73-12,495

COLAMOSCA, John Vincent, 1944-
THE EFFECT OF PRIOR HOSTILITY OF VICTIM ON THE LIKELIHOOD OF HELP IN A CRISIS.

Wayne State University, Ph.D., 1972
Psychology, experimental

THE EFFECT OF PRIOR HOSTILITY OF VICTIM ON THE LIKELIHOOD OF HELP IN A CRISIS

by

John V. Colamosca

A DISSERTATION

Submitted to the Office for Graduate Studies,

Graduate Division of Wayne State University, Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

1972

MAJOR: SOCIAL PSYCHOLOGY

APPROVED BY:

Advisor Date

ACKNOWLEDGEMENTS

The preparation and execution of a project such as a dissertation requires the help and understanding of many people. I would like to express my deepest thanks to Dr. Ira Firestone. Throughout my entire graduate school career, Dr. Firestone has been a true and sincere friend. He has helped me both academically and personally. The time he spent in offering guidance and suggestions, in listening to complaints and excuses, and in personal conversations has helped me tremendously.

I would also like to thank Drs. Cary Lichtman and Kalman Kaplan, for their time, suggestions and help. They both operated under much stress and pressure. I thank them both very much for their consideration and help in aiding me to meet a very stringent deadline. To Dr. Lichtman also goes my thanks for his suggeastions on the design and execution of this and a previous study. I would also like to express my thanks to Drs. Gloria Cowan and Reuben M. Baron for their help and suggestions.

My thanks also go to Tom Muller who acted as the confederate in this study, a difficult and demanding task; to Villanova University for the use of their facilities and subject pool in the actual execution of this study; and to Carol Friend, for her help and skill in preparing this final manuscript.

Lastly, I would like to acknowledge the deep debt I owe to my parents and brother. For the last six years, they and other members of my family have given me the affection, support and trust which in large part is repsonsible for whatever success I have attained. Their understanding and belief in the value of

education has sustained me throughout my endeavors. It is to my late father, Vincent Colamosca, that I owe my greatest debt for my beliefs, values and goals, and it is to him that this work is dedicated.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I
Introduction

During the past decade or so, social psychologists have evidenced more and more interest in the dynamics and parameters of what has come to be known as "altruistic behavior". This label covers a multitude of theories, approaches, and methods. Terms such as prosocial behavior (Bandura & Walters, 1963), helping behavior (Berkowitz, 1967), volunteering (Rosenbaum, 1956), gift-giving (Blake & Rosenbaum, 1955), sharing (Staub & Sherk, 1971), aiding (Midlarsky, 1968), and bystander intervention (Latane & Darley, 1966) can be subsumed under this very general heading.

The proliferation of studies in these various areas precludes any systematic presentation of the entire area of altruism in this paper. The interested reader is referred to reviews of the general literature on altruism to Krebs (1970) and of the literature on altruism in children to Bryan & London (1970). Instead, the scope of this paper is limited to only a few areas of the altruism literature: bystander intervention in emergency sitautions, rejection and altruism, and responsibility and altruism.

Before reviewing the relevant research for the study presented here, it would be best at the outset to outline what this study is concerned with in a general way. The general question that this study is asking is: What happens to a person who in the past has been hostile and negative to certain people and is now in need of their help in a very real way? What will be the

reaction of these supposed angered and annoyed people to this person? Will they, in effect, "let bygones be bygones" and attempt to help this person in need of aid as they would attempt to help another neutral person? Or will they react in the opposite manner, and operate under the law of talion and say "an eye for an eye" and not help him? A discussion group led by either an effective or an ineffective leader is continually blocked or partially blocked from attaining its goals by the obstructions set up by one of its members. At a particular point in time, this negative group member undergoes a physiological attack and needs help from the members of the group to overcome it. Will the other group members help or not? Before coming to specific hypotheses concerning what may happen, it is necessary to look at various studies which bear upon this question. It should be pointed out at the beginning that there are few studies which bear directly upon this problem and consequently many of the studies considered below are only generally relevant or are relevant only by implication or interpolation.

Although we have no information concerning the effects of hostility upon bystander intervention in a crisis, we do have quite a bit of research dealing with the general question of when a person will be helped by bystanders in an emergency situation. It is to this area that we turn first.

Bystander Intervention in Emergencies

The study of this phenomenon was first begun by Latane and Darley who were puzzled by the shockingly irresponsible behavior of the thirty-eight witnesses who remained behind their

apartment doors while Kitty Genovese was being murdered (Rosenthal, 1964). These two investigators conducted a number of experiments on bystander intervention which have stimulated further research by others both in the laboratory and in the field setting.

As both Allen (1972) and Latane & Darley (1970) have noted, there are numerous variables in the social situation which mediate helping. For example, Allen lists the following: the potential helper's relationship to the victim, the characteristics of the victim, physical and psychological barriers present, the anticipation of harm or violence, familiarity with the environment, personality and individual differences of both helper and victim, the mood of the situation, the presence of communication opportunities, and the possibility of cohesive action by a group of help givers. The present study taps several of the variables mediating helping as listed by Allen, namely, the potential helper's relationship to the victim, the characteristics of the victim, the mood of the situation, and the possibility of cohesive action by a group of help givers.

Much of the research in bystander intervention has been concerned with other variables involved in the social situation which facilitate or impede helping. In the main, they have been concerned with the effects of such situational variables as group size and the characteristics of other bystanders on helping. Darley & Latane (1968) found that the mere perception that other people are also witnessing the event will markedly

decrease the likelihood that an individual will intervene in an emergency. Subjects alone with a victim of a seizure were much more likely to intervene on his behalf, and, on the average, reacted in less than one-third the time required by the subjects who thought others were present. This result was also confirmed by Latane & Rodin (1969) who found that two-person groups were less likely to offer assistance than were subjects who were alone.

Latane & Darley (1968) found that subjects were less likely to report an emergency (smoke filling a room) when in the presence of passive others or in groups of three than when alone.

Several investigators have further studied the findings of the Latane & Darley studies, especially the finding relating to diffusion of responsibility. Schwartz & Clausen (1970) replicated and extended the Darley & Latane (1968) study to examine the effects of number and competence of bystanders, information given appropriate for action and ascription of responsibility (AR) upon males and females. They found that speed of helping dropped significantly for females but not for males when other bystanders were present and dropped significantly further when another bystander was medically competent. Among females desposed to accept rationales for denying responsibility, both effects were particularly strong. Information-action and AR to the self were associated with faster and more direct help.

Bickman (1971) tested the hypothesis that it is not the mere presence of others that reduces speed of helping, but how the others are perceived; specifically, if another bystander is seen as not being able to help, then there should be no effect on the speed with which the subject helps. The results showed that there was no difference in helping behavior between the condition in which there were no other bystanders present and the condition in which the other bystander could not help. However, as predicted, subjects in both of these conditions helped significantly faster than subjects in the condition in which the other bystander was perceived as being able to help.

