

AN ABSTRACT OF THE THESIS OF

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Title: Effects of Situationally Induced Affect On Boys' Generosity Toward Peers

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Abstract approved: \_\_\_\_\_ Dr. Reese M. House \_\_\_\_\_

This study examines the effect of mood and fairness of treatment on children's generosity toward peers. Thirty-one third and nineteen fourth grade males participated. A positive or negative mood was induced using recorded stories. Each child then played a ring toss game for which he had been promised a certain number of tokens for playing. Three equity conditions were established by under-, over-, or properly paying the amount promised. Children were given the opportunity to anonymously donate to non-present peers who would not have a chance to play.

While the mood manipulation had an effect on observed facial expression in third graders ( $p < .05$ ), there was no similar effect for the fourth graders.

There was no significant differences for mood, equity condition, or grade on donations. A marginally significant ( $p < .08$ ) interaction did occur between the three variables for amount donated. The results of this study suggest that generosity to others involves both cognitive and affective components.

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Effects of Situationally Induced Affect  
on Boys' Generosity Toward Peers

by

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# Effects of Situationally Induced Affect on Boys' Generosity Toward Peers

## CHAPTER I

### INTRODUCTION

In their day-to-day interactions with peers and others, children both give and receive concrete (e.g. toys, food) and intangible goods (e.g. praise, information). In addition, they are often asked to make judgments about how much they or another should give or receive of available goods, and whether particular allocations are fair. These processes are addressed by exchange theories (e.g., Homans, 1961; Adams, 1963; Walster, Walster, and Berscheid, 1978). Research within the perspective of these theories has given some understanding of the developmental course of actions and judgments involving exchanges. Another relevant body of literature exists, however, which has not been well integrated with the material on social exchange. This material concerns the role of affect on behavior. In particular, there is a growing body of research concerning the effects of affect on generosity.

The purpose of this study was to investigate the effect of mood and equity treatment on generosity judge-

ments. The affective state of children was first manipulated by having the children hear a happy or sad story. Children then received more, less, or the amount of payment they expected for playing a game. Finally, children were given an opportunity to share the resources they had earned with others who would not be given the opportunity to play the game.

The following predictions were made: 1) There would be a main effect for affective state with boys who experienced a positive mood donating significantly more than those whose affective states were negative. 2) There would be a main effect for amount of reward received. Children who were overpaid would donate the most to a non-playing peer, while children who were underpaid would donate the least. 3) There would be a significant interaction effect between affective state and amount of reward. In general, negative mood should depress generosity especially in the underpaid and fairly rewarded conditions. This prediction is graphed in Figure 1.

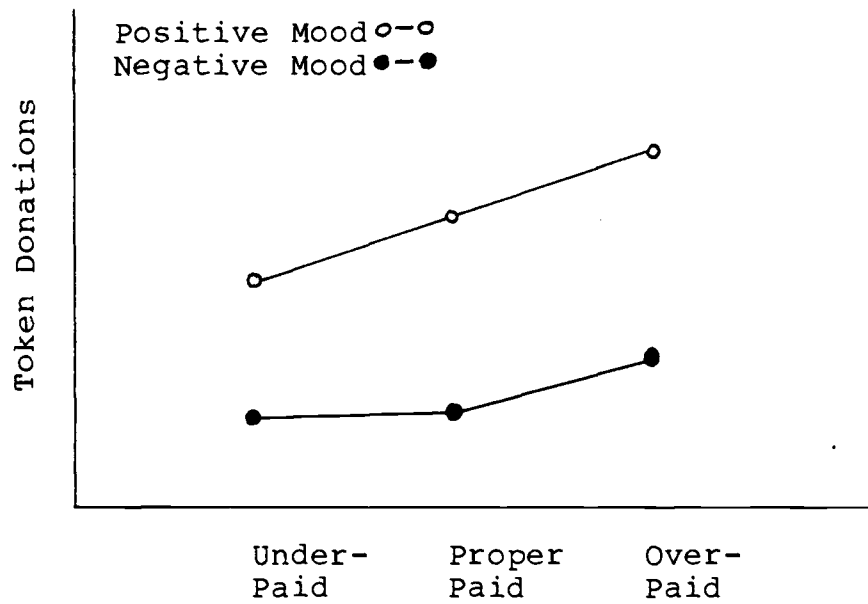


Figure 1. Predicted donation rates for mood and equity conditions.

## CHAPTER II

### REVIEW OF LITERATURE

#### Social Exchange: Equity Theory

The exchange of both tangible and intangible goods is addressed by Equity Theory (Walster, Berscheid & Walster, 1970, 1973; Walster, et. al., 1978). This theory assumes that in a relationship (including short term interactions), people constantly make assessments of all involved parties' outcomes and rewards, including their own, in terms of the inputs and investments of each (Walster, et. al., 1978; Shaw & Constanzo, 1982). Equity involves a perceived state of equilibrium where one person's rate of rewards to their investments is equal to the reward/investment ratio of the other person in the relationship.

Equity theory has four basic propositions (Walster, et. al., 1978). The first is that humans are selfish creatures and can be generally relied on to attempt to secure for themselves maximum rewards (Walster, et. al., 1973). However, if each individual pursued their own desires at will, others would suffer. The second proposition of Equity Theory states that in order to maximize

the benefits to the greatest number of people a system of equitable rewards and costs has evolved and can be applied to each member of the social unit. The group can maintain equitable behavior through the use of rewards and punishments for equitable or inequitable behavior.

Societies may differ in their determination of what is equitable and how equity will be maintained. This same subjectivity applies also at the individual level (West & Wicklund, 1980). Because people wish to gain rewards and avoid punishment they act according to society's rules. People learn "the most profitable way to be selfish is to be 'fair'." (Walster, et. al., 1978, p. 15). The realization that violations of others deservingness threaten the predictability of the norm encourages self-protection by safeguarding the deservingness of others (Long & Lerner, 1974). Because inequitable behavior may be caught and punished the safest behavior is that which gains appropriate rewards, i.e. equitable behavior. However, not all inequitable behavior is discovered and punished. In those cases the individual gains rewards for his inequitable behavior from an unsuspecting society as well as the rewards gained from his equitable behaviors. According to Equity Theory, equitable or inequitable behavior will prevail

depending on which will secure the greatest benefits relative to cost.

A third proposition of Equity Theory indicates that inequity leads to distress in the participants. The greater the inequity the greater the distress in the relationship participants. Those who receive more reward become distressed due to, a) fear of the others retaliation and b) self-concept distress from knowing one has violated an internalized rule. The victim who perceives himself to receive less reward tends to be more distressed by the inequity than the harmdoer. The victim usually experiences anger in such a situation and may demand compensation or retaliate against the other.

Because the inequitable situation is so distressing there will be attempts by the participants to eliminate the distress through behaviors that will restore equity. According to the fourth proposition of Equity Theory, equity may be restored by restoring actual or psychological equity. The exploiter may restore actual equity by compensation of the victim, retaliation, or self-deprivation, while psychological equity may be restored by blaming the victim, minimizing the victim's suffering, denying responsibility for the act or offering an apology. The victim may attempt to restore actual equity by demanding compensation or by retaliating, while

restoring psychological equity involves changing beliefs in order to justify the inequity. For example, victims may attempt to convince themselves that they really were not a victim, that the exploitation did bring about benefits to them, that the exploiter will sometime, somehow and by someone get what they really deserve, or that the exploiter actually deserves the benefits received. While several restoration techniques may be employed by a participant at the same time in the category of compensation or justification, people tend not to employ compensation and justification simultaneously as these techniques have been found to be negatively related; the more one compensates the less justification is employed and vice versa (Walster, et. al., 1978).

