

THE UNIVERSITY OF MANITOBA

THE EFFECT OF GROUP SIZE AND DEPENDENCY
ON NON-EMERGENCY HELPING BEHAVIOR

by

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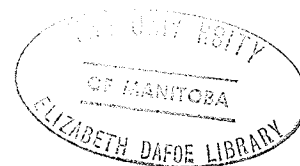
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ABSTRACT

This study examined the effect of two major variables: group size which had been investigated primarily in naturalistic emergency situations; and dependency, which had been studied by several researchers, especially Berkowitz, in laboratory situations. The variables sex of subjects and subjects' concern about the "experimenter's awareness" of their productivity also were examined in the non-emergency situation. One hundred and forty-four subjects, equally divided as to sex, were placed randomly in one of the twenty-four cells of a 3 X 2 X 2 X 2 factorial design. The dependent variable was the number of envelopes made by each subject on behalf of a supervisor who needed his help.

There were three different group sizes; 2-, 3-, and 6-person groups. Contrary to prediction, there was not a significant effect for group size, i.e., subjects did not produce more in the smaller sized group. The interaction between dependency and group size was also non-significant.

There were two levels of dependency in which the subjects were told that either 80 per cent (high) or 20 per cent (low) of their supervisor's evaluation for a bonus depended on their productivity. The results showed a significant main effect for dependency in which, contrary to the prediction, subjects worked harder under the low than under the high dependency condition.

In examining the effect of sex, it was found that male subjects produced more under the low dependency condition than under the high

dependency condition as predicted, but unexpectedly, female subjects worked the same amount in the high dependency condition as in the low dependency condition. It is plausible that each of these negative results were caused by insufficient arousal of the social responsibility norm. In other words, the subjects may have reacted to the pressure of the task, and formulated individual achievement goals, instead of feeling obliged to help their dependent supervisors.

As predicted there was no difference in productivity between subjects in the "same" or "other" experimenter conditions. This could be attributed to either the lack of differential manipulation of experimenter awareness or to the fact that the subjects were not influenced by what their experimenters thought of them in this experimental situation.

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CHAPTER I

INTRODUCTION

In the last ten years there has been increasing research on altruism. Altruism (or what has also been called helping behavior) is commonly defined as "behavior carried out to benefit another without anticipation of rewards from external sources" (Macaulay and Berkowitz, 1970, p. 3). Previously altruistic behavior had been studied only in children, e.g., Wright's early study (1942) of the degree to which children were generous with their toys. The more recent interest in adult altruism, however, appears to have been initiated by Berkowitz and Daniels' (1963) demonstration that individuals tended to help a peer whom they perceived as dependent upon them. Since then variables relevant to help-provoking situations have been examined and several theories advanced as to why one person helps another. Some of the more prominent theories that have emerged are Homans' (1961) distributive justice, Gouldner's (1960) theory of reciprocity, Lerner's (1965) theory of social justice, Berkowitz's (1963) norm of social responsibility, and Darley and Latane's theory of "diffusion of responsibility". A detailed review of these theories of altruism, and their supportive research, will be examined in this paper.

REVIEW OF THE LITERATURE

Altruism in Children

Before altruism was examined in adults, it was first studied in children. One early study (Wright, 1942) found that eight-year old children were more generous with their toys with strangers than with friends. Besides the personality variables of age (Handlon and Gross, 1959; Wright, 1942) and socioeconomic status (Berkowitz and Friedman, 1967; Berkowitz, 1968) helping behavior in children also appears to be affected by the need for social approval (Staub and Sherk, 1968), and by the observation of helping models (Rosenhan and White, 1967; Hartup and Coates, 1967). One interesting study (Bryan, 1970) found that children donated more money when they saw a model do so, but the model's exhortations that "one should give to the crippled children" (Bryan, 1970, p. 64) had no effect on their donation behavior. From this Bryan suggests that the "integration of deeds concerning helping norms is neither a property of, nor an expectation held by, the young child" (Bryan, 1970, p. 71).

Other experimenters have recently theorized about the reasons behind children's altruistic behavior. Several (Aronfreed, 1968; Midlarsky and Bryan, 1967) have suggested empathy as an important determinant. Aronfreed (1968, 1970), for example, believes that children must first experience an empathic state before they are capable of true helping behaviour. According to Aronfreed, empathy is conditioned in the child when there is "an initial temporal association between cues which transmit the affective experiences of others and

closely related events whose affective value is directly experienced by the child" (Aronfreed, 1970, p. 111). In performing an altruistic act the child experiences a reduction in his empathic distress, which is internally reinforcing. Since dispositional characteristics are easy to theorize about, but difficult to examine, most of the experimenters in the field of childhood altruism appear to stress behavior, and the situational variables that affect it, rather than dispositional states.