These investigations have used situations with contrived and restricted communications. This approach is appropriate for investigating certain classes of problems but this very methodological approach has prevented the investigation of the manner by which an interacting group deals with a crisis, a situation which may better mirror what is actually taking place.

Several field studies, however, have attempted to overcome this shortcoming of the laboratory technique employed in the above studies. For example, in a field study on the subway, Piliavin et al. (1969) had teams of students (made up of a victim, a model, and two observers) stage standard collapses in which type of victim (drunk or ill), race of victim (black or white), and presence or absence of a model were varied. The major findings of the study were that an apparently ill person

is more likely to be helped than is one who appears to be drunk, that race of victim has little effect on race of helper except when the victim is drunk, that the longer the emergency continues without help being offered, the more likely it is that someone will leave the area of the emergency and that the expected decrease in speed of responsibility as group size increases--the diffusion of responsibility effect of Darley & Latane (1968)--does not occur in this situation.

In another field study, again on the subway, Allen (in Bickman & Henchy, 1972) studied the conditions under which a bystander would correct the wrong directional information given one confederate by another. Allen found that the less the bystander is directly involved in the action of the incident, the less likely he is to correct the misinformation and the more likely he is to diffuse the responsibility or blame, and the greater the probability of threat to the bystander for his intervention, the less likely he is to correct the misinformer.

In an attempt to look at an interacting, face to face group in the confines and control of the laboratory, the present writer, in a previous study (Colamosca, 1972), varied leader type to find out its effects on helping behavior. Three types of leaders were employed: the Emergent leader, the individual who, in an initially leaderless group discussion, showed the most leadership qualities according to Bass (1949); an Arbitrarily Appointed leader, an individual who may or may not by chance possess the above qualities; and a Pseudo-emergent

leader, an individual who showed very little of the leadership qualities and who would be chosen least often by the group members as their leader. The results showed that after a member of these groups (a confederate) had suffered a diabetic seizure, groups with an Emergent leader were most likely to respond quickly and successfully to the crisis while groups with a Pseudo-emergent leader were least likely to respond to the crisis quickly. It was also found that Pseudo-emergent leaders were most frequently deposed by their groups before they took action on the crisis. It was inferred that such leaders failed to give the group an anchor and foster cohesiveness so that such groups were unable to respond in a quick manner to the crisis situation.

The study which is proposed here is a partial replication and an extension of Colamosca (1972). This study was focused directly on two of the other mediating variables mentioned by Allen, the relationship between the victim and his potential helpers and one of the characteristics of that victim, his hostile behavior.

Several previous studies have looked at some of the characteristics of the victim. Both Bryan & Test (1967) and Piliavin et al. (1969) studied the race of the victim; the former study found that the race of a Salvation Army solicitor did affect the percentage of donors willing to contribute money, while the latter found that the race of the victim had little effect on the race of the helper except when the victim is

drunk. Allen (1972) hypothesized that the more deserving the bystander perceived the direction-asker to be, the more correction of wrong information would be found. However, this effect was not confirmed.

For the study conducted here, perhaps the findings of Piliavin et al. (1969) concerning the responsibility for the crisis are most pertinent. In discussing the reactions of bystanders to an ill or a drunk victim, these authors state that it is more likely that an ill person will be helped more often and quicker because of the role of responsibility for the crisis: in the case of a drunk person, he is at least partially responsible for his trouble, a sick man is not seen as being responsible for his difficulty.

Responsibility for trouble is seen as being a barrier to helping. It is here hypothesized that hostility of the victim acts as another such barrier to helping: A person who was previously hostile and who suddenly needs help will be helped but not as quickly as a person who has not been previously hostile to his potential helpers. If this general prediction is true, then varying the leader type of groups with such a hostile member will produce the same general results found in Colamosca (1972), i.e., the Emergent leader groups will help in the faster manner and more often and the Pseudo-emergent leader groups in a slower manner and less often, but it is also predicted that these groups will take longer to react and will react less often than groups in which no hostility was present. In order

to check on this prediction, data from Colamosca (1972) have been included at the appropriate points for comparison.

The basic assumption underlying these hypotheses is that in a crisis, other things being equal, people will help another in distress. (Helping does not seem to be an "all or none" phenomenon. None of the studies reported here found 100% helping or 100% non-helping in any condition.) This assumption is supported by Schwartz & Clausen (1970) who point out that during a crisis, general humanitarian norms demanding help are activated for most adult bystanders, by Latane & Darley (1970) and Allen (1972) who make statements much like that of Schwartz & Clausen. These statements support the contention that a previously hostile person in a crisis will be helped but as Allen (1972) points out, the way the situation evolves will influence the degree to which an individual will feel responsible to intervene. In the present study, it was predicted that the expression of hostility would influence this degree of responsibility the individual feels to intervene.

The hypothesis that when intervention does occur, it will be Emergent leader groups which will intervene quicker and more often is supported by the results of Colamosca (1972) and by Allen (1972) who states that when there is little group cohesion or satisfaction with the group (as in Pseudo-emergent leader groups), members of the group will feel unwilling or unable to act.

Several studies which do not fit into the category of

bystander intervention studies also support by implication the above general hypothesis. Isen & Levin (1972) found that subjects who were made to "feel good" are more likely to offer aid than are control subjects. There was no condition included in this study in which subjects were made to "feel bad", but it may be assumed that subjects who are annoyed or antagonized by a hostile person will be made to "feel bad" and will not be as likely to give aid, The same may be assumed for the results of Berkowitz & Macaulay and Isen, Bicker, & Fairchild (both reported in Isen & Levin, 1972), both of which indicate that good feeling aroused through positive verbal contact results in increased aid.

Responsibility and Altruism

Several studies in this area of helping behavior lend support to the general hypothesis listed above. These studies have been concerned with the general realtionship between the victim and the helper; specifically, these studies have focused upon the aspect of responsibility for harm between bystander and victim.

Rawlings (1968) found that exposure to the suffering or discomfort of another, regardless of whether or not one is responsible for the other's misfortune, makes one more responsive to the plight of other victims. Subjects in both a responsible-for-punishment and a not-responsible-for-punishment-of-other conditions were significantly more altruistic toward a new partner than subjects in two control groups(neither-respon-

sible-for-punishment and neither-punished) as measured by the administration of electric shocks. While the results of this study do not apply directly to the present study, it can be inferred that being exposed to the suffering of a victim, regardless of responsibility for his misfortune, will make one more responsive to the plight of that same victim. Thus, we can expect that in this present study there will be a general response of helping. Again, though, the barrier of hostility should make these responses slower on the whole.

