ABSTRACT

To show that there are crucial assumptions of the cognitive-developmental approach to moral education made about the nature of moral reasoning which may not be warranted, sixty public school students randomly selected from two middle schools and two high schools, were interviewed on twelve different dilemmas. Transcripts of the interviews, discussing three dilemmas within each of the four forms of moral reasoning, were scored and analyzed. Findings indicated that the cognitive-developmental claim of naturally occurring invariant development of stages of moral reasoning was confirmed for only three of the four forms of moral reasoning. Research raised the following questions about assumptions underlying Kohlberg's rationale: whether raising an individual's level of moral reasoning on one form of reasoning produces a concomitant advancement in his reasoning on an alternate form of reasoning; and if Kohlberg's moral education program stimulates the key form of moral reasoning for moral action. The conclusion reached is that for a moral education program to be maximally effective, it ought to focus on naturally occurring situations within the life-space of the students and ask of them deliberation about their prospective behavior other than to exclusively form judgements about others behavior. (Author/KSN):
AN EMPIRICAL EXAMINATION OF KEY ASSUMPTIONS UNDERLYING

THE KOHLBERG RATIONALE FOR MORAL EDUCATION

James S. Leming
Assistant Professor
Department of Education
S.U.N.Y. at Stony Brook
Stony Brook, New York 11790

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Recent research on the development of moral reasoning has found an invariant developmental sequence of six stages of moral reasoning ranging from immature forms of reasoning to increasingly differentiated and complex forms of reasoning (Kohlberg 1963, 1969). Studies on the comprehension and preference of the stages of moral reasoning (Rest, Turiel and Kohlberg 1969; Rest 1974) have found that individuals comprehend all stages at or below their own stage and also one stage above. These studies have also found that when individuals are asked which stages of moral reasoning are the best they prefer the next highest stage over their own stage and lower stages. Using the above mentioned findings Blatt and Kohlberg (1974) have found that it is possible to facilitate individuals' rate of moral development by helping them experience the type of conflict that leads to a greater awareness of the greater adequacy of the next highest stage and concomitantly communicating at the level directly above the child's current level of thought. This approach
has commonly been referred to as the cognitive-developmental approach to moral education.

This study will attempt to show that there are crucial assumptions which the cognitive-developmental approach to moral education makes about the nature of moral reasoning which are not warranted. Specifically this approach to moral education assumes that the individuals’ stage of moral reasoning will be stable and consistent regardless of the kinds of questions asked of him or the situations about which he reasons. The first distinction which will provide a basis for this research is that between the judgment mode and the deliberation mode of moral reasoning. Moral judgment will be defined using Baier's (1965) characterization of justification:

"...I try, after someone has acted, to determine whether he has taken the best course open to him, with a view to determining whether he is to be condemned or praised... (p.42)." Moral deliberation, again using Baier (1965) will be defined as moral reasoning where "...I try, before acting, to determine which is the best course open to me with a view to entering on it (p.42)." In other words in the judgment mode of moral reasoning the individual is presented with a fiat accompli and is asked to evaluate the actions involved. In the deliberation mode of moral reasoning the individual is faced with an
incomplete situation and his task is to choose the morally correct course of action for himself. The second distinction within the realm of moral reasoning which will form the basis of this research centers around the differences between classical moral dilemmas and practical moral dilemmas. Classical moral dilemmas will be taken to refer to situations which are removed from the life space of the individual and involve characters with which the subject has trouble identifying. Practical moral dilemmas will be taken to refer to situations within the life space of the individual and involving people and issues familiar to him.

An analysis of the Kohlberg method of assessing stage of moral reasoning reveals that he is primarily measuring the individuals' moral judgment as applied to classical moral dilemmas. For example, on a typical dilemma a man (Heinz) has stolen a drug which will save his wife's life. The subject is then ask questions such as Should Heinz have stolen the drug? Who has a right to the drug? Should Heinz be punished? etc. Clearly the moral reasoning measured under these conditions is not dealing with issues or situations which are familiar to many people. Moral philosophers, although finding this sort of reasoning valuable and interesting, see deliberation in practical
situations as the most important form of reasoning. For example, Frankena (1963) states that "The ultimate concern of the normative theory of obligation is to guide us in the making of decisions and judgments in particular situations (p. 11)." A key question which has not been answered by the cognitive-developmental approach to moral reasoning is in what way is moral judgment about classical dilemmas different or similar to deliberation about practical dilemmas. The present research was set up to examine this question. Specifically, this research attempts to answer the following two questions: 1) Is there a difference between the moral reasoning people use to justify actions they claim they would take and the moral reasoning they use in judging the actions of others? and 2) Is there a difference between the moral reasoning people use in dealing with situations which are unfamiliar to their life space and the moral reasoning they use in situations which are familiar to their life space?

