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ABSTRACT

This study investigated the effects of sex of child, age, rationale focus, rationale orientation, and maturity of moral judgment on resistance to deviation in 120 children (7 to 11 years old) using the standard punishment paradigm. Children were randomly assigned to a consequence- or intentions-focused rationale with an object or person orientation in a 2x3x2 factorial design. The following predictions were made: (1) a rationale will be more effective in reducing deviation in girls, (2) deviation will decrease across age for the intentions rationale, (3) person-oriented rationales versus object orientation will increase in effectiveness with age, (4) person-oriented rationales will be more effective with girls than boys, and (5) children who are more mature in moral judgment will be less deviant. Results indicate that for all measures girls were less deviant than boys; age significantly increased latency to first deviation when the rationale focused on intentions but not consequences; person-oriented rationales tended to increase in effectiveness (that is, latency to first deviation was longer) with increasing age for boys but not girls, and children who scored high on the moral realism measure were less deviant. Content of the reasoning seemed to be a major factor in the relationship between the child's level of moral judgment and moral behavior. (ST)

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A DEVELOPMENTAL STUDY OF REASONING AND ITS EFFECT ON RESISTANCE TO  
*Deviation*  
~~BEHAVIOR~~ IN CHILDREN OF HIGH AND LOW MATURITY OF MORAL JUDGMENT\*

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Although cognitive factors are assumed to influence inhibition of deviant behavior, the manner in which these factors function is not well understood. According to Becker (1964) explanation and reasoning facilitate resistance to deviation by providing the individual with internal criteria for evaluating his non-behavior. Cheyne and Walters (1970) have suggested that cognitive elements, such as general rules, are effective inhibitors of deviation because through past learning they have become transsituational cues in that non-compliance with a rule has been previously associated with anxiety, often through punishment. But once the rule has been learned, anxiety is less important since the child can now apply the rule to the specific situation. Other oriented induction, according to Hoffman (1970), is the specific cognitive factor determining resistance to deviation because it focuses on the implications of the child's behavior for others. The child's moral judgment capacity which emerges as a result of an interaction between the child's cognitive structures and his experience with the world has been stressed by Piaget (1965). Implicit in all of these accounts is the concept of internalization of some rule, norm, or principle which is the result of explaining the implications of deviation to the child.

Reasoning is the most extensively researched cognitive factor in the literature on resistance to deviation resulting from punishment. Some researchers (e.g., Parke, 1970) have labeled this reasoning element a rationale. However, LaVoie (1973a) has argued that the term rationale

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should be restricted to reasoning which is sufficient in information and legitimates inhibition of deviation. Rationales can be grouped according to their focus (i.e., the central theme) and orientation (i.e., the direction with respect to whom or what). This categorization system results in four types of rationales: namely, consequence focus (i.e., a possible result of deviation), intentions focus (i.e., the motivation for deviation), object orientation (i.e., stressing a particular thing, generally material), and person orientation (i.e., stressing the effect of deviation on one's self or another).

Most rationales in the experimental literature on punishment have been object oriented and focused on the consequences of the deviant act. First and second grade children in the Cheyne & Walters (1969), Parke (1969), and Cheyne (1971) studies were significantly less deviant after being told not to play with the toy they had selected because it might get broken or worn out. Rationales focusing on intentions have also been effective with young children in reducing deviation. Aronfreed (1963, 1969) told eight- and nine-year-old children that they were being punished for wanting to pick up the prohibited toy or that their toy choice was inappropriate for their age. The rationale which focused on intentions produced more resistance to deviation than the other rationale. LaVoie (1973a) reported that a person oriented rationale which appealed to adolescent boys' respect for others property and rights, was more effective than a 104 db aversive stimulus. This type of rationale is similar to Hoffman's (1970) other oriented induction. The apparent variation in rationale focus and orientation in punishment studies using reasoning indicates that gaining insight into the functioning of cognitive factors in resistance to deviation by comparing these studies is a difficult task at best.

