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Differential Effects of Reward and Punishment on Subsequent Altruistic Behavior

Sharon Browning

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DIFFERENTIAL EFFECTS OF REWARD AND
PUNISHMENT ON SUBSEQUENT
ALTRUISTIC BEHAVIOR

Sharon Browning

A thesis
presented to
the faculty of the department of
psychology
Virginia Commonwealth University
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of the requirements for the degree of
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CHAPTER I

Introduction And Review Of The Literature

In today's complex society, no one can be independent and survive; people must help others. There appear to be limits on help giving or at least some conditions under which help is not given. For example, why did thirty-eight people stand silently and watch Kitty Genovese being murdered without one person calling the police or offering any assistance? In addition to making people more interdependent, our rapidly expanding technological society may also account for increased impersonalization and accompanying apathy and alienation. However, the research which has been done in the area of altruism or helping behavior seems to indicate that the variables involved are more complex than these "explanations" would indicate.

Funk and Wagnall's dictionary defines altruism as "devotion to the interests of others: disinterested benevolence." Berkowitz and Daniels (1963, 1964) as well as Hornstein (1968) assume the existence of what they term a "social responsibility norm," while Leeds (1963) calls it the "norm of giving." Latane and Darley (1970) feel that many discussions of altruism have

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1The terms "helping behavior" and "aiding behavior" are not synonymous with the term altruism; however, these terms are often intertwined in the literature concerning altruism. Because of the close relation between these terms, studies pertaining to all three of these areas are included in the review of the literature.
basic questions which must be separated if we are to explain this phenomenon adequately. The first of these questions is, "What is the underlying force in mankind toward altruism?" or "What motivates helping?" The second, which is more specific, asks, "What determines in a particular situation whether one person will help another?"

Schwartz (In Macaulay and Berkowitz) suggests that there is a three-step decision process which leads to behavior that is congruent with moral norms. First of all, the person must recognize the dependence of another on him by becoming aware that a potential action has consequences for the other. Secondly, he must have knowledge of the moral norms pertinent to this action and its consequences; and finally, he must ascribe some responsibility to himself for the action. Similarly, Darley and Latane (1968) have outlined a series of steps which describe the process of deciding to intervene in an emergency. He must notice that something is happening, interpret the event as an emergency, and decide that he has personal responsibility for coping with it. If any of these steps is omitted, then the bystander will remain inactive. However, they also point out that although many theories use the concept of norms to account for variations in helping from one situation to another, there is little evidence that people actually think about norms when choosing a course of action but instead seem guided by their first reactions.
Personality Characteristics Of Altruists

Perry London (In Macaulay and Berkowitz, 1970) seems to feel that there were certain personality characteristics associated with Christians who rescued Jews from the Nazis in World War II. He developed a standardized interview schedule, and from this determined that these Christians seemed to possess a fondness for adventure, had a strong identification with a parent who was usually a strong moralist, and were socially marginal people, i.e., not completely acculturated.

Davis Rosenhan (In Macaulay and Berkowitz, 1970) found that there was a noticeable difference in the personality of those partially committed to the civil rights movement (had participated in one or two freedom rides) and those who were fully committed to the movement (were physically active in the South for a year or longer). The fully committed reported a positive respecting relationship with both their parents; while the partially committed tended to describe their parents in negative or ambivalent terms. The parents of both the fully and partially committed were concerned with moral issues, but there was evidence of discrepancy between what they preached and actually practiced. The partially committed person was also considerably more likely to have spent some period of their lives in psychotherapy.

Another study (London and Bower, 1968) investigated premorbid altruistic behavior in relation to an extravertive personality in a sample of hospitalized mentally ill people and used belonging to clubs etc. as a measure of altruistic behavior. They hypothesized
that a greater degree of mental health would be positively correlated with both altruistic behavior and extraversion. However, the relationship was not found to be significant, and extraversion was not predictive of altruistic behavior. However, they did find that the person's perception of his parent's behavior was related to his charitableness to a significant degree.