#### Developmental Research on Equity

Reward allocation behavior progresses from self-interest, to equality, and then to equitable reward distribution with increasing age (Hook & Cook, 1979; Major & Deaux, 1982; Keil & McClintock, 1983). Prior to age six years the child does not consider the input ratios of participants and allocates outcomes based on self-interest or equality. There is a shift at approximately age six years from equality to equity (Major & Deaux, 1982). From about age six to thirteen years

"ordinal equity" is the predominant basis of reward allocation. There is a rank ordering of individual inputs with an understanding that those with greater inputs should get more rewards but the rewards are not directly proportional to inputs (Hook & Cook, 1979). While individual or group equity can be brought about by external events it is presumed that increasing socialization will internalize it (Shaw & Constanzo, 1982).

A review of thirty-one allocation studies by Keil and McClintock (1983) suggests that by age eight years proportional equity is understood by at least a majority of the children if there is a one-to-one match between inputs and resources. When a one-to-one match is not possible children tend to use ordinal equity or equality rules to make allocation. The use of proportional equity as the predominant means of allocating resources occurs at about age thirteen (Hook & Cook, 1979; Keil & McClintock, 1983). Knowledge and use of allocation rules appear to be closely linked to cognitive-numerical development (Krebs, 1982; Major & Deaux, 1982; Keil & McClintock, 1983).

Situational and Personal Factors  
Which Influence Rewards to Others

Mood

Mood has been shown to be a powerful factor influencing altruistic behavior. Studies on the effects of mood in adults show that situations/tasks producing a positive mood state result in a significant increase in generosity toward others (Berkowitz & Conner, 1966; Isen, 1970; Isen & Levin, 1972).

With children the same pattern is observed, that is, there is a positive relationship between generosity and positive affect. The direct manipulation of children's mood state by task success has been found to increase generosity. Staub (1963) found fifth grade children were more generous with their resources when they won a game than when they failed or were average performers. Isen, Horn, and Rosenhan's (1973) work with first through fourth graders also found an increase in generosity with task success. In a competitive task children who were winners donated more than those children who lost or tied in the game (Barnett & Bryan, 1974).

Not only has mood generated by direct experience been found to influence a child's mood and subsequent behavior but affect generated by having the child imag-

ine or reminisce about an affect-laden event will influence behavior. Moore, Underwood and Rosenhan (1973) asked 7 and 8 year old children to think about events that resulted in happy, sad, or neutral moods. Children who thought about happy events were found to be more generous with resources toward peers who would not be given the opportunity to be involved than those in either the sad or neutral conditions. These results were replicated by Underwood, Froming and Moore (1977) and again by Froming, Allen and Underwood (1983), demonstrating the effect of positive affect on generosity and the tendency for children's generosity to increase with age. In addition, studies by Long and Lerner (1974), and Miller and Smith (1977) investigated over-, under-, or proper-payment for tasks. It can be argued that those children who were overpaid were experiencing positive affect while the proper-paid and underpaid subjects were experiencing neutral and negative affect. In both studies the children who were overpaid were more generous with resources than in the other conditions. In general, conditions that produce positive affect in the individual tend to consistently increase altruistic behavior in both adults and children (Krebs, 1970; Cialdini, Kenrick and Baumann, 1982).

In adults, negative mood states have been found to

produce an increase in generosity (Cialdini, Darby & Vincent, 1973). Transgressions are thought to produce a negative state. Cialdini and his colleagues propose a Negative State Relief Model (Cialdini & Kenrick, 1976; Kenrick, Baumann & Cialdini, 1979) which postulates that an individual will attempt to reduce the negative affect through performance of behavior that is self-gratifying and works to relieve transient negative mood states in the same manner that other mood strengthening experiences will. In this model altruism is seen as hedonism in that the altruistic behavior produces positive gains for the benefactor and the recipient. The potential benefactor's distress seemingly acts as a motivator to generous behavior. Walster, et. al., (1973) also address "equity distress" as a motivator of behavior. Thus, with adults both positive and negative moods increase generosity and produce a U-shaped curve for mood and generosity.

Negative moods in children do not follow the adult pattern. For children the pattern is reversed. Children have been found to be least generous when in a negative mood state. In females, the pattern begins to become similar to adult behavior at approximately the twelfth to thirteenth year. With males behavior becomes adult-like between the ages of thirteen to fifteen years old

(Cialdini & Kenrick, 1976; Cialdini, et. al., 1982). Work by Isen and her colleagues (Isen, et. al., 1973, first and third studies) involved mood manipulation of children by producing winners and losers in a game situation. Those who failed the game donated less to charity than did the winners and the controls. Also studied were the effects of observed versus unobserved failures. Children who were unobserved failures donated less than those children who failed the task and were observed. Barnett and Bryan's (1975) study with children in a competitive situation who were losers found that children who lost were less generous with their resources. Children who are asked to reminisce or think sad thoughts have been found to be less generous than those children thinking neutral or happy thoughts (Moore, et. al., 1973; Rosenhan, Underwood and Moore, 1974; Cialdini & Kenrick, 1976; Underwood, et. al., 1977). Therefore, it would appear that the relationship between mood and children's generosity is generally linear in nature. Studies by Moore, et. al., (1973) and Underwood, et. al., (1977) involving situations where children were asked to think about positive, negative, or neutral events found positive thoughts resulted in the most generosity, negative thoughts the least amount of generosity, while children thinking neutral

thoughts gave more than in the negative but less than the positive conditions.

There appears to be some exceptions to the above pattern of generosity. Staub's (1963) study with fourth and fifth grade children found that a failure situation produced greater generosity in the younger children than in same aged controls. Isen, et. al.'s (1973) studies found that if the child was aware that the experimenter knew of his failure on a task there was a tendency to give more of one's resources than if the failure was unobserved. It was postulated that the child was engaging in "image repair". Kenrick, et. al. (1979) also observed an increase in generosity in negative mood children when publicly observed. It was proposed that the mood effects brought about by failure could be repaired by behaving generously and receiving recognition for that behavior.

The focus of a child's negative thoughts also influences generosity. When children were asked to relate a sad experience they or another child had had, self-focus resulted in decreased generosity while an other-focus increased generosity (Barnett, King and Howard, 1979). Barnett, Howard, Melton, and Dino (1982) had high and low empathic children discuss a sad or neutral incident involving themselves or another child. They found that when asked to dwell on the sad other,

children who were highly empathic were more generous than low empathic children.

### Empathy/Role Taking

Empathy, an affective mirroring of another's experienced emotions based on the other's situation or affective display, is distinguished from role-taking which involves accurately comprehending (cognition) what the other is experiencing (affectively, cognitively, and/or perceptually) but does not require the actual mirroring of the other's affective condition (Perry & Bussey, 1984).

The ability to empathize or experience emotions of the potential recipient is a factor in helping behaviors (Aronfreed, 1968). Hoffman (1975) believes that both empathy and role-taking abilities must be present within an individual to motivate altruistic behavior. Aroused empathy will not lead to altruistic behavior unless the person is able to take the other's role and realizes it is the situation that is promoting the affective reaction. While an understanding of the situation will help one to understand another's reactions, activated altruistic behavior depends on the observer imagining how it would feel to be in the situation himself. Role-taking ability tends to relate positively with prosocial behavior (Perry & Bussey, 1984). The empathically aroused

child may give aid to alleviate mutual distress or bring vicarious pleasure (Barnett, 1982). Selman (1976) suggests that children seven years and older can take the role of another and imagine the role taking experiences of another. They can appreciate another's perspective and emotional state and can see how altruistic behavior will affect both the other and themselves as well. Younger children are hampered by egocentrism and centration. While they probably can see how their actions would make another feel better they are unable to see how their actions will also affect their own mood state.

### Affect and Equity

According to Graziano (in press), theories of equity stressing a cognitive-mechanical approach to justice and deservedness may be only partially effective in explaining and predicting equity behavior. The tendency for humans to make equity judgements exclusively through the computation of inputs and outcomes would appear to be both narrow in focus and simplistic in explaining complex social behavior. While the ability to reason effectively is important in making equity judgements the contribution of mood state must also be equally considered. Graziano has suggested a four stage/sequential model of equity decision-making which emphasizes both "cold" cognitions

and "hot" affective elements. Hedonic relevance of the situation for the individual will determine how strongly each element contributes to the judgement of deservedness. While some situations will be decided on quickly and possibly without much thought, other situations with high hedonic relevance may involve a longer interval to arrive at a decision after much weighing of both cognitive and affective elements.