While rationale focus and content appear to be determinants of resistance to deviation in children, their effect is probably contingent on the age and sex of the child. According to Luria (1961), the child's ability to cognitively control his behavior increases with age. Cheyne (1969) found that increasing the amount of information in the rationale reduced deviation in third graders but not kindergarten children. For one group of children the rationale focused on consequences ("That's bad"), a second group was also told, "You should not want to play with that toy (focus on intentions); while a third group was instructed, "That toy belongs to someone else (a person orientation). The person oriented rationale tended to be more effective with third graders. Resistance to deviation seems to be influenced by sex of the child. LaVoie (1973) observed that rationales were more effective with girls. Bronfenbrenner (1961) has suggested that mild forms of punishment result in compliance behavior in girls equivalent to that from harsher forms with boys. Rationale orientation should be sensitive to sex of the child since girls are more frequently rewarded for dependent overtures toward others (Mischel, 1966).

Maturity of moral judgment is another potential factor mediating the effect of a rationale. Piaget (1965) and others have demonstrated that children make more mature as well as different types of moral judgments with an increase in age. But previous studies (e.g., Grinder, 1964; Medinnus, 1966) have not found that moral judgment significantly influences resistance to deviation. However, Kohlberg (1969) reported that teacher ratings of children correlated with their level of moral judgment. Allinsmith (1960) has proposed that resistance to deviation is determined by situational factors rather than moral traits, such as

moral judgment. This conclusion contradicts the findings from punishment research that a rationale decreases deviation. Cheyne and Walters (1970) have taken the position that the social learning experiences of the child determine the effect of moral judgment on moral behavior. One critical factor influencing this generalization or transfer effect is the importance of a particular rule within the child's cognitive structure (Cheyne & Walters, 1970). Rationales which provide information on the wrongness of an act are similar to social norms socialized in the child. Further, person oriented rationales should increase in effectiveness as the child becomes less egocentric, a cognitive deficit which also influences moral judgment.

The present study investigated the effects of sex of child, age, rationale focus, rationale orientation, and maturity of moral judgment on resistance to deviation in seven-to eleven-year-old children using the standard punishment paradigm. Based on the previous discussion, the following predictions were made: (1) A rationale will be more effective in reducing deviation in girls; (2) Deviation will decrease across age for the intentions rationale; (3) Person oriented rationales will increase in effectiveness with age; (4) Person oriented rationales will be more effective with girls than boys; (5) Children who are more mature in moral judgment will be less deviant.

#### Method

##### Subjects

The subjects for the study were 120 seven-, nine-, and eleven-year old, middle class, Caucasian boys and girls of average intelligence (i.e., IQs of 100-120) from intact families. An equal number of boys and girls (20 boys and 20 girls) were selected from each age group. The mean age in years

and months of each group was: seven year-olds ( $\bar{X}$  7:2), nine-year-olds ( $\bar{X}$  9:1), eleven-year-olds ( $\bar{X}$  11:3). Children were randomly assigned to a consequence or intentions focused rationale with an object or person orientation in a 2 (sex of subject) x 3 (age) x 2 (rationale focus) x 2 (rationale orientation) factorial design with five subjects per cell.

#### Experimental Arrangements

Each subject was tested individually in a mobile research trailer situated in the school parking lot. The trailer was partitioned into an experimental room and an observer's room. The fixtures in the experimental room consisted of a table on which the toys for the selection task were presented and two chairs. A closed circuit television system consisting of a camera and wide angle lens, built into the partition, and a television monitor, were placed in the observer's room. The camera lens protruded into the experimental room but was carefully concealed from the subject. This type of monitoring system was selected because it is well known that children above the second grade are very knowledgeable about one-way mirrors. The television monitoring system also made the child less suspicious of surveillance in this resistance-to-deviation paradigm and thus helped to maximize the potential for deviation. All timed measurements were made a stopwatch.

