

THE EFFECTS OF SOCIAL CLASS,
MORAL ORIENTATION, AND SEVERITY OF
PUNISHMENT ON CHILDREN'S MORAL
RESPONSES TO TRANSGRESSION

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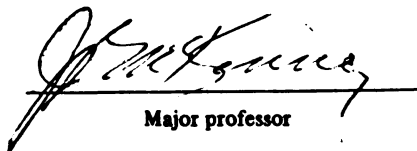
THE EFFECTS OF SOCIAL CLASS,
MORAL ORIENTATION, AND SEVERITY
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MORAL RESPONSES TO TRANSGRESSION

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ABSTRACT

THE EFFECTS OF SOCIAL CLASS, MORAL ORIENTATION, AND SEVERITY OF PUNISHMENT ON CHILDREN'S MORAL RESPONSES TO TRANSGRESSION

By

David John DePalma

Recent studies (and earlier surveys) have attempted to investigate the origins of moral responses. However, because of the limited generalizability of the data obtained, and various theoretical and/or methodological problems, little understanding of the mechanism of moral response has resulted.

Aronfreed (1961, 1963) recognized this difficulty, and examined the variety of moral responses and their social antecedents. His results indicated that two responses, self-criticism and reparation, were differentially related to the social class, sex, and parental discipline of the child.

However, recent research by Hoffman (1970) has important implications for the classification of parental discipline. It would seem from Hoffman's research that Aronfreed's categorization of disciplinary techniques might be further extended. Aronfreed classified discipline

as either "induction," or "sensitization." Hoffman found that the moral orientation of both children and parents could be coded as humanistic-flexible, conventional-rigid (both internal), or external. The child's orientation was related to his parents' moral orientation and disciplinary techniques. Using different judgment categories, McKinney (1971) and Olejnik (1971) also found that the orientation of parents (prescriptive or proscriptive) was related to the orientation of their children. The latter study found this relationship existed in four-year-olds and their parents. Thus, the orientation of the parents can have a profound influence on their children, and at a very early age. This substantiates Hoffman's contention that the child-rearing pattern is directly related to the child's moral development.

Aronfreed (1963) had subjects push for ten trials through a formation of toy soldiers to remove a nurse doll from the "battlefield." A modified version of this technique was used in the present study. The subjects were 128 eight-year-old boys classified according to social class (Hollingshead, 1957), and moral orientation (Hoffman, 1970). The subjects were then randomly assigned to one of four conditions (Baseline, Group I, Group II, or Group III). In the Baseline condition, the subjects punished themselves over two sets (Phases I and II) of ten trials. In Group I, the subjects were punished (Phase I) at a level higher

than the highest baseline average. In Group II, the subjects received punishment equivalent to the baseline average. In Group III, the subjects received punishment lower than the lowest baseline average. In Phase II these three groups (as well as the baseline) punished themselves. On trial eleven the subjects were tested for the presence of self-critical and reparative responses (Aronfreed, 1963).

The response measures recorded were: the number of self-critical responses over the ten trials, the presence or absence of self-critical responses on trial eleven, the presence or absence of reparative responses on trial eleven, and the number of Tootsie Rools removed (self and experimenter punishment) over the ten trials, in Phase I and Phase II.

The analyses revealed a significant main effect of punishment treatment, and a significant interaction between moral orientation and punishment treatment. The interpretation of the data suggested that subjects of high social class and flexible moral orientation may have a more highly "internalized conscience" and do not "need" the overt stimuli (punishment and self-criticism) to control their behavior. The present data when considered with research by Luria (1961) indicated a developmental sequence in the internalization of moral sanctions.

The directions of the response data supported Aronfreed's contention that self-criticism and reparation are two different responses, and are not indicative of some "unitary" structure such as conscience. The strong influence of experimenter punishment, and the patterning of self-critical and reparative responses suggested the importance of imitation and past socialization experiences in the child's responses to transgression.

Some suggestions for additional studies were offered, and it was hoped that these ideas (and the present data) would stimulate further investigations in the area.

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INTRODUCTION

Although the development of moral behavior has interested psychologists for decades, it has only been recently that the origins of moral responses have been examined in the laboratory. These studies (and earlier surveys) attempted to isolate the factors which influence the acquisition and development of these responses. However, because of the limited generalizability of the data obtained, and various theoretical and/or methodological problems, little understanding of the mechanism of moral response has resulted.

Conceptualizations of moral development which use a unitary structure of acquisition seem to be partly responsible for this difficulty in understanding moral responses. The assumption of a prerequisite unity in the " . . . forms and sources of moral behavior may obscure some important differences between specific responses and their distinct antecedents" (Aronfreed, 1963a). Further support for a more flexible interpretation of the moral development process comes from Hoffman (1970a):

Knowing a person's moral orientation alone then does not enable us to predict with confidence how he will behave. Whether he resists or submits to temptation is a function of a complex balance of forces involving his achievement needs and specific goal strivings, guilt and other aspects of his moral structure, his system of ego controls and various aspects of the immediate situation (p. 345).

The socialization of moral behavior therefore plays an important role in the understanding of the acquisition of moral responses. Moral behavior can be motivated by internal as well as by external forces. Internal standards are learned through processes called introjection and identification.¹ Allinsmith (1954) interprets the child's compliance with parental prohibitions and his adoption of these ideals as the child's wish to master the environment. After the child has "taken in" these injunctions, he acts as though he had within him a force (the "voice of conscience") which threatens him as he previously perceived himself threatened in reality. Thus, a person in a moral (transgression) situation, depending upon the degree of his conformity to the internal demands, punishes himself even when there is no possibility of external censure.

Allinsmith also found that the individual's severity with himself is related to types of parental discipline and socioeconomic status. Burton, Maccoby, and Allinsmith (1961) supported this notion and showed that restrictive parents have children who more thoroughly

¹For a further discussion of these and similar Processes see Hoffman (1970a).

internalize parental values. Aronfreed's (1961) explanation is that parents who focus on withdrawal of affection in their discipline may be those who are also most oriented toward inducing an internal governor of conduct in their children. Parents who sensitize their children to the punitive external consequences of transgression induce an external control in their children. Disciplinary techniques then can have a profound influence on the moral behavior of the child. Sears, Maccoby, and Levin (1957) observed that parental withdrawal of love makes the child take on characteristics of his parent. That is, after transgressing, the child will criticize, evaluate, punish and control his behavior as his parent had formerly done. The child responds to power assertion, however, by trying to avoid the parent. This and other studies led Hoffman (1970a) to conclude, " . . . the direction of causality is from the child-rearing pattern obtained, to the child's moral development."

More recently, Bandura (1969) described the social learning of moral judgments as proceeding from a variety of modeled responses and transmitted on the basis of a modeling process. This modeling is such a potent factor that Bandura found that children would imitate models who were acting in ways which were contrary to the children's moral beliefs. This confirmed Aronfreed's (1964) belief that the child's responses to social punishment reflect

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explicit standards or values which have been adopted from a model. Dworkin (1968) also found that modeling was important for the learning of moral behavior. However, he argues that in order to promote long-lasting changes, rather than the overt adoption of an imitative response (parroting), training must focus on cognitive mediating responses. This might be accomplished by communicating the salient cognitive dimensions of the moral concept being taught. Dworkin believes that socioeconomic status may be relevant for such learning.

Support for class differences in moral response to transgression was obtained in research by Aronfreed (1961). This author found that middle-class children were less dependent upon external reinforcement than working-class children. A sex difference existed within these data. In both socioeconomic classes boys relied less upon an external definition of moral consequences than the combined classes of girls. These differences were not attributable to the variable of intelligence as Aronfreed measured it. Such relationships between moral responses and social positions indicated to Aronfreed (1961) that:

. . . different moral orientations do not emerge sequentially with advancing age or experience, as has been argued in some interpretations of moral development, but are rather the stable end-results of different patterns of social reinforcement (p. 239).