In a study investigating personality traits and other variables affecting helping behavior, Latane and Darley (1970) led subjects to believe that they were hearing another subject having an epileptic seizure. There were three different conditions. In one condition, the subject thought that he and four strangers were hearing the victim, whom he had not met previously, having a seizure. In the second condition, the subject believed that he and four others were hearing the attack of a victim whom he had met previously. In the third, the subject was led to believe that he was the only one hearing the victim, whom he had not met previously. The results of this study showed that the smaller the number of people the subject believed were hearing the victim's cry for help, the greater the likelihood of his offering assistance. Meeting the victim before the "epileptic seizure" also increased the probability of the subject's intervention. They suggested that perhaps since he was the only one who had met the victim, he could visualize him having a seizure. A third explanation for these findings was that because the subject had had a chance to see him, he may have felt accountable to the victim. None of the subjects who failed to intervene showed apathy or indifference to
the victim's plight. They seemed quite concerned and inquired about his welfare. Instead of being apathetic, it seemed that they had vacillated between responding and not responding rather than choosing not to respond. After participating in this experiment, the subjects were asked to fill out several personality scales--the Social Responsibility Scale designed by Berkowitz and Daniels which measures the extent to which subjects accept the social responsibility norm, the Marlowe-Crowne Need for Approval Scale which measures the extent to which subjects try to present a desirable image of themselves by claiming to behave supernormatively, and Richard Christie's authoritarian personality scale (F Scale), his scale of anomie, and his Mach Scale which measures a subject's tendencies to agree with the writings of Machiavelli. None of these personality variables predicted helping in this instance. Darley and Latane feel that personality may be rather unimportant in determining a person's reaction to an emergency. First of all, an individual faced with an emergency does not have time to think, and he must make a quick decision under strong pressure. Secondly, personality differences may operate in opposing ways at different stages of the intervention process. For example, they state that a tender-hearted person who really wants to help may be too frightened or squeamish to do so. However, Staub and Sherk (1968) have shown that the need for social approval does influence the aiding response.

Berkowitz (Macaulay and Berkowitz, 1970) suggests that self-concern may have an effect on altruistic behavior. He says that
self-concern may lower the likelihood of altruistic acts by keeping the person from being immediately aware of social ideals calling for helpful behavior in certain situations, by interfering with empathy leading to derogation of those in need of help or by increasing the resentment produced by the threat of a reduction in behavioral freedom. However, he also suggests that self-concern may lead to greater amounts of helping because the person may attempt to gain approval and advance his value in the eyes of others or he may want to be consistent with his image of himself as a helpful person.

Attitudes Toward The Self-Sacrificing Person

Altruists are not always viewed by others in a favorable light, and Lerner and Simmons (1966) believe that this may be the result of our need to believe in a just world. In their study, a victim appeared to receive severe and painful electric shock in a paired associates learning task. In describing the victim later, the subjects rejected and devalued her when they believed they would continue to see her suffer in a second session and when they were powerless to alter the victim's fate. Their rejection and devaluation of the victim was strongest when she was viewed as suffering for the sake of the subjects in the "martyr" condition. They feel that these results are consistent with their hypothesis that rejection and devaluation of a suffering victim are primarily based on the observer's need to believe in a just world.
Rawlings (1968) suggests that guilt plays a major role in altruistic behavior. Guilt was aroused in subjects in one experimental treatment by making them responsible for a partner's punishment with electric shock. In another group, subjects watched their partners being punished but neither was responsible. There were two control groups. In one, the subjects were responsible for punishment to both themselves and their partners. In the second control group, neither the subjects nor their partners received punishment. Later, all the subjects were given the opportunity to act altruistically toward a new partner in another setting, and it was found that subjects in both experimental groups were significantly more altruistic toward a new partner than were subjects in the two control groups. Carlsmith and Gross (1969) found the same results in a similar experiment. In a study by Freedman, Wallington, and Bless (1967), subjects who had been induced to tell a lie to the experimenter were twice as likely as the controls to agree to participate in another experiment. In a number of "machine breaking" studies (Wallace and Sadalla, 1966; Brock and Becker, 1966), there was a tendency for subjects who believed that they had broken the machines to be more likely to comply than controls. When induced to cheat on a test (Carlsmith, Ellsworth, and Whiteside, 1968), subjects were more likely to volunteer for future experiments than controls unless they were given an opportunity to confess to their cheating. In another study (Darlington and Macker, 1966), subjects were led to believe that they had harmed someone by not earning
bonus grade points for him in a task which was in reality impossible. When the subjects were then given an opportunity to donate blood to a local hospital, they were significantly more likely to do so than the control group. To date, the research on the effects of "wrong-doing" on compliance have consistently shown similar results with the exception of a study by Silverman (1967), but his data was flawed by self-selection of subjects, too high a compliance rate in the control groups, etc.

Obligations, Dependency, And Altruism

There are those who (Gouldner, 1960) are of the opinion that an individual is motivated to help others in order to reciprocate for the favors which have been done for him in the past for those which he anticipates. He suggests that conformity with social norms is something that is carried out in payment for the obligations that people owe one another.