#### Procedure

The subject was conducted to the mobile research trailer by a female experimenter in her twenties. During their walk to the trailer the experimenter and the subject conversed in a friendly manner and the subject was told that he/she was going to a trailer where some toys were kept. (The experimenter carefully monitored her interactions so that each subject received the same amount of interaction and same degree of nurturance

After entering the trailer the subject was seated at the table next to the experimenter and the following instructions were given: "I am going to place several pairs of toys in front of you, one pair at a time, and I want you to select one toy from that you would like to play with. Do you understand what you are supposed to do?" The experimenter then placed a randomly selected pair of toys in front of the subject and asked him/her to make a choice. When a subject selected a toy on two of the trials, one of the following rationales was given: (a) consequence focus-object orientation. "That toy is not to be played with because it might get broken or worn out from you playing with it. That toy is a very special toy, and I don't have another toy exactly like that toy to replace it." (b) Intentions focus - object orientation. It is wrong for you to want to play with that toy or to think about playing with that toy. That toy is a very special toy and should not be played with". (c) Consequence focus - person orientation. "That toy might get broken or worn out from you playing with it. Since that toy belongs to another boy/girl, how do you think he/she would feel if you play with this toy when he/she is not here?" (d) Intentions focus - person orientation. "It is wrong for you to want to play with that toy or to think about playing with that toy because it belongs to another boy/girl. How do you think he/she would feel about you playing with his/her toy?"

Both toys were removed from the table after the rationale was given. A rationale was not given for one toy choice to prevent formation of a set. When the toy selections were completed, the experimenter placed the two prohibited toy choices on the table as though preparing the subject for another selection. The experimenter then announced, "Oh! I just remembered that I must make a telephone call. I will have to return to the school. Will you be okay here by yourself? Good! When I return I

will knock on the door three times so that you will know it's me. (This instruction was given to assure the subject he would be alone in order to maximize temptation). You wait here until I return." The experimenter then exited through the outside door.

During the ensuing 15 minutes resistance-to-deviation (RTD) test period, a neutral observer recorded the subject's toy handling responses from the television monitor using the following measures: latency (time from the experimenter's departure until first deviation), frequency of deviation, duration (the sum of all deviations), average duration per deviation, and percent of time deviating (ratio of duration of deviations to actual time attending to the prohibited objects).

At the end of the 15 minute test period, the experimenter, after knocking on the door, reentered the trailer and apologized for the lengthy delay in returning. The experimenter then administered a short posttest questionnaire which consisted of asking the subject: the instructions he/she had received; and which toys he/she has played while the experimenter was away. The subject was then debriefed, asked not to discuss the trailer or the toys with other boys and girls, and returned to his/her classroom.

#### Resistance-to-Deviation Test Objects

The six toys which comprised the RTD test objects were Ocean in a Bottle, Wizzer, Nervous Breakdown, Pin Ball Game, Solar Engine, and Magniks. The rated interest value of each of these toys was previously obtained in pilot testing with first, third, and fifth grade children by observing the length of time the children played with each toy. The three pairs of toys were matched so that both toys in each pair were approximately equal in interest value and did not differ significantly from other toys in the group.



### Moral Judgment Test

Seven conflict situations adapted from the stories constructed by Piaget (1965) in his study of moral judgment comprised this test. The items consisted of three situations measuring moral realism, two situations measuring expiatory punishment, and two situations assessing immanent justice. The situations were modified to balance their content in accord with the suggestions made by Jensen and Rytting (1972). The child's response was scored a 1 if it indicated subjectivity (a mature response) and 0 if the response was objective (an immature response). A mature response for the moral realism items was one where the child focused on the intentions of the act and correctly identified the differences in the seriousness of the act. For the expiatory punishment items, a mature response was one where the child used restitutive justice (i.e., stated that punishment should be reciprocally related to the deviant act rather than painful, arbitrarily administered punishment). Mature responses to the immanent justice items were those which stressed naturalistic causality to explain certain physical acts as opposed to the view that such acts resulted from the protagonist's deviation. A total moral judgment score for each subject was derived by summing the scores for the seven items.

The Moral Judgment Test was administered to each subject two weeks after the RTD test by an experimenter not associated with the latter test. Each situation was scored by the experimenter at the completion of the questioning. A second rater later scored the tape recorded responses of 10 subjects at each grade level. The inter rater correlation was .70.