The relation of social class to differences in moral behavior has been obtained in many studies. An

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investigation by Hess and Shipman (1965) provided evidence that socioeconomic status differences are related to the early experiences and the socialization of "cognitive styles" of children. Using the Siegel Sorting Task, these authors found a significant difference between upper- and lower-class children in the descriptive part-whole category. This difference was influenced by the disciplinary method of the mother. The lower-class child (compared to the upper-class child) was characterized as one who relates to authority rather than rationale; who although often compliant is not reflective in his behavior; and for whom the consequences of an act are largely considered in terms of immediate punishment and reward, rather than in terms of future effects and long-range goals.

Although psychologists have focused on the prohibitive and punitive components of the parent-child relationship in moral behavior, recent research (McKinney, 1971; Olejnik, 1971) has examined both positive and negative values. Instead of the psychoanalytic or social learning theory conceptualizations, McKinney (1971) postulates a four-fold model for the development of behavioral values. The two dimensions on which this model is based are the reinforcement dimension (reward or punishment), and the behavioral orientation dimension (right-doing or wrong-doing) [see Figure 1].

		Reinforcement	
		Punishment	Reward
Behavioral Orientation	Proscriptive	Doing wrong	Avoiding wrong
	Prescriptive	Neglecting to do good	Doing good

Figure 1. Two dimensions of value development: reinforcement (punishment and reward) and behavioral orientation (wrong-doing or right-doing).

This assumption of a four-fold process prompted McKinney to examine his hypothesis empirically. In this research, McKinney was not only trying to determine the existence of these dimensions, he was also attempting to relate these dimensions in a systematic way to the individual's perception of his parents' reward and punishment behaviors. The results of this research enabled McKinney to conclude:

1. . . . subjects consider the positive effects of their behavior to be the result of the right things they do, while they consider the negative effects to be the result both of the wrong things they do and the right things they fail to do. In psychoanalytic terms, it would appear that the two aspects of the super-ego, i.e., the conscience and the ego-ideal, are developed in very different ways.
2. The data confirmed the existence of a dimension of value development concerned with a prescriptive vs. proscriptive orientation.
3. The results supported the hypothesis that " . . . a prescriptive orientation is related to one's perception of his parents as being more rewarding, while a proscriptive orientation is related to one's perception of his parents as being more punitive."

More recently, Olejnik (1971) extended McKinney's (1971) findings to altruistic behavior in four-year olds. Olejnik observed that the child's altruism (giving candy to a hypothetical "needy" child) was related to his parents' value orientation. That is, children of pre-scriptive parents were significantly more altruistic (gave more candy) than were children of proscriptive parents. Olejnik's data not only show that the orientation of parents can have a profound influence on their children, but also that this influence can be effective at a very early age. These studies (McKinney, 1971; Olejnik, 1971) provide further support for Hoffman's (1970a) contention that parental discipline plays a very important role in the moral development of the child.

Additional relevant data concerning the child's moral behavior, particularly his reactions to transgression, appear in the research of Aronfreed. In his 1961 study, Aronfreed found that children's internalized responses to transgression assume a great variety of forms. Responses were attributed to different patterns of social reinforcement, since they were predictably related to the socioeconomic status and the sex roles of the children, and to a lesser degree to maternal disciplinary practices. However, recent unpublished research by Hoffman (in Hoffman, 1970a) seems to justify criticism of Aronfreed's discipline classification.

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Aronfreed recognized the importance of internal and external orientation, and maternal discipline in moral behavior. From a questionnaire interview, Aronfreed determined the predominant disciplinary techniques of the mothers. These techniques were labeled either "induction," or "sensitization." Hoffman classified discipline as power assertion, love withdrawal, or induction. Thus, there may actually be two varieties of Aronfreed's "induction" (love withdrawal and induction). Hoffman also discovered that these parental discipline types were differentially related to moral orientation.

By examining the moral standards or principles which children gave in response to several moral judgment items, Hoffman was able to identify two internalized but different value orientations. Children who " . . . emphasized the consequences of behavior for others or stressed certain interpersonal moral values such as mutual trust were coded as humanistic." Subjects who responded to the items in terms of the " . . . violation of an institutional norm were coded as conventional."² A second criterion which was used to evaluate the subjects' responses was the flexibility with which standards were applied. Categorization was again based on the subjects' responses to moral judgment items.

²See Hoffman (1970a, pp. 336-343) for more detailed discussion of these orientations.

Responses which justified the acts because of extenuating circumstances were coded as flexible; responses which criticized them for being against religious precepts or against the law without regard to the extenuating circumstances or simply stated that they should never be done were coded as rigid (p. 336).

On the basis of these criteria, Hoffman was able to identify two internalized groups: the conventional-rigid and the humanistic-flexible. Hoffman also selected a third group with an externally focused moral orientation. This group was lower on IQ, but by excluding some subjects a very close match between the three groups was achieved.³

Hoffman then investigated the relationship of these moral orientations to certain personality characteristics and parental discipline.⁴ As Hoffman summarized:

. . . the humanistic-flexible and conventional-rigid groups appear to be two variants of an internalized conscience which differ not only in the manifest content but also the hierarchical arrangement and motivational basis of their moral standards. Thus, in making moral judgments about other people's violations, the humanistic-flexible subjects tend to stress the consequences for others and are more likely to take extenuating circumstances into account (p. 339).

Such people are high on guilt and other indices of internalization, but they experience guilt " . . . primarily as a consequence of their behavior for others." The conventional-rigid subjects, however, are " . . . more likely to give a religious or legal basis for their moral

³This is consistent with other data which show a positive relation between IQ and internal orientation. Also see Hoffman (1970a).

⁴See Hoffman (1970a, pp. 336-343) for further discussion.

judgments and to ignore extenuating circumstances." Their guilt stems more from the awareness of "unacceptable impulses" than from the amount of harm done others. As Hoffman concludes: " . . . although the two groups were selected on the basis of conscious moral judgments, they appear to reflect moral syndromes which differ beyond the conscious and rational aspects of moral orientations" (p. 339).

Regarding parental discipline, Hoffman observed that both internal groups obtained higher scores on induction and affection, and lower scores on power assertion, than the external group. However, some remarkable differences between the two internal groups emerged. Parents of the conventional-rigid group reported using love withdrawal (or some variant) as the predominant discipline technique. Parents in the humanistic-flexible group used a more varied and discriminating disciplinary method. This method ranged from power assertion to permissiveness, depending on the situation, and utilized more induction and suggestions of reparation (where possible).⁵ From the McKinney (1971) and Olejnik (1971) studies previously mentioned, one might expect that the moral standards of the children would be similar to those of their parents. Hoffman's research supports this

⁵ Similar results were recently obtained by Baumrind (1971).

expectation, since parents of humanistic-flexible children fit the humanistic-flexible pattern. Similarly, conventional-rigid children had conventional-rigid parents. Whereas the humanistic-flexible group tends to look at behavior in its larger context, the conventional-rigid parents are " . . . more likely to ignore contextual factors, to compare standards of good or bad behavior, and act accordingly."

The problem with Aronfreed's (1961) classification then is that it is based on structure, rather than function. Aronfreed classified maternal discipline techniques as either "sensitization" if the mothers used physical punishment (e.g., power assertion), or as "induction" if the mothers used other kinds of punishment (e.g., love withdrawal). However, it is clear from Hoffman's data that a structural classification is not as powerful a discriminator as a functional classification. Only with a classification similar to Hoffman's (which emphasized the way a disciplinary method functions for the parent and child) can one make the important discrimination between humanistic-flexible and conventional-rigid values.

If Aronfreed (1961) had classified maternal discipline techniques in this way, it is quite possible that he would have obtained different relationships, or at least interpreted his data differently. Although Aronfreed has shown that moral responses to transgression

can be examined empirically, his classification weakens his conclusions.

