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BEHAVIOR IN THE STAGES OF MORAL
REALISM AND MUTUAL RECIPROCITY

by

Gabriel Mancini

Thesis presented to the School of
Graduate Studies of the University
of Ottawa as partial fulfillment
of the requirements for the degree
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CURRIGULUM STUDIORUM

Gabriel Mancini was born November 9, 1950 in Italy. He received the Bachelor of Arts degree from Carleton University in 1972 and the Bachelor of Education degree from McArthur College, Queen's University, in 1974.

ABSTRACT

The focal point of this study was to study the relationship between two levels of moral judgment and the overt behavior of "cheating". Moral development, as outlined by Piaget's specific stages, was measured through the administration of his questionnaire which classified children in the moral realism or mutual reciprocity stage. The sample embodied 40 subjects: 20 males and 20 females who represented both stages of moral judgment with equal numbers of male and female members per group. Using a simple, lever-pressing apparatus, cheating behavior could be recorded under conditions of high and low temptation. It was expected that children in the moral realism stage would cheat more under duress than those classified in the more mature stage of development. The results of the study confirmed this expectation and were interpreted in view of Piaget's theory of moral development.

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CHAPTER I
REVIEW OF THE LITERATURE

Introduction

Morality has fluctuated greatly as an area of interest from being an integral part of psychological interpretations to a low ebb of being ignored as was particularly evident during the Second World War. Historically, one can venture as far back as Aristotle to gain a perspective on this topic; during this period, it was implicitly understood that people involved in politics often exercised a different set of values or virtues from those of the subjects. For centuries, political theorists drew great lists of virtues necessary to be a good ruler; unmistakably, political goodness was analogous with moral goodness. Machiavelli, in his book The Prince, written during the sixteenth century, bisected this philosophy by arguing that political morality must be different from private morality; in today's terminology, this could be described as being "two-faced".

Sociologically speaking, Durkheim regarded morality as stemming from society; "all morality is imposed by the group upon the individual and by the adult upon the child" (Piaget, 1932, p. 341). He further suggested that religion, which to some extent influences morality, is inextricably related to the problem of society. Thus, one can argue that society must, out of all necessity, impose morality in order to maintain social control.

From the psychoanalytical point of view, Freud (1930) views "the sense of guilt as the most important problem in the evolution of a culture" (Freud, 1930, p: 123); thus, he considers morality as a paramount aspect in understanding social development; that is to say, guilt is not only a measure of social control but also a measure to ensure the existence of a culture.

Morality tends to fluctuate not only in a general philosophical or psychological point of view but also within each separate individual.

Frankl (1959) indicates this aspect in one of his articles:

"Dr. J. -- was the only man I ever encountered in my whole life whom I would dare to call a Mephistophelean being, a satanic figure. Dr. J. became such a fanatic in the Nazis' euthanasia program that not a single psychotic was spared the gas chamber." After the war, in a conversation with a patient, Dr. Frankl learned that the infamous Dr. J. was in a Mauseau prison, Lubanka, where he died. During this period of imprisonment, Dr. J. was a perfect comrade consoling inmates and living according to the highest moral standards. He was, as a matter of fact, the patient's best friend. (Frankl, 1959, p. 207).

Today's morality, unlike the 1930's and 1940's where the main concern focused upon social adjustment and socialization, is viewed in developmental terms. Thus, morality, as observed from this standpoint, must incorporate the concept of internalization; consequently, moral development must be seen as the result of cultural norms and mores. From this point of view, then, the individual should be studied in terms of rule acceptance and internalization as compared to rule abiding with no internalization. The former functions relatively independently of social pressures and sanctions and is at Allport's (1937) "Ought" stage while the latter is at the "Must" stage and basically accepts social demands due to fear of sanctions.

Recent researchers of moral development have been divided into two factions; one supporting the cognitive or developmental position and the

other supporting the behavioristic point of view. These two divisions have come about as a result of the apparent lack of correlation between what one says and what one does.

Piaget's position on moral development stems from his general theory of the child's understanding of his environment and the world at large. Despite Piaget's awareness of social influences on moral development, he is critical of exclusively using it as a social explanation of child development. Instead, Piaget traces the development of morality through the acceptance and internalization of rules toward an autonomous being. He also identifies three main coercive forces which bring about changes in moral judgment: (1) the breaking away from adult constraints and authority; (2) peer group interaction where equality, cooperation and reciprocity are exercised and (3) the changing character of the child's mind as a result of cognitive maturation. These three interacting factors are responsible, according to Piaget, for the developmental differences in the system of responsibility and type of moral judgment used by children of different ages (Johnson, 1962); however, Piaget does not show exactly how and what influences these factors have in producing the changes.

Piaget distinguishes two major phases of development which encompass four different-developmental stages.

The first stage is purely motor and individual in character. The child, at this age (birth to two years), will pick up a marble, drop it, and repeat this action in a more or less ritualized schema. These fixed patterns cannot really be viewed as rules since the infant has not yet learned to play and to cooperate with others. They are purely motor but are not considered collective. Morality is based upon punishment and its avoidance. This stage could be compared to the first stage of Piaget's

theory of cognitive development (sensorimotor stage). The child views the world in terms of stable objects which do not disappear. At first, the child has no notion of objects which he can no longer see; out of sight means that they no longer exist. As he grows older, he begins to see objects as part of their original locations and thus will search for an object where he last put it, despite the fact that he saw it being moved to another location. At eighteen months, he develops the concept that objects still exist regardless of their displacement in space and, of course, time. The development toward the permanence of objects is seen as one of the most important aspects of this first stage. Thus, morality is nonexistent and rules begin to take shape shortly before the end of the first stage.

The second stage (two to five years) is the period of "egocentricity"; the child is concerned mainly with himself. Morality, as described by Wright (1955), is hedonistic in character and is centered on the notion that actions that satisfy needs are justified for that reason. Conformity to the rule is for the purpose of gaining favors and rewards from others. Rules at this time are simply imitated and do not become internalized and part of the child. This can be easily understood by simply watching two children playing. Each plays independently of the other. There is no attempt to develop any unified rule. Each person is concerned with maximizing his pleasure regardless of the other. This stage is also influenced by the intuitive stage of cognitive development. Between the ages of two and three years, the child begins to view objects symbolically, with gestures and images; they take on a total character in themselves. The child, however, in this stage fails to integrate actions and experiences over short periods of time and is unable to develop and understand the concept

of conservation. If two boys play together, each will play to satisfy himself. Each will follow the rules the way he understands them to the letter. They are regarded as being sacred and unchangeable. Since the first two stages are characterized by strong concern for oneself in terms of gains and losses regardless of the other, Wright (1955) defines these two stages as being "pre-moral".

The third stage (seven to ten years) is known as "incipient cooperation". This is the period when children begin to concern themselves with the question of mutual control and the unification of rules; however, ideas about rules are rather vague. The competitive aspect of the game is in the earliest form of development. Moral values have developed to the extent that the individual will readjust his behavior and attitudes according to the other's point of view. Kohlberg (1963) refers to this stage as the "good boy orientation". The individual's actions and life style are arranged in accordance with adults' expectations; he strives for acceptance. During this stage of cognitive development (concrete operational stage), the child is capable of reversing operations, thus creating a revolution in a seven-year-old's view of the world. The child, then, is capable of reasoning about objects and reversing their state mentally; he is less able to reason solely with words.

In the fourth stage (ten to twelve years), known as codification of rules, the child knows how to play to the last detail and the code of rules is known to everyone. Morality is based on respect for authority. "Moral obligation is equated with duty and religious authority and the motive behind moral action is the desire to avoid letting authority down and incurring its censure." (Wright, 1971, p. 169). The adolescent in the stage of formal operations can solve complicated scientific problems. He can

state hypotheses, make deductions and consider all the relevant variables of the problem. Adolescents can think of problems which generally do not concern younger children and consider many different aspects of that problem. The adolescent's philosophy and ideology is solid indication that it is not until adolescence that the individual deals verbally with hypothetical concepts and ideas.

As stated earlier, Piaget emphasizes two major stages in the development of morality. The first stage, known as moral realism or egocentricity, is based on the ethic of authority. It covers a period from three to eight years of age. Since it is based on the ethic of authority, the individual views rules as being imposed from above, generally from God or his parents and, consequently, are followed to the letter of the law. Duty and obligation are basically primitive in this stage "since duty is nothing more than the acceptance of commands received from above" (Piaget, 1932, p. 106). Since this first stage exists as the consequence of the tangency between egocentrism and constraint and his cognitive immaturity, the child, owing to his unconscious egocentrism, tends to involuntarily and extemporaneously alter the truth to satisfy his immediate needs; consequently, he ignores the value of veracity. The child fails to distinguish between aspects which belong to his self and those items which belong to the external world at large. Thus, he is handicapped to the extent that he is unable, or at least finds it difficult, to see or take others' social points of view. The rule that one must not lie, imposed by adult authority, will, therefore, seem all the more objective an interpretation because it does not, in fact, correspond with any felt inner need on his part. The question which presents itself is how the young child will learn to distinguish between good and evil if he accepts everything without distinction. M. Bovet points out that

"the child is pulled in several directions at once and is forced to appeal to his reason in order to bring unity into the moral material" (cited in Piaget; 1932, p. 106).