In a study of college women (Berkowitz and Daniels, 1969), one-half of the subjects were helped by a peer (E's confederate) on a task and the others were not helped. Then, the subjects worked on another task under the supposed supervision of another peer, with one-half of the subjects being told that the supervisor was highly dependent upon their work and the others told that she was less dependent upon them. They were told that the first peer would learn of their work in half of the cases but not in the other half. Subjects who had been helped previously tended to exert the greatest effort in behalf of their dependent peer. In another study
(Berkowitz and Daniels, 1963), the subjects were workers operating under the guidance of a peer (a stranger) who was playing the part of their supervisor. In the High Dependency condition, the subjects were told that the experimenter's evaluation of the supervisor would depend mostly on their productivity; and in the Low Dependency condition, the subjects were told that the evaluation would be unaffected by their performance. Performance proved to be significantly greater in the High Dependency condition. The Low Dependency subjects worked harder when they had been informed that the supervisor would learn of their performance than when they were told that the supervisor would not learn about their performance until a future time.

In a study (Berkowitz and Conner, 1966) examining the influence of success and failure on a person's willingness to help others, college students either experienced a success, a failure, or no experience on a preliminary irrelevant task and then worked for a peer whose chance of gaining a prize was either 20 per cent, 50 per cent, or 80 per cent depending on their performance for him. Those who had previously experienced frustration tended to express stronger dislike for the experiment and for their peer the greater his dependency on them. Berkowitz suggests that the felt obligation which arose from the High Dependency was probably an unwelcome pressure.

**Development of Empathy, Socialization, And Altruism**

Aronfreed and Paskal (1965) have suggested that empathy may be an important feature in sharing behavior and have suggested that
empathetic responses can be conditioned by pairing positive affect arousal in the giver with expressions of joy in the recipient. They attribute altruistic behavior to the conditioning of positive affect to the observations of the pleasurable consequences of the act for the recipient. McDougall, likewise, feels that the sight of a person in distress arouses empathetic feelings in the observer, which he terms "primitive passive sympathy," and by helping the person in distress, the observer also helps himself. However, Aronfreed (In Macaulay and Berkowitz, 1970) also states that we will be unable to gain an adequate psychological conception of altruism and sympathy without a broader developmental perspective into the process of socialization. He divides the ingredients of altruistic and sympathetic behavior into two basic classes of phenomena. The first class, which was described earlier, establishes the child's capacity for empathetic experience and the second lies within the establishment of the instrumental value of overt acts. In a study of the development of sharing behavior in children, Handlon and Gross (1959) found that giving a partner a greater share of an unequally divisible number of objects increased with age and that the highest degree of keeping the largest share for oneself occurred in the pre-school group with the transition occurring between the fourth and fifth grades. The sharing behavior was not influenced by the sex of the child or by the fact of being an only child or having siblings.
A number of investigators have demonstrated the role of modeling in eliciting altruistic behavior. Bryan and Test (1967) did three investigations utilizing the parking lots of two large department stores in New Jersey and indexed helping by contributions to the Salvation Army. In another experiment helping behavior was indexed by offers of aid by passing motorists to a woman with a disabled vehicle. The presence of a helping model significantly increased helping behavior in each of these studies. Hornstein (1968) conducted a study in midtown Manhattan in which by chance people came upon an envelope, from which a man's wallet containing money was protruding. In the envelope was a letter addressed to the owner of the wallet in which the finder told of his feelings about returning the wallet. When the first finder of the wallet expressed positive feelings about returning the wallet, this produced significantly more returns by the subject than when the letter expressed negative feelings.

In a study by Rosenhan and White (1967), fourth and fifth graders played a bowling game once in the presence of an adult model, and once in his absence. When the model won gift certificates he gave one-half of them to charity. None of those who did not observe the model contributed gift certificates when playing alone. They also found that it was chiefly those subjects who contributed to the charity in the model's presence who also contributed in his absence, suggesting that rehearsal and observation were necessary to elicit the charitable responses. In another
study by Bryan (1968), models who practiced charity were rated more favorably by children than those who failed to donate and were rated more favorably than a model who held a neutral conversation. However, the children's evaluation of the model was unaffected by the discrepancy of his words and deeds, and a model practicing greed and preaching charity was rated as favorably as the practitioner of charity.