Thus, the present study was designed to analyze the relationship of control over punishment, parental discipline, socioeconomic status, and moral orientation (parent and child) to intensity of punishment and self-critical and reparative responses in children. Modifications of Aronfreed's (1963) design were made so that the impact of experimental socialization could be assessed more accurately.

METHOD

Aronfreed (1961, 1963) investigated the relationship of self-criticism and reparation to socioeconomic status, sex, maternal discipline, control over punishment, and cognitive structure of instructions. The present study focused on the relationship of specific subject variables and experimental paradigms to severity of punishment and self-critical and reparative responses in children.

The subjects came from middle- and working-class families. Subjects from each class were classified as either internal or external moral orientation. The internal orientation subjects were further classified as either humanistic-flexible, or conventional-rigid (see Hoffman, 1970b). The children were then randomly assigned to one of four groups: the baseline (or control) group, or one of three experimental groups.

In the baseline group, treatment involved a modified version of Aronfreed's (1963a) technique (see Appendix A). The subjects in this group punished

themselves. In the experimental groups, control over punishment changed. In Phase I, the experimenter punished the subjects in the experimental groups. The level of punishment was different for each group. In Group I the subjects received a punishment intensity greater than the average level of punishment used by baseline group subjects. Group II subjects received punishment equivalent to the baseline average. And Group III subjects received a punishment less than the baseline level. In Phase II, the same subjects in each of the experimental groups punished themselves.⁶ This design allowed for comparisons within and between groups on the variables mentioned earlier.

In 1961, Aronfreed found that middle-class children (boys and girls) gave more self-critical responses than working-class children. Later, Aronfreed (1963a) discovered that self-critical responses are more likely to appear when the socialization paradigm provides explicit standards of evaluation than when the cognitive structure of the instructions is minimal. He also observed that self-critical responses were not related to the degree of control over punishment given the child. In the present investigation, self-critical responses were maximized by providing the subject with only the high cognitive structure

⁶The baseline group subjects punished themselves during both phases of the experiment.

instructions (see Aronfreed 1963a). In view of Aronfreed's (1961, 1963a, 1963b) data on socioeconomic status, and Hoffman's (1970) research on moral orientation, it was expected that for all groups throughout the experiment, self-critical responses would be:

1. greater for middle-class than working-class subjects;
2. greater for internal orientation than external orientation subjects;
3. greater for middle-class internal than working-class internal orientation subjects;
4. greater for middle-class external than working-class external orientation subjects.

Regarding reparative responses, Aronfreed (1963a) found that the frequency of these responses was positively correlated with control over punishment, rather than with the structure of the instructions. In an earlier investigation, Aronfreed (1961) observed that reparative responses were not directly related to the social class or the sex of the subject. He did find, however, that reparation occurs more often in subjects from "induction" than from "sensitization" disciplinary backgrounds. Hoffman (1970b) also reports a relationship between discipline and reparative responses. These data indicated that there might be a complex relationship between social class, discipline, and

reparative responses. It was possible, for example, that working-class subjects would give as many reparative responses as middle-class subjects. Reparative responses, unlike self-critical responses, are usually expressed overtly. Therefore, the working-class subjects might use reparation as a reaction to fear of punishment. The middle-class children, however, might use reparation for other reasons (e.g., high degree of guilt). It was hoped that analyses of the interaction between reparation, level of punishment, and the subject variables might clarify the ambiguities in this relationship.

Although reparation might not be related to social class, it might be related to moral orientation. That is, it was postulated that internal orientation subjects of both socioeconomic classes would give more reparative responses than the external orientation subjects of both classes. Reparative responses would be lower when the experimenter punished the subjects (low control), than when they punished themselves (high control) (Aronfreed, 1963a).

Confirmation of these hypothesized relationships would also support Aronfreed's contention that self-criticism and reparation cannot be thought of as alternative or equivalent responses to transgression deriving from a single pattern of socialization.

The amount of punishment used by the subjects should be negatively related to socioeconomic status and

moral orientation. One reason for this relationship may be that middle-class and internal subjects have higher guilt scores (see Hoffman, 1970b) and are more internally controlled. It was expected that they would "need" less punishment to control their behavior than working-class and external subjects. Hoffman (1970b) reports that humanistic-flexible parents do not feel it necessary to punish a child for accidental damage. Conventional-rigid parents, however, believe one should punish accidental damage. Therefore, it was hypothesized that:

1. middle-class children would punish themselves less than working-class children punish themselves;
2. internal orientation subjects would punish themselves less than external orientation subjects;
3. middle-class internal orientation subjects would punish themselves less than working-class internal orientation subjects punish themselves;
4. middle-class external orientation subjects would punish themselves less than working-class external orientation subjects punish themselves.

These results would also show a strong negative relationship between self-criticism and intensity of punishment. Subjects who do not "need" punishment (humanistic-flexible, and to a lesser degree, conventional-rigid), would use more self-critical responses. Subjects who employ a high

level of punishment would have a lower number of self-critical responses. That is, as the number of self-critical responses increased, the level of punishment would decrease.

It was expected that the basic relationships described above would exist within all four groups throughout the experiment (i.e., during both Phases I and II). If one were to compare the data between groups, the hypotheses become more complex. But basically the relationships should operate on the principle (Aronfreed, 1963b) that:

The child in adopting a socializing agent's critical evaluative responses reduces the anxiety attached to transgression by reproducing punitive stimulus aspects of the agent which originally came to serve as cues signifying the termination of the anxiety that accompanied their anticipation (p. 292).

Thus, the subjects in the experimental groups should respond differently to the model (the experimenter in Phase I). These responses to different punishment levels should be consistent with the subjects' previous socializing experiences. That is, middle-class and internal subjects should respond to increased level of punishment by increasing self-critical responses, while working-class and external subjects should respond by increasing the punishment level. In Group III, the subjects received lower-than-baseline punishment. The subjects in this group should "compensate" for this lower level by responding again in a way more consistent with their "pre-experimental disposition"

(Aronfreed, 1963b). The middle-class and internal subjects should increase self-critical responses; the working-class and external subjects should increase punishment level. Thus, the three intensities of experimenter punishment would have differential effects on the dependent variables (self-criticism, reparation, and self-punishment) as a function of the social class and moral orientation of the child. It was hoped that by analyzing this data, it would be possible to determine the importance of "pre-experimental dispositions" (naturalistic socialization factors) in the experimental socialization setting. These findings may provide valuable (meaningful) relationships between socialization effects and moral responses to transgression, and perhaps more generally, for the entire class of responses in moral behavior.

Subjects

The subjects were sampled from a population of 232 second (110) and third (122) grade boys from the four public elementary schools in the Okemos school system. Only 21 of these boys were not allowed (by their parents) to participate in the study. The remaining subjects were then classified by social class, moral orientation, and age.

The subject's social class was determined by a combination of the father's (head of the household)

occupation and educational background according to Hollingshead (1957).

The subjects were interviewed individually to discover their moral orientation (humanistic-flexible, conventional-rigid, or external). Four moral judgment items adapted from Hoffman (1970b) were used in these sessions (see Appendix A). Coding of these responses was based on the procedure used by Hoffman (1970b; personal communication):

Two criteria were used in coding the responses. One was the moral standards or principles given in support of the judgments. Thus item 1 tapped the extent to which the subject believes that human needs are the underlying basis for complying with social norms: responses which stressed the harm done others by the stealing were coded as humanistic; responses phrased in terms of the violation of an institutional norm, such as the law or the ten commandments, were coded as conventional. Responses to item 2 which were coded as conventional stated that breaking into the store was worse because stealing is against the law or may involve property destruction, or that the two acts are equally bad because they both violate religious precepts or involve stealing the same amount of money. Responses coded as humanistic generally stated that the "borrower" was worse because of the violation of a trust and personal deception involved, the possible lessening of the benefactor's faith in people, or the ultimate loss to others who really need the money. Responses in which the stealing was judged worse because the loss would be greater to the storekeeper, who was often perceived as less affluent than the benefactor, were also coded as humanistic.

