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NAME OF AUTHOR/*NOM DE L'AUTEUR* IAN MICHAEL WRIGHT

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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* Dr. D. MASSEY.

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THE UNIVERSITY OF ALBERTA

MORAL REASONING AND CONDUCT OF SELECTED ELEMENTARY SCHOOL CHILDREN

by

© IAN MICHAEL WRIGHT

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Moral Reasoning and Conduct of Selected Elementary School Children" submitted by Ian Michael Wright in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

Donald Massey
Supervisor

Charles Chamberlin

Lew Lightstone

Jean H. Young

P. H. Martorella
External Examiner

Date September 29th, 1975

ABSTRACT

The major purpose of this exploratory study was to investigate the relationship between moral reasoning and conduct. A second purpose was to study the effect of participation in moral discussions on moral reasoning. Kohlberg's cognitive-developmental theory of moral development provided the conceptual framework.

In three designated schools, Grade Five and Six teachers identified, according to a researcher designed instrument, students who displayed overt 'delinquent' or 'non-delinquent' behavior. From these the researcher selected eighteen 'delinquents' and twenty 'non-delinquents' as representing the most overt anti-social or sociable, behavior. Subjects ranged in age from ten years and five months to thirteen years and one month. All attended schools in low, or low-middle, socio-economic areas.

All subjects were administered Form A of Kohlberg's Moral Judgment Instrument (1973 version), and a Flavell cognitive role-taking task in an interview situation. Canadian Lorge-Thorndike intelligence quotients were obtained also. Subjects were then randomly placed into an experimental treatment group which participated in six, one-half hour moral discussions held over a six week period; a placebo group which played Social Studies games over the same time period; or a control group which continued with normal classroom activities. A posttest consisting of Form B of the Kohlberg instrument was administered, followed a month later by the readministration of Form A and the Flavell task.

Analysis of variance statistics indicated that 'delinquents'

and 'non-delinquents' differed significantly ($p = .001$) on moral reasoning scores at all test administrations. Product-moment correlations on modal stage scores among three judges were over .88. Verbal intelligence quotients were significantly related ($p = .01$) to moral reasoning scores ($r = .51$) but the product-moment correlation was only .15 when 'delinquents'' scores were analysed separately. Role-taking was apparently not related to moral judgment ($r = .02$). Analysis of variance statistics indicated that the treatments had no significant effect on any groups' moral reasoning scores ($p = .13$). There was, however, a slight indication that 'non-delinquents' in the experimental treatment group were affected; this group made the most advances between pre and follow-up tests.

On the basis of the findings it was hypothesized that moral reasoning was related to conduct, and that the effect of participation in moral discussions might be a function of conduct. Implications discussed included (1) the need for teachers to reason with 'delinquents' in terms of the latters' stages of development; (2) the need to examine values education, as part of the Social Studies program, in light of Kohlberg's theory; and (3) the need for program developers to be aware of children's stages of moral and role-taking development. Further studies exploring the relationship between moral reasoning and conduct appeared warranted.

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INTRODUCTION AND STATEMENT OF THE PROBLEM

As a result of the past decade of ferment in the Social Studies, most teaching-learning programs in this subject area have moved beyond the emphasis on facts and the transmission of the cultural heritage. Recent literature on the teaching of Social Studies in the schools stresses not only the intellectual development but also the personal and social development of students (Joyce, 1972; Fraenkel, 1973). Many writers (Oliver and Shaver, 1966; Newman and Oliver, 1970; Simon, 1970) have emphasized that Social Studies education should focus, as the Alberta Social Studies program (Alberta Department of Education, 1971) does, upon social and personal issues. These social issues ". . . are fundamentally moral problems—and moral problems of which we can for the most part see no clear solution . . . (Jeffreys, 1968, p. 40)."

As the school has the function of teaching skills, developing intelligence and forming character (Lester Smith, 1964, p. 29), as formal schooling not only teaches people, but pre-eminently teaches people how to live with people (Dewey, 1959, 1966), and as people "need to be trained not only in scientific but human terms (Snow, 1962, p. 47)," considerations of morality cannot be ignored.

> For questions of private and public behaviour and of social relationships, and the exercise of moral judgment, are matters of practical necessity for all children as for all adults, in their studies as well as in everyday living (May, 1971, p. 39).

Moral education has been of concern to educators since the time of Plato's The Republic. During the last decade there has been a deepening interest within education in morality, moral development and moral education. This interest is attested to in the over one thousand books and articles contained in a bibliography (Association for Values Education and Research, 1972) compiled at the University of British Columbia.

However, the term 'moral' is subject to many interpretations. In fact, Warnock (1967, p. 73) states that there is no commonly accepted definition of the term 'moral.' In psychology varying paradigms give rise to differing concepts of the nature of man and the ways in which he learns moral ideas. However, the fundamental question of morality and moral education was recognized long ago in Meno's question to Socrates:

> Can you tell me Socrates—can virtue be taught? Or if not, does it come by practice? Or does it come neither by practice nor by teaching, but do people get it by nature, or in some other way? (Rouse, 1963, p. 28)

This question has been 'answered' by Lawrence Kohlberg whose theory was the subject of this study.

1. THE PROBLEM

One of the paradoxes of human behaviour is that one often knows what one should do but acts otherwise. The question then becomes, "Is one acting morally?" Hare (1952, p. 1) says:

> If we were to ask a person, 'What are his moral principles?' the way in which we could be most sure of a true answer would be by studying what he DID.

One might be inclined prima facie to agree with this dictum,

but it must be realized that actions may not tell one what a man's moral principles are. One needs to not only observe action, but also to realize the reasoning behind the action. Kohlberg (1964, p. 408) argues that ". . . the development of judgment and development of conduct do not go along on two independent tracks." He reiterated this position when he stated (Kohlberg, 1971b, p. 78), "Fortunately, moral maturity in judgment and in action are closely related." This view is subscribed to by Porter (1972, p. 126), who states:

> Generally it has been found that persons at a higher level of moral judgment not only reason better, but they act in accordance with their judgments.

Kohlberg's position is that:

> Although more research needs to be conducted, existing evidence clearly supports a positive relationship between stage of reasoning, and moral behavior. The goal of facilitating more mature forms of moral thinking is certainly important to the long range goal of promoting social action (Kohlberg and Selman, 1972, p. 41).

Whereas it may be true that moral knowledge and understanding are prerequisites for authentic moral action and that, for example, one must learn respect for the property of others if one is to know that one should resist the temptation to take it even when safe opportunity offers, other writers question the knowledge-action concomitance claim. Bull (1969, p. 5) posits that:

> No claim could be made for strong correlation between moral judgment and moral behavior . . . Even if the individual knows the right thing to do, so much depends upon motivation, the actual situation, and—according to some adolescent girls—even mood.

Kay (1970, p. 39 and p. 112) also argues that there is no necessary connection in every situation between moral reasoning and

conduct, and Graham (1972, p. 16), when discussing studies involving guilt and resistance to temptation, says:

> Their value may be primarily in demonstrating that judgment and action are not always related—if indeed any such demonstration is necessary.

On the one hand, therefore, we see support from Kohlberg, Porter and Selman that "reasoning and behaviour are linked because mature moral action requires mature forms of moral thought as prerequisites (Kohlberg and Turiel, 1971, p. 457)," and that "if we know a child's moral-judgment level we should be able to predict a good deal of his moral behavior (Ibid.)." On the other hand we have support for the view that knowledge and action are not necessarily linked in that an individual may know the right thing to do but acts contrary to this knowledge. This knowledge-action question is of prime importance for moral education. If a program in moral education can raise a student's level of moral reasoning but it is unknown as to whether or not there will be any concomitant change in the maturity of moral conduct, then moral education can be questioned. One would wish children to behave as well as reason at morally mature levels.

This study examined, therefore, the moral reasoning and conduct of selected elementary school children in light of Kohlberg's theory of moral development. The study was exploratory in that it attempted to:

> . . . discover significant variables in the field situation, to discover relations among variables, and to lay the groundwork for later, more systematic and rigorous testing of hypotheses (Kerlinger, 1973, p. 406).

As far as is known this study was unique in that it explored the moral reasoning of students who were deemed by teachers to display

'delinquent' or 'non-delinquent' characteristics in a classroom situation. Although studies have been carried out on the moral reasoning of legal delinquents in corrective institutions, no one has studied the moral reasoning of Grade Five and Six 'delinquents' in a public school setting. Whether the moral reasoning variable is related to 'delinquent' conduct can, at present, only be speculated. This study should, therefore, help to lay the groundwork for hypothesis building as to the relationship between moral reasoning and conduct among 'delinquent' students in the upper elementary school. Although previous research has studied the effects of exposure to higher stage moral reasoning on legal delinquents and 'normal' elementary school students, this study explored the effects of participation in moral discussions on 'delinquent' and 'non-delinquent' students. Results might form a basis for discovering the relationship between conduct and the effects of participation in moral discussions, leading to possible hypotheses which might form the framework for future research.

2. THEORETICAL OVERVIEW

In order to investigate the problem of whether or not there is concomitance between how one reasons about moral problems and how one acts in concrete moral situations, the cognitive-developmental theory of Lawrence Kohlberg was used. Based on empirical evidence Kohlberg has developed a six stage model of moral development (Appendix A). Progression through these stages results from organism-environmental interaction with the resulting mental structure being a product of this interaction rather than a direct reflection of either

innate neurological or external environmental patterns (Kohlberg and Mayer, 1972, p. 457). Like Piaget, Kohlberg views cognitive structures as internally organized wholes or systems of internal relations. These structures are rules for processing information or connecting events. Kohlberg postulates that:

1. The stages are universal. They are not culturally determined and particular religions make no difference.

2. All stages have to be moved through; there is an invariant sequence, order or succession and no stage may be skipped. However, speed of development will vary with the individual, fixation may occur at a given stage, and individuals may be partly in one stage and partly in neighbouring stages.

3. Each stage reflects different motives and a differentiation of life over other values.

4. Each stage shows a concern for welfare and justice.

There is reasonably consistent evidence that moral development is closely related to intelligence either as measured by intelligence quotients or by Piagetian tasks. However, intelligence is a necessary, not a sufficient condition for moral development. Another factor which appears to influence development is role-taking ability. According to Selman (1971) only reciprocators [the understanding that others can take one's own perspective simultaneously with one's taking of others' perspectives (Selman, Gordon and Damon, 1973)] attain the conventional level of morality.

Kohlberg postulates that upward movement occurs through stimulation of cognitive conflict. Studies by Turiel (1966), Turiel

and Rothman (1972), Blatt and Kohlberg (1973), Beck, Sullivan and Taylor (1972), and Lieberman and Selman (1974) all found that movement was created when lower stage subjects were pitted against higher stage subjects or experimenters either in discussion or role-playing contexts. Moral development, it would appear, is facilitated therefore by:

1. Provision of enhanced opportunities for role-taking.

2. Exposure to cognitive conflict, to contradictions in one's own moral views.

3. Exposure to moral reasoning one stage above one's own.

When it comes to putting moral reasons into action, Kohlberg posits that "the influence of judgment on action should be characterizable in cognitive-structural terms (Kohlberg, 1969, p. 390)." Several research studies (Kohlberg, 1971a, p. 228; Haan et al, 1968; Kohlberg and Turiel, 1971, p. 459) have apparently demonstrated a congruence between actions and stage of moral reasoning. One of the most promising avenues of research into the thought-action paradox appears to be with prisoners in corrective institutions and with juvenile delinquents. Kohlberg, LaCross and Ricks (1971) state that repetitive stealing or bullying are possible indicators of immaturity in children as young as seven or eight and that these are predictive of adult maladjustment, delinquency and anti-social behavior. Kohlberg (1958) found that delinquency was a sign of preconventional moral judgment, although non-delinquency is not a sign of conventional moral reasoning.

> Delinquency is the most extreme form of consistent disregard of approved behavior. In this connection it

> has been found that the large majority (eighty-three percent) of fifteen to seventeen year old working class delinquents are preconventional . . . (Kohlberg and Turiel, 1971, p. 460).

As Kohlberg and Turiel (1971, p. 460) state that:

> . . . We may expect a typical child to have reached the conventional level of moral judgment (Stages 3 and 4) by early preadolescence, and to reflect this level in behavior consistently showing a decent regard for the core expectations and approval of parents, peers and outside authorities.

it can be hypothesized that pre-adolescents who repetitively violate these basic expectations have failed to reach the conventional level. Although there are other sociological and psychological factors involved, delinquency does appear to indicate immature moral development. This is evidenced by the Kohlberg, Scarf and Hickey (1972) prison study and studies by Fodor (1972), Hudgins (Hudgins and Prentice, 1973) and Ewanyk (1973) in which adult inmates or adolescent delinquents invariably scored at Stages 1 or 2.

According to Kohlberg and Turiel (1971, p. 448) one of the critical transition periods is between the ages of ten and thirteen. If a child has not begun to reason at the conventional level by age thirteen he is unlikely to develop principled morality in adulthood. Therefore this period appears to be crucial for moral development and it is this period which was examined in this study.

3. STATEMENT OF THE PROBLEMS

The major purposes of this study were to investigate the following questions.

1. Is there congruence between how a person reasons about

moral problems and how he acts in actual moral situations?

2. Will a situation in which students are exposed to moral reasoning at one stage above their initial modal level influence their level of moral reasoning towards the higher stage?

In order to answer these questions the following specific problems were investigated.

1. Do Grade Five and Six 'delinquents' and 'non-delinquents' differ in the scores obtained on Kohlberg's Moral Judgment Instrument?

2. Will a situation in which a random selection of Grade Five and Six 'delinquents' and 'non-delinquents' are exposed to moral reasoning at one stage above their pretest stage influence their reasoning to the extent that their stage of reasoning is higher on the posttest than it was on the pretest?

2 (a). Will any changes be reflected on a follow-up test administered one month after the posttest?

2 (b). Will there be any differences between pretest, posttest and follow-up scores on the Kohlberg Moral Judgment Instrument between 'delinquents' and 'non-delinquents' in experimental, placebo and control groups?

Additional questions researched were:

3. Is role-taking ability as assessed by Flavell's Role-Taking Instrument (Flavell et al, 1968) related to stage or moral reasoning? For 'delinquents'? For 'non-delinquents'?

3 (a). Do 'delinquents' and 'non-delinquents' differ on role-taking ability?

4. Is intelligence quotient as assessed by the Canadian

Lorge Thorndike Intelligence Tests (Lorge et al, 1967) related to stage of moral development? For 'delinquents'? For 'non-delinquents'?

4. DESIGN OF THE STUDY

In order to investigate the problems posed the following research design was formulated.

The Sample

One hundred and fifty-seven students in Grades Five and Six in three Edmonton public schools, chosen by the Edmonton Public School Board, were selected by teachers and/or principals as displaying 'delinquent' or 'non-delinquent' characteristics. A Student Behavior Rating Instrument (Appendix C) was used for selection purposes. From this sample, forty subjects were chosen by the researcher as demonstrating the most extreme characteristics of 'delinquency' (n = 20) and 'non-delinquency' (n = 20). During the course of the research two 'delinquent' subjects became unavailable for study.

Instrumentation

Role-Taking Instrument. All subjects were administered Flavell's Role-Taking Instrument (Flavell et al, pp. 70-81) (Appendix F).

Kohlberg's Moral Judgment Instrument. (Appendix E) All subjects were administered Form A of this instrument as a pretest, Form B as a posttest and Form A again as a follow-up test one month after the posttest. Each subject was interviewed separately and all interviews were tape-recorded.

Intelligence Quotient. All Grade Six subjects were administered Form D of the Canadian Lorge-Thorndike Intelligence Test and all Grade Five subjects were administered Form C of the same test.

Experimental Design

All subjects were randomly assigned to one of three groups.

1. Experimental Group (n = 13). These subjects were involved in six, one-half hour sessions held once per week in each of the three schools, over a six week period. Five of the sessions comprised the viewing of one of the First Things filmstrips (Guidance Associates, 1972) followed by a discussion. The final session comprised the discussion of moral dilemmas which subjects felt were relevant to their own lives.

2. Placebo Group. This group (n = 12) was involved in six, one-half hour sessions held once per week in each of three schools, over a six week period. During each session a Social Studies related game was played.

3. Control Group. This group (n = 13) continued with normal classroom activities during the experimental and placebo group sessions.

The Design

Figure 1 provides a summary of the research design.

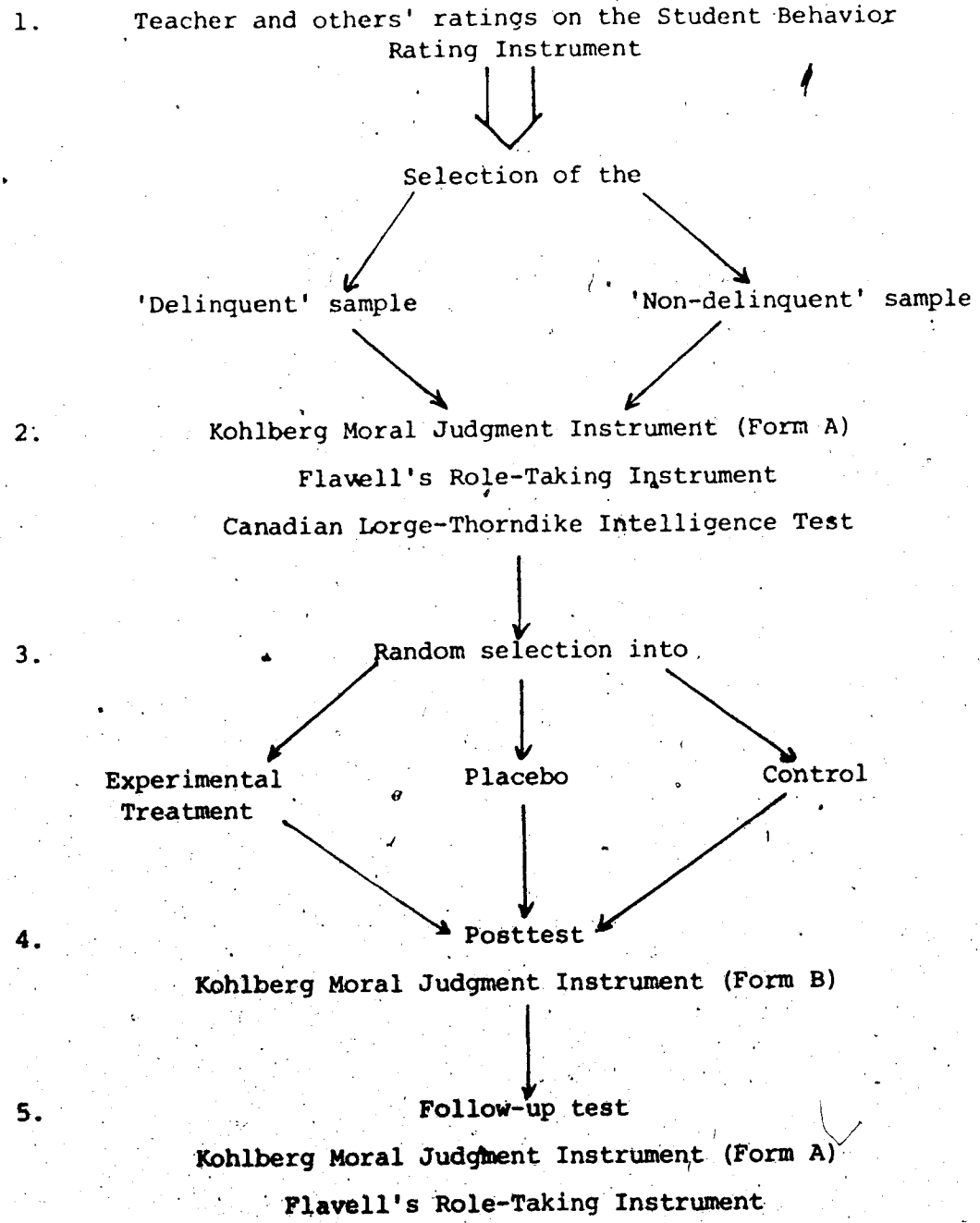


FIGURE 1

THE RESEARCH DESIGN

5. DEFINITIONS

Functional

Value: Any characteristic deemed important because of psychological, social, moral or aesthetic considerations (Good, 1973, p. 636).

Moral: That which a person considers to be right or wrong and that which he considers he ought or ought not to do.

Moral Judgment: This involves a choice between principles, policies or courses of action based on a criterion or criteria for right action.

Conduct: The actual behaviors demonstrated by someone in a real world concrete situation.

Delinquent: Behavior that is in violation of the conduct norms of society; usually based on legal norms but can be broadened to include all anti-social acts whether or not these are brought to the attention of a court of law (Good, 1973, p. 170).

Role-Taking Ability: The facility of seeing something from somebody else's perspective; the ability to disassociate one's own viewpoints from those of others.

Operational

Moral and Moral Judgment: The 'score' obtained from the analysis of subjects' responses to Kohlberg's Moral Judgment Instrument.

Conduct: The ratings obtained from the Student Behavior Rating Instrument.

Role-Taking Ability: The score obtained on Flavell's Role-Taking Instrument.

Delinquent: Those subjects identified by teachers and others on the Student Behavior Rating Instrument as displaying overt anti-social behavior.

Non-Delinquent: Those subjects identified by teachers and others on the Student Behavior Rating Instrument as displaying overt social behavior.

Intelligence: The score obtained on the Canadian Lorge-Thorndike Intelligence Tests.

6. ASSUMPTIONS

1. That Social Studies education not only has intellectual growth functions but is also concerned with children's personal and social behavior and moral development.

2. That the cognitive-developmental theory of moral development provides a sound theoretical base for understanding moral reasoning.

3. That the Kohlberg Moral Judgment Instrument will accurately reflect the moral reasoning of subjects.

4. That the 'stage level' of each subject can be accurately ascertained from responses given to the dilemmas posed in the Kohlberg Moral Judgment Instrument.

5. That Flavell's Role-Taking Instrument will accurately reflect the cognitive role-taking ability of subjects.

6. That the Student Behavior Rating Instrument will accurately

reflect the classroom conduct of the subjects.

7. That subjects in the experimental treatment situation will initially use the stage(s) of reasoning assessed from the pretest score on the Kohlberg Moral Judgment Instrument.

8. That any researcher effect on the experimental group posttest scores will be controlled by the incorporation in the design of the placebo group, and by the administration of a follow-up test.

7. LIMITATIONS

The following limitations appear to apply to this study.

Theoretical Limitations

The study was limited to one theory of moral development. Although the theory appears to be based on empirical evidence and has a reasonable philosophical basis, it is but one theory among several.

External Limitations

As the study was exploratory, generalizations to other populations could not be made.

Sample Limitations

These limitations included the small size of the sample, the assignment of schools by the School Board and the difficulties involved in obtaining the sample.

Internal Limitations

Caution was used in the analysis of results due to the internal limitations of the research design. Even though a number of

subjects were categorized as 'delinquent,' treating these subjects as a group was carried out cautiously for, although the group shared a common characteristic (i.e., anti-social behavior), the specific quantitative and qualitative degree to which the individuals in the group were equivalent was questionable. Also no attempt was made in this study to account for the home background or past experiences of the subjects.

8. SIGNIFICANCE OF THE STUDY

The study was deemed significant in the following ways:

1. Knowledge was gained regarding how 'delinquents' reasoned about concerns of morality. Although studies on legal delinquents in corrective institutions have been carried out (Kohlberg, 1958; Ewanyk, 1973), this study appeared to be unique in that it researched the moral reasoning of Grade Five and Six students who were deemed by teachers to display overt anti-social behavior in 'normal' public school classrooms.

2. Information gained from this study may have significance for program development and classroom practice. Although several studies, such as those by Turiel (1966), Blatt and Kohlberg (1973) and Beck, Sullivan and Taylor (1972), have apparently demonstrated that a student's stage of moral reasoning can be raised there is still a question regarding the success of the intervention technique on all students. This study, therefore, examined the efficacy of the Kohlberg technique on 'delinquent' and 'non-delinquent' Grade Five and Six students.

3. The Alberta Social Studies program (Alberta, Department of Education, 1971) stresses the values clarification approach designed by Raths et al (1966). Presumably this approach can be used with students at any age. Yet the question can be raised as to whether, for example, students can identify and choose freely from among all known alternatives (Steps 1, 2 and 3 of the Raths model) unless they are cognitively and morally mature enough to do so. The Kohlberg theory when put into instructional practice does attempt to match the student's stage of development to the instruction. If students are only capable of reasoning at the stage they are in, or the one stage above, then this developmental principle can be used as a basis for instruction by "creating dissatisfaction in the student about his present knowledge of the good (Kohlberg, 1970, p. 308)," by exposing the student to +1 reasoning.

Values clarification strategies do not stress role-taking; role-taking is included as one part of the overall appraoch. Yet according to Kohlberg (1971b, pp. 51-52), moral reasoning is closely related to role-taking as mature moral reasoning involves considering the welfare of others. This necessitates the ability of 'taking another person's point of view.' It would appear that, although role-taking ability is developmental in nature, it needs to be practised. Moral discussions which involve such questions as, "How would you feel if you were A?" involve the practising of seeing others' perspectives either within a dyad, group or societal framework. The importance of role-taking has not been adequately emphasized either in the values clarification approach or in the Alberta Social Studies program.

Also values clarification centers on the personal values of the student; the end result is unknown and should not be inculcated. Kohlberg, however, maintains that although values (content) may be relative, the reasons for holding values are not. Kohlberg argues that the notion of relativity will have to be rethought as it is both philosophically and psychologically unsound.

Therefore this study had significance in that it examined the moral reasoning of elementary school students, creating a possible basis for moral or values education programs in the school.

4. The conduct aspect of morality is of import. One would wish students not only to reason at a mature level but also to act at a morally mature level for it is the child's conduct which the teacher evaluates. In this regard all teachers are values educators. Yet the relationship between thought and conduct is problematic. As research evidence regarding the congruence between moral reasoning and moral conduct is scarce this study was regarded as both unique and necessary. As Wright (1971, p. 172) says:

> We need to know how people's theoretical morality relates to the rest of their moral lives.

9. SUMMARY

This chapter has introduced the major research questions and has outlined the procedures used to provide answers to these questions. The major problem was seen to be the hypothesized relationship between moral reasoning and moral action, with a secondary concern relating to the efficacy of the Kohlberg intervention technique designed to raise a person's stage of moral reasoning. Chapter II examines

research studies related to the problems posed. Chapter III outlines the research design, and the procedures used to analyse the data. Chapter IV contains the results of the data analysis and Chapter V summarizes the study, discusses the implications and provides suggestions for further research.

Chapter II

RATIONALE AND RELATED STUDIES

This chapter reviews the cognitive theory of moral development as formulated by Piaget and modified and extended by Kohlberg. Relevant research and theory in terms of moral and cognitive stages, decentration (role-taking ability), instructional processes and actual moral conduct are analysed in order to explicate the operational problems and design of this study.

1. PIAGET

Jean Piaget postulated that children move through invariant stages in cognitive operations—the sensori-motor, pre-operational, concrete operational and formal operational. He posited (1960, pp. 13-14) that these stages had a constant order of succession, that the elements of one stage were integrated into the next higher stage and that lower stage elements were the basis for the higher stage. Factors which influenced development were maturation, experience (physical and logico-mathematical), social interaction and transmission, and equilibrium. Piaget's main work has been in the nature of physical and qualitative thinking (Phillips, 1969, p. 129) but in 1932 he wrote one book on children's moral reasoning, The Moral Judgment of the Child. By studying the reasoning of lower class, [illegible] to twelve year old Swiss children with regards to the moral [illegible], he arrived at the following developmental

pattern consisting of three stages.

1. Pre-moral Stage

No concept of right or wrong.

