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JUDGMENTS OF THE JUSTICE OF PUNISHMENT BY ADOLESCENT DELINQUENTS

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ABSTRACT

JUDGMENTS OF THE JUSTICE OF PUNISHMENT BY ADOLESCENT DELINQUENTS

by Jeannette M. Haviland

This study investigates the relevance of Jean Piaget's theory of the development of moral judgment to the problem of the justice of punishment.

The first hypothesis was that retardation of moral judgment as measured by Piaget's tests is related to adolescent delinquency. The experimental Ss were known delinquents in a Training School; the control Ss were matched with the experimental Ss on intelligence and general background, but were not known delinquents. This hypothesis was tested in two ways: the first measure was the interview in which S judges a character in a story who transgresses; the second measure was the S's use of punishment and reward in training rats.

The first hypothesis that adolescents who are delinquent would give immature moral responses was not significantly supported by the interview, but was significantly supported by the results of the behavioral method. While training a rat which had been pretrained to make a 'wrong' response, the delinquent

Ss used significantly more punishment and significantly less reward than did the control Ss.

Since all the interview questions were in one moral judgment category, the second hypothesis was that interview responses would not differ significantly among the interview questions. However, this hypothesis had not previously been tested by systematically altering only one variable in each interview story. The variable in this study was the relationship between the characters in the interview story. This Piagetian hypothesis was not supported. The results suggested that moral judgment of punishment differs with respect to the relationship between people. The Ss in the delinquent and matched non-delinquent samples gave significantly more mature punishment responses when the interaction was reported to be between adolescent peers than when the interaction was reported to be between an adolescent and his mother or an adolescent and a teacher. This result does not support Piaget's hypothesis that moral judgment of punishment is cognitively 'global', but rather would support social learning theorists who maintain that moral judgment is situation dependent.

The correlations between interview responses and punishment responses in the rat training situation also tend to support the social learning hypotheses. For the control Ss on the adolescent -- parent story, punishment responses were significantly and positively correlated with interview responses. For the

delinquent $\underline{S}$s on the adolescent -- peer story, punishment responses were significantly and negatively correlated with the interview responses.

The results, while not disputing the the development of moral judgment is related to cognitive development, suggest that punishment behavior for adolescents is situation oriented, rather than part of a global cognitive code. Beliefs about peer punishment, adult punishment, and animal punishment are not highly related.

Approved [signature]

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JUDGMENTS OF THE JUSTICE OF PUNISHMENT BY ADOLESCENT DELINQUENTS

By

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Introduction

Theories of moral and character development are an ancient topic of study, traditionally more of interest to the philosopher than to the psychologist. Only in the last few decades have psychologists begun empirical studies in this area. In so doing they have found that 'morality' and 'character' cover many facets of psychological development, not all of which are congruent. The topic of this study is the development of attitudes toward and beliefs about the justness of punishment.

Many contemporary ideas about moral judgment find their origins in writings ranging from the Nichomachean Ethics to Augustine, from Dewey to Freud, and, with particular respect to theories of the development of morality, from Piaget. This discussion will be limited first to a general review of the literature on moral judgment and then to the narrower topic of the development of beliefs and practices about punishment.

In the United States in the early part of this century interest in children's moral behavior was confined largely to the practical aspects of training to conform to society's notion of 'goodness'. Dewey, a member of the pragmatist tradition which greatly influenced the historical development of behaviorism, clearly summarizes and heralds the thought in this area. He explores the belief that moral ideas are learned

through acting 'morally'. He means by this, acting according to society's prescription in social situations, in the family, at school, and so on. Dewey appeals to situational variables rather than to general ideas about morality; he suggests that social reinforcement and task accomplishment are better reinforcers than punishment, restrictions, future goals, or personal recognition. Dewey also foreshadows Piaget's ideas about the importance of judgment in the learning of moral behavior.

In this tradition Hartshorne and May (1928-1930) defined character as social habits of conformity, honesty, self--control, and service, and tested these habits with temptation situations. Their study found little relationship between honesty in a temptation test and previous membership in Sunday School, Boy Scouts or character -- education classes. In general Hartshorne and May conclude that honesty is dependent upon situational factors such as the opportunity to be dishonest and remain undetected and the value of the possible reward for undetected dishonesty.

Several writers (e.g., Kohlberg, 1963) have interpreted the reported failure of training for honesty to mean that learning theory concepts were not applicable. However, another interpretation would be that learning <u>about</u> honesty did not generalize to <u>behaving</u> honestly. To test the effectiveness of learning theory with respect to honesty one should reinforce

subjects for resisting temptation. Then after training to resist temptation a post--test in other situations would represent a more adequate test of learning theory principles.

Further studies (Grinder, 1962; Sears, Alpert & Rau, 1965) on the teaching of moral behaviors have shown relatively little relationship between training and children's behavior. Hartshorne and May found that punishment inhibited or elicited behavior in a particular situation when the punishment was immanent and realistic, but little generalization was found to other situations in which punishment was not immanent. Most reviewers agree with Hartshorne and May that these results are evidence against the existence of a generalized conscience even though there is no evidence about the effect of positive reinforcement on the development of conscience.

Psychologists such as Piaget, 1932, and Kolhberg, 1963, would interpret results of such studies as Hartshorne and May's differently. They would maintain that general moral schemas do exist but that moral behavior and judgments are difficult to change with reinforcement techniques.

Psychoanalytic interpretations of the development of moral judgment center about the concept of the superego. Freud argued that the mechanism of identification with caretakers accounted for the energizing of the superego system. The young child is completely dependent upon his caretakers. Because of this, he identifies with them; that is, he matches

his behavior with the sanctions and prohibitions laid down by them.