Tilker (1970) looked at the relationship between responsibility for the safety of another, the amount of feedback received regarding the condition of the other, and socially responsible reactions. He studied three conditions of responsibility (none, ambiguous, and total) and three conditions of feedback (none, audio, and audiovisual). He found that individuals with full responsibility for the punishment of the other and full feedback were most likely to react in a socially responsible manner and attempt to alter the course of events (as measured by verbal protests to stop the punishment of the other). Of more importance for the study presented here is the finding that the group with no responsibility for the punishment of the other and full feedback (the same conditions as in the study presented here) reacted significantly less often than the group with full feedback and full responsibility and slightly (n.s.) higher than the group with full feedback and ambiguous responsibility. If the assumption can be made that a

group with a hostile member feels no responsibility for that member or his actions, then this finding can be used as evidence that such a group will respond less often to help that member in a crisis.

In line with these results is the finding of Thalhofer (1971) who found that help relevant to harm is greater with greater degree of the subject's involvement as the source of harm.

Rejection and Altruism

In this section we are concerned with the personal reactions of the group members to the hostile member and to the group leader. This part of the study involves a number of separate predictions which relate to the expression of aggression and the catharsis hypothesis.

Catharsis (the concept that there will be a decrease in aggression after the expression of aggression) has long been studied by social psychologists and there are several difficulties with these studies which make it difficult to derive conclusions and implications from them (Berkowitz, 1962, 1970; Buss, 1961). As Doob (1970; Doob & Wood, 1972) has pointed out, disconfirmations of the catharsis hypothesis under certain conditions have been taken as nonreplications of previous experiments, rather than as experiments done with very different research paradigms testing very different hypotheses. He has pointed out the confusion resulting from three sources: the numerous measures used to study the hypothesis (e.g., aggres-

sive behavior, feelings of arousal, physiological arousal); the very great variety of things which happen to the subjects (e.g., watching a videotape of a person undergoing an unpleasant drug experience, watching a movie of a fight, saying nasty things about an obnoxious person); and differences of opinion as to whether the state of the subject (annoyed or not) make a difference on the expression of a catharsis effect (Doob & Wood, 1972).

A set of situations which produces decreased levels of aggression are those in which a person sees the person annoying him get hurt. Bramel et al. (1968) found that annoyed subjects who watched a video-tape of their annoyer suffering (even though they knew that this tape had been made some time in the past) subsequently rated him as more competent and courteous than did subjects who had watched either of two other tapes. The opposite effect was shown for subjects who had not been annoyed. Doob (1970) showed that subjects who had a chance to hurt the person who annoyed them subsequently gave shorter shocks to the annoying person than did subjects who had not had a chance to hurt the annoying person. Once again, there was no effect for subjects who were not annoyed. Doob & Wood (1972) compared the effects of having the annoying person get hurt by the subject or by another person. They found that with annoyed subjects, having the confederate get hurt decreased the number of electric shocks that he was subsequently given.

These studies have importance for those hypotheses of the

present study which are concerned with the reactions of the subjects to the hostile group member and the leader after the expression of hostility and the occurrence of the seizure. It was hypothesized for this study that groups in which a seizure takes place after the hostility is expressed by one of its members will rate that member more positively (due to catharsis) than will groups in which there was no crisis intervening between the expression of hostility by the group member and the rating of that member. This hypothesis is supported by the findings of Bramel et al. (1968), Doob (1970) and Doob & Wood (1972).

In terms of the specific groups involved in the present study, it was predicted that after the seizure there would be less negative ratings of the confederate by the Emergent leader groups because these groups would be most successful during the crisis and this would tend to further ameliorate the aggressive feelings built up during the discussion sessions. The more negative ratings of the confederate were predicted for the Pseudo-emergent leader groups because they were expected to be less successful in the crisis and there would be "extra" aggression built up due to the ineffectiveness of the leader during the discussions. Thus, it was expected that there would be an additive effect of aggressive feelings during the discussions and feelings against the leader for the groups led by the Pseudo-emergent leaders. This is supported by implication from the results of Colamosca (1972) and by Pepitone & Reichling

(1955) who found that uncohesive groups (such as those led by Pseudo-emergent leaders) will be less able to overcome internal and external restraints on the expression of hostility during the life of the group than will cohesive groups (such as those led by Emergent leaders).

It was also predicted that in these groups, the leader will be rated more positively by the other group members in the Emergent leader condition and less positively in the Pseudo-emergent leader condition. Ratings of group atmosphere were predicted to parallel the rating of the group leader. These hypotheses are supported by implication by Pepitone & Reichling (1955) and by the finding of Smith (1957) who found that there is less satisfaction and increased defensiveness in groups in which a member acts contrary to the group's expectations than groups in which all members behave as expected during discussions.

Different predictions were made for groups which are not involved in a crisis situation between the hostility expression by the confederate and the final rating of him by the other group members. It was predicted that Emergent leader groups in this situation will rate the confederate more negatively because these groups are the most oriented toward the goal, most able to attain it, probably the most cohesive and will be the most frustrated under these conditions. Pseudo-emergent leader groups will rate the confederate less negatively. These predictions are supported by several studies: Jones &

de Charms (1957) found that the perceptions of another's characteristics will depend on whether the other promotes or interferes with goal attainment. When the failure of one group member affects the reward attainment of all, more negative characteristics will be ascribed to that person and when the locus of phenomenal causality is perceived as internal to that person (i.e., he himself is responsible for thwarting the goal), negative evaluations are more severe. Buss (1963) showed that subjects prevented from attaining a goal tended to display more aggression toward the person thwarting them than did a nonfrustrated control group. Strickland et al. (1960) found that subjects whose arguments were supported by a cohesive group (as in Emergent leader groups) were more negative in their evaluations of an antagonist than those whose arguments were not supported by the group.

It was also predicted that under conditions of No Crisis, Pseudo-emergent leader groups will rate their leader more negatively because he is ineffective in both the discussion situation and in the handling of the hostile member of the group. The Emergent leader will be rated more positively because he is better able to deal with the discussions and the hostile group member. Again, it was predicted that the ratings of group atmosphere would parallel the ratings of the leaders by the group members. Both of these predictions are also supported by the results of Pepitone & Reichling (1955) and Smith (1957).

Responsibility for Emergency and Liking

One of the situational variables (other than how the re-

lationship and the situation have evolved) which may affect the rating of the confederate by the other group members is the role of responsibility for the crisis; specifically, whether or not the victim has caused the crisis to himself in some way. The question to be answered in connection with the present study is: How will the others react to a crisis which the victim has brought upon himself, for which he is to blame?

The studies presented below bear upon this question. These studies have focused upon the role of responsibility for suffering--whether it is the responsibility of an observer or a victim--and shed some light on the above question.

Lerner & Simmons (1966) found that if observers can attribute the victim's suffering to something the victim did or failed to do, they will have less need to devalue his personal characteristics. This result is seen as support for the contention that rejection of a victim is the result of an observer's attempt to maintain his belief in "a just world". These authors hypothesize that rejection will occur primarily when this need is not satisfied by the assignment of misdeeds to the victim.