According to Masters, Carlson, and Rahe (1985) Equity Theory has been a highly accepted explanation for children's self-gratification or generosity. However, evidence has shown that affective states do influence children's resource allocation behavior. While the consequences of comparing one's outcomes to the outcomes of others may be behavioral, cognitive or affective in nature, there has been little research concerning the role of affect in equity behavior. Yet, equity may be influenced by the interaction of the three consequences of comparison individually or in combination.

The Masters, et. al., (1985) study investigated the affective results of social comparison with first and second grade children. Children were observed for affective reactions after inequities were established by the over- or underpayment of a subject relative to a peer companion for task behavior. Subject children ex-

pressed sadness when they received less than their peer and happiness when they received more. When the first situation in a multiple comparison sequence resulted in a positive inequity favoring the subject, a positive mood occurred and self-gratification was decreased regardless of the subsequent experience and affect. Negative inequities, regardless of their position in the two-part sequence, resulted in the subject's decreased generosity to others. Masters, et. al. (1985) suggest that models of equity must also take into account both the affective reaction and sequence of experiences to understand net equity or inequity. Children's behavior in the study did not reflect the equity maintenance motive that has been postulated by others. It would seem, as Graziano (in press) has indicated, that cognitions about equity are not the sole factor influencing reward distribution but that equity decisions are also impacted by affective states. Masters, et. al. (1985) have also suggested that pattern plays a role in multiple comparison resource distribution studies.

## CHAPTER III

### RESEARCH AND DESIGN PROCEDURES

#### Method

##### Subjects

Thirty-one<sup>1</sup> third and nineteen fourth grade male children participated in this study. The participants all attended an elementary school in a small University community. Parental permission letters (See Appendix C) were sent home with all third and fourth grade boys. Each child was randomly assigned to either the "happy" or "sad" story condition and then to a condition where they were overpaid, underpaid or properly paid for their participation in a simple ring toss game.

##### Apparatus

The apparatus used in this study was a modified ring toss game. It consisted of a natural wood board (91.44 cm x 10.16 cm x 3.81 cm), with three painted dowels whose exposed heights and diameters were 16.5 cm x 1.27 cm (red); 24.13 cm x 2.54 cm (yellow); and 31.75 cm x 3.81 cm (blue). The dowels were placed 40.64 cm apart. Three sets of three rings were constructed with inside

diameters measuring 4.44 cm, 7.62 cm, and 12.70cm. These were made from black, plastic, .64 cm diameter rope. The peg board was placed 91.5 cm away from a parallel 45.72 cm throw line with the red peg on the left side.

### Procedure

The subject was brought to the testing room by one of two female assistants (See Appendix D for complete instructions). Prior to taking the child to the testing room the Assistant introduced herself to the subject and then asked the child if he wanted to accompany her to a room and play a game. Upon entering the testing room the Assistant introduced the child to the Experimenter. The child was then asked to be seated at a small table and asked if he would like to play a game. The Experimenter explained to the child that she was conducting a test of a new version of a ring toss game.

The Experimenter then indicated that she had to go into the next room to prepare the game. While she was busy the child was asked to listen to a recorded story accompanied by a picture book (See Appendix E). During the story period the child heard a short story, of approximately 5 1/2 minutes, that was concerned with either sad or happy events. At the end of the story,

the Assistant entered the room and conducted an assessment of the child's mood state. The Assistant then brought the child to the second room and left him there with the Experimenter who conducted the ring toss game.

The child was told that he would receive some (5, 10 or 15) prize chips just for playing the game and that the prize chips could be turned in later for small prizes. The child was given the three smallest rings, then the middle sized rings and finally the three largest rings to try. At the completion of the game the Experimenter told the child that she had several questions to ask him about the game and then gave the child the 5, 10, or 15 prize chips promised. After a brief delay the Experimenter excused herself from the room on the pretense of retrieving the game questions inadvertently left in another room. Prior to leaving the Experimenter gave the child 10 prize chips regardless of how many he was promised.

In the over-reward condition, children were told they would receive 5 prize chips (and received 10), in the equitable condition, children were promised 10 prize chips (and received 10), and in the under-reward condition, children were promised 15 prize chips (but received only 10). Thirty seconds after the Experimenter left the room the Assistant entered, assessed the child's mood

state and then indicated to the child that some third (or fourth) grade boys at the school would not be able to play the game. A small box, labeled "Tokens for Other Boys" and containing 10 prize chips was placed on the table. The child was told that he could give some of his prize chips to non-playing peers by putting any number of his tokens into the box. The rest of the tokens could be used later to trade in for prizes. The Assistant explained that the Experimenter would return in a minute and then left the room.

After one minute the Experimenter returned with the game questions. For those children who were underpaid, the Experimenter indicated that a mistake had been made and gave the child 5 more chips. All children were then asked several questions about the game. The child was then brought back into the first room and told that he could exchange his prize chips for small prizes. The Experimenter exited the room. The Assistant helped the child redeem his tokens for small prizes. The Assistant asked the child if he had donated some of his chips and his rationale for donating or not donating. He was then asked to keep the game a secret from his classmates and then escorted back to his classroom by the Assistant.

## CHAPTER IV

## PRESENTATION AND ANALYSIS OF THE DATA

Preliminary Analyses

Reliability. For all children a visual assessment of mood was made by an assistant after the child heard the mood-inducing story (Mood 1) and again after the child received payment for participating (Mood 2). The child's mood was rated as very happy (5), somewhat happy (4), no observable mood (3), somewhat sad (2), or very sad (1). For 17 (34%) of the assessments, two assistants individually recorded the child's mood. Inter-rater reliability was assessed by calculating a Pearson product-moment correlation between the ratings of assistant 1 and assistant 2 for Mood 1 and also between assistant 1 and assistant 2 for Mood 2.

Significant positive relationships were observed in inter-rater reliability for Mood 1,  $r = .983$ ,  $p < .001$ , and for Mood 2,  $r = .988$ ,  $p < .001$ .

Manipulation Check. In order to assess whether the happy and sad stories had the intended effect on mood, a 2 X 2 X 3 analysis of variance (ANOVA) was performed on assessments of mood after the stories (Mood 1). Factors in the ANOVA were type of mood-inducing story (sad, hap-

py), grade (third, fourth), and equity condition (underpaid, properly paid, overpaid).

There was a significant main effect for type of story (manipulated mood) on observed mood,  $F(1,38) = 8.86$ ,  $p < .005$ . Children who heard a sad story were observed to have a more negative mood ( $M = 2.70$ ) than the children who heard a happy story ( $M = 3.39$ ).

This effect, however, was qualified by a significant two-way interaction between story (manipulated mood) and grade,  $F(1,38) = 5.65$ ,  $p < .05$ . These means are presented in Table 1. The happy and sad stories produced corresponding moods in the third grade boys. The sad story produced a corresponding mood in the fourth grade boys, however, the happy story did not produce an observed corresponding mood. Thus, the observed effect of story on mood occurred primarily for the third graders. There was no difference between the moods of the fourth graders who heard the sad story and the fourth graders who heard the happy story.

In addition to these effects, there was also a significant two-way interaction between equity condition and grade on mood after hearing the story,  $F(2,38) = 3.75$ ,  $p < .05$ . These means are presented in Table 2. Post-hoc analyses indicated that the only significant difference was between third graders who were underpaid

Table 1

MEAN RATINGS OF MOOD FOR THIRD AND FOURTH GRADE BOYS WHO  
HEARD A SAD OR HAPPY STORY

Grade	Type of Mood-Inducing Story	
	Sad	Happy
Third	2.65a	3.79
Fourth	2.80a	2.79a

Note. Ratings of mood could range from 1 to 5, with 1 being very sad, 3 neutral, and 5 very happy. Means not sharing a common subscript, are significantly different at  $p < .05$  by Duncan's Multiple Range Test.