In Freudian theory the superego is usually in direct opposition to the id, since society's moral code, which the child adopts, is directed towards inhibiting the id's primitive drives. According to the Freudian point of view main determinants of moral behavior are and can only be established in early childhood when the important figures in the child's life are all powerful. Rewards and punishments applied later in life are not believed to be strong enough to develop moral behavior.

Piagetian and psychoanalytic views of moral development touch on a few issues, but for the larger part are parallel. For example, both theories agree that the autocratic, all-seeing, punishing caretaker contributes to the development of certain immature types of moral behavior. Piaget asserts that most children pass through a stage in which their cognitive development is dominated by views of parental authority and its essential validity, even its divinity. He does not hypothesize that this is the basis of the conscience, but rather that this aspect of moral development changes and matures, just as beliefs about physical phenomena, such as the movement of clouds, change and mature. Piaget seemingly ignores consideration of emotional content in developmentally earlier beliefs. Theoretically this emotional content may not change but may lie dormant, since it is neither replaced nor punished.

Further differences in Piagetian and psychoanalytic interpretations lie in their assertions about the origins of moral behavior and judgments. Freud believed that the origins lay in the resolutions of childhood crises such as toilet training, sex training and identification. Piaget maintains that the dominant origins are multiple and interacting but include such factors as parent authoritarianism, cooperation among peers and the changing patterns in cognitive development.

In summary, psychoanalytic interpretations of moral development involved a different aspect of development from that pursued by Piagetians, the former being more oriented toward the emotional aspects and the latter entirely cognitive. This is not to say that a rapprochment in unnecessary or impossible. In fact, since many studies of antecedents of moral development have not upheld Piagetian predictions, we may need to combine the theories in this area.

Social learning theory has combined to some extent the contributions of behavioral and psychoanalytic interpretations. In the area of moral judgment, however, social learning theory interpretations have lead to new interpretations and the posing of new problems.

An extensive study by Sears, Rau, and Alpert (1965) illustrates both the relation of social learning theory to psychoanalytic theory and its unique controbutions. Sears et al. attempted to intercorrelate measures of dependency and identification. The

data revealed a lack of intercorrelation, thus inconsistant with psychoanalytic predictions. It is therefore clear that the relationship between identification and dependency must be reformulated.

Another study (Bandura & Kupers, 1963) shows how social learning concepts of imitation are related to development of the ego ideal. The seven-year-old subjects learned to reward their own behavior through observing a model who rewarded himself. A model with 'high standards' influenced the child to have high standards, while a model exhibiting 'low standards' influenced the child to have low standards. Peers and adults were equally effective as models.

Further studies by social learning theorists have investigated the effects of punishment and the timing of punishment upon resistance to temptation (Parke & Walters, 1967; Aronfreed, 1961,1963). These will be discussed with other studies directly related to punishment behavior.

The studies cited above generally tend to uphold the social learning hypothesis that the Freudian concepts of conscience, dependency, and identification are very global and that elements of any of these may be independently acquired through direct reinforcement, punishment, or imitation.

Piaget's work in the field of moral judgment is a small interlocking segment of his life's work in cognitive development. According to Piaget the development of the two moralities --

the morality of constraint (the ethics of authority) and the morality of cooperation (the ethics of mutual respect) -- is congruent with areas of judgment.

Piaget's theoretical position (1954) is called "equilibation theory". Equilibfation means that logical cognitive structure develops as a function of an internal process dependent upon activity and experience. The repetition of acts is not assumed to act through external reinforcement but by a process of mutual influence of the child's activities upon each other. Contradictions in mental structure bring about reorganization of concepts and relations (Smedslund, 1961). Moreover, it is only in the area of moral judgment that Piaget and his co-workers have specified which of the child's activities might have dominant influence. In doing this they obviously leave themselves open to proof of error, but they also give other experimenters an opportunity to start the process of eliminating and building on a strong theoretical basis.

Piaget studies moral judgment through watching and participating in children's marble games and through interviewing with stories. In the former case he studies children's notions of rules and their origins and use; in the latter he notes children's reactions to stories which involved a moral judgment. Piaget recognizes the technical drawbacks in his methods; his results may reflect his own interpretaions and could be influenced by the experimenter's personality and training. Never-

theless, Piaget's methods have been fruitful for him and other psychologists.

In his 1932 study on lower-class Swiss children Piaget identified several different kinds of moral judgment. These included a) immanent justice -- each act has reacting consequences upon the actor, b) moral realism -- an act is judged according to its external effects, c) beliefs about collective and individual responsibility for punishable acts, and d) beliefs about types and values of punishment. It is primarily the last are which is of concern in the present study.

Piaget's study of the justice of punishment revealed striking developmental changes: younger children think that punishment is just and necessary; the sterner it is, the more just. Younger children also believe that punishment is effective in the sense that the child who has been duly chastized will in the future obey better than one not severely chastized. Older children tend to suggest punishments that put things right and restore the status quo; "punishment as such is regarded as useless, reproach and explanation being deemed more profitable than chastisement" (p. 201). However, as is true of most cognitive structures, immature forms may and often do survive at all ages and may be found among adults as well as children. Piaget hypothesizes that a change in attitude toward punishment occurs as the child becomes less egocentric and recognizes the reciprocal effects of causing suffering.

The child comes to realize that wrong actions are contrary to rules of cooperation and break the bond of solidarity that exists within a group, especially a peer group.

Certain social and philosophic questions are raised by this theoretical conception. Should one accept the results related to justice of punishment as having implications for moral behavior, conscience development, guilt and other non-behaviorally defined concepts related to good and evil? Furthermore, what is the meaning of the terms "mature" and "immature" as they have been applied to moral behavior?