Social Class Influences On Helping Behavior

In a study investigating social class differences in helping behavior, Berkowitz and Freedman (1967) hypothesized that members of the entrepreneurial class would be more likely than people from the bureaucratic middle class to act in accord with social exchange conceptions and display a reciprocity orientation toward giving and getting. They placed adolescent boys in a setting in which they either received much or little help when they were in need of assistance. They were then given an opportunity to help someone, either the person who had helped them previously or another person. As was hypothesized, the work in behalf of the other person was more greatly affected by the amount of help in the entrepreneurial middle class sample than in either the bureaucratic middle-class or working-class samples. They found that the entrepreneurial boys were most likely to give help only to the extent that they had received help. Berkowitz and Freedman suggested that the bureaucratic entrepreneurial boys entered the experimental situation with a relatively strong bias against the
working class people. In a similar study by Berkowitz (1968) in England, he found that as in the American study the help given by the bureaucratic middle-class subjects seemed relatively unaffected by the amount of assistance they had previously received, but unlike the Americans, the English working-class boys tended to exhibit a strong reciprocity orientation in that their help giving was strongly affected by the level of help they had gotten earlier. The reciprocity tendencies seemed the most pronounced when the person they could help was from a different social class level. They suggested that the American group possessing the strongest reciprocity orientation (boys from the entrepreneurial middle-class families) showed essentially the same behavior.

Latane and Darley (1970) hypothesizing that middle and upper-class citizens are less likely to help others, staged incidents at an underground subway station and at La Guardia Airport in which a man on crutches tripped and fell to the ground clutching his heavily taped knee. Twice as many people offered assistance in the subway as opposed to the airport, and Latane and Darley initially attributed these results to the fact that middle and upper-class citizens are more likely to be present at airports. However, further investigation revealed that greater familiarity with the environment seemed to be the determining factor.

The Effect Of Reinforcement On Altruistic Behavior

Latane and Darley (1970) feel that reinforcement theory conflicts with the observed fact that people do help others in circumstances in which there seem to be no gains, and much risk.
Fischer (1963) found that sharing can be reinforced with material rewards. Four year olds shared marbles with an unknown peer if their sharing was rewarded with bubble gum. The number of marbles they shared was affected by how many marbles were available but not by how many marbles had been won on previous days.

Bandura (1965) demonstrated that observer behavior changes as a consequence of witnessing the reward-cost contingencies associated with a performer's behavior, i.e. witnessing a model's behavior rewarded increases the probability of the response occurring in the viewer and seeing his behavior punished decreased the probability of the response.

Research by Weiss, Buchanan, Altstatt, and Lombardo (1971) indicates that subjects will learn an instrumental conditioned response by alleviating another person from distress (electric shock).

Helping Behavior In Non-Emergency Situations

In a study of helping behavior in non-emergency situations (Latane and Darley, 1970), students asked for three kinds of minor assistance (time, directions, or change). Students were very successful in getting this assistance and encountered only a few refusals. However, they were much less successful when they asked for the subject's name and the least successful when requesting a dime. The manner of request made a good deal of difference. When the experimenter gave his name before asking for a dime or said he needed the dime for a phone call etc., he met with significantly more success. Sex seemingly had no effect on giving minor
assistance, but female requesters were given a dime more frequently than male requesters. In the requests for a subject's name, females were more likely to receive an answer only if the subjects were male. The number of requesters was also relevant variable. Pairs of requesters were more likely to receive help than were single students and trios received the most help. Females were twice as likely to receive assistance as males and three times as likely when in same-sex pairs.

Harvey Allen (In Latane and Darley, 1970) did a study in the New York City subway in which a subway rider was selected as an unsuspecting subject and one of the experimenters sat or stood near him. A second experimenter then approached and asked if the subway was going uptown or downtown. The bystander (first experimenter) gave the wrong answer. When the question was asked of the subject and the "bystander" interrupted with the wrong answer, the subject corrected him nearly every time. If the question was addressed toward both the subject and the "bystander," the subject corrected him much less frequently; and if the question were directed at the misinformer, the subjects corrected least frequently of all. In other conditions, the "bystander" created an image of himself as either a physical threat, an embarrasser, or as a tentatively answering person. The subject was the most hesitant to correct the physically threatening person, the least reluctant to correct the tentatively answering person, and in between in correcting the potentially embarrassing person.
Helping Behavior In Emergency Situations

Before a bystander will intervene in an emergency, Latane and Darley (1970) suggest that there are several steps which must occur in his thinking process. He must notice that something is wrong, decide that he has some personal responsibility, decide on a specific mode of intervention, and then implement the intervention.

In one of their studies (Latane and Darley, 1968), male undergraduates found themselves in a smoke filled room either alone, with two non-reacting others, or in groups of three. They found that subjects were less likely to report the smoke when in the presence of passive others or in groups of three. They suggested that the results seem to have been mediated by the way the subjects interpreted the situation, i.e., seeing the others remain passive probably made the subjects decide that the smoke was not dangerous. Group size is an important determinant of helping behavior.

