

A DESCRIPTIVE ANALYSIS OF PUPILS' PERCEPTIONS OF
THE USE OF REWARD AND PUNISHMENT

Dissertation for the Degree of Ph. D.

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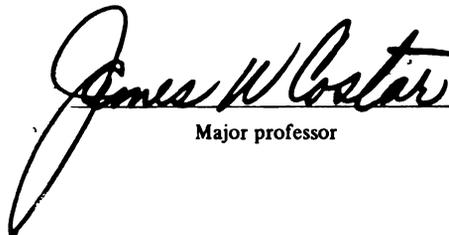
A DESCRIPTIVE ANALYSIS OF PUPILS' PERCEPTIONS
OF THE USE OF REWARD AND PUNISHMENT

presented by

Jeff E. Richburg

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ABSTRACT

A DESCRIPTIVE ANALYSIS OF PUPILS' PERCEPTIONS OF THE USE OF REWARD AND PUNISHMENT

By

Jeff E. Richburg

The purpose of this study was to analyze the effect of certain reward and punishment techniques used by elementary school teachers, when applied according to the moral development stage of the pupil with whom they are used. In addition, an attempt was made to determine whether it is possible to derive from the Kohlberg model a more useful procedure for analyzing descriptions of a teacher's approach to rewards and punishments, and whether there is a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting a certain reward and/or punishment for their individual pupils have more success in social control in the classroom. It was felt to be especially important that educators fully understand the concepts that underlie the use of reward and punishment and why particular rewards and punishments are effective with certain, but not all, pupils.

Data were collected from all teachers in grades 3, 4, and 5 at a single school in which 99 percent of the pupils were white, middle class, and whose parents were predominantly college educated.

There were two teachers at each of the three grade levels mentioned-- three females and three males.

The teachers involved in the study were asked to provide the names of four students with whom they felt they had in the past been successful in using a reward or punishment to get the student to comply with the teacher's standard of acceptable behavior. The teachers were asked to describe, in a general way, the kinds of rewards and punishments they used, which ones were effective or ineffective, and what they thought were reasons for their effectiveness or ineffectiveness. Each teacher was also asked to name four different students with whom he or she had been unsuccessful. Additionally, each teacher related an episode that involved each of the eight pupils. The teacher described each student's behavior in the episode and told how he attempted to get the student to comply with his standard of classroom behavior. Two judges decided whether the teacher's approach in attempting to get the pupil to comply would appeal to a child at Stage 1, 2, 3, 4, 5, or 6 of the Kohlberg model of moral development, which was selected for use in analyzing the teachers' responses.

Students who had been mentioned by the teachers were questioned to determine their perceptions of the kinds of rewards and punishments their teachers used. Each pupil was asked what he thought his teacher would and should do if he behaved in a certain way described by the interviewer. The same two judges were asked to decide whether the student's suggested manner of handling the

same episode his teacher had earlier described would appeal to a child at Stage 1, 2, 3, 4, 5, or 6.

Comparisons were then made between the moral developmental stages of the teachers' and students' responses. It was noted whether the moral developmental stage appeal of each student's response was the same as, lower, or higher than the developmental stage appeal of his teacher's response. Teachers who attempted to make their reward or punishment fit the child's characteristics were referred to in this study as differentiators. Those teachers who used the same reward or punishment for all pupils, irrespective of individual characteristics, were referred to as nondifferentiators.

The results of this study showed that more pupils of teachers who differentiated (87.5 percent) reported that they liked the teachers' ways of handling them than did pupils of teachers who did not differentiate (68.8 percent). Generally, more successfully managed pupils of both teachers who differentiated and of those who did not (89.6 percent) reported that they liked the way the teachers handled them than was true for the unsuccessfully managed pupils (66.7 percent).

There was a higher percentage of teacher management strategies which matched the stage appeal of moral judgment of successfully managed pupils among teachers who differentiated (50 percent) than was the case for teachers who did not differentiate (25 percent). There was a higher percentage of teacher management strategies which matched the stage appeal of moral judgment of unsuccessfully managed pupils among teachers who did not

differentiate (87.5 percent) than was true of unsuccessfully managed pupils of teachers who differentiated (16.6 percent). Nondifferentiating teachers, however, used fewer strategies with their unsuccessfully managed pupils that would seem to appeal to children above Stage 1 than did teachers who differentiated. Successfully managed students gave more than three times (3.7) as many reasons for liking their teacher's management strategies than did unsuccessfully managed pupils. The reasons cited by successfully managed pupils were also more varied.

Using the Kohlberg model of moral development, there was a high level of agreement between the judges on the stage appeal classifications of both the responses of teachers (85.4 percent) and the responses of pupils (83.3 percent).

It was concluded on the basis of the findings that teachers who adapted their rewards and punishments to fit the individual characteristics of their students were perceived by their students as more effective in control of social behavior in the classroom.

It was also concluded that teachers who had a well-conceived rationale had more success in social control in the classroom when success was defined as pupil satisfaction with the management strategy used by their teacher. In addition, the Kohlberg model was found to be useful in providing a description of a teacher's pupil management strategies.

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TABLE OF CONTENTS

	Page
LIST OF TABLES	v
 Chapter	
I. INTRODUCTION	1
Background	1
Purpose of the Study	4
Importance of the Study	6
Major Research Questions	8
Related Questions	9
Definition of Terms	9
Methodology	11
Limitations and Scope of the Study	14
Organization of the Dissertation	15
 II. REVIEW OF RELATED RESEARCH	 17
Rewards and Punishments in the Classroom	17
Studies of Various Types of Incentives	18
Material Incentives	18
Social Incentives	27
Material and Social Incentives	31
Classroom Management Incentives	32
Aversive Incentives	34
Summary of Literature on Incentives	39
Moral Behavior Studies	40
Summary of Literature on Moral Behavior	51
 III. METHODOLOGY	 52
Major Research Questions	52
Related Questions to Be Answered	54
Identification of the Population	54
Sampling Procedures	55
Teacher Sample	56
Student Sample	56
Data Collection and Classification	56
Teacher Interview Procedure	58
Student Interview Procedure	59
Analysis of the Data	63
Analysis Framework	63
Analysis Procedures	68

Chapter	Page
IV. ANALYSIS OF THE DATA	74
Introduction	74
Analysis of Major Research Questions	75
Comments of Teachers	75
Classification of Teachers	78
Identifying Pupils	79
Analysis of Related Questions	86
Summary of Significant Findings	96
V. SUMMARY AND CONCLUSIONS	100
Background	100
Purpose of the Study	103
Methodology	104
Research Questions	106
Summary of Significant Findings	107
Conclusions	110
Recommendations for Further Research	112
Discussion of the Data	113
APPENDIX	115
BIBLIOGRAPHY	117

LIST OF TABLES

Table	Page
3.1 System Used to Classify Teacher Responses	59
3.2 System Used to Classify Student Responses	61
3.3 Students' Perceptions of Their Teachers' Discipline Practices	62
4.1 Successfully Managed Pupils' Ratings of Their Teacher's Classroom Management Strategies	80
4.2 Unsuccessfully Managed Pupils' Ratings of Their Teacher's Classroom Management Strategies	80
4.3 Moral Judgment Stage Appeal Comparisons Between Teachers and Their Successfully Managed Pupils	82
4.4 Moral Judgment Stage Appeal Comparisons Between Teachers and Their Unsuccessfully Managed Pupils	82
4.5 Pupil Satisfaction With Classroom Management Strategies of Differentiating and Nondifferentiating Teachers	84
4.6 Stage Appeal of Classroom Management Strategies Used by Differentiating Teachers	85
4.7 Stage Appeal of Classroom Management Strategies Used by Nondifferentiating Teachers	86
4.8 Degree of Agreement Between Raters on the Stage Appeal of Teacher Management Strategies	88
4.9 Degree of Agreement Between Raters on the Stage Appeal of What Students Thought They Would Do	89
4.10 Reasons Successfully Managed Students Provided to Explain Why They Liked or Disliked Their Teacher's Classroom Management	93

Table	Page
4.11 Reasons Unsuccessfully Managed Students Provided to Explain Why They Liked or Disliked Their Teacher's Classroom Management	94
4.12 Stage-Appeal Comparisons Between Nondifferentiating Teachers and Their Pupils	95

CHAPTER I

INTRODUCTION

Background

Teachers reward and punish students regularly in the management of classroom behavior. The research reported in this study is a descriptive analysis of the use of rewards and punishments by elementary school teachers. This research attempts to study two factors: first, whether teachers who differentiate in their use of rewards and punishments are perceived by their pupils as more effective in managing student behavior; and, second, whether teachers who differentiate according to the individual stage of moral development for each child are perceived by their students as more effective at managing pupil behavior in the classroom. Differentiation, which is central to this research, refers to a teacher's efforts to make a reward or punishment "fit" the child's characteristics in some way.

Teachers use an assortment of reward and punishment strategies to manage student behavior. They usually select strategies they think are either pleasing or distasteful to their pupils, believing both to be effective. For example, teachers often rely on extrinsic rewards such as gold stars, good grades, candy, or praise. Typical punishment techniques include loss of privileges, verbal reprimands, or physical punishment. In any case, if a reward is to

be effective, the child must value the reward. Punishment, to be effective, must seem to the child unpleasant or distasteful.

Those who work with children soon discover that for one child a certain reward gets excellent results, whereas the same reward used with another child is sometimes a dismal failure. This suggests that, to be effective, strategies of reward and punishment must structurally relate to values currently held by the child. Therefore, a teacher needs to understand how each child in his class views a particular reward or punishment--what meaning the reward or punishment has for that child. This meaning will often vary, depending upon the moral developmental stage of the child. Verbal praise used as a reward strategy ("That's a good boy, John.") might be rewarding to a pupil at one stage of his moral development but of little appeal at a different stage.

During the 1920's and 1930's there was considerable research interest in moral or character education in the elementary schools of the United States. Many believed the way to influence pupil behavior was to increase pupils' moral knowledge despite the fact that there was little research evidence at that time to support this view. Most character-education classes led to no significant changes, as measured by experimental tests of moral behavior,¹ though some studies led to slight changes in measured honesty.²

¹Hugh Hartshorne and Mark A. May, Studies in the Nature of Character, vol. 1 (New York: Macmillan, 1928-30), vol. 2: Studies in Service and Self-Control, vol. 3: Studies in Organization of Character.

²Vernon A. Jones, Character and Citizenship Training in the Public School (Chicago: University of Chicago Press, 1936), cited by

On the basis of two more recent studies of considerable significance, Kohlberg³ and Kohlberg and Turiel,⁴ there is evidence to support the view that human behavior depends primarily on the level of moral judgment of the individual. This conclusion is supported in a study by Kohlberg and Turiel, in which they found that verbal arguments used to influence the moral judgment of a child are only assimilated into the child's thinking if the argument is no more than one moral developmental stage above that of the child.

A number of other recent studies on moral judgment have shown that there are clear-cut relationships between levels of moral judgment and moral action, especially in those areas of honesty, nondelinquency, refusal to violate the rights of others, and student activism. As an example, Krebs administered moral judgment interviews and a battery of four Hartshorne and May experimental tests of cheating to 120 junior high school students. He found cheating more common among subjects with low levels of moral judgment than among subjects with high levels.⁵

Moshe M. Blatt and Lawrence Kohlberg, "The Effects of Classroom Moral Discussion Upon Children's Level of Moral Judgment," in Recent Research in Moral Development, ed. Lawrence Kohlberg and Elliott Turiel (New York: Holt, Rinehart and Winston, 1973), p. 1.

³Lawrence Kohlberg, "The Moral Atmosphere of the School: A Developmental View," The School Review 74 (Spring 1966): 3.

⁴Lawrence Kohlberg and Elliott Turiel, "Moral Development and Moral Education," in Psychology and Educational Practice, ed. Gerald S. Lesser (Glenview, Ill.: Scott Foresman, 1971), pp. 410-465.

⁵Richard Krebs and Lawrence Kohlberg, "Moral Judgment and Ego Controls as Determinants of Resistance to Cheating," in Recent Research in Moral Development, ed. Lawrence Kohlberg and Elliott Turiel (New York: Holt, Rinehart and Winston, 1973), p. 3.

Moral action reflects the developmental stage of moral judgment, the higher stages correlating with more positive moral action. Kohlberg has classified moral judgment into three levels: preconventional morality, conventional morality, and postconventional morality. Generally speaking, Kohlberg felt that elementary school children between ages 6 and 10 are at the preconventional level, and those over 20 years of age are more often classified at the postconventional level.⁶

Purpose of the Study

The purpose of this study is to analyze the effect of certain reward and punishment techniques used by teachers in an elementary school. Special attention is paid to the suitability of the reward or punishment for the developmental level of the child with whom it is being used.

Through the use of interviews with teachers and their pupils, an attempt is made to explain factors related to the effectiveness or ineffectiveness of specific reward and punishment strategies. For instance, are teachers using reward and punishment strategies that are inappropriate for the stage of moral development of their pupils? Also, under what conditions do pupils judge their teachers to be effective or ineffective when using rewards and punishments in the management of classroom behavior of pupils?

Studies involving the use of rewards and punishments with pupils generally focus on the behavior of the children. In fact,

⁶A full description of the Kohlberg stages and levels is given on pages 63-67 in Chapter III of this report.

behavior modification strategies are overt attempts to change a particular behavior by means of a reward, punishment, or by extinction. The focus on behavior and behavior change often seems to disregard the fact that human behavior is also influenced by cognitive thinking. In essence, we act like the kind of people we perceive ourselves to be. This concept is the very heart of an abundance of literature that deals with "self-concept" and its ramifications. Prescott Lecky, a pioneer in self-image psychology, demonstrated that students have difficulty learning when they perceive themselves as being unable to learn.⁷

Albert Ellis wrote that human feelings and emotions are generally the product of thought expressed in internalized sentences we say to ourselves.⁸ Interpreting Ellis in another way, we can say that behind an emotion is generally a thought that determines the state of the emotion. For instance, it is the thought that determines whether we are sad, happy, angry, or pleased. Similarly, moral behavior is also influenced by thought, the moral judgment we all possess. Our moral judgment, according to Kohlberg, although only one factor in moral behavior, is nevertheless the single most important determinant yet discovered for moral behavior. If this assertion is correct, we should give more attention to the concept of moral judgment and its relationship to student behavior in the classroom.

⁷Prescott Lecky, Self-Consistency: A Theory of Personality (Garden City, New York: Anchor Books, 1969), pp. 123-30.

⁸Albert A. Ellis, A Guide to Rational Living (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961), pp. 9-11.

Teachers, being concerned with moral behavior, need to understand the influence of moral judgment on behavior. As was stated earlier, teachers have always rewarded and punished students, expecting to influence their social and moral development. This study attempts to analyze the use of rewards and punishments by elementary school teachers as they relate to the level of moral judgment of their pupils. The Kohlberg model of moral judgment is the frame of reference against which observations of teachers and pupils are tested.

Importance of the Study

Recent events in the United States have caused many people to express great concern about moral issues in relationships to government and life in general. Our schools reflect the concerns of society at large.

Consistently, polls and surveys designed to assess the concerns of citizens about public education have shown that discipline in the schools is primary. In May 1974, George Gallup conducted the Sixth Annual Gallup Poll of Public Attitudes Toward Education. A total of 1,702 adults (18 years and older) composed the cross-section of adults in the United States. Heading the list of major problems confronting the public schools in 1974 reported by those interviewed was "lack of discipline in the public schools."⁹

⁹George H. Gallup, "Sixth Annual Gallup Poll of Public Attitudes Toward Education," Phi Delta Kappan 56 (September 1974): 20-21.

More recently, Gallup concluded a seventh poll and found "lack of discipline" again heading the list of major problems confronting the public schools. This poll further indicated that 84 percent of public and 85 percent of parochial school parents thought schools should provide instruction that deals with morals and moral behavior.¹⁰

In the early part of 1973, the membership of Phi Delta Kappa, a professional organization for educators, was asked to rank, in order of priority, 18 distinctive goals of education. High on the list was the goal that schools "develop moral responsibility and a sound ethical and moral behavior."¹¹ It was further pointed out in this same survey that the membership of Phi Delta Kappa saw the schools as having less control over pupil behavior than in years past. The results of both the Phi Delta Kappa study and the Gallup polls of 1974 and 1975, as well as other recent analyses, generally indicate that most people still expect schools in the United States to have a positive influence on the moral thinking and behavior of children, and that classroom teachers have a significant role to play in the development of sound moral judgment in their pupils.