Although there have been numerous studies on altruistic behavior in children, sometimes under the label of sharing behavior, generosity, and moral behavior, only a few have been cited to illustrate the variables related to children's altruistic behavior that have been studied and the several explanations of the development of altruism in children that have been advanced. The study of altruism in children may be instructive regarding the acquisition of the motive, but the variables under which it is maintained in adults is of concern today and the focus of this paper.

Adult Altruism in the Laboratory and Field

Recent interest in altruism in adults appears to have been initiated by Berkowitz and Daniels (1963) when they studied the interaction between helping behavior and dependency. They hypothesized that people help others because of the social responsibility norm which prescribes that "people should help those who are dependent upon them" (Berkowitz and Connor, 1966, p. 664). Berkowitz, as well as other experimenters, examined the conditions under which subjects were most likely to help a dependent

peer. Others, however, have felt the inadequacy of existing laboratory situations in investigating help-giving as it occurs in real life.

Darley and Latane, for example, decided to make the laboratory situation more realistic by having the subjects believe that a real emergency was taking place. In one of their experiments (Darley and Latane, 1968), the subjects overheard someone having an epileptic seizure. Of course, no epileptic seizure actually occurred, but in questioning the subjects after the experiment, they said that they had heard someone in desperate need of their help. Darley and Latane (1970) later completely abandoned the laboratory setting and examined help-giving in such naturalistic settings as subways and city sidewalks. Bryan and Test (1967) also favoured the naturalistic setting and looked at donation behavior in front of department stores, as did Hornstein (1970) who examined the reactions of people to finding a wallet on a busy city sidewalk.

Thus research on altruism has been conducted both in the laboratory and in naturalistic settings. Although the examination of altruistic behavior in a naturalistic setting, such as a busy subway station, allows the experimenter to look at the spontaneous reactions of the people on the scene, without being influenced by subtle pressures from the experimenter and other subjects, it does not permit any form of experimental control. A laboratory setting, on the other hand, while it lacks the realistic nature and spontaneity of responses, is characterized by its ability to control certain variables. Since this study required the careful manipulation of experimental variables, a laboratory situation was utilized.

Theories and Supportive Research

Many theories have been advanced as to why people help other people. Each theory has its own body of supportive research, although some theories have naturally provoked more research than others. Those theories that have initiated the most research are discussed below.

Distributive justice. One theory (Homans, 1961) contends that people are motivated by their desire for distributive justice, i.e., that people only want from an interaction what they feel they deserve from it. This desire for equity in human relationships has been more recently described by Adams (1965, p. 277) "as one in which a person's ratio of outcomes to inputs is equal to the other person's outcome-input ratio". Walster, Bersheid, and Walster (1970) expanded this equity formulation to define "harm doing", the opposite of altruistic behavior, as an act that "produces an inequitable relationship between the members" (p. 181). They then went on to list six major hypotheses, and various corollaries, to explain the factors that influence the harm doer after he has committed his harmful act. For example, one hypothesis states that "the harm doer will attempt to reduce his distress through the restoration of equity to his relationship with the victim" (Walster, Bersheid, and Walster, 1970, p. 183) by using such justifications as derogating the victim, denying responsibility for the act, and minimizing the victim's suffering. However, if the harm doer actually compensates his victim, he will do it only to the extent that it is equivalent to the outcome the harm doer has received. Thus Walster et al offer a theory of guilt-produced altruism which is based on Homans' distributive justice.

Stephenson and White (1968) have also used equity to describe altruistic behaviour. Unlike Walster, Bersheid, and Walster, they did not describe guilt; or the reactions to it, but instead looked at the reactions of ten-year old boys to manipulated injustice. They found that the boys in the absolutely deprived condition, the most inequitable position, cheated more than boys in the relatively deprived condition. As they state, "The rule of distributive justice receives strong support from these findings" (Stephenson and White, 1968, p. 468). Thus, Homans' (1961) theory of distributive justice has initiated research and received some experimental support.