Piaget elaborates that the cognitive development of a three- to eight-year-old child is not sufficiently developed to distinguish between moral rules and physical laws. Thus, the child of this stage views rules as fixed external things rather than instruments having a value and a purpose in themselves. Rules are not only regarded as being absolute but also as being very confusing. This is due to (a) the child's realism; that is, his inability to distinguish between subjective and objective aspects of his experiences and (b) to his extreme egocentrism which prevents the individual from having a clear perspective of his own events and not confuse them with those of others. The externalization of rules is one more reason why the child sees adults, and particularly his parents, as being a fountain of knowledge and strength. As a result, the child, due to the externalization of rules, has developed a primitive principle of justice. The severity of punishment is inextricably related to the amount of damage regardless of the intention or motive; that is, the principle of immanent justice is exercised. This process can be understood by considering two dilemmas posited by Piaget:

A little boy, who is called John, is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. John couldn't have known that there was all this behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and they all get broken!

Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up on to a chair and stretched out his arm. But the jam was too high up and he couldn't reach it and have any. But

while he was trying to get it he knocked over a cup. The cup fell down and broke. (Piaget, 1932, p. 122).

The children were asked who should be punished more and why. The unanimous agreement was the boy who broke the fifteen cups because he broke more than the other boy.

In contradistinction to the more primitive stage of duty, unilateral respect and realism, the second and more mature stage of cooperation (eight to eleven years of age) is known for its ethic of mutual respect. The child's intellectual growth and experiences with his peers and role-taking, as well as the breaking of close family ties, have changed his views of rules from being externally based to internal principles. Thus, their response to the stories previously quoted would place each individual as equal culprits. The punishment should be less severe than if the children had broken the cups intentionally. In this stage, the child's concern is with reciprocity and equality between individuals. Rules have a purpose and value; they can be changed only with unanimous consent of the group.

"Justice, up to seven or eight years, is dominated and determined by adult authority. Between eight and eleven years, there develops a progressive concept of strict equality, when 'fairness is all'." (Bull, 1969, p. 15). This is known as distributive justice. "From eleven to twelve years such equalitarianism is tempered by equality - by consideration of motives, circumstances and relationships" - known as retributive justice (Bull, 1969, p. 15).

Piaget argues stridently that justice, as extrapolated from the above quote, could be defined as a concern for reciprocity and equality between individuals. It develops independently of adult influence and requires only interaction and mutual respect among peers. In essence, Piaget argues

that the first stage (heteronomy) is not inextricably related to this second stage. Developmentally, he believes that autonomous justice morality slowly replaces the heteronomous morality at about eight to eleven years of age. This autonomous justice is expected to develop within all children unless the child is not normal or has been unduly restricted by his parents or culture and, thus, deprived of peer group interaction.

A fundamental aspect of Piaget's position on moral development lies in the concept of equality, fairness and distributive-retributive justice which can only develop through peer group interaction and not through parent-child relationships. However, as mentioned earlier, the parents can promote this development if they provide a permissive and free home atmosphere. The peer group has the greatest influence upon the individual from the ages of eight to eleven, a period when the child strives to "cut the apron strings", so to speak, and emerge as a thinking individual. It is only at this stage, according to Piaget, that morality of mutual respect begins to break out from the childhood shell.

Since the parent-child bond can never be freed or severed from the unilateral relationship established during early childhood, the parents can never become a significant other nor can they ever be a socializing agent for the development of mature cooperation and respect.

Prior to the age of seven or eight, the child finds it difficult to always tell the truth. Without really consciously lying or trying to intentionally deceive anyone, he unconsciously distorts reality due to his immediate needs and/or romanticisms; consequently, testimony and expressions given by a child of this stage must be, out of necessity, considered as personal expressions rather than factual statements bearing truths or faults.

To briefly summarize, rules are first seen as externally based; they are accepted despite the fact that the child does not feel that he is part of them. At this point, the child is less thoughtful and more mechanical in his approach to rules which are still externally based. Following this, during the last stage of autonomy or incipient cooperation, the rules become internalized and part of the individual. They now have a purpose and value; they can be altered if the majority of the group agrees.

During the past twenty years, a multitude of studies have been drafted based on the results of Piaget (Abel, 1941; Harrower, 1934; Lerner, 1937). From their review, Boehm and Nass (1962) inferred that age is the only consistent operating factor in the development toward maturity in moral judgment. It would seem, then, that Piaget's discovery of an age change in moral judgment has been confirmed although the specific age of the change would depend on the nature of the sample and the level of difficulty of the questions asked.

Boehm and Nass (1962) also emphasize strong sociocultural differences suggesting that similar studies carried out in different parts of the world have yielded different, if not contradictory, results from those of Piaget (Harrower, 1934; MacRae, 1950). Piaget, aware of these discrepancies, argues that what is important is not that they occur at a specific age and time but rather that these changes occur in the same direction. This has been a central component of the controversy: for example, Harrower (1934) found that English middle class children indicated a more moderate and adaptable moral judgment than their working class peers. Both groups made a fewer number of retributive and immature judgments than Piaget's sample. Other investigators (Bull, 1969; MacRae, 1950) strongly suggest that Piaget's findings need to be reorganized to take into consideration social class and

cultural differences. Both Lerner (1937) and Medinnus (1957) presented material which shows that the age of change in beliefs concerning various areas of moral judgment is variable from one area to the next. For example, Abel (1941) indicated that adolescent girls, who were institutionalized and continuously punished as a result of their constant rebellion against authority, scored much higher in intentionality tests than passive, obedient girls. Abel suggests that it is the individual's perception of authority and not his experience of constraints that relates to moral judgment.

Boehm (1962) and Boehm and Nass (1962) found that a great number of children responding at a mature level about lying and responsibility gave immature responses to stories that required them to make a choice between peer reciprocity and submission to adult's authority. Johnson (1962), in his research of child rearing, found that children of domineering parents gave immature judgments about punishment. One interesting finding by Johnson was that the child rearing practices of parents rated at both ends of the scale (very domineering and totally permissive) were detrimental to the development of moral judgments. Hoffman (1960) found that children whose parents used love withdrawal for child management internalized conventional moral rules quickly but applied them more stringently and to the letter than those children whose parents implemented reason in dealing with them.

One of the main focal points of Piaget's theory of moral development (1932) rests upon peer group interaction as the principal source of awareness and the breaking away from unilateral respect. Researchers have interpreted that this emphasis has been possibly related to moral maturity. Research to date on this hypothesis is mixed. Ugurel-Semin's (1952) study

found that children from small families are generally more selfish in terms of sharing than are children from big families. Spiro (1958) found that children raised in kibbutzim were more sensitive at an earlier age to moral norms in respect to their peer group. They also shared more and demonstrated virtually no anti-social behavior such as stealing. Einhorn (1971) found that group ties and social interaction are very influential in the development of moral autonomy at the age of eight but not at the age of five. Keasey (1971) found that higher level of moral reasoning was directly correlated to social participation. Whiteman and Kosier (1964), using Piaget's (1932) moral judgment tests, found that responses to moral judgment tests were positively influenced by attendance at an ungraded classroom, a richer social environment due to the combination of different ages of children. An interesting study by Nass (1964) demonstrated that deaf children obtained adult's independence on Piaget's stories earlier than hearing children. The possible explanation given was that deaf children tended to have a greater social solidarity among themselves than hearing children perhaps because of their common problem. Studies such as Kugelmas and Breznitz (1967) reported that Israeli kibbutz children demonstrated the same level of sensitivity as Israeli children reared in an average family atmosphere. Lerner (1937b) found that the peer group can have a negative effect, similar to adult constraint, on children when the peer group's opinion is contrary to the principles of moral standard (cooperation and fairness). Piaget (1932) states that if a parent "gives the child a feeling of equality by laying stress on one's own obligations and deficiencies (p. 137)... and preaches by example rather than the precept, he exercises an enormous influence" (p. 319). This child rearing process bridges the gap between the child and his important social interactions.

Piaget's premise that the level of moral development is directly related to cognitive development is well documented and supported by research (Abel, 1941; Boehm, 1962; Durkin, 1959a; Johnson, 1962; MacRae, 1954) stressing the strong relationship between I.Q. and moral judgment maturity. In this line of thinking, Boehm (1967) found that retarded adolescents, sixteen to twenty-one years of age, scored the same as younger normal children on a test of intentionality and peer reciprocity. Pringle and Gooch (1965) observed that mental age, rather than chronological age, was more important to the child's perception of evils. Other studies (MacRae, 1950) found that children with high I.Q. retained a belief in immanent justice more so than children with low I.Q.; however, MacRae adds that higher I.Q. children scored more proficiently on a measure of intentionality and attitude toward punishment.

In summary, the scientific evidence is strong for the relationship between cognitive development and maturity in moral judgment. A mixed array of research is supportive of the relationship between social interaction and moral judgment. The weakest scientifically supported hypothesis is that of the relationship between freedom from parental authority and maturity of moral judgment.