2. Heteronomous Stage

Unlitaral respect for adults leads to heteronomous attitude towards adult rules as being sacred and unchanging because of:

a. Egocentrism—confusion of one's own perspective with his own—inability to see moral values as relative to various persons and ends.
b. Realism—confusion of subjective phenomena with objective things—moral rules as fixed rather than psychological expectations.

This leads to:

c. Objective responsibility—physical consequences are used as the basis for judgment rather than intents.
d. Unchangeability of rules.
e. Absolution of values—'right' and 'wrong' are absolute and in conflict situations the parent is 'right.'
f. Wrongness is defined by sanctions, wrong = punishment.
g. Duty as being obedience to authority.
h. Belief in expiatory punishment.
i. Ignoring reciprocity in defining obligations.
j. Belief in immanent justice.
k. Belief in collective responsibility.
l. Punishment by authority rather than retaliative reciprocity by victim.

3. Autonomous Stage

Growth of sense of rights (justice) and duty (obligation) as co-operation increases and egocentrism declines means that the above 'beliefs' will disappear and more subjective and autonomous thinking will replace them.

However, it must be noted that Piaget did not conceptualize these latter two moralities as being discrete. He states (1932, p. 78):

> There exists in the child certain attitudes and beliefs which intellectual development will more and more tend to eliminate; there are others which will [illegible] more and more importance . . . The two sets of [illegible] are to be met both in the child and in the [illegible] one with predominance in the one, the other in the other.

[illegible] have empirically tested by many researchers

and a basic developmental pattern has, in the main, been substantiated. However, moral development has been seen to be more complex than Piaget realized in 1932. Questions have been raised regarding the consistency of development across all components of morality. Johnson (1962), testing for immanent justice, moral realism, punishment and responsibility concepts with eight hundred and seven subjects in Grades Five, Seven, Nine and Eleven, found development with age in all areas. However, correlations between the various moral judgment tests used ranged from .68 to .15 demonstrating, as did Brennan (1962) in part, that various areas of judgment may not be highly related. MacRae (1954) also found development with age but like the aforementioned researchers he could find no common entity in moral judgment and McKechnie (1971) concluded that specificity in reasoning was related to the behavioral area involved and the structure of the protocols presented.

Other questions have also been raised regarding whether or not every component of moral judgment, as described by Piaget, is developmental in nature. The following general characteristics are deemed to be the criteria for stage developmental theory (Kohlberg and Mayer, 1972, p. 458):

> 1. Stages imply distinct or qualitative differences in children's modes of thinking or of solving the same problem.
>
> 2. These different modes of thought form an invariant sequence, order, or succession in individual development. While cultural factors may speed up, slow down, or stop development, they do not change its sequence.
>
> 3. Each of these different and sequential modes of thought forms a "structural whole." A given stage-response to a task does not just represent a specific response determined by knowledge and familiarity with [illegible] it; rather, it represents

an underlying thought organization.

4. Cognitive stages are hierarchical integrations. Stages form an order of increasingly differentiated and integrated structures to fulfill a common function.

Whereas developmental theory has been substantiated according to the above criteria in the areas of objective responsibility, fixity of rules, absolutism of value, wrong defined as punishment, expiative justice and immanent justice (Kohlberg, 1963, p. 319), the more socio-emotional aspects of Piaget's theory have been questioned. For example, peer group participation, although an important aspect of overall moral development, has not been found to be specifically associated with advance on measures of reciprocity or intentionality. Kugelmass and Breznitz (1967) found that children raised on an Israeli kibbutz were not more intentionally oriented than children raised in a conventional Israeli family. Reciprocity appears to increase in children aged between six and nine but then stays the same or declines (Kohlberg, 1963, p. 319).

A second factor of Piaget's theory relates to the existence of a democratic home atmosphere. Yet MacRae (1954) and Johnson (1962) found that parental democracy did not relate to development on the Piagetian component of objective responsibility. According to Lydiat (1973, p. 376), the non-developmental dimensions are:

> Duty defined as obedience to authority, reciprocity in rights, punishment by authority versus retaliation, individual and collective responsibility, and favoritism in the distribution of rewards and punishments.

Accordingly it can be stated that developmental theory holds in certain dimensions of Piaget's theory. However, development is not definitively age related and variation due to many factors can

occur. Piaget himself stated (1932, p. 78):

> A given individual may, for example, have reached the state of autonomy with regard to a certain group of rules while his consciousness of these rules, together with the practice of certain more subtle rules, will still be colored with heteronomy.

2. KOHLBERG

Lawrence Kohlberg has extended and modified Piaget's original thesis by developing an ideal typological model to explain the development of moral reasoning. Kohlberg's theory differs from Piaget's on several major points. The first is the starting point. Whereas Piaget begins with respect for sacred rules, Kohlberg (1973c, p. 191) commences with the pragmatic concern of punishment, finding that ten year olds who displayed Stage 1 thinking (Appendix A) did not show strong respect for adult authority. In fact, young children appear to judge acts by whether or not the act is rewarded or punished. A 'bad' act which was accorded parental reward was deemed to be 'good' by young children (Kohlberg, 1968, p. 489). Secondly, Piaget's theory contained three stages, whereas Kohlberg incorporates six (Appendix A). Thirdly, whereas Piaget stresses peer-group participation as a major factor facilitating development, Kohlberg (1968, p. 489) does not. Yet both agree that there exists:

> A culturally universal age development of a sense of justice, involving progressive concern for the needs and feelings of others and elaborated conceptions of reciprocity and equality (Kohlberg, 1968, p. 489).

Basically the Kohlberg theory states that:

> The cognitive-developmental metaphor is not material, it is dialectical; it is a model of the progression of ideas in discourse and conversation. The dialectical

> metaphor was first elaborated by Plato, given new meaning by Hegel and finally stripped of its metaphysical claims by John Dewey and Jean Piaget, to form a psychological method. In the dialectical metaphor a core of universal ideas are redefined and reorganized as their implications are played out in experience and as they are confronted by their opposites in argument and discourse. These organizations define qualitative levels of thought, levels of increased epistemic adequacy (Kohlberg and Mayer, 1972, p. 456).

Kohlberg sees this progression as a reorganization of psychological structures resulting from organism-environmental interaction, with the mental structure being a product of this interaction rather than a direct reflection of either innate neurological patterns or external environmental patterns (Kohlberg and Mayer, 1972, p. 457). Like Piaget, Kohlberg views cognitive structures as internally organized wholes or systems of internal relations. These structures are rules for processing information or connecting events, and these events are organized actively through these cognitive connecting processes, not passively through external association and repetition. The core of development is not the unfolding of instincts, emotions or sensori-motor patterns but instead is cognitive change in distinctively human general patterns of thinking about the self and the world. The development of moral reasoning has therefore a cognitive core, and the cognitive and affective are parallel aspects of the structural transformation which takes place in development (Kohlberg and Mayer, 1972, p. 457). Kohlberg admits (1971b, p. 44) that moral judgments involve strong emotional components but he states that emotions will not reduce the cognitive core.

Development is therefore movement towards greater differentiation, integration and adaptation; it is progression from a less

adequate psychological state to a more adequate one (Kohlberg and Mayer, 1972, p. 483). It is a change in form, pattern and organization of behavior, not just a change in frequency or intensity of responses.

Knowledge is thus viewed as functional or pragmatic. It is an equilibrated or resolved relationship between an inquiring human mind and a problematic situation. The child's epistemology is both unique to the individual at his stage of development and universal as all individuals progress through stages of development.

Evidence for the existence of the six stage model (Appendix A) was based initially on analysis carried out on the responses given to moral dilemmas by eighty-four male subjects ranging in age from nine years and six months to sixteen years and four months (Kohlberg, 195[illegible]ng to Kohlberg (1958), these stages form a quasi-simplex[illegible]nt stages to the subjects' dominant stage correlate more [illegible] each other than do distant stages. All statements made [illegible]ts could be assigned to one of the one hundred and eight[illegible] (thirty moral aspects by six stages). However, whereas age [illegible] in moral development have been substantiated in the research (G[illegible], 1972, p. 182), this does not validate the notion of sequenti[illegible]nvariance. As Kohlberg (1973c, p. 189) acknowledges:

> While the age trends indicate that some modes of thought are generally more difficult or advanced than other modes of thought, they do not demonstrate that attainment of each mode of thought is prerequisite to the attainment of the next higher in a hypothetical sequence.

This evidence is provided in a longitudinal study which followed some of Kohlberg's original 1958 subjects. According to the results of this study, "Each individual child must go step by step through each of the kinds of moral judgment . . . (Kohlberg, 1971b, p. 36)." This longitudinal data, however, has demonstrated that post-conventional reasoning is not reached until adulthood, if at all. ". . . our longitudinal data now suggests that Stage 5 is a stage reached in adulthood, not in adolescence . . . Thinking we labelled Stage 6 in high school was misclassified (Kohlberg, 1973a, p. 31)." In fact since the conception of the six stage model in 1958, further modifications have been made on the basis of research evidence. Kramer (Kohlberg and Kramer, 1969) discovered what at first was assumed to be a regression in the moral reasoning of college students. These students apparently were reasoning at Stage 2, yet on further analysis Kohlberg posited that this reasoning was characteristic of a transition between conventional and post-conventional thinking, and has thus labelled it as Stage 4 - 1/2. This has, as it were, 'saved' the sequential and hierarchial aspect of the theory. However, there is a statement by Kohlberg (1973b, p. 501) which reads:

> A pilot cross-sectional study of moral judgment in the aged (unpublished) suggested that some, but far from all, aging people regressed to childish pre-conventional patterns of moral thought.

This suggests that the non-regression aspect of the cognitive-developmental theory may not be valid for all age groups. Other changes have included the reclassification of the various aspects of moral judgment. Whereas in 1958 thirty aspects were conceptualized, these have been reclassified into ten major issues (Appendix B). Also

substages within each stage have been formulated based on evidence from a longitudinal study. The A substage is based on concerns of normative order and utilitarianism and the B substage on justice and ideal-self concepts. According to Kohlberg, Kauffman, et al (1974, p. 25), the longitudinal data indicates that the B substage is more mature in the sense that a 3A thinker moves to 3B, but a 3B never moves to 3A although he may move to 4A. However, the B substage can be skipped. This study was only concerned, however, with the six stage model and not with the substages.

Cross-cultural research (Kohlberg, 1971b, p. 37) indicates that people progress through the stages regardless of culture. However, evidence for this universality of development is still open to question. Graphs of stage usage of subjects in five countries (Kohlberg, 1971b, p. 37) do not indicate how many subjects were tested, which dilemmas were used or what the scoring reliability was, and evidence for the existence of post-conventional reasoning is absent in two out of the five samples.

Further evidence for the developmental theory is provided by Rest (Rest et al, 1969) and by Selman (Kohlberg and Turiel, 1971, p. 451). Rest demonstrated with a sample of forty-five Fifth and Eighth Grade boys and girls who were asked to recapitulate statements at each of the stages, that these subjects could recapitulate statements at one stage below their own modal stage with a high degree of accuracy. Recapitulation of +1 statements yielded a moderate degree of accuracy with +2 statements being the least accurate. Subjects apparently understood their own stage and lower stages but did not

comprehend reasoning which was too developmentally advanced. Rest also found, when subjects were asked to state which of the statements taken from each stage they preferred and which they thought were the worst advice, that:

> The -1 statements were chosen as the worst advice with significantly more frequency than either the +1 or +2 statements ($p < .01$). The +1 and +2 statements were also judged as being better than the -1 statements ($p < .01$), and the results indicate also that these two statements were equally preferred (Turiel, 1969, p. 104).

The same pattern was demonstrated with a group of forty-seven Twelfth Graders (Rest, 1973). This group preferred higher stage reasoning, but could only comprehend and recapitulate reasoning at their own stage, lower stages or the +1 stage.

Ability to comprehend moral reasoning was also shown by Selman to be a function of developmental principles. Kohlberg and Turiel (1971, p. 451) report that Selman, in a research study which involved ten to sixteen year old children's interpretations of the 'Golden Rule,' found only Stage 3 children translating the rule correctly. Those at Stage 2 used a Stage 2 orientation of actual exchange or revenge, not a Stage 3 ideal reciprocal judgment involving a consideration of what you would wish if you were in the other's place. Yet almost all children could correctly verbalize the formula of 'Do unto others as you would have them do unto you.'

Further evidence of the cognitive-developmental theory of moral development is provided in studies which attempted to induce changes in moral reasoning, and in studies which related behavior to moral judgment. This evidence will be discussed later in this chapter.

Each of the six stages represents a structured whole but this does not mean "at any given time a child functions entirely on one stage and that change involves movement from one such discrete stage to another (Turiel, 1969, p. 113)." In fact the evidence suggests that the majority of subjects tested respond at various stages.

> Typically, as children develop they are partly in their major stage (about 50% of their ideas) partly in the stage into which they are moving and partly in the stage they have just left behind (Kohlberg, 1971b, p. 38).

The actual usage pattern may be as diagrammed below in Figure 2.

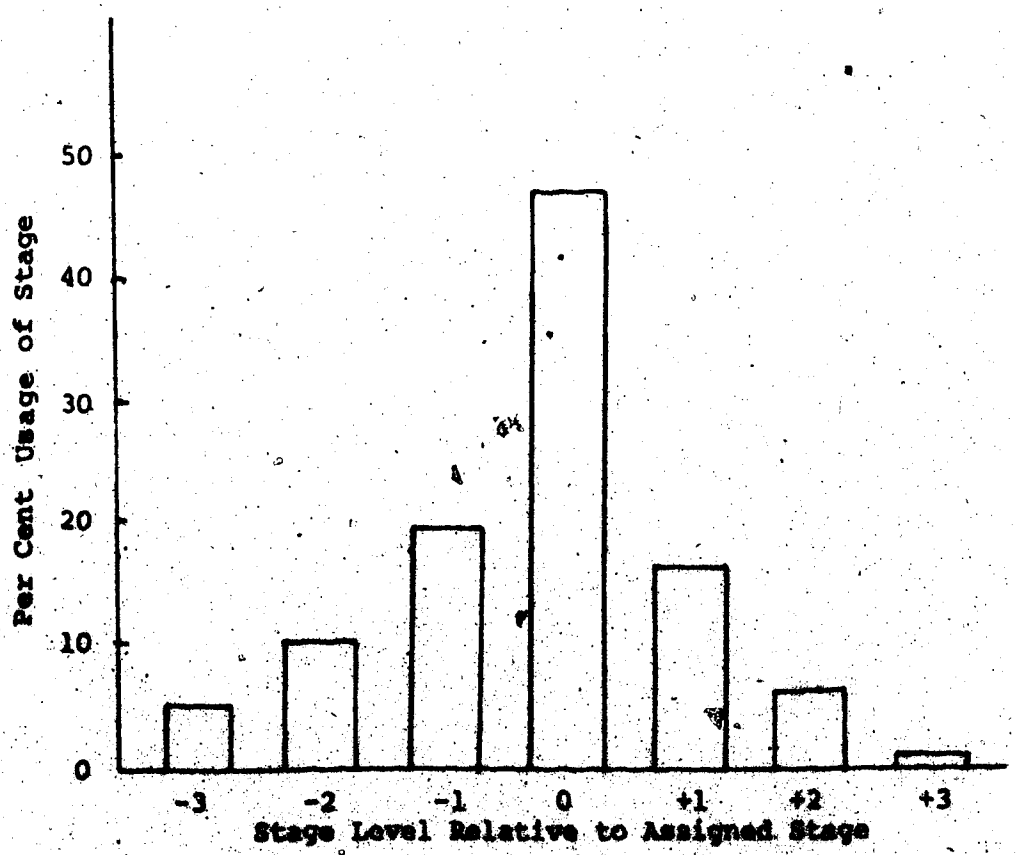


FIGURE 2

STAGE LEVEL RELATIVE TO ASSIGNED STAGE
(Kohlberg, 1969, p. 387)

This above pattern is borne out by the correlations existing among the various dilemmas presented to subjects. These range between .75 and .31 with the median being .51 (Kohlberg, 1969, p. 388). One of the problems presented in reviewing studies pertinent to this particular research study is that it is often unknown as to which dilemmas were presented to subjects and which questions were posed. Therefore, the 'degree of fit' between reasons given to one dilemma and those given to another is problematic. One reason for the fluctuating correlations between various dilemmas may also be due to actual differences in the dilemmas. Leming (1974) posits that there are two modes—one a judgment one in which a response is made to an act which has already been performed, the other a deliberation mode in which a correct course of action is chosen for the dilemma character. For example, in the Heinz story (Instrument I, Appendix E) Heinz has actually broken into the store to steal the drug, but in the dilemma involving Joe (Instrument II, Appendix E) Joe has to decide whether or not to give his money to his father. Secondly, Leming suggests that classical moral dilemmas which are removed from the life space of the individual (such as the aforementioned Heinz story), differ from practical dilemmas in which there is a familiar character in a familiar situation. Leming in fact found differences in moral maturity scores in his sample of sixty, Seventh and Twelfth Grade subjects according to the mode and type of dilemma presented. According to Kohlberg, Scharf and Hickey (1972), prison inmates used lower modes of thought on prison dilemmas as compared with the standard non-prison ones.

Fluctuations in scores, therefore, may be due to the different types of dilemmas posed. Haan et al (1968), however, found that forty-six per cent of their adolescent sample could not even be classified in a modal stage. This 'inability' to find a modal stage may be due to a number of factors, such as scoring imprecision or to the lack of differentiation between learned verbal responses and 'truly structural' responses. But measurement imprecision may not necessarily account for all the variation.

> Some of the variation can be explained by Piaget's concept of 'decalage' . . . Decalage exists because some concepts are more difficult than others and because a child has had more experience in some realms than in others (Turiel, 1969, p. 115)..

Two concepts can be introduced here. One is that of 'mental structures' which refer to forms of thought that may function in more or less cohesive patterns; the second is 'structuring process' which refers to the mode of transition from less mature to more mature forms of functioning. Variation will typify changes in the structuring process, fixity will be typified by consistency. This consistency could be a function of age—the young child is progressing very slowly in moral development, the adult at the higher stage has reached optimal equilibrium. On the basis of these hypotheses, Turiel (1969) analysed the data from three studies and computed variation scores. He found (1969, p. 125):

> Younger children show stage consistency at the early phases [where] developmental change is slow. When children [are] in the period of relatively rapid development through the lower stages, [there] is necessary for change to occur [gradually]. While [they] do not [all] attain the upper stages [established] at the [later] phases [of] the period of transition . . . the [greatest] [number] of [the] stage [which is the

greatest amount of mixture because at that point higher stage functioning is very unstable.

On the basis of both theoretical considerations and empirical evidence Kohlberg states:

1. The stages have universal application. They are not culturally determined although the cultural environment may help to speed up the developmental process or slow it down (Kohlberg, 1971b, p. 38).

2. All stages have to be moved through; there is an invariant sequence and no stage may be skipped. However, speed of development will vary with the individual, fixation may occur at a given stage, and individuals may be partly in one stage and partly in neighboring stages.

3. Each stage reflects, (a) different motives for action, (b) differentiation of life over other values, and (c) a concern for welfare and justice.

4. Each stage is a cognitive structure, an internally organized whole or system of internal relations.

3. FACTORS INFLUENCING MORAL DEVELOPMENT

Intelligence

There is reasonably consistent evidence that moral development is closely related to intelligence measures. Studies by Boehm (1962), Hayden (1963), Johnson (1962), Milgram-Speigle (1964), Whiteman and Kosier (1964), Hayden (1963), Stevens and Hayden (1965), Hayden (1966), Hayden (1967), Hayden (1967) and Hayden (1968) all report a significant

p. 391) reports that he found "a curvilinear relation between I.Q. and moral maturity. In the below-average range, a linear correlation (r = .53) is found between I.Q. and moral maturity." However, in the above average group a low correlation of .16 was found between intelligence quotient and moral maturity.

In the above mentioned studies, the intelligence tests used varied as did the correlations with moral maturity. It must be realized that it may not be true to say that those with high intelligence quotients will necessarily be morally mature for, "Cognitive structure development depends upon massive general experience, a requirement which an 'innately' bright child cannot short circuit (Kohlberg, 1968a, p. 1030)." Far more relevant, therefore, are studies which utilize Piagetian cognitive tasks and correlated results of these with stages of moral reasoning. Hypothetically the relationship should be as shown in Figure 3.

Jantz (1973) found a positive relationship between intellectual development, as measured by conservation ability, and moral development. Sixty-eight per cent of his sample fell in the pattern of non-conservation/morality of constraint or conservers/morality of co-operation. Lee (1971) found that the transition to formal operations was a good indicator of an increase in Stage 4 thinking, and that the transition to concrete operations was a good indicator of a increase in Stage 3 thinking. Rest (1973) obtained a correlation of .48 between logical and moral stage assessments. He found that the change of moral reasoning scores [illegible] preconventional [illegible] the appearance of Stage 4 thinking. Lawrence (1973)

Logical Stage	Moral Stage
Symbolic, intuitive thought.	Stage 0. The good is what I want and like.
Concrete operations. Substage 1. Formulation of stable, categorical classes.	Stage 1. Punishment-obedience orientation.
Concrete operations. Substage 2. Reversible concrete thought.	Stage 2. Instrumental hedonism and concrete reciprocity.
Formal operations. Substage 1. Relations involving the inverse of the reciprocal.	Stage 3. Orientation to interpersonal relations of mutuality.
Formal operations. Substage 2. Capacity to order triads of propositions or relations.	Stage 4. Maintenance of social order, fixed rules and authority.
Formal operations. Substage 3. [illegible]	Stage 5. Social contact, utilitarian law making perspective.
	Stage 6. Universal ethical principle orientation.

and Tomlinson-Keasey (1972) also showed that formal operations thinking was necessary for principled morality. Although not clear cut, the relationship between Piagetian cognitive tasks and stage of moral reasoning appears to be quite well substantiated, in that "a given logical stage is a necessary but not sufficient condition for the parallel moral stage (Kohlberg, 1973, p. 13)."

Role-Taking

Another way of assessing intellectual ability and moral development is to focus on decentration and role-play skills, both vital according to Piaget and Kohlberg, for development. In fact, one of the assumptions of the cognitive developmental theory is:

> There is a fundamental unity of personality organization and development termed the ego or the self. While there are various strands of social development (psychosexual development, moral development, etc.) these strands are united by their common reference to a single concept of self in a single social world. Social development is, in essence, the restructuring of the (1) concept of self, (2) in its relationship to concepts of other people, (3) conceived as being in a common social world with social standards (Kohlberg, 1969, p. 349).

Therefore, the ability to role-take is necessary for mature moral judgments as moral judgments at the higher stages involve considering the perspective of other people. In this regard Kohlberg has [illegible] stages of social perspective taking in the most recent scoring manual (Kohlberg, 1973). The development of social [illegible] up to Stage 4 is outlined in Figure 4.

[illegible] stage-structured role-taking yet role-taking [illegible] according to Flavell (Flavell et al., [illegible]. Rest and Deemer (1973)

Stage 1. Doesn't consider the interests of others or recognize they differ from actor's. Doesn't relate two points of view. Actions are considered physically rather than in terms of psychological interests of others. Confusion of authorities perspective with one's own.

Stage 2. Separates own interests and point of view from those of authorities and others. Aware everybody has their own interests to pursue and these conflict, so that right is relative (in the concrete individualistic sense). Integrates or relates conflicting interests to one another through instrumental exchange of services, through instrumental need for the other and the other's good will, or through fairness in treating each individual's interest as equal.

Stage 3. Aware of shared feelings, agreements and expectations which take primacy over individual interests. Relates points of view through the 'concrete Golden Rule,' putting yourself in the other person's shoes. Does not consider generalized 'system' perspective.

Stage 4. Differentiates societal point of view from interpersonal agreement or motives. Takes the point of view of the system which defines roles and rules. Considers individual relations in terms of place in the system.

[illegible]

label it as a summary variable because it contains within it various properties. Globally, role-taking is equated with the general ability of taking the role of another person and assessing his responses, capacities and tendencies. The ability includes literal-perceptual and figurative-intellectual components. It is this latter cognitive ability that Irwin and Ambron (1973), with their sample of seventy-two Kindergarten and Grade Two subjects, found was most highly related to moral judgment as assessed by Piagetian stories concerning blameworthiness, restitution, and intentionality perspectives. Yet, overall, there was a significant relationship between all the role-taking tasks (cognitive, affective and perceptual) and moral judgment. The same relationship was demonstrated by Selman (1971) in that on two role-taking tasks an overall significant relationship existed with moral maturity scores obtained from Kohlberg's Moral Judgment Instrument. In his sample of sixty subjects at the ages of eight, nine and ten, only recipricators attained the conventional level of morality. Stuart (1967) also demonstrated that decentering ability was related to moral maturity, with high decentraters rendering more mature moral judgments than low decentraters.

It would appear that role-taking ability is a significant component of moral reasoning in that it is a necessary, but not sufficient condition for moral maturity. Kohlberg (1971, p. 50) therefore argues that opportunities for role-play activities are necessary for moral development. ". . . opportunities for role-taking are important and (all) operate in a similar direction by stimulating moral development."

Instructional Processes

Kohlberg postulates that movement from one stage of reasoning to the next occurs through the stimulation of cognitive conflict. Research by Turiel (1966) demonstrated that movement was created if reasoning was presented to subjects which was at one stage higher than their modal stage. This finding was based on a sample of forty-four Grade Seven subjects placed in three treatment and one control group. Treatment subjects were exposed to reasoning at -1, +1 or +2 to their modal stage as determined by a pretest which consisted of six Kohlberg dilemmas. Following three treatment sessions spread over a three week period, a posttest was administered. This incorporated the six pretest dilemmas and the three dilemmas used during the treatment sessions. Analysis of the posttest scores on the three treatment dilemmas revealed a significant difference between the +1 and +2 groups which suggested that the +1 treatment was the most effective. However, there was no statistically significant difference between the -1 and +1 groups, although there was a slight indication ($p = .10$) that the +1 group was more effective. Yet, as these results were based on the analysis of the responses made to the dilemmas used during the actual treatment sessions, they could be due to "memory, learning and suggestion (Kurtines and Grief, 1974, p. 465)." Analysis of the pre/posttest scores on the other six dilemmas revealed no statistically significant treatment effects. In fact, the control group's scores decreased by 6.1% and the +1 group's by 4.5%. This research therefore provides only minimal support for the theory that moral development can occur through exposing students to +1 reasoning.

In two related studies (Blatt and Kohlberg, 1973), Blatt apparently demonstrated that exposure to +1 reasoning did stimulate development. In the first study a sample of eleven Jewish students aged between eleven and thirteen years old were exposed to reasoning at one stage above their present level in twelve, one hour long, experimental sessions. During this time subjects discussed dilemmas other than the three used in the pretest and the six used in the posttest (four of these were originally used in the pretest). Blatt found a mean increase in moral maturity scores between pre and post-tests for his experimental group. This change was statistically significant ($p = .0$[illegible]). None of the control groups, which were taken from Turiel's 1966 and 1972 experiments, increased in moral maturity scores between the pretest and posttests. In a follow-up test administered one year later, the posttest results were essentially unchanged. Pretest level of moral maturity predicted moderately with posttest level ($r = .65$), while posttest level predicted well to the follow-up test ($r = .84$).

In a second study Blatt studied one hundred and thirty-two students of lower class or lower middle class status who were in Grades Six or Ten. Three experimental groups were established in each age group--a control group, an experimenter-led discussion group and a discussion group without active leadership by an adult. Eighteen sessions of forty-five minutes duration each were held over a nine week period. The pre and posttests were those used in Blatt's first study. Results indicated that although there were no statistically significant differences between the three groups on pretest

scores, on the posttest the experimenter-led group increased significantly on moral maturity scores. On the follow-up test administered one year later, all groups had increased in moral maturity scores, but the experimenter-led group still differed significantly from the control group.