The second coding criterion was the flexibility with which standards were applied, particularly the extent to which extenuating circumstances were taken into account. Items 3 and 4 were used to tap flexibility. Responses which justified the acts because of the extenuating circumstances were coded as flexible; responses which criticized them for being against religious precepts or against the law without regard to the extenuating circumstances, or simply stated

that they should never be done, were coded as rigid. In coding, the reasons given were more important than the direction of the choices, and perfunctory responses were not coded at all (pp. 95-96).

As a result of this coding, a sample of 182 subjects remained; the others being discarded because of response ambiguity. Twenty-two of the 182 subjects were then dropped because of conflict between their responses to items 1 and 2, and their responses to items 3 and 4 (i.e., humanistic responses to 1 and/or 2; rigid responses to 3 and/or 4). Additional subjects (23 classified as social class II, 3 from class IV, and 2 from class V) were omitted in order to increase the difference between the high and low social class groups. This procedure permitted a sample size of 132 subjects. However, two of these subjects moved during the course of the experiment; and two more were randomly dropped in order to equalize the number of subjects in each cell (eight).

Thus, the final sample consisted of 128 boys averaging 8.4 years of age (range, 7.2-9.8; standard deviation, .67). This age was chosen since it appears to be part of a "transition period" in child development (e.g., from egocentric to non-egocentric, or from moral realism to moral relativism--Piaget, 1960; Gutkin, 1970; Einhorn, 1971; and others). Half of these subjects were classified as high social class (mean Hollingshead value, 11.56; standard deviation, 1.39), and half as low social class (mean, 38.42; standard deviation, 10.18). Further

categorization by moral orientation provided for equal representation of the flexible and rigid internal orientation subjects in each social class. Unfortunately, no clear examples of the external orientation were observed in the interview sessions.

Procedure and Design

The basic procedure used by Aronfreed (1963a, pp. 440-446) was followed in this study with these modifications:

1. Aronfreed (1963a) conjectured that the terms "careless" and "rough" might have created a greater perceived intensity of punishment, and thereby affected the frequency of self-critical and reparative responses. However, Aronfreed controlled the intensity of punishment so that the experimenter or the subject could only remove one, two, or three Tootsie Rolls (TR's). Therefore, the relationship of "careless" and "rough" to perceived intensity of punishment is confounded. It is also possible that similar intensities of punishment are perceived differently. That is, a loss of two TR's might be extremely punishing for one subject, but only mildly punishing for another. The latter subject might utter more self-critical responses to compensate for his lower (perceived) intensity of punishment. Or, he might not respond at all.

Therefore, in the present study, Aronfreed's statement telling the child that he might lose one, two, or three TR's, either by experimenter punishment, or by self-punishment, was omitted.

2. Once the TR's were shown to the subject at the beginning of the experiment, they were removed from his sight. The TR's were put in a box with an opening in it so the subject might remove the TR's to punish himself. The subject was just aware that there were many TR's in the box, but was not allowed to count them. In this way, the subject did not know how many TR's he had at any given time in the experiment; and the removal of TR's retained its "punishing" character. It is possible under Aronfreed's method that the subject began to see his pile of TR's diminish, and subsequently took fewer TR's away from himself (since he could keep the remaining TR's). This decrement in punishment number might affect the perceived severity of the punishment and the number of self-critical responses (see 1 above).

After the subjects were classified according to social class and moral orientation, they were randomly assigned to one of four groups. In the baseline condition, the subjects were tested as were the self-punishing subjects in Aronfreed's (1963) study, with the modifications mentioned above. The number of TR's each subject took from himself, the number of self-critical responses he

made over the ten trials, and the presence or absence of self-critical and reparative responses on trial eleven (the test trial) were recorded for each subject.

In the experimental groups, the basic design was the same. However, these groups were tested on the experimenter punishment condition in Phase I. There were three levels of experimenter punishment:

1. In Group I, the experimenter punished the subjects at a level greater than the highest average punishment intensity of the baseline subjects.
2. In Group II, the experimenter punished the subjects at a level corresponding to the average punishment intensity of the baseline group.
3. In Group III, the experimenter punished the subjects at a level lower than the lowest average punishment intensity of the baseline group.

The number of self-critical responses and the presence or absence of self-critical and reparative responses on trial eleven were recorded for each subject.

Following the ten trials and test trial in Phase I, the subjects (baseline and experimental) punished themselves (Phase II) for another set of ten trials of the task. Again, the number of TR's removed, the number of self-critical responses, and the presence or absence of self-critical and reparative responses on trial eleven were recorded (see Appendix B for the design).

The subjects were equally divided by social class and moral orientation, and randomly assigned to one of the four conditions and to one of two male experimenters.⁷ The experimenters were not aware of the subject's social position or moral orientation.

Each subject was individually taken by the experimenter from his classroom to the experimental room, where he was asked to sit in front of one end of a rectangular piece of plywood resting upon a small table. The board was roughly 2x3.5 feet in size. Twenty-four small toy soldiers were thickly clustered in a triangular formation at the other end of the board. Behind the soldiers, at the edge of the board, stood a rubber and wood doll about four inches in height. Two dolls were used in this study--a doctor doll and a nurse doll--in order to provide the subjects with a different doll from Phase I to Phase II. This was done to increase the credibility of the doll's breaking "by accident" on trial eleven. The order of the doll presentation was controlled for each experimenter and across all subjects.

⁷Adult males were the models (experimenters) here since Bandura and Kupers (1964) found that adults were more often imitated than peers. They also observed that subjects used the same self-critical responses as the model. Aronfreed (1963) observed a very low frequency of identical verbal imitation. Also, Bandura and MacDonald (1963) found that social reinforcement could change children's moral judgments.

A large padded cardboard box rested on the floor just beyond the far edge of the board and behind the doll. The box was below the height of the board's surface, so that the interior was not visible to the subject when he was seated. The experimenter sat to the right side of the board toward the far end. Next to the experimenter's left hand was a box containing small Tootsie Rolls. This box was hidden from the subject by a small, vertical wooden barrier. The subject could reach around this barrier for the TR's, but he was not permitted to look around it at the box. On the subject's left was a small box in which the subject (and experimenter) placed the TR's lost.

After the experimenter and the subject were seated, the experimenter used one of two procedures. In one procedure, the experimenter evaluated and punished the subject; in the other, the subject evaluated and punished himself. In either procedure, the experimenter read the following instructions:

I have something here for you to do. The Army uses it to pick people for a special kind of work. To do this work, you have to be very careful and gentle. Being careful and gentle is the most important thing.

Here's the way we do it. Back here there is a nurse (doctor) of a special type (point to doll). She (he) is important in case anyone gets sick, and all the soldiers love her (him) because she (he) is so good to everyone. Whenever there's any danger she (he) has to leave the field by going back into this box (lift up box). Here's how she (he) goes into the box. You push her (him) off the board with this pusher; you must keep it down on the board when you push (demonstrate--give to the subject).

Now the soldiers guard the nurse (doctor) very carefully. They stand all around her (him) like this (point to soldiers). Of course, to push her (him) off, you will have to push through the soldiers, and so you will knock some of them over, even though you're trying to be careful and gentle. The idea is to see how many of the soldiers you will knock down. If you knock down just a few, that's good. If you knock down a lot of them, that's not so good. When you use the pusher try to be as careful and gentle as you can.

The experimenter then followed the baseline or experimental condition procedure.

Baseline Condition

Phase I

The experimenter showed the subject the TR's in the box. He then read:

"When we're all through, you may keep however many you have left. Each time after you push off the nurse (doctor), you look at the number of soldiers you knocked down, and you decide how careless and rough you've been. Then you decide how many Tootsie Rolls you should take from your pile. You take the number of Tootsie Rolls you think is right, and put them in the box here (point to small cigar box). Those are the Tootsie Rolls you lose. The amount you take depends on how careless and rough you think you've been."