Norm of reciprocity. Gouldner (1960) has proposed another theory of altruism based upon a "universal norm of reciprocity." Two kinds of reciprocity have been described. In one type the individual repays the other person for benefits he has received from that person. In the second, more general type of reciprocity "the individual provides rewards to another in relation to benefits he has received or anticipates, but the person to whom the rewards are given is not necessarily the same one who has benefited him in the past or who will maximize his outcomes in the future" (Berkowitz, 1968, p. 48). This universal norm of reciprocity does not contradict the previous theory, but rather tends to express altruism in the same economic terms. Although Gouldner (1960) proposed such a universal norm, various studies have shown that it is not universal, but is limited by certain conditions. For example, it was found (Goranson and Berkowitz, 1966) that reciprocity "is influenced by the degree to which the rewards given to the individual have been provided voluntarily" (Berkowitz, 1968, p. 48). The subjects worked hardest for someone who

had helped them voluntarily, particularly if it was the same person who had helped them previously. Social class differences also affect general reciprocity tendencies. It was found that American adolescent boys from entrepreneurial self-employed middle-class families were more affected by the reciprocity norm than were boys from either the bureaucratic (fathers receiving salaries) middle-class families or the lower-class families (Berkowitz and Friedman, 1967). Boys from the bureaucratic middle-class families were more responsibility-oriented than were the boys from the entrepreneurial middle-class homes. In studying the behavior of English adolescent boys (Berkowitz, 1968) it was found that it was the lower class boys, rather than the middle class boys, who were most concerned with reciprocity obligations. While the American working-class gave relatively little help, regardless of the assistance they had received, the British working class boys were "greatly affected by the level of help they had received earlier" (Berkowitz, 1968, p. 46). However, reciprocity considerations are particularly important in some cultures. In the Philippine culture, for example, favors must be repaid or the individual faces social rejection (Kaut, 1961). On the other hand, "reciprocity norms may not be particularly salient to the middle or upper class female college student in our culture" (Test and Bryan, 1961, p. 211). Although Test and Bryan did not determine the specific contributions of modeling and reciprocity in helping behavior, they realized the importance of controlling for "model effects when studying reciprocity" (1969, p. 211).

The reciprocity norm has also been interpreted in terms of equity principles (Wilke and Lanzetta, 1970). Rather than a general "prescription

to help others who have helped you" (Wilke and Lanzetta, 1970, p. 489), the reciprocity norm could be expressed in the stronger equity terms "to do exactly unto others as they have done unto you" (Wilke and Lanzetta, 1970, p. 489). The finding that reciprocated help was a "monotonic increasing function of the amount of prior help", was interpreted as being consistent with social exchange theories (Wilke and Lanzetta, 1970, p. 489).

Dispositional state theories. The essentially sociological theory of reciprocity may also be viewed as a psychological theory stressing the individual's internal dispositional state. According to Greenberg (1968) the individual repays, or reciprocates, a favor because he experiences a state of indebtedness, i.e. a "state of tension having motivational qualities" (Greenberg, 1968, p. 3). Not only has the variable affecting reciprocated help been studied, but reciprocity has also been examined in terms of an internal state of indebtedness.

Aronfreed (1970) also believes that the internal dispositional state of the individual who performs an altruistic act should be examined. However, he does not deal directly with reciprocity, but with altruism as a whole. He believes that an individual learns as a child to behave altruistically, because it is affectively reinforcing. "Even when an altruistic act may have a directly experienced aversive outcome for the actor, the value of its total set of outcomes can nevertheless be preferred to the value of the outcomes of another less altruistic alternative" (Aronfreed, 1970, p. 105). However, explanations of behavior in dispositional terms are difficult to prove or disprove. That is why more research has been done on theories that look at the behavioral act, rather than on theories that are concerned with dispositional states.

Altruism as social justice. Another theory of altruism maintains that "people want to believe they live in a just world where people get what they deserve" (Lerner, 1970, p. 208). Altruism is therefore "a response to the need to establish social justice" (Simmons and Lerner, 1968, p. 223). If someone is the victim of an injustice, this theory contends that he would be helped in order to maintain the helper's belief in a just world. In a series of experiments, Lerner and his colleagues examined the attitudes of people towards those who needed help. In one experiment (1965b), he found that observers of an innocent victim will try to help and compensate the victim but, if they cannot, they reject the victim as one who "deserves" his fate. Rejection of the victim was strongest when the victim was viewed as a martyr, that is, when the victim suffered for the sake of the other subjects (Lerner and Simmons, 1966). "The suffering of someone whose fate derives from altruistic motives is more threatening to the observer's belief in a just world than the suffering of less nobly motivated victims. The most comfortable way the observer can maintain the belief in a just world is by rejecting the victim" (Lerner, 1970, p. 214). In another experiment (Simmons and Lerner, 1968) subjects worked less hard for a supervisor who had been betrayed than for one who had been rewarded. According to this theory, the subjects persuaded themselves that the supervisor who had been betrayed was a "loser" and did not deserve their help.