Method

Instrument

The Kohlberg method of assessing stage of moral reasoning involves interviewing the subjects on moral dilemmas using a semi-structured interview schedule.
tape recording the subjects' responses, transcribing the tape recording, and finally scoring the transcript according to procedures developed by Kohlberg (1972). As a result of the scoring procedures the subjects are assigned to one of the six stages of moral development.

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Insert Table 1 about here

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The standard Kohlberg dilemmas and interview schedules measure what has been identified above as moral judgment on classical moral dilemmas. The three Kohlberg dilemmas used were Heinz, Joe and his father, and Alexander.

In order to assess differences in moral reasoning due to mode of reasoning and type of situation reasoned about it was necessary to develop alternative moral dilemmas and interview schedules. A series of practical moral dilemmas was developed which contained moral conflict situations likely to be found within the life space of the prospective subjects. A questionnaire was given to 186 seventh and twelfth grade students asking them to identify or suggest moral conflict situations with which they were familiar. From the situations most frequently identified a set of six pilot dilemmas was created. A final selection of three practical moral dilemmas was made on the basis of the results of a pilot study. A typical practical moral
dilemma was the "Party" dilemma. In this dilemma a girl's parents have denied her permission to go to a friend's party. The girl's best friends were expected to be there so she told her parents that she was going to a movie and went to the party anyway. The other two practical moral dilemmas dealt with the issues of cheating (the Assignment dilemma) and peer group conflict (the Group dilemma). An interview schedule was developed for the practical dilemmas to assess the subjects' stage of moral reasoning in the judgment mode.

In addition to measuring the subjects' moral reasoning in the judgment mode on the classical and practical dilemmas it was also necessary to measure their moral reasoning in the deliberation mode on the same sets of dilemmas. In order to accomplish this it was necessary to reword both the classical and practical dilemmas so that they were now worded in the present tense and the moral choice in the dilemma was still open and unstated. For example, in the Heinz dilemma it was necessary to rewrite the dilemma in such a way that the subject was asked to consider a situation where his loved one is dying of cancer, he can't raise the money, and the choice offered is whether or not he would steal the drug to save his loved one's life. In sum there were four sets of dilemmas and interview schedules on which
the subject's stage of moral reasoning was assessed (see Table 2).

After each dilemma the subjects were asked to respond on a five point scale to the statement "In my life situations like this one are familiar". It was found that significantly more subjects ($p < .05$) agreed with this statement after discussing practical moral dilemmas than agreed with it after discussing classical moral dilemmas.

Subjects

The sample in this study consisted of 60 public school students randomly selected from two middle schools and two high schools in the Madison, Wisconsin area. At the time of the interviews thirty of the subjects had just completed seventh grade and thirty of the subjects had just completed eleventh grade. Equal numbers of boys and girls were present in the sample.

Procedure

The interviews took place in July and August of 1972 at two of the local school buildings. The subjects were interviewed on twelve different dilemmas, three within each of the four forms of moral reasoning. The interviews took between two and three hours for each subject. Two
ten minute breaks were given and the order in which the
dilemmas was presented to each subject was randomly
determined in order to eliminate any fatigue effect.
Each interview was tape recorded and then transcribed.

Scoring

The transcripts of the interviews were scored according
to procedures outlined by Kohlberg (1972). Scoring was
organized by form which resulted in four stage scores
for each subject. It is possible to report stage of moral
reasoning scores as either global scores or as mean moral
maturity scores. The global score is a modal score and the
subject is classified as either a pure stage or a mixed
stage. For ease of statistical computation this study
used the subjects' mean moral maturity scores.