Piaget, drawing principally from the philosophies of Durkheim, Bovet, and J. M. Baldwin, clearly intends to speak of the justice of punishment in terms of good and evil and to imply that the mature judgment is qualitatively better than the immature judgment. To Piaget expiatory punishment is a primitive social method of restoring social order by objectively hurting anything or anyone associated with the disorder or crime. Theoretically, this response substitutes for the impossible task of attacking the disorder itself. Punishment is considered a primitive and immature way of responsding because it lays the burden of restoration of order not on the cause of the disorder, but on an individual or group regardless of its ability to be responsible. This objective expiation would not lead to development of subjective or autonomous responsibility or authority, but rather to heteronomous respon-

sibility. For example, such an expectation could lead to the concept that the evil lies in being 'caught' or being associated with crime rather than with one's own volition in committing a criminal act.

Durkheim discusses comparatively the use of expiatory punishment in primitive and more modern democratic societies and Piaget draws from this material to make analogies to the child's development of concepts concerned with the justice of punishment. In both the case of primitive societies and in the child's case Piaget notes the relative importance of omnipotent and omniscient authorities. For the child these authorities are the parents. Because of the authoritative relationship between the parent and the child, Piaget believes that the child adopts the philosophy of moral realism or non-autonomous authority in his moral judgment. In one sense, then, the child is simply expressing a belief in the justice of his own situation, that is in the relationship between himself and his parents. He expresses the belief that punishment that emmanates from an external source is just punishment, and that such punishment prevents further unwanted (by the authority) behaviors.

The mature alternative to expiatory punishment is censure or explanation or both. This is a reasonable, though still idealistic, alternative only in the social situation in which all the interacting members are able and willing to cooperate. According to Piaget, cooperation implies the ability to take

another person's point of view. If it is true that each member of the society takes autonomous responsibility for his own behavior, only then do conscience and the ability to censure or correct the self develop. Although Piaget does no himself make the point, the implication is that all members of the society have an implicit contract to cooperate. When the contract is broken, censure alone restores the bond of cooperation because the individual will correct his behavior when he is able to observe or is instructed of its consequences on others and on the contract.

To Piaget, censure and explanation rather than expiation is 'mature' rather than merely idealistic because he assumes that the child in transition becomes able to understand and reason through the concepts of equality and cooperation. This cognitive restructuring is aided, according to Piaget, by peer cooperation through which the concepts are presented at first concretely in the child's experience, although at a later stage he assumes that the concept would generalize and be formulated rationally.

A number of studies have tested Piaget's assertions that immanent justice, collective responsibility, moral realism, and punishment and other such instances of moral judgment do exist and that these areas are related as Piaget hypothesized they would be. Other studies have extended Piaget's findings to children of different social classes and nationalities.

Well before Piaget, Barnes (1902) presented comparative data on 8 to 15 year old school children in the United States and Great Britain. This extensive study is remarkably similar in method to Piaget's studies and the results may be interpreted in exactly the same way. Barnes found that the recommendation of corporal punishment for "a young child who mistakenly painted some chairs" decreased from about 40% at age 8 to less than 10% at age 15, while the recommendation of explanation for the same story increased from about zero at age 8 to almost 40% by age 15. At all ages girls gave more mature (explanation) responses than boys, although the significance of this difference, of course, was not reported (there were no tests).

MacRae's (1954) extensive study of antecedents of moral judgment updates and in part replicates an earlier study by Lerner (1937). Lerner was primarily interested in replicating Piaget's results in the United States and in general succeeded. MacRae tested 244 boys ages 9 to 14 by questionaire and interview. He found no significant correlation between maturity of moral judgment and his measures of extent of parental authority, interaction with parents, extent of parental discipline and control, attachment to the more or the less strict parent, or the extent of internalization of parental prescription. The boys" perceptions of their own participation and role in peer groups did not show a significant relation to moral judgment

either. Thus MacRae's findings do not support Piaget's hypotheses about possible antecedents to mature and immature moral judgments.

The factor of peer influence on values and attitudes remains comparatively unexplred in the psychological literature. The Sherif, Harvey, White, Hood, and Sherif (1961) study stands out as one of the only studies in this field and does support the hypothesis that peer interaction contributes to the establishment of self-concept, role, and status. A study by Wilson (1959) lends further indirect support to the Piagetian hypothesis. Wilson studies high school students" educational, occupational, and political values. Statistically partialling out such parental influences as occupation and education made it apparent that individual values were influenced by balues held by the majority of the students in the high school. Although these studies indirectly support Piaget's hypothesis, in contradiction to MacRae's data, which do not support it, the evidence for either case is meager, and no conclusions should be drawn.

MacRae also correlated responses in several areas in moral judgment. The results indicated that there are "two distinct clusters of areas. The first is concerned with intentions and consequences,...the second is concerned with punishment -- with the expectation of it or the feeling that punishment is right" (p.112). This result is not consistant with Piaget's hypothesis, supported by his studies, that moral judgment is

a unified area of cognitive development. MacRae interprets the two clusters a posteriori as indicating the existence of emotional and cognitive levels in moral judgments. Within clusters of questions, though, MacRae found the same developmental trends toward a mature answer as did Piaget and Lerner.

Johnson's (1962) study of children's moral judgments is also primarily an attempt to measure the consistency of mature or immature responses to moral judgment questions and is an investigation of antecedent conditions. In contrast to MacRae's study, Johnson test both boys and girls across a broader age range (grades 5,7,9, and 11). The variables in the tests of antecedent conditions were adult constraint, egocentricity, age, sex, IQ, and parental occupation, each measured with a standard written questionaire or test. Of these variables, chronological age correlated positively and significantly with all areas of moral judgment. Socioeconomic status and IQ, themselves positively correlated, were highly correlated with responses in the areas of moral realism, retribution vs. restitution, and the efficacy of severe punishment. The eight significant correlations of parent attitudes out of a possible 45 occurred most frequently in the areas of immanent justice and communicable responsibility. Other measures of antecedent conditions did not show significant non-random correlations with moral judgment. None of the significant correlations -

directly contradicts the findings in MacRae's study, since the measures in the two studies are not the same.