It was already been pointed out that teachers regularly reward and punish students in managing classroom behavior. Teachers view rewarding and punishing both as a means of influencing pupil

¹⁰George H. Gallup, "Seventh Annual Gallup Poll of Public Attitudes Toward Education," Phi Delta Kappan 57 (December 1975): 234.

¹¹David Purpel and Kevin Ryan, "Moral Education: Where Sages Fear to Tread," Phi Delta Kappan 56 (June 1975): 660.

behavior and a means of developing moral character. Thus, it is especially important that educators fully understand the concepts underlying reward and punishment as well as the techniques which insure that their use will have a positive impact on the moral development of students. Further analyses must also be made of why particular rewards and punishments are not effective with certain pupils. This study attempts to do that within the broader frame of reference that has as its focus the impact of rewards and punishments, in general, upon the classroom behavior of children at the elementary school level.

Major Research Questions

As observed earlier, elementary school teachers have many techniques they can use to reward and punish their students. Some teachers use similar techniques with all pupils, whereas others use specific techniques that vary from student to student. The two primary research questions in this study attempt to focus upon the conditions that underlie the effective use of this approach in the management of pupil behavior in the classroom. Specifically:

1. Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?
2. Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Related Questions

Teachers generally reward and punish students to accomplish two basic objectives: to provide effective classroom management, or to influence the moral development of their pupils. Kohlberg's research focused on moral judgment--not on rewards and punishments. However, he asserted in his writings that moral judgment is positively correlated with moral action or behavior. Therefore, the following related questions are considered in this study:

1. Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?
2. Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?
3. To what degree is there stage-appel agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Definition of Terms

The concept of moral judgment underlying the main thesis of this study is one based on the work of Lawrence Kohlberg. The model which he has developed is specific in its scope and incorporates the following terms:

Morality is an integrating and directing principle. Morality is what defines an organized unit of the personality. The integrating and directing principle of morality is a sense of justice.

Justice is the ability to see relationships in a conflict from all points of view. One needs to be able to see the other

person's point of view as well as his own to resolve a conflict justly.

Moral principle is a principle for resolving competing claims for action.¹²

Moral decision is a decision that involves consciousness of conflict between two lines of action and an attempt to choose the better in the face of temptation. This involves strong emotional involvement.

Stage is a developmental pattern that is chronologically successive but not age related. Stage is the product of organism-environment transaction and varies with individuals and cultures with respect to age of entry, time required to pass through a given stage, and level of stage maturity reached.

A moral developmental stage is a kind of stage in which a person makes a moral choice by using the structural logic that represents the characteristics of that stage. Kohlberg found that there are six stages.

A moral developmental level is a general period of time that reflects the basic overall characteristics of moral judgment for two specific stages within that level. Kohlberg found that there are three levels.

A successful reward or punishment in this study refers to a reward or punishment the teacher and/or the student thinks is effective.

¹²John S. Stewart, "Toward a Theory for Values Development Education" (Ph.D. dissertation, Michigan State University, 1974), pp. 268-81.

Moral education is direct and indirect intervention of the school that affects both moral behavior and the capacity to think about issues of right and wrong.¹³

Stage appeal refers to behavior that seems to fit a particular stage of moral development.

Methodology

This study is a descriptive analysis of the perceptions of elementary school teachers and their pupils regarding effective and ineffective use of rewards and punishments as means of controlling social behavior in the classroom.

Data were collected from all teachers in grades 3, 4, and 5 at a single school in which 99 percent of the pupils were white, middle class, and whose parents were predominantly college-educated. The school comprises six grade levels and normally has an enrollment of about 275 pupils with 12 classroom teachers. There are two teachers at each of the three grade levels mentioned above; all six were included in the study. Three were females and three were males. The pupils included in this study were those identified by their teachers as pupils with whom the teachers felt they had been either successful or unsuccessful in achieving compliance with a specific standard of acceptable classroom behavior.

Each teacher involved in the study was asked to provide the names of four students with whom he or she had in the past successfully used a reward or punishment to get the student to comply with the

¹³Purpel and Ryan, "Moral Education," p. 659.

teacher's standard of acceptable behavior. Each teacher was also asked to name four different students with whom he or she had been unsuccessful. The number of students, four for each category, is reasonable for the size of the classes. Generally in a class of about 25, there are three or four students who are difficult to manage, and it was thought that a total of eight per teacher would provide a sufficient number of students to balance those who are difficult with an equal number of those who are viewed as easy to manage. Each of the six teachers in the study was asked to describe an episode, either successful or unsuccessful, in which an attempt was made to get each of the eight students to comply with the teacher's standards of acceptable classroom behavior. Both what the student did and what the teacher did to change the student's behavior were included in the descriptions.

Each student was interviewed to get both his perception of what he thought his teacher would do if he behaved in the manner which the teacher previously reported, and what he thought the teacher should do in the same situation.

Comparisons were made between what the student thought the teacher would and should do and what the teacher reported that he or she had actually done with that student. It was then possible to determine if what the teacher had done was similar to what the student thought would and should have been done to control his or her behavior, i.e., whether the particular reward or punishment the teachers used was appropriate.

The Kohlberg model of moral development was used to explain student-teacher agreement, or lack of agreement, as to the suitability of a specific reward or punishment for a particular student. An attempt was first made to identify those teachers who rewarded or punished students on the basis of what seemed appropriate for particular students in terms of their developmental stage of moral judgment. After these teachers were identified, an attempt was then made to determine whether they found it easier to change the behavior of pupils in the desired direction, as perceived by their pupils and themselves, than teachers who did not. It was assumed that any inferences that might be made while using the Kohlberg model to assess the moral development stage of each pupil, from the responses the student gave, would only enable the researcher to classify the developmental stage of the responses. It was not possible to determine if the pupil was actually at that stage of moral development.

The procedure used in the interviews consisted of three phases. First, the researcher attempted to establish a good personal relationship with each student and teacher being interviewed, using an informal, individualized approach. During the second phase, the researcher stated the purpose for the interview and described how the conversations were to be tape-recorded. In the final phase the researcher asked those questions that would provide the necessary data. The questions for the teachers were different from those used with the students, and can be found on page 58 in Chapter III.

There were 54 interviews in all, 48 with pupils and 6 with teachers. The first interview was with teacher A, followed by eight

separate interviews with pupils of teacher A. Next came the interviews with teacher B and the eight pupils of teacher B. The procedure continued in this order until all 48 pupils and 6 teachers had been interviewed individually.

Limitations and Scope of the Study

The limiting factors present in this study are as follows:

1. The student interview questions related to moral judgment used in this study were not fully validated in previous research. Earlier studies incorporating the use of rewards and punishments with elementary school children have not analyzed them in relation to the level of moral development.
2. Teacher statements about their own behavior may not, in reality, reflect the actual behavior of the teachers.
3. In this study, the moral judgment stages for each child and for the teacher responses represent inferred stages that were determined by two judges who had studied Kohlberg's research on moral development in their doctoral programs. Although both judges were experienced in the use of the Kohlberg model, it is possible that their estimations of moral judgment stage are not the actual stage.
4. There is no certainty that teacher strategies that students like or those they think are effective are, in fact, effective.
5. The data were gathered by the principal of the school in which the study was conducted. The responses of teachers and students may have been influenced to some degree as a result of this relationship.

6. The students were not randomly selected for this study, thus limiting the degree to which any conclusions drawn can be generalized to other populations.

7. The sample consisted of all white, middle-class children, with parents who were, for the most part, well-educated.

The delimiting factors that were established to confine the scope of this study are as follows:

1. The study was limited to upper elementary pupils in grades 3, 4, and 5. It was thought that this group of pupils would be more articulate and better able to express both their thoughts and feelings than would younger pupils.

2. The study involved only one elementary school in Michigan. This seems reasonable in light of the fact that the purpose of the study was to analyze and describe the factors associated with the effective use of rewards and punishments in the classroom rather than student behavioral outcomes.

3. Comparisons were made using only the Kohlberg model of moral judgment to assess the stage appeal of teacher and student responses. Although others were available, none seemed more appropriate.

4. The research was limited to a study of the effective use of rewards and punishments and did not attempt to test the validity of the Kohlberg model of moral development for use in the classroom.

Organization of the Dissertation

The importance and purpose of the study, the research design, including the research questions to be analyzed, have all

been described in this first chapter. In the remaining chapters the related literature, research procedures, results, and conclusions are presented.

In Chapter II a review of related literature is reported. This review is intended to present findings in three significant areas: positive incentives (material and social), aversive incentives, and moral behavior.

The research design is outlined in Chapter III. There, a detailed description of the methodology of the study is presented, including the selection of the subjects, the development of the interview procedures, and the gathering and processing of the data.

The results of the analysis of the data are discussed in Chapter IV.

A summary of the study, the conclusions, recommendations, and the implications for further research are presented in the final chapter.

CHAPTER II

REVIEW OF RELATED RESEARCH

Rewards and Punishments in the Classroom

Elementary school teachers are showing considerable interest in the use of incentives and behavior modification techniques to improve both academic performance and social behavior in the classroom. The research that is reviewed in this chapter shows the impact of using a variety of incentives to improve academic and social behavior in elementary school classrooms. Incentive-motivation theories are based on the assumption that behavior is influenced by the anticipation of reinforcing consequences. Incentive theorists further hold that behavior can be controlled or modified by arranging incentive conditions through such techniques as deprivation, satiation, and conditioning.¹ If one wishes, for example, to stimulate pupil interests in academic pursuits, the incentive theorists would say that it would be necessary to arrange conditions of reinforcement with respect to achievement behavior. Examples of this kind of restructuring and arranging of incentive conditions are reported in the studies that follow.

¹Albert Bandura, Principles of Behavior Modification (New York: Holt, Rinehart and Winston, 1969), pp. 226-27.

Studies of Various Types of Incentives

In 1971, Lipe and Jung did a comprehensive review of recent research on the use of incentives to influence student performance in elementary school classrooms. This review was partially supported by the United States Office of Education. Many of the same studies that Lipe and Jung reviewed were also reviewed and are reported in this chapter.²

Material Incentives

The use of rewards, which are often referred to in the literature as tokens, positive reinforcers, or material incentives, is not new. In 1529, for example, Erasmus advocated cherries and cakes in place of the cane in teaching children Latin and Greek.³ Token reinforcement programs used in classrooms, however, began and developed rapidly less than a decade ago. Such programs are generally characterized by two basic components: instructions are given to the class about the behaviors to be reinforced, and tokens or rewards are made available if the behaviors agreed upon are demonstrated. Other rules are developed as needed.

In one of the largest token reinforcement studies, Hewett, Taylor, and Artuso formed six classrooms of 8- to 11-year-old

²Dewey Lipe and Steven Jung, "Manipulating Incentives to Enhance School Learning," Review of Educational Research 4 (October 1971).

³Burrhus F. Skinner, "Contingencies of Reinforcement in the Design of a Culture," Behavioral Science 11 (May 1966): 159.

emotionally disturbed children.⁴ There were nine students per class. The classes were matched for IQ, reading age, and achievement level. One class (E) received tokens for the entire year. Another class (C) served as a control and received no tokens for the entire year. Two more classes (CE) had control procedures for the first semester and tokens for the second semester. Finally, two classes (EC) received tokens for the first semester and control procedures the second semester. The three dependent measures were arithmetic achievement (California Achievement Test [CAT]), reading achievement (CAT), and task attention. There was greater improvement in arithmetic and task attention in Class E than in Class C. The two CE classes showed greater improvement in arithmetic and task attention during the second semester than did Class C. However, the two EC classes showed a significant increase in task attention when tokens were withdrawn when compared with Class E. This latter finding was somewhat unclear and inconsistent with the other results.

Many studies have shown that contingent token reinforcement leads to behavioral changes, whereas noncontingent reinforcement does not. However, Kazdin found that behavioral change might result in situations in which a reinforcement was made contingent or noncontingent upon a desired behavior.⁵

⁴Frank M. Hewett, Frank D. Taylor, and Alfred A. Artuso, "The Santa Monica Project: Evaluation of an Engineered Classroom Design With Emotionally Disturbed Children," Exceptional Children 35 (March 1969): 523-29.

⁵Alan E. Kazdin, "Role of Instructions and Reinforcement in Behavior Changes in Token Reinforcement Programs," Journal of Educational Psychology 64 (February 1973): 70.

Drabman discussed a number of problems that are often responsible for the failures many classroom teachers experience in implementing token economy programs. One mistake that was cited is that of assuming that a particular class needs to have a token program when other approaches such as using simple praise, ignoring, or using soft reprimands would be more effective.⁶

Significant improvements in academic behavior of children in special remedial classes have also been reported by Wolf, Giles, and Hall. These researchers had a special remedial education program for 15 children in grades 5 and 6 in an urban poverty area. The Standard Achievement Test scores of the children in the token program increased 1.5 years as compared to a median gain of 0.8 years for a control group (N = 15) that had no remedial program. The token group showed a median increase of 1.1 grade points (report card grades), whereas the entire group increased only 0.2 points.⁷

Food, in particular, has been a popular reinforcer. Fruit and cookies or sandwiches were given to black children of a depressed Kansas City area in an experimental preschool. Snacks given at regular snack time, but made contingent on desired behavior, were successful incentives.⁸

⁶Ronald S. Drabman and Richard D. Tucker, "Why Classroom Token Economies Fail," Journal of School Psychology 12 (Fall 1974): 185.

⁷Montrose M. Wolf, David K. Giles, and Robert V. Hall, "Experiments With Token Reinforcement in a Remedial Classroom," Behavior Research and Therapy 6 (February 1968): 51-64.

⁸Todd R. Risley and Betty Hart, "Developing Correspondence Between the Nonverbal and Verbal Behavior of Preschool Children," Journal of Applied Behavior Analysis 1 (May 1968): 267-81.

The results of McGrade's study indicated that lower-class children were responsive to verbal reinforcement, with candy being more effective than verbal rewards for both middle- and lower-class groups.⁹ Contradictory results were obtained by Unikel, Strain, and Adams, who found that with lower-socioeconomic children tangible and social rewards were equally effective and both significantly facilitated performance on a learning task as compared with a nonreward control. Unikel and his associates compared the giving of candy with teacher-praise statements such as "That's good." These two conditions did not show a significant difference in effects on performance of a simple discrimination learning task. Five- and six-year-old white children who were enrolled in Project Head Start in a rural area were subjects in this experiment.¹⁰

The effects of tangible and intangible rewards on concept-switching performance were evaluated in five-year-old middle- and lower-class children in Israel. The children were given cards that were constructed so that they could be sorted according to color and form. The children were initially taught two principles for sorting the cards, but later were asked to sort them an entirely

⁹Betty J. McGrade, "Social Class and Reinforcers, Effects in Discrimination Learning," Psychonomic Science 12 (October 1968): 140.

¹⁰Irving P. Unikel, G. S. Strain, and Henry E. Adams, "Learning of Lower Socioeconomic Status Children as a Function of Social and Tangible Reward," Developmental Psychology 1 (September 1969): 553-55, cited by Joseph Tramontana, "Social Versus Edible Rewards as a Function of Intellectual Level and Socioeconomic Class," American Journal of Mental Deficiency 77 (July 1972): 33-38.

different way.¹¹ They found that children who received a tangible reward performed better than those who received an intangible one. However, neither type of reward had an effect that was significantly better than a control group who received no reward at all. Also, lower-class children did not differ in performance from middle-class children, and time of presentation of the reward, whether before or after the performance, had no effect.

Chadwick and Day¹² and Day and Chadwick¹³ used food and other material reinforcers in a class of 30 black and Mexican-American students, all with severe behavior problems. A school-furnished lunch, candy, gum, goldfish, clothes, and jewelry were some of the reinforcers. These material incentives were instrumental in improving both social behavior and academic performance.

Benowitz and Busse found spelling improved for fourth grade black children in two urban ghettos when spelling test results were reinforced with a box of crayons for improved performance. The teachers were asked to tell their classes each day, "If you do very

¹¹Charles W. Greenbaum, Lilly R. Weiss, and Rivka Landan, "Type of Reward, Social Class, and Concept-Switching in Preschool Children," Journal of Genetic Psychology 121 (September 1972): 91-106.

