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Susan Louise Bryant

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PERCEPTIONS OF CHILDREN'S MORAL REASONING

by

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Department of Psychology

Submitted in partial fulfilment  
of the requirements for the degree of  
Doctor of Philosophy

Faculty of Graduate Studies  
The University of Western Ontario  
London, Ontario  
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#### ABSTRACT

Moral judgment has been an extremely popular area of interest over the past few decades. The theories of Jean Piaget (1932) and Lawrence Kohlberg (1958) stimulated a great deal of research aimed at examining developmental differences in moral judgment skills. Recently, researchers have extended these efforts to consider adults' perceptions of the moral reasoning abilities of older children and adolescents (e.g., Bressley, Schmierer, & Hope, 1980; Rybush, 1980). This area of research is particularly exciting because of its potential implications for moral education and educational strategies suggested to promote moral thinking. The present investigation provided an extension to this previous research and considered adults' awareness of young children's moral judgment skills.

The first of the four studies examined adults' predictions of moral reasoning for 4th, 7th, and 10th grade children. In addition, adults' prescriptions for advice they would offer children to teach them moral reasoning were also assessed at the three grade levels. Comparisons revealed that the adults were able to predict accurate levels of moral reasoning for the children. Their prescriptions for advice, however, did not reflect a clear awareness of these developmental differences in moral reasoning. Recommendations for advice were often consistent with adult levels of functioning.

A second study was conducted to determine the actual reasoning levels demonstrated by 4th grade children. This was done to allow for more accurate comparisons between the children's true level of reasoning and adults' predictions and prescriptions of their performance.

Comparisons indicated that the adults' predictions in Study 1 were accurate relative to actual moral reasoning of 4th grade children. The majority of their prescriptions, however, were significantly higher than the reasoning levels of the children (i.e., more than 1 stage higher), and thus, would not be considered good moral advice according to suggested moral education strategies (Enright, Lapsley, & Levy, 1983).

The predictions and prescriptions of elementary teachers were assessed in the third study to determine if direct experience with children improved moral advice-giving ability. In agreement with the first study, however, the teachers prescribed advice at their own level of moral understanding. Their predictions reflected an awareness of developmental differences in reasoning, yet their prescriptions indicated that they recommended advice above the level of comprehension for 4th graders (i.e., more than 1 stage above).

The teachers' poor advice-giving abilities were discussed in terms of a lack of adequate knowledge concerning moral theory and moral education strategies. This hypothesis was examined further in the final study. Adults in this study received either no training or training in moral theory or moral theory plus moral education. Their predictions and prescriptions for 4th graders were assessed one week following the training sessions. Results indicated that only those individuals who participated in the combined training procedure evidenced moral advice appropriate for promoting growth in 4th grade children. Subjects in the no training and moral theory only training conditions prescribed advice at a level greater than 1 stage above that of 4th grade children. Educational applications of this finding, as well as suggestions for future research are discussed.

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## Introduction

Over 50 years ago, Jean Piaget conducted observations and interviews with young children in an attempt to better understand their moral reasoning abilities. Through the use of these extensive procedures, he developed a two stage cognitive-developmental theory of moral judgment (Piaget, 1932). This initial effort by Piaget later provided the basis for the elaborate six stage theory of moral judgment proposed by Lawrence Kohlberg (1963).

As a result of the early work of both Piaget and Kohlberg, moral development has been an extremely popular area of interest for the past few decades. The theories of these two men stimulated a great deal of subsequent research aimed at examining developmental differences in moral judgment skills. Numerous examples of such research appear in the literature (see Colby, Kohlberg, Gibbs & Lieberman, 1983, for a discussion).

Recently researchers have begun to consider adults' perceptions of the moral reasoning abilities of children (Pressley, Enright, Michener & Rothlisberg, 1984; Pressley, Schmierer & Hope, 1980; Rybash, 1980; Yussen, 1976). This area of research is particularly exciting because of its potential implications for education and child-rearing procedures. The present series of investigations provides an extension to this previous research, and considers adults' awareness of young children's moral judgment skills. Before detailing the four studies in this thesis, the

theoretical and empirical literature relevant to moral judgment is reviewed.

### The Cognitive-developmental Theory of Moral Judgment

Early interest in the area of moral judgment was initiated by the work of Jean Piaget (1932). Through the use of observations and interviews, Piaget sought to determine how young children (i.e., 4-12 years) think about such moral issues as justice and punishment. To understand children's moral thought processes, he presented his subjects with pairs of stories concerning young children in problem situations. Examples of such story pairs are presented below.

I. A. A little boy who is called John is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. John couldn't have known that there was all this behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and they all get broken!

B. Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up on to a chair and stretched out his arm. But the jam was too high up and he couldn't reach it and have any. But while he was trying to get it he knocked over a cup. The cup fell down and broke.

(Piaget, 1932, p. 122)

Following the presentation of these stories, two questions were asked of the children: 1) "Are these children equally guilty?" and 2) "Which one of the two is the naughtiest, and why?" (Piaget, 1932, p. 123).

On the basis of these interview sessions with children, Piaget concluded that there are two stages of moral judgment. The first stage, moral realism, involves children aged 4-7 years. According to Piaget, characteristics of a moral realist include: 1) judging the appropriateness of a behavior by the consequences of the behavior, 2) a belief that all rules are unchangeable, and 3) a belief in imminent justice or immediate punishment for a wrong doing. In opposition to these characteristics, older children in Piaget's second stage, moral autonomy, exhibit the following moral beliefs: 1) intentions of an act (rather than consequences) are important, 2) rules may be changed if agreed upon by consensus, and 3) punishment may only occur if a wrongdoing has been witnessed (Piaget, 1932).

More recently, Lawrence Kohlberg elaborated upon Piaget's early work in the area of moral judgment. In his doctoral research, Kohlberg (1958) outlined a six stage cognitive-developmental theory of moralization. This theory was derived from interpretations of interviews conducted with 10-16 year old males. In these interviews, Kohlberg presented the participants with a series of dilemmas in which the central characters faced moral problems. Following is a familiar example of one of the dilemmas used:



In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist ~~was~~ charging ten times what the drug cost him to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together \$1,000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug, and I am going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife. (Kohlberg, 1969, p. 379)

Subsequent to the presentation of each dilemma, questions such as the following were asked of the subjects: "Should Heinz have done that?", "Would a good husband do it?" These questions were open-ended as there were no right or wrong answers to them. Subjects were presented with the questions, and then asked to explain why they answered the way they did. This questioning procedure was referred to as the Moral Judgment Interview (M.J.I.).

Kohlberg collected all of his subjects' explanations, and on the basis of these responses, he proposed that individuals proceed through an invariant sequence of six stages of moral thought.

According to Kohlberg, each stage is characterized by qualitatively different levels of moral reasoning. The following three assumptions are also included in Kohlberg's theory:

1. under normal environmental conditions developmental change will always be in an upwards direction;
2. there will be no stage skipping;
3. individual's thinking will be at a single dominant stage, although the stage adjacent to the dominant stage may also be employed (Colby & Kohlberg, 1984).

The assumptions outlined above are in agreement with Piaget's general framework of moral development. For example, in agreement with Kohlberg, Piaget (1932) stated that children will progress from the primitive to the more advanced level of moral thought. He also believed that children between his two stages of moral thought (i.e., children aged 7-9 years) would evidence features of both levels of thought. That is, they would be in a transition phase with elements of both moral realism and autonomy in their reasoning processes.

Kohlberg conceptualized his theory of morality in terms of three major levels of development. These levels, preconventional, conventional and postconventional morality, each include two stages of moral reasoning. Stages 1 and 2 are included within the preconventional level, stages 3 and 4 within conventional reasoning, and stages 5 and 6 within the postconventional morality level.

According to Kohlberg (1976), preconventional morality is based on an individual's desire to gain reward and avoid punishment. Standards of moral behavior are not internalized at this point. In conventional morality, however, social standards and rules have been internalized and the individual conforms to maintain order and the approval of others. In the last level, postconventional morality, an individual is not guided by the rules or expectations of others, but rather acts according to his/her own self-chosen principles. Within each of these levels, the two stages are defined, with the second stage reflecting the more advanced moral perspective. Brief descriptions of these stages are presented in Table 1.

The stages of moral development are determined by the cognitive development of the individual and are thus, generally related to age level (Colby & Kohlberg, 1984). Kohlberg's research (1981) has demonstrated that most children less than 9 years of age, some adolescents and most criminal offenders operate at the preconventional level of thought. The majority of adolescents and adults function within the conventional mode, and a few adults attain the postconventional morality level.

Kohlberg's model of moral development has been the focus of great controversy since its conception. Such controversy arose because subsequent investigations of the model did not always demonstrate strong support for the stage theory. Kurtines and Grief (1974) for example, were perhaps the most vocal critics when they questioned the basic assumptions of the model as well as the

Table 1.

Kohlberg's Stages of Moral Development.

Stage	Description
<u>Preconventional Level</u>	
1	<u>Obedience and punishment orientation</u> Egocentric deference to superior power or prestige, or a trouble-avoiding set. Objective responsibility.
2	<u>Naively egoistic orientation</u> Right action is that instrumentally satisfying the self's needs and occasionally those of others. Awareness of relativism of value to each actor's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.
<u>Conventional Level</u>	
3	<u>Good boy orientation</u> Orientation to approval and to pleasing and helping to others. Conformity to stereotype images of majority or natural role behavior, and judgement by intentions.
4	<u>Authority and social-order maintaining orientation</u> Orientation toward authority, fixed rules, and the maintenance of social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for its own sake. Morality is not based on individual or personal values and judgements.

Continued...

Table 1 (Cont'd)

Stage	Description
Postconventional Level	
5	<p><u>Contractual legalistic orientation</u>  Right action is defined in terms of individual rights and of standards which have been initially examined and agreed upon agreed upon by the whole society. Emphasis is upon procedural rules for reaching consensus and ensuring general welfare. Concern with establishing and maintaining individual rights, equality, liberty. Distinctions are made between values having universal prescriptive applicability and values specific to a given society.</p>
6	<p><u>The universal-ethical principle orientation</u>  Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality and consistency. These principles are abstract; they are not concrete moral rules. These are universal principles of justice, of the reciprocity and equality of human rights and of respect for the dignity of human beings and individual persons.  (Turiel, 1974, pp. 14-15)</p>

reliability, validity, administration and scoring of the interview procedure (i.e., the M.J.I.). Similar criticisms have also been voiced by numerous other researchers (e.g., Gibbs, Widaman, & Colby, 1982; Rest, 1976; Rubin & Trotter, 1977). In the years since these critiques, however, Kohlberg and his associates have made substantial revisions to the theory. Specifically, Colby, Kohlberg, Gibbs, Candee et al. (1983) developed a new scoring system, Standard Issue Scoring. This new procedure has been reported to be more reliable and valid than Kohlberg's original scoring system (Colby, Kohlberg, Gibbs & Lieberman, 1983). The administration and scoring may still present some difficulties, however, because of the time and training involved.

Criticisms of Kohlberg's theory have also often focused on his assumptions of stage sequence and stage consistency. Many researchers in fact, have questioned the universality of the stages, in particular the sixth stage of moral thought (Simpson, 1974; Sullivan, 1977). The recent revision to the theory and scoring procedures, however, was based on longitudinal research conducted by Kohlberg and his associates over a period of 20 years (Colby, Kohlberg, Gibbs & Lieberman, 1983). This research demonstrated strong support for Kohlberg's cognitive-developmental stage model. All subjects in this 20 year research project (i.e., 58 males aged 10-16 years), progressed through the stages in the predicted manner, and no stage skipping was reported. It is important to note, however, that participants in this project did not operate at the sixth and final stage of moral development.

Given this finding, Kohlberg chose to omit this stage from the revised scoring manual. The longitudinal evidence failed to support its existence as a universal stage of moral reasoning, and thus, the revised theory and manual now includes only the first five stages of moral development. The existence of these five stages, however, has been supported in numerous recent investigations. Studies conducted by Nisan and Kohlberg (1982), Walker, de Vries, and Richard (1984), Snarey (1985), and Snarey, Reiner and Kohlberg (1985), have all reported findings in agreement with Kohlberg's notion of a five stage hierarchy.

In light of these above-mentioned research findings, and the recent revisions to the theory and scoring procedures, criticisms such as those offered by Kurtines and Grief (1974) have hopefully been put to rest (Kohlberg, Levine & Hewer, 1983). It should be mentioned here though, that various other aspects of Kohlberg's model have also been criticized. Holstein (1976) and Gilligan (1982), for example, both voiced concern about Kohlberg's sexual bias towards males in his model of moral development. In a recent article, Kohlberg et al. (1983) addressed this concern in light of the reformulation of the theory and scoring procedures. The authors admitted that such a bias may have existed in the original formulation of the model (i.e., Kohlberg, 1958, 1969), but stated that it was not relevant to the newly-revised scoring system.

In addition, recent research has also supported Kohlberg et al.'s (1983) claim. Walker (1984) reviewed 54 studies of moral judgment which employed Kohlberg's M.J.I., and concluded that very

few instances of sex differences had been reported in the literature. Of the few studies that did indicate gender differences (in favor of males), most relied on Kohlberg's earlier scoring system (i.e., Kohlberg, 1969). Walker also concluded that a few studies supported higher levels of reasoning in adult males than in adult females. He noted however, that in these studies, sex differences were often confounded by other variables such as level of education and occupation.

Gibbs, Arnold and Burkhart (1984) also addressed the issue of sex differences in their study of the moral reasoning stages of 177 males and females, aged 11-20 years. While no differences were found between the actual moral stage usage of each sex, the authors did note gender differences in the orientation or moral content employed within each stage. That is, the females used greater empathetic role-taking in their moral judgments than did the males. Thus, it appears that while no apparent sex differences exist between actual levels of moral thought, as measured by the M.J.I., males and females exhibit differing orientations in their moral thought processes. For a more detailed account of this issue (as well as other concerns with the Kohlbergian model), please refer to Kohlberg (1982), Kohlberg et al. (1983), and Levine, Kohlberg and Hower (1985).

#### Moral Development and Its Relationship to Role-taking Skills

Kohlberg (1973) proposed that the ability to assume the role of others is a key factor in the development of advanced levels of moral reasoning. In other words, a child's progression through the



stages of moral development is closely related to his/her ability to adopt the perspective of another person. Piaget (1932) also emphasized this point. He stressed that an important transition in the development of moral thought was the shift from early egocentrism to an understanding of the thoughts and feelings of others (Hetherington & Parke, 1979). Role-taking or perspective-taking ability, much like the development of moral thought, proceeds within a stage-like sequence. In 1974, Selman and Byrne proposed a five stage model outlining the development of perspective-taking abilities (see Table 2). These five stages are described in greater detail in Table 2.

The nature of the relationship between moral judgment and social role-taking has been the subject of numerous research investigations (Ambron & Irwin, 1975; Moir, 1974; Walker, 1980). One of the earliest investigations of this relationship was conducted by Selman (1971). In this study, 8-10 year old children were administered Kohlberg's M.J.I., the Peabody Picture Vocabulary Test (as a measure of intelligence), and two measures of role-taking ability. Selman's results (with intelligence controlled for) revealed a significant relationship between the role-taking tasks and the child's level of moral judgment as measured by the M.J.I. In particular, non-reciprocal role-takers (i.e., Stage 2), tended to employ preconventional moral reasoning (i.e., Stages 1 and 2), when presented with moral dilemmas. The more advanced perspective-takers (i.e., Stage 3, reciprocal)

Table 2.

Parallel Stages of Social Role-taking<sup>a</sup> and Moral Development<sup>b</sup>

Social Role-taking	Moral Development
<p>Stage 0--Egocentric Viewpoint</p> <p>Child has a sense of differentiation of self and other but fails to distinguish between the social perspective (thoughts, feelings) of other and self. Child can label other's overt feelings but does not see the cause and effect relation of reasons to social actions.</p> <p>Stage 1--Social-informational Role Taking</p> <p>Child is aware that other has a social perspective based on other's own reasoning, which may or may not be similar to child's. However, child tends to focus on one perspective rather than coordinating viewpoints.</p> <p>Stage 2--Self-reflective Role Taking</p> <p>Child is conscious that each individual is aware of the other's perspective and that this awareness influences self and other's view of each other. Putting self in other's place is a way of judging his intentions, purposes, and actions. Child can form a coordinated chain of perspectives, but cannot yet abstract from this process to the level of simultaneous mutuality.</p> <p>Stage 3--Mutual Role Taking Orientation</p> <p>Child realizes that both self and other can view each other mutually and simultaneously as subjects. Child can step outside the two-person dyad and view the interaction from a third-person perspective.</p>	<p>Stage 0--Premoral Stage</p> <p>Stage 1--Obedience and Punishment Orientation</p> <p>Stage 2--Naively Egoistic Orientation</p> <p>Stage 3--Good Boy</p>

Continued...

Table 2 (Cont'd)

Social Role-taking	Moral Development
<p>Stage 4--Social and Conventional System Role-Taking</p> <p>Person realizes mutual perspective taking does not always lead to complete understanding. Social conventions are seen as necessary because they are understood by all members of the group (the generalized other) regardless of their position, role, or experience.</p>	<p>Stage 4--Authority and Social-order Maintaining Orientation</p>

<sup>a</sup> as defined by Selman and Bryne, 1974

<sup>b</sup> as defined by Kohlberg, 1958, 1963

evidenced conventional levels of reasoning when confronted with the dilemma situations.

Ten of the children from this investigation were included in a second experiment conducted one year later. These children were low on both role-taking and moral reasoning in the initial investigation. When they were retested one year later, none of the children attained conventional moral reasoning without having first attained reciprocal role-taking. Reciprocal role-taking, however, was observed in children who had not yet reached the level of conventional moral thought. These findings led Selman to conclude that the development of the ability to understand another's perspective is a "necessary but not sufficient condition" for the development of advanced levels of moral judgment (Selman, 1971, p. 79).

The results of Selman's research have been corroborated in subsequent investigations (Ambron & Irwin, 1975; Moir, 1974; Selman & Damon, 1975; Selman, 1976; Walker, 1980; Walker & Richards, 1979). In a more recent study, Walker (1980) examined the relationship between perspective-taking ability and moral judgment in 4th through 7th grade children. Included in this study was a brief role-playing situation to stimulate the moral growth of the children. In this role-playing task, children previously identified as Stage 2 moral reasoners were exposed to Stage 3 moral arguments. This was accomplished by involving each child in a moral dilemma/role-playing situation with two adults (each of whom provided Stage 3 reasoning to the child during the discussion).

Walker found that transitions from Stage 2 to Stage 3 moral thought occurred only in those children who had attained Selman and Byrne's (1974) Stage 3 perspective-taking ability.

Given the research findings of Selman (1971), Walker (1980) and others, it appears that a significant relationship exists between the development of moral reasoning and role-taking ability. Selman (1976) reviewed all the relevant empirical data and concluded that parallels exist between the development of these two abilities. These parallels, as suggested by Selman, are presented in Table 2.

When considering the suggested relationships between moral judgment and perspective-taking ability, one must keep in mind that all studies examining these two issues have been correlational in nature. That is, moral reasoning level was correlated with role-taking skill. Thus, while it is possible to conclude that a significant relationship exists between these two abilities, one cannot state that role-taking skill determines the subsequent moral level of a child (or vice versa).

Reference also must be made at this point to the fact that not all of the empirical data support this conclusion. Costanzo, Coie, Grumet and Farnhill (1973) for example, examined the effects of intent and consequences in moral judgment, and concluded that children understand moral intentions prior to exhibiting role-taking skills. This discrepancy in results may have been due in part to differences in procedures between Costanzo et al. and the other research efforts. Costanzo et al. for example, did not

employ Kohlbergian measures of moral judgment, but rather included different forms of short stories involving both positive and negative intentions and consequences. Thus, the authors were interested specifically in examining the development of the use of intentions in moral judgments rather than in overall moral reasoning from a Kohlbergian perspective.

#### Moral Perspective-taking

The research discussed thus far has generally supported Kohlberg's (1969, 1971, 1973) hypothesis that perspective-taking ability is positively related to moral maturity. As noted earlier however, all investigations producing positive data (Moir, 1974; Selman, 1971; Walker, 1980) examined subjects' performance on the M.J.I. relative to their performance on role-taking measures. An alternative approach to moral role-taking, however, has recently been considered. Pressley et al. (1984) and Yussen (1976) used the Defining Issues Test (D.I.T.) as their measure of moral judgment, and examined subjects' ability to assume moral perspectives other than their own.

The D.I.T. is a moral judgment questionnaire which was developed by James Rest (1974, 1975) as a multiple choice-type alternative to the M.J.I. This questionnaire is a recognition measure of moral reasoning. That is, subjects are required to select their answer from a number of alternatives rather than produce it (as is required of the M.J.I.). It has been found to correlate highly (i.e.,  $r = .68$ ) with Kohlbergian measures of moral judgment (Rest, 1974, 1975), and consists of six moral dilemma

stories, four from the M.J.I., and two which are similar to Kohlbergian-type dilemmas. Subjects are required to read each dilemma and then consider and rate 12 issue statements according to how important they believe each is to resolving the moral situation. For example, concerning the Kohlbergian Heinz dilemma, subjects are asked to consider such statements as: 1) Is Heinz willing to risk getting shot as a burglar to going to jail for the chance that stealing the drug might help, 2) What values are going to be the basis for governing human interactions?, and 3) Isn't it only natural for a loving husband to care so much for his wife that he'd steal? (Rest, 1975, p. 77). Each of the 12 statements represents a belief central to a particular Kohlbergian stage of moral development (Stage 2 through to Stage 6). The statements are rated on a scale of importance (i.e., most, much, some, little, or no importance). The four most important issues are then rank ordered.

The D.I.T. yields a number of scores based on these ratings and rankings. The most popular and useful scores are the "P" index (Principled Morality) and the "D" index (overall index of development). The "P" score indicates the amount of advanced, postconventional moral reasoning used by the subject. This score can range from 0-95, and the higher the score, the greater the amount of postconventional reasoning (i.e., Stages 5 and 6) employed by the subject. The "D" score is a more recent scoring technique developed by Davison, Robbins, and Swanson (1978). It represents a composite index of development obtained through

weighted ratings (Rest, 1984), and the higher the score, the greater the level of moral reasoning evidenced by the subject.

The D.I.T. has a number of advantages over Kohlberg's M.J.I. in that it can be group administered and easily scored. Thus, extensive time and effort are not needed with this measure. Recent criticisms however, have focused on the nature of the D.I.T. task relative to the M.J.I. The D.I.T. is a recognition measure of moral reasoning, and as such does not require subjects to produce their own opinions regarding moral issues. Gibbs, Widaman and Colby (1982) have noted that given this limitation, the D.I.T. should not be thought of as a substitute for such measures as the M.J.I. (This criticism will be discussed in greater detail later in the thesis.)

Yussen (1976) employed Rest's D.I.T. in a study of moral perspective-taking. In this study, 9th, 10th and 12th grade students, as well as college students responded to the D.I.T. from three separate perspectives: 1) their own; 2) that of an average philosopher (thought to be representative of higher levels of morality); and 3) that of an average policeman (thought to be representative of lower levels of morality). Yussen hypothesized that with increasing age, subjects would be better able to differentiate their own perspective from the moral perspectives of others. His findings supported this hypothesis. The youngest subjects in the study (i.e., 9th graders), exhibited the least amount of role differentiation. The college students on the other



hand, demonstrated the greatest amount of differentiation in the moral role-taking task.

In Pressley et al. (1984), American and Canadian university students responded to a three story version of the D.I.T. from two separate perspectives. Six conditions were included in this investigation. In five of these conditions the subjects simulated moral responses for either: 1) politically liberal and politically conservative adults; 2) high I.Q. and low I.Q. individuals; 3) 11 year-olds and 21 year-olds; 4) males and females; or 5) British individuals and North American individuals. In the sixth condition, the students were required to respond to the D.I.T. from their own perspective, as well as from the perspective of a hypothetical identical twin.

Pressley et al. (1984) found that both the American and the Canadian students could predict the moral responses from the differing perspectives. As was hypothesized, subjects in the three conditions involving moral perspectives which were known to differ from each other (i.e., an intelligent versus an unintelligent person, a conservative versus a liberal, and an adult versus an 11 year-old), correctly simulated differences in their responses. Those subjects in the remaining conditions involving similar moral perspectives (i.e., a Britisher versus a North American, a male versus a female, and self versus a twin) did not demonstrate differentiations in their moral predictions. These findings are in agreement with the earlier work of Yussen (1976). The adults in both investigations were able to assume the moral perspective of others.