In line with the above result, Lerner & Matthews (1967) found that subjects who perceived that a victim was responsible for her own suffering subsequently described her in a relatively objective manner. However, when the subject perceived herself as responsible for the other's fate, she tended to devalue the other. Again, the proposition is offered that rejection of another will not occur if the observer can attribute the suffering to something the victim did.

From these findings on responsibility for the crisis, it can be predicted that confederates who are perceived by the other group members as being responsible for the crisis to themselves, will be rated in a more objective (i.e., more positive) manner than will confederates who are not perceived as being responsible for the crisis.

The Use of Observational Techniques

As mentioned previously, one of the aims behind the study presented here is to look at bystander intervention from the viwepoint of an interacting, face to face group, rather than to employ tape-recordings, isolation of subjects, etc., as previous studies did. The hopeful benefit of the approach employed here is to gain greater understanding of and insight into a situation as close to the real world as possible and yet maintain the benefits of the controls of the laboratory.

The obvious limitation of this approach is that it is difficult to impose strict controls upon the interactions. Specifically, here there was no sensible way of controlling the interactions during the discussion periods and limiting the amount of aggression displayed by the leader and the other group members toward the hostile confederate (indeed, it is questionable that such controls would be beneficial or desirable). Consequently, it was deemed necessary to note, catalogue, and analyze the behavior, verbal and nonverbal, during the discussion sessions through the use of observational techniques. The results of Piliavin et al. (1969), who utilized two obser-

vers to gain information about helpers and non-helpers on the subway, point out the importance of using observational techniques in conjunction with more conventional statistical methods for gaining more subtle information in helping studies than simple tallies of the number of people who help.

In recent years, thanks to people such as Bales (1950, 1970), Hall (1963, 1966), and Weick (1968), more attention is being turned toward the use of observational techniques as an adjunct to the "harder" measurement techniques. Observational methods have been developed for the cataloguing of such behaviors as facial expressions, glances, body movements, spatial behavior, and communication patterns in interactions.

In the study presented here, observational interest was in the occurrence and frequency of aggressive or hostile behaviors as expressed in two general modes--verbal and nonverbal. There are several systems of categories which have been developed to encode social interaction and which are not confined to specific problems and have general relevance: the Interaction Process Analysis (IPA) of Bales (1950, 1970), the Interaction Process Scores (IPS) system (Borgatta, 1962), and the Behavior Scores System (Borgatta, 1963). Because of the nature of interaction under study and the type of data of interest, it was decided to use the Bales IPA method to categorize the verbal interactions taking place.

For the observation of nonverbal aggression, instead of utilizing a particular sysyem of notation, it was decided

to record those gestures, body movements, and spatial behaviors which have been associated by several investigators with the expression of hostility or aggression, e.g., physical withdrawal, gestures of impatience, etc.

The data derived from these observational methods are presented in Appendix E.

Summary: Overview and Hypotheses

Overview: The experimental design is a 2 X 3 factorial. Groups are led by one of the two types of leaders (Emergent or Pseudo-emergent). In all of the groups, a confederate of the experimenter, by means of hostile remarks to the leader, disagreements and arguments with the group, blocks the attainment of their goal by the group. For one-half of the groups, the same confederate of the experimenter undergoes a (simulated) diabetic attack and requires the help of the group to end the crisis; in the other half of the groups, the confederate does not suffer such an attack. In one-half of the crisis groups, the confederate is perceived as being responsible for his own attack, while in the other half he is not perceived as being responsible.

Hypotheses: The hypotheses of the present study as previously derived are as follows:

1. A person who was previously hostile to a group and who suddenly needs its help will be helped, but not as quickly or as often as a person who has not been previously hostile to his potential helpers.
2. Emergent leader groups will help faster and more often than will groups led by Pseudo-emergent leaders.
3. Groups in which a crisis occurs after the expression of hostility by the confederate will rate the confederate more positively than will groups in which there was no crisis intervening between the expression of hostility by the confederate and the rating of that confederate.

4. In the crisis groups, groups with Emergent leaders will rate the confederate less negatively than groups with Pseudo-emergent leaders.
5. In the crisis groups, groups in which the responsibility for the occurrence of the crisis is perceived as being the confederate's will rate him more positively than will groups in which no such responsibility may be attributed to the confederate.
6. In the crisis groups, the leader will be rated more positively by the other group members in the Emergent leader condition than in the Pseudo-emergent leader condition.
7. In the crisis groups, ratings of group atmosphere will be more positive in the Emergent leader condition than in the Pseudo-emergent leader condition.
8. In the no-crisis groups, Emergent leader groups will rate the hostile confederate more negatively than will the Pseudo-emergent leader groups.
9. In the no-crisis groups, groups with Pseudo-emergent leaders will rate their leaders more negatively than will groups with Emergent leaders.
10. In the no-crisis groups, ratings of the group atmosphere will be more positive in groups with Emergent leaders than in groups with Pseudo-emergent leaders.

CHAPTER II

Method and Procedure

Subjects: One hundred and ninety-two male undergraduates from introductory psychology courses served as subjects and were randomly assigned to conditions. The only restriction upon the random assigment was that there be an equal number of groups (8) in each condition.

Introductory Procedure: Subjects were scheduled five at a time. Of these, four were actual subjects, the fifth was the confederate of the experimenter and was present at all experimental sessions.

The subjects were told that the purpose of the study was to look at group processes and see how people work together (for the complete script employed in this study, see Appendix A). They were told that they were going to be given a series of problem-solving situations which they were to discuss among themselves and then arrive at a solution to each problem. At this time they were also given a series of personality questionnaires and a personal data form to fill out (see Appendix B). They were given these questionnaires, they were told, so that the experimenter could get some idea of the characteristics of those people who were taking part in the study. The questionnaires given were: Rotter's I-E Scale, Christie's Machiavellianism Scale (Mach V), and the Crowne-Marlowe Need for Approval Scale.

After these were filled out and collected, the subjects were then told: "Before you start on the problems themselves,

I'd like you to get to know each other a little bit better." Subjects were then instructed to give their first names, and some of their academic and outside inetersts, such as sports and hobbies.

During this period of discussion in the Crisis groups, with the experimenter present, the Responsible confederate mentioned to the other group members that he did not "go in much" for sports or any physical activity because he has disbetes and had to take insulin and that any physical excitement or exertion was extremely hazardous for his condition and would quite likely result in his having an attack. In the No Responsibility groups, the confederate merely mentioned that he did not "go in much" for sports because he had diabetes and had to take insulin and physical activity was not good for his condition. In the No Crisis groups, the confederate made the same statement as in the No Responsibility-Crisis condition.

The experimenter then said: "I'd like to give you one of these problems that I've been talking about to see how you do on it and to make sure there are no problems with it. It's also going to be necessary for one of you to act as group leader and we'll decide who that will be after you run through this sample problem." Subjects were then given the sample problem and told to come to a decision within five minutes time, writing down their answer and the reasons why they had come to this conclusion.