Tracy (Tracy and Cross, 1973) with a sample of seventy-two subjects aged between twelve and fifteen in experimental treatment and control groups, found that with three experimental treatment sessions the Stage 1 and 2 subjects moved upwards more than the Stage 3 and 4 subjects. In fact, the control group subjects at Stages 1 and 2 moved more than the experimental treatment Stage 3 and 4 subjects. This may demonstrate that the pretest is itself a manipulative device and that, for this age group, a ceiling effect exists for conventional reasoning subjects.

The above studies incorporated relatively short experimental treatment sessions. Other research studies have contained experimental treatment sessions of a longer duration. Lieberman and Selman (1974) carried out an evaluation of the First Things (Guidance Associates, 1972) values education program. Both experimental Grade Two groups, one teacher led, the other 'expert' led, moved significantly more over an October to May period than the control group. The authors point out that as the teacher-led group produced the greatest gains, "it is impossible to sort out 'teacher effects' from 'intervention techniques,'" and they suggest that further research be carried out in this area.

In a similar four month long study Beck et al (1972), with a

sample of seventeen Grade Eleven students in an ethics course in which a post-conventional rationale for morality was introduced, and seventeen students in a control group, found that there were no significant pre-posttest results. However, when the follow-up test was administered one year later the experimental group scored significantly higher than the control group. Whereas on the pre and posttest there were four Stage 5 subjects (two in the experimental and two in the control group), by the follow-up test two-thirds of the experimental group were scored at Stage 5. Similar results were obtained in another study by Sullivan and Beck (1974) involving forty-two Grade Five students—twenty in an experimental, moral discussion group and twenty-two in a control group. At the end of the first semester a posttest was administered. Although neither group differed significantly from each other on moral reasoning scores, both groups scored significantly higher than on the pretest. However, on a follow-up test administered at the end of Grade Six, the experimental group had progressed significantly more than the control group. Overall, subjects in this group dropped Stage 1 reasoning and began to reason in Stage 4 terms.

Despite the significant differences reported above, researchers at the Association for Values Education and Research (Association for Values Education and Research, no date) report that, in a five week mini-course introduced into Grade Eight, Nine and Ten classes, there was no statistically significant effect due to the Kohlberg treatment. However, the direction of the difference between pre and posttest scores was upward as predicted.

Overall, therefore, there is support for the view that moral development can be stimulated through cognitive conflict and the exposure to +1 reasoning. However, the treatment effect will depend upon a number of factors. Turiel (1969) posits that the age of the subject is of import—a twelve year old at Stage 4 is less likely to progress than a twelve year old at Stage 2. A second factor is the strength of fixation. The third is the manner in which higher stage reasoning is presented; Turiel (1969, p. 129) reasons that only by presenting one stage higher reasons for and against the subject's present stage reasoning and position on a dilemma will the cognitive conflict necessary for movement be created.

There are still many unknowns with regard to this treatment and its purported effects. The question can be posed as to why some subjects who are exposed to experimental treatments increase in moral maturity scores while others do not. According to Blatt (Blatt and Kohlberg, 1973), this may be a function of interest. According to Krebs (Krebs and Kohlberg, 1973), it may be a function of ego control.

Other psychological frameworks suggest that moral learning can occur through the imitation of adult models and through the use of reward and punishment stimuli. Bandura and McDonald (1963) demonstrated that subjects who were objectively oriented could, through imitating an adult model, learn to make subjective judgments, and Dorr and Fey (1974) and McCann and Prentice (1973) found that modelling effect and monetary reward could induce changes in moral responses. Since the Bandura and McDonald (1963) study, argument has raged as to whether the effects of modelling behavior cast doubt on

the cognitive-developmental theory. Cowan et al (1969) replicated the Bandura experiment and posttested two weeks after the treatment. Although confirming Bandura and McDonald's results, they stated that pretest scores, time, type of item and direction of conditioning were factors overlooked by the original experimenters. The experiment revealed that downward learning (subjective subjects exposed to objective arguments) was less stable over time than was upward learning.

What appears from this research is that it is possible to induce at least short term changes in moral reasoning through the imitation of adult models. The questions remain however as to (a) how long the induced change will endure; (b) whether or not the acceptance of change is a function of developmental stage; and (c) whether or not a response induced through an experimental treatment is a 'learned' or 'truly structural' one.

Within the Kohlberg theory it would appear, therefore, that moral development is facilitated by various processes. These include:

1. Provision of enhanced opportunities for role taking.

2. Exposure to cognitive conflict, to contradictions in one's own moral views and in their relations to the view of others.

3. Exposure to moral reasoning one stage above one's own.

It would also appear that other processes can also induce changes in moral reasoning.

All the above research has been carried out mainly in isolation from the rest of the school curriculum. Fenton (Fenton et al, 1974, p. 6) states:

> Discussions of moral dilemmas should be viewed as part of the Social Studies course, not as an additional element to be introduced on 'moral development day' twice each month.

Beck (1971) has made the same point. He shows how moral education can become an integral part of the total school curriculum. Despite possible side benefits of exposing students to moral discussions, such as the growth of inquiry and discussion skills and a greater knowledge of value related issues, research on the effect of the total school experience on the moral development of students is virtually non-existent.

4. KNOWLEDGE AND ACTION

When it comes to putting moral thought into action, Kohlberg postulates that "the influence of judgment on action should be characterizable in cognitive-structural terms (Kohlberg, 1969, p. 390)." Piaget (1932, p. 109 and p. 113) wondered what the relationship between thought and action would be and posited the theory of 'conscious realization' (p. 174). In the theoretical the individual, by reflection, makes consciously explicit the moral principles upon which he actually functions. As verbal thinking consists of a conscious realization of schemas that have been already established in action, there will be a time lag before a developmental practical change is registered at the theoretical level.

This hypothetical time lag implies several things. Firstly, it implies that practical morality may shape theoretical morality but that the theoretical does not shape the practical. The theoretical moralising of the adult will only affect the child's theoretical

morality and that its influence will only be to retard or help this theoretical morality catch up to the practical. However, this 'conscious realization' hypothesis is speculative.

Other writers suggest that there may be little association between what one thinks one ought to do and what one actually does. Williams (1970, p. 20) states:

> It is not by any means true that, if a person believes the right thing, he will also behave in the right way. A man may believe quite sincerely that it is wrong to punch someone on the nose and yet he may physically attack people every time they offend him. He may be said to be lacking in some quality, such as self control.

and Peters (1966, p. 203) comments:

> The formulation and justification of principles is one thing, but it is still another to apply moral principles intelligently to concrete situations.

These statements are supported in studies by Beller (1949) and Morris (1958). Both found that differences existed between what a subject stated should be done and what he stated actually would be done in certain moral situations.

The classic study of moral conduct was produced by Hartshorne and May (1928). They defined morality in terms of character traits, those which society viewed as moral (like honesty). They found no pattern of development. In an important discussion in Book Two of Studies in Deceit (Hartshorne and May, 1930, p. 238), on the specificity of moral conduct, attitudes and motives, Hartshorne and May reach the conclusion that modes of response are as much a function of the situation as of the individual or are part of the "total functioning complex that includes both the individual and the

occasion." However, there is evidence from Burton (1963) that there was a general trait of honesty operating relatively independently of situational factors. This view is also supported by Brogden (1940) and by Grim, Kohlberg and White (1968). Of these studies Wright (1971, pp. 53-54) states:

> It is meaningful to talk about a general disposition of moral restraint, but in any temptation situation this is one of a number of dispositional and situational factors at work, and its role in accounting for individual differences may be relatively minor.

In 1964 Kohlberg (1964, p. 408) argued that:

> Judgment does not appear to become 'moral' until early adolescence, while 'morality' of conduct appears to develop early. Individual differences in levels of moral judgment are quite general and stable; morality of conduct is more specific to the situation and more unstable over time. Moral judgment appears to develop in the same direction regardless of social groups; moral conduct appears to develop in line with specific class and peer-group norms.

He appears here to support the notion that conduct and reason develop along different lines. Lately he has come out far more strongly for the existence of a positive relationship between thought and conduct, yet evidence for this is scanty. In a study by Brown (Kohlberg, 1971a, p. 228) both principled and conventional college students were theoretically opposed to cheating, but in an experimental cheating situation only those at the principled level actually failed to cheat. Kohlberg argues that only at the principled level is there a contractual obligation not to cheat; conventional subjects on the other hand see that 'authority' does not care whether one cheats or not, or that as everybody else is cheating one does also. Krebs (Krebs and [illegible]) found the same phenomenon with his sample of one

hundred and twenty-three Grade Six subjects. Whereas four out of five Stage 5 subjects resisted cheating (80%), as did 45% of the Stage 4 subjects, only 25% of those in Stages 1, 2 and 3 did so. This resistence to cheating is attested by Krebs to be not only a function of stage of moral maturity but also to ego controls (intelligence quotient and attention). Krebs (Krebs and Kohlberg, 1973, p. 30) suggests that three distinct forces influence moral action in general and resistance to cheating in particular. These are:

1. External Social Situational Forces such as social punishment and reward, group pressures and expectations and the influence of models.
2. Internal Moral Judgmental Forces or Dispositions the primary variable being moral stage.
3. Internal Dispositions of Ego Strength or Ego Control such as intelligence, attention, delay of gratification and achievement motivation.

Kreb's research is, however, questionable in light of Kohlberg's (1973, p. 31) statement that "Stage 5 is a stage reached in adulthood, not in adolescence," and Krebs purportedly found five principled subjects in Grade Six classes. Schwartz et al (1969) demonstrated that college students who were above the sample median on moral maturity scores cheated significantly less than those who scored below the median.

Cheating is but one aspect of morality. It appears to be used primarily as an assessment of moral conduct because it is relatively easy to measure. Cheating is not a good indicator of moral character until the child has developed, in adolescence or later, a set of inner moral principles that prohibit it.

By the time cheating behavior may reflect a lack of [illegible] development of moral values (i.e. failure to reach the level of moral principles) or a discrepancy between

> action and moral values (a discrepancy due to a variety of possible deficits in ego strength or ego abilities) (Kohlberg, 1973, pp. 464-465).

Other studies on the congruence between thought and action have been sporadic. Kohlberg (Kohlberg and Turiel, 1971, p. 459) gave the moral development tests to subjects in Millgram's (1963) study and found that 75% of Stage 6 thinkers (four out of six) refused to administer electrical shocks to a volunteer, whereas only 13% of the twenty-four lower stage subjects did. Testing soldiers who were involved in the My Lai Massacre, Kohlberg (Kohlberg and Selman, 1972, p. 39) discovered that the soldiers who obeyed the order to fire were at Stage 4 or lower, and that only the soldier who disobeyed orders was at a higher stage.

A more sophisticated study was carried out by Haan (Haan et al, 1968). This group of researchers found that Stage 6 college subjects sat in at a Berkeley demonstration, but so too did Stage 2 instrumental relativists; only those reasoning at Stage 3 and 4 were unlikely to demonstrate.

The most promising avenue of research into the congruence between moral thought and conduct appears to be with prisoners in corrective institutions and with delinquents. Although resistence to cheating is not apparently a function of pre-conventional or conventional moral reasoning, Kohlberg, LaCross and Ricks (1971) state that repetitive stealing or bullying are possible indicators of immaturity in children as young as seven or eight and that these are predictive of adult maladjustment, delinquency and anti-social behavior. Kohlberg (1958) found that delinquency was a sign of

pre-conventional moral judgment although non-delinquency is not a sign of having reached the conventional level.

> Delinquency is the most extreme form of consistent disregard of approved behavior. In this connection it has been found that the large majority (eighty-three per cent) of fifteen to seventeen year old working class delinquents are preconventional . . . (Kohlberg and Turiel, 1971, p. 460).

Although there are many psychological and sociological factors involved, delinquency does appear to indicate immature moral development. This is evidenced by the Kohlberg, Scarf and Hicky (1972) prison study and research by Ewanyk (1973), Fodor (1972), and Hudgins and Prentice (1973), all of whom found that adult prison inmates or juvenile delinquents were invariably scored, according to the Kohlberg protocols, at the pre-conventional level.

Research on the concomitance between moral reasons and moral conduct is fragmentary. Some evidence for conduct differences between principled and non-principled 'thinkers' exists and there is an indication that conventional and pre-conventional subjects may differ in their conduct! However, this area of research still contains many interesting questions such as whether 'milestones' are reached first in action or in moral judgment. It also remains an open question for it could be argued, as Craig (1974), does that some of our conduct may be habitual rather than based on conscious reasoning. Kohlberg (1969, p. 489) states:

> Moral behavior that involves conformity to social rules is on the whole, to be explained as the result of the same situational forces, ego variables and socialization factors that determine behaviors which have no direct moral relevance.

It can also be argued that Kohlberg's model does not require a direct

stage by stage relationship between reason and conduct. A person may perform the same act for a variety of reasons, or persons at one particular stage of reasoning can perform different acts for the same reason. A Stage 2 child may behave well in a classroom because he wants the teacher to like him, or he's achievement oriented, or he's been trained to behave well. Another Stage 2 child might be a behavior problem because he likes doing as he pleases, he craves attention or he doesn't care for achievement goals. In fact, in 1964, Kohlberg (1964, p. 422) stated: "We are not yet able to offer a view of personal moral ideology which combines personality type and developmental considerations into a single framework." Yet in terms of conduct, Kohlberg and Turiel (1971, p. 460) postulated that:

> We may expect a typical child to have reached the conventional level of moral judgment by early pre-adolescence, and to reflect this level in behavior by consistently showing a decent regard for the core expectations and approval of parents, peers and outside authorities.

It is this last statement coupled with the research evidence on the level of reasoning displayed by juvenile delinquents, and the data on instructional processes within the cognitive-developmental framework that provided the theoretical and empirical basis for this study.

5. SUMMARY

This chapter has reviewed the moral development theory of Piaget and Kohlberg. It was noted that not all of the Piagetian components of morality appear to be truly developmental. It was pointed out that Kohlberg has modified and extended the Piagetian theory to arrive at a six stage model of moral development. This

cognitive-developmental model was discussed in theoretical terms and the theory related to empirical research data. Factors influencing moral development were examined and the evidence for the existence of a relationship between moral reasoning and conduct was reviewed.

Chapter III

THE RESEARCH DESIGN

In order to investigate the problems posed in this study, the following elements of the research design were employed.

1. THE SAMPLE

Initially, three elementary schools were assigned by the Edmonton Public School Board on the grounds that these schools were likely to contain a high proportion of 'delinquent' subjects. It was hoped that a large sample of 'delinquent' subjects would be found within one school so that inter-rater reliability on the ratings of 'delinquent' and 'non-delinquent' behavior might be obtained. However, this proved to be infeasible and the study was subject to the confines of the assigned schools. One school proved to have very few suitable subjects so another school was assigned giving a total population of approximately four hundred Grade Five and Six students from which the initial sample was drawn. Two of the schools were 'inner city' schools drawing their student population mainly from working and lower-middle class parents; the third was in a new suburb and drew its student population mainly from lower-middle and middle class parents. Evidence for socio-economic ratings was obtained from principals, teachers and from the Edmonton School Board and was based upon the type of residences found in the area serviced by the school and by the occupations of the parents whose children attended

the school. These schools were not representative therefore of the Edmonton Public Elementary School system.

In each of the three schools Grade Six teachers were requested to identify 'delinquent' and 'non-delinquent' students according to the categories identified on the Student Behavior Rating Instrument (SBRI) (Appendix C). As a sample size of forty was desired for possible statistical purposes and as initial results of the teacher ratings did not provide such a sample, Grade Five teachers in the two assigned inner-city schools were also requested to rate their students' behavior. In all, eighteen teachers provided student ratings. This provided the sample size desired.

A total of one hundred and fifty-seven students were identified as displaying one or more of the characteristics stated on the SBRI. From these, twenty-three subjects were selected by the researcher as displaying the most extreme form of 'delinquency' in that teachers had rated them in five or more of the categories of the SBRI and had rated them low on the Fairmindedness and Trustworthiness Instrument (Appendix D). Parental permission was obtained from twenty-one of these subjects; however, one subject became unavailable for study prior to commencement of the research and two subjects became unavailable for study during the course of the research and were eliminated from the research. This left a total of eighteen 'delinquent' subjects. These subjects can be identified by the prefix A after the subject identification number throughout the rest of this thesis.

[redacted] which categories teachers rated each

TABLE 1

CATEGORIZATION BY TEACHERS ON THE SBRI
OF 'DELINQUENT' SUBJECTS

	Student Behavior Rating Instrument Categories*										
Subject	1	2	3	4	5	6	7	8	9	10	Total
1A	*			*		*	*		*	*	6
2A	*		*	*		*			*		5
3A		*		*		*		*	*		5
4A	*	*	*	*	*	*	*	*	*	*	10
5A		*	*	*		*	*	*	*	*	8
6A	*	*			*	*	*		*		6
7A				*		*	*	*		*	5
8A	*	*	*	*		*				*	6
9A	*	*	*	*	*	*	*		*	*	9
10A	*		*	*	*	*	*		*	*	8
11A	*		*	*	*	*	*		*	*	8
12A	*	*	*	*	*	*	*	*	*	*	10
13A	*					*	*		*	*	5
14A	*	*		*		*		*	*	*	7
15A	*	*	*	*		*			*	*	7
16A	*		*		*	*	*				5
17A					*	*	*	*		*	5
18A	*	*	*	*		*					5
Total	14	10	11	14	8	18	12	7	13	13	120

*Student Behavior Rating Categories

1. Interferes with others physically.
2. Unco-operative in work or play.
3. Interferes with others' possessions.
4. Works in discordance with others in group situations.
5. Vandalizes.
6. Frequency of punishment.
7. Punishment has little or no effect.
8. Lacks confidence.
9. Disobeys or disregards classroom rules.
10. Lacks respect for authority.

subject. It is noteworthy with reference to this table that all 'delinquent' subjects were deemed to require frequent punishment (Category 6 of the SBRI) by teachers and the majority (n = 14) of them interfered physically with others (Category 1 of the SBRI) and worked in discordance with others in group situations (Category 4 of the SBRI). The majority (n = 13) of them also were deemed by teachers to disregard and disobey classroom rules (Category 9 of the SBRI) and to lack respect for authority (Category 10 of the SBRI). The degree to which subjects exhibited these various behaviors is questionable as seven teachers and one principal provided the ratings and each of them may have brought to bear his or her own perspective as to the degree to which each rated subject exhibited each behavior. However, it is of note that all raters defined 'delinquency' in terms of punishment, anti-social behavior and lack of respect for rules and authority.

Twenty-nine subjects were selected by the researcher as displaying the most extreme form of 'non-delinquency' in that teachers had rated them in five or more of the SBRI categories and had rated them high on the Fairmindedness and Trustworthiness components of the SBRI. Of these, parental permission was obtained for twenty-two subjects; however, two subjects became unavailable for research purposes prior to commencement of the study, leaving a total of twenty in the 'non-delinquent' group. This group is identified by the prefixing of the letter B after each subject's identification number throughout this thesis.

Table 2 indicates in which categories of the SBRI teachers

TABLE 2

CATEGORIZATION BY TEACHERS ON THE SBRI**
OF 'NON-DELINQUENT' SUBJECTS

	Student Behavior Rating Instrument Categories***										
Subject	1	2	3	4	5	6	7	8	9	10	Total
1B	*		*	*		*		*	*		6
2B	*	*		*	*	*		*	*	*	8
3B	*	*		*	*	*		*	*	*	8
4B	*		*		*	*		*	*		6
5B	*	*	*	*	*	*		*	*		8
6B	*	*	*	*	*	*		*	*	*	9
7B	*	*	*	*	*	*		*	*	*	9
8B	*	*		*	*	*		*	*		7
9B			*	*		*		*	*	*	6
10B	*				*	*			*	*	5
11B	*		*	*	*	*		*	*	*	8
12B	*		*	*	*	*			*	*	7
13B	*	*	*	*	*	*		*	*	*	9
14B	*	*	*	*	*	*		*	*	*	9
15B	*		*	*	*	*			*	*	7
16B	*	*	*	*	*	*		*	*	*	9
17B	*	*	*	*	*	*		*	*	*	9
18B	*		*					*	*	*	5
19B	*		*	*	*			*	*	*	7
20B	*		*					*	*	*	5
Total	19	10	16	16	16	17		17	20	16	147

**Category 7 did not pertain for the rating of 'non-delinquent' subjects.

***Student Behavior Rating Categories

1. Doesn't interfere with others physically.
2. Helps other students.
3. Doesn't interfere with others' possessions.
4. Co-operative in group situations.
5. Doesn't vandalize.
6. Doesn't have to be punished.
8. Has respect in own ability.
9. Respects and obeys classroom rules.
10. Respects authorities.

had rated the 'non-delinquent' sample. As in the categorization of 'delinquents' (Table 1), teachers perceived 'non-delinquency' in terms of the opposites of 'delinquent' behavior; i.e., lack of punishment necessary, sociable behavior, and respect for rules and authority. However, unlike the majority of 'delinquents,' 'non-delinquents' were perceived as having confidence in their own abilities (Category 8).

The Fairmindedness and Trustworthiness scales (Appendix D) were scored in the following way.

Fairmindedness	
Very fair	Scored as 1
Generally fair	Scored as 2
Unconcerned	Scored as 3
Selfish	Scored as 4
No sense of fairmindedness	Scored as 5
Trustworthiness	
Completely trustworthy	Scored as 1
Reliable	Scored as 2
Conforming	Scored as 3
Unreliable	Scored as 4
Untrustworthy	Scored as 5

Table 3 indicates that the vast majority of 'non-delinquent' ratings were in terms of Very Fair and Completely Trustworthy, whereas 'delinquent' subjects were rated from Unconcerned to No Sense of Fairmindedness, and from Unreliable to Untrustworthy.

Within the total sample there were fifteen females, thirteen of them being judged as 'non-delinquent,' and twenty-three males, only seven of whom were judged 'non-delinquent' (Table 4). Table 4 also indicates that subjects ranged in age from ten years and five months to thirteen years and one month with the average age of the 'delinquent' group being eleven years and five months and the average age of the 'non-delinquent' group being eleven years and four months.

TABLE 3

RATINGS OF 'DELINQUENT' AND 'NON-DELINQUENT' SUBJECTS BY TEACHERS ON THE FAIRMINDEDNESS AND TRUSTWORTHINESS INSTRUMENT

'Delinquents'			'Non-Delinquents'		
Subject	(1)*	(2)*	Subject	(1)*	(2)*
1A	3.5	4.5	1B	1	1
2A	5	4	2B	1	1
3A	3	3	3B	1	1
4A	4	5	4B	2	2
5A	4	5	5B	1	1
6A	4	4	6B	1	1
7A	3	5	7B	1	1
8A	4	4	8B	2	2
9A	3	4	9B	2	1
10A	4	5	10B	2	1
11A	4	4	11B	1	1
12A	3	4	12B	1	1
13A	4	5	13B	2	3
14A	3.5	5	14B	1.5	1
15A	3	4.5	15B	1	1
16A	4	4	16B	1	1
17A	2	4	17B	1	1
18A	4	4	18B	1	1
			19B	1	1
			20B	1	1

*(1) Fairmindedness
(2) Trustworthiness

TABLE 4

SUBJECTS BY AGE, AS OF APRIL 1ST, 1975, GRADE AND SEX

'Delinquents'				'Non-Delinquents'			
Subject	Age Yrs.Mos.	Grade	Sex	Subject	Age Yrs.Mos.	Grade	Sex
1A	12.0	6	Male	1B	12.0	6	Female
2A	11.4	6	Male	2B	11.11	6	Female
3A	13.1	6	Female	3B	12.3	6	Male
4A	10.5	5	Male	4B	11.10	6	Female
5A	11.4	5	Male	5B	11.0	5	Female
6A	10.9	5	Male	6B	11.3	5	Female
7A	11.0	5	Male	7B	11.3	5	Female
8A	10.11	5	Male	8B	11.0	5	Male
9A	11.9	6	Male	9B	10.8	5	Female
10A	11.9	6	Male	10B	10.9	5	Male
11A	13.1	6	Male	11B	11.4	6	Female
12A	10.5	5	Male	12B	12.3	6	Female
13A	12.1	6	Female	13B	10.10	5	Male
14A	12.1	6	Male	14B	10.9	5	Male
15A	11.10	6	Male	15B	12.2	6	Male
16A	11.10	6	Male	16B	11.9	6	Female
17A	11.9	6	Male	17B	11.6	6	Male
18A	11.7	6	Male	18B	12.1	6	Female
				19B	12.3	6	Female
				20B	12.0	6	Female
$\bar{X}$	11.55				11.48		

Fourteen subjects were in Grade Five classes and twenty-four were in Grade Six. Table 5 below shows how the total sample was distributed by school and by category.

TABLE 5

NUMBER OF SUBJECTS BY SCHOOL AND BY CATEGORY

School	'Delinquent'	'Non-Delinquent'	Total
1	6	8	14
2	6	7	13
3	6	5	11
Total	18	20	38

2. INSTRUMENTATION

In order to research the problems posed, the following instruments were used:

1. The Student Behavior Rating Instrument (SBRI) (Appendix C). This was used by teachers and principals to select 'delinquent' and 'non-delinquent' subjects. Categories of behavior were supplied by the researcher and raters selected the name or names of students who fitted a particular category.

2. The Fairmindedness and Trustworthiness Instrument (Appendix D). Teachers and principals rated, on a five point scale, the degree of fairmindedness and trustworthiness displayed by each student selected initially on the SBRI.

3. The Kohlberg Moral Judgment Instrument (Appendix E). This

instrument consists of eight moral dilemmas and appropriate questions. Subjects were interviewed separately and responses taped. Responses were subsequently transcribed and scored according to Kohlberg's scoring manual, so that a modal stage of moral reasoning could be ascertained for each subject.

4. Flavell's Role-Taking Instrument (Appendix F). This instrument is designed to ascertain whether or not the subject can cognitively role-take. Subjects first tell a story based on seven pictures showing a boy being chased up a tree by a dog. The pictures indicating that the dog was the motive for the boy's tree climbing are then removed and the subject asked to retell the four picture story from the point of view of another observer. Responses were scored according to the degree to which the subject could shift his frame of reference from the initial seven picture story to the four picture story.

5. The Canadian Lorge-Thorndike Intelligence Tests. The purpose of this instrument was to gain verbal and non-verbal intelligence quotients. As it was a group test and as scores were already available for Grade Six subjects, it was deemed the most feasible instrument to use.

Each of these instruments is described in detail below. This is followed by a discussion on the reliability and validity of each instrument.

The Student Behavior Rating Instrument

This instrument (Appendix C) was used to select the 'delinquent' and 'non-delinquent' samples. Teachers and principals were

requested to identify students in their class or classes who could be categorized according to the items presented. Names of students who displayed 'delinquent' behavior were entered in the left hand column, and names of 'non-delinquents' in the right hand column. The criterion for entry was that the subject consistently displayed one or more of the behaviors listed and stood out from the rest of the student population in the display of the behavior. Teachers then ranked each student whose name had been entered, on the Fairmindedness and Trustworthiness Instrument (Appendix D).

The items on the SBRI were developed from the theoretical base that delinquent acts, at the age group being studied, were a sign of pre-conventional moral reasoning (Kohlberg, 1958; Kohlberg and Turiel, 1971, p. 460). According to Gough (Gough and Peterson, 1952), there are four clusters of pre-dispositional factors in delinquency. These are: (1) role taking deficiencies; (2) resentment towards family; (3) feelings of despondency and alienation, lack of confidence in self and others; (4) poor scholastic achievement and rebelliousness. For the purposes of this study the factors most capable of being assessed were (1), (3) and (4). Coleman (1964) also suggests that the great majority of delinquents are anti-social. He lists the following characteristics: inability to understand and accept ethical values; egocentricity; impulsiveness and irresponsibility; low frustration tolerance and poor judgment; hedonism combined with unrealistic goals; lack of anxiety and guilt; inability to profit from mistakes; and inability to develop meaningful social relations. Items about which a teacher or principal would have information were included in

the SBRI. For example, teachers might not have had reliable evidence regarding a student's home life, but they were likely to know about a student's specific classroom behaviors.