¹²Bruce A. Chadwick and Robert C. Day, "Systematic Reinforcement: Academic Performance of Mexican-American and Black Students" (unpublished manuscript, University of Washington, Department of Sociology, 1970), cited by Lipe and Jung, "Manipulating Incentives," pp. 251-55.

¹³Robert C. Day and Bruce A. Chadwick, "Modification of Disruptive Behavior of Mexican-American and Black Children" (unpublished manuscript, University of Washington, Department of Sociology, 1970), cited by Lipe and Jung, "Manipulating Incentives," pp. 251-55.

well on your spelling test this week, you will be given a nice price, a box of crayons."¹⁴

Cartwright and Cartwright investigated the reward preferences of elementary school children in grades 4, 5, and 6. They sought to determine and describe differences, if any, in the preference patterns when these children were grouped according to grade level, sex, and intelligence. There were five categories of reward preferences from which the child was to indicate his preference. The categories were adult approval, competition, consumable, peer approval, and independence. There were statements that characterized each category. The child was to choose one of a pair of statements he preferred as an indicator of reward preference. Among the above-mentioned categories, adult approval was the most highly preferred class of reinforcers for all groups. This category was characterized by such descriptors as the following: a grade of "A" on your paper, and the teacher writes "excellent" on your paper. Peer approval began to replace competition as the second most preferred for groups of sixth graders. Either "independence" or "consumable" ranked lowest for all groups. The consumable category was characterized by reward preferences such as a soft drink or a nickel for a scoop of ice cream. The independence group had descriptors such as: to be free to play outside, to draw pictures, and to look at different books. Results also showed relatively stable

¹⁴Martin L. Benowitz and Thomas V. Busse, "Material Incentives and the Learning of Spelling Words in a Typical School Situation," Journal of Educational Psychology 61 (February 1970): 24-26.

patterns of reward preferences over grade level, sex, and intelligence. These data, however, were group results. The individual profiles showed different patterns.¹⁵

Paul Viel and Charles Galloway also investigated the question of how a teacher can decide which reinforcer is best for a particular child. They concluded that the sensible way is simply to ask the child.¹⁶

In various other studies, a variety of material rewards was made available contingent on improved performance. In a laboratory learning experiment with 160 white kindergarten children, materials such as candies, trinkets, small cars, and dolls were made available for successful performance. In this experiment, the rewards did not result in improved performance in both groups. Marshall speculated that when the children took time to select rewards, the continuity of the task was interrupted, lowering performance scores.¹⁷ Spence, however, found poor results in the use of material rewards as well. She found that candy rewards yielded poorer results than verbal

¹⁵Carol Cartwright and Phillip G. Cartwright, "Reward Preference Profiles of Elementary School Children," paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, California, December 1969 (Bethesda, Md.: ERIC Document Reproduction Service, ED 030 932, 1969), p. 4.

¹⁶Paul J. Viel and Charles G. Galloway, "What's an Effective Reinforcer? Ask the Children," Elementary School Journal 73 (March 1973): 314-22.

¹⁷Hermine H. Marshall, "Learning as a Function of Task Interest, Reinforcement, and Social Class Variables," Journal of Educational Psychology 60 (April 1969): 133-37.

statements of right or wrong on a discrimination learning task with preschoolers, second, third, fifth, and sixth graders.¹⁸

Money was used to improve reading accuracy and speed on the Gray Oral Reading Test. There were 96 subjects, fourth, fifth, and sixth grade boys who were each given 75 cents before the experimental session. These boys, in a reward and punishment experimental condition, were told they might win more money or lose what money they had, depending on their reading performance. Control subjects were told that the money was merely for participating. The two groups yielded results that were not significantly different.¹⁹ Alschuler, however, used play money instead of real money and got significant results in the period of one year. These results were evaluated through standardized testing. Alschuler had each student sign a contract with the teacher, in which the student agreed to complete so much math for so much make-believe money.²⁰

Goodyear investigated the effect of both reward and punishment on listening comprehension. He felt that previous studies on this topic had been inconclusive. In this study, incentives were defined by varying additions and deductions of grade points, and

¹⁸Janet T. Spence, "A Study of Certain Factors Affecting Children's School Performance" (Bethesda, Md.: ERIC Document Reproduction Service, ED 011 086, 1967), p. 30.

¹⁹Sherwin B. Cotler, "The Effects of Positive and Negative Reinforcement and Test Anxiety on the Reading Performance of Male Elementary School Children," Genetic Psychology Monographs 80 (August 1969): 29-50.

²⁰Alfred S. Alschuler, "The Effects of Classroom Structure on Achievement Motivation and Academic Performance," Educational Technology 9 (August 1969): 19-24.

listening skill was defined by performance on the Brown-Carlson Listening Comprehension Tests. Results of this study showed no basis for the use of external incentives in the classroom as a means of influencing listening performance.²¹

Other researchers found that a reward, contingent on performance but available at a later date, was made possible by a verbal promise. Halcomb and Blackwell promised credit toward successful completion of a college course if students performed well on a monotonous, boring task. Those subjects for whom credit was made contingent on a certain level of performance did better than those who were promised credit simply for participating. Thus, the verbal promise was motivational in influencing performance.²²

Another study by Walker and Hops examined the effectiveness of various reinforcement contingencies in diminishing social withdrawal in children. In this study, social withdrawal was defined in terms of low rates of social interaction. Subjects were three socially withdrawn first and second graders in three different regular classes, as determined by scores on the Walker Problem Behavior Identification Checklist. A behavioral coding system was developed for observing and recording social interactions in the classroom. Points were given to encourage social interaction. These points were

²¹Finis H. Goodyear, "The Effect of Reward and Punishment Incentives on Listening Comprehension," paper presented at the Annual Meeting of the Speech Communication Association, New York City, 8-11 November 1973 (Bethesda, Md.: ERIC Document Reproduction Service, ED 084 602, 1974), pp. 6-7.

²²Charles G. Halcomb and Peggy Blackwell, "Motivation and the Human Monitor: The Effect of Contingent Credit," Perceptual and Motor Skills 28 (April 1969): 623-29.

given to the withdrawn child or his group. In one instance, the child was given a training session in social interaction skills. In another instance, the group, not the child, was trained. In still another situation, both the child and the group were trained. It was found that varying the reinforcement contingencies with the individual, group, or a combination thereof did result in increased social interaction. The most significant results were achieved when both the child and the group were trained in social interaction skills and techniques.²³

Social Incentives

Teacher praise has been studied most often as a social incentive. Thompson and Hunnicutt found that:

1. either praise or blame is more effective than no external incentives in increasing the work output of fifth grade pupils;
2. if repeated often enough, praise increases the work output of introverts until it is significantly higher than that of introverts who are blamed or extroverts who are praised;
3. if repeated often enough, blame increases the work output of extroverts until it is significantly higher than that of extroverts who are praised or introverts who are blamed.

²³Hill M. Walker and Hyman H. Hops, "The Use of Group and Individual Reinforcement Contingencies in the Modification of Social Withdrawal," Report No. 6, Department of Special Education, Bureau of Education for the Handicapped, Oregon, University, Eugene, Oregon, May 1972 (Bethesda, Md.: ERIC Document Reproduction Service, ED 069 096, 1973), pp. 1-61.

The results indicated that praise as well as blame can be used unwisely by the elementary school teacher if he does not fully appreciate and understand the different personalities present in his classroom.²⁴

More recently, Kennedy and Willcutt reviewed 33 studies on praise and blame as incentives. Two of these studies showed that fifth grade students labeled as introverts achieved a higher level when blamed.²⁵ Leith and Davis found that 13-year-old students rated as both anxious and introverted performed better for praise than for negative incentives. This was not true of the other personalities examined.

Leith and Davis also found no differential preference for praise versus neutral or negative incentives in relation to performance of students from high and low socioeconomic home environments.²⁶ Cameron and Storm found that middle-class subjects performed significantly better than lower-class subjects under non-material reward conditions, whereas material rewards made no

²⁴George G. Thompson and Clarence W. Hunnicutt, "The Effect of Praise or Blame on the Work Achievement of 'Introverts' and 'Extroverts,'" Journal of Educational Psychology 35 (May 1944): 257-66, cited by Lester D. Crow and Alice Crow, Readings in Educational Psychology (Patterson, New Jersey: Littlefield, Adams and Company, 1960), pp. 203-10.

²⁵Wallace A. Kennedy and Herman S. Wilcutt, "Praise and Blame as Incentives," Psychological Bulletin 62 (November 1964): 323-32.

²⁶George O. Leith and T. N. Davis, "The Influence of Social Reinforcement on Achievement," Educational Research 11 (February 1969): 132-37.

difference in respect to social class.²⁷ In regard to the relationship of socioeconomic status to effectiveness of social rewards, a review of the literature shows a general consensus that lower-socioeconomic families, especially those who are classified as culturally deprived, make less frequent and less effective use of all aspects of language, including less frequent use of verbal rewards.²⁸

Studies were also conducted which gave characteristics of incentive givers that enhanced the reinforcement value of praise. Unikel, Strain, and Adams found that female experimenters got better results with five- and six-year-old white rural-area children than did male experimenters.²⁹

Kennedy and Willcutt reviewed a study by Vega that found second, sixth, and tenth grade black students showing improved performances during "blame" conditions by black examiners. However, with white examiners "blame" depressed the scores of black students.³⁰ McArthur and Zigler tried to manipulate the attractiveness of the reward giver by showing one of two films to each subject before the subject performed a discrimination learning task. One

²⁷Ann Cameron and Thomas Storm, "Achievement Motivation in Canadian, Indian, Middle and Working-Class Children," Psychological Reports 16 (April 1965): 459-63.

²⁸Joseph Tramontana, "Social Versus Edible Rewards as a Function of Intellectual Level and Social-Economic Class," American Journal of Mental Deficiency 77 (July 1972): 33-38.

²⁹Unikel, Strain, and Adams, "Learning of Lower Socio-economic Status Children," p. 553.

³⁰Kennedy and Willcutt, "Praise and Blame as Incentives," pp. 323-32.

film showed the experimenter as unfriendly whereas the other film presented him as warm and helpful. Those second grade boys who viewed the warm, helpful experimenter persisted longer on a boring task in order to earn praise than did the boys who viewed the same experimenter as unfriendly.³¹

Stevenson and Fabel found that institutionalized feeble-minded children have a greater motivation for adult approval or praise than do noninstitutionalized normal children. However, it was impossible in their study to determine whether the differences were attributable to the effects of social deprivation due to institutionalization or other characteristics that differentiate normal from retarded children.³²

Kelly and Stephens compared the effectiveness of praise and criticism, with 180 male kindergarten children of middle- and upper-lower-class families, on their performance of a simple motor-operant task. They found that punishment or criticism was more effective than praise in the children's learning and performing of the motor task.³³

³¹Leslie McArthur and Edward Zigler, "Level of Satiation on Social Reinforcers and Valence of the Reinforcing Agent as Determiners of Social Reinforcer Effectiveness," Developmental Psychology 1 (November 1969): 739-46.

³²Harold W. Stevenson and Leila S. Fabel, "The Effect of Social Reinforcement on the Performance of Institutionalized Normal and Feebleminded Children," Journal Personality 29 (June 1961): 136.

³³Richard Kelly and Mark W. Stephens, "Comparison of Different Patterns of Social Reinforcement in Children's Operant Learning," Journal of Comparative and Physiological Psychology 57 (April 1964): 294-96.

In a study dealing with the effect of frequency of praise, Clark and Walberg found that praise given more frequently produced the greatest improvement in subjects' standardized reading scores after a three-week experimental period.³⁴

McManis compared the effects of neutral, reproof, praise, and competition verbal-incentives on the persistence and accuracy of normal and retarded children who were involved in tasks that paired them with other children of comparable performance abilities. It was found that both praise and competition incentives produced significantly greater persistence and accuracy of performance than did neutral or reproof incentives, with both retarded and normal children.³⁵

Material and Social Incentives

Risley studied the effect on the behavior of elementary school children of combining a material and a social incentive. A food reward was coupled with verbal statements by the teacher during snacktime. The criterion measure of performance in this study was the number of verbal statements about what a child had done and the truthfulness of these statements. When the teacher gave the snack contingent on a child's statement, the teacher found that the child repeated that statement more frequently whether the statement was

³⁴Carl A. Clark and Herbert J. Walberg, "The Use of Secondary Reinforcement in Teaching Innercity School Children," Journal of Special Education 3 (Summer 1969): 177-85.

³⁵Donald L. McManis, "Pursuit-Rotor Performance of Normal and Retarded Children in Four Verbal-Incentive Conditions," Child Development 36 (September 1965): 667.

true or not. When the teacher confirmed the truthfulness of the child's statement, the child's reporting stayed high. When the child's statement did not conform to fact, the teacher still gave him a snack but added, "You didn't really play with the paint though, did you?" The number of false claims dropped significantly, thus showing that the teacher's verbal statements had some impact.³⁶

Classroom Management Incentives

O'Leary and Becker evaluated experimentally the effects of praise, ignoring, and reprimands on disruptive behavior of a class of 19 first graders during their rest period. The authors found that praising appropriate behavior and ignoring disruptive behavior reduced the average disruptive time from 54 percent to 32 percent. When reprimands were reinstated, disruptive behavior increased to baseline level; disruptive behavior dropped again to an average of 35 percent when the all praise-no reprimand procedure was resumed.³⁷

Walker, Mattson, and Buckley devised a treatment program for "hyperdisruptive, and acting out" fourth, fifth, and sixth graders who had average or above-average intelligence. Two children were brought into this class at a time, until there was a total of six children in the class. A number of procedures were introduced simultaneously, such as programmed instruction, charts kept by the

³⁶Todd Risley, "Learning and Lollipops," Psychology Today 1 (January 1968): 28-31.

³⁷Daniel K. O'Leary and Wesley C. Becker, "The Effects of the Intensity of a Teacher's Reprimands on Children's Behavior," Journal of School Psychology 7 (Winter 1968-1969): 8-11.

children of their points earned, timeout from reinforcement, group points for appropriate behavior, and parental involvement. The children in the program increased their proportion of task-oriented behavior from an average of 39 percent in the base period in the regular class to 90 percent in the token program in the special class. The six children were allowed to return to their regular classes from 2:00 P.M. to 3:00 P.M. each day. By the end of the fourth week of the treatment program, the behavior of all six subjects was equally as good in their regular classes.³⁸

McAllister's experiment with junior-senior high school students showed that inappropriate talking can be reduced through noncontingent praise. The teacher of this English class was instructed to "disapprove of all instances of inappropriate talking behavior in a direct stern manner." Also, regardless of classroom behavior, the teacher was to praise the class for being quiet. Praise was given on a predetermined time schedule. This procedure was quite effective in reducing inappropriate talking.³⁹

Other researchers have tried to use class social pressures on individual students to control classroom behavior. Schmidt and

³⁸Hill M. Walker, Robert H. Mattson, and Nancy K. Buckley, "Special Class Placement as a Treatment Alternative for Deviant Behavior in Children," Oregon University, Eugene Oregon, July 1968 (Bethesda, Md.: ERIC Document Reproduction Service, ED 026 694, 1969), pp. 16-41.

³⁹Loring W. McAllister, James G. Stachowaik, Donald M. Baer, and Linda Condermon, "The Application of Operant Conditioning Techniques in a Secondary School Classroom," Journal of Applied Behavior Analysis 2 (November 1969): 277-85.

Ulrich⁴⁰ used what Schwitzgebel called a "behavior prosthetic" device to control classroom noise. A sound-level meter and a kitchen timer were used to monitor duration and intensity of noise level below 42 decibels for a length of time set on the timer. A fourth grade class was used for the experiment. Peer consequences in the form of threatening gestures, arm moving, and facial expressions directed at the noisy ones were reported by the researchers. The peer pressure appeared to be effective. Packard obtained similar good results in another experiment that capitalized on peer consequences as a means of controlling classroom behavior.⁴¹

Aversive Incentives

Aversive incentives or punishments used by elementary school teachers have been studied--for example, reproof, reprimands, disapproval, and other indicators that a student's behavior was unacceptable. In a study, LaVoie compared the effectiveness of an aversive stimulus with techniques such as withholding of resources, withdrawal of love, and reasoning. LaVoie compared these techniques when used by themselves and when combined with praise. His sample consisted of 120 first and second graders. Resistance to deviation was used as the measure of punishment effectiveness. He found that the most stable response pattern resulted from the use of an

⁴⁰Gilbert W. Schmidt and Roger E. Ulrich, "Effects of Group Contingent Events Upon Classroom Noise," Journal of Applied Behavior Analysis 2 (November 1969): 171-79.