Manipulation of Leadership Style: After this had been accomp-

lished and any problems that arose were taken care of, each member of the group was given rating forms for each other subject and told to rate the other members of the group on them. The forms were composed of 17 Likert type scales (see Final Questionnaire, Appendix D). This rating formed the basis for the initial liking rating of both the leader and the confederate.

Next, the group leader was selected according to one of the following methods (in neither of the conditions was the confederate selected as leader):

1. Emergent leader: E instructed each S to write down on a slip of paper the number (all Ss had been assigned numbers by E when they arrived at the experimental room) of the person he thought would be the best one to lead the group. These were collected by E and the group was told that the most popular member was appointed leader. (It had been decided beforehand that E would "rig" the election, so that the group member who showed the greatest amount of Emergent leader behaviors, e.g., offering the most suggestions, attempts to bring the group to consensus, etc., would be reported by E as the one the group had chosen. As it turned out, in this condition, the group members actually voted the individual who could be termed the emergent leader as their leader. Consequently, the individual selected as leader by the group and the individual who would have been selected by E, were one and the same and the "rigging" process was not necessary.)
2. Pseudo-emergent leader: E gave the same instructions as in condition 1, but rather than tell the group whom they had actually selected, he told them that they had elected the individual whom E observed to show the least emergent leader behaviors. The members of these groups had actually selected the member who could best be termed the emergent leader also; thus, the person whom they selected and the person whom E said they had selected were different people. (Throughout the remainder of this paper, the two types of leaders will be refferred to as the Emergent leader and the Pseudo-emergent leader. These names are based on the amount of emergent leader potential exhibited by the particular leader rather than the process through which they were selected, i.e., election versus appointment.)

After the leader had been selected in one of the above manners, the experimenter told the group that he would be giving them five problems of the type they had just discussed and solved (for the actual practice and experimental problems, see Appendix C.) He told the group the following: "What I want you to do is this: The leader will read what the problem is and then you will all discuss it and come to a solution as to what should be done about the problem. When you have done so, the leader will bring the result to me in my office down the hall where I will look at the way you solved the problem. I will then give him the next problem to be solved. Remember that you will have five minutes to solve each problem, so be sure to work within that framework of time. Are there any questions before I give you the first problem?"

After any questions were answered by the experimenter, he then gave the leader the first problem typed on a slip of paper.

The experimenter then left the room, ostensibly to go to his office to await the completion of the first problem. Actually, he did go to his office which was two rooms down the hall and then went from there into the room between the experimental room and his office where he and another confederate observed the group at work through a one-way mirror, where he noted the various activities of the group members, paying especial attention to the expression of hostility and aggression by all of the members of the group. The verbal exchanges of the

subjects were categorized according to Bales' categories and the nonverbal behavior (gestures, movements, etc.) were also observed and noted. As the group reached a solution to the problem, the experimenter would go back into his office, receive the result from the leader, and then give him the next in the series of problems.

Goal Blocking Manipulation: During the discussion of the first three problems in the Crisis groups (and during all five problems for the No Crisis groups) the confederate of the experimenter acted in a hostile manner. Although for each group and each problem the specific comments made would vary, the general trend of the confederate's comments were negative: he derogated the leader and his abilities, said that the conclusions the group came to and the reasons for these conclusions were wrong, stupid and that he did not agree with them. His comments were such that they caused the group to go over the five minute time period for the first problem. After about six minutes had elapsed from the start of the first discussion, the experimenter enetered the experimental room and said: "What's happening here? Aren't you done yet? Didn't you understand that you only have five minutes to do these problems? You've had plenty of time and are holding things up. We have a lot to accomplish, so please finish this problem now and be sure you finish the rest of them in the five minutes alloted."

Responsibility Manipulations: There were two parts to the manipulation of responsibility for the diabetic attack. The first

of these has already been mentioned. It consisted of the different things said by the confederate concerning his diabetes, its relationship to sports and exertion, and the possible consequences to the confederate for engaging in such activities. These things were said during the interchange among the subjects on their backgrounds and interests.

The second part of the manipulation took place during the discussion of the hrird problem. In the Responsible condition, the confederate told the other group members that he was beginning to feel dizzy. He said that it must be because he had not eaten anything with sugar in it so far that day and had forgotten to bring some candy with him and that it was beginning to affect him. He said that he had not had enough time and that he should have taken his orange juice that morning. Shortly afterward, he began to again complain about the discussion and the problem under consideration.

In the No Responsibility condition, the confederate said that he was beginning to feel dizzy. He said that he could not understand it because he had a full meal including something with sugar in it and that everything should be all right but was not. As in the previous condition, shortly afterward he began again to act in a hostile manner.

Seizure Manipulation: For one-half of the groups, during the discussion of the fourth problem, the confederate of the experimenter began to complain that he was having a diabetic reaction and that he needed some sugar; he said that he was

too weak to get the sugar himself and that he needed help. While saying these things, he lookes in the direction of the group leader. The experimenter observed the various actions taken to aid the confederate and noted what was done by the leader and by the other group members during the crisis situation.

For the other half of the groups (No Crisis), the group completed all five problems in the prescribed manner. After these groups had completed all of the problems, the experimenter returned to the room and gabe them a final questionnaire (see Appendix D) to fill out. Included in this questionnaire was a rating of the group atmosphere, several questions relating to the group's productivity, a question concerning their interest in the experiment and one asking whether or not they would be willing to take part in experiments similar to the one just completed. They were also given a check-list of their reactions to the experiment and four rating forms which were the same as the one used previously to rate the other group members. They were again asked to rate all of the other group members so that an understanding could be gained of the interpersonal relations existing within the group.

Measurement of Helping Behavior: In the Crisis groups, if one of the Ss left the experimental room to report the trouble or to take some other action, he was stopped by the second confederate of the experimenter, asked what was the matter,

and told to return to the experimental room. The second confederate told the subject that the situation "would be taken care of." The criterion of helping, then, was the departure from the experimental room by a subject in search of help for the victim. If the group had not done something to directly get aid for the victim and attempt to alleviate the trouble by the time three minutes had elapsed from the time the confederate first asked for help, the experiment was terminated by the experimenter.

After either of these alternatives had occurred, the experimenter entered the experimental room and asked what was taking place. When told about the confederate, as he invariably was, the experimenter called to the second confederate and asked him to take the ailing subject to the infirmary. The experimenter then asked the group for a detailed explanation of what had happened and asked each subject what he had done. He then asked the rest of the subjects to wait while he talked to the leader alone in his office, "to talk about the situation and the problems they had solved and what should be done now." Here, the leader was asked for a detailed account of what had happened and what he had done and why. In all of these interchanges with the experimenter, the subjects were asked why they felt the confederate had had his attack. The experimenter asked: "What do you think made him get sick; was it the experiment, I mean, was it too much for him, did I do something wrong? Or was it because of something else, was

he sick before? If it's due to the experiment, I want to know so I can change the design so that the same type of thing doesn't happen again."