Validity

The SBRI was based on both theoretical considerations and empirical evidence. It was therefore assumed to have content validity in that the items included were representative of the universe of content of classroom 'delinquency' or 'non-delinquency.' Teachers who were asked to adjudicate initial forms of the SBRI did not include any other behaviors as being apparent of 'delinquent' or 'non-delinquent' behavior although they were asked to do so. The same held true for the teachers in the major study. As Kerlinger (1973, p. 459) says, "content validation, then, is basically judgmental," and the SBRI was judged by teachers to be valid for the purposes of defining 'delinquent' and 'non-delinquent' behavior.

The criterion-related validity of the SBRI was investigated in that the major study attempted to discover whether or not moral judgment scores were predicted by selections made by teachers on the SBRI. Results of this validity check are reported in Chapter IV.

Reliability

The reliability of behavior rating instruments is always a problem. Rater bias, ambiguity of meanings, generosity error, the probable lack of equal distance between intervals on a scale and the halo effect (Thorndike and Hagan, 1969, pp. 426-432) all have to be taken into account and controlled if possible. In order to attempt

to overcome some of the shortcomings of rating instruments, behaviors were defined as specifically as possible and a substantial number of descriptions were provided. Secondly, the raters had a great deal of opportunity to observe the person being rated in situations in which he would be likely to demonstrate the characteristics on which the ratings were desired. Also the raters, as teachers, were expected to be impartial, although this point and the one above did not guarantee either. Thirdly, the instrument was designed so that it could be completed in a relatively short time. The rater did not have to rate each individual student, instead the rater provided the name of a subject, or names if there was more than one subject, who fitted a given item.

Reliability of rating was obtained in some cases in two schools where a given teacher interacted with more than one class, or the principal taught a class or classes. However, in one school reliability was not obtained as each teacher was responsible for one class alone and the principal was not willing to rate students on the grounds that he did not know the students well enough. Therefore, in the majority of instances, teacher perceptions were taken 'on face value,' as it was impossible to obtain inter-rater reliability. Table 6 indicates the reliabilities obtained on those subjects where ratings by more than one teacher and/or principal were possible. For example, in the case of subject 1h, both raters judged that he fit categories 1, 4, 9 and 10 and both agreed that he did not fit categories 5 and 8. There was disagreement over the scores on the fair-mindedness and trustworthiness scales, giving an overall percentage

TABLE 6

PERCENTAGE AGREEMENT ON TEACHER RATING OF THE SBRI

Subject	Raters	Student Behavior Rating Instrument Categories										Fairminded-ness	Trustworthi-ness	Percentage Agreement
		1	2	3	4	5	6	7	8	9	10			
1A	1	*			*		*			*	*	3.5	4.5	58%
	2	*	*	*	*					*	*	4	4	
2A	3	*		*	*		*			*	*	5	4	50%
	2						*	*	*		*	5	4	
3A	3		*		*		*		*	*		3	3	58%
	3	*	*		*		*			*		5	5	
16A	4	*		*		*	*	*				4	4	75%
	5	*				*	*					4	4.5	
17A	4					*	*	*	*		*	2	4	66%
	5							*			*	4	4	
1B	1	*		*	*		*			*	*	1	1	63%
	2	*			*					*		1	2	
2B	3	*	*		*	*	*			*	*	1	1	72%
	2	*	*		*					*	*	1	1	
3B	3	*	*		*	*	*			*	*	1	1	63%
	2	*		*	*	*				*	*	1	2	

TABLE 6. (Continued)

Subject	Raters	Student Behavior Rating Instrument Categories										Fairminded-ness	Trustworthi-ness	Percentage Agreement
		1	2	3	4	5	6	7	8	9	10			
4B	3	*		*		*	*			*	*	2	2	63%
	2	*		*	*					*	*	1	2	
16B	4	*	*	*	*	*	*		*	*	*	1	1	36%
	5					*				*		1	1	
17B	6	*	*	*	*	*	*		*	*	*	1	1	54%
	7				*				*	*	*	1	1	
18B	6	*		*					*	*	*	1	1	54%
	7						*		*			1	1	
19B	6	*		*	*	*			*	*	*	1	1	36%
	8	*	*				*			*		1	1	
20B	7	*		*					*	*	*	1	1	54%
	8			*	*							1	1	

agreement of 58%. In total, reliability ratings could only be obtained for five 'delinquents' (27.7%) and for nine 'non-delinquents' (45%).

The Fairmindedness and Trustworthiness Instrument

The two items included on this test were originally used by Kohlberg (1958). The items pertain to two aspects of morality as described by Kohlberg and they were used in this study because the correlation coefficient between ratings on these items and moral judgment scores was relatively high. Kohlberg (1958) reports a product moment correlation of .45 for moral judgment and fairmindedness, and a correlation of .47 for moral judgment and trustworthiness.

Ratings on these two items were obtained for each of the students who were initially selected by teachers on the SBRI.

Kohlberg's Moral Judgment Instrument

The purpose of this instrument is to determine, from responses given to moral dilemmas, the stage(s) of reasoning displayed by a person. This instrument (Appendix E) consists of two forms (Form A and Form B) which are considered by Kohlberg to be equivalent forms for test-retest use. However, as few test-retest coefficients have been reported (Kurtines and Grief, 1974, p. 457), it was deemed advisable to use Form A of the instrument as both a pre and follow-up (postpost) test instrument. Form B was used as a posttest only. The dilemmas involved (see Appendix E) included the major issues (Appendix B) considered by Kohlberg to be aspects of moral judgment.

Form A and Form B of this instrument involve four major

Instruments Used in This Research		Instruments Now Suggested by Kohlberg	
Form A			
Dilemma	**Issues**	**Dilemma**	**Issues**
Heinz	Life. Punishment.	Heinz	Life. Punishment.
Joe and his father	Father-son relationship. Contract-Promise.	Joe and his father	Father-son relationship. Contract-Promise.
Mercy killing	Life. Punishment.	Karl and Bob	Property—Trust. Conscience.
Judy and Louise	Mother-daughter. Contract/Sister-sister.		
Form B			
Captain in Korea	Life. Governance.	Mercy killing	Life. Punishment.
Troublemaker or sick man	Life.	Judy and Louise	Mother-daughter. Contract/Sister-sister.
Karl and Bob	Property-trust. Conscience.	Valjean	Citizen role. Punishment.
Valjean	Citizen role. Punishment.		

FIGURE 5

A COMPARISON BETWEEN THE MORAL JUDGMENT INSTRUMENTS USED IN THIS RESEARCH AND THOSE NOW SUGGESTED BY KOHLBERG

dilemmas which basically involve a conflict between authoritative decree or moral law and concern for the needs and welfare of individuals. Each dilemma focuses on certain issues such as punishment, governance and the value of life (Appendix B). Kohlberg (Tracy and Cross, 1973, p. 239) has indicated that the "level of moral judgment can be reliably scored from a series of four dilemmas."

The design of this study was based on materials available to the researcher at the time. Since then Kohlberg and his associates have revised the instrument and now use three dilemmas for the pretest and three for the posttest. A comparison (Figure 5) reveals that there was probably little difference in terms of issues examined between the instruments used by this researcher and those now suggested by Kohlberg.

Administration

The instruments were administered on three separate occasions. Form A (pretest) was given first, Form B (posttest) approximately six weeks later and Form A (follow-up test) again one month after the posttest. Each subject was interviewed separately and all sessions were tape recorded. Each subject was given a copy of the dilemma and the dilemma was read to the subject by the researcher. Then the questions pertaining to each dilemma (Appendix E) were asked. The researcher only deviated from the set questions if, in his estimation, the subject had mis-comprehended the dilemma, or if a subject's response needed clarification. Each subject was presented the dilemmas in the same sequence in order to facilitate ease of

transcription. Each interview session lasted for approximately thirty minutes, so that on completion of the pretest, posttest and follow-up test each subject had been interviewed for approximately ninety minutes in total.

The Interview

The function of the interview was to elicit, whenever possible, stage scorable responses to the questions posed to each subject. Therefore, the interviewer had to be cognizant of the structure of each stage and the probable answers given to each question according to the scoring manual, in order that the highest stage thinking of which the subject was capable, might be reflected in the answers. The function of the interview was not to obtain 'what' responses, but 'why' responses. For example, in reply to the question, "Why should a promise be kept?" Subject 13A on the pretest replied,

> Um . . . well don't make 'em if you can't keep 'em. Well . . . like if you promise somebody something you should keep the promise.

This does not answer the question as to why a promise should be kept. When asked "Why?" the subject said:

> Well . . . If somebody give me something and I promised somebody I would give them something back . . . then I'd keep my promise. Well, because they might give me something that I liked and kind of giving them something . . . and giving me what they give me.

Promises should be kept, it appears, because of instrumental exchange reasoning—you give me something and I'll give you something back. The interviewer must therefore probe to find out, wherever possible, the structure of the reasoning used. However, one can

attempt to probe too deeply and questioning ceased if a subject was unable to answer or continually repeated a prior response.

The interview was given in an atmosphere which was a relaxed as possible. Subjects were informed that this was not a test in which right or wrong answers were given. The Kohlberg protocols were introduced with the statement, "I'm interested in finding out what students of your age think about some problems. I'm interested in the reasons you give for your answers and there are no right or wrong answers. I'd like you to read this story and then I'm going to ask you some questions." At the end of the interview each subject was thanked for his co-operation and asked what he or she felt about the interview. Most subjects replied that the questions were "not too difficult" and some responded that they had been very easy. The majority of subjects felt that the interview had been quite enjoyable and all were willing to participate. The interviewer made sure that the interview time was suitable to the teacher and to the subject, so that the subject did not miss an activity which he or she really enjoyed.

Validity

As no universally accepted definition of morality exists and as the definition of morality changes according to which state of moral development one is discussing, validity becomes a philosophical problem. Two major concerns are of import in this section. Firstly, does the Kohlberg instrument assess what can be regarded as moral reasoning? (i.e., content validity). Secondly, are the stages of moral reasoning as posited by Kohlberg valid? In this latter regard the

validation of Stages 1 to 4 only will be studied as it is unlikely that subjects at Stages 5 or 6 will be found. Also a defense of the statement that Stage 6 morality is the only true morality (Kohlberg, 1971b, p. 68) was not pertinent to, and was beyond the scope of, this study.

The Kohlberg instrument is designed to elicit responses concerning a subject's conceptions of right and wrong with regard to dilemmas which pose conflicts between authoritative decree or moral law and the welfare of individuals. These dilemmas contain issues (Appendix B) which according to many philosophers [Frankena, 1963; Wilson, 1969; Plato (Rouse, 1963); and Hare, 1952] lie within the moral domain. Kohlberg argues (1971b, pp. 57-62), as do Kant and Hare, that moral judgments are based on principles—universal modes of choosing; general guides of choice which we want all people to adopt in all situations. These principles fall into categories as outlined by principled-intuitionist philosophers. For example, Kohlberg (1971b) includes, as moral components, Sidgewick's prudence (welfare consequences to the self), benevolence (welfare consequences to others), and justice (distributive equity and commutative reciprocity). The one principle Kohlberg adds is respect for authority. All these principles have two characteristics (Kohlberg, 1971b, p. 59).

> First, they are ultimate terms, they refer to states of affairs which seem right or good in themselves and are in that sense 'principles.' Second, they refer to states of affairs that are involved in all moral situations and are potentially relevant to all people.

Kohlberg had philosophical support (Rawls, 1971; Peters, 1966) on

this latter point that moral rules "involve considerations of people's happiness or welfare and consequences of equal treatment between people (Kohlberg, 1971b, p. 59)." Kohlberg states (1958, pp. 5-12) that moral judgments:

> (a) Are oriented to or preceded by value judgments.
> (b) Take priority over value judgments.
> (c) Are associated with judgments of the self as being good or bad.
> (d) Based on reasons which are not limited to the consequences of a particular act in a particular situation.
> (e) Have generality, universality, consistency and inclusiveness.
> (f) Are objective to the makers—are agreed to independently of differences of personality and interest.

Therefore on the basis (1) that some schools of philosophy have identified the issues that the Kohlberg instrument assesses, as being moral issues; (2) that the principles (i.e., justice and benevolence) as formulated by some philosophers, are found in some form in each stage of reasoning; (3) that morality concerns people's welfare and principles of justice, the Kohlberg instrument can be said to have validity in that it assesses moral reasoning.

Construct Validity

There is substantial support for the existence of stages of moral development. Many researchers have identified and labelled such stages (Figure 6) and as Graham (1972, p. 182) states: "the agreement is impressive." Support for the postulates that (a) there are six stages of development and (b) these stages form an invariant sequence, are presented by Kohlberg and his associates.

1. The stages form a quasi-simplex in that adjacent stages to the subjects' dominant stage correlate more highly with each other

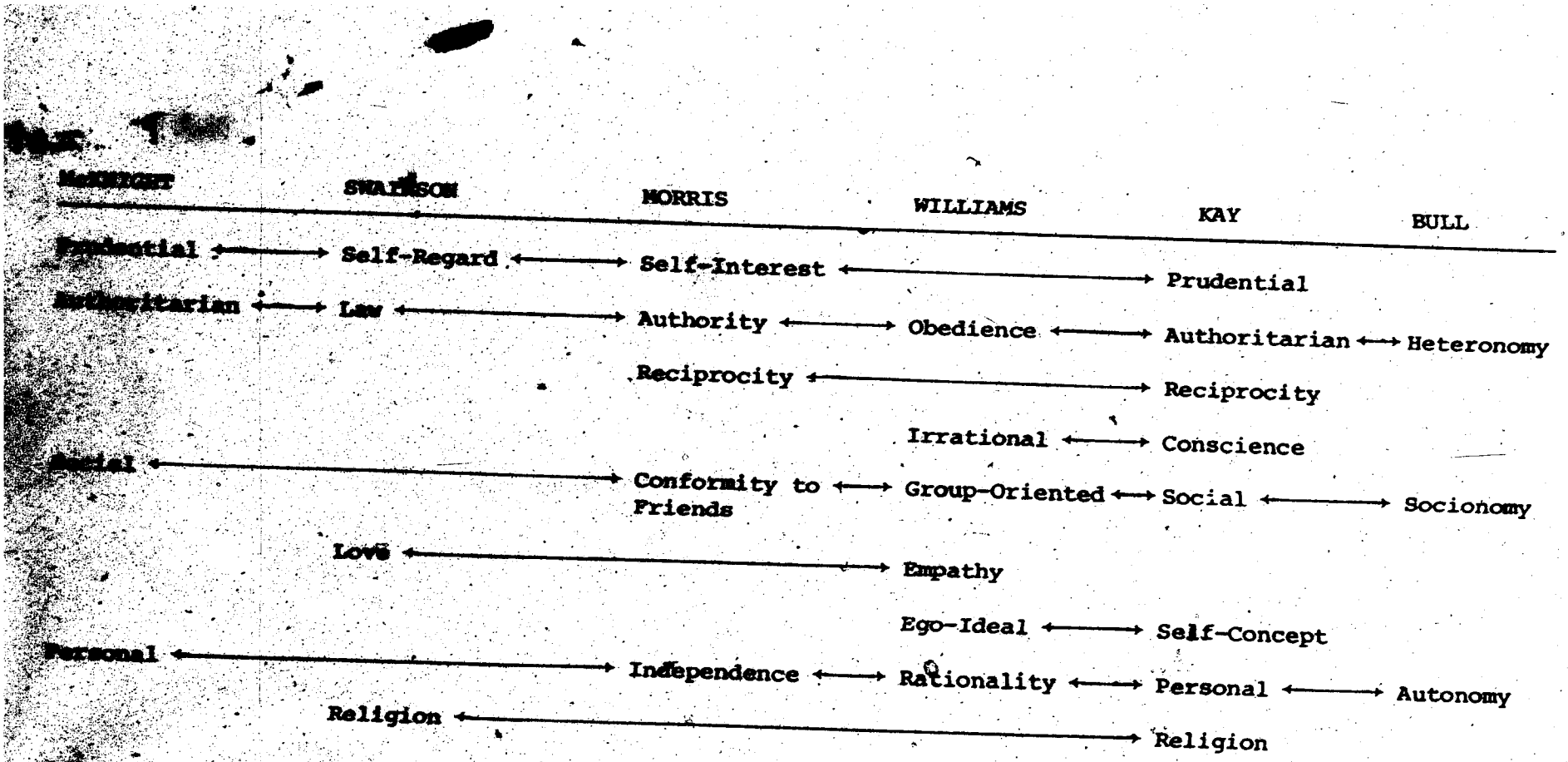


FIGURE 6

THE PATTERN OF MORAL SANCTIONS
(Kay, 1970).

than do distant stages (Kohlberg, 1958).

2. Cross-cultural research (Kohlberg, 1971b) indicates that people progress through the six stages regardless of culture. However, Stage 5 and 6 thinkers were not found in some cultures.

3. Longitudinal studies (Rest et al, 1969) confirm that by late adolescence or early adulthood subjects tested had reached Stage 4, and there is some evidence (Kohlberg, 1971b, p. 36) that the stages are invariate.

4. Ranking of scores (percentage of mature responses) in a group of ten year old lower class isolates and a group of sixteen year old middle class integrates was not, according to Kendall's coefficient of concordance, due to chance (Kohlberg, 1958).

5. Stages differentiate between delinquents and non-delinquents, integrates and isolates, and between social classes; factors which previous research had deemed important in moral development.

6. Subjects can only be induced to move to the +1 stage, not the stage which is +2 to their modal level (Turiel, 1966).

7. Subjects are capable of translating a moral principle in terms of their modal or +1 stage, but not the +2 stage (Rest, 1968).

8. In some situations the stage of reasoning positively correlates with the external criterion of moral conduct (Haan et al, 1968; Krebs and Kohlberg, 1973; Hudgins and Prentice, 1973; Fodor, 1972).

Despite the fragmentary evidence for construct validity and the evidence presented by Sullivan and Grief (1974) to support the

statement that "the value of the model remains to be demonstrated," there appears to be some support for the validity of the Kohlberg model and Moral Judgment Instrument.

Reliability

Despite the relative frequency of use of the Kohlberg instrument few references are made to which dilemmas were actually used and there is a dearth of information on test-retest reliability. Lieberman and Selman (1974, p. 5) report only a moderate correlation of .62 between their control group's pre and posttest scores. However, this correlation was based on a test of intentionality and not on the Kohlberg Instrument. Only two test-retest correlations on Kohlberg's test could be found. Blatt (Blatt and Kohlberg, 1973) reports a correlation of .84 (n = 13) and Hickey is reported by Kohlberg (1975) to have obtained 94% agreement between pre and posttest measures for control group scores (n = 20). Also internal reliability is a problem as correlations between the various dilemmas range from .31 to .75 (Kohlberg, 1969, p. 388). However, moral judgments are complex and the Kohlberg instrument does attempt to tap subjects' responses to a variety of moral issues. As Hague (1974, p. 18) states: "And until something better comes along we will continue to use the Kohlberg Moral Judgment Scale . . ." The instrument, although not a highly standardized or precise measure, is a useful tool "in getting to know how a person views questions that most of us would call moral (Porter and Taylor, 1972, p. 6)."

Interjudge reliability for scoring the Kohlberg instrument has been [illegible] intrajudge agreement has been

relatively high. Lieberman and Selman (1974), report correlations of .84, .90 and .81 for pretest, posttest and post-posttest interjudge reliability respectively; Krebs (Krebs and Kohlberg, 1973) reports a figure of .75; Turiel (1966) reports .78 agreement between two judges, one using the global scoring method, the other the issues scoring method; Blatt's study (Blatt and Kohlberg, 1973) produced a correlation of .89, and Hickey is reported by Kohlberg (1975) to have obtained 70% agreement between two judges on overall scores and 94% agreement on dominant stage scores.

Interjudge reliability in this study was ascertained from two judges. Each judge scored six subjects' responses to each of the pretest (Form A), posttest (Form B) and follow-up test (Form A). One subject's complete protocol was randomly selected from each of the following groups at each testing time.

1. 'Delinquent' in the treatment group.
2. 'Non-delinquent' in the treatment group.
3. 'Delinquent' in the placebo group.
4. 'Non-delinquent' in the placebo group.
5. 'Delinquent' in the control group.
6. 'Non-delinquent' in the control group.

The judges consisted of two experts, both of whom were very familiar with the Kohlberg theory. One judge had, prior to this study, scored protocols for research purposes, and the other had worked with the Kohlberg materials and had received scoring training at the Center for Moral Education at Harvard University. The judges' scores were compared to those of the researcher who had also received training at Harvard.

As Table 7 shows, the percent of interjudge scoring agreement was relatively high and figures are in keeping with reliability

TABLE 7

JUDGES' SCORING ON THE KOHLBERG MORAL JUDGMENT INSTRUMENT

Test	Subject	Judge 1	Judge 2	Judge 3
Pre	2A	2(1)	2(3)	2
	9A	2	3(2)	2
	18A	2	3	2
	7B	2(3)	2(3)	2
	19B	2-3	2(3)	2
	20B	2(3)	2(3)	2
Post	1A	2(3)	3(2)	2(3)
	7A	1	1	1
	10A	2(1)	2(1)	2(1)
	2B	3(2)	3(2)	2(3)
	4B	2(3)	2(3)	2(3)
	17B	2	2(3)	2
Follow-up	5A	2(1)	2(1)	2(1)
	7A	1(2)	1(2)	1(2)
	13A	2	2(3)	2(3)
	7B	2(3)	2(3)	2(3)
	9B	2	2	2
	16B	2-3	2(3)	2(3)

Percentage agreements on modal stage scores.

Between Judge 1 and 2 = 83.33%
Between Judge 2 and 3 = 77.77%
Between Judge 1 and 3 = 94.44%.

Product-moment correlations.

Between Judge 1 and 2 = .928
Between Judge 2 and 3 = .887
Between Judge 1 and 3 = .964

scores reported in other studies which used versions of the Kohlberg Moral Judgment Instrument. The degree of fit between judges' scores is somewhat of a problem when this instrument is used. For example, if a scorer arrived at a total of seven Stage 2 responses, and three Stage 3 responses for a particular subject's entire protocol, this subject's overall score would be 2(3), as thirty per cent of the subject's responses are at Stage 3, and seventy per cent at Stage 2. If, however, another scorer only scored two responses at Stage 3 and the same seven at Stage 2, the two Stage 3 responses would only account for twenty-two per cent of the subject's protocol and would therefore not be counted according to the Kohlberg scoring procedure. As both judges, however, perceived the character of the protocol as being Stage 2, interjudge agreement was initially based on modal stage scores only. Results of this reliability check are displayed in Table 7.

A more thorough reliability check was carried out on the post-test and follow-up test scores. This involved comparing total scores arrived at by each judge for each subject on the post and follow-up tests. Pretest scores could not be compared this way as one judge did not score for minor stages; this judge gave an overall modal score only for each subject. Table 8 presents results of this analysis.

TABLE 8

PERCENTAGE AGREEMENTS BETWEEN JUDGES ON OVERALL MORAL REASONING SCORES ON THE POST AND FOLLOW-UP TESTS

Judges 1 and 2	Judges 2 and 3	Judges 1 and 3
66.66%	75%	75%

The percentage agreements are only moderate, but as was pointed out above disagreement between judges on but a few separate responses in one particular protocol can change the overall stage score. The nature of the scoring of the instrument, resting as it does on open-ended responses to various question, does not always allow for 'scientifically objective' scoring. Yet, as can be seen in Table 7 the nature of disagreement between judges on overall scores is very slight. In no case is there more than one-third of a stage disagreement between judges' scores. In light of the percentage agreements reached in other studies where agreement is based on judges' scores which are within one-third of a stage of each other, the agreement reached between judges in this study is regarded as satisfactory.

Scoring

Since the conception of the six stage model in 1958, Kohlberg and his associates have refined the scoring procedures. As of June 1975 (Kohlberg, 1975) all the materials on the introduction to scoring have been rewritten; only the actual scoring manual has not yet been revised. As was pointed out in Chapter II, the original thirty aspects of moral judgment had been collapsed to ten issues with eleven moral concerns, of which seven (self-interest, altruism, duty, conscience, rules, role-taking and justice) have been identified as central to the way in which a person appears to view an issue. However, as the 1973 scoring guide was the most recent available reference, this was used as the criterion for scoring, with clarification sought from the 1975 materials.

The goal of scoring was to find evidence of the structure of

the subject's reasoning, with the manual acting as the structural criterion or 'independent variable.' A response was only scored if it corresponded to a point in the manual. This guarded against scoring what appeared to be cognitively complex responses at a higher stage than they actually were, or relying on content (what behavior the subject thought was right) as the sole indicator of stage of reasoning. Whereas one can predict, to an extent, choice from the stage of reasoning, one cannot predict stage from choice; e.g., ninety per cent of Stage 5 subjects think it would be right to steal the drug in the Heinz dilemma, but then so do ninety per cent of Stage 2 thinkers. Therefore, a subject's response was only scored when it 'fitted' a response in the manual. For example, Subject 2A, on the pretest, replies to the question "Should Heinz steal the drug even if he didn't love his wife?"

> Well, no, because what would he steal the drug for if he didn't love his wife?

This fits criterion concept B5 on page thirteen of the Form A scoring manual which reads, "The husband has no obligation or reason to risk stealing the drug if he does not love his wife." This sometimes meant that a few protocols had very sparse scores. Overall, however, scores were obtained for all subjects on each of the pre, post and follow-up tests.

The standard scoring procedure was used as this is the most widely accepted method and as the scoring manual is designed to facilitate this method.

Procedure

1. The scorer was familiar with the stages and had read through the scoring manual to orient himself to the "structure" for each issue.

2. The scorer read through the subject's responses to the entire dilemma and particular issue being scored.

3. Having ascertained the stage at which the subject appeared to be reasoning, the scoring manual was used to ascertain the stage responses given for each issue. Usually, this meant that the scorer started looking at the manual for Stage 1 criteria. If two Stage 1 responses were found these were entered in the scoring sheet. If only one could be found, this was entered and Stage 2 criteria were then examined. This process through the stages was continued until all responses had been scored or had been deemed unscorable. The number of concepts that can be scored at any one stage is limited to two because:

> There are individual differences in the variety with which a subject can express his or her underlying moral structure. We do not, for example, want to consider a subject who expresses six different ideas, all at Stage 3, to be any more 'solidly Stage 3' then another subject whose repertoire is at the same moral stage but is more limited in its variety. The standard of two concepts at a stage is a compromise which is large enough to make it likely that the subject really possesses the structure of that stage without requiring too great a demonstration (Kohlberg, Part III, 1975, p. 23).

Therefore, a given criterion concept is only used once per subject. For example, Subject 16A, on the pretest, replied to the question, "Should Joe give his father the money?"

> Well . . . no, because Joe has earned hard earned money and he's the one who worked for it so it belongs to him.

In response to the question "Does his father have the right to ask Joe for the money?" the subject replied:

> Well no . . . probably . . . well he has the right . . . but if I was in Joe's position I wouldn't give it up. I'd earned it, so I wouldn't give it up.

Both these responses fit the criterion B5 on page 69 of the Form A scoring manual which reads "Joe should refuse to give his father the money because he earned it, it's his money." It was, therefore, only scored once.

On completion of the scoring sheet for one issue, the next issue was scored until the entire test had been completed. The scoring proved to be very time consuming and often difficult. Two problems existed; one, because of the dilemmas used in this research, and two, because of the scoring manual. The posttest used contained the Captain in Korea (Instrument V, Appendix E) and the Troublemaker or Sickman (Instrument VI, Appendix E) dilemmas. The 1973 scoring manual does not contain these dilemmas so the previous manual had to be used and this does not contain examples of actual responses. Therefore, the scoring of these latter two mentioned dilemmas had to be carried out on the basis of knowledge of the stages and on criteria in the old manual which may be out of date in light of the new knowledge gained since its publication. Secondly, although the scoring manual contains criteria for the conscience issue in the Heinz and Bob dilemma (Instrument VII, Appendix E), it was noted by the researcher at the workshop held at Harvard in June 1975, that the examples given were not considered to be particularly valid. So the conscience issue was not scored.