⁴¹Robert G. Packard, "The Control of Classroom Attention: A Group Contingency for Complex Behavior," Journal of Applied Behavior Analysis 3 (Spring 1970): 13-28.

aversive stimulus. Neither use of praise nor sex of child significantly influenced punisher effectiveness.

LaVoie compared the effectiveness of an aversive stimulus, a rationale, withholding resources, and withdrawals of love, when administered to six- to eight-year-old boys and girls in a resistance-to-deviation test. Each child received one of the four types of punishment for selecting prohibited toy choices, and his resistance to deviation was observed. Three predictions were made: (1) punishment is more effective with girls, (2) an aversive stimulus is more effective than the other three punishers, and (3) use of a rationale produces greater stability in resistance to deviation. La Voie found that the first deviation occurred significantly later in the resistance-to-deviation test period for those subjects who were punished with an aversive stimulus. Frequency of deviation was less in the aversive stimulus condition than for withdrawal of love, but not for a rationale. The aversive stimulus did not produce significantly more resistance to deviation than the other punishers in the analysis for duration and average duration per deviation. Thus, the overall effectiveness of an aversive stimulus in reducing duration was not equivocally supported. Sex was not a significant factor, the treatments being equally as effective with boys as with girls. Use of praise was not a significant

factor in resistance to deviation. The most stable pattern of deviation occurred when the punisher was an aversive stimulus, not a rationale as predicted.⁴²

In an earlier study by Parke, in which he examined the degree to which cognitive structures affect punishment, he found that if you give the child a rationale along with the punishment, the effectiveness of the punishment is increased.⁴³

It has been theorized from cognitive dissonance theory that children would devalue an attractive but forbidden toy when a mild rather than a severe threat is used as a deterrent. Dembroski and associates explored the "forbidden toy" notion with low-socioeconomic children. It was predicted that lower-socioeconomic children would: (1) devalue a forbidden toy more when threatened with loss of money rather than with loss of approval, (2) derogate the toy more under threat of severe rather than mild money loss, and (3) devalue an equally small amount regardless of threat level in the loss of approval condition. The major finding of this study was that lower-socioeconomic children devalued the forbidden toy significantly

⁴²Joseph C. LaVoie, "The Effect of Type of Punishment to Deviation," paper presented at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, Pennsylvania, 29 March-1 April 1973 (Bethesda, Md.: ERIC Document Reproduction Service, ED 078 969, March 1973).

⁴³Ross D. Parke, "Effectiveness of Punishment as an Interaction of Intensity, Timing, Agent Nurture and Cognitive Structuring," *Child Development* 40 (March 1969): 217.

more under the threat of severe loss of money than was the case in any other condition.⁴⁴

McAllister and associates found that punishment delivered without emotions such as anger, disgust, and rage seemed to be more effective. Teacher disapproval, delivered sternly but without threat of consequences and in conjunction with increased praise to the whole class, was found to be quite effective.⁴⁵ In some situations, however, punishment increased the frequency of the behavior it was supposed to decrease. Becker and Armstrong found that tripling the number of disapproving remarks by the teacher increased the frequency of disruptive behavior in primary school children.⁴⁶

Marshall, from his review of the research on the effect of punishment on children, revealed that in general, negative reinforcement tends to improve performance. Other factors found to influence the effect of punishment include intellectual and achievement level, task complexity, strength of association, delay of

⁴⁴Theodore Dembroski, Scott D. Tyler, and James W. Pennebaker, "Devaluation of Forbidden Toys Among Lower Socioeconomic Children as a Function of Severity of Threat," paper presented at the Southwestern Psychological Association's Annual Meeting, Dallas, Texas, April 1973 (Bethesda, Md.: ERIC Document Reproduction Service, ED 091 452, 1974), p. 5.

⁴⁵McAllister, Stachowaik, and Condermon, "The Application of Operant Conditioning Techniques in a Secondary School Classroom," pp. 278-80.

⁴⁶Wesley C. Becker, Don R. Thomas, and Marianne Armstrong, "Production and Elimination of Disruptive Classroom Behavior by Systematically Varying Teacher's Behavior," Journal of Applied Behavior Analysis 1 (Spring 1968): 43.

reinforcement, pre-experimental satiation, instructions, subject's personality, experimenter, and atmosphere.⁴⁷

MacMillan and his associates were cautious in pointing out various concerns related to the use of punishment by classroom teachers. However, they also pointed out that there are times when punishment must be used, and at those times it must be used consciously and effectively.⁴⁸

Bandura summarized the factors that interact with punishment. He noted that the effects of punishment may vary considerably as a result of a number of factors such as intensity, duration, frequency, and the distribution of aversive consequences. In addition, there are other factors that affect the effectiveness of punishment which relate to timing strength of punished responses, availability of desired alternative behaviors, degree of temptation, characteristics of punishing agents, and the presence of discriminative cues or stimuli that might alert one to the probability of adverse consequences.⁴⁹

Meacham and Wiesen advocated the use of positive rather than negative incentives because they felt the effects of positive reinforcement were more predictable. If punishment is used, they thought it advisable to deliver it automatically and without

⁴⁷ Hermine Marshall, "The Effect of Punishment on Children: A Review of the Literature and a Suggested Hypothesis," Journal of Genetic Psychology 106 (March 1965): 23-33.

⁴⁸ Donald L. MacMillan, Steven R. Forness, and Barbara M. Trumbull, "The Role of Punishment in the Classroom," Exceptional Children 40 (October 1973): 94.

⁴⁹ Bandura, "Behavior Modification," p. 295.

emotional overtones.⁵⁰ McManis found in an experimental study that a child's performance can even be adversely affected by sitting next to another child who is being reprimanded.⁵¹

Summary of Literature on Incentives

Material, social aversive, and vicarious reinforcement or incentives have all been demonstrated to be effective in influencing behavior under certain conditions and with certain individuals. For example, praise, a natural social incentive, could be more effective with increased frequency and when paired with other incentives. Material incentives were less effective in laboratory studies of discrimination learning. In those studies, timing, placement, or mode of delivery rather than type of incentive seemed more important. Once students became involved in a learning task, external incentives did not always improve performance. Vicarious reinforcement seemed to be a potentially powerful incentive, but it needs further testing. Aversive incentives or punishment appeared complex and controversial. In cases where punishment was used, it seemed advisable to deliver it without emotional overtones.

⁵⁰ Merle L. Meacham and Allen E. Wiesen, Changing Classroom Behavior: A Manual for Precision Teaching (Scranton, Pennsylvania: International Textbooks, 1969), p. 76.

⁵¹ Donald L. McManis, "Marble-Sorting Persistence in Mixed Verbal-Incentive and Performance-Level Pairings," American Journal of Mental Deficiency 71 (March 1967): 816.

Moral Behavior Studies

Teachers, when they reward or punish their students, are dealing with the moral actions of children. Since the writer is emphasizing the point that moral judgment is positively related to moral action, it seems important to review the literature on the topic of moral behavior of children. Kohlberg wrote that moral judgment, although only one factor in moral behavior, is the single most important or influential factor yet discovered in moral behavior.⁵²

The moral education of children in the public schools dates far back in history. Greek philosophers, scholastics, and others have emphasized the fact that schools must play a central role in moral development. In deciding on a suitable plan for education of children, Plato concluded:

Certainly, the young should learn their letters, and for this purpose the reading school was necessary. Also, since children were boisterous and unruly creatures, the dancing school might teach them some order and self-control.⁵³

John Dewey said: "The child's moral character must develop in a natural, just, and social atmosphere. The school should provide the environment for its part in the child's moral development."⁵⁴ Dewey also maintained that certain aspects of human

⁵²Lawrence Kohlberg, "The Cognitive-Developmental Approach to Moral Education," Phi Delta Kappan 56 (June 1975): 672.

⁵³I. N. Thut, The Story of Education (New York: McGraw-Hill Book Company, Inc., 1957), p. 62.

⁵⁴John Dewey, A Common Faith (New Haven: Yale University Press, 1934), p. 85.

behavior developed in stages, an idea that is basic to the findings of Lawrence Kohlberg.

Selman studied the relationship of role taking to development of moral judgment in children. He explored the relationship between role-taking ability and moral reasoning with 60 middle-class children ages 8, 9, and 10 (10 boys and 10 girls from each age group). These children were administered Kohlberg's moral judgment measure, two role-taking tasks, and the Peabody Picture Vocabulary Test, which is a conventional measure of intelligence. Results indicated that in these middle childhood ages, with intelligence controlled, the development of conventional moral judgment is related to the development of reciprocal role-taking skills.⁵⁵

Travis studied the growth of moral judgment of fifth grade children through role playing. In this study, all fifth grade students attending Catholic elementary schools in the San Francisco Bay area were given the Kohlberg Moral Interview, Form A, to begin with and Form B following the role-playing sessions. The investigator directed two role-playing sessions per week with 10 subjects who were taken from the classroom for each session. There were 24 sessions for the 10 subjects over a 12-week period. The remainder of the students formed a control-comparison group. One weekly class dealt with the skills of role playing; the second class focused on the recognition and exploration of moral dilemmas. The results showed that the role-playing process significantly promoted

⁵⁵ Robert L. Selman, "The Relation of Role-Taking to the Development of Moral Judgment in Children," Child Development 42 (March 1971): 79-81.

the growth of moral judgment in fifth grade youngsters as measured by the Kohlberg Moral Maturity Scale. The average growth on the Moral Maturity Scale was 45.25 points, or about one-half a stage for the three-month period. The results also showed no difference between boys and girls. There was no significant correlation between the IQ scores and moral maturity scores in any group.⁵⁶

Mays investigated the relationship of moral and cognitive modes of thought in second and fifth grade children. There were 60 children involved in the study who were recorded and interviewed for the purpose of evaluation. Levels of cognitive development were evaluated using four learning tasks. Moral development was assessed by presenting four conflicting situations to each subject for discussion purposes. The outcome of this study tended to substantiate the position that cognitive development parallels or precedes moral development in the process of intellectual growth. The data showed that children who were at a higher level of cognitive development were either at a correspondingly higher level or at a lower level of moral development. Levels of moral development were not shown to advance significantly over the levels of cognitive development.⁵⁷

⁵⁶ Mary P. Travis, "The Growth of Moral Judgment of Fifth Grade Children Through Role-Playing" (Ph.D. dissertation, Stanford University, 1974), pp. 79-99.

⁵⁷ Eileen Mays, "The Relationship of Moral and Cognitive Modes of Thought in Second and Fifth Grade Children," paper presented at the Forty-Eighth Annual Meeting of the National Association for Research in Science Teaching, Los Angeles, California, March 1975 (Bethesda, Md.: ERIC Document Reproduction Service, ED 108 861, 1975), p. 10.

Baldwin studied children's judgments of kindness and found that children acquire understanding of different aspects of kindness at different ages. At some age levels, it was found that children may judge a situation in an opposite manner to an adult and were able to give consistent, clearly articulate reasons for their perceptions. Adults, in contrast with the children, showed a consensus in respect to their perceptions of kindness. Baldwin, in this study, administered A Kindness Picture Measure based upon a model of judgments of intention to subjects from kindergarten through college. Also, lower-middle-class children in a Catholic school attained adult judgments earlier than children in a lower-class public school.⁵⁸

Olejnik investigated the interrelationships among the development of role-taking skills, moral judgments, and sharing behavior of boys and girls in kindergarten through third grade. There was a total of 160 lower-middle-class white children (20 boys and 20 girls from each grade) who participated in the study. Data were gathered on four measures: (1) sharing candy with a friend, (2) role taking on emotional responses to pictured situations, (3) moral judgments on Piagetian dilemmas with positive or negative consequences, and (4) sharing candy with a stranger. Results indicated the following: (1) role-taking ability was positively correlated with the use of intentionality in making moral judgments; (2) role taking was positively correlated with sharing

⁵⁸ Clara P. Baldwin and Alfred L. Baldwin, "Children's Judgments of Kindness," Child Development 41 (March 1970): 29-47.

with a friend, sharing with a stranger (only for boys), and total sharing; and (3) the use of intentionality in moral judgments was positively correlated with sharing with friends. Both age and sex differences were found.⁵⁹

Crowley studied the effect of training upon objectivity or moral judgment in grade-school children. He followed a procedure suggested by Piaget's theory with first grade parochial-school children who consistently made "objective" moral judgments during the pretest. Objective judgments were evidenced in the study by responses that judged morality by the size of damage resulting from an action. The "objective" judgment children were then trained by means of stories that de-emphasized the size of damage or objective thinking and, instead, focused on the intentionality or subjective motive of the individual who caused the damage. Posttesting revealed that all training groups made significantly more mature ("subjective") judgments than the control group who received no training. The study further demonstrated that moral stories were much more effective than amoral stories in producing mature judgments.⁶⁰

⁵⁹ Anthony B. Olejnik, "Developmental Changes and Interrelationships Among Role-Taking, Moral Judgments and Children's Sharing," paper presented at the Biennial Meeting of the Society for Research in Child Development, Denver, Colorado, 10-13 April 1975 (Bethesda, Md.: ERIC Document Reproduction Service, ED 111 507, 1976), p. 10.

⁶⁰ Paul M. Crowley, "Effect of Training Upon Objectivity or Moral Judgment in Grade School Children," Journal of Personality and Social Psychology 8 (March 1968): 228-32.

Glassco and associates retested the same children six months later whom Crowley had used as subjects. Their findings substantiated the results Crowley had previously obtained, and thus showed evidence of the stability of training effects on the improvement of moral judgment of children.⁶¹

Boucher tested the following three research hypotheses: (1) the child's level of moral judgment is positively related to parental level of moral judgment, (2) length of family discussion time is positively related to parental level of moral judgment, and (3) parental encouragement of child participation and decision making in the family discussion of moral issues is positively related to the child's level of moral judgment. Boucher found that for Hypothesis 1, when the moral judgment scores of both parents were combined, there was a moderate relationship of advanced moral judgment to advanced moral judgment of the child. When the scores of each parent were examined separately, however, it was found that the relationship of the mother's moral judgment to the child was significant, but the father's was not. For Hypothesis 2, he found that the mean length of time spent discussing moral issues was longest for families in which parents had previously demonstrated advanced moral reasoning. Hypothesis 3 results showed that parental encouragement related significantly to the child's level of moral judgment. Parents who encouraged their child to participate in

⁶¹ Judith A. Glassco, Norman A. Milgram and James Youniss, "Stability of Training Effects on Intentionality in Moral Judgment in Children," Journal of Personality and Social Psychology 14 (April 1970): 360-65.

the discussion and share in the decision making had children relatively advanced in moral judgment.⁶²

Other, more recent studies, however, have shown a significant correlation between moral judgment and moral action. One such study was mentioned earlier, in which Krebs and Kohlberg found that only 15 percent of students showing level-3 thinking in Kohlberg's classification scheme cheated as compared to 55 percent of conventional subjects and 70 percent of pre-conventional subjects.⁶³

Turiel and his colleagues conducted a number of experimental studies to determine the effect of classroom moral discussion on the development of moral reasoning and judgment. In one such study, Turiel divided sixth grade children of varying developmental stages into three experimental groups. One group role played with an adult who sent moral verbal messages to the children that were one stage higher than the developmental stage of each child. A second group received messages that were two stages above, and a third group received messages one stage below. Turiel found, after posttestings, that the group receiving moral verbal messages one stage higher assimilated more of the messages than the other two groups. Follow-up studies confirmed this finding and explained that the effect was a

⁶² Constance Boucher, "Parental Consensus and Interaction in Relation to the Child's Moral Judgment" (Ph.D. dissertation, University of California, 1969), pp. 250-90.