Pinard and Laurendeau (1970) have successfully replicated Piaget and Inhelder's (1956) findings that a child under six years of age is very egocentric in his perception of the physical world. The child believes that there exists but one viewpoint which is globally embraced whether or not he is right or wrong. Lerner (1937b), in studying absolutism of moral perspective and its development, reported that most six-year-old children manifested their egocentrism by believing that everyone would think the way they did. Nine-year-olds, on the other hand, were able to discern that

different people would have a different view of a particular situation; in other words, there was no universal right or wrong answer.

Kohlberg (1963) reports that age and maturity are correlated with the ability to be self-critical. In the second dimension, defined as conceptual rules, Piaget maintains that as a result of the child's egocentricity, he is unable to distinguish the psychological dimensions from the physical ones. It has been suggested that reality and fiction tend to blend and overlap each other; thus, the mode of thinking also influences moral judgment. The young child will see rules as unchangeable and eternal, somewhat similar to physical laws. This rigidity in the perception of moral rules, according to Piaget, can be attributed to the child's strong respect for adults as well as to cognitive immaturity. Epstein (1965) has supported this Piagetian concept of the young child's rigidity of rules but was unable to support Piaget's underlying reasons for this rigidity. Kohlberg (1968) explains Epstein's findings by suggesting that "insofar as the young child does claim that the rule is unchangeable; it is largely because he does not distinguish between changing and breaking a rule" (cited in Kickona, 1976, p. 222). If a child is able to cognitively understand the differences between changing and breaking a rule, he would agree with changes in rules (as most of Epstein's bright laboratory school samples did). This explanation differs from that of Piaget's (1932) way of thinking: rules are sacred and unchangeable because they partake of "adults and quasi-divine origin" (p. 80).

According to Piaget (1932), the child, unable to make a clear-cut distinction between breaking of social rules and physical laws, looks for physical forces to support moral order. Consequently, a child at this cognitive level would respond to Piaget's (1932) story of a boy who stole some

apples and ran across an old bridge by saying that the bridge broke because he stole the apples. Considerable research has been carried out and supports the Piagetian position that immanent justice is evident in early childhood and gradually gives way to retributive justice (Dennis, 1943; Grinder, 1964; Jahoda, 1958; Johnson, 1962; Lerner, 1937a; MacRae, 1954; Medinns, 1959). Piaget (1932) has found that, as a result of the child's inability to distinguish subjective experiences from those things that are external and physical, children tend to judge actions by the observable physical aspect rather than by the intentions and motives behind the particular actions. For example, "a little boy said that he saw a dog as big as a cow" is worse than "a little girl telling her mother that she got good grades in school when she did not" (p. 122). The first story is worse because there is no such thing as a dog as big as a cow. Once the child reaches the age of seven, intentions and motives become more important than the consequences. Using Piaget's terminology, the child's concept of responsibility becomes subjective rather than objective. This trend toward increased intentionality within the child has been supported by many studies in different parts of the world (Switzerland, Great Britain, Belgium, U.S.A., Israel). Studies by Armsby (1971), Boehm (1962), Boehm and Nass (1962), Caruso (1943), Johnson (1962), Lickona (1976), MacRae (1954) and a host of others have all found increased intentionality in children of different social classes.

Harrower (1934) and Medinnus (1962) have shown that, as the child becomes older, he tends to be less concerned with punishment and prohibitions and applies more trust and fairness in explaining why it is wrong to lie or cheat. Thus, the child becomes more independent from external sanctions in moral judgments.

Piaget emphasizes that, as a result of the child's growth, his awareness of reciprocity develops. This awareness, according to Piaget, is the focal point of the transfer from unilateral respect for authority to mutual cooperation among peers; additionally, the child, at this point, becomes aware of what is the appropriate punishment for moral transgression. Researchers (Boehm & Nass, 1962; Johnson, 1962) have found that by the approximate age of seven, children prefer to receive natural or logical consequences for their transgressions as opposed to expiatory punishment. In other words, children prefer to replace any objects which they broke rather than to have a spanking. Boehm (1957) demonstrated that Swiss children preferred expiatory punishment for bloodying the nose of a classmate while American children preferred to apologize to the injured person.

Piaget (1932) attempted to determine the orientation of reciprocity by posing the following question to children: "If anyone punches you, what should you do?" He observed that generally children "maintained with a conviction that grows with their years (six to twelve) that it is strictly fair to give back the blows one has received" (p. 302); this belief is observed in children through adolescence. Durkin (1959a, 1959b, 1959c, 1961) did not support Piaget's findings; rather, he observed that the children of all ages preferred to go to an authority rather than face the aggressor.

In summary, a cursory examination of the various manifestations of moral development posited by Piaget are primarily cognitive. In particular, they reflect the child's knowledge of the ideal norms held up to him by his culture and, as such, they shed little light on the behavioral aspects of moral standards and development. Perhaps in partial reaction to Piaget's intellectual and moralistic approach, American scientists, especially since World War II, have directed their attention primarily to overt expressions

of moral behavior and their social-psychological antecedents. It would be illuminating, then, in this context to turn to a consideration of the results of this contrasting approach.

Current studies of moral development show strong influences from three theoretical traditions: behaviorism, psychoanalysis and the cognitive theories of Piaget. Of these, behaviorism was the first to make a major impact through the inspiring monumental works of Hartshorne, May and their colleagues. The major conclusion of these researchers, in part preordained by the highly specific nature of their theoretical concepts and of the tasks and tests they employed, is that moral qualities, such as honesty and deceit, represent not general ideals but specific habits learned in relation to specific situations which have made one or the other response successful.

The chief importance of this pioneering research was the precedent it set for studying moral character not merely through verbal response but through observation of concrete behaviors, such as cheating, sacrifice, sharing and the like. This precedent was followed a few years later by MacKinnon (1938) who compared the personality characteristics of college students yielding or not yielding to the temptation of cheating. As the conceptual framework for his research, however, MacKinnon explicitly rejected Hartshorne and May's theory of specificity and turned instead to structural and developmental hypotheses from psychoanalysis. With these as a guide, MacKinnon observed a number of reliable relationships reflecting dynamic processes. Despite the promising character of his work, it was twenty years before social scientists once again turned to psychoanalytic theory as a guide for research on moral development. It is necessary, therefore, to look to other researches for the integration of the cognitive and maturational aspects of moral development with the social-psychological

antecedents. Some progress in this direction was made possible during the 1950's through the resurgence--this time on a broad scale--of psychoanalytically oriented studies of moral standards and behavior. Since this thesis concerns itself with the joint aspects of morality and cheating, it would be illuminating to turn to and consider the results of these contrasting approaches in view of situational determinants of transgressions.

Situational Determinants of Transgressions

It appears that in today's society, cheating is no longer regarded as a moral offence; Bull (1969) emphasized that "only 8.5% of conscience responses were derived from a cheating situation". Pringle and Edward (1964) found "considerable unanimity over the six most wicked actions, and also on their respective degrees of wickedness" (as cited in Bull, 1969, p. 53). The actions were as follows: (1) murder; (2) physical cruelty; (3) stealing; (4) cruelty to animals; (5) lying and (6) damage to property. Cheating was mentioned by less than 8% of the subjects. In Edwards' (1965) study, cheating was not mentioned at all by his subjects as being a wicked action. In Bull's (1969) study, it was found that cheating "was insignificant in the judgment of primary school children and nonexistent in the judgment of the secondary school boys" (p. 54). Thus, one can assume, from this research, that cheating as a moral transgression carries little significant importance. Thus, Bull (1969) defined cheating as "an artificial rather than intrinsic moral offence to children, fabricated as it is by a competitive educational system. It is, moreover, well-nigh universal and in some circumstances may be motivated by morality of loyalty, rather than by the immorality of self-interest" (p. 56).

In the early 1900's, there was an attempt to determine the existence of a general trait of honesty or dishonesty in people. Hartshorne and May (1928) negated the existence of any such general trait. They concluded that:

Honesty and dishonesty are rather specific functions of life situations. Most children will deceive in certain situations and not in others. Lying, cheating and stealing as measured by the test situations used in these studies are only very loosely related (Hartshorne & May, 1928, p. 285).

Kohlberg's (1963) interpretation of the existence of a general trait seems to support the conviction that people's tendency to be honest in a particular situation is primarily due to a learned response rather than honesty per se. Kohlberg further suggests that the data raises the question as to whether there are any psychological dimensions that can usefully be conceived as "conscience" or "internalized standards". If there is little consistency from situation to situation involving the same standards, it should be assumed that conforming behavior is determined by the standard and not by situational forces.

Maller (1934) and Burton (1963), in reanalyzing the data of Hartshorne and May (1928), have reached a consensus that a general trait of honesty, independent of situational factors, actually exists. More recent studies, Eysenck (1960), Nelson, Grinder and Biaggio (1969), Nelson, Grinder and Mutterer (1969) and Sears, Rau and Alpert (1965) all support the conviction that a general trait of honesty does exist. Grim, Kohlbert and White (1968) reported the existence of a small, positive association between two measures of cheating at age six.