Table 2

MEAN RATINGS OF MOOD AFTER MOOD-INDUCING STORY FOR THIRD  
AND FOURTH GRADE BOYS WHO WERE LATER ASSIGNED TO  
DIFFERENT EQUITY CONDITIONS

Grade	Future Equity Condition		
	Underpaid	Properly Paid	Overpaid
Third	2.50a	3.30ab	3.64b
Fourth	3.00ab	2.67ab	2.67ab

Note. Ratings of mood could range from 1 to 5, with 1 being very sad, 3 neutral, and 5 very happy. Means not sharing a common subscript, are significantly different at  $p < .05$  by Duncan's Multiple Range Test.

and third graders who were overpaid. These Differences were not expected and, in fact, there should have been no differences for the equity condition because children were randomly assigned to conditions and the manipulation for the equity condition had not yet occurred when mood was first assessed. These differences can only be due, therefore, to unfortunate randomization and the small sample size. Overall, it would appear that condition randomization was complete.

In addition to the ANOVA, a point-biserial correlation was calculated to determine the degree of relationship between story and mood. There was a significant correlation between the type of story listened to and the assessed mood after the story,  $r(49) = .346, p < .01$ .

### Tests of Predictions

Donation of Prize Tokens to Peers. In order to assess whether or not the manipulated mood and equity treatment had an effect on the boys' generosity, the number of prize tokens donated to anonymous peers was analyzed in a 2 X 2 X 3 ANOVA. Factors in the ANOVA were the same as in previous analyses.

It was predicted that there would be a main effect for affective state with those experiencing a positive mood donating significantly more than those boys whose

affective state was negative. There was no significant main effect for mood ( $F < 2.00$ ).

A second prediction was that there would be a main effect for equity condition in amount donated. Boys who were overpaid were expected to donate more to a non-playing peer, while those who were underpaid would donate the least. There was no significant effect for equity condition ( $F < 1.00$ ).

While predictions were not made regarding a main effect for grade it should be noted that there were no significant differences in amount donated by third and fourth grade boys ( $F < 1.00$ ).

A third prediction was that there would be a significant interaction between affective state and the amount of reward received. In general, a negative mood should depress generosity, especially in the under-paid and properly paid conditions. There was a marginally significant three-way interaction between mood, equity condition, and grade ( $F(2,38) = 2.73, p = .078$ ). These means are graphed in Figure 2. The graph would tend to indicate that donation amounts for third and fourth graders who heard the sad story were about the same, not varying greatly in donated amount over all equity conditions. Fourth graders who heard the happy story and were underpaid donated an average of five tokens while the

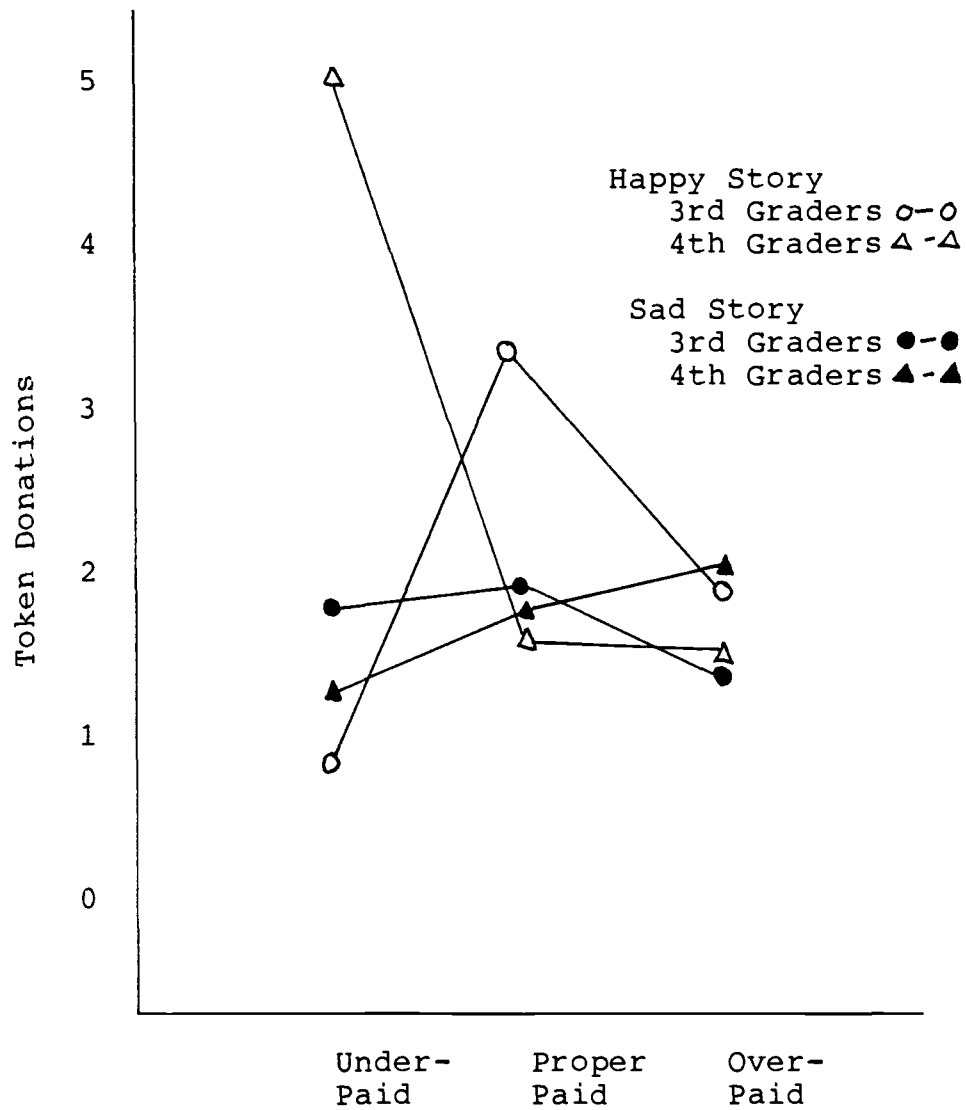


Figure 2. Mean donation rates for third and fourth grade boys according to mood and equity condition.

third graders who heard the happy story and were underpaid donated less than one token on the average.

Mood after Payment. In order to assess whether the equity condition (underpaid, properly paid, overpaid) had an effect on mood, a 2 X 2 X 3 ANOVA was performed on the assessments of mood after the child was paid (Mood 2). Factors in the ANOVA were the same as in previous analyses. There were no significant main effects or interactions (all  $F$ 's < 2.00). The children, regardless of the payment condition, were generally rated by the observer as having a neutral facial affect. These means are presented in Table 3.

Table 3

MEAN RATINGS OF MOOD AFTER PAYMENT FOR THIRD AND FOURTH  
GRADE BOYS

Story	Equity Condition	Grade	Mean
Sad			3.04
	Underpaid		3.11
		Third	3.20
		Fourth	3.00
	Properly paid		3.00
		Third	3.00
		Fourth	3.00
	Overpaid		3.00
		Third	3.17
		Fourth	2.67
Happy			3.13
	Underpaid		2.75
		Third	2.80
		Fourth	2.67
	Properly paid		3.43
		Third	3.50
		Fourth	3.33
	Overpaid		3.25
		Third	3.00
		Fourth	3.67

Note. Ratings of mood could range from 1 to 5, with 1 being very sad, 3 neutral, and 5 very happy.

## CHAPTER V

## DISCUSSION

The purpose of this study was to investigate the effect of affect and perceived equity on third and fourth grade boys' behavior toward peers. A happy or sad story was used to manipulate the child's affective state. The child was then promised a specific payment for his participation in a simple game. However, the actual payment the child received was more, less, or the same as promised. This created an equitable situation (amount paid was amount promised) or inequitable situation (amount paid was more or less than amount promised). The child was then given the opportunity to share resources with non-present peers who were unable to play the game.