In another study (Latane and Darley, 1970), subjects were led to believe that a woman had fallen from a chair in the next room and had hurt her ankle. Again, the greater the number of bystanders, the less likely was the subject to intervene. The highest rate of intervention occurred when the subject believed that he was the only one who heard her fall. If two naive subjects heard her fall, the rate of intervention was lower than in the single subject condition and demonstrated that the presence of another person strongly inhibits individuals from intervening. Pairs of friends who heard the accident were more inhibited in their
responding than in the Alone condition, but they were significantly faster responding than pairs of strangers.

In a study (Latane and Darley, 1970) in which subjects believed they were witnessing a theft, pairs of subjects were again less likely to report the situation than single subjects. An interesting finding in this situation was the high proportion of subjects in both conditions who professed not to have noticed the theft which was seemingly quite obvious. Latane and Darley suggest that noticing the theft would have put the subjects in an avoidance-avoidance conflict such that they were torn between the negative alternatives of risking confrontation with the theft by acting and risking guilt by not acting. A good way to avoid this conflict was not to see the theft at all.

Another study (In Latane and Darley, 1970) also illustrates the perceptual distortion that may occur in an emergency situation. Subjects were led to believe that they were listening to a fight between two children and that one was being seriously injured. Of those that failed to intervene, each subject assured the experimenter that had he been convinced that the fight were real, he would have intervened. Each had an elaborate reason for not believing that the fight was not serious. By convincing themselves that no emergency is occurring, subjects can remain uninvolved.

The Effects Of Race And Sex On The Aiding Response

Research by Wispe and Freshley (1971) indicated that both the race and sex of all those involved in a situation when an altruistic
response could be forthcoming is important. In their study the altruistic response measure was helping a person who had seemingly dropped her groceries as the result of her bag breaking. They discovered that there were significant sex differences in helping behavior in the black sample but not in the white sample, with the black men helping more and the black women helping less.

Summary

A review of the literature indicates that the following variables affect whether or not a person will behave altruistically in a given situation:

1. Personality-The findings on this variable are equivocal at this time. Extraversion does not seem to be predictive of altruistic behavior, but the need for social approval appears to exert a great influence on the aiding response. There are indications that self-concern may either lower or raise the likelihood of helping behavior. Although apathy as a trait has been hypothesized as a characteristic of those who fail to intervene in emergency situations, the evidence does not seem to confirm this claim. Much more research is needed in this area to further clarify the personality variables which operate in various situations.

2. Attitudes-It appears that people may devalue and reject a suffering victim if they are unable to alter his fate.

3. Guilt-Those who are made to feel guilty (believe they have caused harm to another, induced to lie, or cheat, believe they have broken a machine) are more likely to volunteer to help an experimenter with a new study than are controls.

4. Obligations And Dependency-People who have been given assistance on a task are more likely to exert a great effort to help those who are dependent on them than are persons without such a history. After being frustrated, persons will express a stronger dislike for a peer the greater his dependency on them than someone who has experienced success.
5. **Empathy And Socialization**—It appears that empathy plays an important role in sharing behavior and can be conditioned. Sharing seems to increase with age. "Greediness" is apparently at its peak in pre-school children and the transition to sharing behavior seems to occur between the fourth and fifth grades.

6. **Modeling**—Modeling significantly increases the probability of helping behavior and it appears that charitable models are rated more favorably than those not exhibiting charitable behavior. In this instance it seems that words speak louder than actions, because children were unaffected by the discrepancy between the model's "charitable words" and stingy actions.

7. **Social Class**—It has been hypothesized that members of different social classes differ in altruistic behavior. However, this area has received very little attention and lacks conclusive evidence. Studies by Berkowitz do seem to indicate that social class may be a factor, however.

8. **Reinforcement**—Sharing behavior in children can apparently be increased with rewards (bubble gum). It also seems that witnessing a model's behavior rewarded increases the probability of the same response occurring in the viewer and that seeing his behavior punished decreases the probability of response.

9. **Non-Emergency Helping**—When asking for minor assistance (time, directions, or change) the manner of request makes a difference in obtaining assistance. The sex of both the "requester" and "requestee" is also important.

10. **Emergency Helping**—The larger the group of potential helpers, the smaller is the victim's chance of receiving assistance. People also frequently appear not to notice an emergency when it is occurring or if they do notice it, interpret it as not being serious.

11. **Sex And Race**—There are significant sex differences in helping among blacks but not among whites, with the black man helping more and the black women helping less.
Statement Of The Problem

Theorists such as Rosenhan (In Macaulay and Berkowitz, 1970) feel that reinforcement proponents have difficulty accounting for altruistic behavior which he feels is in part defined by the apparent absence of reinforcement. Likewise, Latane and Darley (1970) state that every day experience shows us that people do help others even when it is evident that they will receive no rewards. Although Fisher (1963) demonstrated that material rewards will reinforce sharing behavior, research concerning the effects of reward and punishment of an altruistic act on subsequent altruism is lacking.