After he had talked alone to the leader, the experimenter and the leader went back to the experimental room and all subjects were told that due to the other subject's problem, the experiment was over but that the experimenter wanted the remaining subjects to fill out the final questionnaire of the study, so that the experimenter would be able to get some data on their experiences in the group. They were then given the final questionnaire outlined above. When this had been completed in any group (Crisis or No Crisis), the experimenter explained the true purpose of the study to all subjects, allaying any fears they had and answered any questions. Subjects were assurred that their answers would be entirely anonymous and confidential. All subjects were asked to keep the purpose and occurrences of the experiment in strict confidence and were then dismissed.

Dependent Measures: The major dependent measures analyzed in this study were: the latency and rate of helping in the crisis groups, the differences in the first and second ratings of the confederate and the group leader, the rating of the group atmosphere, and the responses to the mood adjective check-list and other questions in the final questionnaire. Minor measures analyzed were the scores on the personality questionnaires and the observational measures made by the experimenter during the discussions.

CHAPTER III

Results

Success of Experimental Manipulations

Information on the success of experimental manipulations was obtained from the subjects who left the room of the attack, in the unstructured interview with the leader and other group members before the administration of the final questionnaire, and in the postexperimental interview itself. Interest was focused on the perception of three manipulations: the instigation of the subjects to hostiltiy, the plausibility of the crisis, and the differential perception of responsibility for the crisis.

The confederate's comments, disparagements and general hostility to the other members of the group were designed in order to bring about a negative response to the confederate by the other group members. A check on this manipulation can be found in the Change scores of the confederate's ratings by the other group members. Without exception, subjects in all of the groups did in fact change their ratings in a negative direction. Pooling the Change scores of all subjects and comparing the mean against the null expactation of zero change results in a t value of 41.43, $p < .01$, leaving little doubt that the confederate's comments and actions had their intended effect.

Judging by the subjects' nervousness when they reported the attack to the experimenter, by the responses while the emergency was taking place, by their responses to questions of

the experimenter, and by their surprise when they were told during the postexperimental interview that the seizure was not real, one can conclude that all of the subjects perceived the emergency as being real. None of the subjects reported to the experimenter that they perceived the situation as being a hoax or involving deception. Therefore, there was no need to drop the data of any of the subjects from the analysis.

The check on the perception of responsibility for the crisis was done by means of the subjects' responses during the unstructured interview after the crisis to the question "What do you thnk made him get sick", etc. The question was posed in such a way that the responsibility could be placed on the confederate himself or the conditions of the experiment. Subjects in the Responsibility condition perceived the confederate to be responsible for the crisis significantly more often than did subjects in the No Responsibility condition (87% [14 of 16] to 18% [3 of 16 groups] ; $X^2 = 16.52$, df = 1, $p < .01$). Subjects in the Responsible condition made statements such as, "He said he didn't feel well but he didn't do anything about it", "It was his fault", and "He should have known better, but he just stayed where he was." Subjects in the No Responsibility condition tended to say that the crisis "wasn't anybody's fault", blaming neither the confederate nor the conditions of the experiment.

Comparison with Previous Study

The first hypothesis to be tested in this study was the

proposition that a hostile group member would not be helped as quickly as would a non-hostile group member. This hypothesis relates to both frequency and latency of helping. In order to test this hypothesis, the relevant data from Colamosca (1972) were compared with the data from the crisis groups in the present study. It should be kept in mind that these two studies were conducted at different times, utilizing different confederates. Consequently, they may not be totally comparable. However, it is felt that for the present purposes that rough comparisons between the two studies may be made. Table 1 shows the relevant data from the previous study and the present one.

A Chi-square analysis of the frequency of groups (without regard to type of leader) responding to the confederate's need by the end of three minutes was done. The result was not significant, nor was the result of a Chi-square analysis of the two conditions for Emergent leaders. However, a Chi-square analysis of the two conditions for Pseudo-emergent leaders is significant (X^2 5.727, p .025). While the hypothesis as advanced is not supported, a revision of the hypothesis may be made for the frequency of helping. The results point to the probability that it is not the characteristic of the victim (hostile or non-hostile) which is important in the present situation, rather it is the type of leader that affects the frequency of helping the victim.

To discover the effects of the hostility variable upon

TABLE 1.--Comparison data for likelihood and speed of helping responses in the present study and Colamosca, 1972

Condition	Non-Hostile Victim		Hostile Victim	
Leader type	Emergent	Pseudo-em.	Emergent	Pseudo-em.
N Helping	11	3	15	6
N Not Helping	2	10	1	10
% Responding by 3 minutes	84	23	94	37
$\bar{X}$ Time in Seconds	46	103	75	145
$\bar{X}$ Speed Score	21.7	9.7	13.2	6.1

the latency of helping, an analysis of variance was done on the speed scores for the two conditions. The summary data are presented in Table 2. The results show that there is a significant effect of the characteristic of the victim on the speed of helping. There is also a significant main effect of leader tyeps upon the speed of response. The significant interaction effect is in accord with the results above on Pseudo-emergent leaders. These results combined with the results of the Chi-square analyses do support the initial hypothesis. It thus can be advanced that speed of helping is affected by whether or not the victim has previously been hostile to his potential helpers but the frequency of helping is unaffected by the hostility variable. Rather, in this situation, it would seem that it is the leader type which affects the frequency of helping.

Figure 1 shows the cumulative proportion of subjects who had intervened by any point in time following the crisis in both hostile and non-hostile conditions. The figure shows very clearly the difference in speed of helping found above in the different types of groups. For example, by the time the fastest Emergent leader group had intervened in the Hostile condition, approximately 50% of the same leader type groups had already intervened in the Non-Hostile condition. The difference is even more glaring between the Pseudo-emergent leader groups in the two conditions: when the first of these groups reported the emergency in the Hostile condition, all of the same leader type groups who were going to recat in the Non-Hostile condit-

TABLE 2.--Analysis of Variance of Speed Scores for Hostile and Non-Hostile Conditions

Source	df	MS	F
Condition (A)	1	43,94	43.51**
Leader Type (B)	1	8.40	8.31**
A X B	1	4.86	4.82*
Within cell	54	1.01	