The mean moral maturity score (MMS) is ascertained by
identifying stage scorable responses by issues within
the transcripts of individual dilemmas. Issues are defined
by Kohlberg (1972) as "defining the concrete objects of
concern or value to the subject in the situation.
Secondly they are the things to be defined and chosen
between in the situation, they define the moral conflict... (p. 18)."
Once the stage scores for all the scorable responses within
the form have been determined, issue stage scores for the
form are computed by procedures outlined by Kohlberg (1972).
For every issue stage score within a form a point value is then assigned. The point value is based on a ratio of 3:2:1 depending upon whether the stage score was circled (most salient issue for resolving the dilemma), uncircled (ascertained with a high degree of certainty), or question-marked (ascertained with a low degree of certainty). Next a percent score was figured for each stage present in the subjects' reasoning based on the total points assigned. The percent score was then multiplied by the number representing the stage. When summed the results yielded scores ranging from 100 (100% at stage one) to 600 (100% at stage six).

In order to obtain a reliability score it was necessary to hire and train a graduate student in education. The reliability scorer evaluated the responses of ten randomly selected transcripts. A product-moment correlation coefficient was computed between the two scorers MMS's on the individual forms. Using this procedure the correlation coefficients for the ten subjects on the separate forms was: MJCMD (.88), MDCMD (.79), MJPMD (.88), and MDPMD (.80).

**Statistical analysis**

A 2X2X2X2 analysis of variance permits examination of the data for significant differences by sex, year in
school, mode of reasoning, and type of dilemma. Standard fixed effects analysis of variance statistical design requires independent assignment of scores to each cell. This research does not meet this condition since individual subject's scores were assigned repeatedly across the four factors identified. That is, there is a score for each subject in all the four forms of moral reasoning. It was decided therefore to use Kirk's (1968) multiple factors repeated measures split-plot design (SPF - pr.qu). This method of analysis allows one to answer the primary research questions concerning differences in moral reasoning between modes of reasoning and types of situations.

RESULTS

The analysis of variance found that two of the four main effects were statistically significant beyond the .05 level. Twelfth grade subjects were found to be significantly higher in mean moral maturity scores than eighth grade subjects and mean moral maturity scores for all subjects were found to be significantly higher in the judgment mode than in the deliberation mode. Two of the interactions in the analysis of variance were found to be statistically significant. First, the interaction between mode of reasoning and type of dilemma was found to be significant beyond the .001 level.
An examination of Table 3 reveals that the interaction is due largely to substantially lower MMS for deliberation on practical moral dilemmas. Figure 1 presents this interaction graphically and demonstrates that the type of dilemma is only an important factor in one's moral reasoning within the deliberation mode.

The interaction between mode of moral reasoning and type of dilemma can be further understood through an examination of the second significant interaction: grade x mode x dilemma. The means associated with this interaction are reported in Table 4. These means indicate that the most marked change in MMS occurs for both eighth and twelfth grade subjects when engaging in the MDPM MD form of moral reasoning. Across grade this drop in MMS is around 20 to 24 points. These means and hence the interaction can be more fully understood by depicting them graphically. Figure 2 presents the graph of the grade x mode x dilemma interaction.
This graph shows that the mode x dilemma interaction is due to the twelfth grade subjects' drop in MMS in moral deliberation within practical moral dilemmas - the MDPMD form of moral reasoning. The significant difference found between eighth and twelfth grade subjects can now be interpreted as due predominately to age differences on the MJCMD, MDCMD, and MDPMD forms of moral reasoning alone.

A post hoc analysis utilizing the Sheffe' procedure showed that the difference between eighth and twelfth grade subjects on the MDPMD form of moral reasoning was not statistically significant (p < .05). The statistically significant difference between MMS on modes of moral reasoning is accounted for by the low mean scores found on moral deliberation within practical moral dilemmas. A further clarification of this significant drop in level of moral reasoning can be gained by examining subjects' percentage stage usage across all four forms of moral reasoning.

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Insert Table 5 about here
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It is evident from the data presented in Table 5 that the drop in MMS on the MDPMD form of moral reasoning for twelfth grade subjects is largely due to a decrease in stage 3 usage and a concomitant increase of stage 2 responses.
In summary, the analysis of variance finds that: 1) older subjects are significantly higher in mean stage of moral reasoning than younger subjects; 2) across all subjects, reasoning in the judgment mode is significantly higher than reasoning in the deliberation mode; 3) the interactions of mode x dilemma and grade x mode x dilemma are statistically significant; and 4) the interaction effects are the result of the twelfth grade subjects' lower MMS on the MDPMD form of moral reasoning.