The purpose of this study was to determine the immediate effects of reward and punishment of altruistic efforts on subsequent altruistic behavior.

Hypotheses

1. Ss who are reproved (punished) for an altruistic act will be less likely to manifest altruistic behavior in the immediate future than Ss who are not reproved (Control Group).

2. Ss who are verbally rewarded for an altruistic act will be more likely to manifest altruistic behavior in the immediate future than Ss who are not verbally rewarded (Control Group).

3. Ss who are verbally rewarded for an altruistic act will be more likely to manifest altruistic behavior in the immediate future than Ss who are reproved (punished).
CHAPTER II

Experimental Method

Subjects

The study was conducted in the parking lot of a shopping center and the Ss were those individuals using the facility. Since the design of the experiment necessitated that the Ss perform an altruistic act (helping an individual who dropped packages), this was a prerequisite to their being included as a S in one of the two experimental groups. No effort was made to screen any potential S, with the exception that only adult white female Ss were included in the study.

Confederates

The nature of the study necessitated using two confederates, both females. Confederate A dropped groceries in the parking lot. Confederate B was positioned in a wheelchair and appeared to be experiencing difficulty negotiating a curb.

In all instances, Confederate B was a twenty-three year old female.

In the grocery dropping situation, the original confederate was a twenty-eight year old female. However, after numerous potential Ss passed her by without offering assistance, it was decided that an elderly person would be more likely to elicit aiding responses. On one day Confederate A was a sixty-one year old woman, and on another day Confederate A was a fifty year old woman.
Procedure

Confederate A stationed herself in the parking lot until she saw a potential S getting out of her car. A then dropped her groceries when S was at between ten to fifteen feet away. If the S attempted to help her, she was either rewarded verbally with the statement, "How clumsy of me; thank you very much," or in the re-proved condition, A said, "Go on, I don't want any help and I don't need any help." In the control condition, only the wheelchair situation which is described below was used. Under this condition, Ss were not exposed to the package dropping situation.

Confederate B then positioned herself so that she appeared to be unable to get onto the curb in her wheelchair. B was unaware of whether S had been rewarded, punished, or received neither. The dependent variable was measured dichotomously in terms of whether or not S subsequently helped B.

Controls

Both the S and the confederates were female because, as Latane and Darley (1970) and Wispe and Freshley (1971) demonstrated, sex is frequently an important variable in determining whether someone behaves altruistically or not. Since this study was concerned with the effects of reinforcement on the aiding responses, the sex of the Ss and confederates were the same to minimize the influence of this variable.

The data was all collected at a small, local shopping center. Latane and Darley (1970) have shown that familiarity with environment influences the aiding response. Therefore, it seemed likely
that conducting the study at a small shopping center might have a
different effect from a large shopping center with which people
are less likely to be familiar. Each S was selected when she was
alone in the parking lot to prevent stray people from wandering
into the experiment.

Confederate A dropped her packages at a great enough distance
away from the potential S (about ten to fifteen feet) so that she
had to make a choice about helping or not helping and did not
respond reflexively. Confederate A did not look at the potential
S after dropping her packages, as this could possibly have been
interpreted as a plea for assistance. Note also that reproved and
reward conditions were randomly assigned to the two Confederate As
who elicited aid.

Confederate B was unaware of whether or not the S was rewarded
or reproved for her actions.

The confederates as well as all of the Ss were all white, because Wispe and Freshley (1971) demonstrated that race is an
influential factor in helping behavior.
CHAPTER III

Results

Table 1 illustrates the S's aiding responses as a function of the reward and control conditions.

A Chi Square of 11.13 was obtained between the punishment and control conditions indicating that Control Ss helped the confederate in the wheelchair significantly (p < .001), more often than Ss who had just previously been punished for helping the confederate who had dropped her groceries, thus confirming hypothesis one.

A Chi Square of 11.13 was also obtained between the reward and control conditions (see Table 2). Although this value was significant (p < .001), it was not significant in the expected direction, and hypothesis two was not confirmed.

Since no one helped in either of the treatment conditions, there was no difference between these two groups.

Table 2 illustrates the differences in aiding responses directed toward each of the three grocery droppers.