4. Having obtained scores for each of the issues an overall score is computed. All responses at a particular stage are totalled. If all responses are at one stage, the score is at that stage; e.g., Subject 8A on the pretest (Appendix K) who only has Stage 2 responses. If there is a mixed stage score then percentage weightings are used to determine major and minor stages. For example, Subject 1A on the pretest (Appendix K) has two Stage 1 responses, seven at Stage 2 and four at Stage 3. As the two Stage 1 responses only account for 15.4% of the total number of responses (2/13), they are rejected and Stage 2 becomes the dominant stage with Stage 3 (4/13 or 30.8%) becoming the minor stage.

5. Finally a moral maturity score (MMS) can be computed. This takes into account each stage scorable response and the percentage of those responses at each stage. This percentage at each stage is then multiplied by the stage number itself; e.g., Subject 1A on the posttest (Appendix K) has eleven Stage 2 responses (73.33%) and four Stage 3 responses (26.66%). Multiplying 73.33% by two and 26.66% by three realizes a moral maturity score of 226.

Flavell's Role-Taking Instrument

According to both theory and empirical research (Piaget, 1932; Kohlberg, 1958; Stuart, 1967; and Selman, 1971) role-taking ability is positively related to both cognitive and moral development. Selman (1971) posited that reciprocal role taking was a necessary condition for the development of conventional moral thought. The relationship should be as follows:

Moral Stage		Role Taking Ability
Pre-conventional level	Stage 1	Egocentric (non-reciprocal)
	Stage 2	Possibility of reciprocity
Conventional level	Stage 3	Reciprocity necessary
	Stage 4	

(Selman, 1971, adapted).

Administration

This instrument (Appendix F) was originally devised by Flavell (1968).

1. Each subject was shown the ordered series of seven pictures showing the story of a boy being chased by a dog, running to and climbing an apple tree with the dog nipping at his heels, then eating an apple as the dog trots away.

2. Each subject told an appropriate story about the pictures.

3. Three pictures were then removed from the set leaving those showing the boy walking, running to the apple tree, climbing it and eating an apple. Although the dog remains in the last but one picture the 'fear of the dog' motive is removed.

4. Each subject was then asked to tell a story as if his teacher were looking at this four picture set. The subject was then asked, "Why would Mr./Mrs. A think the boy climbed the tree?"

Each subject was administered this test during the pretest session and each subject was tape recorded.

A categorical system of scoring was used to determine whether or not cognitive role taking ability had been demonstrated.

Category 1 (egocentric). The subject could not perform any transformation of the original story. In both stories the angry dog

remained as the motivational force behind the boy's tree climbing.

Category 2. The subject could either:

(a) Tell a perceptually correct four picture story but reverted to the 'fear of dog' motive on questioning; or

(b) Use the 'fear of the dog' motive in the story but on questioning could indicate one or more other motives for the boy's tree climbing.

Category 3 (reciprocal). The subject could tell a four picture story that the observer might tell by suppressing the original seven picture motivational scheme. On questioning, the subject could provide other than the 'fear of the dog' motive, or use this motive as one of many possible alternatives.

Validity

According to Piaget, the ability to decenter—to 'see' something from the viewpoint of another person—is a necessary condition for concrete and formal operational thought. According to Selman (1971) and Kohlberg (1958), this ability is also necessary for moral development. As was pointed out in Chapter II, role-taking ability can take a number of forms, one of which is cognitive role-taking ability. In this test the subject has to disassociate from his seven picture viewpoint in order to tell the four picture story from an external observer's viewpoint. The task "thus creates a gap between two roles or perspectives which the subject must bridge (Flavell, 1968, p. 76)." On this basis, the Flavell instrument would seem to have content validity, in that it assesses the ability to see something from other than one's own perspective.

Reliability

Interjudge reliability was ascertained by three judges, one of whom was the researcher, another a recent PhD graduate of the University of Alberta and the third was a graduate student in the Department of Elementary Education at the University of Alberta. Table 9 indicates the percentage agreement between the three judges.

TABLE 9

PERCENTAGE INTERJUDGE AGREEMENT ON PRETEST ROLE-TAKING SCORES

Judges 1 and 2	Judges 2 and 3	Judges 1 and 3
94.73%	92.11%	97.37%

Test-retest reliability was determined by readministering the instrument during the follow-up test period. Table 10 indicates the pre and follow-up test role taking scores for each subject. The product moment correlation between scores on these two tests was .68.

The Intelligence Test

All subjects in Grade Six, as part of the Edmonton Public School Board testing program, had been administered the Canadian Lorge-Thorndike Intelligence Tests (Form D) just prior to the commencement of this research. Verbal and non-verbal scores were therefore collected from the subject's cumulative record. Grade Five subjects were administered Form C of this test in a group situation by the researcher just after commencement of the research. This particular test was chosen because some results were already available, and

TABLE 10

TEST-RETEST ROLE-TAKING SCORES FOR EACH SUBJECT

Subject	Test	Retest	Subject	Test	Retest
1A	2	3	1B	3	3
2A	3	3	2B	2	2
3A	3	3	3B	3	3
4A	3	3	4B	3	3
5A	3	3	5B	3	3
6A	1	1	6B	3	3
7A	3	3	7B	3	3
8A	3	3	8B	3	3
9A	3	3	9B	3	3
10A	1	3	10B	3	3
11A	3	3	11B	3	3
12A	2	2	12B	3	3
13A	3	3	13B	3	3
14A	3	3	14B	3	3
15A	3	3	15B	3	3
16A	3	3	16B	3	3
17A	3	3	17B	3	3
18A	3	3	18B	3	3
			19B	3	3
			20B	2	2

in terms of time, appropriate. Subjects had already spent at least half an hour in individual testing sessions and it was felt undesirable to take up any more subject or researcher time in this endeavour. As the test is standardized and is widely used, considerations of validity and reliability are not discussed here. Details can be obtained from the manual (Lorge, Thorndike, Hagan and Wright, 1967).

Summary

In total five different instruments were used in this study, one of which—the SBRI—was researcher designed. Figure 7 summarizes the purpose of the instrument, its validity and reliability and the type of data obtained.

3. TREATMENTS

Subjects were randomly assigned to one of the following three experimental groups.

1. Treatment. 2. Placebo. 3. Control.

Table 11 indicates in which experimental group and in which school each subject was placed. All treatment and placebo sessions were researcher conducted.

The Treatment Group

Thirteen subjects were involved in six, one-half hour sessions held once per week in each of the three schools, over a six week period. Five of these sessions comprised the viewing of one of the First Things (Guidance Associates, 1972) filmstrips (Appendix G), followed by a discussion, the purpose of which was to stimulate moral reasoning. Each subject was encouraged to arrive at the best reason for saying that the character in the filmstrip dilemma should pursue

Instrument	Purpose	Administration	Validity	Reliability	Data Gained
Student Behavior Rating	**Selection of 'delinquent' and 'non-delinquent' subjects.**	Individual Teacher	Content	Some inter-judge.	Names of students who could be classified in one or more categories.
Fairmindedness and Trustworthiness Scale	**Selection of 'delinquent' and 'non-delinquent' subjects.**	Individual Teacher	Content	Some inter-judge.	Quantitative score.
Moral Judgment	**To determine stage of moral reasoning.**	Individual Student	Content Construct.	Inter-judge. Test/Retest.	Qualitative responses categorized into quantitative stage scores.
Flavell's Role-Taking	**To determine cognitive role-taking ability.**	Individual Student	Content	Inter-judge Test/Retest.	Qualitative responses categorized according to reciprocal or non-reciprocal levels.
Canadian Lorge-Thorndike Intelligence	**To determine I.Q.**	Group			Quantitative score.

FIGURE 7

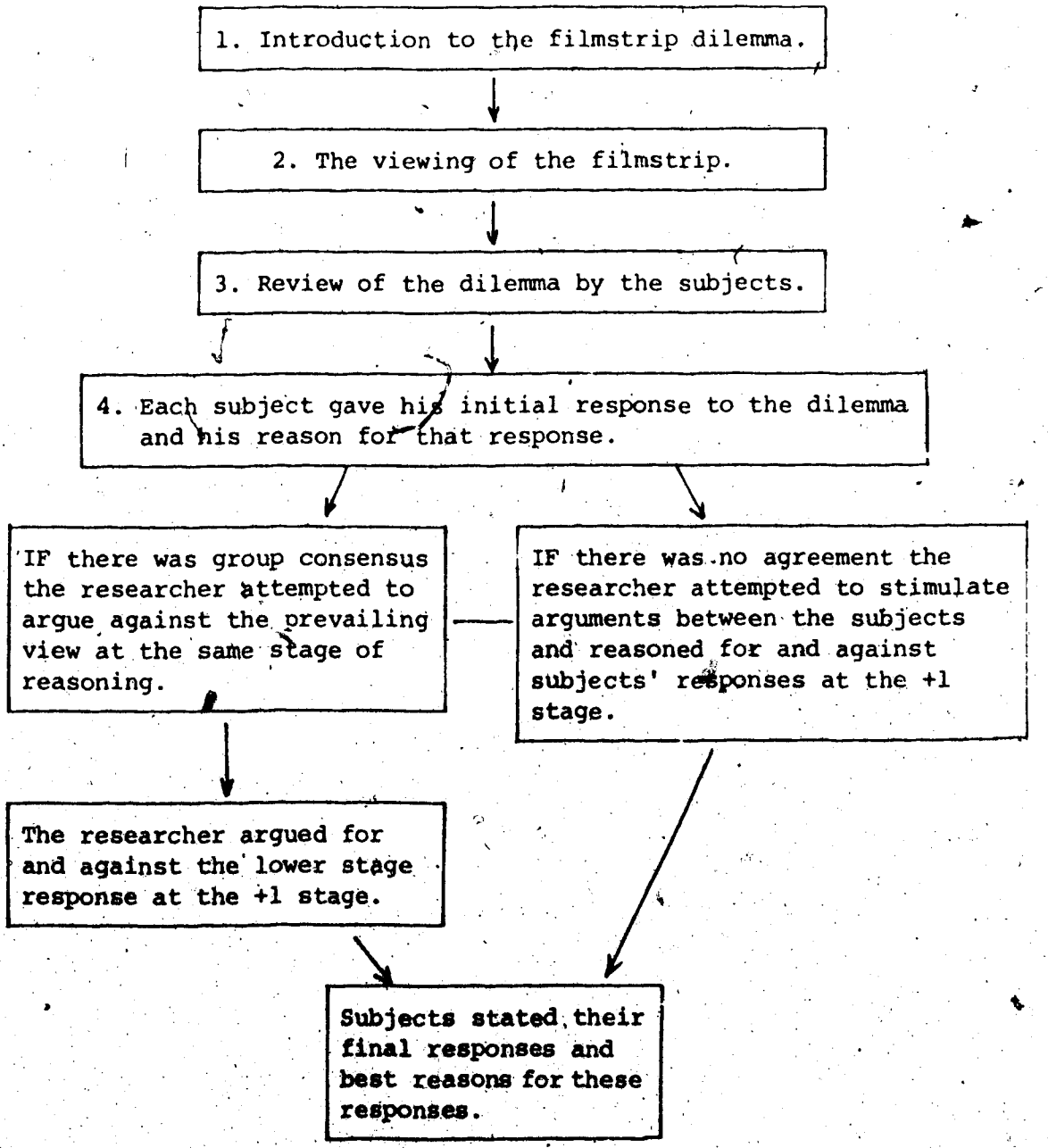
THE PURPOSE, ADMINISTRATION, VALIDITY, RELIABILITY AND TYPE OF DATA GAINED, OF EACH OF THE RESEARCH INSTRUMENTS

TABLE 11

COMPOSITION OF THE THREE EXPERIMENTAL GROUPS BY STUDENT IDENTIFICATION NUMBER AND CATEGORY, AND BY SCHOOL

	Experimental Groups		
School	Treatment	Placebo	Control
1	1A	4A	2A
	6A	5A	3A
	3B	1B	2B
	8B	4B	5B
			7B
2	9A	10A	7A
	11A		8A
	12A		
	9B	12B	14B
	10B	13B	
	11B	15B	
3	13A	15A	14A
		18A	16A
			17A
	17B	16B	18B
	20B	19B	
Totals			
'Delinquents'	6	5	7
'Non-delinquents'	7	7	6

a certain course of action. The format followed was:



Throughout the session the researcher attempted to stimulate conflict, to point out alternatives, to clarify subject's responses and to reason at the +1 stage both for and against initial subject responses. The following types of questions were employed:

1. Issue specific. E.g., Should you always keep any promise?

2. Inter issue. E.g., Which is more important, a brother's birthday present or keeping a friendship?

3. One stage higher. E.g., What would happen if all parents acted like that?

4. Role switch. E.g., How would John feel?

A concentrated effort was made to encourage subjects to argue amongst themselves, but despite this determination to remain in the background most questions and answers were directed to and through the researcher. However, as the sessions progressed, the subjects became more capable of carrying on a discussion amongst themselves and the researcher only initiated himself into the discussion when arguments ran out or were constantly regurgitated. As freedom of expression and a non-judgmental atmosphere regarding the dilemmas were emphasized and as subjects became better acquainted with each other, the discussions became more student organized.

The final session involved the discussion of dilemmas which subjects felt were relevant to their own lives. Most of the situations mentioned involved rules so discussion focused upon the usefulness and fairness of certain rules. These included the rule of being at home by a certain time at night, the rule often imposed by teachers that if one person in a class has performed a mis-demeanor and no one will own up then the whole class is punished, and rules prohibiting stealing, damaging property, lying and fighting. In School 3 the subjects attempted to arrive at one rule which they thought should in no circumstances be broken. They eventually decided that there were two rules for which they could think of no

justifiable exception. One was, 'Don't litter' and the other was 'Don't poison babies.'

The Placebo Group

Twelve subjects were involved in six, one-half hour sessions held once per week, in each of the three schools, over a six week period. The intent of these sessions was to interact positively with these subjects so that any possible researcher effect on the treatment group might be controlled on the posttest. This group played various Social Studies games (Appendix H), none of which involved issues regarding what was morally right or wrong.

The Control Group

Thirteen subjects were assigned to the control group. This group continued with normal classroom activities during the treatment and placebo group sessions. As far as can be ascertained, none of the control subjects was involved in the formal discussion of moral issues in classtime.

4. ANALYSIS OF THE DATA

The initial problem posed in this research involved the relationship between moral reasoning and moral conduct. In order to investigate this problem two groups were selected, one consisting of students deemed 'delinquent,' the other of those deemed 'non-delinquent.' Despite the fact that subjects were found in different classes in three different schools and were selected by different teachers, it was decided, for analysis purposes, that 'delinquents'

and 'non-delinquents' could be treated as non-equivalent groups. The following rationale was used.

1. The existence of some inter-judge reliability on student ratings on the SBRI.

2. The degree of commonality perceived in the various raters use of the SBRI categories. For example, reference to Table 1 will show that every 'delinquent' subject selected was labelled as requiring frequent punishment and nearly every subject (fourteen out of eighteen) was noted as interfering physically with others and as working in disharmony with others in group situations. In the case of all 'non-delinquent' subjects, all raters (Table 2) deemed the respecting and obeying of classroom rules as a criterion for selection, and nearly all subjects (nineteen out of twenty) were considered not to interfere physically with others. In other words, a common perception of 'delinquent' and 'non-delinquent' behavior appeared to exist despite the number of raters and despite the number of schools used. This is also borne out in the results of the Fairmindedness and Trustworthiness Instrument. Only one 'delinquent' subject (17A) was deemed to be high in fairmindedness (he was rated as a 2), and only one 'non-delinquent' (13B) was rated higher than a score of two in both the fairmindedness and trustworthiness components. For details see Table 3. Whereas the specific quantitative degree of similarity between each individual 'delinquent' or 'non-delinquent' subject is open to question, on a global basis it would appear that these two groups can be treated as discrete for analysis purposes, and as on all items of the measures used there were

significant differences between the two groups.

Statistical Procedures

The following statistical procedures were used in order to attempt to gain answers to the specific problems posed in the study.

1. In order to attempt to answer the question of whether or not the 'delinquent' group differed from the 'non-delinquent' group on moral maturity scores, an analysis of variance test was applied to the pretest scores, derived from the Kohlberg Moral Judgment Instrument, for each of these two groups. The same procedure was used on these two groups' posttest and follow-up test moral maturity scores.

A t test was used to ascertain whether or not 'delinquents' and 'non-delinquents' differed on role-taking scores derived from the Flavell instrument.

2. Product-moment correlations were applied to the moral maturity scores and role-taking scores and the moral maturity scores and intelligence quotients of the entire sample in order to attempt to discover the relationship existing between these variables. This correlation procedure was also applied separately to the data from the 'delinquent' and 'non-delinquent' groups in order to attempt to discover whether or not relationships among the above mentioned variables were similar for the two groups.

3. In order to test the effect of the treatments a three-way analysis of variance test was applied to pre, post and follow-up test moral maturity scores of 'delinquents' and 'non-delinquents' in the experimental, placebo and control group treatments.

All statistical procedures were carried out on the advice of, and under the direction of the Educational Research Services in the Faculty of Education at the University of Alberta.

5. THE PILOT STUDY

The purposes of the pilot study were to:

1. Ascertain the validity and reliability of the research instruments.

2. Determine appropriate methods of administering the instruments.

3. Field test the experimental treatment materials.

The pilot study was carried out in an Edmonton elementary school situated in a low socio-economic area. All subjects were in Grade Five (n = 4) and Grade Six (n = 5) and all were between the ages of ten years and four months and eleven years and six months. Four subjects (one in Grade Five and three in Grade Six) were deemed 'delinquent' by teacher raters, and five were deemed 'non-delinquent' (two in Grade Five and three in Grade Six).

Instrumentation

The Student Behavior Rating Instrument. This instrument in its initial form was unclear to teachers as it appeared that only 'delinquent' subjects had to be rated. Therefore the instrument was modified to ensure that both 'delinquents' and 'non-delinquents' would be rated (Appendix C). The categories displayed on the SBRI were regarded as valid by teachers and no other characteristics of 'delinquent' or 'non-delinquent' behavior were added by the pilot study raters or by other teacher judges contacted by the researcher.

Teachers initially found the instrument difficult to use, but when it was pointed out by the researcher that he only required subjects who consistently displayed one or more of the characteristics stated on the SBRI, and that it was the individual teacher's perceptions which were of importance, then teachers were more willing to rate students. The only real difficulty noted by teachers was cases when a student vacillated between 'delinquent' and 'non-delinquent' behaviors. In these cases teachers were asked to use their own judgments. If a student was rated as both 'delinquent' and 'non-delinquent,' the researcher did not include the subject in the sample. Reliability of the teacher categorization in the pilot study was not obtained because teachers discussed their choices with each other. Therefore, in the major study efforts were made to prevent teacher/teacher or teacher/principal interaction.

The Fairmindedness and Trustworthiness Instrument. This instrument (Appendix D) was judged by teachers to be relatively easy to use and was deemed effective in differentiating one student's behavior from that of another.

Flavell's Role-Taking Instrument. This instrument was deemed to be appropriate for the age level of the pilot sample. Only four out of the nine subjects could, according to this test, cognitively role-take. The test was therefore assumed to have discriminative value. A question posed regarding what the dog in the third picture of the four picture series was doing proved to be ineffective in noting differences in subjects' role-taking ability. Students said, "It's walking away." This question was therefore eliminated from the task. Test/retest agreement over a three week period was one hundred per cent

and scoring, according to the criteria formulated, was deemed reliable.

The Kohlberg Moral Judgment Instrument. The interview technique was found to be the most appropriate form for collecting the data. Written comments were either incomprehensible or were too brief for scoring purposes. It was also evident that, by only posing the questions as stated in Appendix E, unclear or garbled responses were often obtained. Therefore, clarification was sought and questions regarding the reason for a particular response were asked. For example, a response of, "Stealing is wrong" was followed by the interviewer asking, "Why is it wrong?" On the basis of the pilot experience, the above procedure of seeking clarification, or probing responses, was adopted.

Scoring of the responses to the dilemmas proved initially to be difficult. The standard scoring procedure was found to be the most appropriate as it utilized all classifiable data. Although each question posed during the interview focused upon one particular issue (value of life, property, punishment and so on), student responses did not necessarily focus upon the particular issue under examination. The complete protocol had therefore to be examined. It was found that the majority of student responses could be categorized as to a stage level and the pilot experience of interviewing and scoring proved to be invaluable to the researcher.

Field Testing of the Experimental Treatment Materials. The field testing of the experimental treatment materials demonstrated that the selected First Things filmstrips (Guidance Associates, 1972)

were appropriate for Grade Five and Six students. They provoked argument and it appeared that students related to the dilemmas posed. Group discussions were effective but it was apparent that teacher facilitation was necessary at times to stimulate further discussion.

Summary

On the basis of the pilot study experiences the following observations were noted:

1. The SBRI was shown to be effective in describing student behavior, however, the format was modified to make it more comprehensible to raters and more stringent reliability measures were seen to be needed.

2. The Role-Taking and Kohlberg Moral Judgment Instruments were shown to be appropriate instruments for collecting the data needed. Revisions were made to the testing formats and the scoring methods were determined.

3. The experimental treatment materials were chosen and were found to be appropriate in content.

6. SUMMARY

This chapter discussed the selection of the sample, the instrumentation used, the analysis of data procedures and the pilot study.

The major study sample consisted of eighteen subjects in three schools who were deemed to display 'delinquent' behavior by teacher and/or principal raters, and twenty subjects deemed 'non-delinquent,' chosen by the same teacher and/or principal raters in

TABLE 12

SUMMARY OF THE CHARACTERISTICS AND LOCATION OF THE SAMPLE

Subject	Sex	Age Yrs.Mos.	School	Grade	*Ex. Group	I.Q. Verbal	I.Q. Non-verbal
1A	M	12.0	1	6	E	91	88
2A	M	11.4	1	6	C	73	80
3A	F	13.1	1	6	C	88	99
4A	M	10.5	1	5	P	94	96
5A	M	11.4	1	5	P	102	117
6A	M	10.9	1	5	E	120	113
7A	M	11.0	2	5	C	93	97
8A	M	10.11	2	5	C	94	101
9A	M	11.9	2	6	E	107	119
10A	M	11.9	2	6	P	140	129
11A	M	13.1	2	6	E	78	91
12A	M	10.5	2	5	E	80	83
13A	F	12.1	3	6	E	81	66
14A	M	12.1	3	6	C	77	70
15A	M	11.10	3	6	P	110	117
16A	M	11.10	3	6	C	104	90
17A	M	11.9	3	6	C	84	78
18A	M	11.7	3	6	P	86	121
1B	F	12.0	1	6	P	105	125
2B	F	11.11	1	6	C	105	95
3B	M	12.3	1	6	E	119	99
4B	F	11.10	1	6	P	126	127
5B	F	11.0	1	5	C	135	130
6B	F	11.3	1	5	C	130	108
7B	F	11.3	1	5	C	117	111
8B	M	11.0	1	5	E	121	128
9B	F	10.8	2	5	E	104	121
10B	M	10.9	2	5	E	104	97
11B	F	11.4	2	6	E	135	137
12B	F	12.3	2	6	P	80	104
13B	M	10.10	2	5	P	95	113
14B	M	10.9	2	5	C	94	119
15B	M	12.2	2	6	P	83	84
16B	F	11.9	3	6	P	116	111
17B	M	11.6	3	6	C	114	103
18B	F	12.1	3	6	E	119	106
19B	F	12.3	3	6	P	122	129
20B	F	12.0	3	6	E	110	129

* E = Experimental treatment.
P = Placebo.
C = Control.

the three schools. All subjects were aged between ten years and five months, and thirteen years and one month, with the average age of the entire sample being approximately eleven years and five months. All subjects were in Grade Five or Six classes. Table 12 consolidates information regarding the sample. Each subject was administered the Kohlberg Moral Judgment Instrument (Form A) and Flavell's Role-Taking Instrument, and an intelligence quotient was obtained from the Canadian Lorge-Thorndike Intelligence Tests. All subjects were then randomly placed in one of three groups: (1) An experimental treatment group in which moral dilemmas were discussed; (2) A placebo group in which Social Studies games were played; (3) A control group which carried on with normal classroom activities. On completion of the six week intervention, a posttest consisting of Form B of Kohlberg's Moral Judgment Instrument was administered. This was followed a month later by the readministration of Form A of Kohlberg's Moral Judgment Instrument and Flavell's Role-Taking Instrument.

Chapter IV

FINDINGS OF THE STUDY

Introduction

This exploratory study focused upon the relationship between moral reasoning and conduct among Grade Five and Six students who had been rated by teachers, according to a researcher designed Student Behavior Rating Instrument, as 'delinquent' or 'non-delinquent.' A second concern related to the effect of participation in moral discussions upon the moral reasoning of 'delinquent' and 'non-delinquent' subjects. Eighteen 'delinquents' and twenty 'non-delinquents,' in three Edmonton schools, were administered, in an interview situation, Kohlberg's Moral Judgment Instrument (Form A) and Flavell's Role-Taking Instrument. Intelligence quotients, based on the Canadian Lorge-Thorndike Intelligence Tests, were obtained from Grade Six subjects' cumulative records, and Grade Five subjects were administered the tests in a group situation. Following the administration of these instruments all subjects were randomly assigned to one of three groups: (a) an experimental treatment group which participated in moral discussions; (b) a placebo group which played games related to Social Studies education; and (c) a control group which carried on with normal classroom activities during the experimental treatment and placebo group sessions. Both the experimental treatment and placebo groups, which were conducted by the researcher, were involved in six, one-half hour sessions spread over a six week period. At

the end of this time all subjects were administered Form B of Kohlberg's Moral Judgment Instrument. A month later Form A of the Kohlberg Instrument and Flavell's Role-Taking Instrument were re-administered, the latter test being included for test-retest reliability purposes.

This chapter reports the findings of the study. Each question posed in the study is reported separately, and a discussion of each finding follows.

1. FINDINGS OF THE STUDY

Question 1

Do Grade Five and Six 'delinquents' and 'non-delinquents' differ in the scores obtained on Kohlberg's Moral Judgment Instrument?

Table 13 displays the pretest results of the scoring of responses made on the Kohlberg Moral Judgment Instrument (Form A), with the stage of response and the moral maturity score (mms) for each subject in the 'delinquent' and 'non-delinquent' groups being shown. For example, Subject 20B obtained a stage score of 2(3). This indicates that this subject had a modal Stage 2 orientation (60% of her responses), and, as 40% of her responses were scored at Stage 3, the overall score is displayed as 2(3). This, when quantified, yielded a moral maturity score of 240. Table 13 also indicates that 'delinquents' in the sample tend to reason more in Stage 1 and 2 terms than do 'non-delinquents.' Only two 'delinquent' subjects (1A and 4A) demonstrated 25% or more Stage 3 reasoning according to

TABLE 13

PRETEST MORAL MATURITY SCORES FOR THE 'DELINQUENT' AND 'NON-DELINQUENT' GROUPS

'Delinquent' Group			'Non-Delinquent' Group		
Subject	Stage	Moral Maturity Score	Subject	Stage	Moral Maturity Score
1A	2(3)	215	1B	2(3)	240
2A	2(1)	177	2B	3(2)	273
3A	2	183	3B	2(3)	227
4A	2(3)	231	4B	2	221
5A	1-2	150	5B	3(2)	280
6A	2	208	6B	2(3)	227
7A	1(2)	130	7B	2(3)	230
8A	2	200	8B	3(2)	272
9A	2	206	9B	2	179
10A	2	184	10B	2(3)	210
11A	2	191	11B	2(3)	228
12A	1-2	150	12B	2	184
13A	2	182	13B	2	200
14A	2(1)	163	14B	2	206
15A	2	191	15B	2	208
16A	2	206	16B	3(2)	273
17A	2	212	17B	2	192
18A	2	206	18B	2(3)	221
			19B	2-3	250
			20B	2(3)	240

scored responses on the Kohlberg instrument. Yet four 'non-delinquent' subjects (2B, 5B, 8B and 16B) demonstrated Stage 3 reasoning as a modal stage, and nine subjects (1B, 3B, 6B, 7B, 10B, 11B, 18B, 19B and 20B) apparently had 25% or more Stage 3 thinking as part of their repertoire. Conversely, whereas five 'delinquent' subjects (2A, 5A, 7A, 12A and 14A) used some Stage 1 reasoning, no 'non-delinquent' subject used enough Stage 1 reasoning to account for 25% of their total score, or they used no Stage 1 reasoning at all. This is indicated in Appendix K which displays the number of scored responses at each moral stage for each subject.