⁶³ Richard Krebs and Lawrence Kohlberg, "Moral Judgment and Ego Controls as Determinants of Resistance to Cheating," in Recent Research in Moral Development, ed. Lawrence Kohlberg and Elliott Turiel (New York: Holt, Rinehart and Winston, 1973), p. 3.

result of rejection of lower messages, which were comprehended, and of noncomprehension of the two-stage-up measures.⁶⁴

Blatt also conducted classroom discussions of conflict or situational moral dilemmas with junior and senior high school classes. Since the students in the classes were not all at the same levels of moral stage development, they interacted with each other with moral reasoning at various levels as well. At the end of the semester, those students who had been pre- and posttested showed significant upward change when compared to control groups. In the experimental classrooms, from one-fourth to one-half of the students moved up a stage. The control groups, however, showed no change. The experimental groups were tested again one year later, and showed that they had maintained their gains.⁶⁵

Kuhmerker summarized the basic teaching techniques that are most desirable in helping children in their growth and development of moral judgment. She considered training in discussion skills and use of small- and large-group discussions as basic to the techniques. She provided several crucial discussion points at which the teacher might intervene during discussions. These points were: the teacher might intervene to help children keep the issue

⁶⁴Elliott Turiel, "An Experimental Test of the Sequentiality of Developmental Stages in the Child's Moral Judgment," Journal of Personality and Social Psychology 3 (June 1966): 611-18.

⁶⁵Moshe M. Blatt and Lawrence Kohlberg, "The Effects of Classroom Moral Discussion Upon Children's Level of Moral Judgment," in Recent Research in Moral Development, ed. Lawrence Kohlberg and Elliott Turiel (New York: Holt, Rinehart and Winston, 1973), p. 37.

clearly in mind and thus preserve the moral conflict, to keep the arguments balanced, encourage role taking, and to modify the moral judgment dilemma or problem. She further pointed out that moral education that is based on the stage theory of moral development uses cognitive dissonance in helping individuals clarify their thinking, which allows for growth from one stage to the next.⁶⁶

The work of Jean Piaget has had a significant impact on our understanding of the moral judgment of children. Piaget's work, as reported in the book The Moral Judgment of the Child (1932), may have been a factor in the development of the Kohlberg theory of moral judgment. Pulaski interpreted well Piaget's ideas on "morality" and moral judgment in children. The essence of Piaget's concept of morality, according to Pulaski, is respect for a system of rules. Most of these rules are given from parents to child or from older children and talking with them during their games. The changes in the thinking of the children about rules is an indication of their development of moral reasoning, Piaget concluded. Pre-school children, for example, would imitate the rules, but play egocentrically--they merely went through the motions of following rules, with individual variations.

Piaget observed that, around the ages of seven or eight, children became increasingly aware of the rules. The rules then became, in the minds of the children, sacred and unchangeable. However, Piaget observed a complete change in children's attitudes

⁶⁶Lisa Kuhmerker, "Growth Toward Principled Behavior," Journal of Moral Education 2 (June 1973): 259.

toward rules after about 10 years of age. Rules were no longer considered sacred, laid down by adults, but decisions made by children who played the games. Piaget called this "the morality of cooperation." Respect for rules was now based on mutual consent and cooperation. Piaget's observation of children's perception of rules at various ages led him to study the development of moral judgment in children.

As a result of his research, Piaget developed the concept of "moral realism." This concept means that the letter rather than the spirit of the law shall be observed. Piaget observed this kind of thinking to be very common with children under the age of 10. An example of moral realism is illustrated by a child who feels that another child who broke 15 cups deserves a greater punishment than one who broke one cup, because by objective standards the guilt of the first child was greater. After all, 15 is bigger than one. Here, missing from the child's way of thinking is the notion of intention or motivation. No consideration is given to the possibility that the child who broke 15 cups might have done so accidentally, whereas the child who broke one cup might have done so deliberately. Piaget maintained that children at about 10 years of age gradually lose this sense of objective responsibility and begin to place more emphasis on subjective intentions. At this point, the child considers that the child who did not mean to break

the cup could be excused, whereas before, intent was not considered at all.⁶⁷

Piaget pointed out that two attitudes, which may coexist at the same age, seemed to be present in children. These two attitudes are essentially one that judges actions by material consequences and another that only takes intentions into account. However, Piaget maintained that objective responsibility, or the attitude of judging by material consequences, diminished as the child grew older. Judging by subjective intention, however, became more important.⁶⁸

The empirical studies of Kohlberg have also substantiated the notion of John Dewey, who earlier proposed that moral development proceeded through stages of development. Dewey maintained that there were three levels of moral development:

1. the premoral or preconventional level of behavior, which consists essentially of biological and social impulses;
2. the conventional level of behavior, in which the individual accepts almost uncritically the standards of his group;

⁶⁷ Mary A. Pulaski, Understanding Piaget (New York: Harper and Row, 1971), pp. 77-88.

⁶⁸ Wayne Dennis, "Piaget's Questions Applied to a Child of Known Environment," Journal of Genetic Psychology 60 (March 1942): 307-20.

3. the autonomous level of behavior, which is guided by the individual's own thinking, judging for himself the basis for the group's standards.

Kohlberg, who has been working with his theoretical ideas and empirical findings for about 20 years, also maintained that there are three levels of moral development. He, like Dewey, referred to the levels of moral development as the preconventional, conventional, and the postconventional or autonomous. The descriptions Kohlberg provided for these stages and levels are given in Chapter III of the present study.

Summary of Literature on Moral Behavior

Turiel, Blatt, Kohlberg, and others have all demonstrated through their studies that, through classroom discussions that center around genuine moral conflict, uncertainty, and disagreement about genuine moral situations and present thinking that is one stage above the stage of the child, it is possible to stimulate movement of the child's level of moral reasoning and judgment to a higher stage. Significant also was the finding that parental encouragement of children to participate in decision making and family discussions can have a positive impact on moral development. It was also brought out that moral judgment development is preceded by cognitive growth and further enhanced by particular training that develops role-taking skills and empathic, "subjective" insight and understanding.

CHAPTER III

METHODOLOGY

This study was an attempt to analyze the effect of certain reward and punishment techniques used by teachers in an elementary school. Special attention was paid to their effectiveness when prescribed in accordance with the moral development stage of the child with whom they were used.

The design of the study is described in this chapter under six general headings: (1) Major Research Questions, (2) Related Questions to Be Answered, (3) Identification of the Population, (4) Sampling Procedures, (5) Data Collection and Classification, and (6) Analysis of the Data.

Since this is a descriptive study, research questions were formulated rather than statistical hypotheses. Two major research questions were formulated, which focus upon the central purpose of the study. In addition, three related questions of less importance were also prepared. All questions appear in the following two sections.

Major Research Questions

This study centers around two major research questions and three related, but less significant, questions. The questions are as follows:

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

It was assumed that all teachers differentiate to some extent--try to make rewards or punishments fit the child--because of obvious differences among pupils. For example, we know that teachers treat children who have hearing or visual handicaps differently from children with normal hearing and vision. We also know that teachers treat children differently on the basis of sex. But do they consciously consider the more intrinsic differences in moral judgment levels of children when they select a reward or punishment for a particular student? And if these teachers do attempt to individualize their rewards and punishments, do they seem to their pupils to be more effective or successful in managing pupil behavior than teachers who reward or punish all of their pupils in the same manner?

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Differentiation is central to this research, and refers to a teacher's efforts to make a reward or punishment "fit" the child's characteristics in some way. Thus an attempt was made to learn whether those teachers who differentiate or individualize their rewarding and punishing of students with the thought in mind that children of a certain age differ in their developmental levels of

moral judgment are more successful as perceived by their students than teachers who differentiate on other bases--i.e., teachers who use rewards or punishments that are currently the most fashionable or the ones by which they were disciplined as pupils?

Related Questions to Be Answered

In addition to the major research questions, there are related questions of interest as follows:

1. Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?
2. Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?
3. To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Identification of the Population

The elementary school in which the study was conducted is located in a predominantly middle-class, Caucasian community of mostly college-educated parents. The school is near a state-supported university with a student body of over 40,000. A majority of the pupils at the school have fathers who work at the university, and a smaller number have fathers who are in business or other professions.

The school enrollment at the time of the study was 275 pupils. There were 12 teachers, all in self-contained classrooms. The teachers of the school have taught for an average of 11.2 years, and half of them hold a master's degree.

The teacher population in this study consisted of all six upper elementary school teachers in the school. The upper elementary grades were three, four, and five, with two teachers at each grade level. The six teachers in the study included three males and three females.

The student population comprised all third, fourth, and fifth grade pupils in the school. The pupils who were included in this study included both those identified by their teachers as pupils with whom they had been successful in changing the child's social behavior in the classroom and those with whom the teacher felt he or she had been unsuccessful. The teachers were asked to name four pupils in each category.

Sampling Procedures

Since the study was a descriptive analysis of perceptions of teachers and students, it was thought to be important that the teachers select students whose social behavior they perceived to be the easiest or the most difficult to change. The teachers were asked to identify four students who they thought were easy to manage and four they thought were difficult. Since each class size was about 24 pupils, it seemed reasonable to assume that at least four students from each class could be found for each of the two

categories. The teacher was not asked to name a specific number of boys or girls because sex was not a consideration in this study.

Teacher Sample

All of the upper elementary teachers of the school agreed to participate in the study. This group consisted of two teachers from each of the third, fourth, and fifth grade levels. It was felt that possible negative morale factors might be minimized by giving all teachers of the upper grades the opportunity to participate.

The group consisted of three males and three females, one male and one female at each grade level. All of the teachers were experienced, tenured teachers with a range of teaching experience from 7 to 15 years.

Student Sample

The sample consisted of an equal number of boys and girls even though the researcher made no reference to sex during the teacher interviews. There were 24 boys and 24 girls nominated from grades three, four, and five, who ranged in age from 8 to 11 years. From grade three the two teachers named 5 girls and 11 boys. From grade four there were 11 girls and 5 boys selected, and in grade five 8 girls and 8 boys were identified for inclusion in the study.

Data Collection and Classification

The method used in this study for data collection was a structured interview with both individual teachers and individual

pupils. The structured interview was selected as the most promising approach after a considerable amount of consultation with two research specialists familiar with its use because this approach offers more opportunity for the respondent to elaborate on or clarify his responses, thus often providing more accurate and deeper analysis of the situation under consideration.

Teacher interviews were held at the school over a period of several weeks. Each interview ranged in length from 30 to 45 minutes and consisted of three components. The first part began with an open-ended question to which teachers were asked to respond in a general way. They were asked to describe the kinds of rewards and punishments they used and to identify those that seemed to be the most effective and those that were the least effective.

The second part consisted in having the individual teacher name eight pupils--four whose behavior in the classroom was easy to change and four whose behavior was difficult to modify. Each child was later interviewed using procedures described in a following section of this chapter.

The third component called for the teacher to describe a specific episode involving each of the eight pupils, in which he or she attempted to change the child's behavior. The teacher was asked to describe each pupil's behavior and to tell how he or she attempted to get the pupil to comply with a specific standard of classroom behavior. Two judges with experience in use of the Kohlberg model of moral development were later asked to indicate

whether the teacher's approach would appeal most to a child at stage 1, 2, 3, 4, 5, or 6 of the model, as found on pages 64-67.

Teacher Interview Procedure

Data from teachers were collected by an interview procedure. Each teacher interview was tape-recorded. Rapport with the teacher was established in an individualized way, depending upon the relationship the researcher already had with each person. Then the interviewer asked progressive questions in the following way:

Step 1. "I am doing a study on rewards and punishments and how kids respond to them. I want to ask you some questions; but first I want you to comment on the strategies you use with your pupils. I am particularly concerned about rewards and punishments. When I speak of rewards, I am thinking of the things you do to show the children that you are pleased with what they are doing; and by punishments, I am referring to those things that you do when you are not pleased. What kinds of rewards do you use, and which are effective, and why? Start anywhere and talk to me about this."

Step 2. "Now that you have told me how you operate in general, I want to ask you specifically about some youngsters. I want you to tell me the names of four of your pupils whom you feel you have managed successfully and four whom you haven't. By managing successfully, I mean that you really know how to reward or punish that child and get the effect you want."

Step 3. "Now I want you to tell me about a particular situation involving each child you mentioned, in which you feel that you managed the child successfully or unsuccessfully."

The procedure for listing and recording the data acquired from the interviews with teachers is shown in Table 3.1.

Table 3.1.--System used to classify teacher responses.

	Child's Name	Behavior of the Child Episode	Teacher's Response	Classification of Stage Appeal
<u>Successful Episode</u>				
1	Student A	"	"	"
2	Student B	"	"	"
3	Student C	"	"	"
4	Student D	"	"	"
<u>Unsuccessful Episode</u>				
5	Student E	"	"	"
6	Student F	"	"	"
7	Student G	"	"	"
8	Student H	"	"	"

Student Interview Procedure

Data from students were collected using the following interview procedures. The students were interviewed individually. A comfortable atmosphere was first established through light

conversation. Then the interviewer asked questions that followed a pattern similar to the questions asked of the teachers.

Step 1. "I want to record our conversation so that I don't forget what we talked about. How do you know when the teacher likes what you are doing? How do you know when the teacher does not like what you are doing?"

Step 2. "How do you know when your parents like what you are doing? How do you know when your parents do not like what you are doing?"

Step 3. "What do you think your teacher would do if you did this?" (Describe the episode that the teacher related as an example of a situation that he or she handled successfully or unsuccessfully.) "What do you think you would do if you were the teacher in this case?"

Step 4. "Do you like the way your teacher handles you? Do you like the way your teacher handles others?"

The questions in Steps 1 and 2 of the pupil interviews were designed to assist the judges in determining under what conditions subjects in the study were able to relate their impressions of how they were disciplined by others. From this information it was also possible to draw more valid conclusions from the findings.

In Step 3, each pupil was asked to respond to the same episode the teacher had related about him. The pupil, however, was not told the episode actually involved him or that he had been identified by his teacher. The student's responses were classified on the same basis as the teacher's response, using the Kohlberg

model and the same two judges. The system for classifying these data is found in Table 3.2.

Table 3.2.--System used to classify student responses.

Episode	What Student Thought the Teacher Would Do	What the Teacher Said He or She Did	What the Student Thinks Should Have Been Done
The Behavior of the Child	stage appeal	stage appeal	stage appeal

From data gathered by the questions in Step 3, the judges were able to decide whether the student's suggested manner of handling the same episode his teacher had described would appeal to a child at stage 1, 2, 3, 4, 5, or 6 of the Kohlberg model of moral development described later in this chapter. It was then possible to make comparisons between the developmental stages of the teacher's and the student's suggested way of handling the behavior and to observe whether the moral judgment stage of the response from each student was the same as, lower, or higher than the stage of his teacher's response. The primary question was: "What do you think you would do if you were the teacher in this case?" The question dealing with what the student thought the teacher would do was asked to assist in the evaluation of the reliability of the decisions of the judges. A summary of these data is found in the Appendix.

The students were asked in Step 4 of the student interview whether they liked their teachers' handling of them and others. This question was asked to determine the effectiveness or ineffectiveness of the teachers' rewards or punishments as seen from the perspective of their pupils. These data were recorded and classified for each teacher in the manner illustrated in Table 3.3.

Table 3.3.--Students' perceptions of their teachers' discipline practices.

Student Perception of Discipline Practice	Likes the Way Teacher Handles Him or Her (Yes or No)	Likes the Way Teacher Handles Others (Yes or No)	Reasons Why or Why Not
<u>Successful</u>			
Student A	_____	_____	_____
Student B	_____	_____	_____
Student C	_____	_____	_____
Student D	_____	_____	_____
<u>Unsuccessful</u>			
Student E	_____	_____	_____
Student F	_____	_____	_____
Student G	_____	_____	_____
Student H	_____	_____	_____

Analysis of the Data

Data for the two major research questions were analyzed with the following questions in mind:

1. Was the teacher more successful in maintaining social control over certain pupils in the classroom when the stage appeal of the teacher's rewards and punishments was at or near the moral judgment developmental level of that child?
2. Was the teacher less successful in maintaining social control over certain pupils in the classroom when the particular rewards and punishments the teacher used were far from the moral judgment developmental level of that child?
3. When the teacher was more successful with social control of a particular child in the classroom, was there agreement on what the teacher thought needed to be done to maintain social control and what the student thought should be done?

Success was inferred when the teacher reported that he or she managed the student successfully and the student reported that he liked the way the teacher handled him.