### Moral Education: Increasing Children's Moral Judgment

The finding that adults can predict others' moral reasoning skills has important implications for the areas of classroom teaching and moral education. If one has the ability to recognize the levels of reasoning required of a child, one may also have the potential to promote the moral thought of the child by providing an appropriate level of moral advice.

Moral education is an area currently receiving a great deal of attention in both the educational and psychological literatures. As such, many investigations have recently been conducted to determine the most effective moral education programs for young children. Excellent reviews of this research have been provided by Lockwood (1978), Lawrence (1980), Leming (1981), Enright, Lapsley, Harris, and Shawver (1983), Enright, Lapsley, and Levy (1983), Lapsley and Quintana (1985), and Schlaefli, Rest and Thoma (1985).

As a result of the extensive research in the area, numerous moral education procedures have been developed for the classroom. Five of these procedures are based on Lawrence Kohlberg's cognitive-developmental model of moral development. In this model, Kohlberg claimed that moral growth in children could be facilitated if three conditions were met. They are as follows:

1. exposure to the next higher stage of reasoning;
2. exposure to situations posing problems and contradictions for the child's current moral structure leading to dissatisfaction with his current level;

3. an atmosphere of interchange and dialogue combining the first two conditions in which conflicting moral views are compared in an open manner (Kohlberg, 1978, p. 46).

The first of the five educational strategies that includes these elements is the plus-one intervention approach. As the name suggests, this approach attempts to promote moral growth through exposure to moral reasoning one stage above a student's present level. Deliberate Psychological Education is a second approach to moral education based on Kohlberg's (1958) model. In this intervention procedure, students receive specific training in communication techniques, and then practice counseling and role-playing skills. A third intervention involves didactic instruction in social studies, ethics and logic. Here, subjects are exposed to courses involving such issues as prejudice, police matters and political themes. The fourth moral education strategy which includes Kohlberg's conditions is called the Just Community Strategy. This procedure involves the restructuring of the social environment of the individuals (i.e., the school or the classroom), to make it more democratic, thus promoting moral growth.

The last strategy based on the above-mentioned conditions, is an information-processing approach. This intervention is based on Flavell's (1974) information processing model, and includes the following assumptions:

1. The content of the social curriculum should come from the child's own social behavior and interactions. Hypothetical dilemmas, then, should be used only as a supplement to the "real world" content.

2. If the child is encouraged to think about his or her own social experiences, then he or she should be challenged to think more complexly about the newly formed thought. In other words, once the child reflects on an actual experience, the educator should model a statement one level above the child's own.
3. Once a child demonstrates understanding of a social concept, he or she should be encouraged to try out that concept in social action so that the new experience might become the basis of new thoughts.

(Enright, Lapsley & Levy 1983, pp. 70-71)

Countless investigations have been conducted to determine the effectiveness of these five moral education strategies. Only the first approach, however, is reviewed here. It is both the most popular and the most effective of the Kohlbergian approaches, and the one most relevant to the research reported in this thesis. For excellent reviews of the literature on all educational strategies, please refer to Enright et al. (1983), Enright, Lapsley & Levy (1983) and Schlaefli et al. (1985).

#### The Plus-One Approach

The plus-one intervention procedure is based on the assumption that moral reasoning is promoted by discussions involving reasoning developmentally more advanced than the child's. It is believed that exposure to such advanced reasoning produces a state of cognitive disequilibrium in the child, and thus, progresses the child to the next stage of moral thought. Cognitive disequilibrium may be defined here as an internal state of disorganization and

contradiction which would lead one to reorganize his/her mental structures (Rest, Turiel, & Kohlberg, 1968).

According to Jean Piaget (1967), if a child in a state of disequilibrium is presented with reasoning close to his/her present level, his/her assimilatory and accomodatory functions act to allow for greater equilibrium (Turiel, 1969). In other words, change or progression occurs when the child is unable to assimilate this advanced reasoning to his/her current level of thought. The child is in a state of disequilibrium, and thus, is motivated to move to the next stage to achieve a state of equilibrium.

The process of promoting growth through disequilibrium is not unique to the field of moral education. Rather, this approach has been widely recommended as a general education strategy for children. Joyce (1984) for example (in a discussion of learning strategies), suggested that one must produce a state of "discomfort" in young students to promote educational growth. This view was also espoused by Hunt (1971). He claimed that one must deliberately mismatch a student and his/her environment to encourage the student to move on toward greater complexity (Joyce, 1984).

Moral disequilibrium or "discomfort" is produced in a child by presenting him/her with contradictions to his/her present level of reasoning. Such contradictory arguments, however, must be comprehensible to the child before he/she will be able to advance to the next higher level of moral reasoning. For example, reasoning 2 or more levels above the child's would not promote

disequilibrium, as such advice would not be understood by the child (Turiel, 1966, 1974). Exposure to plus-one reasoning, however, is comprehensible to the child and thus, would permit the development of disequilibrium within the child (Rest, Turiel, & Kohlberg, 1969; Walker & Richards, 1979).

Turiel (1969) suggested that a child perceives contradictions at a stage one level above his/her own modal level, because the child operates at more than one stage of moral thought at a time. Thus, the child evidences at least rudiments of more complex thinking characterized by the stage one beyond the modal level. If a child reasoned at only one stage of thought, he/she would perceive little conflict with other levels of thought. A child, however, functioning predominately at one stage, but with some other levels as well (i.e., the next higher level) would be better able to perceive contradictions in others' moral arguments. This child therefore, would experience conflict and thus, would be likely to progress in moral reasoning (Kohlberg, 1976; Langer, 1969).

Abundant research on the plus-one intervention has considered a wide variety of empirical variables such as length of intervention and type of plus-one treatment (Enright, Lapsley & Levy, 1983). In general, regardless of the specific design details, the findings drawn from the majority of plus-one investigations support the conclusion that the strategy is a potent moral intervention procedure (Arbuthnot, 1975; Blatt & Kohlberg, 1975; Hayden & Pickar, 1981; Walker, 1980, 1983).

In one of the earliest investigations of this strategy, Turiel (1966) hypothesized that: 1) more learning would result from exposure to reasoning directly above one's present level than to reasoning two stages above, and 2) more learning would result from exposure to reasoning one stage above one's present functioning than from exposure to reasoning one stage below. There were three experimental conditions and one control condition in this investigation. Experimental children were exposed to role-playing situations in which they were confronted with moral reasoning either one stage above (+1), 2 stages above (+2), or one stage below (-1), their present level of moral thought. This role-playing procedure involved having the subjects assume the role of the main character in a Kohlbergian dilemma, while 2 experimenters provided conflicting advice on how to resolve the dilemma. On the basis of M.J.I. scores obtained following the role-playing treatment session, Turiel concluded that moral advice one stage above an individual's dominant stage was the most effective in facilitating moral growth.

In a subsequent investigation, Blatt & Kohlberg (1975) exposed young children to guided discussions of higher (i.e., +1) levels of moral reasoning. In agreement with the results of Turiel (1966), Blatt & Kohlberg found that the plus-one procedure significantly increased children's M.J.I. scores. The gains observed in moral level were still evident one year later.

Recent research by Walker (1983) has also supported the strength of the plus-one strategy. Walker examined various sources

of cognitive conflict to determine the relative effectiveness of both opinion and reasoning level conflicts for inducing moral growth. Fifth through seventh grade children were exposed to one of the six following conditions:

1. pro/con +1 condition (i.e., conflicting +1 reasoning opinions);
2. con +1 condition (i.e., consonant +1 reasoning opinions which differed from child's opinions);
3. pro +1 condition (i.e., consonant +1 reasoning opinions which agreed with child's opinions);
4. pro/con 0 condition (i.e., conflicting same stage opinions);
5. pro 0 condition (i.e., consonant same stage opinions in agreement with child's reasoning);
6. no-treatment control condition.

Analysis of the children's moral judgement scores (1 week and 7 weeks following intervention), revealed that the subjects in the pro/con +1 and the con +1 conditions demonstrated the greatest amount of moral growth. On the basis of this finding, Walker concluded that "conflict in both opinions and reasoning seems to be the optimal means by which development can be stimulated" (Walker, 1983, p. 108).

Numerous additional investigators have also demonstrated the positive results of this plus-one intervention procedure (Arburthnot, 1975; Hayden & Pickar, 1981; McCann & Prentice, 1981; Tracey & Cross, 1973; Walker, 1980). Williams (1974), however, proved to be unsuccessful in his attempts to utilize the strategy in a classroom situation. The failure of the procedure in this



investigation, however, may be accounted for by the fact that the subjects were younger (i.e., grades 2 and 3) than those employed in the successful experiments. Other researchers have also found the strategy to be ineffective with young children (e.g., Wright, 1978). It may be, therefore, that the plus-one strategy is not appropriate for use with early elementary school-aged children below the grade 4 level (Enright, Lapsley & Levy, 1983).

It should also be noted here, that the plus-one approach has recently come under question in light of some new research findings (Lapsley, Enright & Serlin, in press). Walker (1982) for example, demonstrated that moral growth within his 7th grade subjects was effectively promoted using both plus-one and plus-two (i.e., two stages above current reasoning) interventions. Also, recent work by Berkowitz and his colleagues (e.g., Berkowitz, 1980; Berkowitz, Gibbs & Broughton, 1980; Berkowitz & Gibbs, 1983), suggested that the optimal discrepancy between a child's current level and the level of moral arguments presented, may in fact be one-third of a stage rather than one stage. The results of the Berkowitz investigations indicated that subjects participating in moral discussions one third of a stage above their level, evidenced the most advancement in moral growth (when compared to subjects involved in discussions two-thirds of a stage or more above their present level of functioning)..

Although this more recent evidence has questioned the validity of the plus-one approach, the majority of research supports its use as an effective intervention procedure. Reviews of the literature

have also suggested that alternative strategies such as Deliberate Psychological Education and the Just Community approach (as described earlier) may be beneficial as well in promoting moral growth. The most popular and effective approach however, still appears to be the plus-one technique. Recent reviews have established the effectiveness of this approach (Enright et al., 1983; Enright, Lapsley & Levy, 1983; Schlaefli et al., 1985; Thoma, 1984). Enright, Lapsley and Levy (1983) reviewed 28 studies employing the plus-one strategy, and concluded that all but four were effective in advancing the moral growth of children. A more extensive review of the literature by Schlaefli et al. (1985) also demonstrated that the plus-one technique produced significant gains in moral development.

#### Teachers' Decision Making

The moral education literature suggests that children should be presented with moral advice just above (i.e., 1 stage above) their present level of functioning (Enright et al., 1983). The role of a teacher in a moral education program therefore, should be to develop a model of teaching which would incorporate this strategy.

A common problem that teachers encounter however, in attempting to promote development in their students, is the task of integrating all of the information that is available to them, and presenting it in an effective manner. According to Shavelson and Stern (1981), teachers possess a great deal of information about their students; information obtained from such sources as

observation, test scores, anecdotal reports, school records, etc. To process this "information overload", teachers integrate it into judgments that they make about their students. These judgments, in turn, guide their teaching decisions in the classroom (Shavelson & Stern, 1981).

To better understand the teaching process, Peterson and Clark (1978) studied the cognitive processes of twelve teachers in classroom situations. On the basis of this study, they proposed a model of teachers' decision processes which suggested that teachers consider a number of alternate approaches when involved in an interactive instruction session with their students. That is, they believed that teachers consider numerous alternatives to a lesson given the observable response of the students.

Subsequent research however, indicated that teachers actually consider alternative teaching strategies in their classroom rather infrequently (Clark & Peterson, 1986). That is, teachers often stick with their original teaching decisions in the course of an interactive lesson. Shavelson and Stern (1981) based their model of teacher decision making on this notion, and suggested that in an interactive teaching session teachers behave according to well-established routines that they possess. These routines or instructional plans, are usually so set, that teachers seldom deviate from them once the teaching session has begun (Joyce, 1978, 1979; Shavelson, 1983).

In light of these findings concerning teachers' decision making processes, it seems evident that teacher planning is very

important in any classroom curriculum. Clark and Peterson (1986) in their study of teacher thought processes, concluded that decision making, thinking and planning, make up a large part of what is involved in classroom teaching. These thought processes in turn, according to Clark and Peterson, influence and determine how the teacher will behave in the classroom. In addition, Shavelson (1983) concluded that teacher planning is of the utmost importance because it greatly influences teachers' behavior in the classroom as well as the nature of the education the students receive.

#### Recommendations for Teaching Moral Issues

Considering once again the area of moral education, it appears that teachers' thoughts and perceptions about their students' moral reasoning skills would be very important in the design and implementation of effective moral education programs. In light of this, it would, therefore be of value to consider further their perceptions about teaching moral issues to children.

Some preliminary research has been conducted to examine this issue. Moral development investigators have recently begun to study adults' perceptions about moral advice for children (e.g., Pressley et al., 1980; Rybush, 1980). Previous research has demonstrated that adults understand developmental differences in reasoning skills (Yussen, 1976). Considering this finding, these researchers questioned whether or not adults would consider these differing moral viewpoints when asked to teach moral solutions to younger individuals.

In Pressley et al. (1980), seven groups of college students were given the D.I.T. In one of the conditions, the students answered a standard version of this test. The tests given to the remaining six conditions, however, were modified versions of the D.I.T., with slightly different instructions provided in each condition. Three groups of subjects answered from the perspective of 11 year-olds, 15 year-olds or 19 year-olds (i.e., prediction conditions). In three other conditions (i.e., prescription conditions) subjects "rated the [D.I.T.] issues on the importance of presenting the issues to adolescents 11, 15 & 19 years of age who are faced with the dilemma" (Pressley et al., 1980, p. 1290).

While it was anticipated that the students in the prediction conditions would be able to identify correctly the perspectives of the various developmental levels, the authors were uncertain about what to expect of the adults in the prescription conditions. Previous research in the area of teachers' decision making (Borko, Cone, Russo & Shavelson, 1979) had suggested that a match often exists between adults' perceptions of children's abilities and the instructions that they recommend for them. The investigators sought to determine whether this was also the case when adults were required to consider specifically the moral abilities of children.

Pressley et al. concluded that their subjects could simulate the moral reasoning of different-aged children (i.e., make predictions for others). This finding was not surprising given the conclusions of the Yussen (1976) and Pressley et al. (1984)

investigations. Their understanding, of others' perspectives however, did not appear to affect their recommendations concerning the arguments they thought should be presented to adolescents. That is, the adults prescribed moral advice that was more advanced than the perceived (and actual) abilities of 11 to 15 year-olds. Their advice, in fact, did not differ from the reasoning evidenced by the adult subjects themselves.

Rybash (1980) was especially interested in the advice that elementary school teachers employed to help young children resolve moral problems. One group of teachers in his study was administered a modified version of the D.I.T. They were asked to respond to the D.I.T. with the type of advice they would give an average 10 year-old needing help to solve the moral problems. Teachers in a second group received the same instructions, however, in this condition they were asked to consider an average 40 year-old rather than a child. A third group of teachers responded to Rest's (1974, 1975) standard version of the D.I.T.

In light of Yussen's (1976) results, Rybash (1980) hypothesized that the teachers in his investigation would believe that their resolution of a moral situation should differ greatly from the resolution demonstrated by a child. He expected therefore that the teachers would exhibit less postconventional moral reasoning (i.e., Stages 5 & 6) when giving advice to 10 year-olds than in their own moral resolutions. Rybash however, found no between-condition differences. That is, the teachers did not differentiate between their advice to 10 year-olds and 40

year-olds. Also, their advice did not differ from their own opinions regarding the resolution of the dilemmas.

In summary, the moral perspective-taking literature has shown that adults fail to consider the differing moral viewpoints of others when asked to prescribe moral advice. They understand and are aware of these differing viewpoints (Yussen, 1976; Pressley et al., 1984), yet they do not appear to apply this knowledge when teaching moral issues. Thus, even though the moral education literature illustrates the necessity of presenting moral advice one stage above a child's level, the empirical evidence does not suggest that teachers' and adults' perceptions are consistent with this theory.

In the Rybash (1980) and Pressley et al. (1980) investigations, the subjects' advice to young children reflected the fact that their perceptions of children's reasoning abilities were somewhat distorted. They appeared to believe that children should be able to comprehend moral arguments based upon adult levels of reasoning. Moral educational research, as discussed earlier however, has demonstrated that children learn best if presented with information just slightly above their own level of functioning (i.e., the plus-one approach). The adults' advice in these investigations, therefore, would be considered incomprehensible to children, and thus, would not promote optimal development in terms of their moral functioning.

In an attempt to account for the teachers' poor advice-giving skills, Rybash (1980) suggested that this problem may exist because

teachers may feel morally obligated to teach the best or optimal solution to their students. That is, rather than recommend lower level solutions, the teachers felt a sense of obligation to teach what they perceived to be the best solution. Rybash noted a remark made by a teacher which reflected this attitude, ("What other advice could we give a child except the advice that we personally believe is correct, we have to be consistent with our own beliefs" [Rybash, 1980, p. 22]). Pressley et al. (1980) also noted this problem as they suggested that it was highly unlikely that one would ever espouse a position known to be at a lower level of reasoning.

Thus, it may be that adults give poor moral advice because of an obligation that they feel towards young children. One must also consider, however, that the subjects in these two investigations may have prescribed such moral arguments because of a general lack of knowledge about educational strategies suggested to encourage moral growth. In other words, they may have been unaware of the research in the area of moral education which suggests effective strategies for facilitating moral development.

The research to date has demonstrated that teachers' (and adults') potential for being effective moral advice-givers has been limited by their perceptions of children's reasoning. If, however, these advice skills are limited by their knowledge of moral education strategies, it may be possible to alter these perceptions, thus enhancing their effectiveness in moral teaching.



### Summary

In conclusion, the empirical literature has shown strong support in favour of moral education programs for young children. Given the value of these programs, the role of the teacher in the classroom must be carefully considered. Plus-one research has suggested that teachers and others involved in moral education would do well to present reasoning one stage above the level of their students if they wish to enhance their moral judgment (Arbuthnot & Faust, 1981). Unfortunately, however, the small amount of relevant research suggests that adults and teachers fail to consider the level of the child when prescribing moral advice (Pressley et al., 1980; Rybash, 1980). Their perceptions of children's reasoning skills appear to be overestimated as they recommend arguments at their own adult level of functioning. Considering the apparent distortions in their perceptions of children's understanding, questions arise as to the actual effectiveness of these individuals in a moral teaching situation. It may well be that their effectiveness as moral advice-givers would be limited by the inaccurate perceptions that they possess.

It may be possible, however, to alter adults' perceptions of children's moral reasoning, thus, hopefully, improving their potential as moral advice-givers. Adults may prescribe poor advice because of a lack of knowledge about optimal educational strategies. Awareness of these strategies, however, may serve to improve their advice-giving abilities. Studies to date have not considered this possibility, and thus, the need for research on the

effects of moral education training on adults' perceptions of children's reasoning. This research would provide an extension to our theoretical understanding of adults' moral perspective-taking. In addition it may also, have important moral education implications because of the possibility of enhancing teachers' moral advice-giving abilities. These issues will be addressed in the following four investigations.

## STUDY 1

Previous research has considered adults' predictions and prescriptions of children's moral reasoning. In general, this research (e.g., Pressley et al., 1980; Rybash, 1980) has indicated that adults attribute lower levels of moral thought to younger individuals, but prescribe adult levels of reasoning when attempting to teach moral issues. As discussed earlier, this finding is of importance given the moral education literature (e.g., Arbuthnot, 1975), which suggests that children should be presented with arguments above their present level of functioning (i.e., one stage above).

In light of this educational research, it appears that the adults in the Pressley et al. (1980) and Rybash (1980) investigations may be poor moral advice-givers. It should be noted however, that the conclusions of these studies may be somewhat limited by the nature of the dependent measure which they employed. The Defining Issues Test (Rest, 1974, 1975) has been the moral judgment assessment measure in all previous studies of adults' awareness of children's moral reasoning. While the D.I.T. is a quickly and easily administered questionnaire, it does have limitations as a measure of adults' perceptions of children's abilities. One such limitation was suggested by Rybash (1980) in his investigation with elementary teachers. Rybash commented that the true advice-giving ability of the teachers may be masked in the D.I.T. by the "unnatural medium" of the questionnaire. That is, teachers are forced to make responses to statements that they

might never think of on their own. Secondly, Rybash noted that when responding to the instrument, teachers must choose and rate issues thought to be the best advice for children. In his study, many teachers selected Stage 5 and 6 responses, perhaps assuming that they could alter the wording of these statements to make them more comprehensible to young children. For example, if a teacher selected the statement on the D.I.T. "What values are going to be the basis for governing how people act toward each other?" (Stage 6), he/she could possibly reword it to, "The value of life is more important than that of personal property." This rephrasing would make the statement comprehensible to children at their own level of moral reasoning, and thus the D.I.T. therefore, may have underestimated the moral advice-giving ability of the teachers. A third limitation of the D.I.T. to be considered, is that it is only applicable with individuals 13 years of age and older. For this reason, research to date has concerned itself only with adults' perceptions of older children's reasoning skills. It may be however, that if adults were asked to consider younger children, their perceptions would not be as accurate.

An alternative measure for assessing adults' moral predictions and prescriptions would be Lawrence Kohlberg's M.J.I. In the M.J.I., the experimenter encourages the subject to respond to questions concerning moral problems, and uses probing questions to elicit additional information (e.g., "What do you mean by that?" "Can you make that point another way?"). In this procedure subjects verbally respond to all questions as they wish, and do not choose between moral statements that are provided for them.

Thus, the "unnatural medium" of the D.I.T. is avoided to some extent in this production measure.

The M.J.I., however, is not without its problems, as discussed earlier. For example, Kurtines and Grief (1974) and Rubin and Trotter (1977) both questioned some psychometric properties of this measure such as the test-retest reliability. Criticisms of the M.J.I. have also have focused on the considerable time and effort involved in the administration and scoring of the test (Gibbs, Widaman, & Colby, 1982; Kurtines & Grief, 1974). Data collection for this procedure involves lengthy interviews (i.e., 1½-2 hours) by trained individuals. Scoring procedures also provide additional problems, as they must be conducted by raters trained in intensive Kohlbergian workshops (i.e., 5-10 days).

These requirements of the M.J.I. render it problematic for the present investigation. Recently, however, a number of alternative moral reasoning scales have been developed for use with children. The Moral Development Scale (Kurtines & Pimm, 1983), the Distributive Justice Scale (Enright, Franklin, & Manheine, 1980), the Sociomoral Reflection Measure (Gibbs et al., 1982), and the Sociomoral Reflection Objective Measure (Gibbs, Arnold, Morgan, Schwartz, Gavaghan, & Tappan, 1984) are examples of a few of these recent measures.

As with the M.J.I. and the D.I.T., however, limitations also exist as to the usefulness of each of these measures for the study of adults' perceptions of children's reasoning. The Moral Development Scale, for example, assesses children's reasoning

within a Piagetian-stage framework. The Distributive Justice Scale as well, assesses children according to Damon's (1975) stages of distributive justice reasoning. The present investigation as designed, requires interpretations of moral reasoning to be made according to Kohlbergian stages, and therefore, both of these measures would not be appropriate for use.

The two measures developed by Gibbs and his colleagues (Gibbs et al., 1982; Gibbs et al., 1984) are based on Kohlberg's model of moral development and thus, would be more applicable in this research project. The Sociomoral Reflection Objective Measure (Gibbs et al., 1984), however, was designed as a multiple choice-type assessment, and as such suffers from limitations similar to those of the D.I.T. That is, it is an easily administered measure. However, it is not considered appropriate for use with young children, because of a specific reading level requirement (Gibbs et al., 1984). Also, given that it is a recognition measure (i.e., multiple choice) rather than a production measure, the assessment may not be truly reflective of the individual's current functioning.