Johnson also included a correlational measure of maturity of response among questions within an area and among several areas of judgment. The data seem to support, in contrast to MacRae's data the hypothesis that a general factor of moral judgment influences all areas with the possible exception of communicable responsibility. The correlations are low but in the expected direction. Since the responses are influenced by IQ and socioeconomic level, some correlation is expected; whether it is fully accounted for by these factors is not shown. The correlations of responses to questions within moral judgment areas show high consistency within each area. An examination of the stories used in the interview reveals a few logical inconsistencies in the narrative which if resolved might yield more impressive correlations.

In a short study on one aspect of moral judgment, that of immanent justice, Medinnus (1959) tested the reliability of two Piagetian story--questions. He concluded that children are more likely to give the more mature response if an alternative rational explanation is provided in the story. Medinnus suggests that the results in any particular study of moral judgment will depend on a) the meaningfulness of the story, b) the concreteness of the stories in the child's experience, and c) the prescence or absence of rational explanation in the story. That these

factors make a significant difference is not shown conclusively from Medinnus' small sample. In fact Johnsons' correlational data would suggest that these factors do not make a significant difference.

Two studies of the influence of social class on the development of moral judgment maturity are Harrower's (1934) and Boehm and Nass' (1962). Boehm and Nass did not find social class differences; however, their sample of working class and middle class children all came from the same school and presumably the same neighborhood, so the results of this study are probably contaminated.

Harrower found large differences in apparent development between upper and lower class British children. The lower class children showed the same developmental rate as the lower class children in Geneva tested by Piaget and his collaborators. However, the upper class children did not show a phase of preferring expiatory punishment over reciprocity or restitution even at the youngest ages of 5 and 6. This has some interesting but as yet untested implications for Piaget's theory. It is not at all clear what factors might be operating to produce this schism in social class, and Harrower does not offer any hypothesis. It is unlikely that peer interaction preludes the maturity of moral judgment for upper class children. Piaget's hypothesis that peer interaction is a major factor in the development of mature moral judgment may have to be restated. It is possible that adults' interaction with and expectations

from children are more important than Piaget thought.

Bobroff (1960) has correlated ego development as measured by the TAT with socialization as measured by knowledge and use of rules in marble games. The correlation was small but significant. Two of his subject groups were mentally retarded children. In these groups he observed that the same stages of development in moral judgment occurred at about the same mental age as in the normal children.

Abel's (1941) study extended Bobroff's findings on the effect of mental retardation on development of moral judgment in the area of immanent justice. All his subjects were girls. One group lived in an institution, while the control group lived in the community. On the tests of moral judgment, the control subjects gave responses appropriate for their mental age, whereas those living in the institution were more retarded in moral judgment. Abel attributes this difference in the maturity of responses about immanent justice to the strict control exerted over the girls in the institution. In many respects they are as controlled as very young children. Thus Abel's study may indicate the possible influence of authoritative caretakers on the maturity of moral judgment.

A Review of the Literature on Punishment Behaviors and their Correlates

The problem of punishment has been studied in many different ways. In his study of moral judgment Piaget included some

questions about children's notions of the justice, severity, and types of punishment that parents use. The results indicated that the young child believes punishment to be right and just if an adult indicates that it is so. The young child also believes that severe expiatory punishment is more effective. In contrast older children take motivation into account and other mitigating factors, such as the age of the wrongdoer, the responsibility of the caretaker; furthermore, the older child indicates that a punishment which somehow restores the relationship, either physical or interpersonal, that existed before the 'naughtiness' is more effective (Piaget, 1932; Barnes, 1902). Other studies such as those of MacRae (1952), Johnson (1964), and Harrower (1934) mentioned above have substantiated Piaget's findings in this area and extended the studies to cover correlated variables of IQ and social class.

A recent study by Parke and Walters (1967) investigated the factors influencing the effectiveness of punishment on first and second graders in a temptation situation. This study is related to Piaget's, though it was directed toward a different question. Piaget asks what does the child believe is effective; Parke and Walters ask what is effective. However, the results of their study indicated in part that deviation in the temptation situation is related to the nature of the relationship between the agent and recipient of punishment. The subjects in the high nurturance group deviated less

often and for a shorter period of time than did subjects in the low nurturance group. Also high intensity punishment inhibited deviancy to a greater degree than low intensity punishment. If behavior in a temptation situation were indicative of moral behavior in general, then the results of this experiment would have strong implications for the development of beliefs about punishment. It high intensity punishment from a nurturant person is effective in inhibiting first and second graders' deviant behavior, one might predict that children would come to expect it to be effective.

Other types of information about punishment behaviors are far less in agreement than those above. For example, results of studies of correlates to various types of punishment behaviors reported used by parents have been inconclusive and often conflicting.

Aronfreed (1961; 1963) presents sociological and experimental evidence for the hypothesis that disciplinary differences are related to differences in moral response. He found that in a story completion task lower class children were more likely to show "external guilt" such as fear of consequences, whereas middle class children tended more to use self--evaluation. Aronfreed views this difference as consistant with other findings (Bronfenbrenner, 1968; Maccoby, Gibbs et al., 1954; Littman, Moore, & Pierce-Jones, 1957) that lower class parents are more likely to use direct aggression in dixcipline than

are middle class parents.

To test experimentally one aspect of this presumed difference in parental behavior, in a training procedure Aronfreed varied the amount of control that the child had in structuring his own punishment. He hypothesized that externally administered punishment such as corporal punishment or scolding does not lead to self--criticism to the same degree as self--administered punishment. The results indicated that the child who could structure his own punishment was more likely to engage in self--criticism than the child who was punished by the experimenter. This result suggests that self--criticism generalizes from situation to another, so that if a child receives training in self--criticism in one situation, he is more likely to engage in self--criticism in a different situation than will a child who is not trained in self--criticism. Whether training in self--criticism generalizes to other aspects of moral behavior and moral judgment cannot be gauged from this study. For example, one would question whether self--criticizing children would be less deviant on some measure than the child who is punished by someone else.