The mood manipulation stories had the desired effect on the third grade boys, however, they had an observed effect only for the sad story on the fourth grade boys. Fourth grade boys who heard the happy story had observed mood ratings almost identical to those who heard the sad story. The fourth grade boys' scores on both stories were closer to a neutral affective state than those of the third grade boys.

There are several possible reasons for these findings. First, cultural pressures to suppress extreme emotional responses may be more fully socialized in the fourth grade boys causing them to inhibit more socially visible reactions (Ausubel, 1958; Freedman, Loring, & Martin, 1967). Second, with maturity children learn to vary the intensity of their response to excitants. Older children's response repertoires become increasingly graduated allowing a more appropriate response intensity for each situation encountered (Ausubel, Sullivan & Ives, 1980; Kagan, 1978). Finally, with age, the events in a child's world become more commonplace. Although the child is more responsive to subtle excitants and therefore reactive to an increasing number of events, the child is also simultaneously becoming desensitized to other stimulants. To help interpret the world the child has an increasing number of experiences available as references. With critical ability and more self-control, older children become less emotionally aroused by previously experienced provocative stimuli (Anderson, 1950; Lacey and Vanlehn, 1952; Kagan, 1978). Thus, the observed mood in the fourth graders may have been less affected by the manipulation and/or it may have been less easy to detect. Unfortunately, there is no way to judge which interpretation is correct.

It was predicted that boys' who experienced a positive mood would donate more of their resources than those who experienced a negative mood. Although the results were not significant, boys who heard the sad story donated fewer tokens than those who heard the happy story. This is consistent with results of past studies of children's generosity and mood state (e.g. Staub, 1968; Moore, et. al., 1973; Rosenhan, et. al., 1974; Underwood, et. al., 1977). Failure to obtain significance may have been due to the study's small sample size.

A main effect was predicted for the amount of payment received. It was anticipated that children who were overpaid would donate the most to a non-playing peer, while underpaid children would donate the least. This prediction was not supported; a significant effect for equity condition was not obtained.

The final prediction was that an interaction between affective state and equity condition would occur. It was believed that negative mood would depress generosity, particularly in the underpaid and properly paid conditions. A marginally significant interaction did occur between mood and equity condition, but this interaction also included grade. Fourth graders who heard the happy story and were underpaid donated an average of five tokens while the third graders who heard the happy story

and were underpaid donated less than one token. The fourth graders were apparently following a more adult pattern of maintaining a positive mood threatened by underpayment by donating in order to feel good about themselves (e.g. Cialdini, et. al., 1973; Walster, et. al., 1973; Cialdini and Kenrick, 1976; Kenrick, et. al. 1979).

Third grade boys who heard the happy story and were underpaid donated the fewest tokens. Apparently, they were attempting to preserve their happy mood by retaining resources that were in their possession. In contrast to the fourth graders, they were not using the donation of tokens as a means of making themselves feel happy by giving to someone with less resources. Because the third and fourth grade boys' pattern of donations over all equity conditions does not resemble the pattern expected from a pure equity theory approach, it is likely that mood was also influencing the boys' behavior.

The results of this study would appear to generally fit the findings of Masters, et. al. (1985) indicating that negative mood states brought about by underpayment had a cumulative effect and reduced children's generosity to peers. The low donation rates for both third and fourth grade boys who heard a sad story was likely a result of the negative mood. This effect may also ac-

count for the low donations by third graders who heard the happy story and were underpaid. The negative cumulative effect does not appear to account for the high donations in fourth graders who heard the happy story and were underpaid or the failure of third graders to have high donation rates when in a happy mood and overpaid. Perhaps a larger sample size would have made a difference in donations in the respective conditions.

When one reviews the data in terms of directions and differences between the two mood observations (after the story and again after the child received payment) there is a tendency for the moods observed the first time to become more neutral at the time of the second observation. Several possible explanations may account for the loss of the higher emotional intensities. While the stories had an effect on mood, other related events may have distracted the child from the feelings the story generated. The child's playing the game may have produced other emotional responses. The affect established by the story may have occurred due to sympathy for the story's object and/or by a recollection of similar feelings. However, playing the game may have stirred feelings of a more immediate personal nature. While the child was told he would receive payment for "just playing the game", the child's personal interpretation of success

or failure may have generated a positive or negative mood. The child, while not in competition with others, may have been in competition with his own expectations of success. The presence of the Experimenter may have reinforced the child's mood as she was witness to the child's ring tossing skill. Another possible explanation for the loss of emotional intensity may have been the child's failure to count the number of tokens he had been given and therefore he may not have realized he had been overpaid or underpaid. While some of the children did indeed report a shortage or excess in the number of tokens they received some of the children did not. If the child did not count his tokens the elapsed time from hearing the story to receiving payment may have allowed the mood to weaken.

The current study is a preliminary investigation and further research is needed to assess the impact of mood and equity condition on children's generosity. One problem in this study was the assessment of mood. Future studies might make use of videotape recordings (as Masters, et. al. have done) and also self reports. Efforts should be made to produce stories and game situations of equal impact across situational and developmental levels.

Research investigating the effect of mood and equity

on generosity should include more children of different ages and sex. The effects of competitive and noncompetitive situations also require further investigation. Multiple mood and/or multiple equity condition studies will also provide valuable information. The understanding of effects produced by variable weighting of mood or equity condition must not be ignored.

The importance of the present study as well as future research is the further expansion of our understanding of how cognition, affect, and the situation interact to influence children's equity judgements and behavior.

## REFERENCES

- Adams, J. S. (1963). Toward an understanding of inequity. Journal of Abnormal and Social Psychology, 7, 422-436.
- Anderson, J. E. (1950). Changes in emotional responses with age. In M. L. Reymert (Ed.), Feelings and emotions. New York: McGraw-Hill.
- Aronfreed, J. (1968). Conduct and conscience: The socialization of internalized control over behavior. New York: Academic Press.
- Ausubel, D. P. (1958). Theory and problems of child development. New York: Grune and Stratton.
- Ausubel, D. P., Sullivan, E. V., & Ives, S. W. (1980). Theory and problems of child development. New York: Grune and Stratton.
- Barnett, M. A. (1982). Empathy and prosocial behavior in children. In T. M. Field, A. Huston, H. C. Quay, L. Troll, & G. E. Finley (Eds.), Review of Human Development (pp. 316-326). New York: John Wiley & Sons.
- Barnett, M. A., & Bryan, J. H. (1974). Effects of competition with outcome feedback on children's helping behavior. Developmental Psychology, 10, 838-842.
- Barnett, M. A., Howard, J. A., Melton, E. M., & Dino, G. A. (1982). Effect of inducing sadness about self or other on helping behavior in high- and low-empathic children. Child Development, 53, 920-923.
- Barnett, M. A., King, L. M., & Howard, J. A. (1979). Inducing affect about self or other: Effects on generosity in children. Developmental Psychology, 15, 164-167.
- Berkowitz, L., & Conner, W. H. (1966). Success, failure, and social responsibility. Journal of Personality and Social Psychology, 4, 664-669.
- Cialdini, R. B., Darby, B. L., & Vincent, J. E. (1973). Transgression and altruism: A case for hedonism. Journal of Experimental Social Psychology, 9, 502-516.