As a result of these recent studies, it is appropriate to speak of a general trait of moral restraint or honesty. However, one must take into consideration that in any situation in which temptation is involved,

this general trait is but one of a number of dispositional and situational factors employed. It is not until researchers are able to control these extraneous variables that one can become fully aware of the differences and influences that moral restraint has.

There are a number of factors which influence and impinge upon one's resistance to temptation. Hartshorne and May (1928) indicated that more intelligent subjects tended to be more honest. This observation remained consistent even when sociometric and home background were controlled. Similar findings were reported by Terman and Odin (1947) and Graham (1968), although the reason intelligence plays such an important part in resistance to temptation has not yet been experimentally explained.

It has been traditionally thought that girls' conscience is stronger and thus better equipped to handle tempting situations; on the other hand, Meyer and Thompson (1956), Roskens and Dizney (1966) and Terman and Tyler (1946) found more self-reported cheating for males than for females of a college student population.

In spite of these findings, stereotyping of sex differences has not been empirically substantiated. Researchers such as Hartshorne and May (1928) have found no overall difference between sexes although girls tended to cheat less on some tests and more on others in comparison to boys; the investigators suggested that this difference in behavior was due to the lack of motivation on the part of the boys to demonstrate their skills. The validity of this interpretation is somewhat questionable since the same investigators also found girls cheated more in athletic contests. The field of athletics has always been traditionally

seen as the male's domain, a place where males would not lack any motivational drive to assert their mastery of athletic skills. In addition, it has been observed that girls tend to be more motivated to "look good"; as a consequence, the tendency to be dishonest is stronger when the situation is such that dishonest behavior is the only way to attain social or familial approval. The behavior of boys was more consistent from test to test than that of girls; thus, Hartshorne and May conclude that boys are better integrated than girls in the area of conduct. Crandall (1966), Crandall, Crandall and Katkovsky (1965) and Crandall and Gozali (1969) confirm the findings of Hartshorne and May (1928); they found that girls tend to present a favorable image of themselves at the cost of departing from the truth. Hartshorne and May's (1928) findings also revealed that girls cheated significantly more across all ages in comparison to boys on a lying test. Hartshorne and May (1928) and Maller (1929) found that, generally speaking, boys cheat less than girls but girls tend to exceed boys on tests measuring self-control, persistence, cooperation, moral knowledge and moral opinion.

Other investigators (Burton, AllinSmith & Maccoby, 1966; Grinder, 1962, 1964; Grinder & McMichael, 1963) found no sex differences.

When sex differences have been found, it has generally been in favor of girls; however, in most of these studies (Brock & Del Guidice, 1963; Medinnus, 1966; Sears, Rau & Alpert, 1966) the incentive used was different for each sex. A host of other studies (Feldman & Feldman, 1967; Hetherington & Feldman, 1964; Sears, Rau & Alpert, 1965; Walsh, 1967) reveal that boys cheat more than girls, thus supporting the traditional

stereotyping of sexes. Bull (1969) found that:

Sex differences are minimal at seven years and nine years of age; at eleven years, however, girls are advanced in comparison to boys through their stronger sociometry. Another, and familiar, dramatic development between eleven and thirteen years increases the girls' lead; at fifteen years of age, there is little advance by either sex; at this age, autonomous responses are similar, while the girls show less anomy and heteronomy and greater sociometry. At seventeen years of age, both sexes show another broadly similar and familiar, though less dramatic, advance. Thus, the lead established by the girls at eleven years of age is increased at thirteen years and remains broadly constant. For both sexes the main development is between nine and thirteen years although somewhat stronger in girls and they reach a level at thirteen years that is not attained by boys until seventeen years. (Bull, 1969, p. 133).

In view of the present available data, it is extremely difficult to suggest the existence of any strong sex differences in honesty. The individual behavior depends upon extraneous variables interacting with the sex of the individual, i.e. motivation elicited by the test and, of course, the age of the individual.

The experimental evidence which exists today between age and moral behavior has been achieved not by the use of longitudinal studies but by using subjects of different ages. Grim, Kohlberg and White (1968) suggested that stable attention, in a boring task, seemed to be correlated with moral restraint in older rather than younger subjects. Kohlberg (1964) found a moderate to high correlation between measures of attention and morality indicating "that individual differences in moral behavior are influenced by ego-control factors. The inference to be drawn is that insofar as there are developmental changes, they are in the direction of greater consistency and stability rather than of greater virtue."

(Wright, 1971, p. 58). That is, moral control is related to impulse control.

Situational factors in the investigations of resistance to temptation have just recently become significantly important to investigators; nevertheless, there are relatively few correlations between performance on one moral test in comparison with another.

Kanfer and Duerfeldt (1968) investigated different situations whereby the risk of detection in cheating was manipulated. These investigators concluded that the children cheated much less in the higher detection situation. Atkins and Atkins (1936), Canning (1956), Hartshorne and May (1928) and Howells (1938) observed a tendency for non-cheating subjects to guess at answers less frequently than did their counterparts. Furthermore, Rettig and Pasamanick (1964) demonstrated that cheating was directly related to the individual's estimate of censure if he were discovered cheating.

One's perception of an incentive, high or low, influences the individual's motivation to either restrain or deviate from the acceptable norm. Mills (1958) found that the greater the incentive to cheat, the more the participants will cheat. Similar findings were reported by Hill and Kochendorfer (1969), Merritt and Fowler (1948) and Shelton and Hill (1969). One must qualify that incentives are only effective if they are perceived by the individual as interesting and/or beneficial to him. They must not arouse a sense of suspicion within the individual.

Moral resistance to temptation is also influenced by the individual's observation of a model. Investigations in this area (Rosenkoetter, 1973;

Ross, 1971; Stein, 1967) have yielded empirical data which clearly show that dishonest models can increase knavery or deviant behavior in children while honest models can increase, to a certain extent, honesty in children. McQueen (1957) conducted a study where cheating resulted as a consequence of not reporting a higher grade than deserved. This investigator found that 97% of college students cheated. When a confederate was introduced to report errors in scores, only 42% cheated; this percentage was further reduced to 14% by the instructor praising the confederate for his honesty. The positive model actually influenced behavior away from dishonesty. Blake (1958), through the use of a confederate who disregarded rules, was able to observe the lowering of inhibitions in his sample. Stein (1967), using nine-year-old boys, observed that those subjects exposed to someone having a particularly dull task entrusted to him for a more interesting one, were more likely to abandon it later when they were on their own as opposed to boys who were exposed to a hard-working, diligent person who struggled with the dull task.

Hartshorne and May (1928) emphasized the importance of parental influence upon a child. Dishonest behavior on the part of a parent increased the child's susceptibility toward dishonesty. On the other hand, honesty on the part of a parent would influence the child in a positive way. Studies of Burton, Maccoby and Allinsmith (1961) upon the influence of a warm parent-child interaction, have revealed a positive relationship between parental warmth and behavioral cheating in girls but a negative relationship between warmth and honesty in boys. Mussen (1970) has demonstrated the exact opposite data.

The attempt by experimenters to find a relationship between parental warmth and honesty has not been fruitful in producing definite and clear-cut results to support their hypothesis; nevertheless, experimenters have emphasized the importance of parental warmth as a means to shape a child's behavior to adapt and conform to the established household rules and mores.

Based on his earlier work, Piaget has been concerned with cheating in the classroom situation as well as in children's games. His position on resistance to temptation stems from the countless number of interviews he conducted with Swiss children. As a result of his inquiry, Piaget (1932) criticizes the educational system for stressing competitiveness rather than cooperation. Piaget argues that:

Cheating is a defensive reaction which our educational system seems to have wantonly called forth in the pupil. Instead of taking into account the child's deeper psychological tendencies which urge him to work with others - emulation being in no way opposed to cooperation - our schools condemn the pupil to work in isolation and only make use of emulation to set one individual against another. This purely individualistic system of work, excellent no doubt if the aim of education is to give good marks and prepare the young for examination, is nothing but a handicap to the formation of reasonable beings and good citizens (Piaget, 1932, p. 286).

As a result of this competitive educational spirit, two results could occur. If competition proves to be the dominant mood, then each person will strive to gain favor from the teacher regardless of the hard work and toil of others who, if defeated, will undoubtedly resort to cheating. On the other hand, the second alternative could see the students unite in resistance to the educational constraints. The first alternative is usually preferred by younger children while the latter is adopted by older children of the approximate ages of twelve to seventeen. These differences in strategy are mainly due to the fact that as the child grows older, he becomes less concerned with authority and more interested in equality.