*p<.05
**p<.01

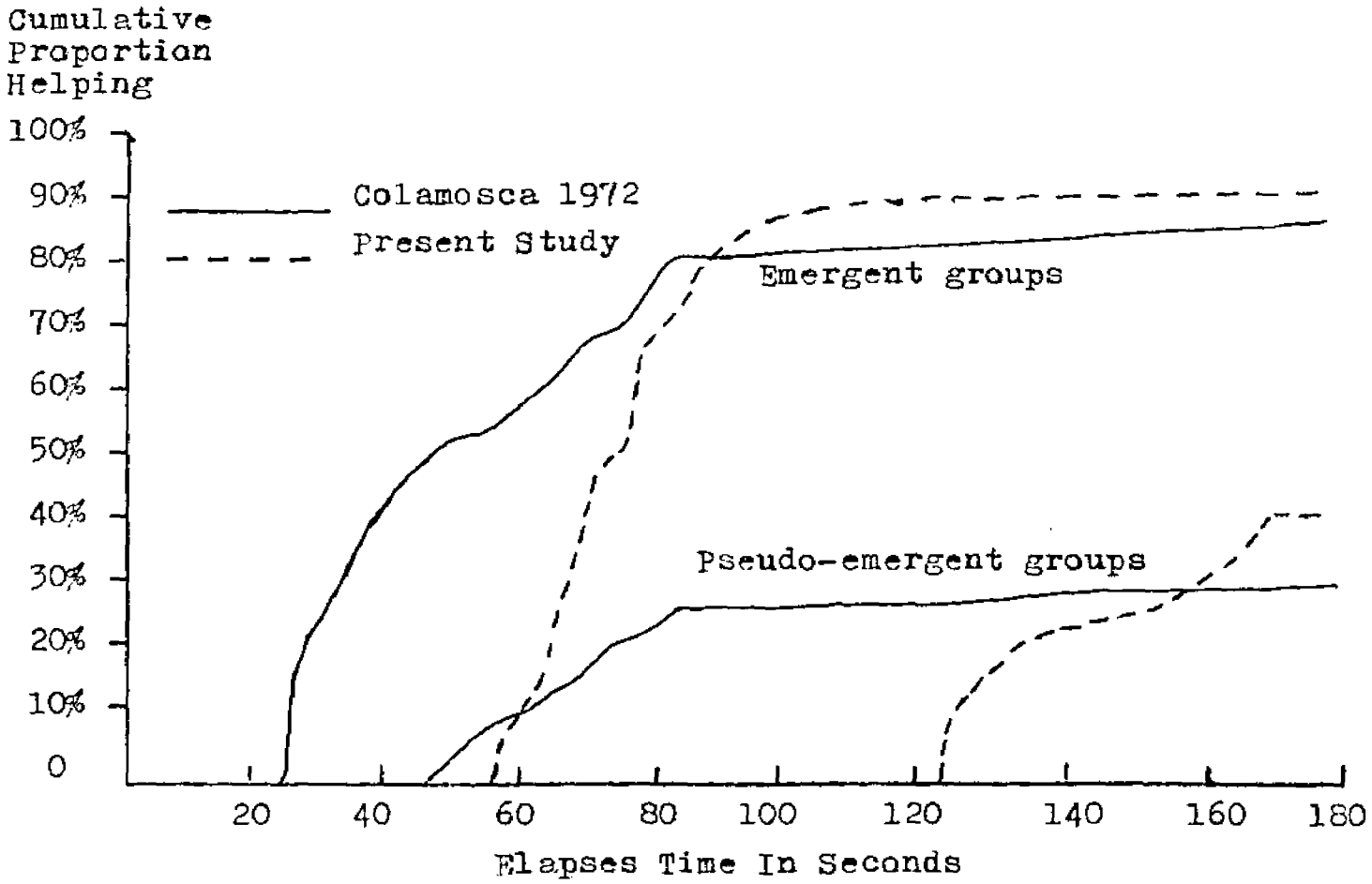


FIGURE 1.-- Cumulative Proprotion of Groups Helping In The Emergent and Pseudo-emergent Conditions in the Present Study and Colamosca, 1972

ion had already done so.

Overall Analysis of the Crisis Groups

In the crisis groups, 65% of the total number of groups (21 of 32 groups) met the criterion for helping behavior in the emergency, 75% (16 of 21 groups) had responded by the time two minutes had elapsed; only 3 subjects came out of the room after 2½ minutes had elapsed (14% of the responding groups). It thus seems unlikely that few additional groups would have responded had the experiment continued beyond the arbitrary three minute limit. For those individual subjects who left the room, the most common response, as noted by the second confederate, was to ask the second confederate where the experimenter was and to say that one of the subjects was sick (17 out of 21 or 80%). All other subjects who emerged from the room reported the emergency to the second confederate; none simply left the field or did not know why they had left the room. In their descriptions of the event to the experimenter during the unstructured interview, 71% (15 out of 21) of those who had left the room said that their intention was to report the emergency to the experimenter, and 29% (6 of 21) claimed that they had meant to help the victim directly (e.g., get him a soda or some candy).

The average length of time before a group responded to the emergency was 95.1 seconds after the confederate had asked for help. Groups which did not emerge from their room by the end of three minutes were assigned a time of 180 seconds. Av-

age times can mislead, therefore, because they are skewed by the 180 seconds assigned to these groups. Following Latane & Darley (1968), each group's time was transformed into a "speed score" by multiplying the reciprocal of its time to respond from the beginning of the emergency by 100. This normalized the distribution somewhat, deemphasizing the differences among those who responded quickly. The higher the speed score, the faster was the response. The right half of Table 1 presents the data relevant to likelihood and speed of response for all of the Crisis groups. Results of the analysis of variance of the speed scores for the leadership types are shown in Table 3.

The results in Table 3 show that there was a significant main effect of leader type on helping ($F = 275.03$, $df = 1/30$, $p < .001$). The results of a Duncan multiple-range test between leader types are shown in Table 4. Table 4 indicates that whereas there was no overall differences in mean helping between the two Responsibility conditions and between the two No Responsibility conditions, both Emergent group types were significantly faster than both Pseudo-emergent leader groups ($p < .05$). The results shown in Tables 3 and 4 support the second hypothesis of this study, that, in a crisis, groups with Emergent leaders will help in a faster time and more often than will groups with Pseudo-emergent leaders.

Figure 1 also reflects these differences in speed of response. For example, Figure 1 shows that by the end of 120 seconds, 93% of the Emergent leader groups had intervened in

TABLE 3.--Analysis of Variance of Speed Scores by Leader Type

Source	df	MS	F
Leader Type	1	407.55	275.03*
Error	30	1.46	

*$p < .01$

TABLE 4.--Means of Leadership Type for Speed of Response

Group	$\bar{X}$
Emergent-Responsiblity	14.1_a
Emergent-No Responsibility	12.2_a
Pseudo-em.-Responsibility	6.2_b
Pseudo-em.-No Responsibility	5.9_b

Note.--Means with common subscripts are not significantly different (at $p < .05$ level) by Duncan multiple-range tests. Higher score indicates faster time. N=8 per mean.

the crisis (infact this was the total number of groups in this condition that reacted) while at the same point in time, none of the Pseudo-emergent leader groups had intervened. The shape of the curve indicates that even had the emergency lasted longer than the arbitrary 180 second time limit, little further intervention would have taken place.

Effects on Rating of Confederate

The next hypotheses to be considered concern the amount of change in the liking of the confederate due to the presence or absence of a crisis, the type of leader of the group rating him and the attribution of responsibility for the crisis to the subject himself. The data for these hypotheses are based upon the 17 item scale administered after the practice problem and in the final questionnaire.