An analysis of variance was performed on the 'delinquent' and 'non-delinquent' moral maturity scores. Table 14 displays the results of this analysis. As is indicated, the 'delinquent' and 'non-delinquent' groups differed significantly from each other. This statistically significant difference was maintained on the posttest and follow-up test results as Table 14 indicates.

Discussion

As the inter-judge scoring reliability was relatively high (Tables 7 and 8), it can be stated with some confidence that, for this sample of students, the group perceived by teachers as being 'delinquent' differed in moral reasoning, as assessed by the Kohlberg Moral Judgment Instrument, from the group perceived as being 'non-delinquent.' This finding is notable in light of the research studies on the moral reasoning of legal delinquents (Kohlberg, 1958; Ewanyk, 1973) in which delinquents were found to reason predominantly at the preconventional level. Despite the difference in terms of age

TABLE 14

TWO-WAY ANALYSIS OF VARIANCE RESULTS ON PRE, POST AND FOLLOW-UP TEST MORAL MATURITY SCORES OF 'DELINQUENTS' AND 'NON-DELINQUENTS' IN THE THREE TREATMENT GROUPS

Pretest

Source	Sum of Squares	Degrees of Freedom	F. Ratio	Probability
A	15139.70	1	17.83	.001
B	89.14	2	.05	.94

Test for additivity. p = .41
Test for homogeneity of variance. p = .99

Posttest

Source	Sum of Squares	Degrees of Freedom	F. Ratio	Probability
A	23792.90	1	21.37	.001
B	1328.68	2	.59	.55

Test for additivity. p = .27
Test for homogeneity of variance. p = .56

Follow-up test

Source	Sum of Squares	Degrees of Freedom	F. Ratio	Probability
A	18351.30	1	20.81	.001
B	658.54	2	.37	.69

Test for additivity. p = .42
Test for homogeneity of variance. p = .76

Source A = Groups; 'Delinquent': 'Non-delinquent'
Source B = Treatments; Experimental: Placebo: Control.

and status, this study apparently demonstrated that upper elementary school students who were perceived in terms of delinquency by teachers also tended to reason predominantly at the preconventional level.

It is also notable that 'non-delinquents,' in the sample studied, tended to reason, at least in some of their responses, in Stage 3 terms. This, to an extent, supports Kohlberg and Turiel's (1971, p. 460) conclusion that typical children should be reasoning at the conventional level by early preadolescence and to reflect this level of reasoning in their conduct. It would appear, from teacher ratings on 'non-delinquents,' that these students may have shown "a decent regard for the core expectations and approval of parents, peers and outside authorities (Kohlberg and Turiel, 1971, p. 460)."

However, non-delinquency is not a sign of having reached the conventional level, as is indicated by the seven Stage 2 thinkers in the 'non-delinquent' group. The findings of this study do not necessarily demonstrate a cause and effect relationship between moral reasoning and conduct as there may be, as is pointed out by Krebs and Kohlberg (1973), a variety of other factors which influence behavior.

This study seemed to indicate that there may be possible differences in the moral reasoning structures of 'delinquents' and 'non-delinquents.' This finding may form the basis for building hypotheses as to the relationship between reason and conduct among upper elementary school children.

Question 2

Will a situation in which a random selection of 'delinquents' and 'non-delinquents' are exposed to moral reasoning at one stage above their pretest stage influence their reasoning to the extent that their stage of reasoning is higher on the posttest than it was on the pretest?

Question 2A

Will any changes be reflected on a follow-up test administered one month after the posttest?

Question 2B

Will there be any differences between pre, post and follow-up test scores on the Kohlberg Moral Judgment Instrument between 'delinquents' and 'non-delinquents' in experimental, placebo and control groups?

These questions were investigated together as findings for each question were based on a three-way analysis of variance test.

Reference to Table 14 will indicate that, when 'delinquents' and 'non-delinquents' were randomly placed into the three treatment groups, the probability of any difference existing between these three groups on pretest moral maturity scores was .95. This suggests that the randomization process was effective.

It was decided that, to answer the questions pertaining to treatment effect, posttest moral maturity scores would not be taken

into account. This was done for the following reasons. Firstly, reference to Table 16 will indicate that a decline in mean moral maturity scores seemingly occurred between the pre and posttest for all groups and treatments except for the 'non-delinquents' in the control group and 'non-delinquents' in the experimental treatment group. For example, experimental treatment 'delinquents' tended to score lower on the posttest ($\bar{x} = 171.8$) than on the pretest ($\bar{x} = 192.00$), whereas pre and follow-up test scores were very similar; the follow-up mean score being 193.33. In overall terms, twenty-eight subjects decreased in moral maturity scores between the pre and posttest, whereas nine increased and one subject had the same pre and posttest score (Table 15).

Secondly, the product-moment correlations between the pre, post and follow-up tests (Table 17) indicate that the most positive correlations were found between the pre and follow-up tests. This was borne out for the entire sample and for 'delinquents' and 'non-delinquents' in the three treatment groups taken separately. The only exception was in the correlations found between control group 'delinquents'' pre, post and follow-up test scores, in which the most positive correlation was between the post and follow-up test ($r = .95$).

Thirdly, the nature of the posttest itself may have been a factor in explaining the vacilations in correlation coefficients and mean scores. The posttest was Form B of the Kohlberg instrument, whereas Form A was used as the pre and follow-up instrument, and Form B deals with three issues (Property-Trust: Governance and

TABLE 15

PRE, POST AND FOLLOW-UP TEST MORAL MATURITY SCORES FOR 'DELINQUENT' AND 'NON-DELINQUENT' SUBJECTS IN THE EXPERIMENTAL TREATMENT, PLACEBO AND CONTROL GROUPS

'DELINQUENTS'

Tests*	Experimental Treatment			Placebo			Control		
	Subject	Stage	MMS	Subject	Stage	MMS	Subject	Stage	MMS
1		2(3)	215		2(3)	231		2(1)	177
2	1A	2(3)	226	4A	2	182	2A	2(1)	163
3		2(3)	225		2(3)	226		2(1)	170
1		2	208		1-2	150		2	183
2	6A	2(1)	182	5A	2(1)	170	3A	1-2-3	198
3		2	232		2(1)	180		2	198
1		2	206		2	184		1(2)	130
2	9A	2(1)	160	10A	2(1)	182	7A	1	118
3		2	190		2	214		1(2)	138
1		2	191		2	191		2	200
2	11A	2(1)	154	15A	2(1)	154	8A	2(1)	163
3		2(1)	180		2	190		2	176
1		1-2	150		2	206		2(1)	163
2	12A	1(2)	135	18A	2	219	14A	2(1)	157
3		1-2	150		2	198		2(1)	162
1		2	182					2	206
2	13A	2(1)	174				16A	2	198
3		2	182					2	206
1								2	212
2							17A	2	210
3								2	198

* Test 1 = Pre
Test 2 = Post
Test 3 = Follow-up

TABLE 15 (Continued)

'NON-DELINQUENTS'

Tests*	Experimental Treatment			Placebo			Control		
	Subject	Stage	MMS	Subject	Stage	MMS	Subject	Stage	MMS
1		2(3)	227		2(3)	240		3(2)	273
2	3B	2(3)	227	1B	2	193	2B	3(2)	239
3		3(2)	297		2(3)	236		3(2)	274
1		3(2)	272		2	221		3(2)	280
2	8B	2(3)	240	4B	2(3)	241	5B	3(2)	254
3		3(2)	287		2(3)	237		3(2)	270
1		2	179		2	184		2(3)	227
2	9B	2	198	12B	2(1)	165	6B	2-3	237
3		2	206		2	188		2(3)	214
1		2(3)	210		2	200		2(3)	230
2	10B	2	208	13B	2(1)	154	7B	3(2)	281
3		2(3)	225		2	210		2(3)	232
1		2(3)	228		2	208		2	206
2	11B	2(3)	240	15B	2	205	14B	2	210
3		2(3)	240		2	207		2	208
1		2	192		3(2)	273		2(3)	221
2	17B	2	181	16B	3	297	18B	2(3)	240
3		2	191		3(2)	268		2(3)	227
1		2(3)	240		2-3	250			
2	20B	3(2)	264	19B	2(3)	204			
3		3(2)	255		2(3)	243			

* Test 1 = Pre
Test 2 = Post
Test 3 = Follow-up

TABLE 16

MEAN MORAL MATURITY SCORES FOR 'DELINQUENTS' AND 'NON-DELINQUENTS' IN EACH OF THE TREATMENT GROUPS AT EACH TEST ADMINISTRATION

	Experimental Treatment	Placebo	Control	
'Delinquent'	192.00	192.40	181.57	Pretest
'Non-delinquent'	221.14	225.14	239.50	
'Delinquent'	171.83	181.40	172.42	Posttest
'Non-delinquent'	222.57	208.42	243.33	
'Delinquent'	193.33	201.60	180.85	Follow-up test
'Non-delinquent'	243.00	227.00	236.66	

TABLE 17

PRODUCT-MOMENT CORRELATIONS BETWEEN PRE, POST AND FOLLOW-UP TEST MORAL MATURITY SCORES FOR THE ENTIRE SAMPLE AND FOR 'DELINQUENTS' AND 'NON-DELINQUENTS' BY TREATMENT GROUP

Group*	Treatment**	Test	Pretest(1)	Posttest(2)	Follow-up test(3)
Entire Sample		1	1.00	.78	.88
		2		1.00	.77
		3			1.00
D.	1	1	1.00	.75	.89
		2		1.00	.83
		3			1.00
Non-D.	1	1	1.00	.79	.82
		2		1.00	.70
		3			1.00
D.	2	1	1.00	.37	.78
		2		1.00	.25
		3			1.00
Non-D.	2	1	1.00	.78	.97
		2		1.00	.83
		3			1.00
D.	3	1	1.00	.87	.79
		2		1.00	.95
		3			1.00
Non-D.	3	1	1.00	.35	.97
		2		1.00	.36
		3			1.00

* Group. D = 'Delinquent.' Non-D = "Non-delinquent.'
** Treatment. 1 = Experimental. 2 = Placebo. 3 = Control.

Citizen Role) which are not major issues in Form A. As was indicated in Chapter III the posttest caused scoring problems in that two of the dilemmas on the test ('The Captain in Korea' and 'The Trouble-maker and the Sickman') were not included in the most recent, revised, scoring manual. The former scoring manual had to be used and this manual is not as thorough as the new one. Also one of the posttest issues (conscience) was not scored for due to doubts by Kohlberg and his associates on the scoring of this particular issue.

The pilot study apparently demonstrated that the posttest was relatively easy to score. This was probably due to the fact that the pilot study subjects all appeared to reason in Stage 1 or 2 terms. Their responses also tended to be short as the researcher, who was gaining experience in the interviewing technique, asked few probing questions. However, scoring difficulties were encountered in the major study. Subjects tended to say more, probably because the researcher was a little more sophisticated in his interviewing technique and in the use of probing questions.

On this rationale, therefore, it was decided that the most satisfactory measure of any treatment effect would consider only pre to follow-up test scores. In this regard an analysis of variance was applied to the pre and follow-up test moral maturity scores of 'delinquents' and 'non-delinquents' in the three treatment groups. Results of this analysis are displayed in Table 18.

As is indicated the probability that 'delinquents' and 'non-delinquents' differ on pre and follow-up test scores combined was .001. This lends support to the finding indicated for Question 1.

TABLE 18

ANALYSIS OF VARIANCE.
STATISTICS ON PRE AND FOLLOW-UP TEST MORAL MATURITY SCORES FOR 'DELINQUENTS' AND 'NON-DELINQUENTS' IN THE EXPERIMENTAL, PLACEBO AND CONTROL GROUPS

Source	Sum of Squares	Degrees of Freedom	F Ratio	Probability
A	32667.21	1	20.27	.001
B	97.07	2	.03	.97
AB	2462.69	2	.76	.47
C	490.04	1	3.78	.06
AC	63.55	1	.49	.49
BC	558.66	2	2.16	.13
ABC	684.58	2	2.64	.09

A = 'Delinquents' and 'Non-delinquents'
B = Experimental, Placebo and Control Treatments
C = Pre and follow-up test moral maturity scores

However, when treatment effect was considered, the probability that there was any difference between the three treatment groups, and pre and follow-up combined moral maturity scores for both 'delinquents' and 'non-delinquents,' was .97. Neither was there any significant difference ($p = .47$) when 'delinquents' and 'non-delinquents' were separated. When pre to follow-up test scores were analysed, there was the probability of .06 that the entire sample differed on these two measures, but when 'delinquents' and 'non-delinquent' scores were analysed separately the probability of any pre to follow-up test changes was .49, and when treatment effect is considered there was a probability of .13 that treatments influenced pre to follow-up test scores of the entire sample. As there was no significant interaction effect ($p = .09$) it would appear that the treatments had no significant effect on the moral reasoning scores of either 'delinquents' or 'non-delinquents.'

The only slight indication of any treatment effect was in the difference existing between experimental treatment 'non-delinquents'' pre to follow-up test scores. Reference to Table 16 will indicate that they made the largest gain in mean scores (pretest $\bar{X} = 221.14$; follow-up test $\bar{X} = 243.00$). This indication of change was borne out, to an extent, by the two experimental treatment 'non-delinquents' (Table 15) who apparently changed from a pretest stage score of 2(3), to a follow-up stage score of 3(2). The only other changes were in the placebo group where one subject (5A) was scored at 1-2 on the pre-test, and 2 on the follow-up test, and Subject 4B who apparently moved from a Stage 2 score to one of 2(3).

Discussion

The finding that an experimental treatment, which involved subjects in moral discussions, seemingly had little or no effect on follow-up test moral reasoning scores is not in keeping with some previous research studies, but is in keeping with others. Turiel (1966) apparently showed that exposure to +1 reasoning, during three experimental treatment sessions, leads to gains in moral maturity scores. Tracy and Cross (1973) found the same phenomenon and Blatt and Kohlberg (1973) discovered gains after twelve hours of experimental treatment sessions. However, Beck, Sullivan and Taylor (1973) found no substantial gains on their posttest measure; gains occurred one year after the treatment sessions. One can only question as to why there are these differences in findings.

Of interest in this study is the slight indication that 'non-delinquents' appeared to increase in moral maturity scores between the pre and follow-up test, whereas no other group showed much or any substantial increase. However, it should also be noted that one subject (17B) did not make a pre to follow-up test gain.

Question 3

Is role-taking as assessed by the Flavell Role-Taking Instrument related to stage of moral reasoning? For 'delinquents'? For 'non-delinquents'?

Table 19 displays the pre and follow-up test role-taking scores and the moral reasoning scores for the 'delinquent' and 'non-delinquent' groups. As is indicated the majority of subjects

TABLE 19

PRE AND FOLLOW-UP TEST ROLE-TAKING SCORES AND MORAL MATURITY SCORES FOR THE 'DELINQUENT' AND 'NON-DELINQUENT' GROUPS

'Delinquent' Group					'Non-delinquent' Group				
			Role-taking					Role-taking	
Subject	Stage	MMS	Test 1	Test 2	Subject	Stage	MMS	Test 1	Test 2
1A	2(3)	215	2	3	1B	2(3)	240	3	3
2A	2(1)	177	3	3	2B	3(2)	273	2	2
3A	2	183	3	3	3B	2(3)	227	3	3
4A	2(3)	231	3	3	4B	2	221	3	3
5A	1-2	150	3	3	5B	3(2)	280	3	3
6A	2	208	1	1	6B	2(3)	227	3	3
7A	1(2)	130	3	3	7B	2(3)	230	3	3
8A	2	200	3	3	8B	3(2)	272	3	3
9A	2	206	3	3	9B	2	179	3	3
10A	2	184	1	3	10B	2(3)	210	3	3
11A	2	191	3	3	11B	2(3)	228	3	3
12A	1-2	150	2	2	12B	2	184	3	3
13A	2	182	3	3	13B	2	200	3	3
14A	2(1)	163	3	3	14B	2	206	3	3
15A	2	191	3	3	15B	2	208	3	3
16A	2	206	3	3	16B	3(2)	273	3	3
17A	2	212	3	3	17B	2	192	3	3
18A	2	206	3	3	18B	2(3)	221	3	3
					19B	2-3	250	3	3
					20B	2(3)	240	2	3

(thirty-two out of thirty-eight) were apparently able to cognitively role-take (scored as 3). Most subjects, it seemed, realized, on the Flavell instrument, that an observer to the four picture set would not have the same information that they had having seen the seven picture set. Only two subjects (6A and 10A) could not, it seems, accomplish this task and four subjects (1A, 12A, 2B and 20B) could not be categorized as clearly showing the ability or lack of ability to cognitively role-take.

The product-moment correlation coefficient between role-taking scores and pretest moral judgment scores for the entire sample was $r = .02$, indicating that a subject's score on the role-taking instrument was likely to be anywhere within the total sample range of moral judgment scores. Figure 8 graphically demonstrates this. As might be expected from the above correlational analysis on the entire sample, product-moment correlations between the 'delinquent' group's moral reasoning and role-taking scores, and the 'non-delinquent' group's moral reasoning and role-taking scores, were close to zero. For the 'delinquent' group, the $r = -.07$, and for the 'non-delinquent' group the $r = -.32$.

Question 3A

Do 'delinquents' and 'non-delinquents' differ on role-taking ability?

A t test was applied to the mean role-taking scores of the 'delinquent' and 'non-delinquent' groups. The t value realized was 1.38. As a critical value of 2.02 is required for df 40 at the .05 level of confidence it can be concluded that 'delinquents' and

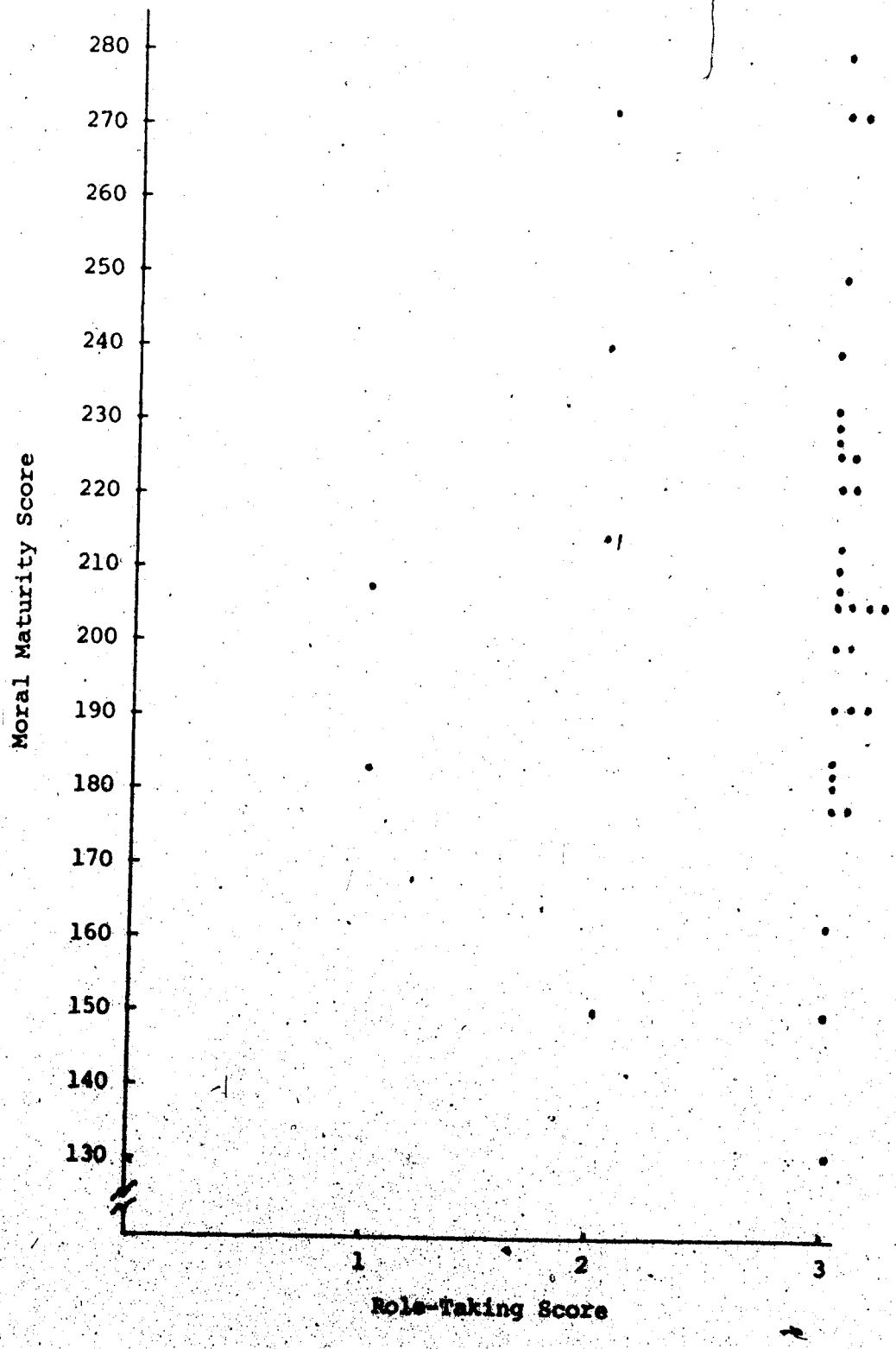


FIGURE 8

THE RELATIONSHIP BETWEEN ROLE-TAKING SCORES AND MORAL MATURITY SCORES

'non-delinquents,' in this study, did not significantly differ from each other on role-taking ability.

Discussion

The pilot experience apparently demonstrated that the Flavell Role-Taking Instrument had discriminative value in that four out of the nine pilot study subjects could seemingly not cognitively role-take. However, in the major study the majority of subjects demonstrated cognitive role-taking ability and the relationship between moral reasoning and role-taking ability was close to zero ($r = .02$). The cognitive-developmental theory of moral development posits that role-taking ability is related to the stage of moral development and empirical findings support this view. One, it appears, has to demonstrate reciprocal role-taking ability in order to reason at Stage 3 on Kohlberg's m[illegible]r, the Flavell instrument would appear only to assess [illegible] seeing something from the perspective of another perso[illegible] not assess the subject's ability to perceive that an [illegible]ould have any knowledge of the subject—the 'simultaneous' [illegible]taking ability of 'I think that he thinks that I think'—it d[illegible]sesses the ability of perceiving that 'I think that he think[illegible] This latter ability may be demonstrated by children who reaso[illegible] Stage 2 terms. Therefore the Flavell test did not discriminate between Stage 2 and Stage 3 thinkers. Selman (1971), using the same Flavell test, came to the same conclusion. The anomaly in this study was that there were three subjects (1A, 2B and 2CB) who could not be scored on the role-taking task and yet demonstrated some Stage 3 reasoning. However, on the retest these

subjects apparently demonstrated role-taking ability (Table 18). Only two subjects (6A and 10A) could not seemingly cognitively role-take and one of these (10A) scored 3 on the retest. The only subjects who could not be categorized on the retest were subjects 12A and 2B, the former being a dominant Stage 2 thinker and the other a dominant Stage 3 thinker. In light of the theory and empirical findings, this latter result is hard to explain. The latter subject did not mention the fear of the dog motive in his story but on being questioned as to why the observer would think the boy climbed the tree, he said "Maybe he wanted an apple and also he saw that dog." On the basis of the statement, "that dog," the subject was scored at 2. In order to probe the statement made by the subject, the researcher could have questioned the subject further. This was unfortunately not done.

Question 4

Is intelligence quotient as assessed by the Canadian Lorge-Thorndike Intelligence Tests related to stage of moral development? For 'delinquents'? For 'non-delinquents'?

Table 20 displays subject's moral reasoning scores and intelligence quotients, both verbal and non-verbal. The mean intelligence quotients, both verbal and non-verbal, were different for both groups. The range in scores was, however, similar for both 'delinquents' and 'non-delinquents.' Verbal intelligence quotients ranged between 73 and 140, and non-verbal ranged between 70 and 129 for the 'delinquent' group, whereas, for the 'non-delinquent' group, the verbal intelligence quotient range was between 83 and 135, and

TABLE 20

MORAL MATURITY SCORES AND VERBAL AND NON-VERBAL INTELLIGENCE QUOTIENTS FOR THE 'DELINQUENT' AND 'NON-DELINQUENT' GROUPS

'Delinquent' Group					'Non-delinquent' Group				
			Intelligence Quotient					Intelligence Quotient	
Subject	Stage	MMS	Verbal	Non-verbal	Subject	Stage	MMS	Verbal	Non-verbal
1A	2(3)	215	91	88	1B	2(3)	240	105	125
2A	2(1)	177	73	80	2B	3(2)	273	105	95
3A	2	183	88	99	3B	2(3)	227	119	99
4A	2(3)	231	94	96	4B	2	221	126	127
5A	1-2	150	102	117	5B	3(2)	280	135	130
6A	2	208	120	113	6B	2(3)	227	130	108
7A	1(2)	130	93	97	7B	2(3)	230	117	111
8A	2	200	94	101	8B	3(2)	272	121	128
9A	2	206	107	119	9B	2	179	104	121
10A	2	184	140	129	10B	2(3)	210	104	97
11A	2	191	78	91	11B	2(3)	228	135	137
12A	1-2	150	80	83	12B	2	184	80	104
13A	2	182	81	66	13B	2	200	95	113
14A	2(1)	163	77	70	14B	2	206	94	119
15A	2	191	110	117	15B	2	208	83	84
16A	2	206	104	90	16B	3(2)	273	116	111
17A	2	212	84	78	17B	2	192	114	103
18A	2	206	86	121	18B	2(3)	221	119	106
					19B	2-3	250	122	129
			$\bar{x}$	94.55 97.50	20B	2(3)	240	110	129
								$\bar{x}$ 111.7	113.8

non-verbal between 84 and 137. Product-moment correlations between moral reasoning scores and intelligence quotients for the entire sample (n = 38) are displayed in Table 21. The correlation coefficient between pretest moral reasoning scores and verbal intelligence quotient was .54. This was significant (p = .001). The correlation with non-verbal intelligence quotient was .41. This also was significant (p = .01). This positive correlation indicates that the higher the intelligence quotient, the higher the moral reasoning score, and conversely the lower the intelligence quotient the lower the moral reasoning score.

Correlational analysis of the relationship between 'delinquents' moral reasoning scores and intelligence quotients realized product-moment correlations of .17 with verbal intelligence and .13 with non-verbal, indicating that for this group the relationship was more of a random nature; a subject was just as likely to be high on moral reasoning and low on intelligence quotient as vice versa. However, the correlations for the 'non-delinquent' group were .53 and .29, indicating a more positive relationship.