A cursory review of the literature would seem to suggest that the individual's behavior in a tempting situation is the result of the individual's decision or strategy which is, in turn, influenced by three clusters of variables. The first set of variables encompasses personal characteristics, innate or learned, which the individual brings to the situation with him; these would include such characteristics as moral belief, age, intelligence, ability to delay gratification, susceptibility to the attraction of temptation, general dependency upon the good opinion of others, self-esteem, etc. The second set of variables circumscribe the actual social and physical features of the situation; these would include the nature of the incentive (high or low), the presence of other people and, finally, the risk involved in the transgression. Thirdly, consideration must be given to a set of variables which embrace the individual's social parameters. In other words, his present group loyalties, the norms and mores practised and accepted by this group and the type and severity of sanctions administered by the group for any transgressions. These three sets of variables are not mutually exclusive regardless of the fact that the second and third clusters are basically external from the individual and can be defined independently of any constituent. Nevertheless, their influences are part and parcel of behavior, of course, dependent on the degree of interaction with the individual's disposition.

Enough has been said of the "new look" in studies of moral development so that it may be instructive to compare it with the earlier work of Piaget and his followers. The new approach to research on moral development differs from its classic predecessors in a number of striking respects. First of all, the more recent studies give virtually no attention to age differences in moral response. Although experimental subjects have ranged in

age from four or five years of age to college level, the possibility of developmental stages in moral development has hardly been raised.

Second, just as the Piaget approach has been one-sided in its emphasis on the cognitive aspects of moral development, so has the new look, true to its psychoanalytic-behavioristic origins, directed its attention to overt behavior in specific situations.

Third, while Piaget and his followers gave first consideration to describing the content of moral judgments, the current approach focused almost immediately on developmental antecedents and gave short shrift to the comparative analysis of the phenomena being predicted. This "historical" bias is reflected most sharply by a striking omission in the current literature of comparisons by sex and age. In most recent researches, except in a few isolated instances, such questions remain unanswered despite the fact that the relevant data are obviously available.

The most curious and perhaps the most serious void in current studies of moral development lies in the once over-worked area of age changes. No one seems to be asking the question of how the cognitive and objective manifestations of guilt, internalization, resistance to temptation and altruism emerge and develop in the growing child. The fact that the child's maturational level may not be as determining an influence in moral development as was once believed does not in any way detract from the scientific importance of age-developmental studies. On the contrary, as the evidence mounts in favour of the view of human morality as man-made rather than an inevitable product of organismic evolution, understanding of the genetic process of moral development becomes even more urgent and intriguing. Such changes over time, however, must be studied not against a purely

chronological scale but in the context of the ever-changing matrix of social relationships through which the child is moulded into man's estate.

Along with the contrasts, however, there are similarities as well. Like Piaget and his collaborators, the new investigators of the fifties began by treating morality as if it were a unitary trait and were only gradually forced by their own data to a more differentiated conception. As a number of investigators acknowledge, indices of guilt, confession, resistance to temptation, all of which are used to measure internalization, consistently show only low intercorrelations at best. Thus, after a review of studies done at Harvard and Stanford, it was concluded that "results [...] argue against a single-process theory of moral development".

This statement smacks of a conclusion reminiscent of Durkin's final statement after her third attempt to replicate relationships required by Piaget's unitary conception (1961):

[...] justice, operationally defined, is sufficiently complex that any theory which attempts to explain the development of the idea of justice in children is, from the start, doomed to inevitable generalization and consequent error.

Finally, despite their concern both with covert needs and conflicts expressed through overt behavior, the protagonists of the new look, like their more traditional predecessors, have left unexplored the relation of verbal response to every-day action. Instead, the two types of data have remained compartmentalized. As a result, virtually nothing is known about the relation of Piaget's concept of moral development to behavior in actual interpersonal situations. Thus, the review of this literature would lead one to surmise the possibility of cognitive, moral judgment being reflected

in overt, moral behavior. If it is indeed the case, the findings would confirm the proposed correlation. The study is yet to be done in which these two approaches are combined within a single research design; consequently, it is necessary to find a procedure stringent enough to put this hypothesis to the test. Since Piaget's conceptualization involves implicit rules, a gaming approach lends itself to both trends since a solution of the game requires different levels of cognitive abilities to be translated into overt behavior.

Consequently, if the foregoing discussion merits consideration, it could be hypothesized that the stages of moral development would be reflected differentially in response to the various gaming situations. Furthermore, these measures should serve as discriminating tools to determine the degree to which internalization has occurred. Since the focus of the present study is to compare resistance to temptation in differing levels of moral development, the empirical hypotheses are stated as follows:

- (1) Children classified in the moral realism grasp are expected to cheat more than those categorized in the mutual reciprocity stage.
- (2) Children exposed to the competitive strategy are expected to cheat more than when confronted with cooperation.

CHAPTER II

EXPERIMENTAL PROCEDURE

This chapter deals with subject selection, the experimental procedure and definitions of the independent and dependent variables in line with the hypotheses.

1. Sample

Forty children, consisting of twenty males and twenty females, served as subjects. They were selected on the basis of their scores on Piaget's Moral Development Questionnaire.

The children were obtained from one elementary school of the Ottawa Separate School Board; the data was gathered during the week of June 7th, 1976. Sample characteristics are presented in Table I.

2. Administration of the Questionnaire

Eighteen story situations and questions (shown in Appendix T), taken from Piaget and used by Medinnus (1957) and Coady (1970), were administered to approximately one hundred children whose ages ranged from eight to ten (grades 3, 4, 5). It was administered in the classroom setting where the experimenter read aloud each question and allowed ample time for the subjects to write their appropriate answers. The questionnaires were then collected and subsequently scored; the scoring procedure was based on the Medinnus technique (1957); children who scored at the top and bottom thirds of the scale were chosen to continue with the experiment with an equal number of boys and girls in the two levels of moral development. The

Lehigh Valley Learning Apparatus was utilized to record the number of lever presses and the number of times the child used the "cheat" button (see Appendix 2). Each child was taken individually by the experimenter into a small empty room and was given the following instruction:

Today, I would like to see how people press levers. In front of you is a panel and the lever is on the bottom (pointing to the lever). Here is what I would like you to do. When this red light comes on, I want you to press the lever. The number of times you press the lever will be shown here (pointing to the counter), and it will tell you your score. In another classroom, there is another panel and a person will be doing the same as you. The other person's score will be shown here (pointing to the other counter).

At another school, we had people pressing this lever, only they could increase their score by pressing this button (again pointing to the appropriate button). But I do not want you to press it. O.K. When the red light goes on, you press this lever until the light goes off. Watch your score and the other person's score.

Let's see how you do.

Each person was actually playing against a computer; there were 20 trials of ten seconds duration. In the first ten trials, each child had a 50% chance of winning while in the last ten trials each child had only a 10% chance of winning; consequently, the level of difficulty was increased, thereby inducing cheating behavior in those individuals who interpreted their challenge as that of winning.

The independent variables for the present study are (1) moral development (2 factors); (2) sex (2 factors), and (3) condition (2 factors).

The dependent variable for the present study is the total number of cheating responses which are operationally defined as the total number of bar presses made on the lever which they were told belonged to another study and which they were requested not to use in their quest for points. Since cheating behavior was of central interest to the study, number of

on the appropriate lever were recorded but are not elaborated in the chapter which follows.

Since the focus of this study was to compare resistance to temptation in differing levels of moral development, the empirical hypotheses are stated as follows:

- (1) There is a significant difference in cheating responses between different levels of moral development.
- (2) There is a significant difference in cheating behavior under the various experimental conditions.

TABLE I

Means and Standard Deviations for Age and the Moral Development Questionnaire Scores of the Experimental Sample

	<u>Moral Development Questionnaire</u>		<u>Age</u>		
	\bar{X}	S.D.	\bar{X}	S.D.	
Moral Realism	Boys	1.75	3.00	10.4	.64
	Girls	1.9	3.18	10.3	.77
Mutual Reciprocity	Boys	9.2	2.66	10.7	.56
	Girls	8.9	2.17	10.5	.77

CHAPTER III

PRESENTATION OF RESULTS

This chapter will present the results of the research findings in terms of the postulated hypotheses.

1. Statistical Findings

This section will present the analyses of variance for the measures procured from the experimental session. The overall analyses of variance consisted of the following factors: (1) Level of Moral Development; (2) Sex; and (3) Condition.

The summary of the first analysis of variance is presented in Table 2. There was a Condition main effect ($F = 5.35, p < .05$) indicating that performance was significantly lower on the second trial block than on the first.

The statistically significant main effect for Level of Moral Development ($F = 7.76, p < .01$) suggests that the moral realism group cheated more than the mutual reciprocity group.

Since the variation among boys and girls was minimal and due to the restricted cell size, the data were collapsed over the six variables and submitted to an analysis of variance which is presented in Table 3. Similar findings were revealed as indicated in Table , except that a statistically significant Condition \bar{X} Moral Development interaction was found ($F = 5.38, p < .05$). As illustrated in Figure 1 and as demonstrated by

TABLE 2

Summary of Analysis of Variance of Total Number of
Cheating Responses of Boys and Girls in Two Levels
of Moral Development under Two Experimental Conditions

Source	SS	df	MS	F
Sex	1110.05	1	1110.05	.005
Moral Development	1630776.05	1	1630776.05	7.760
Condition	1123854.05	1	1123854.05	5.348
Sex \bar{X} Moral Development	190710.45	1	190710.45	0.908
Sex \bar{X} Condition	3251.25	1	3251.25	0.016
Moral Development \bar{X}	453306.05	1	453306.05	2.157
Sex \bar{X} Moral Development \bar{X} Condition	18911.25	1	18911.25	0.089
R:ABC	15130080.4	72	210140.00	

the Tukey test, the Moral Realism group cheated significantly more in the last ten trials than they did in the first ten where their performance is similar to the Mutual Reciprocity group under either Condition.