DISCUSSION

Implications for the study of moral reasoning

One of the central claims of the cognitive-developmental view of moral reasoning has been that there exists, as individuals grow, a naturally occurring invariant development of stages of moral reasoning. The findings of this research indicate that this claim needs more careful examination. The only way that this claim can be adequately confirmed is to do as Kohlberg has done and use long-term longitudinal studies. This research does not contain this sort of evidence; however, one expectation of this assumption would be that with two sets of subjects and with one set four years older than the other, the older set of subjects would be significantly higher in their level of moral reasoning. This expectation was confirmed in this study on three of the four forms of moral reasoning.
studied. However with the MDPMD form no significant difference was found on moral reasoning between the younger and older subjects. The following sorts of questions can therefore be raised about the cognitive-developmental approach to the study of moral reasoning: Is the developmental aspect of moral reasoning only applicable to certain forms of moral reasoning? Are there parallel developmental sequences for each form of moral reasoning? Is there no development at all on certain forms of moral reasoning? Is the Kohlberg interview the correct instrument for measuring development on all forms of moral reasoning?

It might be possible that different types of learning are relevant to the different forms of reasoning. For example, moral reasoning on the MJCMD form might be stimulated only by moral conflict of a broad social nature—war, public controversy, institutional corruption—whereas moral reasoning on the MDPMD form may be stimulated largely by interpersonal conflicts within one's life-space. Hence a person may develop a high level of moral reasoning on MJCMD, but as long as his personal life remains placid, his level of moral reasoning on MDPMD may remain unchanged.

It may also be possible that schedules of reinforcement play a much larger role in the development of moral reasoning in MDPMD than MJCMD. That is, it would appear that as one grows up one's moral reasoning might be controlled by parents
and other authority figures reinforcing certain moral responses as Aronfreed (1968) has suggested. However, in the broader domain of moral judgment on classical or public policy type issues where the schedules of reinforcement are not so well controlled a conflict and cognitive reorganization model of the learning of moral reasoning may be the dominant influence.

Habit plays a large role in most people's lives. Since classical dilemmas pose situations with which the individual has no repertory of habitual responses built up, he may be forced, during the course of resolving the dilemma, to draw upon his highest cognitive abilities. On the other hand, when facing practical moral dilemmas the individual may have built up habitual modes of response which include certain set actions and rationalizations. It may well be that these habitual actions and rationalizations are not sensitive to broader changes in cognitive maturity. In a recent study of the moral reasoning of kidney donors Fellener and Marshall (1970) found that "Not one of the donors weighed the alternatives and decided rationally...they made their decision immediately when the subject of the kidney transplant was first mentioned (and)... once the decision had been made by the prospective donor, he carefully refrained from considering further data and engaged in several maneuvers which permitted him never to vary in his decision or even question it (pp. 269-281)." Although the decision to donate a kidney may be a somewhat extreme example of moral
deliberation, it does indicate that the type of reasoning involved is often quite different from what one would picture as the normal weighing of consequences, application of moral principles, checking out of the facts, etc. Clearly, the research on kidney donors supports the speculation that deliberation in real-life situations may be quite different from moral judgment on classical dilemmas. One of the key differences may be that decision making in real-life crisis situations is habitual and reflexive and the actual moral reasoning may be merely rationalization for what is seen as an irrevokable choice.

Other research on helping behavior has reported the importance of situational factors in people's moral choices. For example, Latane and Darley (1970) have found that people are more likely to engage in helpful behavior when alone than in groups and when in a subway than when in an airport. If situational variations in helping behavior can be supported by moral reasoning - either before or after the act - then one ought to expect variations in moral reasoning, also, depending upon situational factors. It follows that one does not have a complete grasp of an individual's moral reasoning abilities if we deal with his reasoning only about on type of situation.

The above comments are only conjecture, and alternative explanations could be offered; however, this appears to be a
fruitful area for future inquiry and the results could have great import for the cognitive-developmental approach to moral reasoning.