Fortunately, however, Gibbs et al.'s (1982) Sociomoral Reflection Measure (S.R.M.), does not suffer from these limitations. The S.R.M. is a group-administered questionnaire that is considered appropriate for anyone older than 9 years of age. The measure, which was designed on the basis of Kohlberg's M.J.I., is a production task (i.e., individuals are required to write down their answers). Subjects generate their answers rather

than recognize them (as on the D.I.T.), and thus, this measure potentially provides a more accurate and sensitive portrayal of subjects' moral opinions than does the D.I.T. Scoring procedures and training exercises for this measure are outlined in a scoring manual (Gibbs & Widaman, 1982), and raters for this procedure may be self-trained within a period of approximately 30 hours.

Psychometric evaluations of this measure have demonstrated good reliability and validity in comparison to the M.J.I. (Gibbs et al., 1982). Concurrent validity was assessed by correlating the S.R.M. with Kohlberg's M.J.I. Results of this comparison revealed an overall correlation of .85. Construct validity of the S.R.M. was also noted to be high. This was assessed by examining the relationship of the measure with such variables as grade level, socio-economic status, and age. In addition, the validity was also assessed by determining the effectiveness of the S.R.M. as a discriminator between normal and delinquent adolescents (Gibbs et al., 1982). In all comparisons, strong support for construct validity was demonstrated (e.g.,  $r = .65$  with age;  $r = .89$  with grade level;  $r = .37$  with SES,  $p < .001$ ). The S.R.M. also indicated significant differences in moral reasoning between the delinquent and non-delinquent adolescent samples.

Reliability for the S.R.M. was assessed in four ways: 1) inter-rater, 2) test-retest, 3) parallel form and, 4) internal consistency. Test-retest reliability was found to be .79 ( $p < .001$ ) between questionnaires completed two weeks apart. The parallel form reliability, between form A and form B of the questionnaire, was .81,  $p < .001$ .

Inter-rater reliability was assessed for the S.R.M. using highly-trained, trained, and self-trained raters. Correlations between highly-trained raters were noted to be the highest (.98). This is not surprising however, given that these raters were the authors of this measure, and had thus had intensive experience with the questionnaire and its scoring. Inter-rater reliability for trained raters was also found to be high (.76 to .87), as was the scoring reliability of the self-trained raters (.67 to .94). These values were noted to be comparable to those reported by Colby et al. (1983) for use with the M.J.I.

Lastly, as a measure of reliability, the internal consistency of the S.R.M. was assessed, using the eight stage ratings calculated for each individual. Coefficient alphas varied from .64 (for young children) to .92 (for older individuals). Once again, these reliabilities were noted to be comparable to the M.J.I., as reported by Colby et al. (1983).

In summary, research on adults' perceptions of children's moral reasoning has been limited by the nature of the dependent measures employed (i.e., the D.I.T.). The purpose of the present study therefore was to examine adults' moral predictions and prescriptions through the use of the S.R.M. This instrument, however, has just recently been developed, and thus has not previously been employed as a measure of adults' predictions and prescriptions. The present study therefore, utilized a sample of undergraduate students to determine the usefulness of this instrument as a measure of adults' perceptions of young children's moral reasoning.



## Method

### Subjects

The participants in this study were 140 undergraduate students enrolled in an introductory psychology class at the University of Western Ontario. The mean age of the subjects was 19.6 years (S.D. = 2.2 years, range = 16-34 years). One hundred and eight females and 32 males were included in the subject sample. This imbalance in the number of males and females employed in the study was not ideal in light of the recent controversy regarding sex differences. Research (e.g., Gilligan, 1982) has suggested that Kohlbergian measures of moral reasoning may be biased in favor of males. Kohlberg et al. (1983), however, discount this criticism in light of their newly revised scoring system. In addition, Gibbs et al. (1982) found no differences between male and female responses on the S.R.M. Therefore, although the imbalance is not optimal, it should not affect the results of the study. All participants were randomly assigned to one of the seven experimental conditions, with 20 subjects in each condition.

### Instrument-Sociomoral Reflection Measure

The S.R.M., as constructed by Gibbs et al. (1982), is a paper and pencil production task instrument. The measure consists of 15 questions which are designed to examine subjects' reasoning about moral issues and normative values (see Appendix A). Parallel forms of this questionnaire (A & B), contain two similar moral dilemmas and eight associated normative values. The first dilemma of both forms includes nine questions relating to five normative values: 1) affiliation (marriage and friendship); 2) life; 3) law

and property; 4) legal justice; and 5) conscience. The second moral dilemma provides information pertaining to sociomoral norms of family affiliation, contract and property.

When responding to the questionnaire, subjects are asked to read each of the short dilemmas, and then write brief answers to the questions concerning what they believe should be done in the problem situations. Subjects are also asked to indicate why they believe it (i.e., what they suggested) should be done. Following are examples of such questions from the S.R.M.:

What if the person dying isn't Heinz's wife but instead is a friend (and the friend can get no one else to help)? Should Heinz: steal/not steal/can't decide (circle one)?

How important is it to do everything you can, even break the law, to save the life of a friend? very important/important/not important (circle one)?

WHY is that very important/important/not important (whichever one you circled)?

(Gibbs & Widaman, 1982)

The scoring procedure for the S.R.M. provides information on the mean moral stage level of the subjects on each of the eight sociomoral norms. Questionnaires for which fewer than five of these eight norms are scorable (as outlined in the scoring manual,

Gibbs & Widaman, 1982) are invalid, and are thus omitted from further consideration.

Two types of moral level ratings are obtained through the scoring of the questionnaire. The first of these, the Modal Stage Score, represents the stage level (i.e., Kohlberg's Stages 1, 2, 3 or 4) most frequently employed by the individual. The second score, the Sociomoral Reflection Maturity Score (S.R.M.S.) is a rating score similar to Kohlberg's Moral Maturity Score obtained through the use of the M.J.I. This score may range from 100 to 400 points, and corresponds to one of ten global stage levels of moral development. See Table 3 for a breakdown of the Sociomoral Reflection Maturity Scores and the equivalent global stages of development.

#### Procedure

The present experiment included seven conditions. In the control condition, the subjects responded twice to a standard version of the S.R.M. Half of the adults in this condition answered form A of the measure first, followed by form B, while the other half answered form B and form A respectively.

Subjects in the remaining six conditions responded twice to questionnaires which were minor modifications of the standard S.R.M. In these questionnaires, the instructions were modified such that the subjects were asked to answer the moral problems from the perspective of a 4th, 7th, or 10th grade child (see Appendix B). Subjects in these conditions were also asked to respond to the questionnaires from the perspective of a person who is teaching these moral issues to 4th, 7th, or 10th grade

Table 3

Sociomoral Reflection Maturity Scores and Corresponding Global  
Stages of Moral Development

S.R.M.S. Point Range	Global Stage
100 - 125	Stage 1
126 - 149	Transition stage 1(2)
150 - 174	Transition stage 2(1)
175 - 225	Stage 2
226 - 249	Transition stage 2(3)
250 - 274	Transition stage 3(2)
275 - 325	Stage 3
326 - 349	Transition stage 3(4)
350 - 374	Transition stage 4(3)
375 - 400	Stage 4

(Gibbs & Widaman, 1982, p. 53)

children. That is, the subjects were asked to make prescriptions regarding what they thought grade school children should be taught about the moral dilemmas presented (see Appendix C).

In three of the six conditions employing modified questionnaires, subjects first predicted the responses of the children, and then in the second questionnaire, made prescriptions for teaching these issues to the children. In the remaining three conditions, the order of presentation for the questionnaires was reversed, such that the prescriptions for the children were made prior to the predictions. This was done to determine the effect of the prediction task on subsequent prescriptions made by the adults, and vice versa. It was thought that answering the first questionnaire may improve performance on the second questionnaire. Within each of the six conditions, half of the subjects responded to form A of the modified measures, with the other half responding to form B of the measures.

All subjects in the study were run in large groups of approximately 10-20 individuals. Subjects were randomly assigned to the conditions at the start of each testing session. The two questionnaires took approximately 1½-2 hours to complete, however, all subjects were allowed to take as much time as they required. The experimenter carefully explained the instructions to all participants at the start of each session. The experimenter was also available to answer specific questions from the subjects during the testing sessions.

## Results and Discussion

### Scoring

All questionnaires were scored by the experimenter who was trained in the scoring procedures (see Gibbs & Widaman, 1982, for an explanation of scoring). As previously stated, 20 subjects were randomly assigned to each of the seven conditions. Twenty-seven subjects were omitted from the analysis however, as their responses were unscorable (fewer than five of the eight norms could be scored according to the scoring manual). Please refer to Table 4 for a breakdown on the number of subjects included in each condition.

Interrater reliability was based on 28 questionnaires randomly selected and scored by a trained rater. The actual number of questionnaires scored by the two raters was 27, as both raters judged one questionnaire to be unscorable. The overall S.R.M.S. correlation was  $r(25) = .87$ ,  $p < .01$ . The mean absolute S.R.M.S. discrepancy between both raters was 1.64 points. Interrater agreement for the exact modal stage was 70% (100% within a one stage interval). Exact global stage agreement was 56%, and 92% within a one-third stage interval.<sup>1</sup>

Parallel form reliability was assessed between the A and B forms of the questionnaire. The overall correlation was  $r = .70$ ,  $p < .01$ . This value is comparable to those reported by Gibbs et al. (1982). Internal consistency was also calculated for each form. Split-half reliabilities were computed (.84 Form A, .81 Form B), and found to be comparable to the reliabilities reported by Gibbs et al. (1982).

### S.R.M. Analysis

Of primary interest in this investigation was the examination of the undergraduates' prediction and prescription scores for 4th, 7th, and 10th graders. These comparisons will be discussed here. Prior to this, however, the effects of order of questionnaire presentation are discussed.

Order effects. In the 4th, 7th and 10th grade perception conditions half of the subjects responded to the two questionnaires in a prediction/prescription order. The other half responded in a prescription/prediction order. Comparisons were done to determine if the order of questionnaire presentation influenced the undergraduates' S.R.M. scores at each age level. The means and standard deviations for the prediction and prescription scores in each age level and order condition are presented in Table 4.

Comparisons of the prediction scores between order conditions revealed a significant order effect for the undergraduates' predictions of 7th graders,  $t(29) = 3.01$ ,  $p < .01$ . Subjects predicted significantly lower levels of moral reasoning for 7th graders in the prescription/prediction condition than in the prediction/prescription condition. It appears that for this age level, the experience of first prescribing advice for children, may perhaps have made the adults more aware of the true reasoning levels of the children. Order of presentation, however, did not influence the prediction scores for 4th and 10th graders. No significant effects for order were found for either grade level

Table 4

Means and Standard Deviations for Prediction and PrescriptionScores as a Function of Order Condition and Age Level

Age Level	Prediction Scores		Prescription Scores	
	Pred./Pres.	Pres./Pred.	Pred./Pres.	Pres./Pred.
4th Grade	$\bar{x} = 235.31^a$ SD = 47.02 n = 16	$\bar{x} = 226.13$ SD = 41.11	$\bar{x} = 328.75$ SD = 20.16 n = 15	$\bar{x} = 326.67$ SD = 22.10
7th Grade	$\bar{x} = 297.50$ SD = 44.29 n = 16	$\bar{x} = 247.40$ SD = 48.48	$\bar{x} = 328.13$ SD = 38.36 n = 15	$\bar{x} = 332.67$ SD = 24.24
10th Grade	$\bar{x} = 293.22$ SD = 33.72 n = 18	$\bar{x} = 306.21$ SD = 28.82	$\bar{x} = 317.11$ SD = 43.21 n = 14	$\bar{x} = 341.50$ SD = 29.05
Adult Control	$\bar{x} = 332.11^b$ SD = 27.23	$\bar{x} = 317.84^c$ SD = 37.28	$\bar{x} = 317.84^b$ SD = 37.28	$\bar{x} = 332.11^c$ SD = 27.23
n = 19				

<sup>a</sup>S.R.M. scores may range from 100 - 400 points.

<sup>b</sup>First questionnaire mean S.R.M. score.

<sup>c</sup>Second questionnaire mean S.R.M. score.



( $t(29)$  4th grade = .58,  $p > .10$ ,  $t(30)$  10th grade = 1.15,  $p > .10$ ).

Comparisons were also done on the prescription scores between the two order conditions. These comparisons of the prescription scores for each age level did not reveal any significant order effects ( $t(29)$  4th grade = .27,  $p > .10$ ,  $t(29)$  7th grade = .39,  $p > .10$ ,  $t(30)$  10th grade = 1.81,  $p > .10$ ). Thus, the order of questionnaire presentation did not appear to influence the undergraduates' prescriptions for the three age levels.

A final comparison to assess the effects of order of questionnaire presentation on the S.R.M. scores of the undergraduates' own perspective (i.e., control condition) was also performed. The mean S.R.M.S. for the first questionnaire was 332.11 (S.D. = 27.23), and 317.84 (S.D. = 37.28) for the second questionnaire. Results of this comparison revealed no significant effect for order of presentation. S.R.M. performance did not differ significantly from the first questionnaire to the second questionnaire,  $t(36) = 1.35$ ,  $p > .10$ .

In summary, the order comparisons noted a significant difference between the undergraduates' prediction scores for 7th graders in the two presentation conditions. No other significant order effects were found between the prediction and prescription scores for the three age levels. It appears, therefore, that for 7th grade predictions only, the order of questionnaire presentation may have influenced the subjects' performance, such that lower levels of reasoning were predicted in the prescription/prediction condition. In general, however, the order

of presentation of the two questionnaires did not influence the subjects' performance. For this reason, the data were collapsed across the two order conditions for the subsequent comparisons. Order of presentation was therefore counterbalanced within each age level.

Prediction Comparisons. Means and standard deviations for the prediction S.R.M. scores in each age level are presented in Table 5. Differences between the prediction scores were evaluated using Dunn's procedure for planned comparisons (Kirk, 1968). Six pairwise comparisons were performed on the data with the alpha level set at .0083 per comparison. Thus, there was a .05 Type I error rate. The  $t$  statistics associated with each of these comparisons are presented in Table 6. The critical  $t$  value needed for each of the comparisons was 2.682.

The pattern of results presented in Table 6 suggests that the adults perceived that 4th graders and 7th graders would reason at significantly lower levels of reasoning than they themselves would. The 4th graders were also perceived to be significantly lower moral reasoners than were the 7th graders and 10th graders. No other significant differences were found.

These results are in agreement with Pressley et al. (1980). The adults predicted lower levels of reasoning for the younger children, thus recognizing that moral reasoning increases with age.

Prescription Comparison. Means and standard deviations for the prescription scores at each age level are found in Table 5. The six pairwise comparisons performed on the prescription scores

Table 5.

Means and Standard Deviations of Prediction, Prescription, and Difference<sup>a</sup> Scores as a Function of Age Level

Age Level	Prediction Scores	Prescription Scores	Difference Scores
4th Grade	$\bar{x} = 230.87^b$ SD = 44.16	$\bar{x} = 327.74$ SD = 21.09	$\bar{x} = 95.90$ SD = 47.49
7th Grade	$\bar{x} = 274.23$ SD = 46.32	$\bar{x} = 330.32$ SD = 31.53	$\bar{x} = 57.06$ SD = 50.41
10th Grade	$\bar{x} = 298.91$ SD = 31.58	$\bar{x} = 330.59$ SD = 37.02	$\bar{x} = 28.88$ SD = 41.28
Adult Control	$\bar{x} = 324.97^c$ SD = 32.25	$\bar{x} = 324.97$ SD = 32.25	$\bar{x} = 14.26^d$ SD = 37.15

<sup>a</sup>Difference scores are equal to prescription S.R.M. scores minus prediction S.R.M. scores.

<sup>b</sup>S.R.M. scores may range from 100 - 400 points.

<sup>c</sup>Adult control S.R.M. scores refer to the scores of adults who answered the standard version of the S.R.M.

<sup>d</sup>Adult control difference scores equal the S.R.M. scores of the second questionnaires minus the S.R.M. scores of the first questionnaires.

Table 6

Summary of Statistical Tests (t statistic) Computed for Prediction,  
Prescription, and Difference<sup>a</sup> Scores

Comparison	Prediction Scores	Prescription Scores	Difference Scores
4th grade level vs. 7th grade level	4.42*	.45	3.47*
4th grade level vs. 10th grade level	6.98*	.49	6.04*
4th grade level vs. adult controls	10.09*	.24	7.66*
7th grade level vs. 10th grade level	2.54	.03	2.54
7th grade level vs. adult controls	5.44*	.71	4.02*
10th grade level vs. adult controls	2.82	.75	1.38

\* $p < .0083$

<sup>a</sup>Difference scores are equal to prescription S.R.M. scores  
minus prediction S.R.M. scores.

<sup>b</sup>MSE = 1502.10

<sup>c</sup>MSE = 969.81

<sup>d</sup>MS<sub>E</sub> = 1935.81

were identical to those performed on the prediction data. The  $t$ -statistics associated with the six comparisons are included in Table 6.

No differences were found between the prescription scores for each age level and adults' own level of moral reasoning. In other words, the adults prescribed levels of moral advice which did not differ significantly from the level of reasoning evidenced by the adult controls.

This pattern supports the previous research of Pressley et al. (1980) and Rybash (1980). While adults possess the role-taking skills to predict increases in moral reasoning, this perspective-taking ability does not appear to affect their prescriptions for moral advice.

Difference Scores Comparison. A difference score was computed to examine the differences between the moral predictions and prescriptions of each subject. This score was calculated by subtracting the prediction S.R.M.S. from the prescription S.R.M.S. for each age level. The means and standard deviations of these difference scores are included in Table 5.

An analysis was performed on the difference scores presented in Table 5, to evaluate whether each of the scores differed significantly from zero. The difference between the prediction and prescription scores at the 4th grade level was significantly different from zero,  $t(128) = 12.14$ ,  $p < .0083$ . The difference between prediction and prescription was also significantly different from zero at both the 7th and 10th grade levels,

$t(128) = 7.22, p < .0083$ , and  $t(128) = 3.71, p < .0083$ , respectively.

A set of secondary comparisons were also performed on the difference scores. This analysis was identical to the six comparisons performed on the prediction and prescription scores. The  $t$  statistics associated with these comparisons are presented in Table 6. The results presented suggest that the discrepancy between the prediction and prescription scores for the 4th grade level is significantly larger than the discrepancy between these scores for the 7th and 10th grade levels.

Alternative Comparisons. Previous analyses appear to indicate that the students, regardless of the age of children they are considering, prescribe moral arguments at their own level of moral comprehension. An alternate interpretation of the results however, could be that they (i.e., the subjects) are actually applying the plus-one strategy, but that their prescriptions also happen to be at their own level of reasoning. That is, if you consider their prediction scores, their prescription scores may be one stage above their predictions and thus in agreement with the plus-one strategy.

A possible test for this alternate hypothesis would be to consider each subject's prediction and prescription stage equivalent scores (see Table 3), and note the frequency of those who prescribed advice one stage above their prediction stage. If this procedure is applied to each undergraduate in the 4th grader condition, it is noted that seven out of the 31 subjects appeared to use the plus-one strategy relative to their predictions. The

remaining 24 subjects however, prescribed advice which was not consistent with the recommended educational strategy (e.g., Enright et al., 1983). Thus, it does not appear that the majority of adults appropriately applied the plus-one technique when asked to recommend moral arguments for the 4th grade children.

With regards to the adults who were asked to consider 7th and 10th grade children's reasoning, the frequency counts again, did not suggest that most applied the plus-one intervention when prescribing advice. In the 7th grade condition, three out of 31 subjects prescribed advice one stage level above their predictions. Four out of 32 subjects in the 10th grade condition also prescribed plus-one advice. The majority of subjects in both these conditions however, recommended arguments which were not consistent with the plus-one technique.

The educational implications of these results may be of particular importance. The moral education literature suggests that to promote moral thinking, reasoning one stage above the level of the child should be presented (Arbuthnot, 1975; Hayden & Pickar, 1981; Walker, 1980, 1983). In the present investigation, however, the majority of the adults did not prescribe advice at this level, but rather recommended moral advice which appeared to be consistent with their own level of functioning (i.e., stage 3(4) reasoning). It may be that training in moral education strategies would help to decrease the discrepancy between adults' predictions and prescriptions for moral reasoning. This discrepancy exists within all age levels. It appears, however, to

2  
be the most obvious at the youngest age level. For this reason  
subsequent studies in the present investigation will examine moral  
education issues relevant to the 4th grade level.



## STUDY 2

In Study 1 adults were able to recognize that levels of moral reasoning increase with age. They predicted significantly lower levels of reasoning for 4th graders than for 7th graders, 10th graders and themselves. This initial study, however, did not collect actual reasoning levels for the different aged children, and thus it was not possible to assess the accuracy of the adults' predictions.

Pressley et al. (1980) demonstrated that adults are able to predict the moral reasoning levels of adolescents. The accuracy of these predictions was never assessed however, as the predictions were not compared with the actual performance of an adolescent sample. In addition, research to date has not considered adults' predictions for younger children. In the validation procedures for the S.R.M., Gibbs et al. (1982) gave the questionnaire to a sample of 4th grade children and reported the mean S.R.M.S. for this age group as 200.70 (S.D. value unavailable). This average is substantially lower than the undergraduates' prediction S.R.M. scores for 4th graders in Study 1 ( $\bar{x}$  pred/pres = 235.31,  $\bar{x}$  pres/pred = 226.13), suggesting that the adults in Study 1 may be somewhat inaccurate in their predictions of 4th grader's moral reasoning levels. The purpose of this second study, therefore, was to obtain data on the moral reasoning levels of local 4th grade children. This would allow for more unambiguous comparisons between children's actual moral

performance on the S.R.M. and adults' predictions (and prescriptions) of their moral performance on the S.R.M.

Two procedures were employed to obtain 4th grade data on the S.R.M. Gibbs et al. (1982) suggested that the S.R.M. may be group-administered to 4th graders if the dilemmas and questions are read aloud to the children. It was hypothesized however, that this procedure may possibly underestimate children's moral reasoning because of their inability to express clearly their opinions in a written format. That is, the children may understand what is being asked of them, however, because of their somewhat limited writing skills, they may have problems answering the questions. To correct for this problem an individual session with each child, in which he/she verbally responds to the questions, may provide a more accurate portrayal of the child's true reasoning, as it would not require any written answers. It may be that this approach is more sensitive to the needs of a young child. For this reason the present research employed a group administration procedure (as suggested by Gibbs et al.), and an individual administration procedure. Differences in the moral reasoning levels obtained through each were examined.

### Method

#### Subjects

The participants were 30 fourth grade children from the London area (mean age of the children = 9.8 years; SD = .5 years; range = 9.0-10.7 years). Eighteen females and 12 males were included in the sample. The children were recruited for the study

through ads placed in an area newspaper. Socio-economic status data on the children were not directly obtained from the families of the children. However, in general, participants represented the working and middle class socio-economic levels. In appreciation of their participation, all children were invited to an afternoon of movies. The children were randomly assigned to the two experimental conditions, with sixteen children in the group administration condition, and 14 children in the individual administration condition.

#### Materials and Procedure

Group Administration. Children in the group condition were seen in small groups of not more than five children. At the start of each session, the experimenter read to the children the first dilemma from a standard version of the S.R.M. Following the presentation of the first dilemma, the experimenter then read the questions on the measure. For each question, children in this condition responded by writing their opinion on a copy of the questionnaire provided for them. When they completed the first question, the experimenter continued in the same manner with each question, until all questions had been answered. This procedure was then repeated for the second dilemma on the S.R.M. The experimenter also answered any questions or problems that individual children had during the sessions. The time required by the children to complete the questionnaires was approximately 45 minutes to 1 hour. This procedure was identical to the method originally suggested by Gibbs et al. (1982) for use with young children.

Individual Administration. The procedures followed in this condition were very similar to those in the group administration sessions. In this condition, however, each child was seen individually by the experimenter for approximately 30 minutes, and responded orally to the questions. The children were presented with the same stories and questions as in the group condition. Their responses were tape recorded, and later transcribed by the experimenter.

### Results and Discussion

#### Scoring

All questionnaires were scored by the experimenter who was trained in the scoring procedures (see Gibbs & Widaman, 1982). One questionnaire in the group administration condition was unscorable, and thus omitted from further analysis. Interrater reliability was based on 20% of the questionnaires which were selected randomly and scored by a rater who was blind to the two experimental manipulations. The overall S.R.M.S. correlation was  $r(4) = .80$ ,  $p < .05$ . The mean absolute discrepancy between both raters was 7.6 points. Interrater agreement for the exact model stage was 67%, and 100% within a one-stage interval. Exact global stage agreement and global stage agreement within a one-third interval, were both 100%. All interrater agreement percentages exceeded the reliability standards suggested by the authors of the S.R.M. (Gibbs & Widaman, 1982).