Discussion

The relationship between moral reasoning scores and intelligence quotient for the entire sample is in keeping with the findings from other studies (Harris, 1970; Lydiat, 1973; Kohlberg, 1969). As Kohlberg (1968, p. 1030) says, if a subject is high in moral reasoning he tends to be high in intelligence quotient, but the converse is not necessarily true. This was demonstrated in the 'delinquent' sample where a high intelligence quotient did not necessarily mean a high

score in moral reasoning. The finding of this study would, in the main, support the idea that intelligence is a necessary, but not sufficient condition for moral reasoning.

2. CONCLUSIONS

Findings in this study indicated that 'delinquents' and 'non-delinquents' differed significantly from each other on pretest moral maturity scores ($p = .001$). This difference was maintained on the post and follow-up test measures. Moral reasoning was found to be significantly related to both verbal and non-verbal intelligence quotients for the entire sample ($r = .53$ and $r = .41$ respectively). Role-taking ability was not related to moral maturity and it was hypothesized that, despite the role-taking task's apparent discriminative ability in the pilot study, the instrument did not discriminate in the main study because it did not assess reciprocal role-taking ability. This latter ability is seemingly necessary for Stage 3 reasoning, whereas the Flavell instrument only assessed the ability of seeing something from one other person's viewpoint; an ability which Stage 2 thinkers can demonstrate. 'Delinquents' and 'non-delinquents' did not differ from each other on role-taking.

As the posttest instrument caused problems, the most satisfactory change assessment was regarded as differences between pre and follow-up test moral maturity scores. In this regard the only indication of any treatment effect was found in the experimental treatment 'non-delinquents.'

Each finding was discussed in light of the cognitive-

TABLE 21

PRODUCT-MOMENT CORRELATIONS BETWEEN MORAL MATURITY SCORES AND INTELLIGENCE QUOTIENTS

Entire Sample (n = 38)

	MMS*	IQ_1**	IQ_2***
MMS	1.00	.54	.41
IQ_1		1.00	.73
IQ_2			1.00

'Delinquent Sample (n = 18)

	MMS*	IQ_1**	IQ_2***
MMS	1.00	.17	.13
IQ_1		1.00	.76
IQ_2			1.00

'Non-delinquent' Sample (n = 20)

	MMS*	IQ_1**	IQ_2***
MMS	1.00	.53	.29
IQ_1		1.00	.53
IQ_2			1.00

* MMS = Moral Maturity Score.
** IQ_1 = Verbal Intelligence Quotient.
*** IQ_2 = Non-verbal Intelligence Quotient.

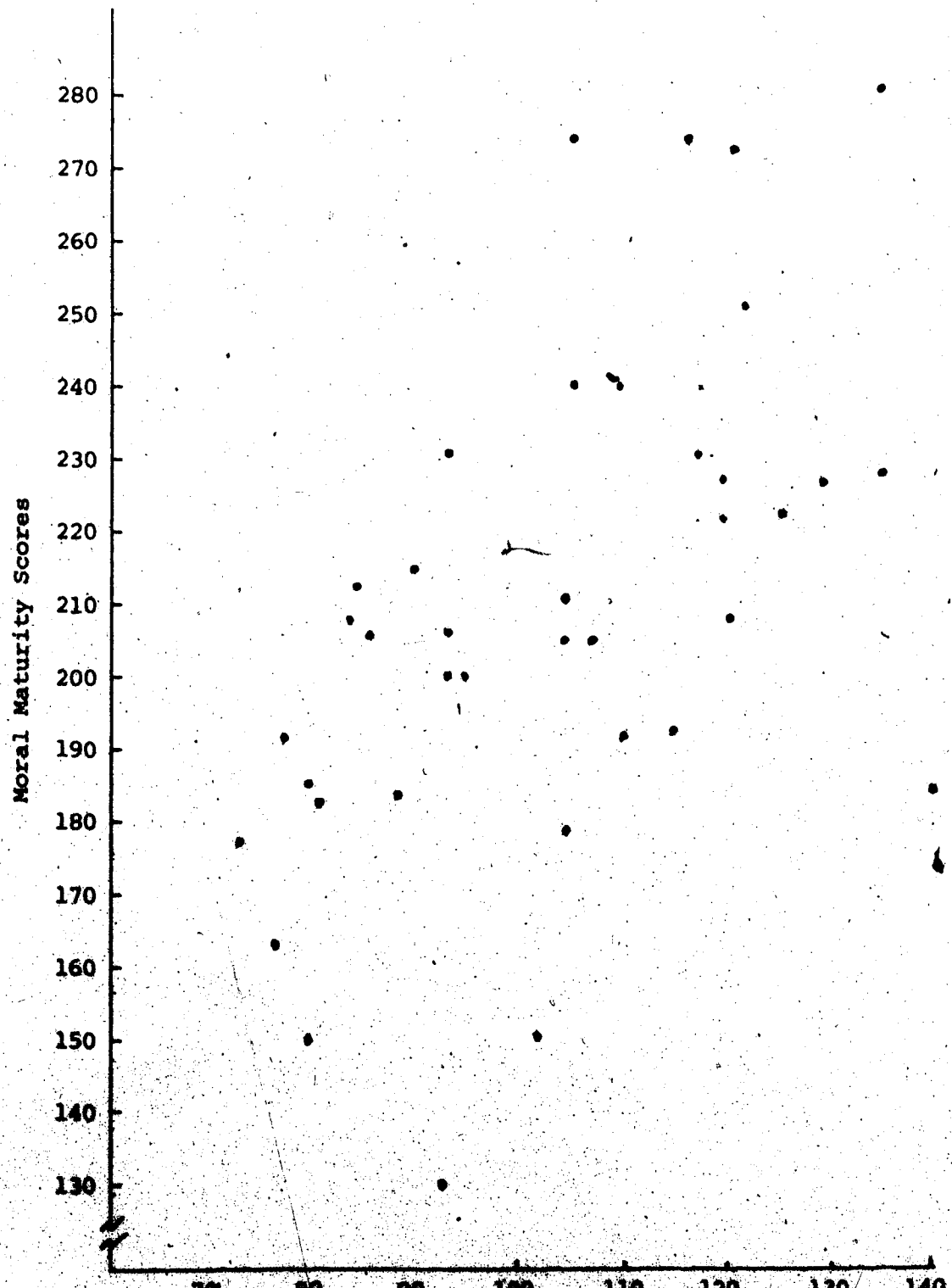


FIGURE 9

THE RELATIONSHIP BETWEEN MORAL MATURITY SCORES AND VERBAL INTELLIGENCE QUOTIENTS

developmental theory and previous research. Questions were raised concerning the findings. Chapter V deals with these questions in more detail.

3. SUMMARY

This chapter reported the findings of the study. Descriptive and statistical analysis of the data apparently indicated that:

1. 'Delinquents' and 'non-delinquents' appeared to differ significantly on moral maturity scores.

2. The treatments apparently had no effect on the follow-up test moral maturity scores of 'delinquents' or 'non-delinquents.' The only slight indication of any change was in the scores of 'non-delinquents' in the experimental treatment situation.

3. Cognitive role-taking was seemingly not related to moral maturity scores and 'delinquents' and 'non-delinquents' did not differ on this role-taking ability.

4. Both verbal and non-verbal intelligence quotients correlated positively with moral maturity scores, however correlations between these variables were lower for the 'delinquent' group than for the 'non-delinquent' group.

Chapter V summarizes the study, discusses implications of the findings and concludes with suggestions for further research.

Chapter V

SUMMARY, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Introduction

In the last decade, the literature on Social Studies Education has emphasized student exploration of moral issues. In this regard, the cognitive-developmental theory of moral development, as formulated by Lawrence Kohlberg, has received a great deal of theoretical and empirical attention. Kohlberg and his associates have apparently demonstrated that, given certain conditions, moral reasoning relates to conduct, and that moral reasoning can be advanced through exposure to reasoning at a higher stage. Yet, the congruence between the stage of moral reasoning and conduct remains questionable, and it is with conduct, as well as with reasoning, that moral education must be concerned. Therefore, the major purpose of this study was to explore the relationship between moral reasoning and conduct, with a second concern relating to the effect of participation in moral discussions on moral reasoning. The study was regarded as exploratory because, as far as was known, it was unique in that it studied the moral reasoning of Grade Five and Six 'delinquents' in a public school setting. Although studies had been carried out on the moral reasoning of legal delinquents, the relationship between reasoning and conduct among elementary school 'delinquents' could only be speculated. This study was, therefore, regarded as necessary for hypothesis building as to the relationship between moral

judgments and action among Grade Five and Six children. Although previous research had studied the effects of exposure to higher stage moral reasoning on legal delinquents and 'normal' elementary school children, this study attempted to explore the effects of participation in moral discussions on 'delinquent' and 'non-delinquent' students. Results might then form a basis for discovering the relationship between conduct and the effects of participation in moral discussions. This might lead to possible hypotheses which might form the framework for future research.

This chapter begins with a summary of the research design procedures and findings of this study. Implications of the findings follow and the chapter concludes with suggestions for further research.

1. SUMMARY OF THE STUDY

This summary is divided into two parts: (1) a brief report on the research procedures, and (2) a summary of the findings as reported in Chapter IV.

1. Summary of the Research Procedures

In order to explore the relationship between moral reasoning and conduct, teachers in three Moncton Elementary Schools, chosen by the Moncton Public School Board, were asked to select Grade Five and Six students who displayed overt 'delinquent' or 'non-delinquent' behavior. Teachers were requested to name students whose behavior was characteristic of one or more of ten categories of behavior deemed representative of 'delinquent' or 'non-delinquent' behavior.

These categories were included in the Student Behavior Rating Instrument (Appendix C). Also teachers rated each subject, who was identified on the Student Behavior Rating Instrument, on the Fairmindedness and Trustworthiness Instrument (Appendix D).

From a total of one hundred and fifty-seven students identified by teachers, twenty-three students were selected by the researcher as displaying the most extreme form of 'delinquency' in that teachers had rated them in five or more of the SBRI categories, and twenty-nine were selected as displaying the most extreme form of 'non-delinquency' in that teachers had rated them in five or more of the SBRI categories. These selected 'delinquents' also rated low on the Fairmindedness and Trustworthiness Instrument, whereas 'non-delinquents' rated high. Forty subjects received parental permission to be involved in the study, but with some students becoming unavailable for study either prior to, or during, the research, the final sample consisted of eighteen 'delinquents' and twenty 'non-delinquents.' Subjects ranged in age from ten years and five months to thirteen years and one month, with the average age being eleven years and five months. Within the total sample there were fifteen females, thirteen of whom were judged 'non-delinquent,' and twenty-three males, only seven of whom were judged 'non-delinquent.' All subjects attended schools in low or low-middle class areas of Edmonton.

All subjects were administered Form A of the Kohlberg Moral Judgment Instrument and Flavell's Role-Taking Instrument in an interview situation. Canadian [illegible] intelligence quotients

were obtained from the cumulative records of Grade Six subjects. Grade Five subjects were administered the Canadian Lorge-Thorndike Intelligence Tests in a group situation.

The 'delinquent' and 'non-delinquent' subjects were then randomly assigned to one of three groups: experimental treatment, placebo or control. The experimental treatment consisted of six, one-half hour sessions held over a six week period, in which moral dilemmas were discussed and the researcher attempted to argue for and against student responses to the dilemmas at the stage which was one higher to the initial student responses. Five sessions comprised the viewing of one of the dilemmas included in First Things—Values (Guidance Associates, 1972), and the last session consisted of a discussion on dilemmas which subjects felt were relevant to their own lives. The purpose of this treatment was to attempt to raise the students' level of moral reasoning. The placebo group, under the direction of the researcher, played Social Studies games during six, one-half hour sessions held once per week over a six week period. The purpose of the inclusion of this group in the research design was to attempt to control any possible researcher effect on the experimental group's posttest scores. The control group continued with normal classroom activities during the experimental and placebo group sessions. As far as can be ascertained, no control group subject was engaged in the type of activity practised by the experimental treatment group.

On completion of the six week intervention, all subjects were administered Form A of the Kohlberg Moral Judgment Instrument.

A month later all subjects were administered Form A of the same instrument and were retested, for test-retest reliability purposes, on Flavell's Role-Taking Instrument.

Interjudge agreements on role-taking and moral reasoning scoring were obtained. The percentage of interjudge agreement between three judges, one of whom was the researcher, on the Flavell Role-Taking Instrument scores was over 90%. On modal stage scores derived from the Kohlberg Moral Judgment Instrument at the pre, post and follow-up test administrations, on a random sample of eighteen subjects, judges one and two had a percentage agreement of 83%, judges two and three had a 77% agreement, and judges one and three were in agreement in seventeen out of eighteen cases (94%).

2. Summary of the Findings

Question 1

Do Grade Five and Six 'delinquents' and 'non-delinquents' differ in the scores obtained on Kohlberg's Moral Judgment Instrument?

It was found that 'delinquents' and 'non-delinquents' differed significantly ($p = .001$) from each other in moral maturity scores at the pre, post and follow-up test administrations of the Kohlberg instrument. 'Delinquents' tended to reason more in Stage 1 and 2 terms than did 'non-delinquents' whereas the latter group demonstrated more Stage 3 thinking than the 'delinquent' group.

Question 2

Will a situation in which a random selection of Grade

Five and Six 'delinquents' and 'non-delinquents' are exposed to moral reasoning at one stage above their pretest stage influence their reasoning to the extent that their stage of reasoning is higher on the posttest than it was on the pretest?

2A. Will any changes be reflected on a follow-up test administered one month after the posttest?

2B. Will there be any differences between pretest, posttest and follow-up scores on the Kohlberg Moral Judgment Instrument between 'delinquents' and 'non-delinquents' in the experimental, placebo and control groups?

It was decided that the posttest instrument (Form B of Kohlberg's Moral Judgment Instrument) was not a satisfactory indicator of any change following treatment. The most recent scoring manual does not include two of the dilemmas so problems in scoring were encountered. One issue (conscience) in the Karl and Bob dilemma (Instrument VII, Appendix E) was not scored owing to doubts by Kohlberg on the validity of the scoring manual on this issue. Product-moment correlations indicated that the posttest did not correlate well with the pre and follow-up test, and analysis of mean scores suggested that nearly every group showed a decline between the pre and posttest. Some of the posttest difficulties may have also been due to the increased sophistication of the researcher in interviewing technique. Whereas in the pilot study few probing questions were asked, and this usually led to very short responses, probing

questions were asked in the major study. This frequently meant longer and more complex responses. In turn this created more scoring difficulties. Also, in the pilot study, subjects had reasoned in Stage 1 and 2 terms, whereas in the major study Stage 3 and some Stage 4 responses were elicited. These latter responses, it was found, were more difficult to score than Stage 1 or 2 responses, owing to inadequacies in the old scoring manual.

A three-way analysis of variance test indicated that there was no statistically significant treatment effect on follow-up test moral maturity scores. The only slight indication of any change was in the 'non-delinquent' experimental treatment group. This group, when compared to 'delinquents' in the same treatment, or when compared to either 'delinquents' or 'non-delinquents' in the placebo or control treatments, made the largest mean score change. Two subjects in the 'non-delinquent' experimental treatment group changed from a pretest stage score of 2(3), to a follow-up test score of 3(2), and all but one subject increased in follow-up test moral maturity scores.

Question 3

Is role-taking ability as assessed by Flavell's Role-Taking Instrument related to stage of moral reasoning? For 'delinquents'? For 'non-delinquents'?

3a. Do 'delinquents' and 'non-delinquents' differ on role-taking ability?

The product-moment correlation between moral maturity scores and role-taking scores for the pretest ($N = 18$) was .05. When

correlations were obtained. This lack of relationship was attributed to the nature of the test itself. Whereas the Flavell instrument assessed the ability of 'putting oneself in the shoes of another person' and perceiving things from another's point of view, it does not assess the ability of mature reciprocal role-taking in which one can understand that others can take one's own perspective simultaneously with one's taking of others' perspectives. The former ability can be demonstrated in Stage 2 reasoning, however, the latter appears to be more related to a Stage 3 orientation. As the majority of subjects apparently demonstrated the ability to cognitively role-take, no significant difference was found between 'delinquents' and 'non-delinquents' on this measure.

Question 4

Is intelligence quotient as assessed by the Canadian Lorge-Thorndike Intelligence Tests related to stage of moral development? For 'delinquents'? For 'non-delinquents'?

The product-moment correlation between the entire sample's moral reasoning scores and verbal and non-verbal intelligence quotients was .54 and .41. This demonstrated a positive relationship between moral reasoning and intelligence quotients and this was determined by the 'non-delinquent' group when 'delinquent' and 'non-delinquent' scores were combined. The correlation between moral reasoning and verbal intelligence quotient for the 'non-delinquent' group was .49 and for non-verbal intelligence it was .38. [illegible] between these variables in the

'delinquent' group were lower, being .17 and .12 respectively.

General Summary of the Findings

The following findings seem to apply to this study:

1. 'Delinquents' and 'non-delinquents' appeared to differ significantly on moral reasoning scores.

2. The treatments apparently had no effect on follow-up test moral maturity scores of 'delinquents' or 'non-delinquents.' The only slight indication of any change between pre and follow-up test scores was in the 'non-delinquent' experimental treatment group.

3. Cognitive role-taking was seemingly not related to moral maturity scores and 'delinquents' and 'non-delinquents' did not differ in role-taking ability.

4. Both verbal and non-verbal intelligence quotients correlated positively with moral reasoning, however, correlations between these variables were lower for the 'delinquent' group than for the 'non-delinquent' group.

2. IMPLICATIONS

This section is divided into four sections: (1) Implications for the cognitive-developmental theory of moral development; (2) Implications for classroom [illegible]; (3) Implications for Social Studies Education; (4) Implications for curriculum.

This study was an exploratory one in that it was designed as an activity preliminary to hypothesis-testing. As Kerlinger (1973, p. 408) [illegible]:

> It is well to recognize, though, that there are activities preliminary to hypothesis-testing in scientific research.

He goes on to say that "research aimed at discovering, or uncovering relations, is indispensable to scientific advance in the social sciences (ibid.)." Therefore, remarks which follow are based upon the exploratory nature of this study, in that hypotheses are generated, and questions posed which may be fruitful in future research.

1. Implications for the Cognitive-Development Theory of Moral Development

The finding that 'delinquents' and 'non-delinquents' apparently differ on moral reasoning scores derived from the Kohlberg Moral Judgment Instrument, may have theoretical implications. Although studies on legal delinquents and adult inmates have been carried out (Kohlberg, 1958; Ewanyk, 1973), and findings indicated that the majority of these subjects reasoned in preconventional terms, this study suggests that children of the age group studied, who are deemed 'delinquent' by teachers, also tend to reason in preconventional terms, whereas those deemed 'non-delinquent' reason more in Stage 3 terms. This does not necessarily indicate a cause and effect relationship as there may be a variety of factors which affect behavior. These may include external, social situational factors, such as social punishment and reward, or internal dispositions, such as ego strength (Krebs and Kohlberg, 1973). Neither does this study suggest, even for this sample, that the relationship between moral reasoning and conduct is firmly positive as 'delinquents'

were found who seemingly had some Stage 3 thinking as part of their repertoire, and several 'non-delinquents' were found who reasoned predominantly in Stage 2 terms. Yet with regard to the 'non-delinquent' group there appears to be some support for Kohlberg's view that by early preadolescence, children will have reached the conventional level of moral reasoning, and that they will reflect this level in behavior "by consistently showing a decent regard for the core expectations and approval of parents, peers and outside authorities (Kohlberg and Turiel, 1971, p. 460)."

The findings of this study would suggest that, even by early preadolescence, there are apparently very sociable children who reason in Stage 3 terms, and some who still reason within a Stage 2 orientation. This raises the question of whether these Stage 2 children rationalize their 'good' behavior in terms of instrumental exchange (you be nice to me and I'll be nice to you), or whether some other variable, such as parental upbringing, has influenced their behavior. Conversely one can ask why there were three 'delinquents' who had some Stage 3 reasoning as part of their repertoire. Are there other factors, such as ego strength or external social forces, which apparently influence their 'delinquent' behavior?

Overall, however, this study indicated that 'delinquents' and 'non-delinquents' differ on moral reasoning scores. One might, therefore, hypothesize that, for children in this age range who display 'delinquent' or 'non-delinquent' characteristics, there is a relationship between moral reasoning and conduct.

Kohlberg (1970, p. 208) states that moral development is

encouraged by "creating dissatisfaction about [the student's] present knowledge of the good." Apparently, if any dissatisfaction was generated in the 'delinquents' in the experimental treatment group, it did not seemingly lead to moral development. The tentative finding in this study was that only 'non-delinquents' were slightly affected by the experimental treatment. Why the experimental treatment, apparently, only affected 'non-delinquents' can only be speculated. Maybe, as Piaget (1932, p. 174) theorized, it is the practical morality which shapes the theoretical and the practical morality of 'non-delinquents,' according to teacher ratings, was in terms of co-operation and respect for rules and authorities, whereas for the 'delinquent' sample the opposite appeared true. One could ask the question as to whether 'delinquents' are intransigent, or fixated, in their moral development. Maybe the environment in which they live is not conducive to moral development. Their reality may consist of frequent punishment because of efforts to do what they want to do, rather than what others would wish them to do.

In light of other research studies which apparently demonstrated that exposure to +1 moral reasoning led to posttest or postposttest gains, this study may suggest that it is easier to create movement in some children because their conduct is already in accord with higher stage reasoning, whereas it is more difficult with other children because their conduct is not congruent with higher stage thinking.

The finding that intelligence quotients were apparently related to moral reasoning scores was in keeping with other studies

(Kohlberg, 1968; Lydiatt, 1973). Of possible note in this study was that, although there was a significant relationship between intelligence quotients and moral reasoning scores over the entire sample, when 'delinquents' and 'non-delinquents' were separated for analysis purposes, correlation coefficients for the former group were only slightly positive. It would appear that 'delinquents' could have high intelligence quotients and yet be quite low on moral reasoning. If intelligence is a necessary but not sufficient condition for moral development, the overall correlation indicated in this study would seemingly support this claim. Yet the correlations indicated in the 'delinquent' group may suggest that there are other factors which impinge on this relationship, one of which, conduct, has already been discussed.

The indication that role-taking ability might not be related to moral reasoning stages is probably not surprising in light of the instrument used. The only implication that it might be possible to draw from this study is that the Flavell cognitive role-taking instrument does not have discriminative value in differentiating between the preconventional and conventional stages of moral development. Whereas on the pilot study this test apparently differentiated between subjects at Stages 1 and 2, the major study involved subjects who reasoned mainly in Stage 2 and 3 terms. According to the cognitive-developmental theory, a test which assesses mature reciprocal role-taking is necessary to differentiate between these two stages. The Flavell instrument, however, does not assess mature reciprocal role-taking in that it does not assess the ability to

perceive that others can take one's own perspective simultaneously with one's taking of others' perspectives.

2. Implications for Classroom Management

The indication that 'delinquents' and 'non-delinquents' differ in moral reasoning ability may have implications for the ways in which teachers can help 'delinquent' children. Kohlberg (1973d, p. 179), when writing about cheating behavior, says:

> The effort to force a child to agree that an act of cheating is very bad when he does not really believe it will only encourage morally immature tendencies toward expedient outward compliance. In contrast a more difficult but more valid approach involves getting the child to examine the pros and cons of his conduct in his own terms (as well as introducing more developmentally advanced considerations).

This would suggest that teachers should attempt to reason with a student at the student's own stage of moral reasoning or at the stage one above, and not at a level which is developmentally removed. This, as Kohlberg points out, is not easy. Even if a child who is causing problems, is reasoned with and accepts the reasons offered, this may not necessarily mean that the child will act on them, for the child may be deficient in an ego control, such as the will to act on 'good' reasons. Yet, a teacher could attempt to reason at the child's level. For example, a student with a Stage 2 orientation could be reasoned with in his own terms by informing him that 'good' behavior will lead to activities which he enjoys, or he could be reasoned with in Stage 3 terms by encouraging him to take the perspective of another person in a conflict situation. In this way not only may behavior be based more on reason, but moral development

may also be stimulated. Whereas it is realized that some classroom order must be maintained if learning is to occur, rigid authoritarianism may lead to compliance, but it may not help moral development.

A classroom in which appraisive and prescriptive (what should be, and what should be done) inquiry is encouraged, and rules are based on reasons which students comprehend, may be quite effective in stimulating moral development. In fact, Lieberman and Selman (1974) found that the class, in which the teacher encouraged moral discussions, made greater gains in moral maturity scores over a one year period, than did a class which was involved in discussions led by an outside 'expert.'

This study indicates that upper elementary school students reason mainly in Stages 2 and 3. In terms of classroom management this may imply that reasoning used by teachers, in order to help 'behavior problem' children, should be couched in Stage 2, 3 or 4 terms.

3. Implications for Social Studies Education

The Alberta Social Studies program, Experiences in Decision Making (Alberta Department of Education, 1971) suggests that elementary school children should examine social issues. These issues, as Jeffrey (1968, p. 40) points out, are "fundamental moral problems." The question can be raised as to whether elementary school children are cognitively and morally (as the two appear to be linked) mature enough to examine certain issues. Certain problems may be too abstract for elementary school children. Yet, Experiences in Decision Making (Alberta Department of Education, 1971, p. 24) suggests that

children should examine the concept of justice in terms of:

> . . . reasoned consideration for others . . . fair play, security, what ought to be, impartiality, equality, reasonableness, legitimacy, rightfulness . . .

One wonders how a child who reasons in terms of instrumental relativism (Stage 2) could comprehend this 'adult notion' of justice.

One might also wonder how children with a Stage 3 role-taking perspective, which does not include a generalized 'system' perspective, could consider the question of their responsibilities as Canadian members of the international community (Alberta Department of Education, 1971, p. v-3), except in terms of their own viewpoint. There are other references in the Alberta program where children are expected to have the ability to role-take. For example, one objective in a Grade Three unit states: "Students should attempt to understand the perspective of the contemporary Eskimo . . . (ibid., p. 111-113)." Yet in this research study there were two subjects who seemingly could not cognitively role-take. It would appear that the Alberta Social Studies program has not taken into account the role-taking abilities of elementary school children.

Experiences in Decision Making (ibid.) also emphasizes the Raths valuing model. There is little stress in this values clarification approach on moral reasoning. Yet this research study suggests that reasoning abilities differ among Grade Five and Six students, a point which is apparently neglected by the Alberta Department of Education.

This research may imply that Social Studies programs already in existence be examined in light of the Kohlberg theory and

specifically in light of the moral reasoning demonstrated by children. It may also imply that program developers should be cognizant of children's moral reasoning so that new programs are more closely matched to the child's moral reasoning abilities. Specifically, programs should be introduced which match the stages of reasoning, displayed by elementary school children, to both the content and process of instructional programs. For example, social issues which are examined should be within the child's world view. It would appear ineffectual to ask a child to create solutions to problems, such as the world energy crisis, with which he has had no, or little, experience. It would also appear that the Grade One to Six sequence of home, to community, to province, to country, to world (the expanding horizons theory) may have to be re-examined in light of the role-taking and social perspective taking abilities of elementary school children. A country or world view would imply the necessity of a generalized 'system' perspective. This perspective, according to the cognitive-developmental theory, is not attained until Stage 4 reasoning is reached, and this study indicated that students at the Grade Five and Six levels demonstrate very little, if any, Stage 4 reasoning.

This study, however, does not imply that all Social Studies teachers must fully comprehend the Kohlberg theory, and be able to interview students on moral dilemmas and then score the responses. This researcher found it took nearly two years to come to his understanding of the theory, and his ability to interview students and score responses to moral dilemmas. Yet, [illegible] can be made aware

of the theory and can probably be trained to implement moral discussions and other value-clarifying activities in their classrooms. A danger is that, if teachers become cognizant of the theory, they may label students for the wrong reasons; i.e., the label becomes an evaluative stereotype. The reason for understanding the theory is not to praise or blame but to understand the child better so that moral development can be stimulated.