Implications for the cognitive-developmental approach to moral education

The finding that there exists a discrepancy in the level of moral reasoning within the forms of moral reasoning used in this study is of great importance to the rationale behind Kohlberg's moral education program. This program rests on the dual notions that the naturally-occurring development of moral reasoning can be stimulated by pedagogical intervention and that when individuals reach the higher (principled stages of moral reasoning) they will act in a more moral manner than at the lower stages since there will be greater consistency between actions and principles due to the fact that the higher stages of moral reasoning are philosophically better at defining one's moral obligations than the lower stages. The research reported above allows one to raise the following questions about these assumptions underlying Kohlberg's rationale.

First, one may ask whether raising an individual's level of moral reasoning on one form of reasoning will also produce a concomitant advancement in his reasoning on an alternate form of reasoning. An individual's level of moral reasoning may be raised in at least two ways. First, everyone's level of moral reasoning has, at one time or another, undergone change through naturally occurring stimulation within his
environment. Social issues and conflict, as well as interpersonal events contribute to differing degrees to the stimulation of moral reasoning for individuals in today's world. In addition to naturally occurring stimulation there exists the possibility of pedagogical intervention for the purpose of stimulating growth in individuals' level of moral reasoning.

This research, since it did not study subjects who had their level of moral reasoning pedagogically stimulated, can not answer directly the question of whether this sort of development would take place simultaneously across all four forms of moral reasoning. However it was found that between forms of moral reasoning that had apparently only been stimulated by naturally occurring events in their environment (not consciously planned intervention) there existed significant differences in the levels of moral reasoning. Whether or not among educationally induced levels of moral reasoning there is greater consistency is a question for further research. However, in order for the development of moral judgment on classical dilemmas to be accepted as a satisfactory method of moral education, it needs to be shown that stimulating this form of moral reasoning also stimulates moral reasoning in the other three forms of moral reasoning, especially for MDPMD. There is reason to believe that if one operates without this knowledge one may have a program that deals only with a fraction of one's professed objective.
The second crucial question which one must ask of the cognitive-developmental rationale for moral education centers around Kohlberg's (1970, 1971) claims and evidence for greater consistency between thought and action at the principled level of moral reasoning. A moral education program that does not address itself to the problem of behavior is seriously remiss and if moral deliberation in practical situations is the key form of moral reasoning for moral action, Kohlberg must show that his moral education program stimulates this form of reasoning. If stimulating moral judgment on classical dilemmas also stimulates moral deliberation on practical dilemmas, then the as yet untested claim that this program has the potential of influencing behavior is still viable. However, if it cannot be shown that this is the case, and this research has cast doubts upon this assumption, then there exist serious questions as to whether stimulating moral reasoning will influence behavior, and hence serious questions concerning the value of stimulating cognitive development as a goal of moral education.

Curricular suggestions

Lawrence Kohlberg (1973) in a recent speech to social studies educators spelled out the Deweyan influence on the new social studies. He pointed out that the new social studies had neglected two central assumptions of the Deweyite canon:
1) the psychological assumption of cognitive and moral stages and the parallel assumption that education is suplying the conditions for development through the stages, and 2) the philosophic recognition of ethical principles as defining the aims of social education. He went on to argue that stimulation of moral development in students ought to be central focus of social studies educators.

I believe that Kohlberg has made useful and insightful recommendations for social studies educators; however, I also believe that the results of this research and other relevant research show that Kohlberg's suggestions, in their present shape, are limited. One of the key components of Dewey's analysis of educational aims is that education at its most fundamental level consists of the reorganization of personal experience. This concept refers to the fact that for humans to learn they need to be confronted with problematic situations, and only through resolving these problems will individuals be able to restructure their experience and hence change in a meaningful and lasting manner. Education which fails to recognize this dynamic side to human learning often ends up being, as Kohlberg (1973) has so well stated, "Information accumulation in the service of competitive academic achievement (p. 89)."
The question which one feel compelled to ask of the Kohlberg moral education program is, does it allow for this most crucial reorganization of personal experience? When Kohlberg mentions the Deweyian influences on the new social studies he also accepted as valid guidelines for his moral education program, the centrality of the problematic case and the need for critical thinking about value assumptions. However, even meeting these assumptions may not be enough to establish the validity of his program. For example, many recent programs have attempted to focus on value questions. Richard H. deLone (1972) in a recent article scrutinizing the failure of drug education programs, pinpoints the greatest error as: "Above all, schools chronically fail to consider anything except cognitive instruction (and some physical education) as their proper province. Emotional, psychological and social growth may appear in the publicity releases, but they are not in the curriculum guide... schools do not deal with student concerns, especially with the life concerns of adolescents: sex, love, joy, self-doubt, fear, pain, anxiety, loneliness, belonging—all the issues that emerge with adolescence and that affect the decision to use or not use... perhaps the ideal process for drug prevention would assume the culture of the schools as the most important problem (p. 29)."