Internal consistency was also calculated for forms A and B of the questionnaire. Reliabilities (split-half) were comparable to

those reported by Gibbs et al. (1982); .72, form A and .65, form B.

#### S.R.M. Analysis

The S.R.M. scores were computed for each subject in both of the experimental conditions. The mean S.R.M.S. for the group administration condition was 208.27 (SD = 36.81). The mean S.R.M.S. for the individual condition was 205.57 (SD = 33.04). A comparison was done between these scores to determine whether differences existed between the children's performance in the two conditions. S.R.M. performance during group administration did not differ significantly from performance during individual administration,  $t(28) = 0.21$ ,  $p > .10$ .

This finding suggests that the group administration procedure, as initially described by Gibbs and his colleagues (1982), is appropriate for use with fourth grade children. As originally hypothesized, the individual procedure did not provide a more accurate picture of the children's reasoning. No differences were found between the two conditions, and thus, it appears that children at this age (i.e., 9-10 years), are capable of expressing their moral opinions clearly, in a written format.

Sex differences. Post-hoc analyses were also performed on the S.R.M. scores of the children to assess possible differences between the moral stage usage of the boys and the girls. Although Kohlberg et al. (1983) and numerous other researchers (Gibbs et al., 1984; Levine et al. 1985; Walker, 1984) have concluded that Kohlbergian measures of moral reasoning are not biased in favour of males, others such as Gilligan (1982) and Holstein (1976), have

strongly suggested this possibility. For this reason, an analysis was performed on the S.R.M. scores of the males and females in the study. The results of this comparison did not reveal a significant difference in moral stage usage between the sexes,  $t(28) = 0.22, p > .10$ . The mean S.R.M. score was 205.89 (S.D. = 34.24) for the females, and 208.73 (S.D. = 36.36) for the males.

Gibbs et al. (1982) comparison. To determine whether differences existed between the Ontario sample employed in the present investigation, and the American sample studied by Gibbs and his colleagues (1982), the mean S.R.M. values for each sample were compared. Given that no differences were noted between the group and individual administration conditions in the above comparison, the group condition was selected as the standard of comparison for this analysis. This condition was selected rather than the individual condition, because the administration procedure paralleled the procedure employed by Gibbs et al. (1982).

The mean S.R.M. score for the 4th graders in the present study was 208.27 (S.D. = 36.81). The mean value obtained by Gibbs et al. (1982) was 200.70. The comparison of these means revealed no significant difference between the two groups of children,  $t_{40} = 0.827, p > .10$ . The children in the present study demonstrated similar levels of reasoning as those employed in the Gibbs et al. investigation.

Study 1 Comparison. As discussed earlier the prediction and prescription performance of the undergraduates in Study 1, appears to be somewhat higher than the actual reasoning of 4th grade

children. To determine the accuracy of the undergraduates' predictions and prescriptions, comparisons were made between:

1) the 4th grade data (group condition)<sup>2</sup> and the Study 1 undergraduates' predictions (both order conditions), and 2) the 4th grade data and the Study 1 undergraduates' prescriptions for 4th graders. The means and standard deviations of the S.R.M. scores for these groups are presented in Table 7.

Differences between the 4th grade S.R.M.S. and the prediction means were evaluated using Dunn's procedure for planned comparisons (Kirk, 1968). Three pairwise comparisons were performed on the means ( $\alpha = .017$  per comparison). The results of these comparisons are presented in Table 8. The critical  $t$  value required for each comparison was 2.48. The results presented in this table indicate that the predictions of the undergraduates (in both order conditions) did not differ significantly from the reasoning of the 4th grade children. In the prediction/prescription order condition, their predictions were within .65 of a standard deviation (i.e., average deviation pooled over cells) of the children's reasoning. Predictions in the second order condition differed by .43 of a standard deviation (i.e., average standard deviation) from the 4th graders' performance. In short, the prediction values of the undergraduates in Study 1 were only slightly higher than the actual reasoning levels of 4th grade children.

Three pairwise comparisons, identical to those outlined above were performed on the 4th grade mean and the 2 prescription means (the  $t$ -statistics associated with these comparisons are also

Table 7

Means and Standard Deviations of the Grade 4, Study 1 Prediction,  
and Study 1 Prescription Scores

Grade 4 S.R.M. Score <sup>a</sup>	Prediction S.R.M. Scores		Prescription S.R.M. Scores	
	Pred/Pres	Pres/Pred	Pred/Pres	Pres/Pred
$\bar{x}$ = 208.27 <sup>b</sup>	$\bar{x}$ = 235.31	$\bar{x}$ = 226.13	$\bar{x}$ = 328.75	$\bar{x}$ = 326.67
S.D. = 36.81	S.D. = 47.02	S.D. = 41.11	S.D. = 20.16	S.D. = 22.10
n = 16	n = 16	n = 15	n = 16	n = 15

<sup>a</sup>Grade 4 group-administration condition score.

<sup>b</sup>S.R.M. scores may range from 100-400 points.



presented in Table 8). The undergraduates' prescriptions for 4th graders (in both order conditions) were found to be significantly higher than the actual reasoning levels of the young children. Their advice in fact was Stage 3(4) reasoning (Gibbs et al., 1982), and thus would not be considered to be good moral advice according to education strategies such as the plus-one approach. This advice would be beyond the level of comprehension for the children who function at the second level of moral reasoning as the optimal level of advice suggested is Stage 3 reasoning. To examine this finding further, the frequency of subjects applying the plus-one strategy relative to 4th graders' reasoning, was considered. Results of this count revealed that 15 out of the 31 subjects were accurate in their level of moral advice. Sixteen of the 31 however, suggested advice which was not appropriate for the children according to the plus-one research (e.g., Enright et al., 1983).

Thus, while the undergraduates were able to assume accurately the perspective of a 4th grade child, just over half of them recommended advice which was above the level of the understanding of the children (according to the plus-one approach). This finding lends some support to Pressley et al.'s (1980) conclusion that although college students can correctly predict children's moral performance, they do not always accurately prescribe moral advice (according to the plus-one strategy). One reason for the discrepancy between their predictions and prescriptions may be their general lack of experience with both children and moral education techniques. As previously noted, these subjects were

Table 8

Summary of the Statistical Tests (t-statistic) Computed for the  
Study 1 Prediction and Prescription Scores

Comparison	t-statistic
Grade 4 vs. Study 1 prediction (pred/pres order)	1.80
Grade 4 vs. Study 1 prediction (pres/pred order)	1.21
Study 1 prediction (pred/pres order) vs. Study 1 prediction (pres/pred order)	.61
Grade 4 vs. Study 1 prescription (pred/pres order)	12.40*
Grade 4 vs. Study 1 prescription (pres/pred order)	11.88*
Study 1 prescription pred/pres order vs. Study 1 prescription pres/pred order	.31

\* $p < .017$  (critical t value = 2.48).

MSE = 1753.37

young adults (mean age = 19.6 years.) with little direct experience with children and no previous knowledge of moral development or educational strategies. Elementary school teachers, on the other hand, have direct contact with young children and also often have had some instruction in moral education strategies. This greater knowledge in these areas may enable them to better prescribe appropriate moral advice. This hypothesis is addressed in Study 3.

### STUDY 3

A discrepancy was noted in Study 1 between the level of reasoning that undergraduates predicted for young children, and the level of reasoning they prescribed as moral advice. Their predictions were accurate for 4th graders, yet half of the students recommended advice more than one stage above the level of reasoning of the children. This finding is important for three reasons: 1) it supports the use of the S.R.M. as a moral prediction and prescription measure; 2) it lends support to the previous findings of Pressley et al. (1980); and 3) it may have important implications for moral educational procedures as it appears that their advice contradicts suggested moral education strategies which recommend advice slightly above the child's level.

The undergraduates in Study 1 who prescribed advice beyond the Stage 3 level, may have done so because of a lack of knowledge about children and Kohlberg's theory of moral judgment. Given this possibility, it is very important to consider teachers' perceptions of children's reasoning levels in contrast to those of the undergraduate students. Elementary school teachers work with young children on a daily basis, and thus it seems that they would have greater knowledge about the needs of young children. In addition, teachers are most probably a major influence on the social and moral development of their students, and thus, it is of interest to examine their opinions regarding moral advice.

Moral education in the schools is often accomplished through the use of informal discussions of moral issues, which are often suggested by the Moral Ethics Consultant for the schools (D. Santor, personal communication, November 29, 1983<sup>3</sup>). The moral education literature (Arbuthnot, 1975; Blatt & Kohlberg, 1975; Enright et al., 1983a, 1983b), however, suggests that if teachers' moral discussions are beyond the level of comprehension of children, they will not be able to facilitate growth in moral reasoning as effectively as possible. It is important, therefore, to examine the levels at which teachers recommend moral advice, to determine whether or not the advice they are prescribing is truly of the greatest benefit to the children.

Teachers have much more experience with young children than did the undergraduate sample in Study 1. For this reason, teachers may be more aware of the moral reasoning levels of their students. Teachers may also possess some limited knowledge of recommended moral education strategies, and thus, may prescribe moral advice that is comprehensible to a young child. Previous research by Rybash (1980), however, demonstrated that teachers are poor moral advice-givers, as they recommend arguments at their own level of functioning rather than at the child's (just as the undergraduates did in Study 1). Rybash suggested that teachers' poor advice-giving abilities may be due to the fact that they feel morally obligated to teach the optimal solution to their young students. It may also be however, that teachers do not possess enough adequate knowledge about moral development and education to prescribe accurate moral advice. Thus, even with the use of the

S.R.M., which is a more sensitive measure than Rybash's D.I.T., teachers may fail to consider children's reasoning when recommending advice.

In summary, two alternative hypotheses have been outlined concerning teachers' moral predictions and prescriptions: 1) they may prescribe effective moral advice as a result of their experience with, and knowledge of, children and moral education strategies, or 2) they may prescribe poor advice because of a sense of obligation to higher level moral positions or a lack of awareness of suggested educational strategies. The purpose of this study was to employ the S.R.M. to examine these issues and determine the levels of moral reasoning prescribed by elementary school teachers for 4th grade children.

#### Method

##### Subjects

The study employed 32 elementary grade school teachers (i.e., 3rd, 4th, and 5th grade) from the London area. The mean age of the teachers was 36.3 years (S.D. = 7.9 years, range = 23-55 years), and two of the 32 were parents of 9-10 year old children. Twenty females and 12 males were included in the sample.

The teachers averaged 12.11 years in the teaching profession (S.D. = 8.11 years, range 1-35 years). Half of the teachers (i.e., 50%) had received some previous training in moral development theory, either through teachers' college, workshops offered by the board of education, university courses (i.e., sociology, psychology, philosophy), or in-service courses offered

by the board of education. Fifty percent of the teachers also had previous experience with educational strategies for moral development. Again the educational training was received through either workshops offered by the Moral Ethics Consultant for the school board, in-service courses, teachers' college, or university courses. Twenty-six teachers in the sample (i.e., 81%) included moral discussions as a regular part of their classroom curriculum. Only 2 of these 26 however, indicated that they followed a specific moral education curriculum set up by the board of education.

The teachers were recruited for the study through letters sent to area schools, as well as through newspaper advertisements. Teachers were paid \$10 for their participation in the study. They were randomly assigned to two experimental conditions, a control (i.e., self-perspective) or a prediction/prescription condition, with 16 in each condition.

#### Materials and Procedure

Each teacher responded twice to the S.R.M. Teachers assigned to the control condition answered standard versions of this measure (see Appendix A). Half of the teachers answered form A first, followed by form B. The remaining half of the teachers answered form B and then form A.

Teachers in the prediction/prescription condition responded to modified questionnaires identical to those employed in Study 1. The instructions were modified such that the teachers responded from the perspective of a 4th grader, as well as from the perspective of a person who is teaching these issues to 4th

graders (see Appendices B and C). The order of presentation for each version was counterbalanced. Half of the teachers answered the questionnaires in a prediction/prescription order, and half answered them in a prescription/prediction order.

All teachers in the study received the S.R.M. questionnaires and instructions for the study through the mail, and completed the questionnaires at their leisure. The teachers were also asked to fill out an information sheet which was attached to the back of the questionnaires. This sheet asked for information concerning years of teaching experience, grade level taught, and experience with moral education (see Appendix D).

### Results and Discussion

#### Scoring

Interrater reliability on the scoring procedure was based on 12 questionnaires (i.e., 20%) which were scored by a trained rater. The overall S.R.M.S. correlation between the two raters was  $r(10) = .99$ ,  $p < .01$ . The mean absolute S.R.M.S. discrepancy was 2.7 points. Agreement for the exact modal stage was 100%, as was the modal stage agreement within a one-stage interval. Global stage agreement within a one-third interval was also 100%, and exact global stage agreement was 83%. These interrater agreement values exceeded those recommended by Gibbs and Widaman (1982).

Parallel form reliability was assessed between the two forms of the questionnaire which were administered to the teachers. The correlation was  $r = .67$ ,  $p < .01$ . The internal consistency was also assessed for forms A and B. Split-half reliabilities were



equal to .71 (Form A) and .78 (Form B). These values are comparable to those reported by Gibbs et al. (1982).

#### S.R.M. Analysis

Of primary interest in the present investigation was the examination of the teachers' prediction and prescription scores versus their self-perspective scores and the scores of actual 4th graders (as obtained in Study 2). These comparisons will be reported in the following sections. Prior to this, however, comparisons to assess the order of questionnaire presentation are discussed.

Order Effects. Although the order of presentation for the questionnaires was counterbalanced such that half of the subjects responded in a prediction/prescription order, and half responded in a prescription/prediction order, comparisons were made to check against the possibility that order may have influenced the S.R.M. scores. The prediction scores of subjects who answered the prediction questionnaire first and those who answered it second were compared, as were the prescription scores of subjects who answered the prescription questionnaire first and those who answered it second. The means and standard deviations of the S.R.M. scores for these questionnaires are presented in Table 9. No significant effects for order were found for either the prediction or the prescription scores ( $t(14)$  prediction = 1.29,  $p > .10$ ,  $t(14)$  prescription = .73,  $p > .10$ ).

A comparison to assess the effects of order of questionnaire presentation on the S.R.M. scores of the teachers' own perspective (i.e., control condition) was also performed. The mean S.R.M.S.

Table 9

Means and Standard Deviations for Prediction and Prescription Scores  
as a Function of Order of Questionnaire Presentation

Order of Presentation	Prediction S.R.M. Scores	Prescription S.R.M. Scores
Prediction/Prescription	$\bar{x} = 261.00^a$ S.D. = 51.33	$\bar{x} = 355.88$ S.D. = 5.64
Prescription/Prediction	$\bar{x} = 230.00$ S.D. = 44.38	$\bar{x} = 349.13$ S.D. = 25.56

<sup>a</sup>S.R.M. scores may range from 100-400 points.

for the first questionnaire was 350.38 (S.D. = 22.6), and 345.63 (S.D. = 29.33) for the second questionnaire. S.R.M. performance did not differ significantly from the first questionnaire to the second questionnaire,  $t(30) = .51$ ,  $p > .10$ . For this reason the data were collapsed across the two questionnaire presentations, such that the average of the first and second questionnaires was computed for each subject. Thus, future reference to the teachers' self-perspective S.R.M. scores reflects the average of the two scores for each participant ( $\bar{x}$  (self revised) = 348, S.D. = 20.69):

Prediction Comparison. Means and standard deviations are presented in Table 10 for the teachers' prediction S.R.M. scores and their self-perspective S.R.M. scores. Also included in this table are the mean and standard deviation of the S.R.M. scores for the 4th grade children reported in Study 2. Differences between these three means were evaluated using Dunn's procedure for planned comparisons (Kirk, 1968). Three pairwise comparisons were performed, with the alpha level set at .017 per comparison (i.e., a .05 Type 1 error rate overall). The results of these comparisons are presented in Table 11. The critical  $t$  value needed for each comparison was 2.48.

The results presented in Table 11 suggest that the teachers' prediction scores for the 4th graders were significantly greater (by one-third of a stage) than the actual S.R.M. scores for 4th grade children (as reported in Study 2). Also the 4th grade scores and the teachers' prediction scores were found to be significantly lower than the teachers' own self-perspective scores.

Table 10

Means and Standard Deviations of the Grade 4, Teacher Prediction,  
Teacher Prescription, and Teacher Self-Perspective Scores

Grade 4 S.R.M. Scores <sup>a</sup>	Prediction Scores	Prescription Scores	Self-Perspective Scores
$\bar{x} = 208.27^b$	$\bar{x} = 245.50$	$\bar{x} = 352.50$	$\bar{x} = 348.00$
S.D. = 36.81	S.D. = 49.04	S.D. = 18.22	S.D. = 30.69
n = 16	n = 16	n = 16	n = 16

<sup>a</sup>Grade 4 scores as reported in Study 2, group-administration condition.

<sup>b</sup>S.R.M. scores may range from 100-400 points.

Table 11

Summary of Statistical Tests (t statistic) Computed for the  
Prediction and Prescription Scores

Comparison	Prediction <sup>a</sup>	Prescription <sup>b</sup>
Grade 4 vs. Teachers' modified perspective <sup>c</sup>	2.84*	15.36*
Grade 4 vs. Teachers' self- perspective	10.60*	14.88*
Teachers' modified vs. Teachers' self- perspective	7.76*	.48

\*  $p < .017$  (critical  $t$  value = 2.48).

<sup>a</sup>MSE = 1395.99.

<sup>b</sup>MSE = 705.01.

<sup>c</sup>Teachers' modified perspective refers to either teachers' prediction perspective or teachers' prescription perspective.

Prescription Comparison. The mean and standard deviation for the teachers' prescription scores are also included in Table 10 along with the mean and standard deviation of the teachers' self-perspective S.R.M.S. and the mean S.R.M.S. data of the 4th grade children. The pairwise comparisons performed on these data were identical to those outlined in the above prediction comparison section. The  $t$ -statistics associated with each of these three comparisons are included in Table 11.

The teachers' self-perspective scores and their prescription scores were both significantly higher than the actual reasoning levels of the 4th grade children. There was no difference, however, between the teachers' prescriptions for 4th graders and their own level of moral reasoning. That is, the teachers recommended moral advice for the children at a level similar to their own level of moral understanding.

The results from both the prediction and the prescription comparisons lend support to the findings reported in Study 1, as well as to the earlier findings of Pressley et al. (1980) and Rybush (1980). Study 1 demonstrated that undergraduates are able to accurately predict the moral reasoning level of 4th grade children: Their predictions were within .43 (prescription/prediction condition) and .65 (prediction/prescription condition) of a standard deviation of the children's performance. Teachers in the present study, also were aware that children possess lower levels of moral reasoning. However, a comparison between the actual reasoning level of the children, and the teachers' predictions of the children's performance, revealed that the

teachers were not entirely accurate in their perceptions. In contrast to the undergraduates in Study 1, the teachers' predictions were in the Stage 2(3) level of reasoning (i.e., between .97 and 1.36 of an averaged standard deviation of the children's actual reasoning). Thus, they overestimated by one-third of a stage level, the children's performance on the S.R.M. questionnaire.

In terms of the prescription scores, the majority of undergraduates (from Study 1) as well as the teachers in Study 3, appeared to recommend moral advice above the level required by the child. The teachers' recommendations for advice were within the Stage 4(3) level of reasoning, two-thirds of a stage above that recommended for promoting moral development (Enright et al., 1983b). In terms of the number of subjects who prescribed advice one stage above the actual reasoning level of the 4th graders, only one out of the 16 teachers appeared to apply the educational strategy. Fifteen teachers recommended advice that was not appropriate according to the plus-one technique. In addition, only three of the 16 teachers applied the plus-one strategy relative to their own predictions for 4th grade performance. The large majority (i.e., 13) prescribed advice which was not one stage above their predictions.

It was thought that perhaps the Study 1 undergraduates' inability to recommend moral advice reflected their lack of experience with both children and moral developmental theory. The teachers on the other hand, had many years of experience with children, and 50% reported having had some prior experience in the

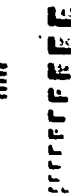
areas of moral theory and education. Lack of experience, however, did not appear to be responsible, as the teachers in the present investigation also failed to recommend appropriate moral advice (i.e., within one stage above child's level). In fact, a greater proportion of teachers failed to apply the plus-one strategy relative to the performance of the undergraduates in Study 1. Teachers' additional experiences therefore, do not seem to be related to their advice-giving abilities.

The teachers behaved in a manner consistent with the teachers employed in an earlier investigation by Rybash (1980). It seems that even though the teachers may possess some awareness of the abilities of 4th grade children, they fail to consider them fully when prescribing moral advice for the children. This finding is of particular importance when one considers the educational implications of it. As suggested by Arbuthnot and Faust (1981), and Enright et al. (1983b), moral advice should be presented at a level one stage above the child's current level to promote moral growth. In the present investigation, however, the teachers did not prescribe advice at this level, even though the large majority of them (i.e., 81%), reported that they regularly included moral discussions in their teaching curriculum. This finding suggests that the teachers may in fact not be facilitating as effectively as possible the moral development of their students.

Rybash (1980) suggested that teachers are poor moral advice-givers because they may feel morally obligated to teach what they believe to be the correct solution to a problem. While this possibility was not directly assessed in the present



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study, informal conversations with the teachers following their completion of the questionnaires did not reveal this to be the case. In fact, a number of teachers strongly indicated their concerns about making their advice as comprehensible as possible for young children. It may be, therefore, that the teachers' moral advice is limited not by their sense of obligation, but rather by their knowledge of moral theory and moral education strategies. As reported earlier, a number of teachers indicated that they had received previous training in the areas of moral theory and moral education. Given this, it may be logical to assume that teachers with such additional training would be better able to predict and prescribe moral reasoning than would those without the benefit of this training. In addition, it might also be logical to assume that teachers with more years of teaching experience would be better at predicting and prescribing moral reasoning for children. Correlations between previous training and subsequent prediction and prescription scores however, did not support the existence of such a relationship.

Previous training in moral development theory was correlated with: 1) the prediction scores, and 2) the prescription scores of the teachers. These correlations,  $r = .22$  and  $r = .04$  ( $p > .05$ ) respectively, did not support the hypothesis that either prediction or prescription scores were significantly related to previous moral development training. Similarly, correlations between previous training in moral education and subsequent prediction and prescription scores, also did not prove significant ( $r = -.13$ ,  $r = .08$ ,  $p > .05$ ). Lastly, correlations between the

teachers' years of experience and their prediction and prescription scores, did not support a significant relationship ( $r = .29$ ,  $r = .36$ ,  $p > .05$ ).

Given these correlations, it appears that years of teaching experience and previous training in moral development and moral education are not related to successful completion of the prediction and prescription S.R.M. questionnaires. This finding is not entirely surprising as the majority of teachers in the study indicated that their training in the areas of moral development and education was received in earlier college and university courses or through brief seminars presented by the education board. Their knowledge of these areas may therefore be rather limited, and thus, it is possible that additional training may be beneficial to the prediction and prescription skills. This issue will be addressed in Study 4.

#### STUDY 4

Teachers play a role in the implementation of successful moral education programs. They are responsible for creating an "atmosphere" within the classroom which will promote the moral development of their students. This atmosphere, according to the plus-one intervention approach (Enright et al., 1983b), would involve providing children with an opportunity to experience levels of moral reasoning slightly above their present level of functioning. In order for a teacher to be able to implement such a program however, it may be useful that he/she have some knowledge of moral development and moral education strategies.

Pressley et al. (1980) and Rybash (1980), as well as Studies 1 and 3, demonstrated that adults and teachers often fail to recommend appropriate levels of moral advice for young children. This may be as a result of a general lack of knowledge concerning moral development and education. With additional training in these areas however, it may be that teachers and others would better be able to prescribe moral arguments at a level required by the children.

A limited amount of research has been conducted to date which investigates the effects of teacher training on moral education effectiveness. An early study by Selman and Lieberman (1975) concluded that knowledge of cognitive-developmental theory was not an important factor for promoting moral growth. In this investigation "developmentally trained moral discussion leaders" were found to be no better at facilitating moral growth in their

students than were "lay teachers". A subsequent study by Keefe (1975) supported this finding, and concluded that teachers trained in moral theory were no better at promoting moral growth in their students than were "neutral" teachers.