Attention was also focused on situations where the subject was involved in the circumstances that led up to the victim's suffering. For example, Lerner and Matthews in 1967 studied the effect of attribution of responsibility on the subject's evaluation of the victim. The

subject and the victim were to pick slips of paper from a bowl, which assigned them to either a shock or a non-shock condition. When the victim chose first and subsequently suffered in the shock condition he was not devalued because he was considered responsible for his own fate. However, when the subject chose first and subsequently placed the victim in the shock condition, he devalued the victim, apparently to reduce his own sense of guilt at being responsible for the victim's suffering. Lerner (1968b) found that if the subjects can even "blame" the experimenter for the victim's suffering, instead of blaming themselves, they have no need to devalue the victim. By compensating an innocent victim if they can, by devaluing an innocent victim when they cannot help him, and by assigning the responsibility for the victim's fate to the victim, the subjects maintain their belief in a "just world" where people deserve their fate.

Helping behavior as power. Another theory of altruism accounts for the power aspect of helping behavior. This theory maintains that the dependent person, that is, the person who needs help, has power over the potential help-giver because of the social responsibility norm that demands that an individual help a person who is dependent upon him. Males appear to be more aware of the power that a dependent person holds over them than are females. This was indicated by Schopler and Bateson (1965) when they found that females helped their dependent partners more when they were more dependent upon them, while males helped their dependent peers less when they were more dependent upon them. They hypothesized that males viewed the increased dependence of another male as a threat

to their status and reacted by helping the more dependent peer less than they helped the peer who was less dependent upon them. Females, on the other hand, presumably tended not to be as competitively oriented as the male subjects and responded to a greater need for help by giving more help.

To examine this power aspect of the dependent subject in a different light, several experimenters looked at the conditions under which a helper is reciprocated for the help he has already given. The helper is now dependent on the individual he once helped, but he still has power over him in the sense that people should help those who are dependent upon them (social responsibility norm). It was found that a person who had been helped was more likely to reciprocate the help when he believed that the person helped because he sincerely wanted to, and not because of external rewards (Schopler, 1970). The potential help-giver will be even more inclined to help if, besides seeing his previous helper's motives as being truly altruistic, he sees his own rewards as likely to increase. For example, a subject helped another more when the recipient of his help possessed valuable resources (Pruitt, 1968) and when his own costs of helping were low (Schopler and Bateson, 1965). By taking resources and costs into consideration, the potential help-giver tried to make sure that he maximized his rewards. But other factors also influenced the potential help-giver's decision to help. He did not help on strictly economic terms. For example, he was more likely to help when he liked the recipient of his action (Daniels and Berkowitz, 1963), and when he perceived that the other person needed help because of external environmental factors, rather than internal personality factors (Schopler and

Matthews, 1965). These studies examined the power aspect of altruism, the power that the person who needs help has over the other person, by virtue of the social responsibility norm. Although an individual's decision to help a dependent peer is influenced by economic factors such as rewards and costs, it is also affected by such factors as liking, and the reasons the other person needs help.

Effects of the presence of others. Darley and Latane (1968) have examined yet another theory of altruistic behavior. In a series of experiments they found that the presence of others, either seen or believed to be present, increased the subjects' reluctance to intervene in the situation. This effect they attributed to a "diffusion of responsibility", since the more people present, the less responsible the individual subject feels and the less likely he is to help. They suggest "that situational factors, especially factors involving the immediate social environment, may be of greater importance in determining an individual's reaction to an emergency than such vague cultural or personality concepts as apathy or alienation due to urbanization" (Latane and Darley, 1970, p. 26).

Darley and Latane (1970) also examined the conditions under which donations, physical assistance, and information were given under non-emergency situations in the city. They found that females were more likely to receive help than males; that bold requests were more likely to be fulfilled than shy requests; that more help was given when the subjects were familiar with the location; and that wrong information was corrected more often if the other person was not physically threatening. Bystanders were more likely to join activities if the participants

reacted enthusiastically (Darley and Latane, 1970). On the basis of these studies they argue that "a person's helping behavior is too complexly determined by situational factors to be accounted for by norms" (Darley and Latane, 1970, p. 99).

Other experimenters have also concerned themselves with the presence of other subjects but they have examined this variable in a slightly different light. Bryan and Test (1967), for example, looked at the effects of models on helping behavior. They found that the presence of a generous model significantly increased donations to the Salvation Army, and that the effect of observing a motorist help another motorist was also to increase helping behavior. More people also signed petitions after observing a model (Blake, Mouton, and Hain, 1956; Helson, Mouton, and Blake, 1958), and more people volunteered for an experiment after seeing a model volunteer (Rosenbaum and Blake, 1955; Rosenbaum, 1956).