The experimenter then began trial one:

"Remember to keep the pusher down on the board. Push off the nurse (doctor), and knock down as few soldiers as you can. And be as careful and gentle as you can. All right, go ahead."

After the doll was pushed over, the experimenter said:

"All right. You knocked down some soldiers, so you decide how careless and rough you've been. Take as many Tootsie Rolls as you think is right, and put them into the box."

The experimenter then reset the doll and soldiers, recorded the subject's responses and the number of

TR's removed. When the subject had finished putting the TR's into the box, the experimenter said casually:

"Good."

Then the experimenter began the next trial(s):

"Okay, go ahead."

The eleventh trial of all conditions was planned as an "unexpected" disruption due to the breaking of the doll. Both dolls were arranged so that the experimenter could easily and unobtrusively "break" them while he picked the doll up from the box. Thus, after the subject pushed the doll off the board on trial eleven, the experimenter held up the "broken" doll and (looking at the doll, not the child) said:

"Auh oh--it's broken. And we don't have another nurse (doctor) here to use for this."

The experimenter then indirectly asked:

(1) "I wonder why it broke."

If the subject gave any response to this stimulus that was relevant to the cause of the doll's breaking, whether or not it was self-critical, the experimenter went on to the third stimulus (given below). If the response was not clearly relevant to the doll's breaking or if the subject gave no response, the experimenter said to the child:

(2) "Why do you think it broke?"

Then regardless of the responses to the first two stimuli, stimulus three was:

(3) "Well, now that it's broken, I wonder what we should do."

This stimulus was intended to indirectly elicit reparative responses. If the subject offered any response that was relevant to the implied question, whether or not it was reparative, the experimenter terminated the eleventh trial procedure. The experimenter then read the Phase II instructions, or terminated the experiment if Phase II was completed (see below). If the subject gave no response, or one that was not relevant to the question, the experimenter then presented the final, stronger stimulus four:

(4) "What do you think we should do now?"

Regardless of the subject's response to the last question, the eleventh trial procedure was terminated. The experimenter then read the Phase II instructions, or ended the experiment if Phase II was completed (see below).

After the Baseline condition subjects had been run, the number of TR's to be removed by the experimenter in Groups I, II, and III was determined. The average number of TR's removed by the Baseline subjects was 5 TR's, and the range was from 1.5 to 12.6 TR's over the ten trials for both Phases I and II.⁸ Thus, the punishment intensity was 13 for Group I, 5 for Group II, and 1 for Group III. The experimenter punished the subjects over the ten trials according to the following scheme:

Group I: 13, 12, 14, 12, 14, 13, 14, 13, 12, 13

Group II: 5, 4, 6, 4, 6, 5, 6, 5, 4, 5

Group III: 1, 0, 2, 0, 2, 1, 2, 1, 0, 1

The three experimental conditions were employed by the experimenters in random order to control for sequence effects and experimenter bias (e.g., fatigue, or practice).

The following procedure for the three experimental conditions was very similar to the Baseline condition instructions. The experimenter showed the subject the TR's in the box. He then read the following:

"When we're through you may keep however many you have left. Each time after you push off the nurse (doctor), I look at the number of soldiers you knocked down, and I decide how careless and rough you've been. Then I decide how many Tootsie Rolls I should take from your pile. I take the number of Tootsie Rolls I think is right, and put them in the box here. Those are the Tootsie Rolls you lose. The amount I take depends on how careless and rough I think you've been."

The experimenter then began trial one:

"Remember to keep the pusher down on the board. Push off the nurse (doctor), and knock down as few

⁸ Since the mean punishment intensity was 5 TR's, Aronfreed's (1961) procedure of punishing at levels of 1, 2, or 3 TR's can be questioned. Thus, it is quite possible that his "punishment" confounded the moral response behavior he observed.

soldiers as you can. And be as careful and gentle as you can. All right, go ahead."

After the doll was pushed over, the experimenter said:

"All right. You knocked down some soldiers, so I decide how careless and rough you've been. I'll have to take--let's see--(one, two, . . .) Tootsie Rolls."

The experimenter then reset the doll and soldiers, and recorded the subject's responses. The experimenter began the next trial(s):

"Okay, go ahead."

The eleventh trial was similar to the procedure previously described (see above).

For Phase II, the experimental as well as the baseline condition subjects were instructed as follows.

Phase II

The experimenter told the subject to leave the room for a minute, put the doll away, and brought out the other doll and reset the soldiers. Then the subject was called in. The experimenter told him:

"Well, we have a different doll now."

After this statement the experimenter repeated the instructions from Baseline condition, Phase I (see above).

In terminating the experiment (for all subjects), the experimenter showed the subject that he had fixed both dolls. He asked the subject not to talk with the other children (or anyone else) about the experiment. The experimenter looked into the box briefly, without the subject's seeing, and gave the subject six Tootsie Rolls in a plastic bag. The procedure ended with the experimenter thanking the subject for participating in the experiment.

RESULTS

The procedure for quantifying the data from the task varied as a function of the response measure in consideration. The self-critical and reparative responses were identified by criteria identical to those used by Aronfreed (1963a): "A response was classified as self-critical if the child, in accounting for the doll's breaking, referred to his behavior in pushing it--for example, any response indicating that he had not pushed the nurse (or doctor) 'the right way,' had pushed it too hard . . ." This criterion was used to identify self-critical responses during the ten trials (before the doll broke) as well (Aronfreed did not include this in his research). The self-critical responses before the doll broke were typically very similar to those which occurred after the doll broke. This made identification of self-critical responses straightforward.

Responses were classified as reparative when they indicated the child's perception that the effects of transgression could be corrected or ameliorated through his own resources for constructive action. These

responses invariably took the form of suggestions for repairing the doll or continuing the procedure, even without the doll, in some alternative way (p. 441).

Of course, no reparative responses were made during the ten trials because the doll did not "break" until trial eleven.

The self-critical and reparative responses could occur to either stimulus 1 or 2, or stimulus 3 or 4 respectively, on trial eleven. Thus, a coding procedure was devised to indicate the presence or absence of these responses to the various stimuli. If the subject responded to the indirect eliciting stimulus (item 1 for self-critical, item 3 for reparative responses) with an appropriate response, he was given a score of 3. An appropriate response to the second, more direct stimulus (item 2 for self-critical, item 4 for reparative responses) was given a score of 2. An irrelevant response, or no response at all, was assigned a score of 1.

The Tootsie Rolls removed were recorded by the experimenter for each of the ten trials, and an average was computed. Thus, the response measures recorded for each subject were: the number of self-critical responses over the ten trials, the self-critical responses on trial eleven, the reparative responses on trial eleven, and the mean number of Tootsie Rolls removed over the ten trials.