TABLE 3

Summary of Analysis of Variance of Total Number of Cheating Responses under Two Experimental Conditions at Two Levels of Moral Development

Source	SS	df	MS	F
Between				
Moral Development	1630776.05	1	1630776.05	5.10
S:A	12143039.5	38	319553.67	
Within				
Conditions	1123854.05	1	1123854.05	13.34
Moral Development \bar{X} Conditions	453306.05	1	453306.05	5.38
SB:A	3201023.9	38	84237.47	

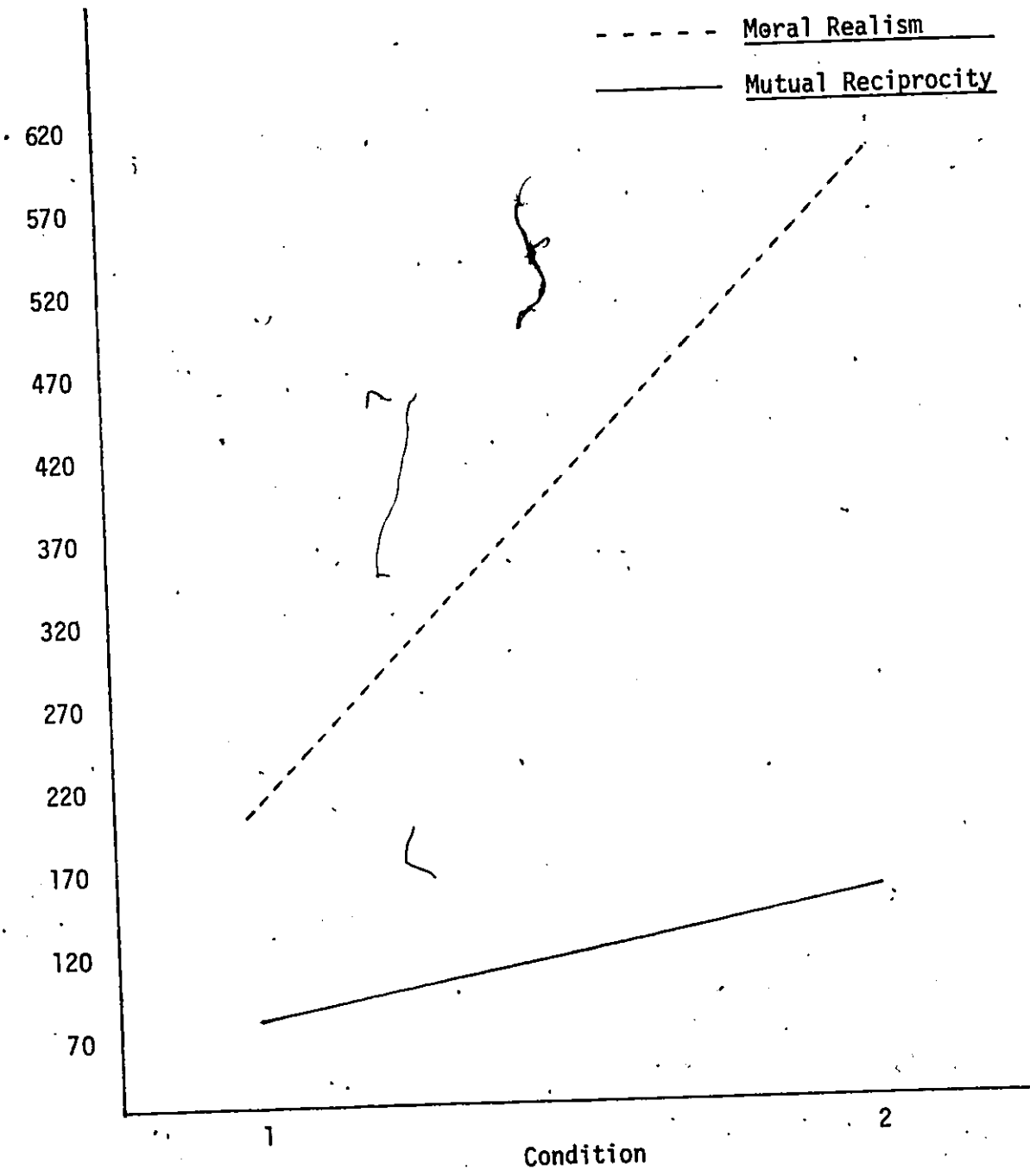


Figure 1: Illustration of Moral Development x Conditions Interaction

CHAPTER IV

DISCUSSION OF THE FINDINGS

This chapter will deal with the findings directly relevant to the specific hypotheses presented previously. The main concern of this study is to compare moral development with overt behavior. To pursue this goal, attention will be focused upon the behavioral features of anomy demonstrated in this study with elements of moral judgments within Piaget's frame of reference.

1. Discussion of the Main Effect: Level of Moral Development

The null hypothesis stating that there is no significant difference in resistance to temptation between levels of moral development was rejected. This conclusion deserves to be more closely examined for the important contribution it can make to the analysis of the child's morality.

The confirmed findings of the previous chapter as well as the behavioral observations of the experimental situation suggested that the child in the stage of moral realism is dominated by a set of rules externally imposed upon him. However, being unable to place himself at the same level as his peers (person playing against him), he became fully engrossed in egocentric play, utilizing all that was available for his own ends; hence, he submitted more to temptation than did the mutual reciprocity group. Although he believed that he was playing like the others, he really thought nothing of using the "cheat" button for his own personal

gains. This is evident when one compares the average cheating trials in the first ten trials versus the second ten trials. In the playing situation, the child either played for himself, regardless of what the other person was doing, or responded along with him by trying to win. By way of observation, the experimenter could hear the laughter and sense the enjoyment of the child when winning: "I've got him" or "I'm winning" was often heard. Children of this stage play in an individualistic fashion without regard for the codification of rules; each child tried to win from his own point of view. When it was apparent that the other person was running up a big score, the child generally stopped pressing the lever and pushed the "cheat" button. It would seem reasonable to entertain the idea that this could be due not only to the competitive aspect of the situation but, as well, to the child being alone and not knowing that the results were being monitored when he yielded to temptation; it was apparent that he was at a disadvantage and the other person was increasing his score by using the "cheat" button.

As Piaget observed in the game of marbles, younger children responded spontaneously to the situation at hand. The child very often feels that what he makes up, even on the spur of the moment, expresses in some way an eternal truth. Piaget argues that younger children view rules as being omnipotent and unchangeable. "In seeking to win, the child tries above all to contend with his partners while observing common rules." (Piaget, 1932, p. 42) Yet, these children do not know or understand the rules in detail. It is only while playing that they understand each other either through mimicking the actions of others

that seem to be more proficient or simply eliminating and ignoring those questionable rules. Simply stated, the child in the stage of moral realism could have justified his actions by parroting what he thought the other person was doing.

Children who fall under the category of mutual reciprocity, when placed in the same situation, manifested "cheating" behavior which, in comparison to the moral realism children, was considerably lower. It would seem reasonable to attribute this manifestation to the fact that, in its beginning, reciprocity does not completely and immediately replace those learned responses imbued in the individual as a result of practise by the complex of egocentricity and restraint. Thought always lags behind action; consequently, reciprocity with its attributes must be practised and internalized before it can fully manifest itself. In the stage of mutual reciprocity, each player tries to win and concerns himself not merely with the competitive aspect but with the question of mutual control and the unification of rules. On observing the pattern in the pressing of the "cheat" button, it was found that the mutual reciprocity children utilized the button upon realizing that they lagged far behind in points. The button was released once the score was balanced. In contradistinction, the moral realism children pressed the "cheat" button and continued to press it even though they caught up and surpassed the score of the other person.

For the children in the stage of mutual reciprocity, then, "the specific pleasure of the game... ceases to be muscular and egocentric and becomes social" (Piaget, 1932, p. 42). For these children, the primary motivating factor is not only to compete with the other person but primarily

to regulate the game with a set of rules which will assure the highest form of reciprocity in the methods employed, as well as being acceptable to both people. It is not until the next stage that they will master their code and their actions will become completely social.

In conclusion, then, the acquisition and the practice of the rules of the games seem to proceed in the following manner: (1) individual regularity and imitation of rules in an egocentric fashion and (2) cooperation and interest in rules for their own sake rather than blindly accepting them.

2. Discussion of the Interaction Effect:

Level of Moral Development x Condition

The data presented in Table 3 reveals a significant interaction between level of moral development and condition. The moral realism group was significantly more affected by change in condition toward a greater number of cheating responses. The question of why this should occur will be interpreted utilizing the previously stated concepts.