Plymale (1977) conducted an investigation which examined the effects of length of teacher training on the moral reasoning levels of young children. In opposition to the above-mentioned studies, she found that teachers who were trained intensively (i.e., 6 weeks) were better moral educators than were teachers who received less training in developmental principles (i.e., 3 weeks). That is, the students of trained teachers demonstrated greater post-test moral reasoning than did the students of less informed teachers.

In general, the limited research on the effectiveness of teacher training in moral development is inconclusive. It should be noted, however, that although the above-mentioned investigations did not specifically describe the teacher training procedures, the details provided suggest that the training may have involved moral development theory only. Selman and Lieberman (1975) for example, described their trained teachers as being familiar with the cognitive-developmental approach to moral reasoning, and possessing previous experience with running discussion groups (p. 173). In Keefe's investigation as well, the trained teacher group was described as possessing an understanding of moral stage reasoning. These studies did not appear to include knowledge of moral education strategies as a requirement for their "trained" teachers. It may be however, that what teachers and

others require to promote moral development is additional training in optimal moral education strategies (e.g., plus-one interventions). An individual may be aware of moral development theory, but unless he/she understands the educational applications of this theory (i.e., the plus-one strategy), he/she cannot hope to facilitate moral thought as effectively as is possible.

The present study served as a preliminary investigation of the effects of moral theory and moral education training on adults' perceptions of young children's moral reasoning. A study with teachers was initially proposed for this investigation however, it was not approved. For this reason, a student sample was recruited. It may appear that students are not the ideal sample for this investigation, however, it should be noted that the undergraduates in Study 1 demonstrated equivalent levels of advice in comparison to the teacher sample in Study 3. The use of a student sample therefore, may be considered appropriate in this case to study the effects of additional training.

The undergraduates received training in either moral theory only or moral theory plus moral education, to determine whether such training had an effect upon their moral predictions and prescriptions. Given the findings of earlier research (e.g., Selman & Lieberman, 1975), it was hypothesized that moral theory only training would not influence the undergraduates' prescriptions for 4th graders' moral reasoning. Moral theory plus moral education training however, may serve to lower the discrepancy between their predictions and prescriptions for moral

reasoning. The combined training, therefore, may serve to improve the moral advice-giving abilities of the undergraduates.

### Method

#### Subjects

The participants in this study were 80 undergraduate students enrolled at the University of Western Ontario. All subjects were first year psychology students, who received course credit for their participation. As in the first study, the students had not yet been exposed to Kohlberg and his theory of moral development in their psychology classes. The mean age of these students was 19.81 years (S.D. = 2.84 years, range = 18-44 years). Fifty-four females and 26 males were included in the study. All participants were randomly assigned to one of four experimental conditions, with 20 subjects in each group.

#### Materials and Procedure

The participants were randomly assigned to one of four conditions: 1) self-perspective; 2) no training; 3) moral theory only training; or 4) moral theory plus moral education training. Self-perspective condition subjects were asked to respond twice to a standard version of the S.R.M. Half of these subjects answered form A first, followed by form B. The remaining subjects completed form B and form A respectively.

Subjects in the no training condition were asked to respond to modified versions of the S.R.M., identical to those employed in the previous investigations. These questionnaires were modified such that the subjects responded from the perspective of a 4th grader, as well as from the perspective of someone who is teaching

these moral issues to 4th graders (see Appendices B and C). The order of presentation for these two versions was counterbalanced across subjects. Half of the students responded in a prediction/prescription order, and the other half responded in the reverse order.

All subjects in the self-perspective and no training conditions were run in large groups of approximately 15-30 individuals. The two questionnaires took approximately 1½-2 hours to complete, however, subjects were allowed more time if necessary. The experimenter carefully explained the instructions to all participants at the start of the testing session. The experimenter was also available to answer specific questions from the subjects during the testing sessions.

Moral Theory Only Training: Subjects assigned to this condition participated in two testing sessions each. At the start of the first session, the undergraduates were informed that the study was going to be run in two parts; the first consisting of a lecture and exercises in moral theory, and the second consisting of questionnaires to be completed one week later. All subjects were then instructed to sit back and listen carefully to the experimenter's lecture. They were advised that they may wish to take notes, but that a handout would also be given to them at the completion of the session, summarizing the lecture material.

The experimenter then began the lecture by introducing the topic of moral development. Lawrence Kohlberg's cognitive-developmental theory of moralization (1958) was



explained to the students with the aid of an overhead projector and examples of differing levels of moral thought.

To begin, the students were presented (by means of an overhead transparency), the following moral dilemma:

A man had been sentenced to prison for 10 years. After 1 year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his profits to charity. Then one day, Mrs. Jones, an old neighbour, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

(Rest, 1979, p. 293)

It was then explained that Kohlberg presented dilemmas of this type to his subjects and asked questions concerning what should be done in each situation (i.e., "Should Mrs. Jones report him?"). On the basis of the responses to these questions, it was further explained that Kohlberg proposed an invariant sequence of stages of moral development.

Students were then introduced to brief descriptions of Kohlberg's first four stages of morality. Each stage description was presented to the students on an overhead transparency. See Appendix E for these stage descriptions. The experimenter read the descriptions, and discussed the approximate age level of individuals in each stage of development. Also, any questions or problems

concerning the subjects' comprehension of the material were clarified at this point.

Following the presentation of the four stages, the subjects were asked to once again study the moral dilemma previously presented. After a two minute period, the stage descriptions were each displayed again, and the subjects were asked to generate sample answers which individuals at each stage of development might give to the question, "Should Mrs. Jones report him?". These answers were discussed by the experimenter and the subjects in terms of their appropriateness for each particular stage. If it was agreed by all that a sample answer was indeed in the questioned stage of development, the experimenter wrote the answer on the overhead transparency. If a student suggested an answer that was judged to be inappropriate for a particular stage, the subjects were asked to explain the problems with the suggested answer. When students finished generating sample responses, the experimenter presented her own sample answers for each stage (see Appendix F). It was also stressed to the students that both "pro" and "con" responses could be included for each stage.

This procedure was followed until all four stages had been discussed in this manner. At the end of the presentation, the students were asked if there were any further questions concerning the material presented. Any questions were answered by the experimenter at this time. The subjects were then given a handout which summarized the lecture material (see Appendix G). They were given 5-10 minutes to carefully study the handout, and were then asked to take their exercise sheets and handouts with them and bring them back to the second session one week later. They were also

instructed to read them over sometime during the week separating the two sessions.

In the second session, exactly one week following the first session, the subjects were asked to complete two questionnaires on the moral reasoning abilities of others. These questionnaires were modified S.R.M. questionnaires identical to those employed in the no training condition (i.e., a prediction questionnaire, and a prescription questionnaire). The order of presentation for the two questionnaires was counterbalanced. Half of the subjects responded in a prediction/prescription order, and the other half responded in the opposite order.

At the completion of both questionnaires, the subjects were asked to fill out an information sheet (see Appendix H). This sheet asked the subjects to indicate whether or not they thought that the training they had participated in previously was helpful in completing the questionnaires. All subjects were allowed to keep their handouts and exercises, summarizing the training session.

The students in this condition were run in small groups of 5-10 individuals. The time required for the training lecture session was approximately one hour. In the second session, subjects took approximately 1 1/2-2 hours to complete both questionnaires, however, additional time was allotted if it was required.

Moral Theory Plus Moral Education Training. The procedures followed in this training condition were very similar to those outlined in the moral theory only condition. Subjects in this training condition were run in small groups of 5-10 individuals, and participated in two sessions. The first session involved training

procedures, and the second session one week later, involved the completion of the S.R.M. questionnaires. The training session in this condition, however, differed somewhat from the moral theory only training outlined previously. In the present condition, the subjects participated in the moral theory training plus additional training in moral education strategies.

Following the completion of the lecture and class exercise on Kohlberg's cognitive-developmental theory of moral reasoning (1958), the subjects were introduced to moral education strategies based on Kohlberg's theory. The "plus-one strategy", (Enright et al., 1983b), in particular, was highlighted for the students. This strategy was outlined, and the level of reasoning required to promote moral growth, was stressed for children of different age levels. At the completion of the presentation on educational strategies, the students were once again asked to carefully read over the moral dilemma presented on the overhead projector. They were allowed approximately two minutes to study the dilemma, and then each subject was given a handout of moral education exercises (see Appendix I). These exercises asked the students to indicate the level of moral advice they would recommend to promote moral growth in different-aged children. The subjects were given ten minutes to answer these exercises. It was stressed that they could feel free to discuss their answers with those sitting close to them. The overhead transparency of the moral dilemma was also displayed to the students while they completed these exercises.

After the ten minute period, the answers were discussed by the experimenter and the subjects. The appropriateness of the subjects'

moral advice was discussed for each age level of children. If an answer was judged to be beneficial in facilitating growth, it was written down by the experimenter on an overhead transparency. If it was judged to be unacceptable, the problems with the answer were discussed by the experimenter and the subjects (i.e., the advice is too low or too high to facilitate optimal growth).

At the conclusion of this exercise, the subjects were given a handout identical to that received by the participants in the moral theory only training condition (see Appendix G). In addition, each student in the present condition also received a summary of the moral education presentation (see Appendix J). The subjects were given 5-10 minutes to read over the handout, and were then instructed to bring their handouts and exercises with them to the second session in one week's time. The time required for the entire initial training session was approximately 1½-2 hours.

The procedures followed in the second session were identical to those outlined in the moral theory only training condition. The subjects completed two modified S.R.M. questionnaires and the information sheet which asked for their opinions concerning the usefulness of the earlier training session.

## Results and Discussion

### Scoring

Interrater reliability was based on 36 questionnaires (i.e., 20%) randomly selected from all completed questionnaires. These questionnaires were scored by a trained rater who was blind to the experimental training conditions. The actual number of

questionnaires included in the reliability check was 35, as both raters judged one questionnaire to be unscorable. The overall S.R.M.S. correlation between the two raters was  $r(33) = .95$ ,  $p < .01$ . The mean absolute discrepancy was .82 points. Agreement for modal stage (within a one-stage interval) was 100%. Exact modal stage agreement was 89%. Global stage agreement within a one-third interval was 97%, and exact global stage agreement was 83%. These reliability values exceeded the standards suggested by Gibbs and Widaman (1982).

Parallel form reliability computed between forms A and B of the S.R.M. was  $r = .68$ ,  $p < .01$ . Internal consistency was also assessed for each form. Split-half reliabilities were .70 for form A and .74 for form B.

#### S.R.M. Analysis

The following section will be divided into three parts: order effects, prediction scores comparison, and prescription scores comparison. Statistical findings will be discussed for each of these comparisons,

Order Effects. To determine whether or not order of questionnaire presentation may have influenced performance, comparisons were made between the scores of subjects who answered a particular questionnaire first (i.e., a prediction version), and the scores of those who answered it second. This was done for all three training conditions. Means and standard deviations for the prediction and prescription S.R.M. scores for each order and condition are presented in Table 12.

Table 12

Means and Standard Deviations for the S.R.M. Scores as a Function of Order of Questionnaire

Presentation and Training Condition

Order of Questionnaire Presentation	No Training		Moral Theory Only		Moral Theory & Education	
	Prediction Scores	Prediction Scores	Prediction Scores	Prediction Scores	Prediction Scores	Prediction Scores
Prediction/ Prescription	$\bar{x} = 259.30^a$	$\bar{x} = 329.90$	$\bar{x} = 272.90$	$\bar{x} = 325.60$	$\bar{x} = 251.70$	$\bar{x} = 278.20$
	S.D. = 35.21	S.D. = 33.89	S.D. = 27.81	S.D. = 21.06	S.D. = 28.62	S.D. = 49.15
Prescription/ Prediction	$\bar{x} = 246.60$	$\bar{x} = 334.30$	$\bar{x} = 249.40$	$\bar{x} = 336.10$	$\bar{x} = 240.50$	$\bar{x} = 291.70$
	S.D. = 45.44	S.D. = 17.19	S.D. = 41.59	S.D. = 29.66	S.D. = 53.1	S.D. = 29.28

<sup>a</sup> S.R.M. scores may range from 100-400 points.

Results of the comparisons are included in Table 13. These results suggest that no significant effects for order of presentation were found for the scores in any of the training conditions.

A comparison to assess the effects of questionnaire order for the subjects' self-perspective scores was also performed. The mean S.R.M.S. for the first questionnaire was 348.8 (S.D. = 21.64). For the second questionnaire, the mean S.R.M.S. was 335.25 (S.D. = 17.68). Performance did not differ significantly from one questionnaire to the next,  $t(38) = 2.17$ ,  $p > .10$ . The subjects' scores, therefore, were collapsed across the two questionnaires. That is, the average of the first and second questionnaires was calculated for each subject in the self-perspective condition. Future reference to the self-perspective S.R.M. scores, will therefore, reflect the average performance of the subjects in this condition ( $\bar{x}$  (self revised) = 342.03, S.D. = 14.39).

Prediction Comparison. Means and standard deviations for the predictions scores of the subjects in all three training conditions are presented in Table 14. Also included in this table are the mean and standard deviation for the self-perspective condition, as well as the mean and standard deviation for the 4th graders' performance (as initially reported in Study 2). To determine whether or not training influenced subjects' predictions of grade 4 performance, differences between these five means were evaluated using Dunn's procedure for planned comparisons (Kirk, 1968). These comparisons were performed with  $\alpha = .005$  per comparison.



Table 13

Summary of Statistical Tests (t statistic) Computed for Order  
Comparisons in the Three Training Conditions

Comparison	Prediction Scores	Prescription Scores
No Training 1st vs. 2nd questionnaire	.70	.37
Moral Theory Only 1st vs. 2nd questionnaire	1.49	.91
Moral Theory and Education 1st vs. 2nd questionnaire	.59	.75

Critical  $t$  value = 2.42 ( $p < .017$ ).

Table 14

Means and Standard Deviations of the Prediction and Prescription  
Scores for all Training Conditions, Plus the Self-Perspective  
Condition and Grade 4 Children

Condition	Prediction Scores	Prescription Scores
No Training	$\bar{x} = 252.95^a$ S.D. = 40.10	$\bar{x} = 332.10$ S.D. = 26.25
Moral Theory Only	$\bar{x} = 261.15$ S.D. = 36.48	$\bar{x} = 330.85$ S.D. = 25.61
Moral Theory and Education	$\bar{x} = 246.10$ S.D. = 41.61	$\bar{x} = 284.95$ S.D. = 39.98
Self-Perspective	$\bar{x} = 342.03$ S.D. = 14.39	
Grade 4 <sup>b</sup>	$\bar{x} = 208.27$ S.D. = 36.81	

<sup>a</sup>S.R.M. scores may range from 100-400 points.

<sup>b</sup>Grade 4 scores as reported in Study 2, group-administration condition.

Thus, there was a .05 Type 1 error rate. The t statistics associated with each comparison are displayed in Table 15. The critical t value required for each was 2.89.

The pattern of results presented in Table 15 suggest that the prediction scores of the subjects in all three training conditions differed significantly from the actual performance demonstrated by the 4th graders in Study 2. That is, the students in the training conditions overestimated the reasoning abilities of the children. Their predictions for performance were in the 2(3) and 3(2) stages of reasoning rather than Stage 2. The reasoning of the subjects in the self-perspective condition was also significantly greater than that of the 4th graders. In addition, the prediction scores of the subjects in the training conditions were significantly lower than the reasoning levels demonstrated by the subjects answering from their own perspective. Thus, it appears that while the students in the training conditions perceived that children would reason at lower levels of moral thought than they themselves would, they did overestimate the 4th graders' skills by one-third to two-thirds of a stage level.

Prescription Comparison. The means and standard deviations for the prescription scores in the three training conditions are also found in Table 14 (along with the self-perspective and 4th grader means and standard deviations). Pairwise comparisons identical to those described in the prediction analysis, were performed to determine the effects of the differing training conditions on the subjects' prescription scores. The results of these comparisons are presented in Table 16.

Table 15

Dunn's Comparisons for Prediction Scores in All Training Conditions,  
Grade 4 Scores, and Self-Perspective Scores

	Grade 4	Moral Theory and Education	No Training	Moral Theory	Self- Perspective
Grade 4	--	3.20*	3.77*	4.47*	11.30*
Moral Theory and Education	--	--	.61	1.35	8.59*
No Training	--	--	--	.73	7.97*
Moral Theory	--	--	--	--	7.24*
Self-Perspective	--	--	--	--	--

\* $p < .005$  (critical  $t$  value = 2.89).

MSE = 1246.91

Table 16

Duan's Comparisons for Prescription Scores in All Training  
Conditions, Grade 4 Scores, and Self-Perspective Scores

	Grade 4	Moral Theory and Education	Moral Theory	No Training	Self- Perspective
Grade 4	--	7.70*	12.31*	12.44*	13.43*
Moral Theory and Education	--	--	4.89*	5.02*	6.08*
Moral Theory	--	--	--	.13	1.19
No Training	--	--	--	--	1.06
Self-Perspective	--	--	--	--	--

\* $p < .005$  (critical  $t$  value = 2.89)

MSE = 881.13

The prescription scores of the subjects in the three training conditions, as well as scores of the subjects in the self-perspective condition, were all significantly higher than the actual reasoning levels of the young children. In addition, the prescription scores of the subjects who participated in the moral theory plus moral education training were significantly lower than those demonstrated by the undergraduates in the two other training conditions, as well as the students in the self-perspective condition. No differences, however, were found between the students' self-perspective reasoning, and the prescription reasoning of the students in the no training and moral theory only training conditions. In other words, the students in these two training conditions prescribed advice for the children which was consistent with their own level of moral reasoning (i.e., Stage 3(4) reasoning).

The findings of both the prediction comparisons and the prescription comparisons are particularly interesting given the results of the previous research (e.g., Pressley et al., 1984), and the three other studies reported in this investigation. In terms of the subjects' predictions for 4th grade performance, it appears that no one training condition was more effective than the others in lowering the subjects' predictions. All three conditions overestimated the children's performance by one-third to two-thirds of a stage level. The training in moral theory and moral theory plus education did not enable the students to better assume the perspective of a 4th grader (in comparison to those who did not receive training).

This finding should not be surprising if one considers the previous research in the area. Both Yussen (1976) and Pressley et al. (1980) found that adults (without prior training) were able to assume the moral perspective of others. Also, the undergraduate students employed in Study 1 of the present series of investigations, accurately predicted the performance of 4th graders (i.e., within approximately one-half of a standard deviation difference). Teachers as well in Study 3, while overestimating the children's abilities, were able to recognize developmental differences in moral thought. Thus, it appears that additional training in the area of moral development and moral education is not a necessary prerequisite for accurate perspective-taking; as it does not appear to influence adults' perceptions. It may be that adults believe they know about children without the need for additional training. Also, if individuals base their predictions on the example of a particular (well-known) child (as many indicated they did), they may not find the training procedure to be either necessary or helpful.

The prescription comparison yielded some interesting differences between training conditions. While subjects in all three conditions prescribed advice significantly above the present level of the children, only those subjects in the moral theory plus education condition prescribed advice at a level appropriate for facilitating optimal growth in the children. The literature on moral education suggests that reasoning slightly above the level of the children (i.e., within one stage), should be presented if one wishes to promote development (Arbuthnot, 1975;

Blatt & Kohlberg, 1975; Enright et al., 1983a, 1983b). In the present study, however, only those subjects who participated in the combined training demonstrated this ability. The 4th graders were reported (in Study 2) to be operating at Kohlberg's second stage of development (please refer back to Table 3 for a breakdown of S.R.M. scores and associated stages). The moral advice recommended by the combined training subjects was at the lower end of the third stage of moral development, the optimal point for promoting growth in 9-10 year old children. Out of the 20 subjects in this condition, 14 recommended moral advice one stage above the reasoning of the children. The remaining six subjects recommended advice which was not one stage above the children's reasoning level. It is interesting to note here however, that if the predictions of the undergraduates in this condition are considered, results indicate that most did not apply the plus-one strategy relative to their own predictions. As noted previously, they overestimated the performance of 4th graders, and only four out of the 20 subjects prescribed advice one stage above their own predictions. Sixteen of the undergraduates prescribed advice which was not optimal according to the plus-one strategy. Thus, it appears that while the combined training was effective in teaching the students appropriate levels of advice, it cannot be claimed that it was effective in teaching them to apply specifically, the plus-one strategy.

The moral theory only training did not influence the subjects' prescriptions for advice. The recommendations of these subjects were similar to those demonstrated by the subjects who



did not undergo training. Subjects in both of these conditions, as well, prescribed advice at their own level of moral functioning (i.e., stage 3(4)). This reasoning is beyond the comprehension of young children (according to the plus-one literature), and thus, it would not be optimal for facilitating the moral growth of the children in question. Looking at the actual numbers again, eight out of 20, and seven out of 20 undergraduates in the no training and moral theory only training conditions respectively, prescribed advice one stage above the level of the 4th graders. The majority of subjects in both of these conditions recommended advice which would not be considered appropriate for 4th grade children. If their actual prediction scores are considered, it is noted that three out of 20 in the no training and one out of 20 in the moral theory only training, appeared to be applying the plus-one strategy. Similar to those subjects in the combined training condition, most subjects in these two conditions recommended advice which was not one stage above their prediction responses for 4th graders.

Previous research on training subjects to become effective moral educators has proved to be somewhat inconclusive. Selman and Lieberman (1975) and Keefe (1975) concluded that moral theory knowledge was not beneficial in promoting moral growth. Plymale (1977) on the other hand, reported that extensive training did have a positive influence on the advice-giving abilities of adults. As discussed earlier, however, the training involved in Keefe's (1975), Plymale's (1977) and Selman and Lieberman's (1975) investigations, appeared to consist of training in moral theory

only and not moral theory plus moral education. The present research demonstrated that an awareness of educational strategies, in addition to an understanding of moral theory, seems to be necessary if one hopes to recommend effective moral advice. This belief was reflected in the comments that the students in the moral theory only training condition wrote on the information sheets (Appendix H) included with the questionnaires (e.g., "It was useful in completing the first one (prediction questionnaire) because it helped me to understand the way a child would think. It did not help with the second (prescription questionnaire) one"). Thus, it may be that unless one understands the educational applications of the theory of moral development, one cannot prescribe moral advice which is as effective as possible.

Summary of Alternative Comparisons. The statistical analyses presented in the four studies included in this thesis have focused on comparisons between: a) prediction S.R.M.S. scores, and b) prescription S.R.M.S. scores for each study. These comparisons were conducted in relation to the primary goal of this thesis, — which was the study of subjects' predictions and prescriptions for others, relative to their own level of moral reasoning.

Also of interest to the present thesis however, is an alternative set of analyses which examined the application of the plus-one strategy by the subjects in each study. Frequency counts of the number of subjects who recommended advice 1) one stage above their own predictions for children, and 2) one stage above the actual reasoning level of the children, were tabulated for each investigation. These values are presented in Table 17. As

Table 17

Summary of Alternative Comparisons Conducted in Studies 1, 3, and 4

	Study 1	Study 3	No Training	Study 4 Moral Theory Only	Study 4 Moral Theory and Education
Percentage of subjects applying plus-one strategy relative to their own predictions.	23	19	15	5	20
Percentage of subjects applying plus-one strategy relative to the reasoning level of 4th graders.	48	6	40	35	70

discussed previously, these numbers indicate that the large majority of subjects in each study, did not appear to use the plus-one strategy when suggesting moral advice for the 4th grade children.

## General Discussion

### Overview

This series of investigations involved the examination of adults' perceptions of children's moral reasoning. These perceptions were examined in undergraduates and teachers, as well as in undergraduates who participated in moral training sessions. The first section of this general discussion focuses on the moral predictions and prescriptions that adults made for different-aged children. Here, the results from the studies are briefly discussed in light of previous research in the area (i.e., Pressley et al., 1980, 1984; Rybash, 1980; Yussen, 1976). Next, the implications of adults' predictions and prescriptions for moral education are discussed.

Following this, the possibility of training adults to become more effective moral advice-givers is discussed. The findings of Study 4 are related to previous research which emphasized training possibilities. Finally, conclusions and limitations of the present series of studies are discussed, along with suggestions for future research in the area.