In other words, even though drug education may satisfy
many of Dewey's recommendations in that it is a controversial area, focuses on values, emphasizes process, and has an interdisciplinary approach, if it does not recognize the situations the students are in, and if it focuses on others' problems rather than the students' own problems, then it is not likely to have an influence on the subject's behavior. That is, it won't result in the reorganization of his personal experience.

One feels compelled to ask whether or not the cognitive developmental approach to moral education is open to the same criticisms as those leveled against contemporary drug education programs. I do not want to say that Kohlberg would endorse most drug education programs; however, even given the likely emphasis on stimulating moral development relative to drug dilemmas, his programs, if they follow his previous research, would deal with other people's problems (Heinz might be a drug pusher) and would ask for the student to judge others rather than to reach his own personal decision through moral deliberation.

This paper has attempted to show that a moral education program that deals with just moral judgment and other peoples' experiences faces two problems: 1) the levels of moral reasoning used in moral judgment are often different from the levels of moral reasoning used in moral deliberation, and
2) Moral judgment is not analytically linked with moral behavior, and what empirical studies there are linking judgment to behavior are sketchy and at best fail to measure the reasoning that took place prior to the action under study.

The conclusion reached from the above analysis is that for a moral or values education program to have the potential of being maximally effective, it ought to focus on naturally-occurring situations within the life-space of the students and ought to ask of them deliberation about their prospective behavior other than to exclusively form judgments about others' behavior. In other words, I am asking for an experience-based moral education program where conflict and disequilibrium grow out of real life experiences of the students and the pedagogical aspects of teacher interaction with the student(s) is applied to their moral deliberation. The major, and as yet untested, assumption underlying this sort of a moral education program is that moral deliberation in practical situations is, in fact, developmental and can be stimulated either by naturally-occurring or pedagogically induced disequilibrium. Given this goal, the following changes would seem to be required to carry out this new curricula.

First, a more flexible approach must be taken to curriculum since student concerns, which are seldom stable in substance and form over a long period of time, will
constitute the focus of the curriculum. Second there will have to be a greater de-emphasis on classes and a greater emphasis on small groups or one-to-one situations. This will be necessary due to the uniqueness of human experiences — everyone will bring some problematic areas that are different either to a large or small degree from everyone else's.

Third there will have to be an even greater emphasis on "diagnosis" — finding out where the students are and what's on their minds — as a first step in curriculum planning. This leads to a fourth suggested new requirement, and that is a new degree and skill at insight or empathy into the adolescent's life. A curriculum involving teachers totally devoid of interpersonal skills will never achieve the openness and trust necessary to get at the crucial experiences in the lives of the students.

Generally, then, the teacher, after identifying problematic areas of concern within the life-space of the students, and after supporting attempts to deal with the problem rationally, will determine what set of principles (stage of moral reasoning) the student is currently using to handle the conflict, lead the student to see the inadequacy of that stage of moral reasoning, and will arrange for him to be exposed to the next highest stage of moral reasoning. If the research findings on the stimulation of moral reasoning
apply within the MDPMD mode of moral reasoning, then the student should adopt the higher stage of moral reasoning. If it were shown that stimulating reasoning on MJCMD also stimulated moral reasoning on MDPMD, then these suggestions would be unnecessary, and if it were shown that MDPMD could not be stimulated then these suggestions would be futile.

However it has been shown that there are significant differences between the two important modes of moral reasoning (MJCMD and MDPMD) and that subjects exhibit a broad range of level of moral reasoning on MDPMD. Hence it is concluded that the direction sketched out is a worthwhile one for future research and curricular planning.
REFERENCES