Not only the model's altruistic actions but also his motives for helping determines whether or not the subject will emulate him. Hornstein, Fisch, and Holmes (1968) studied this by depositing an envelope, containing a wallet, on the sidewalk. Wrapped around the wallet was a letter which led the subject to believe that the wallet had been lost twice, once by its original owner and once by its finder. The letter expressed the finder's feelings - either neutral, positive (pleasure at being able to help) or negative (annoyance) - at finding the wallet. The finder was either a similar model (well written grammatical note) or a dissimilar model (ungrammatical note such as would be written by a foreigner). It was found that "a letter from a similar model reporting positive or no experience produced more returns than a letter reporting

negative experiences, whereas the experience (positive, negative, or neutral) reported by a dissimilar model had no effect on the return rate" (Hornstein, 1970, p. 35). This supports what Schopler (1970) also found, that subjects are more likely to help if they believe that the person who first helped them was acting altruistically. If the model willingly helps, and expresses a positive attitude towards the cause he is supporting, more people will also donate to the charity. But, although positive models lead to more donations than do negative models, both types of models seem to goad people into action. "It seemed to us as we watched that most people would not stop at the table unless there was already someone there. People seemed to avoid solo action" (Macaulay, 1970, p. 59).

Social responsibility norm. There is one important theory that has not yet been discussed in detail - the norm of social responsibility. This norm, as first postulated by Berkowitz and Daniels (1963), prescribes that people should assume responsibility for those who are dependent upon them for help. However, "although the social responsibility norm appears to exist, it does not mean that everyone will adhere to it or, for that matter, that any one person will always behave in a consistent fashion with regard to this moral standard. Even when they have learned this ideal, people will conform to it only if they are aware of the moral rule on that occasion and are motivated to adhere to it" (Berkowitz, 1969, p. 284).

Certain factors seem to encourage social responsibility. For example, if a person is a member of the bureaucratic middle-class he is more likely

to help a dependent peer than if he is a member of the working class (Berkowitz, 1968). An individual's recent past experiences also influence his willingness to adhere to the social responsibility norm. If he has experienced prior success (Berkowitz and Connor, 1966), or if he has been helped previously (Berkowitz and Daniels, 1964), especially if the help was given voluntarily (Goranson and Berkowitz, 1966), he is more likely to help his dependent peer. Observing a helping model also increases helping behavior, probably because the norm is made more salient (Berkowitz and Daniels, 1964; Bryan and Test, 1967).

The individual's relationship with the person who needs help influences his willingness to help. The more the individual likes his dependent peer, the greater the amount of work he will do for him (Daniels and Berkowitz, 1963). Sex also plays a role in helping behavior. Berkowitz and Daniels (1963, 1964; Daniels and Berkowitz, 1963) have found that both males and females work for a dependent peer, but in at least one study this effect has only been found with females (Schopler and Bateson, 1965). This discrepancy was explained on the basis of methodological differences, that "help-giving may have been more legitimate, proper or even required" in the Berkowitz experiment (Berkowitz, 1969, p. 285).

How the situation is perceived also determines helping behavior. Schopler and Matthews (1965) found that subjects gave more help to a person who needed help because of factors beyond his control, than to a person who needed help because of his own inadequacies, presumably because the latter case of dependency was considered illegitimate. But if the subjects had a choice about whether or not to help a dependent

peer who was dependent because of his own shortcomings, they responded by helping (Horowitz, 1968). Subjects are also influenced by personal concerns. The higher the cost of helping (Schopler and Bateson, 1965) and the more self-concerned they are (Berkowitz, 1970), the less willing they will be to adhere to the social responsibility norm.

Even the relationship of the experimental situation to helping behavior has been studied. Some variables, such as the sex of the subject and the sex of the experimenter, have had no effect on helping behavior (Berkowitz, Klanderman, and Harris, 1964). The subjects in this latter experiment also did not help their peers more if they believed that the experimenter would soon learn of their productivity. This variable, which has been labelled "experimenter awareness" appears to have no effect on helping behavior. Even when individuals have learned the social responsibility norm, their past experiences, their relationship to the person who needs help, their perception of the situation, and the degree of their self-concern, all determine whether or not they will adhere to the norm.

Statement of the Problem

The present study was designed to examine the effect of several variables in a helping situation. It was primarily concerned with the effect of the variable of group size on helping behavior in the laboratory. Although group size was found to effect helping behavior in real-life situations (Darley and Latane, 1968), its role in determining helping behavior in a laboratory task, such as that utilized by Berkowitz et al (Berkowitz and Daniels, 1963; Berkowitz, Klanderman and Harris, 1964) has not been demonstrated.