### Moral Predictions and Moral Prescriptions

Moral Predictions. Adults are aware of developmental differences in the moral performance of others. This pattern has been established in the previous literature, at least for performance on the D.I.T. (e.g., Pressley et al., 1980, 1984; Yussen, 1976). In light of this, it is not surprising that the present series of investigations also supported this conclusion with another measure, the S.R.M. Both undergraduate students (in

Studies 1 and 4), and elementary grade school teachers (in Study 3), demonstrated an understanding of the developmental differences in moral judgment skills, although they were not all entirely accurate in their judgments.

The students in Study 1 were able to predict accurately the reasoning levels of 4th grade children. Previous to this investigation, the research on moral perspective-taking had been limited to adults' perceptions of individuals in the early adolescent years and up (e.g., Pressley et al., 1980, 1984). It was thought that adults might not be as accurate in their predictions when asked to consider younger children (because they might not be as able to assume the role of a young child). The findings reported in Study 1, however, clearly indicated that adults can correctly assume the moral perspective of 9 years olds as well as those of older children and adolescents. Their predictions for the very youngest children (i.e., 4th graders) were within .43 to .65 of a standard deviation of the actual reasoning levels of the children, (a level of accuracy comparable to that obtained for prediction of the older adolescents).

The teachers in Study 3, on the other hand, who had more experience with this age group of children, were not as accurate as the Study 1 undergraduates in their predictions for the children. While they predicted lower levels of reasoning for the 9-10 year olds than they themselves would employ, thus demonstrating an understanding of the development of moral thought, their perceptions of the children abilities were elevated. In comparison to the actual Stage 2 reasoning evidenced

by the 4th graders (from Study 2), their predictions were overestimated by one-third of a stage level (.86 of an average standard deviation different). Thus, although they were able to recognize increases in moral judgment with age, their perspective-taking abilities were not as accurate as those of the undergraduate students in Study 1.

It is of interest here to note that the teachers in the third study were quite a few years older than the undergraduate students employed in Study 1 (i.e., mean age = 36.3 years vs. 19.6 years). One might therefore presume that this apparent difference in age could account for the observed discrepancy in the perspective-taking ability for young children. The students were obviously much closer in age to the 4th graders, and thus, may have been better able to assume a 9 year old's perspective (because they could better remember what it is like to be 9 years old). The undergraduate predictions from Study 4, however, did not support this hypothesis. In this investigation, undergraduate students (mean age = 19.8 years) also significantly overestimated the moral performance of the young children by one third of a moral stage. Thus, the age difference between the subjects and their targets did not appear to influence the predictions made for the moral performance of the children. Students and teachers alike (in Studies 3 and 4), regardless of their age, overestimated the actual reasoning levels of the young children. The undergraduates in Study 1 therefore, appear to be better predictors than these other subjects. It is important to note however, that a comparison between the mean prediction scores for

the subjects, across all studies, did not indicate significant differences between the prediction scores (all  $p$ 's  $> .05$ ). That is, while the Study 1 undergraduates were the best predictors for the 4th graders, an analysis of their predictions with those of the teachers and other students, revealed that the scores were all well within one standard deviation of each other.

In summary, all subjects demonstrated age differentiation in the moral perspective-taking tasks. Their predictions, while being elevated, indicated that they were aware of the more limited reasoning skills of young children in relation to their own higher functioning abilities. These results differ somewhat from the previous research (e.g., Pressley et al., 1980, 1984; Yussen, 1976) in that the present subjects were not entirely accurate in their predictions. This difference in findings however, may be accounted for by the fact that previous studies did not compare predictions to actual reasoning levels of the age group being considered. Predictions were assumed to be accurate because they were significantly lower than adult levels of reasoning. The present thesis however, compared predictions with actual reasoning scores, and observed that adults may not be as accurate in their predictions as was previously assumed. Given this, one focus of future research might be to improve the prediction skills of individuals through training procedures.

Moral Prescriptions. Research both present and past, has demonstrated that adults are aware in general, of developmental differences in the moral reasoning of others. This research has also demonstrated however, that adults do not always appear to



consider fully these developmental differences when asked to recommend moral advice to others. These conclusions are consistent with Pressley et al. (1980), Rybash (1980), and the results of Studies 1 and 3 in the present series of investigations.

Regardless of the dependent measure employed or the amount of prior experience with young children, it seems that adults have a tendency to recommend advice which is not consistent with suggested moral education strategies. One exception to this finding, was recently obtained by Mirkovich (1985),<sup>4</sup> who carried out her research in conjunction with this series of investigations. Mirkovich had parents of 4th grade children (rather than undergraduates or teachers) make predictions and prescriptions for their children using modified versions of the S.R.M. The parents in this study were accurate in their predictions of 4th graders' performance in that their scores did not differ significantly from the actual S.R.M.S. scores of 4th graders obtained in Study 2 (233.7 vs. 208.27). Contrary to previous findings, however, the parents' prescriptions for their children were also accurate, as they were only one stage above the child's present level of functioning. The parents seemed to make their recommendations for teaching moral issues according to the plus-one approach (Arbuthnot & Faust, 1981). That is, while their prescriptions were significantly greater statistically than the actual reasoning levels of 4th graders (i.e., Stage 2 as reported in Study 2), they were within the lower range of the 3rd stage of

development (mean prescription S.R.M.S. = 289.4), and thus, at an optimal level for facilitating growth in the children.

Why the discrepancy between teachers' and parents' ability to recognize appropriate levels of moral advice for young children? A number of reasons could be postulated to explain this finding.

First, the parents in Mirkovich's study obviously had much different experiences with their children than did the elementary-grade-school teachers. Parents, for example, deal with the same children on a day to day basis, and most probably experience many situations requiring moral discussions daily. Teachers, on the other hand, probably engage in moral conversations on a much more limited basis. This additional experience with moral discussions may help to explain the superior advice-giving abilities of the parents. Parents may also be better at understanding the advice required for young children because they consider their own 9 year old when making their recommendation decisions. Teachers, however, have a class of approximately 30 students to select from when asked to consider the "average 4th grader". The probability that all 30 students would require the same level of moral advice is low, as children within this age range (i.e., 9-10 years) typically operate anywhere within Kohlberg's first 3 stages of moral development. This, therefore, may account in part for the teachers' lack of understanding about what is required as advice for "the average 4th grader".

In addition, it has been suggested in the literature, that teachers may be inefficient moral advice-givers because of the fact that they feel morally responsible in their position, to

teach what they believe is the best solution to a problem (Ryba sh, 1980). This belief was also espoused by Pressley et al. (1980).

In Study 3, however, when the teachers were informally questioned by the experimenter concerning their recommendations for the young children, they did not claim to base their recommendations for children on feelings of moral obligation and responsibility. No teacher indicated that he/she felt obligated to present the optimal solution to a problem. A number of teachers in fact, revealed just the opposite in their conversations with the experimenter. They reported that they were very much concerned with prescribing advice at a level as understandable as possible for young children, and believed that their recommendation decisions supported this position.

In general, the results of the present investigation versus those of Mirkovich (1985), illustrate that parents do better than teachers when it comes to recommending appropriate levels of moral advice. In addition to the ~~above~~-mentioned factors, the superiority of parents may also be due to the fact that teachers lack adequate knowledge about what is required to promote effective moral growth in their students (i.e., education strategies). Parents may have acquired an "unconscious" awareness of what children require in moral discussions as a result of their continual moral experiences with them (Lickona, 1985), and thus, understand that moral growth is best promoted using arguments slightly above the level of the child. Teachers on the other hand, do not appear to possess this same knowledge perhaps because their experience with the children is much more limited.

In light of this, it was hypothesized that teachers and others interested in moral education would benefit from training in specific moral education strategies. Previous research had demonstrated that teachers prescribe poor moral advice (Rybash, 1980, Study 3). Knowledge of moral education techniques, however, may serve to improve their perceptions of children's moral understanding, and thus, allow them to recommend more accurate and effective moral advice. This hypothesis was examined in the final study of the present thesis, the results of which are discussed below.

#### Moral Education Training

Teachers, when asked to prescribe moral arguments for teaching moral issues to young children, recommend advice at their own level of functioning rather than at the level of the children (Rybash, 1980; Study 3). While this moral advice would not necessarily be detrimental to the children, it is not believed to be the most optimal approach for facilitating moral growth (Enright et al., 1983a, 1983b). As discussed in the introduction to this thesis, a number of educational strategies have been proposed in the literature to promote moral growth in children and adolescents. The plus-one approach, which is considered by many to be the most effective (e.g., Enright et al., 1983b), is the strategy most relevant to this discussion. As discussed previously, this approach suggests that teachers and others involved in moral education would do well to present moral advice and discussions approximately one stage above the level of their students (i.e., within 100 points on the S.R.M), if they wish to

facilitate moral development (Blatt & Kohlberg, 1975; Walker, 1980, 1983). In light of the finding that teachers (in both Study 3 and Rybash, 1980) failed to take into account the moral level of the children when prescribing moral advice, it was hypothesized in Study 4, that additional training in the use of moral education strategies (especially the plus-one approach) would serve to improve their moral advice-giving abilities.

This type of training is not always easy to implement, however. Many researchers in fact, have expressed concern that the plus-one technique is difficult to apply in a classroom setting (Enright et al., 1983b; Rest, 1984). In part, this may be due to the fact that school boards often do not include moral education as a requirement in their curriculums. Resources are made available to the teachers, should they wish to set up a program, yet a strict curriculum is not usually enforced. The moral education of the students is often left up to the discretion of each individual teacher (D. Santor, personal communication, November 29, 1983). Given this situation, it would be difficult to introduce a strict moral education training program into the classroom curriculum. Also, children in each class would demonstrate reasoning anywhere within the first three stages, and thus the implementation of a strict program would be difficult.

It must be noted however, that moral growth does not occur only if one follows a specific education program. It may also develop through the use of informal moral discussions which might regularly take place in a classroom setting. In Study 3 of the present investigation, 81% of the teachers who participated,

indicated that they included such discussions in their classroom curriculum. According to the teachers, these discussions were likely to arise spontaneously, if for example, they were discussing a current events topic.

It seems therefore, that moral situations occur in the classrooms on a fairly regular basis. Given the findings of moral education researchers (e.g., Enright et al., 1983), teachers might do well to apply the suggested educational strategies to improve the effectiveness of their advice in these situations. In order for a teacher to be able to employ such effective advice, however, it might be helpful if he/she possessed a good understanding of the theory and processes underlying the educational techniques. Fifty percent of the teachers studied in the 3rd investigation reported having had some previous training in moral theory and moral education strategies. Of these 50%, however, most indicated that their knowledge came from teachers' college and university psychology and sociology courses. Few reported having studied it recently in board workshops or seminars, and even fewer claimed a working understanding of the plus-one approach. Also, correlations between previous training and prediction and prescription scores (as reported in Study 3), did not demonstrate support for the benefit of this training. Thus, teachers may require additional training in these areas to improve their moral-advice giving abilities, and their general moral education skills.

A limited number of investigations had previously examined the benefits of training teachers in moral education programs.

Selman and Lieberman (1975), and Keefe (1975), both concluded that teachers trained to conduct moral discussions were no more effective in promoting growth than were neutral (i.e., non-trained) teachers. Plymale (1977) on the other hand, suggested that teachers who were trained intensively were better moral advice-givers than teachers who received minimal training. Common to these three studies, however, was the fact that the training involved in the projects appeared to consist of training in moral theory only. In addition to understanding the theory of moral development, however, teachers must also be aware of its applications for promoting moral growth as well (Paolitto, 1977). Therefore, teachers probably also need to possess knowledge about educational strategies designed to facilitate this growth. This hypothesis was investigated in Study 4, which compared the effectiveness of moral theory only training relative to moral theory plus moral education training.

As was hypothesized, the undergraduates who participated in the combined training procedure (prior to completing the questionnaires), advocated effective moral advice. Those who received moral theory only training, or no training, advocated moral advisement beyond the level that would be appropriate for the children (i.e., beyond Stage 3 reasoning). That is, their advice was within their own level of comprehension, and thus, according to the educational literature (e.g., Enright, et al., 1983), it would have been less comprehensible to young children. On the basis of this finding, it appears that it is possible to train individuals to better understand the reasoning requirements

of young children, and thus possibly improve their potential as effective moral educators. Moral theory alone, may (or may not) be beneficial to one's understanding of children's general reasoning abilities (depending on the literature you read). Knowledge of the educational applications of the theory, however, appears to be necessary if one hopes to use this information to facilitate moral development in the children.

Interestingly, one population which would not appear to benefit from additional training in moral education is parents of young children. As noted earlier, parents recommend moral advice for their children at a level which would be easily comprehensible to them (Mirkovich, 1985). Adults with no experience with children, and teachers, on the other hand (as reported in Studies 3 and 4), do not possess such effective advice-giving abilities. Only those undergraduates (in Study 4) who received specific training in moral education, demonstrated advice comparable to that recommended by the parents in Mirkovich's study. The advice prescribed by both of these groups of individuals was at a level, one stage beyond 4th graders' present Stage 2 moral reasoning. Thus, the training procedure in Study 4 was helpful in promoting a good knowledge base in the adults of the moral teaching requirements for young children.

### Summary and Conclusions

Over the past few decades a great deal of time and effort has been devoted to the study of moral development and moral education. This research, according to Chazan (1985) has produced a number of articles, books and instructional materials which



reflect the importance of moral education programs for children. Given the value of these programs, the present series of investigations was conducted to determine 1) if adults and elementary grade school teachers were able to prescribe effective moral advice for children (according to the plus-one approach), and 2) if it was possible to improve moral advice-giving ability through the use of specific training procedures.

Results from these investigations demonstrated that many inexperienced adults, as well as elementary school teachers evidenced poor moral arguments when recommending advice to promote moral growth in children. This finding was not surprising given the conclusions of previous researchers such as Pressley et al. (1980) and Rybash (1980). Adults were capable, however, of presenting effective moral advice when exposed to training procedures involving moral theory and moral education strategies. Training in such strategies (in Study 4) was sufficient to promote good moral advice-giving abilities in the undergraduates studied.

On the basis of the conclusions of the present series of investigations it might be assumed that teachers as well as undergraduates, would also become more effective moral advice-givers if they possessed more knowledge about suggested educational strategies. A study similar to the design of Study 4 could be conducted to determine the effects of such training on a teacher sample. Assuming that this study demonstrated similar positive results, researchers and educators may be interested in presenting workshops and seminars on effective moral education techniques to the teaching community. It should be noted,

however, that not all teachers may be interested in providing moral education within their classroom curriculum. Taking this fact into consideration, this author does not advocate such training as a necessary requirement of a teachers' education. Rather, decisions to participate should be left up to the judgment of each individual teacher. Training in moral education strategies, however, may be beneficial to those teachers who are concerned with the moral development of their students and interested in conducting moral education programs within their classrooms.

The inclusion of moral education as a regular part of a classroom curriculum may be beneficial to the students, as programs structured around effective moral strategies (i.e., plus-one), have been found successful in promoting moral growth in children (Enright et al., 1983; Enright, Lapsley & Levy, 1983). Increases of as much as one-fourth to one-half of a stage of moral reasoning have been reported in relation to these training programs (Blatt & Kohlberg, 1975; Hayden & Pickar, 1981). While these effects may appear to reflect minimal gains in reasoning, differences of this size reflect a gain of four to five years of natural growth (Schaepli et al., 1985), and have been related to real life behavior and decision making (e.g., Blasi, 1980, 1983; Kohlberg & Candee, 1984; Malinowski & Smith, 1985; Rest, 1984; Thoma, 1984). Blasi (1980) reviewed numerous studies relating moral judgment to moral action, and concluded that the large majority (i.e., 76%) supported the existence of a positive relationship. Behaviors such as cheating and delinquency, along

with sociopathic and prosocial behaviors have been significantly related to degree of social maturity (Andreason, 1976; Campagna & Harter, 1975). Recent research by Malinowski and Smith (1985) also strongly supported the relationship between moral judgment and moral conduct. College students scores on the D.I.T. were correlated with test cheating behavior, and the results indicated that the higher the D.I.T. score, the less likely the person was to cheat.

Given these findings, it might be assumed that effective moral education programs may be useful additions to classroom curriculums, as they would develop children's moral reasoning (and thus, possibly their moral behavior). It must be noted however, that the research conducted thus far has been correlational in nature and has also only considered the effects of moral education programs on subsequent moral reasoning skills (as measured by the D.I.T. or the M.J.I.). What clearly remains to be studied is the influence of moral education programming on children's moral conduct and actions. Such research would allow us to determine better the true value of moral education programs.

In conclusion, the present thesis has provided some interesting findings concerning adults' and teachers' perceptions of children's reasoning. Further research, however, is required before more definite conclusions regarding adults' prescriptions for moral advice, can be made. The present series of studies examined adults' and teachers' opinions about what they believe should be presented to young children. These opinions and attitudes were measured through the use of paper and pencil tests

of moral reasoning (i.e., the S.R.M.). While this measure revealed very interesting findings about attitudes towards teaching moral issues, future research needs to consider the actual behaviors of subjects when they are involved in realistic moral interactions with young children. We are aware of their opinions regarding how they believe moral discussions should be conducted, but it is possible that these opinions may change when participating in real-life discussions with children. That is, adults and teachers may initially present and discuss issues at their own level of moral comprehension. In the course of a discussion, however, they may come to the realization that this information is beyond the level of the children, and therefore lower their moral arguments to a position more comprehensible to young children. On the other hand, they may not alter their advice in the course of a moral discussion. Teachers' decision-making research (e.g., Clark & Peterson, 1986) has shown that teachers may actually consider few alternatives in interactive instruction sessions. Thus, it is not known how a teacher might respond in a moral discussion situation. Future research therefore, would do well to involve adults and teachers in moral role-playing situations with young children, to examine their behaviors in such situations. The need for such research remains apparent before we can make any definite conclusions about adults' moral advice-giving abilities. In addition, it should be noted that additional research in this area would also aid in furthering our understanding of teachers' thought processes and decision-making strategies in these interactive situations.

Secondly, another limitation of the present thesis which requires discussion, is the lack of process data available in these investigations. The design of the studies was such that they allowed for the examination of subjects' opinions regarding moral predictions and prescriptions. Lacking however, was a measure of the actual thought processes of the subjects while they were making their recommendations. This additional information would be very beneficial to our total understanding of adults' perceptions of children's reasoning.

For example, in Study 4, subjects in the no training and moral theory only training conditions overestimated the reasoning abilities of children. Their prescriptions as well, were significantly higher than the suggested levels of moral advice. On closer inspection however, their prescriptions appeared to be within one stage level of their prediction levels for the children. As discussed earlier, this finding may lead one to question whether the subjects' difficulties actually lay in the area of predicting performance rather than prescribing advice.

Obviously additional process data would have been beneficial to our understanding of this possibility. Subjects were informally questioned concerning their approach to the questionnaires and were asked to indicate whether they found the training sessions to be beneficial. This information as obtained, however, did not allow for a process analysis of the task. Many subjects did indicate (informally) that the prescription task was difficult as they knew nothing about how to teach moral issues to young children. In addition, subjects in the combined training

condition, while over-predicting as well, were able to prescribe appropriate levels of advice for the children (i.e., at Stage 3). Also, frequency counts, as reported in the studies (see Table 17), did not support the hypothesis that subjects prescribed higher levels of advice because their predictions were high. Rather, the majority of subjects in all studies prescribed advice which was not one stage above their predictions.

This evidence seems to suggest that the combined training condition was beneficial to the undergraduates' awareness of the reasoning needs of children. It is important to note here, however, that while it was helpful (in that the subjects prescribed appropriate advice), the frequency counts mentioned above revealed that they did not seem to make their recommendations according to the plus-one technique. That is, while they were able to recommend appropriate advice they did not prescribe advice one stage beyond their own predictions for the children. This finding is somewhat puzzling, and leads one to question what strategy the subjects might have employed to prescribe the appropriate advice. Additional information concerning their thought processes would obviously have been helpful to this discussion. This information was not obtained, but could be easily included in future studies. Subjects, for example, could be asked to complete structured questionnaires concerning their moral prediction and prescription choices (e.g., "why did you answer this way."). Information dealing with the processes mediating their answers would then be available for

consideration. Future research therefore, should consider the need for processing information in this area.

A third limitation concerns the design of the final study. The fourth study was designed as a preliminary training project only. Although positive results were noted in this study, further research would be beneficial to our understanding of the effects of the training procedures. The length of training time for example, was of very short duration in the present study.

Previous research has demonstrated that individuals who are extensively trained in moral issues are better moral educators than those who receive less training (Plymale, 1977): Given this, future research should consider training sessions which extend over a period of weeks rather than hours. Such training might also include actual moral discussion exercises between the adults and their pupils, as well as written exercises. Also, in Study 4, the moral theory training condition was somewhat shorter than the combined training condition (by approximately 30 minutes).

Although this does not represent a large time difference, it may be that more extensive training in moral theory would be of greater benefit to individuals trying to recommend moral advice. More extensive training may be beneficial, as well, to improving individual prediction skills. The present thesis did not directly concern itself with improving subjects' predictions. However, given that it was found that subjects are not entirely accurate in their perceptions, future research should address the issue of improving predictions as well as prescriptions. Accurate

prediction skills would help individuals to better understand the applications of moral education strategies.

In addition, the final study did not address any questions about the long term effects of moral education training. The predictions and prescriptions of the undergraduates were assessed one week following training. While strong positive results with the combined training procedure were noted at this point, it is not known whether the undergraduates would still be able to advocate appropriate moral advice if questioned at a later point. Thus, although the advantages of combined training in moral theory and moral education strategies were clearly demonstrated, further research should examine the long term application of this training.

An additional suggestion for future research concerns the use of the moral reasoning measure employed: One comment which was commonly expressed by both the undergraduate and teacher participants in the studies, was that some of the moral situations in the questionnaires were irrelevant to young children. Subjects, for example, often questioned the inclusion of the "Heinz dilemma" (Kohlberg, 1969) on the grounds that they would not usually discuss such a topic with 9-10 year old children. The author recognized that this was a legitimate concern with one of the dilemmas in the questionnaire. However, Kohlbergian-type dilemmas are commonly employed in many moral education programs (e.g., Scharf, McCay & Ross, 1979). Also, due to the lack of a more appropriate standardized measure of moral reasoning, the S.R.M. was employed. In light of the concern, about the dilemma



however, future research interested in adults' moral recommendations for young children, should strive to include moral issues that are more directly relevant to everyday experiences. Such age-appropriate dilemma situations have been developed, and are available through the school board and other moral education texts and papers (i.e., Colangelo & Dettmann, 1985; Mattox, 1975; Scharf et al., 1979). The use of these more appropriate dilemmas would be extremely important when examining adults' moral behaviors with young children in role-playing situations. In such a study, topics directly relevant to children's experiences would obviously be more appropriate for discussion.

A final suggestion for future research is not directly relevant to the present series of investigations, but rather concerns the need for more research in the area of parents' roles in the moral education of their children. Mirkovich's (1985) study revealed that parents are able to provide good moral advice for their children. Further examination of why parents appear to be better moral advice-givers (in comparison to teachers), may be beneficial to the application of moral education programs in schools. Also, Lickona (1985) recommended that the family and school should collaborate together in the moral education of children. He believes that the moral education of children is a great challenge, and thus, suggests the need to investigate the possible interactive effect of the home and school on children's development. Further research in this area therefore, may be beneficial to our understanding of the role of the family as well as the school in the moral development of children.

In summary, additional research on children's reasoning would serve as a valuable extension to the present thesis. This thesis has addressed a number of concerns regarding adults' perceptions of children's reasoning skills. In particular, the usefulness of training in moral education strategies to improve these perceptions was noted. Results indicated that such training would be of great benefit in developing the advice-giving abilities of individuals interested in moral education. This finding is deserving of considerable attention given the increasing popularity of moral education programs for children and adolescents. As mentioned above, however, a few limitations impose constraints on the conclusions which can be drawn from this study regarding the benefits of moral education training. Also, it is important to note that this dissertation, as designed, has been concerned with a Kohlbergian perspective of moral development, and as such, has not considered other possible perspectives. In light of this, the conclusions and implications drawn from these studies must be constrained by this limitation. Additional research, as suggested, however, would do much to further our present understanding of the fields of moral reasoning and moral education for young children.