### Results

The five resistance-to-deviation (RTD) measures were highly correlated,

with Pearson  $r$ 's ranging from  $-.62$  to  $.89$ . Latency was negatively correlated with all other measures since a longer latency implies greater resistance to deviation. A series of repeated measures analyses of variance were used to evaluate the frequency, duration, average duration per deviation, and percent time deviating measures which were grouped into three 5-minute blocks. Latency was analyzed as a single measure.  $F$  ratios for the five RTD measures are presented in Table 1. The means for each of the rationales are presented in Table 2.

#### Resistance-to-Deviation Test

Sex of subject was a significant factor in the analyses of the frequency, duration, and percent time deviating measures, while the effect for latency was marginally significant (see Table 1). For all measures girls were less deviant than boys, supporting the differential prediction. A decrease in deviation across age groups occurred for latency. Eleven-year old children had significantly longer latencies to first deviation ( $\bar{X} = 288.20$ ) than nine-year olds ( $\bar{X} = 155.60$ ) or seven-year olds ( $\bar{X} = 130.80$ ). The effect was similar for the other response measures but nonsignificant.

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Insert Table 1 about here

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Focus of the rationale was also a significant factor influencing deviation (see Table 1). The means for type of rationale, presented in Table 2, indicate that subjects who were provided with reasoning focused on intentions of the deviant act rather than consequences had longer latencies to first deviation and deviated for a lesser proportion of time. The intentions rationale also reduced frequency and duration of deviations but the  $F$  ratios were nonsignificant.

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Insert Table 2 about here  
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Since it was predicted that deviation would decrease with age when the focus of the rationale was on the intentions of the act, simple effects analyses were performed on the Age X Rationale Focus interactions, although Table 1 shows that the  $F$  ratios for these interactions were nonsignificant. Winer (1962) states, "the specific comparisons which are built into the design or suggested by the theoretical basis for the experiment can and should be made individually, regardless of the outcome of the overall  $F$  test" (p. 208). Age significantly increased latency to first deviation when the rationale focused on intentions ( $F = 4.62$ ,  $df = 2/96$ ,  $p < .05$ ) but not consequences ( $F < 1$ ). This interaction effect is plotted in Figure 1. Comparisons of means using a Neuman Keuls' analysis, revealed that latency to first deviation occurred significantly later among nine-year olds than seven-year olds and later among eleven-year olds than nine-year olds. However, the intentions rationale differed significantly from the consequences rationale only among the eleven-year olds, which probably accounts for most of the main effect due to intentions. These mean differences provide some support for the age differential prediction which was made. A similar pattern appeared for the other three response measures.

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Insert Figure 1 About Here  
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Rationale orientation also increased resistance to deviation as indicated by the significant  $F$  ratio for percent time deviating (refer to Table 1). The means for object and person oriented rationales in

Table 2 show that subjects who received a person oriented rationale deviated for a lesser percent of time than the object oriented subjects. While an identical effect occurred for the other measures, the  $F$  values were nonsignificant.

The overall  $F$  tests for the interaction between age and orientation of the rationale were nonsignificant. Since the effectiveness of person oriented rationles were predicted to be a direct function of age and of sex of subject (i.e., girls) simple effects analyses were performed on these interactions. Age of the child influenced the effect of the person oriented rationale on duration ( $F = 4.13$ ,  $df = 2/96$ ,  $p < .05$ ). Figure 2, depicting this interaction, shows a decrease in duration of deviation across age. Neuman Keuls' tests of mean differences indicated that eleven-year olds were significantly less deviant than seven-year olds.

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 Insert Figure 2 About Here  
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Sex of child, as well as age, appeared to influence the effect of rationale orientation. Table 1 shows a significant interaction between sex child, age, and rationale orientation for latency. This interaction is graphically presented in Figure 3. Age did influence the effectiveness of object oriented rationales for girls ( $F = 5.31$ ,  $df = 2/96$ ,  $p < .01$ ). Latency to first deviation was significantly later for eleven-year old girls who received an object oriented rationale. Age and sex did not significantly influence the effect of object oriented rationales with boys ( $R1$ ). Person oriented rationales tended to increase in effectiveness with age for boys ( $F = 2.51$ ,  $df = 2/96$ ,  $p < .10$ ) but not girls ( $F < 1$ ). Thus person oriented

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 Insert Figure 3 About Here  
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rationales seemed to be somewhat more effective in reducing deviation in children, boys more than girls, but the results in general were equivocal.