Aronfreed interprets his results as contradicting Piaget's main thesis that moral judgment is a feature of cognitive development, since the results indicated that moral responses are a variable function of the social roles and cultural settings which the child has experienced. However, equilibrium theory,

while not readily admitting moral judgments as purely situational, certainly does recognize that cognitive development is stronly influenced by social roles and cultural settings. For example, Piaget notes that eye-hand coordination in the infant is strongly influenced by cultural and climactic customs of swadling, mittening, providing play things and so on. Cognitive development is a function of integrated individual capabilities and environmental opportunities or restrictions. Since the young child believes in the stage of egocentrism that adults are always correct and hence, just, he could reflect parental opinions, behaviors, and expectations about the efficacy of punishment and thus seemingly give a response incongruous with cognitive level, but congruous with situational variables.

The Stanford studies (Sears, Whiting, Nowlis, & Sears, 1953; Sears, 1961; Sears, Rau, & Alpert, 1965) are another well-known example of an attempt to relate moral responses to early behaviors and parental disciplinary practices. Although the 1953 study (Sears et al.) found a clear positive relation between overt aggression in preschool and maternal punitiveness, testing the same subjects at age twelve showed a negative correlation between anti-social aggression and severity of punishment as reported by the mothers when the children were five. There are several methodological problems which contribute to the likelihood of inconsistent results without really offering very satisfactory explanations of the discre-

ancy. For example, different measures of aggression were used in the different studies and the measures of punishment were data from interviews with mothers only. Furthermore, it is not clear how or whether behavioral measures of aggression are related to moral responses.

If delinquency may be used as a behavioral indicator of immature moral judgment, then studies on the behavioral antecedents of delinquency are relevant to the present discussion. In particular the effects of parental authority as manifested in disciplinary practices would be related to Piagetian theory and to other studies of the efficacy of punishment. The Gluecks' data (1950) are the most reliable on this point, having come from several sources: a psychiatric interview with the child, interviews with the parents or caretakers, case reports by social workers, and school records. The results disclosed that the

> ...most marked difference between the disciplinary practices of the parents of the delinquents and those of the non-delinquents is found in the considerably greater extent to which the former resorted to physical punishment and in the lesser extent to which they reasoned with the boys about misconduct. (p. 85)

Other revealing points were that disciplinary practices of parents of delinquent boys were lax or erratic and that fathers of delinquent boys were particularly likely (over two-thirds) to

use physical punishment. Although there are many other factors involved in delinquency, other studies (Bandura & Walters, 1959; McCord & McCord, 1956) have substantiated the Gluecks' results.

Statement of Purpose of the Present Study

The present study was designed to investigate the applicability of the Piagetian theory of the development of moral judgment to delinquent children and to test behavioral techniques in the area of the justice of punishment.

Many investigators have replicated Piaget's original study using lower, middle, and upper class children ranging in age from 6 to 15. All have used some written or oral form of Piaget's original stories and questions (Harrower, 1934; Lerner, 1937; MacRae, 1954; Johnson, 1964). However, no one has treated this area of moral development as a cognitive phenomenon using subjects who one would predict would be advanced or retarded developmentally on the basis of some social or experimental treatment. One possible exception is the use of mentally retarded subjects. Several investigators (Bobroff, 1961; Abel, 1941) have reported mentally retarded children to be retarded in other developmental areas such as conservation acquisition (Goodnow & Bethon, 1966) and acquisition of immanent justice. However, Piagetian theory predicts that other facets of the personality and environment also have strong effects on development of moral judgment. This study is concerned with one of these.

The subjects were adolescent delinquent boys, most of them Negro. They were chosen on the hypothesis that factors which contributed to their delinquency might also be factors which contribute to developmental retardation in moral judgment. If this notion is correct one would predict that lower class, Negro, delinquent adolescents would have immature concepts of the justice of punishment. There are three assumptions behind this hypothesis. The first is to assume that the parents of these boys probably used severe expiatory punishments in disciplining their children (Glueck & Glueck, 1950). The second is to assume that middle class society does not accept the Negro and in particular the lower class Negro on equal terms; it expects the lower class Negro to be submissive, respectful, and unable to grasp concepts on an equal emotional and intellectual level. In short it clearly views the lower class Negro as 'child-like' in these respects. A third assumption is that because the delinquent sample is being actively punished by society, they will respond as children do to expiatory punishment, even though a part of the punishment is ostensibly rehabilitation.

This is an exploratory study, then, in the sense that it is not singling out specific possible factors, but is centering on an area in which influential factors are expected to be strong. The first prediction is that

1. Delinquent adolescnets will give immature responses a) to the interview questionnaire and b) on a behavioral measure in a

test of moral judgment.

The maturity of the response will be measured by the Piagetian story--question procedure and measured behaviorally.

One minor prediction of the study comes from a control in the story--questions. There is some question about the relative effectiveness of different stories which purport to elicit the same responses (Kodinmus, 1959). The stories used to elicit responses in the interview in this study are the same except that in each story a different person is harmed: mother, teacher, or adolescent peer. There is some question (Wilson, 1959; Sherif et al. 1961) about the difference in relationship between peers, adults, and families and the relative responsibility that a child should feel toward each. However, Piagetian theory would predict that there would be no significant differences, since justice is considered to be a global concept. Thus, the second prediction is

2. There are no significant differences in response to story--questions as a function of the relationship between the adolescent character and the person harmed.

The second major part of this study investigated a behavioral test of moral judgment. Piaget and others who have replicated or extended his findings have relied upon some form of interview technique with all the accompanying problems of administration, standardization, validity, and scoring.