Tables 1-4 represent the means and standard deviations of the response measures for each cell (n=8) in

TABLE 1

Means and Standard Deviations of the Number of
Self-Critical Responses for Each Punishment
Treatment by Moral Orientation by Social
Class Cell for Phase I and Phase II

		High		Low		
		Flexible	Rigid	Flexible	Rigid	
<u>Phase I</u>						$\bar{X}$
Baseline	$\bar{X}$	2.00 2.69	2.13 2.34	1.38 1.65	2.34 3.20	1.96
Group I	$\bar{X}$	.38 .48	.75 .83	2.13 2.62	2.75 2.38	1.50
Group II	$\bar{X}$	1.13 2.32	1.38 1.58	1.63 3.24	2.50 2.65	1.66
Group III	$\bar{X}$	1.38 1.58	1.50 1.41	2.75 2.63	1.00 1.50	1.66
	$\bar{X}$	1.22	1.44	1.47	2.15	
<u>Phase II</u>						
Baseline	$\bar{X}$	1.00 1.50	.63 1.11	.63 .99	2.13 3.06	1.10
Group I	$\bar{X}$	.25 .66	.88 1.69	.88 1.05	2.25 1.64	1.07
Group II	$\bar{X}$	1.00 2.65	.50 1.32	1.38 2.91	.63 .86	.88
Group III	$\bar{X}$	1.00 1.22	1.00 1.50	2.75 3.11	1.00 1.50	1.44
	$\bar{X}$	.81	.75	1.41	1.50	

TABLE 2

Means and Standard Deviations of Self-Critical
Responses on Trial 11 for Each Punishment
Treatment by Moral Orientation by Social
Class Cell for Phase I and Phase II

		High		Low		
		Flexible	Rigid	Flexible	Rigid	
<u>Phase I</u>						$\bar{X}$
Baseline	$\bar{X}$	1.38 .48	1.13 .33	1.38 .70	1.38 .48	1.32
Group I	$\bar{X}$	1.00 .00	1.38 .48	1.63 .48	1.38 .48	1.35
Group II	$\bar{X}$	1.25 .43	1.25 .43	1.25 .43	1.25 .43	1.25
Group III	$\bar{X}$	1.38 .48	1.38 .48	1.13 .33	1.25 .43	1.29
	$\bar{X}$	1.25	1.29	1.35	1.32	
<u>Phase II</u>						
Baseline	$\bar{X}$	1.38 .48	1.38 .70	1.25 .43	1.50 .87	1.38
Group I	$\bar{X}$	1.25 .43	1.25 .43	1.63 .70	1.38 .70	1.38
Group II	$\bar{X}$	1.50 .71	1.25 .66	1.25 .43	1.38 .48	1.35
Group III	$\bar{X}$	1.63 .86	1.38 .70	1.25 .43	1.25 .43	1.38
	$\bar{X}$	1.44	1.32	1.45	1.38	

TABLE 3

Means and Standard Deviations of Reparative
Responses on Trial 11 for Each Punishment
Treatment by Moral Orientation by Social
Class Cell for Phase I and Phase II

		High		Low		
		Flexible	Rigid	Flexible	Rigid	
<u>Phase I</u>						$\bar{X}$
Baseline	$\bar{X}$	2.13 .78	2.00 .71	2.00 .50	1.63 .70	1.94
Group I	$\bar{X}$	2.13 .78	1.63 .48	1.75 .66	1.63 .48	1.79
Group II	$\bar{X}$	2.00 .00	1.88 .33	1.75 .66	1.88 .60	1.88
Group III	$\bar{X}$	2.25 .66	2.13 .60	2.25 .66	1.75 .66	2.10
	$\bar{X}$	2.13	1.91	1.94	1.72	
<u>Phase II</u>						
Baseline	$\bar{X}$	2.38 .70	1.88 .60	1.75 .83	2.00 .87	2.00
Group I	$\bar{X}$	2.13 .78	1.63 .48	1.75 .66	2.00 .71	1.88
Group II	$\bar{X}$	2.75 .43	2.13 .60	1.88 .60	2.00 .71	2.19
Group III	$\bar{X}$	1.88 .60	2.00 .87	2.25 .66	1.50 .50	1.91
	$\bar{X}$	2.29	1.91	1.91	1.88	

Phase I and Phase II. It should be remembered that the same subjects were used in Phases I and II.

The data represented by these tables were analyzed by seven 4 by 2 by 2 (punishment treatment by moral orientation by social class) analyses of variance. The summary tables of these analyses are represented in Tables C-1 to C-4 (see Appendix C). An analysis was not performed on the Phase I Tootsie-Rolls-removed data (see Table 4), since the experimenter punished the subjects in the experimental groups during this phase.

The analyses of the data for three of the four response measures failed to yield any significant main or interaction effects for either the Phase I or Phase II data (see Tables C-1 to C-3).

However, the analysis of the number of Tootsie Rolls removed in Phase II provided significant main and interaction effects (see Table C-4). Punishment treatment provided a strong main effect ($f = 252.31$, $df = 3/112$, $p < .001$). Inspection of the data revealed a relationship between the intensity of punishment delivered by the experimenter to the subject and the intensity of punishment the subject provided for himself. That is, in terms of the numbers of TR's removed in each punishment treatment from Phase I to Phase II: Baseline, 166.0 to 138.8; Group I, 416.0 to 410.7; Group II, 160.0 to 152.0; and Group III, 32.0 to 55.1. In Phase II then, the subjects

in the three experimental groups clearly imitated the experimenter punishment they had received in Phase I. Only the Group III subjects punished themselves more than the experimenter had.

The interaction between punishment treatment and moral orientation was also found to be significant ($F = 4.26$, $df = 3/112$, $p < .01$). Examination of the data indicated the main source of variance in the interaction to be the difference between the flexible and rigid moral orientation subjects at Group I. The rigid subjects (223.1) punished themselves more than the flexible subjects (187.6) did in this punishment treatment. None of the other main or interaction effects was significant for the data.

DISCUSSION

The present research attempted to investigate the relationship of social class, moral orientation, and severity of punishment to children's moral responses to transgression. The hypotheses concerning this relationship were not confirmed statistically. However, consideration of the significant main effect of punishment treatment, and the interaction between moral orientation and punishment treatment is important to the interpretation of the mechanism of moral response.

The punishment treatment the subject received (in Phase I) had a strong influence on the way he punished himself. In Phase I, the subjects were punished, Group I > Group II > Group III. The subjects imitated this punishment in Phase II when they punished themselves, Group I > Group II > Group III. However, Group III subjects punished themselves more than they had been punished by the experimenter. These subjects may have been "compensating" for the lower-than-baseline punishment they received in Phase I. That is, they perceived the Group III punishment

as being too weak (insufficient) to control their behavior, so they punished themselves more severely. It might be postulated that some minimal amount of punishment is necessary to "involve" the subject in the task. Aronfreed (1963b) hypothesized a similar "prerequisite amount" with regard to nurturance.

The punishment compensation may have influenced the interaction between moral orientation and punishment treatment as well. For Group I (particularly) and Group II, the rigid moral orientation subjects punished themselves more than the flexible subjects. The Group III difference was in the opposite direction--flexible subjects punished themselves slightly more than rigid subjects. A possible interpretation of this finding might be that the flexible subjects have a more highly "internalized conscience" than the rigid subjects. The Group III flexible subjects felt more "guilty" about not having a sufficient level of punishment for the task, so they punished themselves slightly more than the rigid subjects did. In Groups I and II, the necessary "minimal level of punishment" existed, and was sufficient for the flexible subjects. This minimal level was not, however, sufficient for the rigid orientation subjects to control their behavior, so they punished themselves even more.

This internalization difference is supported in the Baseline condition. The flexible subjects there

punished themselves more (but equivalent to Group II) than the rigid subjects. Although the Group I (and II) difference was in the opposite direction, it might be hypothesized that the task instructions were related to the way the subjects punished themselves. That is, the reasoning or "induction" of the instructions was characteristic of the discipline flexible children typically received from their parents (see Hoffman, 1970). Therefore, when these subjects were provided with "cognitive standards" (instructions) for evaluating their behavior, they felt "involved" (guilty) regarding their performance on the task. These same standards, however, were not sufficient for the less "internalized" rigid subjects. The high intensity punishment in Group I was more similar to the rigid children's parental discipline. The rigid subjects responded to this additional standard (punishment) for evaluation by punishing themselves more than the flexible subjects did (in Groups I and II). Thus, the rigid subjects may be more dependent on concrete guidelines to control their behavior. Although the other data were non-significant, they provide trends consistent with this postulated differences in internalization.