To analyze the data in regard to the three related questions, the following procedures were used.

Analysis Framework

The Kohlberg model was used as the frame of reference for analyzing the data. A description follows of the levels and stages

of this model as they appeared in a recent article written by Kohlberg.¹ For this study, information regarding both the broad general age range and the school grade distribution was added to Kohlberg's description. This information was obtained from charts that had been compiled by personnel from the Values Development Education Institute at Michigan State University.² The combined descriptions that were used to classify the data from the interviews are found in the following paragraphs.

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 either in terms of the physical or the hedonistic consequences of action (punishment, or 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)."

¹Lawrence Kohlberg, "The Cognitive-Developmental Approach to Moral Education," Phi Delta Kappan 56 (June 1975): 671.

²John S. Stewart, "Values Development Education," in Final Report: An Evaluative Study of the High-School-Use Films Program of Youth Films, Incorporated, ed. T. W. Ward and J. S. Stewart (East Lansing: Michigan State University, 1973), pp. 81-82.

Broad general age range: from about 5 or 6 to about 10 to 12.
School distribution: kindergarten through grade 3 is generally all in stage 1, with stage 2 beginning in grade 3. Progression depends, in large part, on socio-economic status.

"Stage 2: The instrument-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 marketplace. Elements of fairness, of reciprocity, and of 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."

Broad general age range: from about 7 or 8 to about 12 to 14.
School distribution: stage 2 should begin at about grade 3, gradually becoming even with and finally dominating stage 1, especially by late elementary and early middle-junior high. However, stage 2 behavior is still a major force in the morality and decision-making of the young adolescent in high school. Socio-economic status and other environmental factors play a large role in determining the rate and extent of stage progression.

II. Conventional level

"At this level, maintaining the expectations of individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. 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 behavior 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' behavior. Behavior is frequently judged by intention--'he means well' becomes important for the first time. One earns approval by being 'nice.'"

Broad general age range: from about 10 or 11 on, but starts to become more prevalent and predominant beginning about 12 or 13. There is no upper limit because many people never get beyond this stage. School distribution: this is an important stage for junior high and senior high schools.

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

Broad general age range: among some adolescents 12 to 14, but more around 15, 16, or 17. This is the model stage in the United States, and is a terminal stage for many people. School distribution: stage 4 is very important to the high school, although it is possible, but not likely, for stage 4 to develop at around 12 to 14 years.

III. Postconventional, autonomous, or principled level

"At this level, there is a clear effort to define moral values and principles that 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 also has two stages:

"Stage 5: The social-contract, legalistic orientation, generally with utilitarian overtones. Right action tends to be

defined in terms of general individual rights and standards which have been critically examined and agreed upon by the whole society. 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 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 agreement and contract is the binding element of obligation. This is the 'official' morality of the American government and constitution."

Broad general age range: an adult stage which is not likely to develop until the middle or late 20's. School distribution: unlikely to occur at all in high school although it would seem possible for some people to show some signs of stage 5 thinking.

"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 human rights, and of respect for the dignity of human beings as individual persons."

Broad general age range: an adult developmental stage that begins in the late 20's at the very earliest, and more likely in the 30's or beyond.

Analysis Procedures

First the classroom teachers in the study were divided into two groups, differentiators and nondifferentiators, by the following process.

Step 1: Comments that teachers made during the individual teacher interviews were examined first. These comments had been tape-recorded. Notes regarding them had also been made by the researcher during interviews. From this examination it was possible to determine whether individual teachers adapted their rewards and punishments to fit the personal characteristics of their pupils or whether they simply used the same rewards and punishments for all children, irrespective of individual pupil differences.

Step 2: Those teachers whose comments showed that they considered individual differences of pupils when selecting a particular reward or punishment were classified by the researcher as differentiators. Those who used essentially the same rewards and punishments for all children, regardless of personal characteristics, were classified as nondifferentiators.

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Step 1: Opinions from students of both groups of teachers were then examined. These opinions were gathered during individual interviews by asking each student: "Do you like the way your teacher handles you?" "Do you like the way your teacher handles others?" The opinions were analyzed in order to determine which type of teacher, the differentiator or the nondifferentiator, had

more students who reported that they liked the way their teacher handled them and their classmates.

Step 2: The names of those pupils whom their teachers had classified as those who had either been "successfully managed" or "unsuccessfully managed" were then placed on two separate lists.

Step 3: Opinions of "successfully managed" pupils of teachers who differentiated were compared with opinions of "successfully managed" pupils of teachers who did not. This was done in order to determine whether more "successfully managed" pupils of teachers who differentiate were pleased with their teachers' way of handling them and their classmates than was true of "successfully managed" pupils of nondifferentiators.

Step 4: Opinions of "unsuccessfully managed" pupils of differentiating teachers were also compared with the opinions of "unsuccessfully managed" pupils of nondifferentiating teachers to see which type had more students report that they were pleased with the way their teacher handled them and other students.

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Step 1: Two advanced graduate students familiar with the Kohlberg model of moral judgment were given separate copies of behavior management episodes involving each of the six teachers in the study with each of his or her eight pupils. These 48 episodes showed how the teachers managed each of their pupils in a particular situation. The teacher's method for management of the pupil in

each episode was referred to as the teacher's management strategy. These two judges were asked to indicate the number of the moral judgment stage in the Kohlberg model at which a child would be for whom the teacher's management strategy was the most appealing. In those cases where the two judges were not in exact agreement on the stage number of a teacher's response, an average of the two numbers they assigned was used. Data related to the degree of agreement are found in Table 4.8.

Step 2: From the questions: "What do you think your teacher would do in this case?" and "What do you think you would do if you were the teacher in this case?" the judges also determined the appropriate moral judgment stage of each student's responses for the episode in Step 1 in which he or she was involved. The classification procedure was the same as the one used for teacher management strategies. Related data are found in Table 4.9.

Step 3: After the judges had determined the appropriate Kohlberg stage for both what the teachers did and what the pupils said they thought they would do under the same circumstances, comparisons were made to determine whether the stage appeal of the management strategy used by the teacher in each episode was the same as that suggested by the pupil for the same episode.

Step 4: The researcher then examined the management strategies of the teachers to determine whether those teachers who differentiated according to the individual stage of moral judgment for each student were perceived by their students as more effective

at managing pupil behavior in the classroom than those who did not.

Related Question I: Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Step 1: It was decided that if the two judges could agree (or differ by no more than one point) at least 80 percent of the time in their estimation of a moral judgment stage for each of the child's and each of the teacher's responses, it would be sufficient to conclude that it is possible to derive from the Kohlberg theory a more accurate procedure for analyzing descriptions of a teacher's approach to rewarding and punishing students. Thus, reference was again made to the earlier efforts of the two judges to classify both the management strategy used by the teachers in specific situations and the pupils' descriptions of what they would do under the same circumstances.

Step 2: First a table (4.8) was developed to show the number of times there was agreement between the two judges in classifying the moral judgment stage of the teacher's management strategies. The percentage of times there was either complete agreement or a difference of only one stage was also calculated.

Step 3: Another table (4.9) was then developed to show the number of times there was agreement between the two judges in classifying the moral judgment stage of the way pupils said they would have handled specific situations. The percentage of times there was either complete agreement or a difference of only one stage was also calculated.

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Step 1: The reasons teachers gave during the interviews why they felt their rewards and/or punishments were effective were analyzed. The researcher was interested in determining the extent to which teachers had a well-conceived rationale to explain the effectiveness or ineffectiveness of certain rewards or punishments, what differences there were among the reasons the teachers gave in explaining why they felt certain rewards and punishments were effective, and what relationship there seemed to be, if any, between the rationale teachers offered and success in classroom management.

Step 2: A particular rationale was accepted by the researcher as "well conceived" if the teacher mentioned a specific reason for why he felt the kinds of rewards or punishments he used to manage classroom behavior were effective with certain pupils. Success in social control in the classroom was judged on the degree to which pupils expressed satisfaction with the way their teachers handled them.

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Step 1: From the data showing the stage-appeal classifications of both what the nondifferentiating teachers did and what their students said they would have done under similar circumstances,

the researcher computed the percentage of student-teacher agreement on stage appeal in order to compare teachers who did not differentiate with their students who were handled successfully and those with whom the teachers had been unsuccessful.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The purpose of this chapter is to present an analysis of the data that were acquired through the procedures described in Chapter III. The first part will examine data gathered to answer the two major research questions:

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

The second section presents and examines data to answer three related questions:

Related Question I: Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Analysis of Major Research Questions

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Data were gathered from the following sources: comments of the six teachers who participated in the study and comments from pupils of these teachers. The pupils were of two types, those the teacher felt had been successfully managed and those with whom they had been unsuccessful. The six teachers were asked initially to comment on the kinds of rewards and punishments they used, which they thought were effective, and why. Following is a summary of their comments, along with the particular rewards and/or punishments they reported using.

Comments of Teachers

An attempt was made, first of all, to see whether the teachers differentiated in their use of rewards and punishments. Differentiation, in the context of this study, refers to a teacher's attempt to make the reward or punishment "fit" the child's characteristics in some way. It was assumed that all teachers would differentiate to some degree; therefore, special attention was given to determining whether teachers used the same kinds of rewards and/or punishments with all children.

Teacher A: "I bend for a student who needs to feel that what he has done is right. One type of reward or punishment might work with one youngster, but not with another. Many youngsters find their own rewards by doing a good job. For these youngsters,

I emphasize the number of correct responses by putting written comments on their papers."

Teacher B: "I use 'good' a lot when talking to the group. I do not, however, find that using the word 'good' helps to get what you want with every child. For example, there is student 'C' that you can't go up to and say 'That's good, let's keep going,' because he will look at you and say, 'Uh-uh.' For this student, who is all boy, extra gym or a 'man-to-man' talk is better. Some students require a firm approach to get them to respond."

Teacher C: "I seem to do one thing with one group of children who behave well, and have a different approach with those who don't. I find that I am using more punishments with certain children as opposed to others. With student 'G,' for example, I start out being more reasonable; but I might end up having to be more firm. With student 'F,' I usually don't bother to be reasonable--try to explain--because he'll either respond right away or he won't. If I try to reason with him, he will engage me in a long argument. Therefore, I simply am firm to start with."

Teacher D: "I think the rewards vary with the groups. For example, last year I started a 'smiling face' bubble gum kind of a reward system after they had done so many positive things, and they would be rewarded with a piece of bubble gum. This year I had a very good group of kids, and I don't feel that I need anything of this nature. My main system of rewards is just a kind of positive feedback not quite a pat on the back--more just verbal, or a smile, or putting a child's paper up to show. Sometimes I use extra

recess or gym with the class for doing something extremely well. Punishments, on the other hand, have been a lot of nonverbal--a frown, or signal like putting my finger up when someone is talking. Occasionally, I keep kids in for recess." The researcher asked Teacher D whether the things he described as rewards or punishments were things he used with all the children. His response was: "Generally, I think I use the same kind for everyone. Some I might have a bigger smile." Teacher D seemed to use the same rewards or punishments, but in varying degrees.

Teacher E: "I try to let all the students know how I feel about their behavior. I do this by giving them 'I' messages. For example, I say, 'I feel bad about this.' When I am pleased, the 'I' message is also used; but sometimes it seems that there are more negative 'I' messages. When I am not pleased, I also have more emotion and a louder voice. I am not using punishments now such as keeping children in for recess. Neither am I giving tangible rewards such as M & M's. When I am not successful, I feel that students may interpret my 'I' messages as a 'put down,' or perhaps I am not actively listening for the more difficult children."

Teacher F: "I think that some of the ways that I let students know that I'm pleased is through nonverbal responses to them, i.e., a smile, a pat, walking over to them. Also, there are verbal ways to show rewards. We do a lot of this reinforcing." The researcher asked Teacher F if these things were done with all children or certain children. Teacher F's response was: "I think that teachers have patterns of behavior, but I should hope that we

handle them [children] individually. I consider circumstances that apply to the individual child when rewarding and punishing children. As you learn your children, you become familiar with the kinds of things your children respond to. Most kids respond to positive reinforcement. I think all kids respond to positive reinforcement. Most children I handle in the same way with the same mannerisms and kinds of things. I think the kinds of rewards and punishments I use would be effective with all children because I use my own approaches."

Classification of Teachers

No sharp, indisputable differences were found between teachers who did and those who did not differentiate in their use of rewards and punishments; but it did appear that Teachers A, B, and C differentiated to a greater extent than did Teachers D and E. Teacher F's position was less clear because of conflicting statements: "I should hope that we handle children individually" and "Most children I handle in the same way with the same mannerisms and kinds of things."

Based on their comments, the teachers were divided into two groups, one consisting of those who seemed most inclined to differentiate in their use of rewards and/or punishments and the other composed of those who seemed least inclined. By this process Teachers A, B, and C were classified as differentiators and Teachers D and E as nondifferentiators.

Data obtained from Teacher F were not included in the study because of the ambiguity that was mentioned earlier.

Identifying Pupils

Having made this dichotomy between differentiators and nondifferentiators, other data were then gathered to see whether those teachers who appeared to differentiate in their use of rewards and punishments were perceived by their pupils as more effective in control of social behavior in the classroom than those teachers who did not. To determine this, the researcher asked each of the teachers to select four students they felt they had managed successfully and four with whom they had been unsuccessful. Each of the selected pupils was in turn asked to indicate whether he liked the way his teacher handled him.

Thus, it was possible to learn whether those pupils who were identified by their teachers as "successfully managed" felt they were successfully managed and whether those who were identified as "unsuccessfully managed" felt they were unsuccessfully managed. It was also possible to learn how pupils felt about those teachers who appeared to differentiate more in their use of rewards and punishments compared with those who did not.

It was found that more pupils of teachers who were judged to be more differentiating reported that they liked their teacher's way of handling them than did pupils of teachers who were judged to be less differentiating. This was even true of pupils whom the teachers identified as those with whom they had been unsuccessful in managing. It is interesting to note that the successfully managed pupils of the nondifferentiating teachers also liked the

management strategies of their teachers. The results are summarized in Tables 4.1 and 4.2, which follow.

Table 4.1.--Successfully managed pupils' ratings of their teacher's classroom management strategies.

	Successfully Managed Students		
	Liked Management	Did Not Like Management	Unsure
Differentiating Teachers (A,B,&C)	11 (91.7%)	0	1 (8.3%)
Nondifferentiating Teachers (D&E)	7 (87.5%)	1 (12.5%)	0

Table 4.2.--Unsuccessfully managed pupils' ratings of their teacher's classroom management strategies.

	Unsuccessfully Managed Students		
	Liked Management	Did Not Like Management	Unsure
Differentiating Teachers (A,B,&C)	10 (83.3%)	2 (16.7%)	0
Nondifferentiating Teachers (D&E)	4 (50.0%)	2 (25.0%)	2 (25.0%)

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

To determine whether teachers who differentiate in their use of rewards and punishments are more effective in social control in the classroom when their management strategies are more suited for the stage appeal of moral judgment of their pupils, it was necessary to use a model of moral development in which the various levels were clearly defined and appropriate for use with elementary school age children. After reviewing all those that were current and available, the Kohlberg model described in Chapter III, pp. 63-67, was selected as the one most useful.

First the responses of both the teachers and their pupils were classified according to stage appeal of moral judgment by the process described in Chapter III and pp. 87-88 of this chapter. It was then found that, among successfully managed students, a higher percentage of teachers used management strategies that matched the student's inferred developmental stage than was true for unsuccessfully managed students. Tables 4.3 and 4.4, which follow, show these results.

It is of interest to observe in Table 4.4 that the highest percentage of cases in which the stage appeal of the teacher's management strategy matched that of the pupil was found among the nondifferentiating teachers. This is probably because nondifferentiating teachers use fewer strategies with the unsuccessfully managed students, which would seem to appeal to children above

Stage 1, than did teachers who differentiated. These data are found in Tables 4.6 and 4.7.

Table 4.3.--Moral judgment stage appeal comparisons between teachers and their successfully managed pupils.

	Number of Successfully Managed Pupils Whose Stage Appeal of Moral Judgment Matched the Stage Appeal of the Teacher's Management Strategies
Differentiating Teachers (A,B,&C)	6 out of 12 (50%)
Nondifferentiating Teachers (D&E)	2 out of 8 (25%)

Table 4.4.--Moral judgment stage appeal comparisons between teachers and their unsuccessfully managed pupils.