- Cialdini, R. B., & Kenrick, D. T. (1976). Altruism as hedonism: A social development perspective on the relationship of negative mood state and helping. Journal of Personality and Social Psychology, 34, 905-914.
- Cialdini, R. B., Kenrick, D. T., & Baumann, D. J. (1982). Effects of mood on prosocial behavior in children and adults. In N. Eisenberg (Ed.), The development of prosocial behavior (pp. 339-359). New York: Academic Press.
- Freedman, D. G., Loring, C. B., & Martin, R. N. (1967). Emotional behavior in personality development. In Y. Brackbill (Ed.), Infancy and early childhood: A handbook and guide to human development (pp. 429-502). New York: Free Press.
- Froming, W. J., Allen, L., & Underwood, B. (1983). Age and generosity reconsidered: Cross-sectional and longitudinal evidence. Child Development, 54, 585-593.
- Graziano, W. G. (in press). Lost in thought at the choice point: Cognition, context, and equity. In J. C. Masters & W. P. Smith (Eds.), Social comparison, social justice, and relative deprivation: Theoretical, empirical, and policy perspectives. Hillsdale, NJ: Erlbaum.
- Hoffman, M. L. (1975). Altruistic behavior and the parent-child relationship. Journal of Personality and Social Psychology, 31, 937-943.
- Homans, G. C. (1961). Social behavior: Its elementary forms. New York: Harcourt, Brace & World.
- Hook, J. G., & Cook, T. D. (1979). Equity theory and the cognitive ability of children. Psychological Bulletin, 86, 429-445.
- Isen, A. M. (1970). Success, failure, attention and reaction to others: The warm glow of success. Journal of Personality and Social Psychology, 15, 294-301.
- Isen, A. M., Horn, N., & Rosenhan, D. L. (1973). Effects of success and failure on children's generosity. Journal of Personality and Social Psychology, 27, 239-247.
- Isen, A. M., & Levin, P. F. (1972). Effect of feeling good on helping: Cookies and kindness. Journal of Personality and Social Psychology, 21, 354-358.

- Kagan, J. (1978). The growth of the child: Reflections on human development. New York: W. W. Norton and Company, Inc.
- Keil, L. J., & McClintock, C. G. (1983). A developmental perspective on distributive justice. In D. S. Messick & K. S. Cook (Eds.), Equity theory: Psychological and sociological perspectives (pp. 13-46). New York: Praeger Publishers.
- Kenrick, D. T., Baumann, D. J., & Cialdini, R. B. (1979). A step in the socialization of altruism as hedonism: Effects of negative mood on children's generosity under public and private conditions. Journal of Personality and Social Psychology, 37, 747-755.
- Krebs, D. L. (1970). Altruism - an examination of the concept and a review of the literature. Psychological Bulletin, 73, 258-302.
- Krebs, D. L. (1982). Prosocial behavior, equity, and justice. In J. Greenberg & R. L. Cohen (Eds.), Equity and justice in social behavior (pp. 261-308). New York: Academic Press.
- Lacey J. I., & Vanlehn, R. (1952). Differential emphasis in somatic response to stress. Psychosocial Medicine, 14, 71-81.
- Long, G.T., & Lerner, M.J. (1974). Deserving, the 'personal contract', and altruistic behavior by children. Journal of Personality and Social Psychology, 29, 551-556.
- Major, B., & Deaux, K. (1982). Individual differences in justice behavior. In J. Greenberg, & R. L. Cohen (Eds.), Equity and justice in social behavior (pp. 43-76). New York: Academic Press.
- Masters, J. C., Carlson, C. R., & Rahe, D. F. (1985). Children's affective, behavioral, and cognitive responses to social comparison. Journal of Experimental Social Psychology, 21, 407-420.
- Miller, D. T., & Smith, J. (1977). The effect of own deservingness and deservingness of others on children's helping behavior. Child Development, 48, 617-620.
- Moore, B. S., Underwood, B., & Rosenhan, D. L. (1973).

Affect and altruism. Developmental Psychology, 8, 99-104.

Perry, D. P., & Bussey, K. (1984). Social development. New Jersey: Prentice-Hall, Inc.

Rosenhan, D. L., Underwood, B., & Moore, B. (1974). Affect moderates self-gratification and altruism. Journal of Personality and Social Psychology, 30, 546-552.

Selman, R. (1976). Social-cognitive understanding: A guide to educational and clinical practice. In T. Lickona (Ed.), Moral Development and Behavior (pp.299-316). New York: Holt, Rinehart, and Winston.

Shaw, M. & Constanzo, P. (1982). Theories of social psychology. New York: McGraw-Hill Book Company.

Staub, E. (1963). The effects of success and failure on children's sharing behavior. Paper presented at the meeting of the Eastern Psychological Association, Washington, D. C.

Underwood, B., Froming, W. J., & Moore, B. S. (1977). Mood, attention, and altruism: A search for mediating variables. Developmental Psychology, 13, 541-542.

Walster, E., Berscheid, E., & Walster, G. W. (1970). Reactions of an exploiter to the exploited: Compensation, justification or self-punishment? In J. R. Macaulay & L. Berkowitz (Eds.), Altruism and helping behavior. New York: Academic Press.

Walster, E., Berscheid, E., & Walster, G. W. (1973). New directions in equity research. Journal of Personality and Social Psychology, 25, 151-176.

Walster, E., Walster, G. W., & Berscheid, E. (1978). Equity: Theory and research. Boston: Allyn & Bacon, Inc.

West, S. C., & Wickland, R. (1980). A Primer of social psychological theories. Monterey: Brooks-Cole Publishing Company.

## FOOTNOTES

<sup>1</sup>Three subject's were dropped from the study due to their failure to understand instructions.

## APPENDICES

## APPENDIX A

Approval From Oregon State University's Committee  
for the Protection of Human Subjects

## OREGON STATE UNIVERSITY

## Committee for the Protection of Human Subjects

Chairman's Summary of Review

Title: Effects of Situationally Induced Affect on Boys' Generosity Toward Peers

Program Director: Reese M. House

## Recommendation:

- ☒ Approval \*
- ☐ Provisional Approval
- ☐ Disapproval
- ☐ No action

\* The informed consent forms obtained from each subject need to be retained for the long term. Archives Division of the OSU Department of Budgets and Personnel Service is willing to receive and archive these on microfilm. At present at least, this can be done without charge to the research project. Please have the forms retained in archives as well as in your files.

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

Date: 4-21-96

Signature Redacted for Privacy

If the recommendation of the committee is for provisional approval or disapproval, the program director should resubmit the application with the necessary corrections within one month.

## APPENDIX B

Letter From the Assistant Superintendent of the  
Corvallis School District to the Principal of Wilson  
Elementary School

April 17, 1986

Dan Hays, Principal  
Wilson School

Dear Dan:

This letter will introduce Marilyn Palmer, who would like to do research at Wilson School using 4th and 5th grade boys in order to satisfy dissertation requirements.

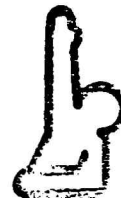
While I have not read her proposal, I have discussed it with her. She has permission to do the research provided you agree. If you have any question, please call me.

Sincerely,

Redacted for Privacy

Shirley A. Woods  
Assistant Superintendent

/pb



CORVALLIS  
SCHOOL  
DISTRICT  
509J

Excellence in  
Education

## APPENDIX C

Parent Permission Letter

A merged School serving Oregon State University and Western Oregon State College with graduate and undergraduate programs in Education.

April 24, 1986

To the Parents or Guardians of \_\_\_\_\_

Some of the boys from your child's class will soon be participating in a research project which I will be conducting at Wilson Elementary School. This letter is to tell you about this project and ask your permission for your child to participate.

The study is concerned with children's interactions with other children and decisions made as a result of the task situation. Children will play a game appropriate to their age level and later be asked to make a decision regarding the allocation of tokens earned in the game. Your child's name will appear only on the data collection sheets of this study, and individual results will not be reported in any way. Once results have been analyzed, all individual information will be destroyed.

The research will take place in the school during school hours and will require about 10 minutes of your child's time. Your child's teacher will decide on an appropriate time for his participation so that classroom instruction is not interrupted. Your child may refuse to participate or may withdraw from this project at any time if he wishes.

I think your son would enjoy participating in this project. The information we gain from it will contribute to our knowledge of children's interactions.

This study will be conducted by Marilyn Palmer, who is a doctoral candidate in Education. If you have any questions concerning this study, please call her (collect) at 371-6698 evenings. Regardless of whether you are willing or not willing to let your child participate, please return the attached form.

Thank you for your cooperation.

Sincerely,

Dr. Reese House  
OSU/WOSC  
School of Education

-----  
Check One:           PLEASE RETURN THIS PART TO SCHOOL

- (   ) YES, my child may be in the project about children's interactions.
- (   ) NO, my child may not be in the project about children's interactions.