If the response data for Group I (especially) are reviewed, it can be observed that the rigid moral orientation and low social class subjects gave more self-critical responses over the ten trials than the flexible

and high social class subjects. In the "Tootsie-Rolls-removed" data, the rigid group punished themselves more than the flexible subjects in the low social class, relative to the high social class.⁹ These non-significant findings (together with the significant) suggest that self-critical responses (on the ten trials) and punishment (TR's removed) may serve the same function for the low social class and rigid moral orientation subjects. That is, these subjects may use punishment and self-criticism in concert to control their behavior. The high social class and flexible moral orientation subjects used fewer of these responses (punishment and self-criticism) because they have a more highly "internalized conscience." Thus, the high social class and flexible subjects do not "need" these overt stimuli (cues) to control their behavior patterns.

Luria (1961) observed that language and cognitive processes are related in a developmental sequence. When a child is very young, he can inhibit his behavior only with overt verbal cues. As the child matures, the need for overt cues diminishes, and the child eventually inhibits his behavior with covert verbal cues. This developmental sequence in the use of overt and covert cues to control

⁹That rigid children used more punishment than flexible children is supported by Hoffman's (1970) observation that rigid parents are more concerned about punishing accidental damage by their children than are flexible parents.

behavior may be influential in the interpretation of the child's use of self-criticism and punishment.

It might be argued that the interaction effect has nothing to do with internalization of sanctions, but was obtained because the high social class and flexible subjects were merely less involved in the task (felt less concerned) than the low social class and rigid subjects. Or, that the high social class and flexible subjects did not respond from fear of punishment. The reparative response data, however, do not indicate support for these arguments. The flexible moral orientation and high social class subjects consistently (albeit non-significantly) gave more reparative responses than the rigid and low social class subjects. The subjects used more reparative responses when they punished themselves than when they were punished by the experimenter (supported by Aronfreed, 1961). And, there was no relationship between punishment treatment and reparative responses. The subjects who were punished more than the baseline average (Group I) in Phase I, did not use more reparative responses than the other punishment treatments. If a subject gave a reparative response, it appeared that he felt "involved" (concerned) in the task. It seems reasonable to suggest that subjects who gave more reparative responses were exhibiting a more highly internalized moral orientation. These differences in internalization between the two social classes, and

between the two moral orientations may not be equivalent. That is, the two moral orientations which are both "internal" types (Hoffman, 1970) might be closer in internalization than the two social classes. One would expect such a relationship from other research (e.g., Hoffman, 1970; Aronfreed, 1961). Thus, the high social class and flexible moral orientation subjects may possess to varying degrees a greater internalization of moral sanctions than the low social class and rigid orientation subjects.

The directions of the differences in the self-critical and reparative response data imply that Aronfreed (1961) may have been correct in claiming that these responses are "distinct moral phenomena" and are not "equivalent reflections of an underlying unitary phenomenon such as 'conscience.'" The powerful influence of experimenter (model) punishment, and the patterning of self-critical and reparative responses indicate the importance of imitation and past socialization experiences in the child's responses to transgression (Aronfreed, [see p. 18]; Bandura, 1969; Hoffman, 1970; and others).¹⁰

¹⁰ It should be noted that these antecedent conditions can also include very subtle cues from the child's socialization agents. In the baseline condition, for example, one experimenter had subjects who consistently gave more self-critical responses over the ten trials than the subjects of the other experimenter. Upon investigation of this "phenomenon," it was discovered that the former experimenter had maintained eye-to-eye contact while giving the instructions, while the latter experimenter had

Imitation of socialization agents then is one of the important influences in the child's internalization of moral sanctions. In this study, adult models were used. But Piaget (1969) emphasizes the role of peer interactions in moral development. Thus, further research utilizing the present methodology modified to include peers (and peer interaction) would be useful in investigating Piaget's theory of moral development.

Since moral orientation played a significant role in this study, the criticism of Aronfreed's discipline classification seems justified.¹¹ The moral orientation categorizations Hoffman (1970) suggested appear to have functional relevance to the patterning of children's moral responses to transgression, and should prove invaluable for future examinations of moral behavior.

Aronfreed (1961) believed that "different moral orientations do not emerge sequentially with advancing age or experience," while Hoffman (personal communication) has observed that children generally become more humanistic-flexible with age. The data obtained in the present study

not. This eye contact may have changed the subject's perception of the task, and affected the responses given. The importance of nonverbal cues to moral responses has been recently examined by Womack (1971). Although self-critical responses over the ten trials was the only response measure which showed experimenter bias, the experimenters were cautioned in order to minimize the occurrence of this confounding factor in Groups I, II, and III. The data for these three groups do not show experimenter bias.

¹¹See pp. 8-12 of this paper.

when considered in terms of Luria's (1961) findings indicate that the rigid moral orientation subjects are less "mature" than the flexible subjects. This notion is supported by Hoffman's observation, and implies that age and experience are important in the development of moral orientations.¹² In the present study, it was found that only 37 of the 128 subjects felt that their performance was related to the doll's breaking. The children may have been too young to exhibit such self-critical responses (on trial eleven) in greater numbers. Perhaps, with age more subjects would assume responsibility for the "damage." It is evident that further research (longitudinal and cross-sectional) is necessary to investigate the role of age and experience in moral development.

The social classes used in this investigation were structurally quite different from one another. The social classes were equally represented in the two internal orientations, and no external moral orientation subjects were obtained in either social class.¹³ The social classes did, however, imply differential trends in the patterning of responses to transgression. Thus, the social class categorization of Hollingshead (1957) may be

¹²See Piaget (1969) for additional discussion of this topic.

¹³This equal representation may be indicative of a "transition period" as hypothesized earlier (see p. 21, this paper).

a functional, as well as structural, classification system (as Hollingshead proposed). Additional research is necessary with subjects from dissimilar locations, and with external moral orientation subjects. Greater subject differences in social class and moral orientation might result in more significant findings than were obtained in the present study. Such data might permit a broader understanding of the mechanisms involved in moral responses to transgression.

The data also demonstrated the significant influence of punishment in the child's responses to transgression. The use of punishment in behavior control has been examined quite frequently in past research in moral behavior. In order to achieve a greater understanding of moral behavior and internalization, it is imperative that future research investigate the effectiveness of reward as a sanctioning device.

In retrospect, the research procedure has proved valuable as a modus operandi for the examination of the relationship of social class, moral orientation, and severity of punishment (and social antecedents in general) to children's moral responses to transgression. The data have been integrated in an attempt to furnish a more cohesive and functional explanation of the social mechanisms involved. Some suggestions for additional studies have been offered, and hopefully these will provide impetus for further investigations in these areas.