<table>
<thead>
<tr>
<th>Levels</th>
<th>Basis of moral judgment</th>
<th>Stages of development</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Preconventional level - child responsive to cultural rules and labels of good and bad, right or wrong; interprets labels in terms of either physical or hedonistic consequences of action.</td>
<td>Stage 1: <strong>Punishment and obedience orientation.</strong> Physical consequences of action determine goodness or badness regardless of human meaning or value of consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right.</td>
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<td></td>
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<td>Stage 2: <strong>Instrumental relativist orientation.</strong> Right action consists of that which instrumentally satisfies one's own needs and occasionally the needs of others. Human relations viewed in terms like those of the marketplace. Elements of fairness, reciprocity and equal sharing are present but always interpreted in a physical pragmatic way.</td>
</tr>
<tr>
<td>II</td>
<td>Conventional level - at this level, maintaining the expectations of individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. Attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting andjustifying the order, and of identifying with persons or group involved in it.</td>
<td>Stage 3: <strong>Interpersonal concordance or &quot;good boy--nice girl&quot; orientation.</strong> Good behavior is that which pleases or helps others and is approved by them. Much conformity to stereotypical images of what is majority or &quot;natural&quot; behavior.</td>
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<td>Stage 4: <strong>&quot;Law and order&quot; orientation.</strong> There is orientation toward authority, fixed rules and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for its own sake.</td>
</tr>
<tr>
<td>III</td>
<td>Postconventional, autonomous or principled level - clear effort to define moral values and principles which have validity and application apart from authority of groups or persons holding these principles, and apart from the individual's own identification with these groups.</td>
<td>Stage 5: <strong>Social-contract legalistic orientation, generally with utilitarian overtones.</strong> Right action tends to be defined in terms of general individual rights, and standards which have been critically examined and agreed upon by the whole society. Clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stage 6: <strong>Universal ethical principle orientation.</strong> Right is defined by decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. Principles are abstract and ethical (Golden Rule, categorical imperative); not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for dignity of human beings as individual persons.</td>
</tr>
</tbody>
</table>

Note: Adapted from Kohlberg (1970).
## TABLE 2
FORMS OF MORAL REASONING

<table>
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<tr>
<th>Form</th>
<th>Mode of Moral Reasoning</th>
<th>Type of Situation</th>
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<tbody>
<tr>
<td>MJCMD</td>
<td>moral judgment (MJ)</td>
<td>classical moral dilemma (CMD)</td>
</tr>
<tr>
<td>MDCMD</td>
<td>moral deliberation (MD)</td>
<td>classical moral dilemma (CMD)</td>
</tr>
<tr>
<td>MJPMD</td>
<td>moral judgment (MJ)</td>
<td>practical moral dilemma (PMD)</td>
</tr>
<tr>
<td>MDPMD</td>
<td>moral deliberation (MD)</td>
<td>practical moral dilemma (PMD)</td>
</tr>
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**TABLE 3**

MNS (All Subjects) for Mode x Dilemma Interaction

<table>
<thead>
<tr>
<th>Mode</th>
<th>CMD</th>
<th>PMD</th>
<th>Across Dilemma</th>
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</thead>
<tbody>
<tr>
<td>NJ</td>
<td>264.4</td>
<td>263.6</td>
<td>263.9</td>
</tr>
<tr>
<td>MD</td>
<td>260.3</td>
<td>240.9</td>
<td>250.6</td>
</tr>
<tr>
<td>Across Mode</td>
<td>262.3</td>
<td>252.2</td>
<td>257.3</td>
</tr>
</tbody>
</table>
## TABLE 4

MMS (All Subjects) for Age x Mode x Dilemma Interaction

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mode (Dilemma)</th>
<th>Across Mode (Dilemma)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMD</td>
<td>PMD</td>
</tr>
<tr>
<td>8</td>
<td>246.8</td>
<td>249.0</td>
</tr>
<tr>
<td>12</td>
<td>281.9</td>
<td>278.1</td>
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<tr>
<td>Across Grade</td>
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<td>263.6</td>
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<td>45</td>
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<td>MDCMD</td>
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<td>43</td>
</tr>
<tr>
<td>MDPMG</td>
<td>0</td>
<td>68</td>
</tr>
</tbody>
</table>
FIGURE 1

Graph of Interaction: Mode x Dilemma

NOTE: \( \Delta = MJ; \mathfrak{O} = MD \)
FIGURE 2

Graph of Interaction: Grade x Mode x Dilemma

MMS
290
280
270
260
250
240
230

MJCMD MJPMD MDCMD MDPMD
Mode & Dilemma

NOTE: \( \Delta \) = 8th grade; \( 0 \) = 12th grade