\_\_\_\_\_  
Child's Name

\_\_\_\_\_  
Teacher

\_\_\_\_\_  
Parent's Signature

\_\_\_\_\_  
Date

## APPENDIX D

Instructions to Study Participants

Assistant: Assistant brings child into room and introduces child to Experimenter. "\_\_ (child's name) \_\_, this is Marilyn, Marilyn this is \_\_ (child's name) \_\_, and he is here to play the game."

Experimenter: "Hello \_\_ (child's first name) \_\_. Let's go in here and sit down. I have some questions to ask you before we begin. \_\_ (child's name) \_\_, what is your last name? How old are you? What is your teacher's name? Would you like to play a game? I am asking boys in your grade to help me try out a new ring toss game and then tell me what they think of it. I have to finish getting ready. While I am doing that I would like you to listen to a story. The story is here on the tape recorder, which I will start for you. Here is the book to go with it. When the story is finished call me, ok?"

Assistant: When child calls the Assistant walks in evaluates the child's mood and then escorts the child into the next room. "Ok, \_\_ (child's name) \_\_ now I will take you into the next room where Marilyn is waiting."

Experimenter: "Could I get you to stand right about here (indicates a line on the floor)? This is a

new ring toss game (pointing toward the pegs) and as you can see it is different from most ring toss games. For just trying out the game today I will give you \_\_ (5, 10, or 15) prize chips like this (shows child chips). These are like money and can be used to buy some prizes when you are through. The prize chips are just for playing the game.

Everyone gets nine tries. First try the 3 little rings (hands child the three small rings). Here's three more that are a little bigger (hands child middle size rings). And last try these rings that are bigger still (hands child the three biggest rings). That was your last throw. Now I would like you to sit down here (indicates two child-size chairs) and I will ask you some questions about the game and then give you the \_\_ (5, 10, or 15) prize chips I promised you." The Experimenter searches briefly through a clip board with papers on it. "I guess I have left the questions that I wanted to ask you in the other room. While I am getting them I will go ahead and give you the prize chips I promised you (stands and hands the child 10 tokens)." The Experimenter quickly leaves the room closing the door on the way out.

Assistant: After the Experimenter has left the room for 30 seconds the Assistant enters and explains

the opportunity to donate. "Some of the boys in your grade will not get to play this game. You may want to give some of your prize chips to those boys so they can buy some prizes, too. If you want to give some of your prize chips to the other boys, you can put them in this box (puts box on the table which contains 10 tokens). We will give the prize chips in this box to the boys who are not playing the game. Marilyn will be back in a minute and then we will let you use your prize chips to buy some prizes." The Assistant then leaves the room.

Experimenter: The Experimenter reenters the room after 60 seconds and sits down at the table. For those children who were underpaid - "I am sorry I just realized that I gave you only 10 prize chips and I promised you 15. Here is the other 5 (hands child 5 more tokens)." For the rest of the children - "Now I will ask you about the game you played. First, did you like playing this game? Do you think it was easy, just about right, or too hard for you? Which peg was the easiest to hit? Which peg was the hardest to hit? Ok, now I will take you back out to the other room and you can turn in your prize chips for prizes. \_\_ (Assistant's name) \_\_ will help you with the prizes." Experimenter leaves the room.

Assistant: The Assistant, 1) helps child redeem

his tokens; 2) asks the child if he donated or did not donate and why; 3) tells the child that other children may play the game and in order to make it fun for others not to tell about what they did; 4) child can tell their parents if they want to. Then the Assistant thanks the child for participating and escorts the child back to his room.

## APPENDIX E

Mood Manipulation Stories and Accompanying PicturesNegative Mood Manipulation Story

Reader: I'm going to tell you a story about a little spotted puppy. I will tell you when to turn the pages of the book. Please open the book to page one.

Once there was a little spotted puppy who lived in Townsville with his mother and four brothers and sisters. It was nice having all those brothers and sisters because he always had someone to play with.

One day, while he was playing in the back yard, he noticed that the fence was broken. The board had become loose and now there was room enough for someone his size to squeeze through.

"Gee, look at all the things I can see going on." he said as he poked his nose through the hole in the fence. "What an adventure it would be to explore the world outside of our yard, let's go."

His brother and sister, with whom he had been playing said to him, "No, mother would be angry with us. She has told us that we must stay in the yard for now. When we are bigger we can go outside on a leash."

"But think of all the fun and adventure we could

have. Besides, we wouldn't have to go very far just down to the end of the fence." And with that remark he quickly slid through the hole in the fence and ran to the end of the fence.

"Come look, look at what I can see." he said to his brother and sister who peeked thru the hole in the fence. "Oh, come back." cried his sister. "You'll get lost", said his brother.

But the little spotted puppy did not listen to them. He was too busy looking, listening, and smelling the things that were all around him. Without thinking he walked further along the sidewalk.

Reader: Please turn to page two.

He heard noises in the yard next door. When he looked he saw several children playing on a swing. But when he walked into the yard, for a better look, a big yellow cat jumped out from the bushes, arched its back, hissed and then before the little spotted puppy could move, it scratched his nose! "Yap" went the little puppy and he ran quickly from the yard. "My nose, my nose.", he cried, "It hurts."

While he sat on the sidewalk crying about his hurt nose he heard the sound of a car coming down the street. He looked up as the car went past him just in time to see the tire hit a big puddle of water. Whoosh, all of

a sudden he was covered with cold water. Now he was wet, cold, and his nose still hurt.

"I had better get away from the road where a car may splash me again.", he said to himself. He walked down the street to a vacant lot full of high grass. "This would be a safer place than the sidewalk.", he said. The grass was high and looked like he might find an adventure walking through it.

Reader: Please turn to page three.

The spotted puppy had walked only a little way into the grassy lot when all of a sudden there was a big black dog laying in the grass chewing on a bone. "Get out of here, puppy, this is my bone and my vacant lot.", he growled. With that the big dog jumped up and chased the little puppy all over the grassy vacant lot. Several times the puppy tripped and rolled over and over, and the big dog almost caught him. All of a sudden he was out of the vacant lot running as fast as his little puppy legs could carry him. The big dog quit chasing him a short distance from the edge of the lot. But just to make sure, the little puppy kept running for another minute.

When he stopped he was so very tired, his feet hurt from all the running, he was still wet from being splashed, his nose where the cat scratched him hurt and

now he was covered with dirt from falling.

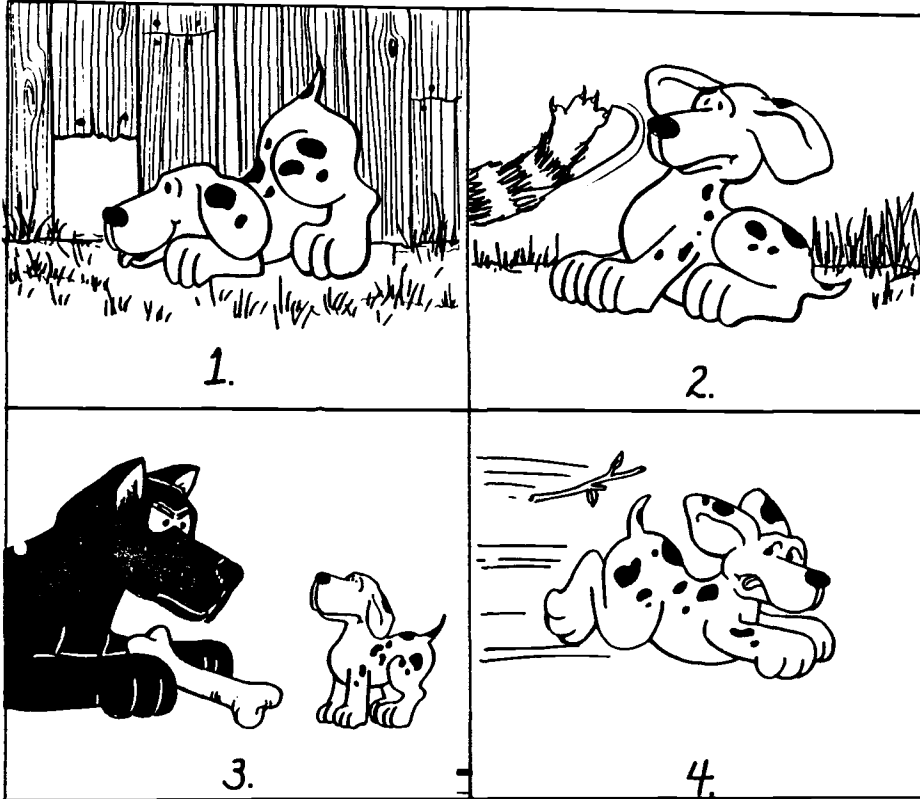
Reader: Please turn to page four.

