. Deserving and the emergence of forms of justice. In L. Berkowitz & E. Walster (Eds.) Advances in Experimental Social Psychology (Vol. 9). New York:

 Academic Press, 1976.
- Lickona, T. Research on Piaget's theory of moral development. In T. Lickona (Ed.) Moral Development and Behavior: Theory, Research, and Social Issues.

 New York: Holt, Rinehart, and Winston, 1976.
- Lincoln, H., & Levinger, G. Observers' evaluations of the victim and the attacker in an aggressive incident.

 Journal of Personality and Social Psychology, 1972, 22, 202-210.
- MacRae, D. A test of Piaget's theories of moral development.

 Journal of Abnormal Social Psychology, 1954, 49,

 14-18.
- Mischel, W., Ebbesen, E., & Zeiss, A. R. Determinants of selective memory about the self. <u>Journal of Consulting and Clinical Psychology</u>, 1976, 44, 92-103.
- Montemayor, R., & Eisen, M. The development of selfconceptions from childhood to adolescence. <u>Develop-</u> mental Psychology, 1977, 13, 314-319.
- Moore, D. The structure of motives for not helping. In J. D. Fisher (Chair) <u>Factors affecting helping</u>. Symposium to be presented at the meeting of the American Psychological Association, New York, August, 1979.
- Moore, D. Moral evaluations and judgments of responsibility.
 Unpublished manuscript. Michigan State University,
 1979.

- Mussen, P., & Eisenberg-Berg, N. Roots of caring, sharing, and helping. San Francisco: W. H. Freeman & Co., 1977.
- Nummedal, S., & Bass, S. Effects of the salience of intention and consequence on children's moral judgments.

 Developmental Psychology, 1976, 12, 475-476.
- Olshan, K. The multidimension structure of person perception in children. Unpublished doctoral dissertation.
- Parsons, J. E., Ruble, D. N., Klossen, E. C., Feldman, N. S., & Rholes, W. S. Order effects on children's moral and achievement judgments. Developmental Psychology, 1976, 12, 357-358.
- Passer, M. W. <u>Multidimensional scaling of the causes for success and failure</u>. Paper presented at the meeting of the American Psychological Association, Toronto, 1978.
- Paulson, S. L. Two types of motive explanation. American Philosophical Quarterly, 1972, 9, 193-199.
- Peevers, B. H., & Secord, P. F. Developmental changes in attribution of descriptive concepts to persons.

 Journal of Personality and Social Psychology, 1973, 27, 120-128.
- Pepitone, A. Social psychological perspectives on crime and punishment. <u>Journal of Social Issue</u>, 1975, 31, 197-216.
- Piaget, J. The moral judgment of the child. Translated by M. Gabain. New York: Free Press, 1965.
- Plato. The virtue of justice. In W. K. Frankena & J. T. Granrose (Eds.) Introductory Readings in Ethics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.
- Rawls, L. A theory of justice. Cambridge, Massachusetts: The Belknap Press, 1971.
- Rohlf, F. J. Adaptive hierarchical clustering schemes. Systematic Zoology, 1970, 19, 58-82.
- Rosenberg, S. New approaches to the analysis of personal constructs in person perception. In J. K. Cole (Ed.) Nebraska Symposium on Motivation (Vol. 24). Lincoln, Nebraska: University of Nebraska Press, 1976.

- Rosenberg, S., & Sedlak, A. Implicit personality theory. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 6). New York: Academic Press, 1972.
- Ross, M., & DiTecco, D. An attribution analysis of moral judgments. <u>Journal of Social Issues</u>, 1975, <u>31</u>, 91-110.
- Ross, W. D. <u>Foundations of ethics</u>. New York: Oxford University Press, 1939.
- Rule, B. G., & Duker, P. Effects of intentions and consequences on children's evaluations of aggressors.