The objective portion of this study allowed the subjects to train a rat pretrained to 'misbehave' by the use of punishment, enticement, or reward, each of which response could be objectively scored. The use of this measure practically eliminated the possibility that the subject's response was designed to please the experimenter by reciting a moral lecture. At the same time the measure is contaminated by the possibility that there may be a real difference between the subject's ideas about the justice of punishment, enticement, or reward, and his own behavior in a punishing situation. However, the third prediction is that

3. The maturity of the responses given in the interview will correlate significantly with the responses in the rat-training.

If these predictions are confirmed, then further study and experimentation can proceed with these methods.

Method

Sample

Experimental Ss. From the population on work programs at Boys Training School (BTS) in Lansing, Michigan, a school for delinquents, 22 male adolescents were randomly selected. The mean age of the Ss was 16.2 (standard deviation = 0.38). Most of the Ss had attended high school, all had attended eighth grade, but school attendance was erratic and grade level was not always available in institution records. The range in IQ was within normal limits 80 to 105, ($\bar{x}$ = 92). The IQ scores were obtained from various standardized individual tests administered to all boys at the school.

The Ss were at BTS for a variety of reasons, all for incorrigibility, with other misdemeanors and crimes ranging from truancy and car theft to rape and armed robbery.

Sixteen of the Ss were from the Negro slum area of Detroit, three were from poor sections of Jackson, Michigan, and two were from smaller southern Michigan towns. Sixteen of the Ss were Negro, five Caucasian and one Mexican.

Control Ss. Twenty-two male adolescents were randomly selected from study halls in a downtown Detroit high school. The school population is almost entirely Negro and is located in a Negro slum area. No attempt was made to select control Ss without police records, the only restrictions on selection were that Ss had low-normal IQ's and were 16 years of age.

The E was not permitted access to school records, and individual IQ tests could not be administered. Instead, the study hall supervisors checked scores on standard group IQ tests and listed the boys who fell into the low-normal range (80 to 105). The mean age of the control Ss was 16.2, standard deviation 0.10.

Procedure

Pretest and familiarization. The E visited BTS twice a week for a month. During each visit she talked informally with the boys individually and in groups, soliciting their opinions about the interview and animal training procedure and assuring them of her goodwill and ability to keep confident any of their responses. The boys remained defensive throughout most of the study, but were not hostile after the first few visits. They became more open and friendly towards the end of the study when word spread that E had been bitten by one of her own rats during a trial run at the school.

Eight volunteers took part in a pre-test of the interview. The results of the pre-test were used to reformulate the story-questions and to gain E-S rapport. The pre-test disclosed the importance of emphasizing the fictional aspect of the stories and the importance of the fact that the rats were laboratory bred, relatively tame animals, not pets of the E on the one hand, nor dangerous and wild on the other.

Animal training. Twelve laboratory bred white rats were trained to run a T-maze prior to the study. Using

shaping and training procedure with partial reinforcement the rats were trained to make a left turn in the maze to obtain delayed reinforcement. The criterion was seven correct trials in succession. The Ss were not told that the rats had been previously trained to make this consistently wrong response. After each trial run with an S, E retrained the rat's left turn response.

Interview. Each S was interviewed individually. When he entered the testing room either at the high school or at BTS, he was requested to pick an identifying number rather than to introduce himself. The E explained that S would remain anonymous. Then E spoke the following instructions from memory:

> I have asked you to take part in a study about learning. We are interested in finding out how you think people learn not to do things. I am going to read you some made-up stories about boys your age and then ask your opinion about certain parts of the stories. There are no right or wrong answers, I just want to know what you think about them. Afterwards I would like you to help train a rat (points) but I'll explain that when we are finished with the stories.

The stories were presented in a random order and E recorded S's answer without comment. Occasionally an S would ask to have the story repeated or a question rephrased, in which case this was done.

The three stories each concern theft. Each story involves a male adolescent thief and one other person: a teacher, mother or male peer. The stories are similar in style to those used by Piaget but are written for adolescents

and are relatively comparable in content except for the relationship between the characters.

Story I

Jim was alone in study hall and decided to look in the teacher's desk. There was some money in the top drawer and he took it. The teacher found out and punished him.

1. How do you think the teacher would punish him?

Another time Alan did the same thing. He took some money from a teacher's desk. But the teacher only talked to him and explained that he was taking something that someone else owned. Later Jim and Alan found a teacher's wallet in the school parking lot. One of them wanted to take the wallet to the teacher.

2. Who was it?

3. Why?

Story II

Tom knew that his Mother kept money in the bedroom. One day he took some, but his Mother discovered it and punished him.

1. How do you think she would punish him?

Sam stole some money from his Mother, too, but she did not punish him. She talked to him about how wrong it is to steal. A few days later Tom and Sam found somethings that their Mothers had left on the front step. One of the boys wanted to sell what they had found and keep the money. The other boy wanted to give them back.

2. Which boy wanted to give the things back to his Mother?

3. Why?

Story III

Peter was over at his friend's place one afternoon waiting for him to come back. He found some money in the room and took it. His friend found out and really gave it to him.

1. What do you think his friend did?

Another time John was at a friend's place and he took some money from his friend. His friend found out and explained to John what he was going to do with the money and what he thought about stealing. Peter and John found something their friend had left at school a few days later. One of the boys wanted to take it back to the friend.

2. Who wanted to take it back?

3. Why?

After the stories were presented and the interview completed, E continued:

Another part of the study on learning is animal training. We want to know how fast you can train this rat to run from here to there and back again (demonstrate). If the rat goes in these red ends (point) he has made a mistake. Would you like to pick a rat to train? (While S makes his selection) These are laboratory rats from Michigan State University. They are born there and raised by experimenters to be used in studies like this. (The rat is placed in the maze). You may use two things to train your rat. Use either this food that you can drop in -- the rat hasn't eaten since yesterday -- or this poker. The poker has a rubber end on it which pulls the rat's hair a little and bothers it. While you train the rat I have some figuring to do so I'll sit over here and work and watch the time. Are you ready? Go.