	Number of Unsuccessfully Managed Pupils Whose Stage Appeal of Moral Judgment Matched the Stage Appeal of the Teacher's Management Strategies
Differentiating Teachers (A,B,&C)	2 out of 12 (16.6%)
Nondifferentiating Teachers (D&E)	7 out of 8 (87.5%)

The researcher was interested in examining the data still further to determine if those teachers (the differentiators) who specifically attempted to adapt their management strategies to fit the child's characteristics, and whose management strategies were judged to be more suited for the stage of moral judgment of each of their pupils, were perceived by their students as more effective in classroom management than nondifferentiating teachers.

The two kinds of data for making the analysis are found in Table 4.5. First, the data in this table show that for differentiating teachers 8 out of 24 pupils (33 percent) were classified as having a stage appeal of moral judgment that matched that of their teacher's management strategies, whereas for nondifferentiating teachers, there were 9 out of 16 pupils (56 percent) whose stage appeal of moral judgment matched their teacher's management strategies.

However, Table 4.5 also shows that more students of differentiating teachers were satisfied with their teacher's management of their classroom behavior. The only exception, as pointed out earlier, was with the successfully managed students of nondifferentiating teachers. Here there was an unexpected number of students who liked the way their teachers handled them, in spite of the fact that the stage appeal of their recommended teacher strategy seldom matched that of what the teacher did. At the same time, it can be seen in Table 4.7 that the nondifferentiating teachers used management strategies with their "unsuccessfully managed" students that were predominantly of Stage 1 appeal. This level was apparently

what both the teachers and students thought would be the most appropriate.

Table 4.5.--Pupil satisfaction with classroom management strategies of differentiating and nondifferentiating teachers.

	Successfully Managed Who Liked Teacher's Handling	Number of Successfully Managed Pupils Whose Stage Appeal of Moral Judgment Matched the Stage Appeal of the Teacher's Management Strategies
Differentiating Teachers (A,B,&C)	11 out of 12 (91.7%)	6 out of 12 (50%)
Nondifferentiating Teachers (D&E)	7 out of 8 (87.5%)	2 out of 8 (25%)

	Unsuccessfully Managed Who Liked Teacher's Handling	Number of Unsuccessfully Managed Pupils Whose Stage Appeal of Moral Judgment Matched the Stage Appeal of the Teacher's Management Strategies
Differentiating Teachers (A,B,&C)	10 out of 12 (83.3%)	2 out of 12 (16.6%)
Nondifferentiating Teachers (D&E)	4 out of 8 (50.0%)	7 out of 8 (87.5%)

It can be seen in Tables 4.6 and 4.7 that both differentiating and nondifferentiating teachers used fewer management strategies above Stage I with their unsuccessfully managed pupils. In contrast, both differentiating and nondifferentiating teachers used more strategies above Stage I with their successfully managed pupils.

Table 4.6.--Stage appeal of classroom management strategies used by differentiating teachers.

	Stage		
	1-1.5	2-2.5	3-3.5
<u>Teachers of Successfully Managed Students</u>			
A	2	1	1
B	1	3	0
C	0	1	3
Total	3 out of 12 (25.0%)	5 out of 12 (41.7%)	4 out of 12 (33.3%)
<u>Teachers of Unsuccessfully Managed Students</u>			
A	1	3	0
B	3	1	0
C	3	0	1
Total	7 out of 12 (58.3%)	4 out of 12 (33.3%)	1 out of 12 (8.3%)

Table 4.7.--Stage appeal of classroom management strategies used by nondifferentiating teachers.

	Stage		
	1-1.5	2-2.5	3-3.5
<u>Teachers of Successfully Managed Students</u>			
D	0	4	0
E	1	3	0
Total	1 out of 8 (12.5%)	7 out of 8 (87.5%)	0 out of 8 (0%)
<u>Teachers of Unsuccessfully Managed Students</u>			
D	4	0	0
E	2	2	0
Total	6 out of 8 (75.0%)	2 out of 8 (35.0%)	0 out of 8 (0%)

Analysis of Related Questions

Related Question I: Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Since the Kohlberg stages were developed empirically and are described in behaviorally translatable language, an attempt was made to find out if the Kohlberg model might be used to describe more accurately a teacher's approach to rewarding and/or punishing students. For example, Kohlberg described Stage 1 in his model shown in Chapter III, pp. 64-67, as a period in which an individual thinks more in terms of the physical consequences of his actions.

Avoidance of punishment and unquestioning deference to power are valued in their own right. It seems plausible to infer that a teacher who uses corporal punishment or insists that pupils obey merely because he is the teacher is appealing to a student whose moral judgment is at or near Stage 1. In describing this teacher, one might say that the teacher uses strategies of a Stage 1 appeal.

Another type of reward is demonstrated by the teacher who gives his pupils candy or some other material reward for doing what pleases him. This strategy enables both the teacher and the student to benefit in that the teacher gets the desired conformity and the student gets the reward. It is based upon the pragmatic logic, "You scratch my back and I'll scratch yours." Such logic was classified by Kohlberg as having Stage 2 appeal. The teacher who employs this strategy of providing tangible rewards would be more effective with a child who is motivated by "What's in it for me?" (Stage 2 thinking), and might be described as one who uses Stage 2 management strategies.

As described earlier in this chapter, teachers were asked to relate an episode in which they rewarded or punished a particular student. The teacher's management strategy in handling that particular situation was classified as to stage appeal using the Kohlberg model. For a detailed description of these stages, refer to Chapter III, pp. 64-67. The degree of agreement between the raters is reported in Table 4.8.

Table 4.8.--Degree of agreement between raters on the stage appeal of teacher management strategies.

Teacher	No Difference	Differed by 1 Stage	Differed by 2 Stages	Differed by 3 Stages
A	3	3	1	1
B	-	6	-	2
C	4	3	1	-
D	4	4	-	-
E	3	4	-	1
F	2	5	1	-
Total	16	25	3	4
%	33.3%	52.1%	6.3%	8.3%

Each student was also asked to respond to the same episode mentioned above, which his teacher had described. The student, however, was not told that the episode involved him. Instead, he was asked what he would do if he were the teacher in this case. The student's suggested method of handling that particular episode was also classified using the Kohlberg model. Rater agreement in this step is found in Table 4.9.

Besides the responses shown in Table 4.9, an additional 48 student responses were analyzed. The judges were also asked to classify these responses, in which the students indicated what they thought their teacher would do in handling the episode the teacher had earlier related to the researcher. The judges were given these additional responses to classify in order to assess the reliability

of the method used for making all classifications. The Appendix shows the results of these additional classifications, in which there was rater agreement in 91.7 percent of the cases.

Table 4.9.--Degree of agreement between raters on the stage appeal of what students thought they would do.

Teacher	No Difference	Differed by 1 Stage	Differed by 2 Stages
A	5	3	-
B	4	3	1
C	1	5	2
D	-	6	2
E	5	2	1
F	1	5	2
Total	16	24	8
%	33.3%	50.0%	16.7%

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Data from teacher comments showed that all six teachers used basically the same kinds of rewards and punishments. The main difference among the teachers centered around the fact that although Teachers A, B, and C used the same kinds of rewards and punishments, they used them more selectively with certain children. On the other hand, Teachers D and E generally used the same rewards and punishments with all children. Thus, Teachers A, B, and C were classified as differentiators and Teachers D and E as nondifferentiators.

The researcher also interviewed students of teachers from both groups, differentiators and nondifferentiators, and found that students of differentiating teachers reported they liked the way their teachers handled them and others more often than did the students of nondifferentiating teachers.

The researcher then examined the comments of the teachers explaining why they thought certain reward and punishment strategies they used at school were effective. The consensus seemed to be that the way parents rewarded and punished children at home had considerable influence on the way the children responded to their teachers' rewards and punishments. For example:

Teacher A felt that the way parents managed their children at home had much to do with the effectiveness of the kinds of rewards used at school.

Teacher B thought that the way boys and girls were brought up by their parents before they came to school was very important in terms of how they responded to particular rewards and punishments. However, B felt that this explanation was not so for student A.

Teacher C felt that children have had individual experiences which make a difference. For example, if they have had a lot of negative experiences with school, these students may need more contrastingly positive experiences. Teachers also felt it was important that students have a good self-image in order to respond to verbal praise.

Teacher D thought that it depended a lot on the home life. "The more praise they are used to at home, you need as much here at school! Some kids, for example, who are used to washing dishes because this is expected of them may not need mom to say 'thank you.'"

Teacher E felt that the "I" messages were good for all and explained that lack of success with some students depended on their own shortcomings and perhaps their home environments.

Because the teachers seemed to feel strongly that the kinds of rewards and/or punishments parents used had an influence on pupil response to rewards and punishments at school, the researcher compared the comments from students concerning the kinds of rewards and punishments both their teachers and parents used. Data were gathered from the following questions, which were asked of all the students:

How do you know when the teacher likes what you are doing?
(This was asked to identify the kinds of rewards teachers used.)

How do you know when the teacher does not like what you are doing? (This question attempted to identify the kinds of punishment strategies used by the teacher.)

Students were also asked: How do you know when your parents like what you are doing? How do you know when your parents do not like what you are doing?

Examination of this information and data gathered earlier from the student interviews revealed both parents and teachers most often showed children they were pleased with their behavior through the use of praise. Praise is illustrated by an example in which mother or teacher said to a student, "You have been doing well--I am proud of you."

Both of the judges classified praise, using the Kohlberg model, as an appeal to a child at or near Stage 3, i.e., the period in which praise and approval are very important. This period is further characterized by wanting to earn approval by being "nice." Good behavior pleases or helps others and wins their approval.

Similarly, the most frequently mentioned example of the way both parents and teachers showed they did not like a child's behavior was through disapproval and reprimand. Children mentioned yelling as the way both teachers and parents most often showed disapproval of their behavior. Spanking was also mentioned by students as a frequent means of parental punishment. Both yelling and spanking were considered by the two raters as responses that would appeal to a child at or near Stage 1, a period in which the physical consequences of action determine its goodness or badness, regardless of the human meaning or value of the consequences.

Examination of the reasons students gave for liking or not liking the teachers' handling of them, in order to find out how appropriate the rewards and punishments seemed to be from the students' perspective, revealed that successfully managed pupils gave more varied reasons for why they liked the way their teachers handled them than for why they did not like management strategies that were used. The pupils' responses are summarized in Tables 4.10 and 4.11, showing the number of times a particular response was made.

Table 4.10 shows that successfully managed students provided more reasons for why they liked rather than for why they did not like their teacher's management strategies. Table 4.10 also shows that the reasons successfully managed students gave for liking were more varied than were reasons for not liking.

Table 4.10.--Reasons successfully managed students provided to explain why they liked or disliked their teacher's classroom management.

Reasons for Liking Teacher's Management (Number of Times Mentioned)	Reasons for Not Liking Teacher's Management (Number of Times Mentioned)
She doesn't yell and get mad. (5)	Sometimes she pulls hair or ears. (1)
She's fair. (4)	The kids don't know when they are doing wrong. (1)
She's nice to me because I am nice to her. (4)	Don't like not being punished. (1)
She doesn't spank. (3)	I don't like it when he takes sides. (1)
It is not good to let me do it again and again. (1)	I don't like it when he punishes the whole class because of a few. (1)
She should be mean to me. (1)	
If they misbehave, they deserve to be punished in some way. (1)	
He gives us treats. (1)	
He treats the people who are mean differently. (1)	
He gives them chances--helps them out. (1)	
He will let us have a party if we're good. (1)	
I don't like being punished. (1)	
She doesn't compare us with others. (1)	
It's not too harsh or mean. (1)	

Table 4.11.--Reasons unsuccessfully managed students provided to explain why they liked or disliked their teacher's classroom management.

Reasons for Liking Teacher's Management (Number of Times Mentioned)	Reasons for Not Liking Teacher's Management (Number of Times Mentioned)
I know that she is a nice teacher, and if she's mad, I know I have done wrong. I like it when she is nice. (2)	I don't like yelling. (2)
She lets you know when you are doing good or not. (1)	Sometimes she handles them roughly. (1)
He gives everybody what he deserves. (1)	He should use a nicer tone. (1)
Treats us the same. (1)	I don't like it when she doesn't give reasons. (1)
He doesn't lose his temper. (1)	Some kids the teacher didn't like would get it the first time. (1)
He lets us do special things. (1)	I don't like people to get mad. They get over-tempered. (1)

Table 4.11 shows that unsuccessfully managed pupils provided the same number of reasons for liking as they gave for not liking their teacher's management strategies. These reasons (for liking and not liking) were also equally varied.

It can also be observed by comparing Tables 4.10 and 4.11 that successfully managed students provided more than three times as many reasons for liking their teacher's management strategies than did unsuccessfully managed pupils.

It was pointed out earlier in this chapter that both differentiating and nondifferentiating teachers used more varied management strategies with their "successfully managed" pupils.

This earlier finding would seem to account for the more varied reasons shown in Table 4.10 that successfully managed pupils gave for why they liked their teacher's management strategies.

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

The researcher was interested in observing whether the students' suggested methods of handling situations that confronted nondifferentiating teachers would be of the same stage appeal as the teachers' methods; and also, whether there would be more stage-appeal agreement between teachers and students among the successfully managed pupils as compared with the unsuccessfully managed. The data related to the former question are found in Table 4.12.

Table 4.12.--Stage-appeal comparisons between nondifferentiating teachers and their pupils.

	Percentage of Student-Teacher Agreement
Successfully Managed Pupils (N=8)	2 out of 8 (25.0%)
Unsuccessfully Managed Pupils (N=8)	7 out of 8 (87.5%)

Concerning the question of whether there would be more stage-appeal agreement between teachers and pupils among the successfully managed students as compared to the unsuccessfully managed, the

related data can be found in Tables 4.3 and 4.4. It should be noted again that although there was more student-teacher agreement among the "unsuccessfully managed" pupils of nondifferentiating teachers, it has been pointed out elsewhere that there was also greater reliance by these teachers upon management strategies that were of Stage 1 appeal when working with "unsuccessfully managed" pupils.

Summary of Significant Findings

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Findings:

1. More pupils of teachers who differentiated (87.5 percent) reported that they liked the teachers' ways of handling them than did pupils of teachers who did not differentiate (68.8 percent).

2. Generally, more successfully managed pupils of both teachers who differentiated and those who did not (89.6 percent) reported that they liked the way the teachers handled them than was true for the unsuccessfully managed pupils (66.7 percent).

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Findings:

1. There was a higher percentage of teacher management strategies that matched the stage appeal of moral judgment of

successfully managed pupils among teachers who differentiated (50 percent) than was the case for teachers who did not differentiate (25 percent).

2. There was a higher percentage of teacher management strategies that matched the stage appeal of moral judgment of unsuccessfully managed pupils among teachers who did not differentiate (87.5 percent) than was true of unsuccessfully managed pupils of teachers who differentiated (16.6 percent). Nondifferentiating teachers, however, used fewer strategies with their unsuccessfully managed pupils that would seem to appeal to children above Stage 1 than did teachers who differentiated.

Related Question I: Is it possible to derive from the Kohlberg theory of moral judgment a useful procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Finding:

1. Using the Kohlberg model of moral development, there was a high level of agreement between the judges on the stage appeal classifications of both teachers' (85.4 percent) and pupils' responses (83.3 percent). A separate analysis of additional student responses not directly related to the research questions revealed an even higher level of agreement (91.7 percent).

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Findings:

1. Four out of five teachers mentioned that the kinds of rewards and/or punishments parents used at home on their child

would influence how that same child would respond to rewards and punishments used on him at school.

2. The most frequently mentioned example given by students of ways both their parents and teacher showed them they were pleased with their (the student's) behavior was through the use of praise.

3. The most frequently mentioned example given by students of ways both their parents and teacher showed they did not like their (the students') behavior was through disapproval and reprimand. Spanking was also mentioned by students as a frequent means of parental punishment.

4. Successfully managed students provided more reasons for why they liked their teacher's management strategies than for why they did not. These reasons for liking were also more varied than the reasons given for not liking.

5. Unsuccessfully managed pupils provided the same number of reasons for liking as they provided for not liking their teacher's management strategies. The reasons for liking and not liking were also equally varied.