 Journal of Personality and Social Psychology, 1973, 27, 184-189.
- Rule, B. G.; Nesdale, A. R.; & McAra, M. J. Children's reactions to information about the intentions underlying an aggressive act. Child Development, 1974, 45, 794-798.
- Scarlet, H. H.; Press, A. N.; & Crockett, W. H. Children's descriptions of peers: A Wernerian developmental analysis. Child Development, 1971, 42, 439-453.
- Shantz, C. V. The development of social cognition. In E. M. Hetherington (Ed.), Review of Child Development Research (Vol. 5). Chicago: University of Chicago Press, 1975.
- Shaw, B. G., & Nesdale, A. R. Moral judgments of aggressive behavior. In R. G. Creen & E. C. O'Neal (Eds.), Perspectives on aggression. New York: Academic Press, 1976.
- Shaw, M. E., & Sulzer, J. L. An empirical test of Heider's levels in attribution of responsibility. <u>Journal of Abnormal and Social Psychology</u>, 1964, 69, 29-46.
- Shepard, R. N.; Romney, A. K.; & Nerlove, S. B. (Eds.).

 Multidimensional scaling: Theory and applications
 in the behavioral sciences. New York: Seminar
 Press, 1972.
- Signell, K. A. Cognitive complexity in person perception and nation perception. A developmental approach.

 Journal of Personality, 1966, 34, 517-537.

- Spence, K. W.; Farber, I. E.; & McFann, H. H. The relation of anxiety (drive) level to performance in competitional and noncompetitional paired-associate learning. Journal of Experimental Psychology, 1956, 52, 296-305.
- Stenson, H. H., & Knoll, R. L. Goodness of fit for random rankings in Kruskal's nonmetric scaling procedure. Psychological Bulletin, 1969, 81, 122-126.
- Stephan, L. The science of ethics. New York: G. P. Putnam's Sons, 1882.
- Stuart, R. B. Decentration in the development of children's concepts of moral and causal judgment. <u>Journal of Genetic Psychology</u>, 1967, 111, 59-68.
- Vysotsky, L. S. Thought and language. Cambridge, Massa-chusetts: M.I.T. Press, 1962.
- Walster, E.; Berscheid, E.; & Walster, G. W. New directions in equity research. In L. Berkowitz & E. Walster (Eds.), Advances in Experimental Social Psychology (Vol. 9). New York: Academic Press, 1976.
- Walster, E.; Walster, G. W.; Abrahams, D.; & Brown, Z. The effect on liking of underrating or overrating another.

 Journal of Experimental Social Psychology, 1966,

 2, 70-84.
- Wagner, D. M. The development of morality. Homewood, IL.: Learning Systems Co., 1975.
- Weiner, B. Achievement motivation as conceptualized by an attribution theorist. In B. Weiner (Ed.), Achievement motivation and attribution theory. General Learning Press, 1974.
- Weiner, B.; Frieze, I.; Kukla, A.; Reed, L.; Rest, S.; & Rosenbaum, R. M. Perceiving the causes of success and failure. General Learning Press, 1971.
- Weiner, B., & Kun, A. The development of causal attribution and social motivation. In S. Feldman & D. Bush (Eds.), Cognitive development and social development. Hillsdale, N.J.: Erlbaum, in press.
- Weiner, B., & N. Peter. A cognitive-developmental analysis of achievement and moral judgments. <u>Developmental</u> Psychology, 1973, 9, 290-309.

- Werner, H. The concept of development from a comparative and organismic point of view. In D. B. Harris (Ed.), The concept of development. Minneapolis: University of Minnesota Press, 1957.
- Werner, H. Comparative psychology of mental development. Chicago: Follett Press, 1948.
- Whiteman, P. H., & Kosier, K. P. Development of children's moralistic judgments: age, sex, IQ, and certain personal-experiential variables. Child Development, 1964, 35, 843-850.

APPENDIX A

MEAN CORRELATIONS AMONG MORAL JUDGMENT MEASURES

APPENDIX A

MEAN CORRELATIONS AMONG MORAL JUDGMENT MEASURES

| | Evaluation | Retribution | Justice | Intent |
|----------------|-------------------|-------------|---------|--------|
| Responsibility | 43 | .47 | 51 | .44 |
| Evaluation | | 31 | .56 | 25 |
| Retribution | | | 34 | .35 |
| Justice | | | | 26 |