## References

- Ambron, S. R., & Irwin, D. M. (1975). Role-taking and moral development in five and seven year olds. Developmental Psychology, 11, 102.
- Andreason, A. W. (1976). The effects of social responsibility, moral judgment, and conformity on helping behavior. Dissertation Abstracts International, 36, 5856B.
- Arbuthnot, J. (1975). Modification of moral judgment through role-playing. Developmental Psychology, 11, 319-323.
- Arbuthnot, J., & Faust, D. (1981). Teaching moral reasoning: Theory and practice. New York: Harper & Row.
- Berkowitz, M. (1980). The role of transactive discussion in moral development: The history of a six-year program of research - Part II. Moral Education Forum, 5, 15-27.
- Berkowitz, M., & Gibbs, J. (1983). Measuring the developmental features of moral discussions. Merrill-Palmer Quarterly, 29, 399-410.
- Berkowitz, M., Gibbs, J., & Broughton, J. (1980). The relation of moral judgment stage disparity to developmental effects of peer dialogues. Merrill-Palmer Quarterly, 26, 341-357.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. Psychological Bulletin, 88, 1-45.
- Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective. Developmental Review, 3, 178-210.

- Blatt, M., & Kohlberg, L. (1975). The effects of classroom moral discussion upon children's level of moral thought. Journal of Moral Education, 4, 129-161.
- Bolt, D. J., & Sullivan, E. V. (1977). Kohlberg's cognitive-developmental theory in educational settings: Some possible abuses. Journal of Moral Education, 6, 198-205.
- Borko, H., Cone, R., Russo, N. A., & Shavelson, R. J. (1979). Teachers' decision making. In P. L. Peterson & H. J. Walberg (Eds.), Research on teaching: Concepts, findings, and implications (pp. 136-160). Berkeley, Ca.: McCutchan.
- Campagna, A. F., & Harter, S. (1975). Moral judgment in sociopathic and normal children. Journal of Personality and Social Psychology, 31, 199-205.
- Chazan, B. (1985). Contemporary approaches to moral education: Analyzing alternative theories. New York: Teachers College Press.
- Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), Handbook of research on teaching (pp. 255-296). New York: MacMillan Publishing Co.
- Colangelo, N., & Dettmann, D. F. (1985). Characteristics of moral problems and solutions formed by students in grades 3-6. Elementary School Guidance and Counseling, 19, 260-271.
- Colby, A., & Kohlberg, L. (1984). Invariant sequence and internal consistency in moral judgment stages. In W. M. Kurtines & J. L. Gerwitz (Eds.), Morality, moral behavior, and moral development (pp. 41-51). New York: Wiley & Sons.

- Colby, A., Kohlberg, L., Gibbs, J., Candee, D., Speicher-Dubitt, B., Kauffman, K., Hower, A., & Power, C. (1983). The measurement of moral judgment: A manual and its results. New York: Cambridge University Press.
- Colby, A., Kohlberg, L., Gibbs, J. C., & Lieberman, M. (1983). A longitudinal study of moral judgment. Monographs of the Society for Research in Child Development, 48(1-2).
- Costanzo, P. R., Coie, J. D., Grunet, J. F., & Farnhill, D. (1973). A re-examination of the effect of intent and consequence on children's moral judgments. Child Development, 44, 154-161.
- Damon, W. (1975). Early conceptions of positive justice as related to the development of logical operations. Child Development, 46, 301-312.
- Davison, M. L., Robbins, S., & Swanson, D. (1978). Stage structure in objective moral judgments. Developmental Psychology, 14, 137-146.
- Enright, R. D., Franklin, C. C., & Manheim, L. A. (1980). Children's distributive justice reasoning: A standardized and objective scale. Developmental Psychology, 16, 193-202.
- Enright, R. D., Lapsley, D. K., Harris, D. J., & Shawver, D. J. (1983a). Moral development interventions in early adolescence. Theory into Practice, 22, 134-144.
- Enright, R. D., Lapsley, D. K., & Levy, V. M. (1983b). Moral education strategies. In M. Pressley & J. R. Levin (Eds.), Cognitive strategy research: Educational applications (pp. 43-83). New York: Springer-Verlag.

- Flavell, J. (1974). The development of inferences about others. In T. Mischel (Ed.), Understanding other persons. New Jersey: Rowan and Littlefield.
- Flavell, J. H., Botkins, P., Fry, C., Wright, J., & Jarvis, P. (1968). The development of role-taking and communication skills in young children. New York: Wiley & Sons.
- Gibbs, J. C., Arnold, K. D., & Burkhart, J. E. (1984). Sex differences in the expression of moral judgment. Child Development, 55, 1040-1043.
- Gibbs, J. C., & Widaman, K. F. (1982). Social intelligence: Measuring the development of sociomoral reflection. Englewood Cliffs, N.J.: Prentice-Hall.
- Gibbs, J. C., Widaman, K. F., & Colby, A. (1982). Construction and validation of a simplified, group-administerable equivalent to the moral judgment interview. Child Development, 53, 895-910.
- Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, Mass.: Harvard University Press.
- Hayden, B., & Pickar, D. (1981). The impact of moral discussion on children's level of moral reasoning. Journal of Moral Education, 10, 131-134.
- Hetherington, E. M., & Parke, R. D. (1979). Child psychology: A contemporary viewpoint. New York: McGraw-Hill.
- Holstein, C. B. (1976). Development of moral judgment. A longitudinal study of males and females. Child Development, 47, 51-61.
- Hunt, D. E. (1971). Matching models in education. Toronto: Ontario Institute for Studies in Education.

Joyce, B. (1978-1979). Toward a theory of information processing in teaching. Educational Research Quarterly, 3, 66-67.

Joyce, B. R. (1984). Dynamic disequilibrium: The intelligence of growth. Theory Into Practice, 23, 26-34.

Keefe, D. R. (1975). A comparison of the effect of teacher and student led discussions of short stories and case accounts of the moral reasoning of adolescents using the Kohlberg model. Dissertation Abstracts International, 36, 2734A.

Kirk, R. E. (1968). Experimental design: Procedures for the behavioral sciences. Belmont, Ca.: Brooks/Cole.

Kohlberg, L. (1958). The development of modes of moral thinking and choice in the years ten to sixteen. Unpublished doctoral dissertation, University of Chicago.

Kohlberg, L. (1963). The development of children's orientations toward a moral order. I: Sequence in the development of human thought. Vita Humana, 6, 11-33.

Kohlberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In D. Goslin (Ed.), Handbook of socialization: Theory and research (pp. 347-481). Chicago: Rand McNally.

Kohlberg, L. (1971). From is to ought: How to commit the naturalistic fallacy and get away with it in the study of moral development. In T. Mischel (Ed.), Cognitive development and epistemology (pp. 151-237). New York: Academic Press.

- Kohlberg, L. (1973). Continuities in childhood and adult moral development revisited. In P. B. Baltes & K. W. Schaie (Eds.), Life-span developmental psychology: Personality and socialization (pp. 180-204). New York: Academic Press.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), Moral development and behavior (pp. 31-53). New York: Holt, Rinehart & Winston.
- Kohlberg, L. (1978). The cognitive-developmental approach to moral education. In P. Sharf (Ed.), Readings in moral education (pp. 36-51). Minneapolis: Winston Press.
- Kohlberg, L. (1981). Essays on moral development. Vol. 1: The philosophy of moral development. Cambridge, MA: Harper & Row.
- Kohlberg, L. (1982). A reply to Owen Hanagan and some comments on the Puka-Goodpaster exchange. Ethics, 92, 513-528.
- Kohlberg, L., & Candee, D. (1984). The relation of moral judgment to moral action. In W. M. Kurtines & J. Gerwitz (Eds.), Morality, moral behavior and moral development (pp. 52-73). New York: Wiley & Sons.
- Kohlberg, L., Levine, C., & Hower, A. (1983). Moral stages: A current formulation and a response to critics. Contributions to Human Development, Vol. 10. New York: Karger.
- Kohlberg, L., & Mayer, R. (1972). Development as the aim of education. Harvard Educational Review, 42, 449-496.
- Kurtines, W. M., & Pimon, J. B. (1983). The Moral Development Scale: A Piagetian measure of moral judgment. Educational and Psychological Measurement, 43, 89-105.



- Kurtines, W., & Grief, E. B. (1974). The development of moral thought: Review and development of Kohlberg's approach. Psychological Bulletin, 81, 453-470.
- Langer, J. (1969). Disequilibrium as a source of development. In P. Mussen, J. Langer & M. Covington (Eds.), Trends and issues in developmental psychology (pp. 22-37). New York: Holt, Rinehart & Winston.
- Lapsley, D. K., Enright, R. D., & Selin, R. C. (in press). Moral and social education. In J. Worrel & F. Danner (Eds.), Adolescent development: Issues for education. New York: Academic Press.
- Lapsley, D. K., & Quintana, S. M. (1985). Recent approaches to the moral and social education of children. Elementary School Guidance and Counseling, 19, 246-259.
- Lawrence, J. (1980). Moral judgment intervention studies using the Defining Issues Test. Journal of Moral Education, 9, 178-191.
- Leming, J. (1981). Curricular effectiveness in moral/values education: A review of research. Journal of Moral Education, 10, 147-164.
- Levine, C., Kohlberg, L., & Haver, A. (1985). The current formulation of Kohlberg's theory and a response to critics. Human Development, 28, 94-100.
- Lickona, T. (1985). Parents as moral educators. In M. W. Berkowitz & F. Oser (Eds.), Moral education: Theory and application (pp. 127-146). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.
- Lockwood, A. (1978). The effects of values clarification and moral development curricular on school-age subjects: A critical review of recent research. Review of Educational Research, 48, 325-364.

- Malinowski, C. I., & Smith, C. P. (1985). Moral reasoning and moral conduct: An investigation prompted by Kohlberg's theory. Journal of Personality and Social Psychology, 49, 1016-1027.
- Mattox, B. A. (1975). Getting it together: Dilemmas for the classroom. San Diego: Pennant Press.
- McCann, D. C., & Prentice, N. M. (1981). Promoting moral judgment of elementary school children: The influence of direct reinforcement and cognitive disequilibrium. The Journal of Genetic Psychology, 139, 27-34.
- McLaughlin, J. A., & Stephens, B. (1974). Interrelationships among reasoning, moral judgment, and moral conduct. American Journal of Mental Deficiency, 79, 156-161.
- Mirkovich, N. (1985). Parents' perceptions of children's moral reasoning abilities. Unpublished honours thesis, University of Western Ontario, London, Ontario.
- Moir, J. D. (1974). Egocentrism and the emergence of conventional morality in preadolescent girls. Child Development, 45, 299-304.
- Mosher, R. L. (1974). Knowledge from practice: Clinical research and development in education. The Counseling Psychologist, 4, 73-82.
- Nisan, M., & Kohlberg, L. (1982). Universality and cross-cultural variation in moral development: A longitudinal and cross-sectional study in Turkey. Child Development, 53, 865-876.
- Paolitto, D. P. (1977). The role of the teacher in moral education. Theory into Practice, 16, 73-80.
- Peterson, P. L., & Clark, C. M. (1978). Teachers' reports of their cognitive processes during teaching. American Educational Research Journal, 15, 555-565.

Piaget, J. (1932). The moral judgment of the child. New York: Harcourt.

Piaget, J. (1967). Six psychological studies. New York: Random House.

Plymale, S. (1977). The effects of a developmental teacher training program on the moral reasoning ability of third and sixth grade students. Dissertation Abstracts International, 38, 2062A.

Pressley, M., Enright, R., Michener, S., & Rothlisberg, B. (1984). Moral perspective taking in American and Canadian university students. Unpublished manuscript.

Pressley, M., Schmierer, D., & Hope, D. J. (1980). Adults' judgments about adolescents' moral judgments. Child Development, 51, 1289-1291.

Rest, J. R. (1974). Manual for the defining issues test: An objective test of moral judgment. Unpublished manuscript, University of Minnesota, Minneapolis.

Rest, J. R. (1975). Recent research on an objective test of moral judgment: How the important issues of a moral dilemma are defined. In D. J. DePalma & J. M. Foley (Eds.), Moral development: Current theory and research (pp. 75-93). Hillsdale, N.J.: Erlbaum.

Rest, J. R. (1976). New approaches in the assessment of moral judgment. In T. Lickona (Ed.), Moral development and behavior (pp. 198-218). New York: Holt, Rinehart & Winston.

Rest, J. R. (1979). Development in judging moral issues. Minneapolis: University of Minnesota Press.

Rest, J. R. (1984). Morality. In P. Mussen (Ed.), Handbook of child psychology (pp. 558-629). New York: Wiley & Sons.

- Rest, J. R., Turiel, E., & Kohlberg, L. (1969). Levels of moral development as a determinant of preference and comprehension of moral judgments made by others. Journal of Personality, 37, 225-252.
- Rubin, K. H., & Trotter, K. T. (1977). Kohlberg's moral judgment scale: Some methodological considerations. Developmental Psychology, 13, 535-536.
- Rybash, J. M. (1980). How teachers help children resolve moral dilemmas. Journal of Moral Education, 10, 18-23.
- Santrock, J. W. (1975). Moral structure: The interrelations of moral behavior, moral judgment, and moral affect. Journal of Genetic Psychology, 127, 201-213.
- Scharf, P., McCoy, W., & Ross, D. (1979). Growing up moral: Dilemmas for the intermediate grades. Minneapolis: Winston Press.
- Schlaefli, A., Rest, J. R., & Thoma, S. J. (1985). Does moral education improve moral judgement? A meta-analysis of intervention studies using the Defining Issues Test. Review of Educational Research, 55, 319-352.
- Selman, R. L. (1971). The relation of role-taking to the development of moral judgment in children. Child Development, 42, 79-91.
- Selman, R. L. (1976). Social-cognitive understanding: A guide to educational and clinical practice. In T. Lickona (Ed.), Moral development and behavior (pp. 299-316). New York: Holt, Rinehart & Winston.
- Selman, R. L., & Byrne, D. F. (1974). A structural-developmental analysis of levels of role-taking in middle childhood. Child Development, 45, 803-806.

- Selman, R. L., & Damon, W. (1975). The necessity (but insufficiency) of social perspective taking for conceptions of justice at three early levels. In D. J. DePalma & J. M. Foley (Eds.), Moral development: Current theory and research (pp. 57-73). Hillsdale, N.J.: Erlbaum.
- Selman, R. L., & Lieberman, M. (1975). Moral education in the primary grades: An evaluation of a developmental curriculum. Journal of Educational Psychology, 67, 712-716.
- Shavelson, R. J. (1983). Review of research on teachers' pedagogical judgments, plans, and decisions. The Elementary School Journal, 83, 392-413.
- Shavelson, R. J., & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. Review of Educational Research, 51, 455-498.
- Shavelson, R. J., Webb, N. M., & Burstein, L. (1986). Measurement of teaching. In M. C. Wittrock (Ed.), Handbook of research on teaching (pp. 50-91). New York: Macmillan Publishing Co.
- Simpson, E. L. (1974). Moral development research. Human Development, 17, 81-106.
- Snarey, J. R. (1985). Cross-cultural universality of social-moral development: A critical review of Kohlbergian research. Psychological Bulletin, 97, 202-232.
- Snarey, J. R., Reiner, J., & Kohlberg, L. (1985). Development of social-moral reasoning among Kibbutz adolescents: A longitudinal cross-cultural study. Developmental Psychology, 21, 3-17.

- Sullivan, E. V. (1977). A study of Kohlberg's structural theory of moral development: A critique of liberal social science ideology. Human Development, 20, 353-376.
- Thoma, S. (1984). Do moral education programs facilitate moral judgment? A meta-analysis of studies using the Defining Issues Test. Moral Education Forum, 9, 20-24.
- Tracy, J. J., & Cross, H. J. (1973). Antecedents of shift in moral judgment. Journal of Personality and Social Psychology, 26, 238-244.
- Turiel, E. (1966). An experimental test of the sequentiality of developmental stages in a child's moral judgments. Journal of Personality and Social Psychology, 3, 611-618.
- Turiel, E. (1969). Developmental processes in the child's moral thinking. In P. Mussen, J. Langer, & M. Covington (Eds.), Trends and issues in developmental psychology (pp. 92-133). New York: Holt, Rinehart & Winston.
- Turiel, E. (1974). Conflict and transition in adolescent moral development. Child Development, 45, 14-29.
- Walker, L. J. (1980). Cognitive and perspective-taking prerequisites for moral development. Child Development, 51, 131-139.
- Walker, L. J. (1982). The sequentiality of Kohlberg's stages of moral development. Child Development, 53, 1330-1336.
- Walker, L. J. (1983). Sources of cognitive conflict for stage transition in moral development. Developmental Psychology, 19, 103-110.
- Walker, L. J. (1984). Sex differences in the development of moral reasoning: A critical review. Child Development, 55, 677-691.

Walker, L. J., de Vries, B., & Bichard, S. L. (1984). The hierarchical nature of stages of moral development. Developmental Psychology, 20, 960-966.

Walker, L. J., & Richards, B. S. (1979). Stimulating transition in moral reasoning as a function of stage of cognitive development. Developmental Psychology, 15, 95-103.

Williams, M. (1974). The effects of the discussion of moral dilemmas on the moral judgment of children, age seven to nine years. Dissertation Abstracts International, 36, 803A.

Wright, I. (1978). Moral reasoning and conduct of selected elementary school students. Journal of Moral Education, 1, 199-205.

Yussen, S. R. (1976). Moral reasoning from the perspective of others. Child Development, 47, 551-555.

# Footnotes

1. The authors of the S.R.M. (Gibbs & Widaman, 1982) suggest the following minimal standards for acceptable interrater reliability:

1. S.R.M.S. correlation	$r = .70$
2. mean absolute S.R.M.S. discrepancy	25 points
3. exact modal stage agreement	67%
4. modal stage agreement within a one-stage interval	100%
5. exact global stage agreement	50%
6. global agreement within a one-third interval	80%

2. Once again the 4th grade group administration condition was selected for comparison because the administration procedure resembled those of the other conditions in the analysis. The group condition score will be employed in all subsequent comparisons for this reason.
3. Don Santor was the Moral Ethics Consultant for the Board of Education for the City of London at the time of the conversation.
4. The study was conducted as a 4th year Honours Project by Nadine Mirkovich. It was co-supervised by this author and Michael Pressley, and was designed as an extension to the present thesis.



Appendix A

Standard Version of the S.R.M.

## SOCIAL REFLECTION QUESTIONNAIRE

Instructions

In this booklet are two social problems with questions for you to answer. We are asking the question not just to find out your opinions about what should be done in the problems, but also to understand why you have those opinions. Please answer all the questions, especially the "why" questions. Feel free to use the backs of the pages to finish writing your answers if you need more space.

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Sex: (circle one): male/female

Date: \_\_\_\_\_

(code 1: \_\_\_\_\_)

(Gibbs &amp; Widaman, 1982)

## PROBLEM ONE

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist wanted people to pay ten times what the drug cost him to make.

The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about half of what the druggist wanted. Heinz told the druggist that his wife was dying and asked him to sell it cheaper or to let him pay later. But the druggist said, "No. I discovered the drug, and I'm going to make money from it." So the only way Heinz could get the drug would be to break into the druggist's store and steal the drug.

Heinz has a problem. He should help his wife and save her life. But, on the other hand, the only way he could get the drug she needs would be to break the law by stealing the drug.

What should Heinz do?

should steal/should not steal/can't decide (circle one)

Why?

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Let's change things about the problem and see if you still have the opinion you circled above (should steal, should not steal, or can't decide). Also, we want to find out about the things you think are important in this and other problems, especially why you think those things are important. Please try to help us understand your thinking by WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS--EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE. Don't just write "same as before." If you can explain better or use different words to show what you mean, that helps us even more. Please answer all the questions below, especially the "why" questions.

1. What if Heinz's wife asks him to steal the drug for her? Should Heinz:

steal/should not steal/can't decide (circle one)?

1a. How important is it for a husband to do what his wife asks, to save her by stealing, even when he isn't sure whether that's the best thing to do?

very important/important/not important (circle one)

1b. WHY is that very important/important/not important (whichever one you circled)?

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2. What if Heinz doesn't love his wife? Should Heinz:

steal/not steal/can't decide (circle one)?

2a. How important is it for a husband to steal to save his wife, even if he doesn't love her?

very important/important/not important (circle one)

2b. WHY is that very important/important/not important (whichever one you circled)?

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3. What if the person dying isn't Heinz's wife but instead is a friend (and the friend can get no one else to help)? Should Heinz:

steal/not steal/can't decide (circle one)?

3a. How important is it to do everything you can, even break the law, to save the life of a friend?

very important/important/not important (circle one)

3b. WHY is that very important/important/not important (whichever one you circled)?

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4a. What about for a stranger? How important is it to do everything you can, even break the law, to save the life of a stranger?

very important/important/not important (circle one)

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if the druggist just wants Heinz to pay what the drug cost to make, and Heinz can't even pay that? Should Heinz:

steal/not steal/can't decide (circle one)?

5a. How important is it for people not to take things that belong to other people?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6a. How important is it for people to obey the law?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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7. What if Heinz does steal the drug? His wife does get better, but in the meantime, the police take Heinz and bring him to court. Should the judge:

jail Heinz/let Heinz go (free/can't decide (circle one)?

7a. How important is it for judges to go easy on people like Heinz?

very important/important/not important (circle one)

7b. WHY is that very important/important/not important (whichever one you circled)?

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8. What if Heinz tells the judge that he only did what his conscience told him to do? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

8a. How important is it for judges to go easy on lawbreakers who have acted out of conscience?

very important/important/not important (circle one)

8b. WHY is that very important/important/not important (whichever one you circled)?

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9. What if Heinz's wife never had cancer? What if she was only a little sick, and Heinz stole the drug to help her get well a little sooner? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

9a. How important is it for judges to send people who break the law to jail?

very important/important/not important (circle one)

9b. How is that very important/important/not important (whichever one you circled)?

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## PROBLEM TWO

Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the \$48. He told his father he had a little more besides. But just before camp was going to start, his father changed his mind. Some of his father's friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money Joe had saved from the paper route. Joe didn't want to give up going to camp, so he thinks of refusing to give his father the money.

Joe has a problem. Joe's father promised Joe he could go to camp if he earned and saved up the money. But, on the other hand, the only way Joe could go would be by disobeying and not helping his father.

What should Joe do?

should refuse/should not refuse/can't decide (circle one)

Why?

Let's change things about the problem and see if you still have the opinion you circled above (should refuse, should not refuse, can't decide). Also, we want to find out about the things you think are important in this and other problems, and especially why you think those things are important. Please try to help us understand your thinking by WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS--EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE. Don't just write "same as before." If you can explain better or use different words to show what you mean, that's even better. Please answer all the questions below, especially the "why" questions.

1. What if Joe hadn't earned the money? What if the father had simply given the money to Joe and promised Joe could use it to go to camp—but now the father wants the money back for the fishing trip? Should Joe:

refuse/not refuse/can't decide (circle one)?

1a. How important is it for parents to keep their promises about letting their children keep money—even when their children never earned the money?

very important/important/not important (circle one)



1b. Why is that very important/important/not important (whichever one you circled)?

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2a. What about keeping a promise to a friend? How important is it to keep a promise, if you can, to a friend?

very important/important/not important (circle one)

2b. Why is that very important/important/not important (whichever one you circled)?

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3a. What about to anyone? How important is it to keep a promise, if you can, even to someone you hardly know?

very important/important/not important (circle one)

3b. Why is that very important/important/not important (whichever one you circled)?

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4. What if Joe's father hadn't told Joe to give him the money but had just asked Joe if he would lend the money? Should Joe:

refuse/not refuse/can't decide (circle one)

5a. How important is it for children to help their parents, even when their parents have broken a promise?

very important/important/not important (circle one)

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if Joe did earn the money, but Joe's father did not promise that Joe could keep the money?

Should Joe:

refuse/not refuse/can't decide (circle one)?

5a. How important is it for parents to let their children keep earned money --even when the children were not promised that they could keep the money?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6. What if the father needs the money not to go on a fishing trip but instead to pay for food for the family? Should Joe:

refuse/not refuse/can't decide (circle one)?

6a. How important is it for children to help their parents--even when it means that the children won't get to do something they want to do?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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Appendix B

Prediction Version of the S.R.M.