The E sat behind Ss where she could watch their movements. The E recorded pokes, food drops, and other behaviors. In this position E was out of S's range of vision and was relatively unobtrusive. After five minutes E said "Time's up, how many times did it run?" and then thanked S and walked back with him to his supervisor or study hall.

Data

In the interview E recorded S's responses verbatim.

These were later analysed as 'mature' or 'immature' with respect to Piagetian theory.

In the rat training phrase E also recorded the number of times S poked the rat, dropped food to it, and exhibited other behaviors such as encouraging talk, attracting behaviors, swearing, etc.

Results

Interview

The interview responses were classified as 'mature' or 'immature' as follows:

1. How do you think _____ would punish him?
   - Immature -- physical punishment
     physical restriction
     appeal to authority
   - Mature -- reciprocal response
     loss of relationship
     explanation
2. Which boy would not steal the _____ ?
   - Immature -- the punished boy
   - Mature -- the boy given an explanation
3. Why?
   - Immature -- revenge for the punished boy to steal again
     punishment is effective
   - Mature -- explanation is effective

The distribution of responses to question one is contained in Table 1. Since many categories had few or no entries, it is not possible to conduct an analysis of variance. However, certain relations may be noted. The delinquent group refers stealing to a higher authority only one--third as often as the control group. This may be due partly to the effect of a new prinicipal in the Detroit high school from which the control group was selected. The charismatic principal influenced his students and the students consulted him over many kinds of problems.

Secondly the delinquent group suggests physical punishment almost twice as often as the control group in the child--parent situation. The third possible difference in response is to the adolescent--peer story in which more delinquent than control Ss

Table 1. The type of response to question one in the interview. The number of Ss giving each response to each story is given in the blocks.

	Stories					
	Control			Experimental		
Response	1	2	3	1	2	3
physical punishment	2	13	5	-	11	9
physical restriction	15	-	16	21	-	10
refer to authority	5	2	-	1	1	-
loss of relationship	-	6	-	-	9	-
reciprocity	-	-	-	-	-	1
explanation	-	1	1	-	1	2

suggested loss of relationship as an adequate response to stealing by a peer. In general the results as expressed in Table 1 show the relative moral immaturity of response as defined by Piaget in both the experimental and control groups, since more than half of the responses are in the categories of physical restriction and punishment. This is particularly well exemplified when the percentage of responses recommending corporal punishment in a parent--child situation in this study is compared with data obtained by Barnes (1902).

The data for each story were transformed to give one score as a composite of the scores of the three questions in each story (Table 2).

The transformed scores were used in an analysis of variance of the interview data. The prediction that the maturity of response given to each story would be the same was not supported. The responses to each story were significantly different ($F=5.09$, $df=2$, $p<.02$). The mean response scores for each story are given in Table 2. This implies that the maturity of the moral judgment is determined to some extent by the relationship between the sory characters. However, the control and experimental groups were not significantly different ($F=.49$). The interaction between type of question and group was not significant ($F=.73$).

One anecdote deserves mention here: three of the delinquent boys, after making the mature response that the boy who received an explanation was less likely to steal again than the

Table 2. Mean transformed scores for responses to each story on a scale of zero to four.

	Stories		
Group	1	2	3
Experimental	1.41	2.27	1.09
Control	1.36	1.86	1.18

boy punished, then commented that "this does not work for me" or "that works for some kids, anyhos". There is apparently some discrepancy between what they thought would be effective when applied to themselves and what would be effective for others. Who the "others" might be is not clear. It is possible that the delinquents have received instruction about handling offenses made against them at BTS and that they believe that this is the 'right' middle class answer. It is probable that other members of both samples, but probably predominantly in the delinquent group, have similar unexpressed thoughts about their 'mature' responses to the questions. One must note, however, that there is no correlation between such responses on the interview and the actual punishment behavior of these three Ss.

Rat Training

The rat training data should have been dichotomous with only two possible responses -- poking (punishment) and feeding (reward). However, the boys devised a third response. The subject would tap the poker on the cage or rub a food pellet across the wire or put his face close to the caged T--maze to talk to the rat. All these behaviors were labeled "attracting" responses and are combined with the fdding responses where indicated.

The percentages of punishment, reward, and attracting behaviors are presented in Table 3. The number of punishment behaviors relative to the number of rewarding behaviors gives the distribution a strong negative skew. In this gross sense the behavioral and interview data are similar with respect to

Table 3. Percentage of punishing, rewarding and attracting in rat training procedure.

	Punishment	Reward	Attracting
Experimental	92%	3%	5%
Control	86%	5%	9%
Level of significant difference	.01	.01	.12 n.s.

'immature' and 'mature' responses.

Since the distribution of the scores was negatively skewed and the variance was large, the non-parametric Mann--Whitney test of identical population distributions was used rather than a Student t-test. All claculations are corrected for ties in rankdsand the results are shown in Table 3. The hypothesis that the population distributions are the same for the delinquent and control groups is rejected at the .01 level of significance for punishment behaviors and for rewarding behaviors. The distribution of attracting responses are not significantly different. Therefore, the data on rat--training indicated that the delinquent and control groups were not the same in use of these procedures in contrast to the results obtained in the analysis of the interview data.

Relation between Interview and Objective Data

The correlations between mature and immature responses on the interview and rat--training task are presented in Table 4. The data used for the correlations are dichotomous. The responses to the second question of the interview -- "Who would return..., the punished boy or the boy given an explanation?" -- is correlated with the raw score on the food drops. Any S who gave two or more food rewards is coded 'mature', an S giving zero or one food rewards is coded 'immature'. This coding is somewhat arbitrary and awkward, but raw scores or

Table 4. Correlations between interview data and punishment responses.