The prediction that deviation would decrease across age when the rationale was person oriented and focused on intentions was not confirmed by the data. A simple effects analysis was applied to duration since the F ratio was greatest for this measure. Focus and orientation of the rationale were found to influence deviation only among nine-year olds ( $F = 4.70$ ,  $df = 2/96$ ,  $p < .05$ ). Deviation was significantly lower when the rationale was person oriented and focused on intentions. There were no significant differences among the rationales for the eleven-year olds.

#### Stability of Resistance to Deviation

No significant differences between rationales emerged from the repeated measures analyses of the frequency, duration, and percent time deviating scores which were partitioned into three 5-minute blocks. The four rationales were quite similar in stabilizing deviation across time.

#### Maturity of Moral Judgment and Resistance to Deviation

A median split was performed on the scores for moral realism, expiatory punishment, immanent justice and total moral judgment. Each of these measures was used as a factor in an unequal N analysis of variance with sex of child, focus of rationale, and orientation of rationale, to assess the effect of maturity of moral judgment on resistance to deviation. Since a median split, rather than extremes, was used to determine high-low scores on each of the measures, .10 was set as the acceptable level of significance.

Subjects who were more mature in moral judgment tended to be less deviant. High scorers on the moral realism measure (i.e., subjects who

were more subjective in intentionality) had significantly longer latencies to first deviation ( $F = 4.13$ ,  $df = 1/104$ ,  $p < .05$ ), and deviated for a lesser percent of time during the RTD test ( $F = 3.27$ ,  $df = 1/104$ ,  $p < .10$ ). Subjects scoring high on total moral judgment also had longer latencies to first deviation ( $F = 2.82$ ,  $df = 1/104$ ,  $p < .10$ ). Thus the prediction that children who were more mature in moral judgment would be less deviant gained some support.

The effect of maturity of moral judgment on resistance to deviation was also influenced by sex of the child and focus and orientation of the rationale according to two 3-way interactions. The interaction between total moral judgment score, sex of child and rationale orientation for latency ( $F = 2.93$ ,  $df = 1/104$ ,  $p < .10$ ) is plotted in Figure 4. The simple effects analysis showed that object oriented rationales resulted in longer latencies to first deviation for girls who scored high on total moral judgment than girls who scored low ( $F = 5.53$ ,  $df = 1/104$ ,  $p < .05$ ). Boys scoring high in total moral judgment who received a person oriented rationale showed a greater increase in latency to first deviation than girls, but high moral judgment girls had longer latencies than boys.

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Insert Figure 4 About Here  
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Deviation among high and low moral maturity children also appeared to be influenced by the interaction between focus and orientation of the rationale as noted in the analysis of average duration per deviation for expiatory punishment ( $F = 4.39$ ,  $df = 1/104$ ,  $p < .05$ ). A simple effects analysis of this interaction, depicted in Figure 5, showed that the consequence focused-object oriented rationale was less effective

with children who believed in expiatory punishment than children who were more mature on this concept ( $F = 7.39$ ,  $df = 1/104$ ,  $p < .01$ ). The three other rationales were about equally effective with expiatory and non-expiatory children (i.e., all  $F$  ratios were less than 1).

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 Insert Figure 5 About Here  
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#### Denial Data

Confession to deviation was influenced by sex and age of the child. Boys were more likely to confess to deviation than girls ( $\chi^2 = 7.29$ ,  $df = 1$ ,  $p < .01$ ) and Binomial tests showed that more nine-year olds ( $p < .03$ ) and eleven-year olds ( $p < .02$ ) confessed. Neither maturity of moral judgment nor focus or orientation of the rationale significantly influenced confession to deviation.