About that time he heard a whizzing sound and something hit the ground right beside him. "Boom" he looked around and saw several boys running after him. They were throwing rocks and sticks. The little puppy turned and ran as fast as his little legs would carry him. Down the street, quickly past the big grassy vacant lot, down the sidewalk, and past the puddle. He looked back and stopped. The mean boys were nowhere to be seen. He had lost them.

It was time to go home, he did not want more adventure. But wait, which way was home? In all the confusion he didn't know which way to go. "Oh, no, I'm lost and will never find my way back to my mother, or my brothers and sisters." He sat down and cried and cried and cried.

Reader: Now that the story is over call out that the story has finished. Just say, "It's finished." Please take the headset off and put them on the table next to the tape recorder, someone will be with you in a minute.

Pictures which accompanied story used to induce a negative mood state.



Original pictures 8 1/2" x 7" were separately mounted on plain white construction paper and placed in a booklet. Drawings are the original work of Dana Pierce.

Positive Mood Manipulation Story

Reader: I'm going to tell you the story of a little spotted puppy. I'll tell you when to turn the pages. Please turn to page one.

The little spotted puppy had been lost for hours. Crawling through the fence had seemed like a good idea, but the adventure had quickly lost its fun. He thought about all that had happened to him since crawling under the fence. He had been scratched by a cat; splashed by a passing car with cold, dirty water; chased by a big black dog; and boys had thrown rocks and sticks at him. He walked down the street. "I wonder", he thought to himself, "how will I find my way back home?" Just about that time he passed a big store. As he passed the door a man called out to him. "Hey, little puppy you look lost and hungry. I just happen to have a very nice dog bone that is just the right size for a little fellow like you." And with that remark he put down a big bone. "Mmmm, that smells sooo good." thought the little puppy. "Go ahead," said the man, "take it it's yours." Since I'm a butcher I have lots of bones to give to nice little dogs like you." So the little dog settled down to chew on the bone. He chewed and chewed on his bone. He liked the butcher, he was a very nice, kind man.

Reader: Please turn to page two.

Later, the little spotted puppy was given a big drink of cool water by the butcher. "Well, little fellow," said the butcher, "you are sure welcome to stay here with me. I'd like to have a little dog like you around." The little puppy thought about it. The butcher was nice...but the puppy thought "I'd rather be back home with my mother and brothers and sisters." So off the little puppy went in search of his home. "Bye." said the butcher, as he waved to the puppy. "Come and visit me sometime. I'll have another bone for you."

So the little puppy walked on. Later he came to a vacant lot where some boys and girls were flying kites. The little puppy sat down and watched the pretty kites flying. Several kids came over and patted the little puppy. "Gee," said one little girl, "I wish I had a nice puppy like you." She sat down beside him and patted him on his head. He liked that.

With all the excitement of the day and with his tummy full, the little spotted puppy soon found himself sleepy. The little girl said to him, "Little puppy, if you fall asleep here, one of us might accidentally step on you while we are flying out kites."

Reader: Please turn to page three.

So she picked up the little puppy and took him over to the side of the field and carefully placed him in a

box. "There you are puppy, now you can take a nap and no one will accidentally step on you and when you wake up you can watch us playing from the safety of the box. The little puppy was very happy, he had found another friend.

After he woke up from his nap the little puppy decided that it was getting late. He still needed to find his home. So off he went. The little girl waved goodbye to him. "Bye puppy, come watch me fly kites again some time."

As the little puppy walked down the sidewalk, he spotted someone way down the street walking toward him. As the person got closer the little puppy saw it was a little boy who seemed to be carrying something in his hand. "Oh, no", thought the puppy, "I hope this is not one of those bad boys who threw rocks and sticks at me before." Then he heard it. Softly, at first and then louder ... "Puppy, here puppy." All of a sudden the little spotted puppy realized that the boy was not a mean little boy but his own little boy who was out looking for him. The little puppy let out two big puppy barks, "Bark, bark (here I am)." and ran as fast as his legs could go to his little boy. "There you are puppy." said the boy. "I sure missed you." "And I missed you." thought the puppy. "Look puppy, I have a new blue

collar and leash for you. Now we can go exploring together and you won't get lost."

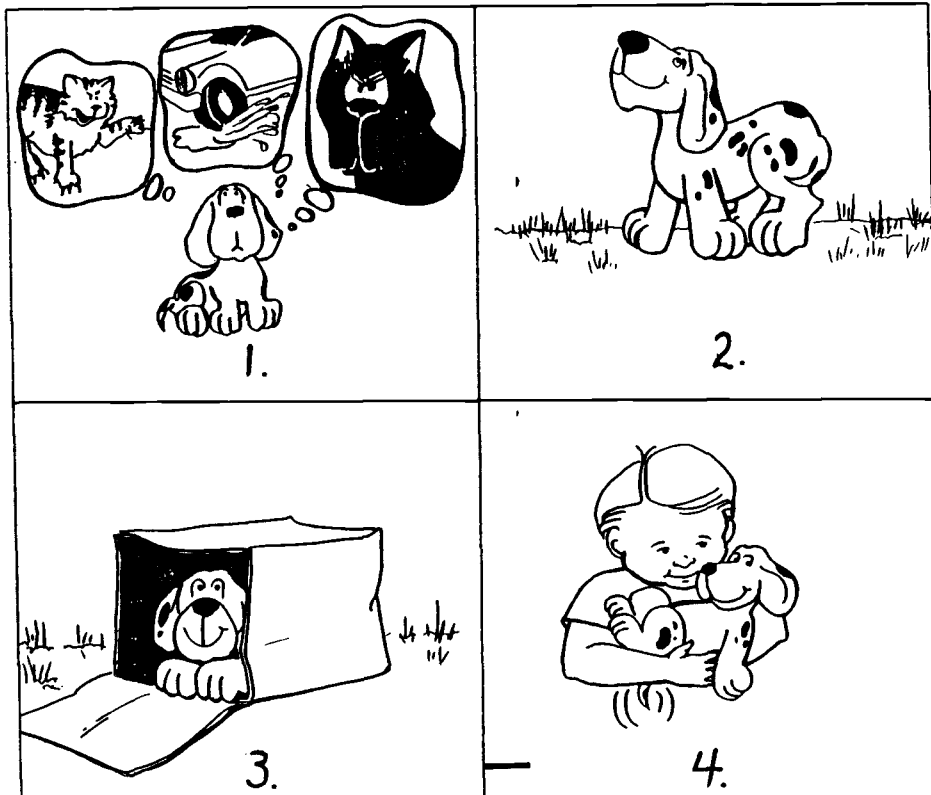
Reader: Please turn to page four.

The little puppy snuggled into the boy's arms. Maybe tomorrow he would take the little boy to meet his new friends, the butcher, and the little girl with the kite ... but right now he was going home, ... no longer lost.

Reader: Now that the story is over, please call out that the story is finished. Just say, "It's finished." You can go ahead and take off your head set and set it on the table next to the tape recorder. Someone will be with you in just a minute.

Note. Stories used for positive and negative mood manipulation are the original work of the author.

Pictures which accompanied story used to induce a positive mood state.



Original pictures 8 1/2" x 7" were separately mounted on plain white construction paper and placed in a booklet. Drawings are the original work of Dana Pierce.