	Story		
Groups	1	2	3
Experimental	.31	-.41*	.02
Control	-.18	.20	.37*

*p < .05

percentage of rewards are very skewed and have very large variances.

Using this method of coding data, the correlations are not large, nor are all in the predicted direction. The delinquent sample's response to the adolescent--peer story shows a significant negative correlation with their punishment behavior. The control sample's responses to the adolescent--parent story is positively correlated with their punishment behavior.

Discussion

The interview data do not support the prediction that delinquent adolescents would make significantly more morally immature responses than a control group from the same socio-economic background. However, both Barnes (1902) and Piaget (1932) reported that for Ss 11 to 12 years old, about 80% of the responses were recommendations of reciprocity or explanation rather than expiatory punishment. The Ss in this study gave fewer than 20% reciprocity or explanation responses. These results seem to indicate that the constraints on lower class male adolescents inhibit the cognitive restructuring of moral judgment as defined by Piaget.

Both the delinquent and non-delinquent Ss responded significantly more maturely in peer situations than in adolescent-adult situations. This result contradicts the second prediction and confirms social--learning hypotheses about the situation-centeredness of morality (e.g. Hartshorne & May, 1928-1930). One might even hypothesize discrimination learning because of the constraints imposed on the adolescent-adult situations. This does not imply that the Ss are unable to generalize from one situation to another, but that to do so is not adaptable. Other research does not seem to support the hypothesis that adolescents of any social class may have one set of moral values for peer situations and another for adolescent-adult situations (Peck & Havighurst, 1960). Peck and Havighurst did not directly

ask specific questions about punishment beliefs and practices, however. Cohen (1055) has hypothesized that such a schism occurs among adolescents who belong to a delinquent gang, but notes that the values expressed by the delinquents did not seem to form a code which had any validity in itself, but only for what it could obtain for the delinquents. The comments of the delinquent Ss in the present study tend to support Cohen's report. A common response to the second story was "Well, he just wouldn't be my friend no more. You can't be friends with someone what's going to steal from you". Many Ss implicitly or explicitly stated that it is just to steal from a peer for 'revenge'.

Although the interview method did not discriminate between the delinquents and non-delinquents, the objective method indicated that the delinquent Ss used punishment significantly more and rewarded significantly less than the control Ss. This finding supports the first prediction of the study. The interviews contain more uncontrollable elements than did the objective measure of punishment behavior and presemably were contaminated by them. One such element already discussed is that the delinquent Ss in particular may have responded with a non-expiatory explanation while privately disavowing its efficacy. This was mentioned with respect to a few comments about the ineffectiveness of censure and explanation for themselves in contrast with its theoretical effectiveness for some unspecified others.

Another element of possible contamination is the non-verbalness of the boys in both groups, but particularly in the delinquent group. Most Ss clearly had problems expressing themselves and may have simply left out parts of their explanations. A large part of the working vocabulary of boys at BTS is composed of phrases either unacceptable to or not understood by white middle class women. The E's presence may have contributed to the Ss inability to express themselves clearly.

The correlations between the interview and the rat training data do not support the second and third predictions, but again confirm the hypothesis that punishment behavior is situation oriented, rather than arising from a global code. The significant negative correlation of the second story and the punishment responses for the experimental sample and the significant positive correlation between the third story and the punishment responses for the control sample both lead to the same conclusion: rat training behaviors are more similar to beliefs about parent-child punishment that to beliefs about peer punishment. This finding seems to be related to the absolute authority relation in each of these two situations in comparison with the peer situation. However, beliefs about peer punishment, parent-child, and teacher-child punishment, and animal training are not highly related.

However, one may reject this hypothesis and search for metho-

dologically confounding variables. One such is suggested by the negative skew. Perhaps testing a middle class group of adolescents on both measures would reveal a stronger relation when there is a more normal distribution of responses for each measure and less randomness in the non-punishment variable. However, a high correlation among the story responses and between the interview and story responses might simply indicate a non-situational code concerning the efficacy of punishment, rather than show that all the measure measure the same moral belief.

Another possible confounding factor is the difference in variability of the punishment responses in each measure. In the interview S is asked one question to which he is expected to give one reply. In the animal punishing situation the S may vary his response contingent upon unknown situational factors. These two aspects of the measure should be neutralized in future studies.

Implications for Further Research

Further research may explore personality and cognitive correlates of punishment behaviors. This could be done by taking a battery of correlates from the delinquent population and correlating these with variables in a non-delinquent population to see whether they predict maturity of judgment. Possibly this could lead to development of a training program in punishment behavior.

Another research project suggested by this study is discussed above. It was noted that a study of middle class adolescents might reveal more valid information about the relation between the interview method and the behavioral measure. Furthermore one might simply ask Gs what they think they might do in various situations in which they had the authority and ability to punish..Many adolescents will recognize that their response in the interview implies a projected response and would probably find the situation more honest if simply asked what they would do, rather than being asked what some fictional character would do.

Another study would require the use of actual punishment behaviors of different people -- peers, younger children, supervisors, unrelated adults, members of minority groups -- as opposed to the rats of the present study. One would also want to test whether or how Piaget's hypothesis of cooperation affects punishment behavior.

This study also suggests the liklihood that moral judgment is situational. The result of differences in the maturity of response to situations involving a peer, parent, or teacher should be replicated, since this is not predicted in the Piagetian schema and has not appeared in other tests of his theory. In addition, study of other areas should be begun. For example, is the maturity of the response related to the severity of the crime; is it related to the number of persons

involved; or is it related to the setting?

A fifth extention of this study would involve the experimental manipulation of expectations for the lower class adolescent. If the adolescent could be led to expect equal treatment in the classroom, would his more mature moral judgment extend from peer situations to student-teacher situations? A study of the effects of different teachers, their expectations, their own maturity of moral judgment, and their teaching methods, on changes in moral judgment would begin to answer this question.

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