#### Discussion

Sex of the child was a more pervasive factor influencing resistance to deviation than rationale or moral judgment but age of the child functioned as an intervening mediator. While girls demonstrated greater internalization in terms of resistance to deviation, boys showed greater internalization when confession is used as a measure. Thus reasoning produced clearly divergent types of internalization in girls and boys.

The greater effect of a rationale on resistance to deviation in girls has been previously reported by LaVoie (1973 b) in a study with first and second grade children. This differential effectiveness can probably be attributed to several factors. Girls tend to receive more nurturance and less punishment during socialization than boys (Goldin, 1969); and less severe forms of punishment, such as reasoning, seem to be effective

with girls, although Aronfreed (1969) has suggested that aversive qualities are present in a rationale because displeasure with the child's behavior is implied. Girls have also been found to be more adult conforming on Dilemmas Tests (Devereux, 1970). Another factor to be considered is that the rationales were administered by an adult female who the girls might have viewed as a surrogate maternal figure.

The higher incidence of confession among boys although they were more deviant on the RTD measures presents a situation similar to that reported by Grusec and Ezrin (1972). They found that children reinforced for self criticism were more self critical but less anxious about deviation, whereas non-reinforced subjects were more anxiety ridden. In explaining their condition where subjects score high on one moral criterion and low on another, Grusec and Ezrin noted that conscience is not a unitary construct, thus the components of conscience do not occur at a similar level in all individuals. It appears that a specific punishment measure does not influence all aspects of moral development equally. Additional evidence for this inference emerges from an earlier study by La Voie (1973 b) where deviant girls were also significantly less likely to confess after receiving a rationale.

Both consequence and intentions focused rationales appeared about equally effective with seven-year olds, but not older children. The consequence rationale in the present study focused on the possibility that the toy might break from playing with it. For seven-year olds this concrete fact seemed to be as effective in deterring deviation as the intentions rationale which suggested to the child it would be wrong to want to play with the toy since it was a prohibited toy.



Shantz and Boydanoff (1973) also found that seven-year-olds were not able to differentiate between accidental and intentional acts of aggression. Eleven-year-olds apparently viewed deviation as an improper act because wanting to play with a prohibited toy in and of itself was wrong, not that the toy might break; while nine-year olds seemed to be at a transitional point for this awareness. This age differential interpretation is congruent with Piaget's (1965) theorizing that cognitive maturation and experience in reciprocal role taking are necessary before intentions of an act can be considered.

While the effect of rationale orientation on resistance to deviation was not as apparent, person oriented rationales did increase in effectiveness across age, but this effect, contrary to prediction, was somewhat more evident for boys than girls. It was assumed that the socialization of girls with its emphasis on expressiveness and nurturance, and the experience of girls in play activities where feelings are commonly expressed, would increase the salience of a rationale which asked the child to think about the feelings of the other boy/girl who owned the toy. This person emphasis produced the greatest sex differences among the nine-year-old girls, while object oriented rationales were more effective with boys. But, the pattern reversed at the fifth grade. One plausible explanation for this reverse effect is that boys become more person oriented at the fifth grade because of opportunities for leadership and greater peer group participation. This interpretation fits with Devereaux's (1970) observation that girls are more adult conforming and Rottenberg's (1970) finding that social sensitivity was not influenced by sex of the child, although sensitivity scores did increase from the third to the fifth grade.

The increase in effectiveness of the object oriented rationale for the fifth grade girl is more difficult to explain. The analysis for total moral judgment score indicated that these object oriented girls tended to score high on moral judgment. This would suggest that girls may be having a different social learning experience than boys during the nine- to eleven-year age period. It may be that as the girl becomes more firmly feminine sex-typed, objects have a special attraction since her own personal possessions are becoming more important to her at this time. Another possible explanation is that related to reciprocity in conformity to peer group norms. In interpreting this notion of reciprocity, Hartup (1970) has suggested that conformity to peer group norms is reciprocal for boys but not girls. Further, reciprocity plays an important role in moral development in boys. The person oriented rationale directed the child to consider how the boy who owned the toy would feel about others playing with the toy during his absence. This allusion to reciprocity in feelings and consideration for others' property may have been more effective with boys than girls. Whatever the reason for the shift in orientation, it is quite clear that additional research is needed.