It would seem appropriate to distinguish two types of responses, one anchored on the premise of expiation and egocentricity, the other on reciprocity and mutual cooperation. While both types are represented in all ages, it is evident that the second tended to dominate the mutual reciprocity group while the notion of expiation and egocentricity tended to dominate the moral realism group. The use of the "cheat" button illustrates this process. The moral realism group utilized the "cheat" button significantly more in the second condition while remaining insensitive to the other person's "wrongdoing"; winning was all-important. The mutual reciprocity group was in favor of the measure of reciprocity which simply

ignored the other person's responses, in the sense of not imitating him and, at the same time, playing the game according to the rules. This can be confirmed by the fact that they persisted in utilizing the lever and not the "cheat" button in the face of a very competitive strategy. Furthermore, the confirmation of the above stated premise was also indicated by the Moral Development Questionnaire (See Appendix 1). The moral realism group chose expiatory elements in all of their answers while the mutual reciprocity group was content to justify and view behavior by its preventive value and according to the different situations and conditions - an attitude which definitely contradicts the previous stage.

In view of the above discussion it seems appropriate to view the children's behavior in the two conditions as follows: It seems that the predisposition of the moral realism child is influenced not only by his own egocentrism or propensities but also by the actions of others. This is elucidated by comparing the respective rates of response in the two conditions. In the first condition (50-50 chance of winning), the two players were more or less equally matched; cheating did occur but it was not significant statistically. In the second condition, the player was constantly losing and he became so involved with the game that the initial instructions were unconsciously set aside. At the same time, he realized that the other player's score was increasing at a rate that he could not maintain by just pressing the lever and he decided to utilize any means at his disposal to maximize his gains. This type of player has neither managed to codify nor internalize rules as a frame of reference. Thus, he remains insensitive to internalized measures. He will sway to the side that approximates the highest gain for himself. Hence, consideration must

be given to a warm-up effect. That is to say that as the game went on, the players became more and more involved, thus perceiving the situation in a competitive way.

In addition, the main effect of condition in cheating, qualified by interaction of moral development and condition, was due to the responses of the moral realism group and not as a result of the mutual reciprocity group.

3. Discussion of the Main Effect: Condition

It was noted in the analysis of variance that significantly more cheating occurred in the second condition in comparison to the first; condition, therefore, significantly affected the individual's rate of responding.

It would follow from Piaget's theory that more cheating would occur in the second experimental condition in comparison to the first. Furthermore, one would expect that the moral realism group would be more affected than the mutual reciprocity group. Since the former is out to win at any cost when faced with the greater challenge of the latter condition, they would be coerced into cheating to yield success in their performance. On the other hand, the mutual reciprocity group is more concerned with rules of the game and will play the game according to the given instruction.

The second condition would produce considerably more cheating responses in the moral realism group because the children's play is strictly egocentric. On one hand, the child is dominated by external rules imposed upon him by the adult; on the other hand, since he is unable to fully understand the rules and, with the desire to place himself at the same level as his

peers, he utilizes for his own benefit all that he was able to grasp of the social context around him. In other words, the child believes he is sharing the point of view of the world while, in reality, he is still tied to his own point of view. Consequently, when faced with a situation in which he lost all control and was constantly losing, he set the established rules aside and took the situation into his own hands.

SUMMARY AND CONCLUSIONS

The review of the literature indicated that most studies on moral development took their initial format from the work of Piaget. Consequently, following a discussion of his method, the behavioral approach was revealed and compared to the present outlook on moral behavior.

The next chapter dealt with the sample, administration of the moral judgment questionnaire, presentation of the task for the subjects, analyses of the observations and statistical design and hypotheses.

Since the main concern of this study was to investigate the relationship between levels of moral development and resistance to temptation, a comparison of the different levels of moral development (moral realism and mutual reciprocity) was discussed in detail.

Finally, an attempt was made to observe the responsiveness of the various groups in resistance to temptation.

The first null hypothesis, suggesting that there is no significant difference between levels of moral development in resistance to temptation, was rejected. It was found that the moral realism group cheated more than the mutual reciprocity group.

The analyses of variance also indicated a significant main effect for condition: there was significantly more cheating under the second condition in comparison to the first.

A significant interaction was observed between moral development level and condition; that is to say, the moral realism group was

significantly more affected by change in condition toward a greater number of cheating responses in the last trial block.

In terms of future research in this area a number of suggestions can be offered.

First, further research should be aimed at verifying the reliability of the Moral Development Questionnaire used in this study. The wording of the questionnaire should be re-evaluated to incorporate present-day syntax and terminology. The questionnaire should also be examined to consider such variables as personality, sex, education level, and different cultural backgrounds.

In addition, it is a matter of considerable interest that sex differences are generally inconsistent with current literature. Since research in this area is scanty, many questions regarding this phenomenon remain unexplained. It would be extremely illuminating to explore these findings in greater depth since the question of sex differences remains an open one.

Implications of the Research

From this study, the writer will attempt the following suggestions to people who are concerned with the behavioral transgression of cheating.

(1) Teachers should not regard a particular incident of cheating as a severe violation of moral, ethical or scholastic mores; should an individual be classified as a "cheater" as a result of his behavior. The review of the literature, as well as the findings of this study, indicate that cheating is influenced by a number of extraneous variables, i.e. competitiveness, environment, chance of detection, etc.

(2) It would follow, from the aforementioned, that one way of eliminating, or at least reducing cheating, is to lessen the

competitiveness among students and to emphasize the importance of cooperation. The present educational trend sometimes encourages each member of the class to compete with each other, to the point that certain children are left with no other alternative but to adopt strategies such as cheating to maintain the teacher's and classroom's standards. Cheating should not be condoned or dismissed lightly, but the teacher should investigate the individual's reasons or rationale behind his behavior. An explanation should be given to the child of the full implications of cheating as well as the reasons for not accepting such behavior.

It is hoped that, through the emphasis of cooperation within the classroom, and the full understanding of behavioral dynamics on the part of the teacher, that cheating would be significantly decreased.

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· APPENDICES

APPENDIX 1

QUESTIONNAIRE UTILIZED FOR MEASURE OF MORAL DEVELOPMENT
AND THE SCORING KEY FOR MORAL DEVELOPMENT QUESTIONNAIRE

NAME _____

GRADE _____

Present Date _____

Age _____

Birth Date _____

Item 1

There was once a little boy who didn't mind his mother. He took the scissors one day when he had been told not to. While he was trying to cut up some paper, he cut his finger.

Why did his finger get cut? _____

If his mother had said it was all right if he used the scissors, would his finger have been cut just the same? _____

Did the scissors know that he wasn't supposed to use them? How? _____

Now tell me what you really believe. Why did the boy get a cut on his finger? _____

Item 2

A. A boy didn't know the names of the streets in a city very well. He was not quite sure where Federal Street was. One day a man stopped him and asked him where Federal Street was. The boy answered, "I'm not sure, but I think it's over there". But it wasn't there so the man completely lost his way and could not find the house he was looking for.

B. Here's another story: A boy who knew the names of the streets in a city very well was asked by a man where Federal Street was. The boy wanted to play a trick on the man and so he said to him, "It's over there", and he pointed to the wrong street. But the man didn't get lost and managed to find his way again.

Comparing this story with the first one, which one of the two boys do you think did the worst thing? _____ Why? _____

Item 3

One day Tommy and Peter were playing together. Tommy had a new electric train and Peter had a boat which could be wound up and it would sail in the water. Now Peter was a naughty little boy, and suddenly he kicked Tommy's electric train and broke it so it wouldn't run any more. What do you think should be done to the naughty Peter?

Should he be spanked? _____

Should his boat be broken? _____

Should he be made to save up his own money until he can buy Tommy another electric train? _____

Which one? _____

Why? _____

Item 4

One Saturday morning a mother asked her two little boys to help her clean the house; one of the little boys was to empty the waste paper, and the other one was to empty the tin cans. But the little boy who was supposed to empty the waste paper went out and played instead, so the mother asked the second boy to do all the work.

Did the second boy do what he was told to do? _____

Why? _____

Would it be all right if the boy who had to do all the work told his mother that he wouldn't do it? _____

Item 5

A. One day a little boy was walking home and he saw a dog that scared him. When he got home, he told his mother that he had seen a dog that was as big as an elephant.

B. One day another little boy came home from school and told his mother that the teacher had given him a good mark in school. But this wasn't true because the teacher had not given him any mark at all that day in school. The mother was very pleased and gave the little boy a reward.

Which one of the boys told the worse lie? _____

Why? _____

Item 6

A mother had two little girls; one was a good little girl and did what her mother told her, but the other one did not mind her mother. One day the mother baked a cake, and since she liked the good little girl best, she gave her the biggest piece of cake.

What do you think of that? _____

Was that all right? _____

Item 7

A. A boy was playing in his room while his father was at work. After a little while the boy thought he would like to draw. But he had no paper. So he went and took some lovely sheets of white paper from one of the drawers of his father's desk. When the father came home he found that his desk was all messed up and he found that someone had taken his paper. He went straight into the boy's room and there he saw the floor covered with the sheets of paper. They were scribbled all over with colored chalk. The father was very angry and he gave the boy a good spanking.