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APPENDICES

APPENDIX A

MORAL ORIENTATION ITEMS

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MORAL ORIENTATION ITEMS

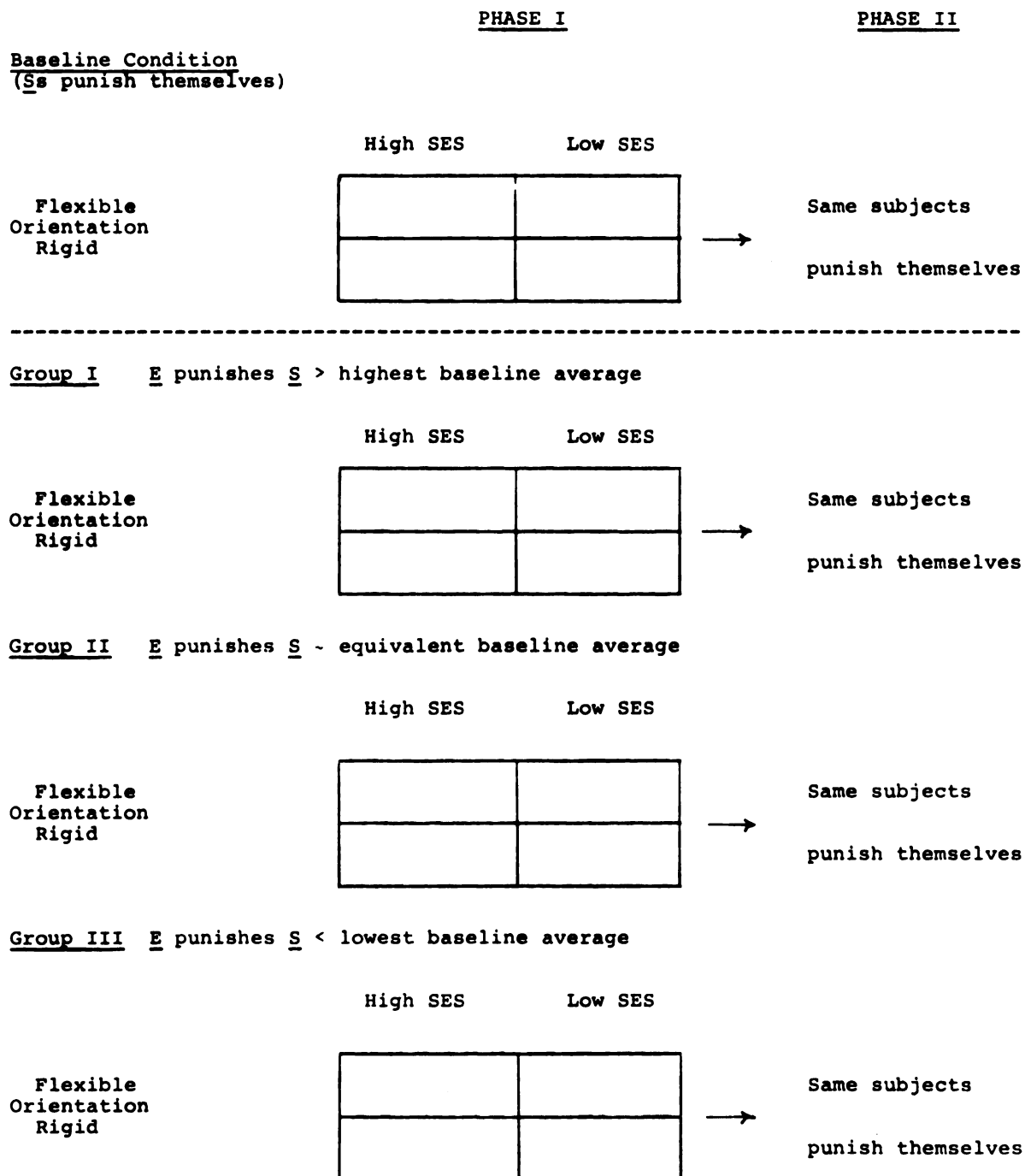
1. Why shouldn't someone steal from a store?
2. Two young men, Al and Joe, were in trouble. They were secretly leaving town in a hurry and needed money. So Al broke into a store and stole \$500. Joe went to a man who helped people in town. Joe told the man he was very sick and needed \$500 to pay for an operation. Really Joe wasn't sick at all, and he wasn't going to pay the man back. Even though he didn't know Joe well, the man loaned Joe the money. So Al and Joe both left town, each with \$500. If you had to decide who did worse, Al who broke into the store and stole \$500, or Joe who borrowed \$500 but wasn't going to pay it back, which one would you say did worse? Why do you think he did worse?
3. Let's pretend that your good friend's mother is dying and needs some medicine to save her life. But only one man in town has this medicine. He wants a lot of money for it too (\$1,000). Your friend's father went to everyone he knew to try to borrow the money (for the medicine). He even went to banks. But your friend's father can only get \$500. So he asks the man if he can get the medicine now with the \$500 and pay him the rest later. The man says no--he wants all the money. So your friend's father gets desperate and breaks into the man's house and steals the medicine for his wife. Do you think your friend's father was right or wrong to do that? Why?
4. Jim is the best bowler of all his friends. He usually bowls around 155 (score). One day some of the boys are teasing his friend, Bobby, about how poorly Bobby bowled (the low score he had) the day

before. They keep saying Bobby doesn't know how to bowl and never did. Bobby isn't smiling at all. Finally Bobby says, "I didn't bowl very well last night, but once I bowled 145." The other boys don't believe Bobby. They just laugh at him. Jim hears them teasing his friend Bobby. Even though Jim never saw Bobby bowl 145, Jim says, "It's true what Bobby says. I was there when he bowled 145. I saw him myself." Do you think Jim was right or wrong to say that? Why?

APPENDIX B

EXPERIMENTAL DESIGN

APPENDIX B
EXPERIMENTAL DESIGN



APPENDIX C

SUMMARY TABLES OF ANALYSES OF VARIANCE

TABLE C-1

Summary of Analyses of Variance of the Number
of Self-Critical Responses for Punishment
Treatment by Moral Orientation by Social
Class for Phase I and Phase II

Source	df	MS	F	p
<u>Phase I</u>				
A (punishment treatment)	3	1.24	.22	NS
B (moral orientation)	1	1.32	.24	NS
C (social class)	1	17.26	3.09	NS
AB	3	3.68	.66	NS
AC	3	5.99	1.07	NS
BC	1	.01	.002	NS
ABC	3	3.15	.56	NS
Within cell (error)	112	5.59		
Total	127			
<u>Phase II</u>				
A	3	1.76	.45	NS
B	1	.01	.003	NS
C	1	14.44	3.70	NS
AB	3	6.59	1.69	NS
AC	3	.91	.23	NS
BC	1	.20	.05	NS
ABC	3	4.74	1.22	NS
Within cell (error)	112	3.90		
Total	127			

TABLE C-2

Summary of Analyses of Variance of Self-Critical
Responses on Trial 11 for Punishment Treatment
by Moral Orientation by Social Class for
Phase I and Phase II

Source	df	MS	F	p
<u>Phase I</u>				
A (punishment treatment)	3	.05	.22	NS
B (moral orientation)	1	.00	.00	NS
C (social class)	1	.13	.57	NS
AB	3	.06	.26	NS
AC	3	.35	1.52	NS
BC	1	.03	.13	NS
ABC	3	.30	1.30	NS
Within cell (error)	112	.23		
Total	127			
<u>Phase II</u>				
A	3	.007	.02	NS
B	1	.07	.16	NS
C	1	.01	.02	NS
AB	3	.11	.26	NS
AC	3	.34	.79	NS
BC	1	.19	.44	NS
ABC	3	.16	.37	NS
Within cell (error)	112	.43		
Total	127			

TABLE C-3

Summary of Analyses of Variance of Reparative Responses
on Trial 11 for Punishment Treatment by Moral
Orientation by Social Class for
Phase I and Phase II

Source	df	MS	F	p
<u>Phase I</u>				
A (punishment treatment)	3	.55	1.31	NS
B (moral orientation)	1	1.53	3.64	NS
C (social class)	1	1.13	2.69	NS
AB	3	.18	.43	NS
AC	3	.02	.05	NS
BC	1	.00	.00	NS
ABC	3	.27	.64	NS
Within cell (error)	112	.42		
Total	127			
<u>Phase II</u>				
A	3	.63	1.21	NS
B	1	1.32	2.54	NS
C	1	1.32	2.54	NS
AB	3	.07	.13	NS
AC	3	.40	.77	NS
BC	1	.94	1.81	NS
ABC	3	1.32	2.54	NS
Within cell (error)	112	.52		
Total	127			

TABLE C-4

Summary of Analysis of Variance of the Number
of Tootsie Rolls Removed for Punishment
Treatment by Moral Orientation by
Social Class for Phase II

Source	df	MS	F	p
A (punishment treatment)	3	739.26	252.31	<.001
B (moral orientation)	1	6.21	2.12	NS
C (social class)	1	.19	.07	NS
AB	3	12.48	4.26	<.01
AC	3	.35	.12	NS
BC	1	10.02	3.42	NS
ABC	3	.75	.26	NS
Within cell (error)	112	2.93		
Total	127			