The relationship between moral judgment and resistance to deviation suggests that reasoning effectiveness was mediated by moral maturity in accord with Cheyne's (1969) assumption. However, sex of the child and rationale focus and orientation were interacting factors. When punishment belief was used as a measure of moral judgment, children who believed in punishment regardless of the act (i.e., those low in moral judgment) were more deviant in the consequence focus -object orientation condition. This rationale should have matched their moral judgment stage,

yet it was ineffective. Changing the rationale to a person orientation or focusing on intentions increased rationale effectiveness. Apparently reasoning which stresses intentions or is person oriented (i.e., Hoffman's other oriented induction) can be effective with children who are less mature in moral judgment, which has implication for the naturalistic situation. Interestingly, the type of reasoning used in most punishment studies has been consequence focused and object oriented.

Content of the reasoning seemed to be a major determinant in the relationship between the child's level of moral judgment and moral behavior. Reasoning which focused on intentions or was person oriented (i.e., a rationale which implies sufficiency in information and legitimation of inhibition) seemed to be most effective with high moral judgment children clearly indicating a relationship between the cognitive and behavioral aspects of morality. This relationship probably occurred because of the social learning situation in which reasoning commensurate with rules and norms previously acquired by the child was used to legitimate resistance to deviation. In retrospect, it seems quite likely that when physical and cognitive similarity between the present situation and past experiences exists, moral judgment will influence moral behavior.

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## Footnotes

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Table 1

## F Ratios for the Five Resistance-to Deviation Test Measures

Source	df	Latency F	Frequency F	Duration F	Ave Duration per Deviation F	Percent Time Deviating F
Sex (A)	1	3.58	6.40*	13.76**	4.46*	10.44**
Age (B)	2	3.09*	.14	1.56	1.70	2.08
Rationale Focus (C)	1	4.85*	2.72	3.23	3.10	6.39*
Rationale Orientation(D)	1	.10	.36	3.31	.90	4.31*
A x B	2	.01	1.70	.41	1.76	.16
A x C	1	2.42	.55	.87	.41	.04
A x D	1	.006	.04	.32	.08	.05*
B x C	2	1.72	.52	1.93	1.63	.98
B x D	1	1.33	.39	1.56	1.61	.49
C x D	1	.009	.00	.004	.45	.15
A x B x C	2	.82	1.49	.53	.91	.52
A x B x D	2	5.29*	1.63	1.00	.14	1.24
A x C x D	1	.33	.08	.25	.04	.20
B x C x D	2	.29	.72	1.29	.46	1.84
A x B x C x D	2	.62	.47	.32	.26	.54

\*  $p < .05$ \*  $p < .01$

TABLE 2

Means for Consequence and Intentions Focused and  
Object and Person Oriented Rationales\*

Rationale Type	Latency	Frequency	Duration	Ave Duration Per Deviation	Precent Time Deviating
	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
Consequence Focus	130.32 <sup>a</sup>	9.18	270.70	29.41	50.52 <sup>b</sup>
Intentions Focus	252.75 <sup>a</sup>	7.25	188.58	19.00	34.76 <sup>b</sup>
Object Orientation	182.65	8.57	271.20	27.01	49.10 <sup>c</sup>
Person Orientation	200.41	7.87	188.08	21.41	36.17 <sup>c</sup>

\*Means with a common subscript significantly differ from each other,  $p < .05$ .

## Figure Captions

- Figure 1. Latency of Deviation for Age X Rationale Focus
- Figure 2. Duration of Deviations for Age X Rationale Orientation
- Figure 3. Latency of Deviation for Age X Sex of Child X Rationale Orientation
- Figure 4. Latency of Deviation for Total moral Development Score X Sex of Child X Rationale Orientation
- Figure 5. Average Duration per Deviation for Expiatory Punishment X Rationale Focus X Rationale Orientation