6. Successfully managed students gave more than three times (3.7) as many reasons for liking their teacher's management strategies as did unsuccessfully managed pupils.

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Finding:

1. It was found that there was a high degree of stage-appeal agreement between nondifferentiating teachers and their unsuccessfully managed pupils (87.5 percent); however, there was also greater reliance by these teachers upon management strategies that were of Stage 1 appeal when working with unsuccessfully managed pupils.

CHAPTER V

SUMMARY AND CONCLUSIONS

Background

Teachers are expected to have a positive impact on the moral development of their pupils. In fact, a significant number of people in the United States today feel that there is a moral crisis among our youth that has been characterized, in part, by a decline in moral standards in the schools and ineffective moral education.

In 1975 a questionnaire was sent to a random sample of members of Phi Delta Kappa to get their views regarding moral education in schools today. In general, members of this professional fraternity, consisting of present and former educators, seemed to feel that schools played a more effective role in the development of moral thinking and behavior of children 25 years ago than is true of schools today.¹ Kappans also have repeatedly cited a "lack of discipline" in schools as a major problem. This "lack of discipline" is thought by many to be a contributing factor to moral decline.

A recent issue of U.S. News and World Report stated that some 10 million students in high schools alone may have experimented

¹Ryan Kevin and Michael G. Thompson, "Moral Education's Muddled Mandate: Comments on a Survey of Phi Delta Kappans," Phi Delta Kappan 56 (June 1975): 773.

with drugs, and marijuana's tell-tale odor drifts through washrooms and playgrounds of many, if not most, of America's junior high schools.² The article also listed many reasons critics have offered to account for the socially unacceptable behavior of today's students. Among the reasons cited were an "outmoded" curriculum and a widening breakdown of authority and traditional beliefs.

Teachers, nevertheless, regularly reward and punish students in the management of classroom behavior with the expectation and belief that rewarding and punishing will have a positive influence on their students' development of moral character. They soon discover, however, that for some children certain rewards and punishments are more effective than for others.

A review of the literature showed that teachers use various classroom incentives as rewards and punishments. These incentives are used to improve both the social and academic behavior of pupils. A variety of material reward incentives such as food, candy, gum, goldfish, and others have indeed been demonstrated to be instrumental in improving both social and academic performance of elementary school pupils.

Nonmaterial rewards have also been used with comparable effectiveness. The most widely studied social or nonmaterial incentive has been teacher praise, which has been shown to reduce the effect of disruptive classroom behavior and to produce improvement in standardized reading scores. However, praise has a

²"Crisis in the Schools," U.S. News and World Report, September 1975, p. 52.

different effect upon students with different personal characteristics and socioeconomic backgrounds. Introverts, for example, have been shown to respond better to praise than extroverts, and middle-class children have performed significantly better with praise than lower-class subjects. Both middle- and lower-class children performed better for praise than for candy rewards.

Aversive incentives or punishments that have been used by elementary school teachers have also had varied effects. The kinds of punishments that have been studied most often are reproof, reprimands, disapproval, blame, and spanking. With certain children, punishment has resulted in a reduction of disruptive behavior in the classroom, whereas with others it has actually resulted in an increase in occurrence of disruptive behavior.³

A review of the literature has also shown that there are clear-cut relationships between levels of moral judgment in children and moral action. Moral action usually reflects the developmental stage of moral judgment--with higher stages correlating with more positive moral action. Moral judgment, according to Kohlberg, "is the single most important or influential factor yet discovered in moral behavior."

Studies have also revealed that classroom discussions that center around genuine moral conflict (uncertainty and disagreement about real moral situations) and present a quality of thinking that is one stage above the child's level of moral judgment have resulted

³Lawrence Kohlberg, "The Cognitive-Developmental Approach to Moral Education," Phi Delta Kappan 56 (June 1975): 672.

in movement to a higher level of judgment by the pupils who were involved. Similar studies in which students have participated in role-playing sessions and family discussions encouraging decision making have also been shown to have a positive impact on the development of moral judgment.

Thus, considering the fact that certain rewards are effective with some children but not others and that children may differ in their level of moral judgment, we are led to a consideration of whether teachers should be concerned about a student's stage of moral judgment when selecting a particular reward or punishment for that individual student. This consideration leads us to the purpose of this study.

Purpose of the Study

The purpose of this study was to analyze the effect of certain reward and punishment techniques used by elementary school teachers when applied according to the moral development stage of the pupil with whom it is used.

In addition, an attempt was made to determine whether it is possible to derive from the Kohlberg model a more accurate procedure for analyzing descriptions of a teacher's approach to rewards and punishments, and whether there is a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting a certain reward and/or punishment for their individual pupils have more success in social control in the classroom.

Methodology

The primary method for gathering the data used in this study was a structured tape-recorded interview with both teachers and their pupils. Teacher interviews were held at an elementary school located in a predominantly college-educated, middle-class, Caucasian community.

These interviews took a period of several weeks, with individual interviews ranging in length from 30 to 45 minutes. The teacher interview consisted of three parts. First, there was an open-ended question to which teachers were asked to respond in a general way. They were asked about the kinds of rewards and punishments they used, which ones were effective or ineffective, and what they thought were reasons for their effectiveness or ineffectiveness. Second, teachers were asked to mention the names of eight pupils--four with whom they had been successful and four with whom they had been unsuccessful in managing the child's behavior in the classroom. Third, teachers were then asked to relate an episode that involved each of the eight pupils. The teacher was to describe each student's behavior, and tell how he attempted to get the pupil to comply with his standard of classroom behavior. Two judges decided whether the teacher's approach in attempting to get the pupil to comply with his classroom standards would appeal to a child at Stage 1, 2, 3, 4, 5, or 6 of the Kohlberg model, which was selected for use in analyzing the teachers' responses.

Teacher interviews were followed by interviews with each of the students they had mentioned. The students were asked how they knew when their teachers and parents liked and did not like what they were doing. This was asked of the students to determine their perceptions of the kinds of rewards and punishments their teachers and parents used.

Each pupil was also asked to indicate what he thought his teacher would do if he behaved in a certain way described by the interviewer. The student was not told that the behavior situation was actually the one the teacher had reported about this same child. He was also asked what he thought his teacher should have done to manage his (the student's) behavior. The same two judges were asked to decide whether the student's suggested manner of handling the same episode his teacher had described earlier would appeal to a child at Stage 1, 2, 3, 4, 5, or 6.

Comparisons were then made between the moral developmental stages of the teacher's and student's responses. It was noted whether the moral developmental stage appeal of each student's response was the same as, lower, or higher than the developmental stage appeal of his teacher's response. By this means, it was possible to observe whether teachers whose management strategies were more suitably matched with their student's developmental stage of moral development were more successful in managing pupil behavior than teachers who used the same rewards or punishments with all of their students, irrespective of the student's level of moral development or his individual characteristics.

The total population consisted of six elementary school teachers--all the upper elementary teachers at the school. The upper elementary grades were three, four, and five with two teachers at each grade level (three males and three females). The student population comprised 48 students, eight per teacher. The pupils who were included in this study were those identified by their teachers as pupils with whom the teachers felt they had been either successful or unsuccessful in establishing a specific standard of acceptable classroom behavior.

Research Questions

There were two major research questions and three related questions included in this study. The questions are listed below:

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Differentiation, which was central to this research, referred to a teacher's efforts to make a reward or punishment "fit" the child's characteristics in some way. From comments the teachers made during the interviews, it was determined whether teachers attempted to reward and punish students in consideration of the pupil's individual characteristics and stage of moral development, or whether they used the same rewards and punishments on all students indiscriminately.

To determine whether teachers who differentiated in their use of rewards and punishments were more effective in social control in the classroom when their management strategies were more suited to the stage appeal of moral judgment of their pupils, it was necessary to use a model of moral development in which the various levels were clearly defined and appropriate for use with elementary school age children. The Kohlberg model seemed most appropriate in meeting these criteria.

In addition to the two major research questions, there were three related questions of interest in this study. These related questions are listed as follows:

Related Question I: Is it possible to derive from the Kohlberg theory of moral judgment a more accurate procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Summary of Significant Findings

Research Question I: Are teachers who differentiate generally in their use of rewards and punishments perceived by their students as more effective in control of social behavior in the classroom than teachers who do not?

Findings:

1. More pupils of teachers who differentiated (87.5 percent) reported that they liked the teachers' ways of handling them than did pupils of teachers who did not differentiate (68.8 percent).

2. Generally, more successfully managed pupils of both teachers who differentiated and those who did not (89.6 percent) reported that they liked the way the teachers handled them than was true for the unsuccessfully managed pupils (66.7 percent).

Research Question II: Are teachers who differentiate specifically according to the individual stage of moral judgment for each child perceived by their students as more effective at managing pupil behavior in the classroom than teachers whose differentiations are merely based on chance?

Findings:

1. There was a higher percentage of teacher management strategies that matched the stage appeal of moral judgment of successfully managed pupils among teachers who differentiated (50 percent) than was the case for teachers who did not differentiate (25 percent).

2. There was a higher percentage of teacher management strategies that matched the stage appeal of moral judgment of unsuccessfully managed pupils among teachers who did not differentiate (87.5 percent) than was true of unsuccessfully managed pupils of teachers who differentiated (16.6 percent). Nondifferentiating teachers, however, used fewer strategies with their unsuccessfully managed pupils that would seem to appeal to children above Stage 1 than did teachers who differentiated.

Related Question I: It is possible to derive from the Kohlberg theory of moral judgment a more accurate procedure for analyzing a teacher's use of rewards and punishments in the classroom?

Finding:

1. Using the Kohlberg model of moral development, there was an unusually high level of agreement between the judges on the

stage appeal classifications of both the responses of teachers (85.4 percent) and the responses of pupils (83.3 percent).

Related Question II: Is there a reasonable basis for assuming that teachers who have a well-conceived rationale for selecting certain rewards and/or punishments for their individual pupils also have more success in social control in the classroom?

Findings:

1. Four out of five teachers mentioned that the kinds of rewards and/or punishments parents used at home on their child would influence how that same child would respond to rewards and punishments used on him at school.
2. The most frequently mentioned example given by students of ways both their parents and teacher showed them they were pleased with their (the student's) behavior was through the use of praise.
3. The most frequently mentioned example given by students of ways both their parents and teacher showed they did not like their (the students') behavior was through disapproval and reprimand. Spanking was also mentioned by students as a frequent means of parental punishment.
4. Successfully managed students provided more reasons for why they liked their teacher's management strategies than for why they did not. These reasons for liking were also more varied than the reasons given for not liking.
5. Unsuccessfully managed pupils provided the same number of reasons for liking as they provided for not liking their teacher's management strategies. The reasons for liking and not liking were also equally varied.

6. Successfully managed students gave more than three times (3.7) as many reasons for liking their teacher's management strategies as did unsuccessfully managed pupils.

Related Question III: To what degree is there stage-appeal agreement between what a teacher did in using a reward or punishment and what the student thinks should have been done when the teacher assigns the reward or punishment solely on the basis of his past experience with a particular approach?

Finding:

1. It was found that there was a high degree of stage-appeal agreement between nondifferentiating teachers and their unsuccessfully managed pupils (87.5 percent); however, there was also greater reliance by these teachers upon management strategies that were of Stage 1 appeal when working with unsuccessfully managed pupils.

Conclusions

On the basis of the findings that were summarized above, the following conclusions are made within the limitations of this study.

1. Teachers whose rewards and/or punishments fit the individual characteristics of their pupils are perceived by the students as more effective in control of social behavior in the classroom.

A review of the literature also showed that in many cases a certain reward or punishment that was generally effective was not so in every situation or with all individuals. This would seem to suggest that teachers need to be more discriminating in their selection of rewards and punishments for particular individuals.

2. It is possible to use the Kohlberg model of moral development to describe more accurately a teacher's pupil management strategies in the classroom. This conclusion is based on the finding that on an average of 84.4 percent of the time, two independent raters were in complete agreement or differed by one point in deciding whether a particular reward or punishment would fit a description of a Kohlberg stage (refer to Tables 4.8 and 4.9, pp. 88 and 89). The judges were essentially asked to decide whether a certain reward or punishment the teacher selected would seem to appeal to a student who was at or near one of the six Kohlberg stages. A complete description of these stages is found in Chapter III, pp. 64-67.

3. It is concluded that teachers who had a well-conceived rationale had more success in social control in the classroom when success was defined as pupil satisfaction with the management strategy used by their teacher. Those teachers who used more varied management strategies were judged by their pupils as more effective in classroom management. Both differentiating and nondifferentiating teachers, however, achieved success with some of their pupils; but the teachers who used a more varied approach seemed to have a well-conceived rationale.

Recommendations for Further Research

Based on the data obtained in this study and the information acquired from the review of the literature, the following recommendations for further research are made:

1. Future research is needed to determine more conclusively the relationship of moral judgment to moral action.

2. An experimental study is needed to determine whether differences in moral judgment of children accounts for the ineffectiveness of particular rewards and punishments with certain children.

3. Further studies are needed to clarify the effects of rewarding and punishing elementary school age children. The purpose of the studies would be to determine more definitively what kinds of rewards and punishments are effective for certain children and under what conditions they are effective.

4. This study should be replicated using a larger sample size. Also, the students and teachers should be interviewed using Kohlberg's method of determining moral judgment stages in addition to the student and teacher interview questions used in this study. The use of the Kohlberg method would provide a basis for comparison between the stage appeal of teacher and student responses and their actual stages of moral judgment. If the correlation between stage appeal and moral judgment is relatively high, the use of stage appeal judgments might be useful and time saving.

Discussion of the Data

This study, though limited in scope, seemed to establish that teachers who selected a variety of rewards and punishments that were based on the personal characteristics of their pupils had more success in managing pupil behavior in the classroom than

did teachers who used the same rewards and punishments for all students indiscriminately.

Teachers who regularly reward and punish students in the management of classroom behavior become aware of the reality that certain rewards and punishments are effective with many but not all of their students. This realization is often a source of frustration for many teachers because they have preconceived ideas that certain reward and punishment strategies should be effective and desirable for all children. For example, it is commonly held by teachers that praise is good for all. Yet, in reviewing the literature, it was reported that praise was effective with many--but not all--children and situations. Also, it was found through the interviews with students that they provided a variety of reasons for liking or not liking a particular teacher's management strategies (refer to pp. 93-94, Chapter IV). For example, two pupils of the same teacher offered these reasons for liking the way the teacher handled them: Student A said, "I like it because it is not good to let me do it again and again. She should be mean to me"; Student B remarked, "I like it because she is a nice teacher." These two qualitatively different statements might be the product of students who differ in their stage of moral development. If such is the case, that there is a difference in moral judgment of these two students, are we then also to expect differences in their behavior? This is a question of considerable interest to classroom teachers, who are regularly engaged in the process of assisting pupils in the development of satisfying behavior patterns.

A review of the literature regarding moral judgment strongly suggests that moral judgment is the single most important factor yet discovered in moral behavior. It was also demonstrated in the studies by Kohlberg that moral judgment stages can be determined for children and adults. Therefore, it is important to continue to explore the relationship between moral judgment and moral action in terms of their implications for the way teachers reward and punish students in their efforts to influence their moral behavior.

What is needed is a more systematic and reliable method for the classroom teacher to decide which rewards and punishments to use with which pupils and under what conditions. In the case of the two students who seemed to differ in their expectations of how the teacher should handle them, the teacher did in fact treat them very differently and was perceived by each student as being effective. This process of selecting or deciding on a particular reward or punishment is still not clearly established and is often a random selection process. It might be that through the discovered means of assessing moral judgment stages of pupils, teachers will be better able to decide on a more appropriate reward or punishment for each pupil. However, further research is warranted in order to explore this possibility. It is hoped that this study will be a catalyst for continued research in understanding the relationship between moral judgment and moral behavior, and what this relationship means for the use of rewards and punishments for the management of pupil behavior in the classroom.

APPENDIX

APPENDIX

Degree of Agreement Between Raters on the Stage
Appeal of What Students Thought Their
Teacher Would Do

Teacher	No Difference	Differed by 1 Stage	Differed by 2 Stages
A	4	3	1
B	3	4	1
C	2	4	2
D	3	5	-
E	5	3	-
F	3	5	-
Total	20	24	4
%	(41.7%)	(50.0%)	(8.3%)
	91.7%		

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