A Chi Square of 61.26 was obtained between the twenty-eight year old confederate and the fifty year old confederate (see Table 3). A Chi Square of 25.13 was obtained between the twenty-eight year old confederate and the sixty-one year old confederate (see Table 4), and a Chi Square of 15.13 was obtained between the fifty and sixty-one year old confederate.
TABLE 1

COMPARISON OF AIDING RESPONSES TOWARD WHEELCHAIR PATIENT AS A FUNCTION OF REWARD AND NO TREATMENT

BEHAVIOR TOWARD WHEELCHAIR PATIENT

<table>
<thead>
<tr>
<th>HELP</th>
<th>REWARD</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (0%)</td>
<td>11 (36.6%)</td>
<td></td>
</tr>
<tr>
<td>30 (100%)</td>
<td>19 (63.4%)</td>
<td></td>
</tr>
</tbody>
</table>

CHI SQUARE=11.13 (p < .001)
TABLE 2

COMPARISON OF AIDING RESPONSES TOWARD WHEELCHAIR PATIENT AS A FUNCTION OF PUNISHMENT AND NO TREATMENT

BEHAVIOR TOWARD WHEELCHAIR PATIENT

<table>
<thead>
<tr>
<th></th>
<th>PUNISHMENT</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HELP</td>
<td>0 (0%)</td>
<td>11 (36.6%)</td>
</tr>
<tr>
<td>NOT HELP</td>
<td>30 (100%)</td>
<td>19 (63.4%)</td>
</tr>
</tbody>
</table>

CHI SQUARE=11.13 (p < .001)
TABLE 3

AIDING RESPONSES TOWARD GROCERY DROPPER

<table>
<thead>
<tr>
<th>CONFEDERATE</th>
<th>HELP</th>
<th>NOT HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (AGE 28)</td>
<td>0 (0%)</td>
<td>60 (100%)</td>
</tr>
<tr>
<td>3 (AGE 50)</td>
<td>30 (71%)</td>
<td>12 (29%)</td>
</tr>
</tbody>
</table>

CHI SQUARE = 61.26 (p < .001)
TABLE 4

AIDING RESPONSES TOWARD GROCERY DROPPER

<table>
<thead>
<tr>
<th>CONFEDERATE</th>
<th>HELP</th>
<th>NOT HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (AGE 28)</td>
<td>0 (0%)</td>
<td>60 (100%)</td>
</tr>
<tr>
<td>2 (AGE 61)</td>
<td>30 (35%)</td>
<td>56 (65%)</td>
</tr>
</tbody>
</table>

CHI SQUARE = 25.13 (p < .001)
TABLE 5

AIDING RESPONSES TOWARD GROCERY DROPPER

<table>
<thead>
<tr>
<th>CONFEDERATE</th>
<th>HELP</th>
<th>NOT HELP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (AGE 61)</td>
<td>30 (35%)</td>
<td>56 (65%)</td>
</tr>
<tr>
<td>3 (AGE 50)</td>
<td>30 (71%)</td>
<td>12 (29%)</td>
</tr>
</tbody>
</table>

CHI SQUARE=15.13 (p < .001)
The fifty year old and sixty-one year old grocery droppers were helped significantly more often than the twenty-nine year old ($p < .001$) and the fifty year old was helped more often than the sixty-one ($p < .001$).
CHAPTER IV

Discussion

The results of this study failed to support the hypotheses that rewarding an individual for an altruistic response increases the probability of his performing an altruistic response in the immediate future, with punishment having the opposite effect. Although there was a significant difference in the predicted direction between Groups II (Punished) and III (Control), the lack of a significant difference between Group I (Rewarded) and Group II (Punished) leads to the conclusion that the experimental treatment (Punishment) was probably not the determining factor.

Under the control condition, Ss aided the confederate in the wheelchair 37 per cent of the time and passed the person by 63 per cent of the time. When the two experimental conditions were added, this had a definite effect on wheelchair helping. Not one S in either of the treatment groups offered aid to Confederate B. That is, no one who offered to help Confederate A pick up her dropped groceries subsequently offered to help Confederate B in the wheelchair regardless of whether they were rewarded or punished. In fact, a large number of the Ss then went a great distance out of their way in order to avoid the person in the wheelchair.

Perhaps the most significant finding of this study at least under the conditions of this research was that people were not helpful. Where are all those individuals who are shocked and dismayed when they read about someone who has been overlooked when
in need of help? It is easier to rationalize findings such as these when they can be attributed to the "depersonalization which occurs in our rapidly expanding technological society," but this study was conducted in a small neighborhood shopping center where it would seem reasonable that people would be more helpful than at a large metropolitan shopping center. These results were obtained with women and may have been somewhat different if men had been included in the sample.

In the control condition, when one person offered assistance to Confederate B others frequently joined her, making it appear as if the S may have been a model for the others who joined her. This finding was consistent with that of Bryan and Test (1967) who found that the presence of a model significantly increased helping behavior to a woman with a disabled vehicle.