## SOCIAL REFLECTION QUESTIONNAIRE

Instructions

In this booklet are two social problems with questions for you to answer as you think an average 4th grader (9-10 year-old) would answer. We are asking the question not just to find out your opinions about what a 4th grader would do in the problems, but also to understand why 4th graders have those opinions. Please answer all of the questions, especially the "why" questions. Feel free to use the backs of the pages to finish writing your answers if you need more space.

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Sex: (circle one): male/female \_\_\_\_\_

Date: \_\_\_\_\_

(code 1: \_\_\_\_\_)

A - 4 - Pred.

..(based on Gibbs &amp; Widaman, 1982)

REMEMBER TO ANSWER AS A 4TH GRADER WOULD

## PROBLEM ONE

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist wanted people to pay ten times what the drug cost him to make.

The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about half of what the druggist wanted. Heinz told the druggist that his wife was dying and asked him to sell it cheaper or to let him pay later. But the druggist said, "No. I discovered the drug, and I'm going to make money from it." So the only way Heinz could get the drug would be to break into the druggist's store and steal the drug.

Heinz has a problem. He should help his wife and save her life. But, on the other hand, the only way he could get the drug she needs would be to break the law by stealing the drug.

What would a 4th grader think Heinz should do?

should steal/should not steal/can't decide (circle one)

Why?

Let's change things about the problem and see if you still have the opinion for a 4th grader that you circled above (should steal, should not steal, or can't decide). Also, we want to find out about the things you think are important to a 4th grader in this and other problems, especially why you think 4th graders would think those things are important. Please try to help us understand your thinking by WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS ABOUT 4TH GRADERS—EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE. Don't just write "same as before." If you can explain better or use different words to show what you mean, that helps us even more. Please answer all the questions below, especially the "why" questions as you think a 4th grader would.

1. What if Heinz's wife asks him to steal the drug for her? Should Heinz:

steal/should not steal/can't decide (circle one)?

- 1a. How important is it for a husband to do what his wife asks, to save her by stealing, even when he isn't sure whether that's the best thing to do?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS A 4TH GRADER WOULD

1b. WHY is that very important/important/not important (whichever one you circled)?

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2. What if Heinz doesn't love his wife? Should Heinz:

steal/not steal/can't decide (circle one)?

2a. How important is it for a husband to steal to save his wife, even if he doesn't love her?

very important/important/not important (circle one)

2b. WHY is that very important/important/not important (whichever one you circled)?

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3. What if the person dying isn't Heinz's wife but instead is a friend (and the friend can get no one else to help)? Should Heinz:

steal/not steal/can't decide (circle one)?

3a. How important is it to do everything you can, even break the law, to save the life of a friend?

very important/important/not important (circle one)

3b. WHY is that very important/important/not important (whichever one you circled)?

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REMEMBER TO ANSWER AS 4TH GRADER WOULD

4a. What about for a stranger? How important is it to do everything you can, even break the law, to save the life of a stranger?

very important/important/not important (circle one)

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if the druggist just wants Heinz to pay what the drug cost to make, and Heinz can't even pay that? Should Heinz:

steal/not steal/can't decide (circle one)?

5a. How important is it for people not to take things that belong to other people?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6a. How important is it for people to obey the law?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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REMEMBER TO ANSWER AS A 4TH GRADER WOULD

7. What if Heinz does steal the drug? His wife does get better, but in the meantime, the police take Heinz and bring him to court. Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

7a. How important is it for judges to go easy on people like Heinz?

very important/important/not important (circle one)

7b. WHY is that very important/important/not important (whichever one you circled)?

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8. What if Heinz tells the judge that he only did what his conscience told him to do? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

8a. How important is it for judges to go easy on lawbreakers who have acted out of conscience?

very important/important/not important (circle one)

8b. WHY is that very important/important/not important (whichever one you circled)?

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9. What if Heinz's wife never had cancer? What if she was only a little sick, and Heinz stole the drug to help her get well a little sooner? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

9a. How important is it for judges to send people who break the law to jail?

very important/important/not important (circle one)



REMEMBER TO ANSWER AS A 4TH GRADER WOULD

3b. WHY is that very important/important/not important (whichever one you circled)?

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REMEMBER TO ANSWER AS A 4TH GRADER WOULD

## PROBLEM TWO

Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the \$40 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his father's friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money Joe had saved from the paper route. Joe doesn't want to give up going to camp, so he thinks of refusing to give his father the money.

Joe has a problem. Joe's father promised Joe he could go to camp if he earned and saved up the money. But, on the other hand, the only way Joe could go would be by disobeying and not helping his father.

What would a 4th grader think Joe should do?

should refuse/should not refuse/can't decide (circle one)

Why?

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Let's change things about the problem and see if you still have the opinion for a 4th grader that you circled above (should refuse, should not refuse, or can't decide). Also, we want to find out about the things you think are important to a 4th grader in this and other problems, especially why you think 4th graders would think those things are important. Please try to help us understand your thinking by **WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS ABOUT 4TH GRADERS—EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE.** Don't just write "same as before." If you can explain better or use different words to show what you mean, that helps us even more. Please answer all the questions below, especially the "why" questions as you think a 4th grader would.

1. What if Joe hadn't earned the money? What if the father had simply given the money to Joe and promised Joe could use it to go to camp—but now the father wants the money back for the fishing trip? Should Joe:

refuse/not refuse/can't decide (circle one)?

1a. How important is it for parents to keep their promises about letting their children keep money—even when their children never earned the money?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS A 4TH GRADER WOULD

1b. WHY is ~~that~~ very important/important/not important (whichever one you circled)?

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2a. What ~~about~~ keeping a promise to a friend? How important is it to keep a promise, if you can, to a friend?

very important/important/not important (circle one)

2b. WHY is that very important/important/not important (whichever one you circled)?

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3a. What about to anyone? How important is it to keep a promise, if you can, even to someone you hardly know?

very important/important/not important (circle one)

3b. WHY is that very important/important/not important (whichever one you circled)?

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4. What if Joe's father hadn't told Joe to give him the money but had just asked Joe if he would lend the money? Should Joe:

refuse/not refuse/can't decide (circle one)?

4a. How important is it for children to help their parents, even when their parents have broken a promise?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS A 4TH GRADER WOULD

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if Joe did earn the money, but Joe's father did not promise that Joe could keep the money?

Should Joe:

refuse/not refuse/can't decide (circle one)?

5a. How important is it for parents to let their children keep earned money --even when the children were not promised that they could keep the money?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6. What if the father needs the money not to go on a fishing trip but instead to pay for food for the family? Should Joe:

refuse/not refuse/can't decide (circle one)?

6a. How important is it for children to help their parents--even when it means that the children won't get to do something they want to do?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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Appendix C

Prescription Version of the S.R.M.

SOCIAL REJECTION QUESTIONNAIRE

Instructions

In this booklet are 2 social problems with questions for you to answer as you think an average 4th grader (9-10 year old) should be taught to answer. We are asking the question not just to find out your opinions about what a 4th grader should be taught about these problems, but also to understand why you think 4th graders should be taught these opinions. Please answer all of the questions, especially the "why" questions. Feel free to use the back of the pages to finish writing your answers if you need more space.

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Sex: (circle one): male/female

Date: \_\_\_\_\_

(code #: \_\_\_\_\_)

A - 4 - Pres.

(based on Gibbs & Widaman, 1982)

## PROBLEM ONE

In Europe, a woman may meet death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist wanted people to pay ten times what the drug cost him to make.

The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about half of what the druggist wanted. Heinz told the druggist that his wife was dying and asked him to sell it cheaper or to let him pay later. But the druggist said, "No. I discovered the drug, and I'm going to make money from it." So the only way Heinz could get the drug would be to break into the druggist's store and steal the drug.

Heinz has a problem. He should help his wife and save her life. But, on the other hand, the only way he could get the drug she needs would be to break the law by stealing the drug.

What should a 4th grader be taught about what Heinz should do?

should steal/should not steal/can't decide (circle one)

Why?

Let's change things about the problem and see if you still have the opinion about what a 4th grader should be taught that you circled above (should steal, should not steal, or can't decide). Also, we want to find out about the things you think are important to teach a 4th grader in this and other problems, especially why you think those things are important to teach a 4th grader. Please try to help us understand your thinking by **WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS ABOUT WHAT 4TH GRADERS SHOULD BE TAUGHT—EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE.** Don't just write same as before. If you can explain better or use different words to show what you mean, that helps us even more. Please answer all the questions below, especially the why questions about what you think a 4th grader should be taught.

1. What if Heinz's wife asks him to steal the drug for her? Should Heinz:

steal/should not steal/can't decide (circle one)?

1a. How important is it for a husband to do what his wife asks, to save her by stealing, even when he isn't sure whether that's the best thing to do?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER

1b. WHY is that very important/important/not important (whichever one you circled)?

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2. What if Heinz doesn't love his wife? Should Heinz:

steal/not steal/can't decide (circle one)?

2a. How important is it for a husband to steal to save his wife, even if he doesn't love her?

very important/important/not important (circle one)

2b. WHY is that very important/important/not important (whichever one you circled)?

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3. What if the person dying isn't Heinz's wife but instead is a friend (and the friend can get no one else to help)? Should Heinz:

steal/not steal/can't decide (circle one)?

3a. How important is it to do everything you can, even break the law, to save the life of a friend?

very important/important/not important (circle one)

3b. WHY is that very important/important/not important (whichever one you circled)?

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REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER

4a. What about for a stranger? How important is it to do everything you can, even break the law, to save the life of a stranger?

very important/important/not important (circle one)

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if the druggist just wants Heinz to pay what the drug cost to make, and Heinz can't even pay that? Should Heinz:

steal/not steal/can't decide (circle one)

5a. How important is it for people not to take things that belong to other people?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6a. How important is it for people to obey the law?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER

7. What if Heinz does steal the drug? His wife does get better, but in the meantime, the police take Heinz and bring him to court. Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

7a. How important is it for judges to go easy on people like Heinz?

very important/important/not important (circle one)

7b. WHY is that very important/important/not important (whichever one you circled)?

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8. What if Heinz tells the judge that he only did what his conscience told him to do? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

8a. How important is it for judges to go easy on lawbreakers who have acted out of conscience?

very important/important/not important (circle one)

8b. WHY is that very important/important/not important (whichever one you circled)?

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9. What if Heinz's wife never had cancer? What if she was only a little sick, and Heinz stole the drug to help her get well a little sooner? Should the judge:

jail Heinz/let Heinz go free/can't decide (circle one)?

9a. How important is it for judges to send people who break the law to jail?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER.

9b. WHY is that very important/important/not important (whichever one you circled)?

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## PROBLEM TWO

Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the \$40 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his father's friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money Joe had saved from the paper route. Joe doesn't want to give up going to camp, so he thinks of refusing to give his father the money.

Joe has a problem. Joe's father promised Joe he could go to camp if he earned and saved up the money. But, on the other hand, the only way Joe could go would be by disobeying and not helping his father.

What should a 4th grader be taught about what Joe should do?

should refuse/should not refuse/can't decide (circle one)

Why?

Let's change things about the problem and see if you still have the opinion about what a 4th grader should be taught that you circled above (should refuse, should not refuse, or can't decide). Also, we want to find out about the things you think are important to teach a 4th grader in this and other problems, especially why you think those things are important to teach a 4th grader. Please try to help us understand your thinking by WRITING AS MUCH AS YOU CAN TO EXPLAIN YOUR OPINIONS ABOUT WHAT 4TH GRADERS SHOULD BE TAUGHT--EVEN IF YOU HAVE TO WRITE OUT YOUR EXPLANATIONS MORE THAN ONCE. Don't just write same as before. If you can explain better or use different words to show what you mean, that helps us even more. Please answer all the questions below, especially the why questions about what you think a 4th grader should be taught.

1. What if Joe hadn't earned the money? What if the father had simply given the money to Joe and promised Joe could use it to go to camp—but now the father wants the money back for the fishing trip? Should Joe:

refuse/not refuse/can't decide (circle one)?

1a. How important is it for parents to keep their promises about letting their children keep money—even when their children never earned the money?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER

1b. WHY is that very important/important/not important (whichever one you circled)?

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2a. What about keeping a promise to a friend? How important is it to keep a promise, if you can, to a friend?

very important/important/not important (circle one)

2b. WHY is that very important/important/not important (whichever one you circled)?

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3a. What about to anyone? How important is it to keep a promise, if you can, even to someone you hardly know?

very important/important/not important (circle one)

3b. WHY is that very important/important/not important (whichever one you circled)?

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4. What if Joe's father hadn't told Joe to give him the money but had just asked Joe if he would lend the money? Should Joe:

refuse/not refuse/can't decide (circle one)?

4a. How important is it for children to help their parents, even when their parents have broken a promise?

very important/important/not important (circle one)

REMEMBER TO ANSWER AS IF YOU WERE TEACHING A 4TH GRADER

4b. WHY is that very important/important/not important (whichever one you circled)?

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5. What if Joe did earn the money, but Joe's father did not promise that Joe could keep the money?

Should Joe:

refuse/not refuse/can't decide (circle one)?

5a. How important is it for parents to let their children keep earned money --even when the children were not promised that they could keep the money?

very important/important/not important (circle one)

5b. WHY is that very important/important/not important (whichever one you circled)?

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6. What if the father needs the money not to go on a fishing trip but instead to pay for food for the family? Should Joe:

refuse/not refuse/can't decide (circle one)?

6a. How important is it for children to help their parents--even when it means that the children won't get to do something they want to do?

very important/important/not important (circle one)

6b. WHY is that very important/important/not important (whichever one you circled)?

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Appendix D  
Teacher Information Sheet  
(Study 3)

## Teacher Information Sheet

Please answer the following questions:

1. What grade level do you currently teach? \_\_\_\_\_

2. How many years have you been teaching? \_\_\_\_\_

3. Have you taught any other grade level? \_\_\_\_\_

If yes, what grades? . \_\_\_\_\_

4. Have you ever received any training in the theory of moral development? \_\_\_\_\_

If yes, please briefly explain when and where.

5. Have you ever received any training in educational strategies suggested to promote moral growth in children? \_\_\_\_\_

If yes, please briefly explain when and where.

6. Do you include discussions of moral issues in your teaching curriculum? \_\_\_\_\_

If yes, please briefly explain.



Appendix E

Moral Stage Descriptions

(Study 4 -- Moral Theory Only and Moral Theory and  
Moral Education Training Conditions)

## Moral Stage Descriptions

### Stage 1 -- Obedience and Punishment Orientation

Theme: Fear of Punishment

This stage involves compliance to prestigious or powerful people (i.e., parents and teachers) in order to avoid punishment. The morality (i.e., goodness or badness) of the act is defined in terms of its physical consequences. Child obeys rules of authority figures to avoid punishment.

e.g., "I had better stop talking in class because if I don't the teacher will send me to the office again."

Approximate age: 5 to 8 years

### Stage 2 -- Naive Hedonistic and Instrumental Orientation

Theme: Self Interest

In this stage the child is conforming to gain rewards. Although there is evidence of sharing, it is manipulative and self-serving rather than based on a true sense of justice, sympathy or concern. The child is inclined to act in order to achieve his own self interest (you scratch my back and I'll scratch yours).

e.g., "If I don't stop talking in class I will be kept after school, and I won't be home in time to watch my favourite program on T.V."

Approximate age: 9 to 11 years

### Stage 3 -- Good Boy Morality

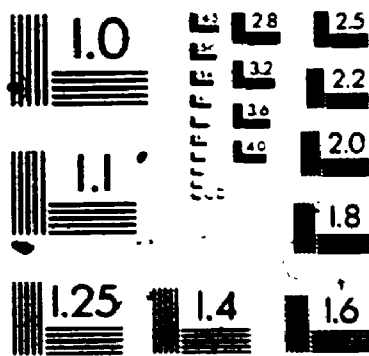
Theme: Nice Boy - Nice Girl

In this stage good behavior is that which maintains approval and good relations with others. Although the child is basing his/her judgment of right and wrong on the responses of others, he/she is concerned with their approval and disapproval rather than their physical power. He/she is concerned with conforming to people's standard to maintain good will. Also he/she is starting to accept the social regulations and rules of others, and is judging the goodness or badness of behavior in terms of a person's intent to violate these rules.

e.g., "I should be quiet in class and listen when spoken to because that is what my teacher likes me to do."

Approximate age: 12 to 15 years

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**MICRO**

Stage 4 -- Authority and Social Order Maintaining Morality

Theme: Law and Order.

In this stage the child accepts social conventions and rules. It is no longer just conformity to individuals' standards, but conformity to the social order. The child realizes that compliance with rules and regulations is necessary for the maintenance of social order. Behavior is judged as right or wrong in terms of its conformity to a set of social rules.

e.g., "If we talked whenever we felt like it, there would be chaos in the classroom."

Approximate age: 15 years and up

Appendix F

Experimenter's Sample Responses for the Question  
"Should Mrs. Jones report him?"

(Study 4 -- Moral Theory Only and Moral Theory plus  
Moral Education Training Conditions)

## Experimenter's Sample Responses

## Stage 1

Mrs. Jones should report him because he broke the law before and that is wrong. It is bad to break the law.

Mrs. Jones should not report him because he is a good and important man. She should be nice and not tell.

## Stage 2

Mrs. Jones should report him because he has to pay for his crime. He chose to break the law and he must pay the price.

Mrs. Jones should not report him because if she likes him she would not want to see him go back to jail. Mr. Thompson has helped people, so she should help him. He may return the favour some day.

## Stage 3

Mrs. Jones should report him because he is a criminal and criminals must be disciplined. He should go back to jail to let him know that what he did was wrong.

Mrs. Jones should not report him because he tried to be a good man. Mrs. Jones should be sympathetic -- she would expect him to help her. She should be concerned about how he would feel.

## Stage 4

Mrs. Jones should report him because the law must be enforced. Laws are needed to protect society and therefore they must be upheld. Mrs. Jones has a responsibility to report him.

Mrs. Jones should not report him because he has made a contribution to society. He has something to offer society, and putting him back in jail would serve no purpose.

Appendix G

Moral Theory Summary Handout

(Study 4 -- Moral Theory Only and Moral Theory plus  
Moral Education Training Conditions)

## JUDGEMENTS OF REASONING

## The Theory of Moral Development

In his doctoral work, Lawrence Kohlberg (1958) outlined a cognitive-developmental theory of moralization. This theory was an extension to the early work of Jean Piaget. The theory was derived from interpretations of interviews conducted with young adolescent males. The participants were presented first with a series of dilemmas in which the central characters faced moral problems. Following is an example of one of the dilemmas used:

A man had been sentenced to prison for 10 years. After 1 years, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his profits to charity. Then one day, Mrs. Jones, an old neighbour, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

Subsequent to the presentation of each dilemma, questions followed: "Should Mrs. Jones report him?" "Why?" On the basis of these responses, Kohlberg (1958) proposed that individuals proceed through an invariant sequence of six stages of moral development, with each stage being characterized by qualitatively different levels of moral reasoning. Brief descriptions of Kohlberg's first 4 stages are included below:



### Stage 1 -- Obedience and Punishment Orientation

This stage involves compliance to prestigious or powerful people (i.e., parents and teachers) in order to avoid punishment. The morality of the act is defined in terms of its physical consequences. Child obeys rules of authority figures to avoid punishment.

"I had better stop talking in class because if I don't the teacher will send me to the office again."

### Stage 2 -- Naive Hedonistic and Instrumental Orientation

In this stage the child is conforming to gain rewards. Although there is evidence of sharing, it is manipulative and self serving, rather than based on a true sense of justice, sympathy or concern. The child is inclined to act in order to achieve his/her own self interest.

"If I don't stop talking in class I will be kept after school, and I won't be home in time to watch my favourite program on T.V."

### Stage 3 -- Good Boy Morality

In this stage good behavior is that which maintains approval and good relations with others. Although the child is basing his/her judgments of right and wrong on the response of others, he/she is concerned with their approval and disapproval rather than their physical power. He/she is concerned with conforming to people's standards and to maintain good will. Also, he/she is starting to accept the social regulations and rules of others and is judging the goodness or badness of behavior in terms of a person's intent to violate these rules.

"A child is quiet in class and listens when spoken to, because that is what the teacher likes us to do."

Stage 4 -- Authority and Social Order Maintaining Morality

In this stage the child accepts social conventions and rules. It is no longer just conformity to individuals' standards, but conformity to the social order. The child realizes that the compliance with rules and regulations is necessary for the maintenance of social order. Behavior is judged as right or wrong in terms of its conformity to a set of social rules.

"If we talked whenever we felt like it, there would be chaos in the classroom."

(Based on Kohlberg, 1967, p. 171)

### Examples of Children's Responses

#### Stage 1 -- Approximate age: 5 to 8 years

Mrs. Jones should report him because he broke the law and that is wrong. It is bad to break the law.

Mrs. Jones should not report him because he is a good and important man. She should be nice and not tell.

#### Stage 2 -- Approximate age: 9 to 11 years

Mrs. Jones should report him because he has to pay for his crime. He chose to break the law, and he must pay the price.

Mrs. Jones should not report him because if she likes him she would not want to see him go back to jail. Mr. Thompson has helped people, so she should help him. He may return the favor some day.

#### Stage 3 -- Approximate age: 12 to 15 years

Mrs. Jones should report him because he is a criminal and criminals must be disciplined. He should go back to jail to let him know that what he did was wrong.

Mrs. Jones should not report him because he tried to be a good man. Mrs. Jones should be sympathetic -- she would expect him to help her. She should be concerned about how he would feel.

#### Stage 4 -- Approximate age: 15 years and up

Mrs. Jones should report him because the law must be enforced. Laws are needed to protect society and therefore they must be upheld. Mrs. Jones has a responsibility to report him.

Mrs. Jones should not report him because he has made a contribution to society. He has something to offer society and putting him back in jail would serve no purpose.

(Based on Gibbs & Widaman, 1982,  
Scoring Manual)

Appendix H

Student Opinion Sheet

(Study 4 -- Moral Theory Only, and Moral Theory plus  
Moral Education Training Conditions)

## Information Sheet

Name: \_\_\_\_\_ Date: \_\_\_\_\_

One week prior to completing these questionnaires, you participated in a specific training session. Do you think that this training was helpful to you in completing these two questionnaires? Please explain why or why not.

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Appendix I

Moral Education Exercises

(Study 4 -- Moral Theory plus Moral Education Training Condition)

## Moral Education Exercises

To facilitate moral growth in a 5 to 8 year old child, what moral advice should you give to that child?

Mrs. Jones should:

To facilitate moral growth in a 9 to 11 year old child, what moral advice should you give to that child?

Mrs. Jones should:

To facilitate moral growth in a 12 to 15 year old child, what moral advice should you give to that child?

Mrs. Jones should:

Appendix J

Moral Education Summary Handout

(Study 4 -- Moral Theory plus Moral Education Training Condition)



### Moral Education

Lawrence Kohlberg claimed that moral growth in children could be facilitated if 3 conditions were met. These conditions are as follows:

1. exposure to the next higher stage of reasoning;
2. exposure to situations posing problems and contradictions for the child's current moral structure leading to dissatisfaction with his/her current level;
3. an atmosphere of interchange and dialogue combining the first and second conditions in which conflicting moral views are compared in an open manner.

(Kohlberg, 1978, p. 46)

Numerous moral education procedures based on Kohlberg's theory have been developed for the classroom. The most popular of these is the "plus-one strategy" (Aburthnot & Faust, 1981). This strategy is based on the assumption that moral reasoning in children is promoted by moral discussion involving reasoning one stage above the child's present level of functioning. Adults wishing to facilitate moral growth in children should do so by modeling moral reasoning slightly above the child's current reasoning level. That is, in order to promote moral growth in young children operating at the first stage of moral development (i.e., 5 to 8 year olds), adults would do best to expose the children to Stage 2 moral arguments. Likewise, Stage 2 children (i.e., 9 to 11 year-olds), should be presented with Stage 3 reasoning, and Stage 3 children (i.e., 12 to 15 year-olds), should be presented with Stage 4 reasoning.

Reasoning one stage above the child's level will induce a state of cognitive disequilibrium in the children, and thus, stimulate their moral growth. If children are presented with reasoning too far above their present level (i.e., more than 1 stage above), they will only become confused by the arguments, and hence will not advance in terms of their moral reasoning.