B. Now I shall tell you a story that is nearly the same but not quite. Another little boy was playing at home while his father was gone. He wanted to draw so he went to his father's desk and took some of his white paper. When his father came home, he found that the paper had been taken, so he went right into his son's room. There he saw the white paper on the floor, scribbled all over with colored chalk. This father was angry too, but he did not spank his son. He explained to him that it wasn't right of him. He said, "When you're not at home, when you've gone to school, if I were to go and take your toys, you wouldn't like it. So, when I'm not home, you mustn't go and take my paper either. It isn't right to do that."

Now a few days later these two boys were playing in their own yards. The boy who had been spanked was in his yard, and the one who had not been spanked was playing in his yard. And then each of them found a pencil. It was their father's pencil. Then each of them remembered that his father had said that he had lost his pencil and that it was too bad because he wouldn't be able to find it again. So then they thought that if they were to steal the pencil, no one would ever know and there would be no punishment.

Well now, one of the boys kept the pencil for himself and the other one took it back to his father. Guess which one took it back - the one who had been spanked before for taking the paper or the one who had been talked to for having taken the paper.

Why did the other one not give it back? _____

Which does the most good - a talking to or a spanking? _____

Which would you rather have? _____

Why? _____

Item 8

There was once a big boy in a school who beat up on a smaller boy. The little boy couldn't hit back because he wasn't strong enough. So one day during recess, he hid the big boy's lunch so he couldn't find it.

What do you think of that? _____

Was it fair of the little boy to hide the older boy's lunch? _____

Why? _____

What should the little boy have done instead of hiding the big boy's lunch? _____

Item 9

A father had two boys. One of them always grumbled when he was sent on errands. The other one didn't like being sent either, but he always went without saying a word. So the father always used to send the boy who didn't grumble on errands more often than the other one.

Was this fair? _____

Why? _____

Did the boy who got sent all the time go on the errands? _____

Item 10

A. A little boy named John was in his room. He was called to dinner. He went into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. But John didn't know the cups were behind the door. He went in, the door knocked against the tray and bang went the fifteen cups and they were all broken.

B. Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam-out of the cupboard. He climbed up onto a chair and stretched out his arm. But the jam was too high up and he couldn't reach it. But while he was trying to get it he knocked over one cup. The cup fell down and broke.

Which one of the boys do you think is the maughtiest one? _____

Why? _____

Item 11

One afternoon a mother took her children for a walk along the river. In the middle of the afternoon she gave each of them a piece of cake which she had brought along. They all began to eat their cake except the youngest one who was careless and let his piece fall into the water.

What should be done? _____

What should the mother do? _____

Should the careless child have nothing to eat or should each of the others give him a little piece of their cake? _____

Why? _____

Item 12

A. Alfred met a little friend of his who was very poor. This friend told him that he had had no dinner that day because there was nothing to eat in his house. Then Alfred went into a bakery. Since he had no money, he waited until the baker's back was turned and he took a loaf of bread. Then he ran out of the bakery and gave the loaf of bread to his friend who was hungry.

B. Frank went into a candy store. He saw some candy that he liked. He didn't have any money. So he waited until the store-owner's back was turned and he stole one piece of candy. Then he ran out of the store and ate the candy.

What do you think of what the two boys did? _____

Which little boy do you think was the naughtiest one? _____

Item 13

Once there were two children who were walking by a house in the country. There were some apple trees out in the yard in front of the house. No one was around so they went into the yard and stole some apples. Suddenly a man came out of the house and ran after them. He caught one of the boys but the other one got away. This one crossed a river on a rotten bridge and fell into the water.

Why do you think the boy fell into the water? _____

If he had not stolen the apples but he had crossed the river on that rotten bridge, would he have fallen into the water anyway? _____

Why? _____

Did the bridge know he had stolen the apples? _____

Now tell me, what do you really believe? Why did the boy fall into the water? _____

Item 14

Once there was a father who had two sons. One was very good and obedient. The other one was all right, but often he did things he shouldn't! One day when the father went to work, he said to the first son, "You must watch carefully to see what your brother does and when I come back I want you to tell me". Well, the father went away and the brother went and did something he shouldn't. When the father came home, he asked the first boy to tell him everything.

What ought the boy to do? _____

Why? _____

Item 15

A. There was once a little girl who was called Marie. She wanted to give her mother a nice surprise, so she cut out a red valentine for her. But she didn't know how to use the scissors and she cut a big hole in her dress.

8. Another little girl named Margaret went and took her mother's scissors one day when her mother was out. She played with the scissors for a while, but since she didn't know how to use them, she cut a little hole in her dress.

Was one or both girls naughty? _____

Which one of the little girls do you think is the naughtiest? _____

Why? _____

Item 16

A child is looking at a picture book belonging to his mother. Instead of being careful, he gets many of the pages dirty. What should the mother do to him? Should she not let him watch television that evening? Or, should she not let him look at any of her picture books anymore? Or, should she go and get one of his books dirty? Which one? _____

Why is that the best punishment for him? _____

Which do you think is the hardest punishment? _____

Why? _____

Item 17

There was once a family with a lot of boys. They all had holes in their shoes, so one day their father told them to take their shoes to

the shoemaker to be fixed. But one of the boys had been naughty several days before so the father said to him, "You can't go to the shoemaker. You will have to wear your shoes with holes in them since you have been disobedient".

Was this right? _____

Why? _____

Item 18

A. Why is it naughty (wrong) to tell lies? _____

B. Would it be all right to tell a lie if you didn't get caught and no one punished you for it? _____

SCORING KEY FOR MORAL DEVELOPMENT QUESTIONNAIRE

The responses to the moral development questionnaire were scored plus or minus following Medinnus' technique.¹ A minus score indicates that the items were answered in the direction of moral realism, while a plus score denotes a "mature", relativistic response. Each item is scored as follows: a minus score was given to the response if the subjects:

- Item 1 - indicated a belief in immanent justice by stating that the boy cut his finger as a punishment for not minding his mother.
- Item 2 - chose the actions of the first boy as worse than those of the second because the man got lost, indicating a disregard for the motive underlying the act of lying and a concern only with the consequences only with the lie.
- Item 3 - selected spanking as the best punishment; this, in contrast to the other two punishments, indicates a belief in the necessity of arbitrary, expiatory punishment as opposed to punishment by reciprocity.
- Item 4 - felt that the adult command was fair and if any reserve feels that he should do what the parent says just to please him.
- Item 5 - judged the first lie to be worse than the second; thus, the more unlikely the lie, the more its contents mark a departure from reality, the worse it is.
- Item 6 - concurred with the mother's actions, indicating a belief in the necessity for punishment to the exclusion of a consideration of equality between siblings.
- Item 7 - declared in favor of the infliction of punishment rather than verbal explanation.
- Item 8 - condemned reciprocity between children involving taking revenge because it is forbidden by adults.

¹ G.R. Medinnus, An investigation of Piaget's concept of the development of moral judgment in six to twelve year olds. Unpublished doctoral dissertation, University of Minnesota, 1957.

- Item 9 - felt that the adult command was fair and if any doubt, they agreed with the parent to please him.
- Item 10 - judged in terms of material result rather than in terms of motive; this was indicated if the subject stated that the first boy was the naughtier one because he broke the most cups.
- Item 11 - required that the careless child be punished by nothing more to eat.
- Item 12 - judged on the basis of value of the object stolen rather than on the basis of the intention underlying the theft.
- Item 13 - indicated a belief in immanent justice by stating that the boy fell into the water because he had stolen the apples.
- Item 14 - revealed a preference for submission to adult authority as opposed to solidarity between children, indicated by the boy's refusal to tell on his brother.
- Item 15 - evaluated the stories in terms of the material damage rather than in terms of motive.
- Item 16 - chose the punishment, forbidding the child to watch television, which bears no relation to the content of the guilty act and is therefore arbitrary in nature.
- Item 17 - approved of the punishment imposed by the father; this points to a belief in the need for retribution rather than a feeling of equality between children.
- Item 18 - state that a lie is wrong because it is an object of punishment; if the punishment were removed, it would be allowed.

APPENDIX 2

INSTRUCTION USED IN THE EXPERIMENTAL SITUATION
AND THE LEHIGH VALLEY LEARNING APPARATUS

Today, I would like to see how people press levers. In front of you is a panel and the lever is on the bottom (pointing to the lever). Here is what I would like you to do. When this red light comes on (pointing to the light), I want you to press the lever (again pointing to the lever). The number of times you press the lever will be shown here (pointing to the counter) and it will tell you your score. In another classroom, there is another panel and a person will be doing the same as you. The other person's score will be shown here (pointing to the other counter).

At another school, we had people pressing this lever, only they could increase their score by pressing this button (again pointing to the appropriate button). But I DO NOT WANT YOU TO PRESS IT. O.k. When this red light goes on (pointing to the light), you press this lever until the light goes off. Watch your score and the other person's score.

Let's see how you do.

THE LEHIGH VALLEY LEARNING APPARATUS