Throughout the study, it was noted that men frequently came from great distances to offer assistance to both Confederates A and B, while only the women who were closest to the confederates in distance offered assistance to them. Latane and Darley (1970) obtained similar results, finding that men tend to be more likely to offer help to someone of either sex than women. Perhaps the idea still persists in our society that the role of a male is to be gallant while the female is weak and helpless, depending on the male for support. Results of a study by Wispe and Freshley (1971) likewise indicated that males tended to be more helpful to a female grocery dropper than did females.

The bulk of this study was conducted on Friday afternoon and on Saturday when people may have felt that they had a limited amount
of time in which to do their shopping and did not have enough time
to help one person and much less two people consecutively. Others
may have felt as if this task was too demanding of them. There
also may have been those who felt that they had done their "one
good deed a day" be helping the grocery dropper and were unwilling
to do any more.

One explanation for the findings of this study may be the
fact that the subjects were, in all likelihood, on a specific er­
rand at the shopping center, and to perform the altruistic acts
would have required deviations from their previous plans. Thus
to perform one or both of the altruistic acts was inconsistent
with the subjects goal directed behavior and therefore a possible
source of frustration. It seems that the performance of one of the
two altruistic tasks could be handled by many of the shopping
center customers, but the demands of the two successive tasks were
excessive and the second task avoided because of the potential
frustration. Many of the subjects physically avoided the confed­
erate in the wheelchair by walking a wide berth around her and it
is likely that many also avoided her "mentally," thus making it
easier to direct their attention to the plan to which each was
already committed.

An alternative explanation may be that the first altruistic
act, regardless of whether accompanied by verbal reward or reproof,
served as punishment. That is, the physical effort required and
personal demands made on a subject acted as punishment and was a
short term deterrent to the performance of other altruistic acts.
On the basis of the present findings, it appears as if an individual will be less likely to perform an altruistic act if he has just performed an altruistic act, if it requires considerable deviation from his specific goal directed behavior, or if the situation is such that he can avoid directing his attention to the person needing help.

The main thrust of this research dealt with the effects of the treatment conditions on the behavior of the benefactor; however, an incidental finding was that concerning the effects of individual differences of the confederates on subsequent helping behavior. Three different Confederate A's were used in this study. The first Confederate A (age twenty-eight) dropped groceries sixty times without any one offering assistance, so it was decided that perhaps an older person would be more successful in eliciting aiding responses. This proved to be an accurate hypothesis (see Tables 3 and 4). However, why did the fifty year old confederate receive significantly more aid than the sixty-one year old confederate who looked much older? The fifty year old confederate weighed quite a bit more than the sixty-one year old confederate, so perhaps she looked more in need of aid in bending over than the older person who may have appeared more agile. There appears to be numerous factors which influence the aiding response and obviously more investigation into this area is needed. The age and sex of all those involved apparently plays a large role as does the appearance of the person needing aid. Some persons may look more helpless than others, however, whether or not they receive help seems also contingent upon the amount of time the
potential helper has as well as his "mood" and amount of energy which he feels he has to share with someone else.

Those who did not offer assistance were indeed an interesting group of people to observe. Many of them were still watching the person in the wheelchair long after they had entered the store. Some of the comments of the people not offering to help Confederate were, "Well, that's the way it goes," or "What a shame." One woman who offered Confederate no assistance later returned and picked up some pecans which had overlooked and walked to her car eating them.
CHAPTER V

Summary

The main thrust of this research was to examine the hypothesis that rewarding an individual for an altruistic response increases the probability of that individual performing an altruistic act in the immediate future with punishment having an opposite effect.

To examine this hypothesis, base rates of helping a confederate who had dropped groceries and a confederate in a wheelchair attempting to get onto a curb in a small shopping center were obtained. All of the Ss and confederates were female. After these base rates were obtained, in order to become a S the person must have helped the confederate who had dropped groceries before approaching the confederate in the wheelchair. Ss were rewarded and punished verbally for helping the confederate who had dropped groceries. In both the reward and punishment conditions, the number of helping responses toward the person in the wheelchair dropped to zero.

Several explanations for these results were offered. All female Ss were used and several studies have indicated that females are less likely to behave altruistically than males. The bulk of this research was conducted on Friday and Saturday when the Ss may have felt pressed for time. Since most of them were likely on a goal-directed errand, one or both of these potential altruistic acts may have acted as a source of frustration. Also, the first
altruistic act may have served as punishment because of the physical effort and personal demands involved. The results of this study appear to indicate that a person who has just performed an altruistic act is less likely to perform another one on the immediate future. As this study progressed, it became apparent that numerous factors enter into a person's decision to help or not to help another, i.e., age, sex of both, time involved, etc.
References