This study indicated that students, in the main, enjoyed the experimental treatment and were not hesitant in bringing forth their reasons and arguments. This would seem to indicate that this procedure should be capitalized on, and that activities which stimulate moral development should be incorporated in the Social Studies curriculum. However, it is this writer's opinion, that moral discussions should be supplemented by inquiry procedures in which pertinant and representative data is examined and analysed.

4. Implications for Curriculum

Moral education has recently received attention in educational literature, especially with regard to Kohlberg's theory. One of the instructional implications of this theory, as has already been indicated, requires that students be exposed to moral reasoning at a stage higher than their own stage. Yet as has been pointed out by Fenton (1974), the type of experimental treatment carried out in this research, involving, as it did, only six, half-hour sessions, may not be very effective in stimulating the moral development of some students. Despite a previous research study which indicated that three sessions were seemingly effective in raising moral maturity

scores (Turiel, 1966), it would appear in this particular study that six one-half hour sessions were not effective, especially with 'delinquent' children. As Beck (1971) points out, moral development does not necessarily occur in isolation from the rest of the school curriculum. If moral education is to be one of the major objectives of the school, then the curriculum, and practice of that curriculum, have to be viewed as a vehicle, and the curriculum, to be effective, needs to relate to the needs, abilities and interests of students. This study has indicated that two or three stages of moral development might be in operation in Grade Five and Six students. If a curriculum is to be resonant with the moral development stages of children, then this finding may need to be taken into account.

This would imply, firstly, that the school be operated on principles of justice and fairness; a school in which the rules and regulations are seen, by children, to be reasonable. Secondly, existing instructional programs often include value related issues, and these should be capitalized upon. For example, in children's stories there are often conflicts involving people; these should be discussed as moral issues. Thirdly, the classroom climate should be conducive to moral development in that children are encouraged to reason about moral issues and to act in morally mature ways.

3. SUGGESTIONS FOR FURTHER RESEARCH

The findings of this study and the questions posed in light of these findings suggest the need for further research studies. These would include:

1. The formal testing of the hypothesis that moral reasoning is related to the conduct of 'delinquent' and 'non-delinquent' school children.

2. A study which explores the effect of student participation in moral discussions on future student conduct.

3. An examination of the relationship between stages of moral reasoning and the ways in which a student investigates social problems in Social Studies classes.

4. An investigation of the influence of exposing children to moral discussions which attempts to ascertain the variables which stimulate moral development.

5. A further examination of the relationships between intelligence, role-taking ability and moral reasoning of 'delinquent' children.

6. An examination of the effect of various instructional procedures, such as problem-solving, value clarification activities and role-playing, on the moral development of children.

7. An examination of the effect of reasoning, with 'delinquent' children, at the child's own stage of reasoning and at the stage which is one above the child's stage.

8. An investigation into children's perceptions of, and attitudes towards, classroom or school rules.

9. A study which investigates the effects of learning about, and using the Kohlberg theory, on teacher classroom behavior.

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APPENDICES

APPENDIX A

DEFINITION OF MORAL STAGES

DEFINITION OF MORAL STAGES
(Kohlberg, 1971b, pp. 86-88)

I. Preconventional level.

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

Stage 1: The punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being Stage 4).

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

II. Conventional level.

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

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

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

III. Post-Conventional, Autonomous, or Principled Level

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

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

Stage 6: The universal ethical principle orientation. 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 and ethical, (the Golden Rule, the categorical imperative) they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice of the reciprocity and equality of the human rights and of respect for the dignity of human beings as individual persons.

APPENDIX B

THE TEN MORAL ISSUES

THE TEN MORAL ISSUES
(Kohlberg, Part II, 1975, p. 1)

1. Punishment and Blame. Should someone be punished or not? What is fair punishment?

2. Property. Should someone give, take or exchange property? What are property rights?

3. Affiliation Roles. Should someone help another or maintain the other's expectations in a personal relationship? What are the motives and obligations of a good family member or friend?

4. Law. Should someone obey or maintain the law? What are the characteristics of a good law?

5. Life. Should someone save a life or not? What makes life valuable?

6. Truth. Should someone tell the truth or allow the truth to be disclosed or not? What defines truth-telling and why is it valuable?

7. Governance. Should someone obey or accept the authority of another person or of a government or rule-making group? What are the characteristics of a good governor and a good citizen?

8. Civil Rights and Social Justice. Should someone violate or uphold the political, economic, and social rights of another person or group? What are the basic political, economic and social rights?

9. Sex. Should one have a sexual relationship or not? What is the nature of a good erotic relationship and why is it valuable?

10. Morality and Mores. Should one follow one's moral opinion or conscience when it conflicts with law, love or self-interest? What is the nature of morality and what is the basis of its validity?

APPENDIX C

THE STUDENT BEHAVIOR RATING INSTRUMENT

Directions: Write the name or names of students who consistently display any of the following behaviors. Students named should stand out from the rest of the student population in their display of behaviors.

For each student you have identified on this instrument please complete the Fairmindedness and Trustworthiness Scale.

	Displays Behavior	Displays Behavior	
1. Pushes, hits, trips or otherwise interferes with others physically. These actions usually lead to complaints from others.			Doesn't hit, trip or otherwise interfere with others physically.
2. Doesn't help other students. Doesn't loan materials, help others in their work or otherwise cooperate with others in either work or play.			Helps other students. Loans materials, helps others in their work and cooperates with others in either work or play.
3. Interferes with others' possessions. Takes them or disturbs them thereby preventing others from using them. These actions usually lead to complaints from others.			Doesn't interfere with others' possessions. Doesn't take them or disturb them thereby preventing others from using them.

	Displays Behavior	Displays Behavior	
4. Works in discordance with others in a group—'bugs' others, doesn't listen to or respect others' contributions			Works in concordance with others in a group. Doesn't 'bug' others. Listens to and respects others' contributions.
5. Vandalizes his/her own property or the property of others—carves on desk, writes on wall, scribbles on books, breaks or otherwise damages school of personal property.			Doesn't vandalize his/her property or the property of others.
6. Has to be punished by being sent outside, told off, sent to the office, kept in or given extra work.			Doesn't have to be punished.
7. Punishment seems to have little or no effect on behavior.			

Appendix C (Contd.)

	Displays Behavior	Displays Behavior	
8. Lacks confidence. Has to be told what to do and how to do it. Asks about the correctness or otherwise of assignments and classroom behaviors.			Has confidence in his/her own abilities.
9. Disregards and disobeys classroom rules.			Respects and obeys classroom rules.
10. Lacks respect for authorities. Does what pleases his/her rather than what pleases others.			Respects authorities. Does what pleases others rather than what pleases him/her self.

APPENDIX D

THE FAIRMINDEDNESS AND TRUSTWORTHINESS INSTRUMENT

DIRECTIONS: Please rate the student on the following scale by checking ✓ one box.

[redacted] _____

1.	**Very Fair** Defends rights of others and wants everyone to share equally—puts himself into others' shoes ☐	**Generally Fair** Tends to share and respect others' rights and stick up for his own except when angry or excited or wants something badly. ☐	**Unconcerned** Usually knows what the fair thing is but doesn't care too much about others' rights or his own. ☐	**Selfish** Does what he wants, only thinks about rights when his share or turn. ☐	**No Sense of Fairmindedness** Doesn't seem to know his own rights or the rights of others. ☐
2.	**Completely Trustworthy** Can always be depended on to do whatever he knows right regardless of what he wants or desires. ☐	**Reliable** Usually does what's right even when there is no one around to check on him. ☐	**Conforming** Follows rules mostly in order to keep out of trouble and/or to win approval. ☐	**Unreliable** Can only be depended upon to follow rules if someone is around to check. ☐	**Untrustworthy** Always trying to get away with something. ☐

APPENDIX E

THE KOHLBERG MORAL JUDGMENT INSTRUMENT

THE KOHLBERG MORAL JUDGMENT INSTRUMENT

Form A

Instrument I

In Europe, a woman was near death from a specific 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 about $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'm going to make money from it." So Heinz got desperate and broke into the man's store to steal the drug for his wife.

1.1 Should Heinz have done that? Was it actually right or wrong? Why?

1.2 Is it a husband's duty to steal the drug for his wife if he can get it in no other way? Would a good husband do it? Why?

1.3 Did the druggist have the right to charge that much when there was no law actually setting a limit on the price? Why?

If the subject thought Heinz should steal the drug the following questions were asked:

1.4(a) If the husband did not love his wife should he steal the drug? Why?

1.5(a) Suppose it wasn't Heinz's wife who was dying but it was Heinz's best friend. His friend didn't have any money and there was no one in his family who was willing to steal the drug. Should Heinz steal the drug for his friend? Why?

If the subject thought Heinz should not steal the drug the following questions were asked:

1.4(b) Would you steal the drug to save your wife's life? Why?

1.5(b) If you were dying but were strong enough would you steal the drug to save your own life? Why?

1.6 Heinz broke into the store and stole the drug for his wife but he was caught by the police. He was brought to court. Should the judge send Heinz to jail or should he let him go free? Why?

Instrument II

Joe a fourteen-year old boy 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 friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he had saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

2.1 Should Joe refuse to give his father the money? Why?

2.2 Does his father have the right to tell Joe to give him the money? Why?

2.3 Does giving the money have anything to do with being a good son? Why?

2.4 Which is worse, a father breaking a promise to his son or a son breaking a promise to his father? Why?

2.5 Why should a promise be kept?

Instrument III

There was a woman who had very bad cancer, and there was no treatment known to medicine that could save her. Her doctor knew that she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of a pain-killer like ether or morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough ether to kill her. She said she couldn't stand the pain and she was going to die in a few months anyway.

3.1 Should the doctor do what she asks and give her the drug that will make her die? Why?

3.2 When a pet animal is badly wounded and will die, it is killed to put it out of its pain. Does the same thing apply here? Why?

3.3 Would you blame the doctor if he gave her the drug? Why?

3.4 Do you think the woman should have the right to decide to die or should the right to decide be up to her husband, to the doctors or to the courts? Why?

3.5 The doctor kills the woman and is brought to court. He is

found guilty of murder. The usual sentence is life imprisonment. What should the judge do? Why?

Instrument IV

Judy was a twelve-year-old girl. She had saved up from babysitting and lunch money for a long time so she would have enough money to buy a ticket to a special out-of-town rock concert that was coming to her town. She had managed to save up the $5 the ticket cost plus another $3. Her mother had promised her that she could go to the rock concert if she saved the money herself. Later her mother changed her mind and told Judy that she had to spend the money on new clothes for school. Judy was disappointed, and decided to go to the concert anyway. She bought a ticket and told her mother that she had only been able to save $3. That Saturday she went to the performance and told her mother that she was spending the day with a friend. A week passed without her mother finding out. Judy then told her older sister, Louise, that she had gone to the performance and had lied to her mother about it.

4.1 Should Louise, the older sister, tell their mother that Judy had lied about the money or should she keep quiet? Why?

4.2 What would be the best reason for Louise to keep quiet? Why?

4.3 Louise has to think about how it would influence Judy in the future if she told. What influence on Judy's future should Louise consider? Why?

4.4 Why should a promise be kept?

Form B

Instrument V

In Korea, a company of Marines was way outnumbered and was retreating before the enemy. The company had crossed a bridge over a river, but the enemy were mostly still on the other side. If someone went back to the bridge and blew it up, with the head start the rest of the men in the company would have, they could probably then escape. But the man who stayed back to blow up the bridge would probably not be able to escape alive; there would be about a four to one chance he would be killed. The captain himself is the man who knows best how to lead the retreat. He asks for volunteers, but no one will volunteer. If he goes himself, the men will probably not get back safely and he is the only man who knows how to lead the retreat.

5.1 Should the captain order a man to go on this very dangerous mission or should he go himself? Why?

5.2 What is the best reason for saying it is right to send someone besides himself?

5.3 What is the best reason for saying it is wrong to send someone else?

5.4 Does the captain have the right or the authority to order a man if he thinks it best to? Why?

5.5 Would a man have the right to refuse such an order? Why?

Instrument VI

The captain finally decided to order one of the men to stay behind. He thought he could pick one of his two demolition men. Both of these men were trained to use dynamite to blow up bridges or fortifications at the least risk to themselves. One of the demolition men had a lot of strength and courage but was a bad troublemaker. He was always stealing things from the other men, beating them up and wouldn't do his work around camp.

The second demolition man he thought of had got a bad disease in Korea and was likely to die in a short time anyway, though he was strong enough to do the job.

6.1 Should the captain send the troublemaker or the sick man? Why?

6.2 Whose life is worth more, the troublemaker or the sick man? Why is that?

6.3 The captain knows that the sick man has a family, the troublemaker doesn't. Should that enter into his decision. Why?

6.4 The captain knows that the troublemaker was a scientist before he joined the army. He was working on a cure for cancer. Should that enter into the decision? Why?

Instrument VII

Two young men, brothers, had got into serious trouble. They were secretly leaving town in a hurry and needed money. Karl, the older one, broke into a store and stole $500. Bob, the younger one, went to a retired old man who was known to help people in town. Bob told the man that he was very sick and he needed $500 to pay for the operation. Really he wasn't sick at all, and he had no intention of paying the man back. Although the man didn't know Bob very well, he loaned him the money. So Bob and Karl skipped town, each with $500.

7.1 If you had to say who did worse, would you say that Karl did

worse by breaking into the store and stealing $500, or did Bob do worse by borrowing the $500 with no intention of paying it back? Why?

7.2 Would you feel like a worse person, stealing like Karl or cheating like Bob? Why?

7.3 Why shouldn't someone steal from a store anyhow?

7.4 Who would feel worse, the store owner who was robbed or the man who was cheated out of the money? Why?

7.5 Which should the law be more harsh or strong against, stealing like Karl, or cheating like Bob? Why?

Instrument VIII

In a country in Europe, a poor man named Valjean could find no work, nor could his sister and brother. Without money, he stole food and medicine that they needed. He was captured and sentenced to prison for six years. After a couple of years, he escaped from the prison and went to live in another part of the country under a new name. He saved his money and slowly built up a big factory. He gave his workers the highest wages and used most of his profits to build a hospital for people who couldn't afford good medical care. Twenty years had passed when a tailor recognized the factory owner as being Valjean, the escaped convict whom the police had been looking for back in his home town.

8.1 Should the tailor report Valjean to the police? Would it be right or wrong to keep it quiet? Why?

8.2 Is it a citizen's duty to report Valjean? Would a good citizen? Why?

8.3 If Valjean was a good friend of the tailor, would that make a difference? Why?

8.4 Should Valjean be sent back to jail by a judge? Why?

APPENDIX F

THE ROLE-TAKING INSTRUMENT

THE ROLE-TAKING INSTRUMENT

This test was originally devised by Flavell (1968).

1. Each S. is shown an ordered series of seven pictures showing a story of a boy being chased by a dog, running down a street, and climbing a tree to eat an apple as the dog trots away.

2. Each S. tells an appropriate story about the pictures.

3. Three pictures are removed from the set leaving those showing the boy walking, running to the apple tree, climbing it and eating an apple. Although the dog remains in the last but one picture the 'fear of the dog' motive is removed.

4. Each S. tells a story with regard to how an observer to this new set would tell it. The S. is then asked how the observer to this set would answer the question, "Why did the boy climb the tree?"

APPENDIX G

THE FILMSTRIP DILEMMAS USED WITH THE EXPERIMENTAL TREATMENT GROUP

THE FILMSTRIP DILEMMAS USED WITH THE EXPERIMENTAL TREATMENT GROUP

These filmstrips were taken from First Things: Values (Guidance Associates, 1972).

The Trouble with Truth. Part I

Patrick and six of his friends visit a fishing area with Dave, their camp counsellor. As a treat they are all to take a boat ride with a fisherman. When Dave and the fisherman leave to check weather conditions at the Coast Guard station, Patrick is left in charge with strict orders that nobody board the boat until they get back, or nobody gets a boat ride. However three children climb aboard, getting off just before Dave and the fisherman return. Patrick has to decide whether or not to tell Dave and the fisherman that three children boarded the boat.

You Promised. Part I

Alex has been visiting Russell on his farm for a week during school vacation. Everyday Russell has been riding King and Alex has been riding Midget, a little pony. Russell has promised Alex that he can ride King, the big horse, on the final day of his visit. However Russell's older brother, Zack, needs King to compete in a horse show. Russell has to decide whether to honor his promise to Alex or whether to allow Zack to have the horse for the competition.

But It Isn't Yours. Part I

Jason is taking a brand new sledge home for his brother's birthday. He decides to enter in a sledging race, despite his friend's Lionel's objections. Losing the race he tries the sledge on Suicide Hill and breaks it. At the community hall he cannot find any suitable wood with which to repair the sledge until Karen and Matt find an appropriate piece which belongs to Lionel. Jason has to decide whether or not to use Lionel's wood.

But It Isn't Yours. Part II

Diana and Connie are helping Diana's older brother Doug clean out the basement. Larry, Doug's younger brother, is asked to help but decides to play instead. He is told that anything considered junk, even if it is his, will be thrown out. Diana and Connie discover a bike that Doug had given to Larry on the condition that he repair it. It is not repaired but Diana and Connie mend it and ride it when Larry sees the girls riding 'his' bike. Doug has to decide

to whom the bike really belongs.

What Do You Do About Rules? Part I

Cheetah, a superhero, is a member of the Cat People. The Cat People aid those in trouble and fight crime. Each member of the Cat People is forbidden to reveal his true identity. Cheetah is really Sam Wilson, but not even his family know he is Cheetah. One evening when waiting for his son Marcus at a bank, Sam notices a robbery taking place. As Cheetah he captures and ties up the robbers but hearing police sirens he changes back to Sam Wilson and leaves the bank through a side window. Marcus sees him and thinks that a robber is escaping but then realizes that the 'thief' is his father. Sam has to decide whether or not to reveal his Cheetah identity.

APPENDIX H

GAMES PLAYED BY THE PLACEBO GROUP

GAMES PLAYED BY THE PLACEBO GROUP

1. Kirman, J. Canada's Prairie Wheat Game. Edmonton, The University of Alberta: Author, no date.

Players move around a board, buying land, seed, fertilizer and crop insurance. They experience monetary loss through such hazards as drought or hail, or monetary reward through the sale of commodities. Finally they sell their wheat at current market prices, the player making the most money being the winner.

2. Krupa, W. The Land Use Game. Middletown, Conn.: Education Ventures Inc., 1971.

Groups of players build new housing developments on a map. The map is zoned, each zone losing so many environmental points if it is built upon. The team building the subdivision with the least number of environmental points is the winner.

3. The NASA Space Game. (Author and publisher unknown.)

Each player pretends that he has crash landed on the moon and has to reach a rescue ship which is two hundred miles away. Each player ranks fourteen items in terms of the necessity to him for survival. The players then must arrive at a group consensus regarding the ranking of each item within a given time period. Rankings are then compared to those provided by NASA.

4. Lesuring Communication. Trading Post. San Francisco: Lesuring Communication, no date.

Players receive a role card and have to provide basic commodities for themselves, trading their own produced commodities for those needed for survival during the winter. Players move around a board receiving needed commodities. The first to collect all necessary commodities is the winner.

5. High School Geography Project. The Game of Farming, in Geography in an Urban Age, Unit 2, Manufacturing and Agriculture. London: Macmillan, 1969.

Players pretend that they are pioneers in western Kansas in the period 1880-1882. Each player has to decide how to manage a farm. To do this he is given $1,500, $500 of which is allocated to living expenses and the rest is spent on various crops or livestock. When all the money has been spent or put in savings an outcome card is collected. This card, which gives a multiplier for each crop or

livestock, reflects variations in weather, plant or animal disease and insect damage, as well as variation in market price. The player computes his total income for the year and then discusses his outcomes with the other players in order to ascertain the factors which led to profit or loss situations. Each player then utilizes his 1880 income to the 1881 farming year. Following the 1881 outcome, a discussion, and the allocation of money to the 1882 year, a final outcome is reached in 1882 at which time the player with the most money is declared the winner. This game was played during two sessions.

APPENDIX I

SAMPLE PRETEST RESPONSES BY STAGE OF RESPONSE TO THE ISSUES OF LIFE AND PUNISHMENT IN THE HEINZ DILEMMA

SAMPLE PRETEST RESPONSES BY STAGE OF RESPONSE
TO THE ISSUES OF LIFE AND PUNISHMENT IN
THE HEINZ DILEMMA

Life

Stage 1. No, because if he got caught he'd be put in jail. (Subject 5A)

Stage 2. If he loves his wife it's his duty to get (the drug) like . . . if he really likes her then he can get it but if he really doesn't care for her, well, it's his opinion if he wants to get it and save his wife's life then he can get the drug but if he really doesn't really love her or care for her then guess it isn't if he doesn't want to. (Subject 18B)

Stage 3. I think I would have done the same thing (steal the drug) but actually he shouldn't have done it because it's still breaking the law. I think he was right but a judge might think he was wrong, because if someone's going to die and you do something to save their life even if it means you break into something or crash you still saved a person's life and that's all that matters. (Subject 18A)

Punishment

Stage 1. Send him to jail if he tried to steal it. Well, he committed a crime, he stole. What he if stole the wrong drug too? (Subject 5A)

Stage 2. Let him go, but on bail, but not that much. He should sentence the druggist because he was the one that raised the price so much. (Subject 8A)

Stage 3. I think the judge should let him go free because . . . well Heinz he couldn't help it and then the judge expected him to set there and let his wife die without doing anything and he could sentence him, but if the judge understood and he's probably know there was nothing else he could do. (Subject 20B)

APPENDIX J

SAMPLE RESPONSES TO THE ROLE-TAKING INSTRUMENT

SAMPLE RESPONSES TO THE FLAVELL ROLE-TAKING INSTRUMENT

Category 1. Subject 10A

Question: What kind of story would Mr. A. tell if he saw these four pictures?

Response: I think he'd say there was a boy named Jack walking down the street, he climbed up a tree because there was the dog after him. While he was waiting for the dog to go he eats an apple.

Question: Why would Mr. A. think Jack climbed the tree?

Response: He was afraid the dog might attack him.

Category 2. Subject 20B

Question: What kind of story would Mr. A. tell if he saw these four pictures?

Response: Tim was walking along a street and he saw a tree and a dog and he was scared of the dog so he climbed up the tree and ate apples.

Question: Why would Mr. A. think Tim climbed the tree?

Response: Because he sees the dog or maybe he's looking for somebody. No, he's scared of the dog, I think. Or he wants to eat apples, or . . ..

Category 3. Subject 7A

Question: What kind of story would Mr. A. tell if he saw these four pictures?

Response: The boy was walking and saw an apple tree, he climbed up it and got an apple.

Question: Why would Mr. A. think the boy climbed the tree?

Response: Maybe he was hungry.

APPENDIX K

NUMBER OF SCORABLE RESPONSES AT EACH MORAL JUDGMENT STAGE FOR EACH SUBJECT ON THE PRE, POST AND FOLLOW-UP KOHLBERG MORAL JUDGMENT TESTS

NUMBER OF SCORABLE RESPONSES AT EACH MORAL JUDGMENT STAGE FOR EACH SUBJECT ON THE PRE, POST AND FOLLOW-UP KOHLBERG MORAL JUDGMENT TESTS

Subject	Stage 1	Stage 2	Stage 3	Stage 4	Stage Score	MMS*	Test**
	2	7	4		2(3)	215	1
1A	1	6	4		2(3)	226	2
		11	4		2(3)	226	3
	4	8	1		2(1)	177	1
2A	4	7			2(1)	163	2
	4	10			2(1)	170	3
	2	10			2	183	1
3A	4	4	4		1-2-3	198	2
	2	8	2		2	198	3
	1	9	6		2(3)	231	1
4A	2	10			2	182	2
		8	3		2(3)	226	3
	6	6			1-2	150	1
5A	3	7			2(1)	170	2
	5	10	1		2(1)	180	3
		10	1		2	208	1
6A	3	8	1		2(1)	182	2
		11	3	1	2	232	3
	9	4			1(2)	130	1
7A	9	2			1	118	2
	8	5			1(2)	138	3
		12			2	200	1
8A	4	7			2(1)	163	2
	3	10			2	176	3
	1	12	2		2	206	1
9A	7	4	2		2(1)	160	2
	2	7	2		2	190	3
	3	10	1		2	184	1
10A	3	8	1		2(1)	182	2
	1	9	3		2	214	3

* Moral maturity score

** 1 = Pretest
2 = Posttest
3 = Follow-up test

Subject	Stage 1	Stage 2	Stage 3	Stage 4	Stage Score	MMS*	Test**
	2	10	1		2	191	1
11A	5	6			2(1)	154	2
	6	9			2(1)	180	3
	5	5			1-2	150	1
12A	7	4			1(2)	135	2
	6	6			1-2	150	3
	2	10			2	182	1
13A	3	4	1		2(1)	174	2
	2	10			2	182	3
	4	11			2(1)	163	1
14A	5	7			2(1)	157	2
	6	10			2(1)	162	3
	1	11			2	191	1
15A	5	6			2(1)	154	2
	1	10			2	190	3
	1	11	2		2	206	1
16A	3	7	3		2	198	2
	1	11	2		2	206	3
	1	12	3		2	212	1
17A	1	7	2		2	210	2
	3	7	3		2	198	3
	2	10	3		2	206	1
18A		9	2		2	219	2
	1	10	1		2	198	3
		7	5		2(3)	240	1
1B	2	10	1		2	193	2
		7	4		2(3)	236	3
		4	7	2	3(2)	273	1
2B	1	5	7		3(2)	239	2
		6	10	2	3(2)	274	3
		10	4		2(3)	227	1
3B	1	7	5		2(3)	227	2
		5	7		3(2)	297	3

* Moral maturity score

** 1 = Pretest
2 = Posttest
3 = Follow-up test

Subject	Stage 1	Stage 2	Stage 3	Stage 4	Stage Score	MMS*	Test**
		11	3		2	221	1
4B		7	5		2(3)	241	2
		8	4		2(3)	237	3
		3	7		3(2)	280	1
5B		4	5		3(2)	254	2
		3	8		3(2)	270	3
	1	6	4		2(3)	227	1
6B	1	6	6		2-3	237	2
	2	7	4		2(3)	214	3
		11	5		2(3)	230	1
7B		2	9		3(2)	281	2
		8	4		2(3)	232	3
		3	8	1	3(2)	272	1
8B		8	6		2(3)	240	2
		2	10		3(2)	287	3
	2	11	1		2	179	1
9B	3	7	3		2	198	2
	1	11	2		2	206	3
	1	9	3		2(3)	210	1
10B	1	8	2		2	208	2
		9	3		2(3)	225	3
		8	5		2(3)	228	1
11B		6	4		2(3)	240	2
		9	6		2(3)	240	3
	2	11			2	184	1
12B	3	6			2(1)	165	2
	2	6	1		2	188	3
	1	8	1		2	200	1
13B		5	6		2(1)	154	2
		9	1		2	210	3
	2	9	3		2	206	1
14B		9	1		2	210	2
	1	8	2		2	208	3

* Moral maturity score

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Subject	Stage 1	Stage 2	Stage 3	Stage 4	Stage Score	MMS*	Test**
	1	7	2		2	208	1
15B		10	2		2	205	2
		11	1		2	207	3
		6	7		3(2)	273	1
16B		2	10		3	297	2
		5	11		3(2)	268	3
	2	11	1		2	192	1
17B	2	10	1		2	181	2
	1	11			2	191	3
		11	4		2(3)	221	1
18B		6	4		2(3)	240	2
		10	4		2(3)	227	3
		7	7		2-3	250	1
19B	2	8	4		2(3)	204	2
		8	6		2(3)	243	3
		9	6		2(3)	240	1
20B		4	8		3(2)	264	2
		7	9		3(2)	255	3

* Moral maturity score

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