As mentioned previously (p.31), without exception, subjects in all groups did in fact change their ratings of the confederate in a negative direction during the second rating period.

Table 5 presents the summary data relevant to the rating of the confederate. These data pertain to hypotheses 3. 4, 6 and 8. Initially, it should be pointed out that a comparison of the mean Before scores for the confederate and the other group members shows that they do not differ significantly. This statement holds for the other group members other than the leaders; these comparisons will be dealt with in a later section.

TABLE 5.--Mean Before, After and Change Scores: Summary Evaluations of Confederate

CRISIS

	Group Type				Total				Grand Total
Form	E-R[a]	E-$\bar{R}$	Pe-R	Pe-$\bar{R}$	E	Pe	R	$\bar{R}$	
N	8	8	8	8	16	16	16	16	32
Before[b]	4.92	5.11	5.31	4.83	5.01	5.07	5.11	4.97	5.04
After[b]	2.50	2.46	2.27	1.69	2.48	1.98	2.38	2.07	2.23
Change[c]	2.42	2.67	3.04	3.14	2.53	3.09	2.73	2.90	2.81

NO CRISIS

	Group Type		Total
Form	E	Pe	
N	16	16	32
Before[b]	5.36	4.97	5.16
After[b]	1.29	1.47	1.38
Change[c]	4.07	3.50	3.78

[a] E = Emergent, Pe.= Pseudo-emergent, R= Responsibility, $\bar{R}$= No Responsibility.
[b] The higher the score, the more favorable the overall reaction.
[c] The higher the score, the greater the change in the negative direction.
Note.--Before scores do not differ significantly from each other in any condition.

Effects of Crisis vs No-Crisis: Hypothesis 3 predicts that the confederate would be rated more positively in the Crisis groups than in the No-Crisis groups. Table 6 presents the analysis of variance of the Crisis and No-Crisis groups. For this analysis, the data for the Responsible-No Responsible variable were combined for the Crisis groups. The results clearly show a significant effect on the rating of the confederate for the condition of Crisis-No Crisis. Results of a Duncan multiple-range test for the means of the Change scores for the Crisis and No-Crisis groups resulted in a significant difference (3.78 for No-Crisis groups versus 2.81 for Crisis groups, $p < .01$). These results show that a hostile individual will be better liked if he subsequently undergoes a crisis than if he does not. Thus the data support hypothesis 3.

Effects of Leader Type: Table 6 also shows that there was a significant interaction effect of leadership type of the group and the situation on the rating of the confederate. This interaction was predicted in hypotheses 4 and 8.

Hypothesis 8 states that, in No-Crisis groups, the confederate will be rated more negatively (i.e., a higher Change score) by groups with Emergent leaders than by groups with Pseudo-emergent leaders. Table 7 presents the analysis of variance for the two leader type groups in the No-Crisis condition. The results show that there is a significant effect on confederate rating for leader type and a Duncan multiple-range test shows that the means for the Change scores for the two groups

TABLE 6.--Analysis of Variance of Crisis and Leadership Effects

Source	df	MS	F
Crisis-No-Crisis (A)	1	12.12	26.93*
Leader Type (B)	1	.03	<1
A X B	1	5.91	13.13*
Error	60	.45	

*$p < .01$

TABLE 7.--Analysis of Variance of Leader Type in No-Crisis Situation

Source	df	MS	F
Leader Type	1	3.38	4.31*
Error	30	.78	

*p<.05

TABLE 8.--Analysis of Variance of Responsibility and Leader Type Manipulations in Crisis Groups

Source	df	MS	F
Responsibility (A)	1	.33	3.00
Leader Type (B)	1	2.77	25.18*
A X B	1	.05	<1
Error	28	.11	

*p<.01

differ significantly (4.07 for Emergent leader groups versus 3.50 for Pseudo-emergent leader groups, $p<.05$). Thus the data support hypothesis 8.

It was predicted in hypothesis 4 that the effect of leader type on the rating of the confederate in Crisis groups would be the opposite of the prediction for the No-Crisis groups, i.e., that Pseudo-emergent leader groups would rate the confederate more negatively than groups with Emergent leaders. Analysis of data relevant to this hypothesis are shown in Table 8. The results show that the type of leader of the group does have a main effect upon the rating of the confederate. Again, a Duncan multiple-range test was done on the means for these groups. The results show that the means for the Emergent leader groups do differ significantly from the means for the Pseudo-emergent leader groups (2.53 for Emergent leader groups versus 3.09 for Pseudo-emergent leader groups, $p<.05$). Hypothesis 4 is thus supported by the data.

Effects of Responsibility Manipulations: As mentioned previously (p.32), there was a significant difference in the perception of responsibility for the crisis for the various conditions. This difference was in the expected direction, with 87% of the Responsible groups (14 of 16 groups) responding that the crisis was the "fault" of the confederate to 18% of the No Responsible groups (3 of 16 groups).

According to hypothesis 5, it was expected that the confederate viewed as being responsible for the crisis to himself would be rated more favorably (i.e., a lower Change

score) than would a confederate who was not perceived as being responsible for the crisis. Table 8 above presents the data relevant to this hypothesis. It can be seen that the predicted effect is not significant, nor is the interaction between the responsibility variable and leader type significant. A Duncan multiple-range test reveals no significant difference between the mean Change scores for these groups.

In order to ascertain if the variable of responsibility had any effect on the likelihood and speed of the helping response, a split was done on the speed scores, dividing them into Responsible and No Responsible groups. The data are presented in Table 9. There are no significant differences between these two groups in either frequency or speed of response.

Responsibility, therefore, seems to exert a differential influence in the present study. Thus, although the manipulation of responsibility was effective in terms of the perception of whether or not the confederate was responsible for the crisis, this variable was apparently not seen as being an important or relevant dimension in either the rating of that confederate after the crisis or in the speed of helping him.

Effect on Rating of the Leader

It was pointed out in the last section that the Before ratings of the leaders differed significantly from those of

TABLE 9.--Division of Intervening Groups into Responsible and No Responsible Groups

Condition	N Helping	N Not Helping	% Responding by 3 min.	$\bar{X}$ Time in sec.	$\bar{X}$ Speed Score
Responsible	12	4	75	69	13.8
No Responsible	9	7	56	81	12.8

the other group members. The mean Before ratings for leader, confederate and other group members are presented in Table 10. An analysis of variance on the total mean Before scores shows that there is no significant effect for type of subject being rated. However, when the mean ratings for leaders are divided into ratings of Emergent and Pseudo-emergent, there is a main effect on Before rating of subject being rated. The summary data for this analysis are shown in Table 11 (for this analysis, the ratings of the confederate and members other than the leader were combined).

The results shown in Table 11 reveal that there is a significant effect on the Before rating of the type of subject being rated. Table 12 shows the means for the various groups and the results of a Duncan multiple-range test on these means which showed the mean Before rating of the Emergent leader differs significantly from the Before ratings of Pseudo-emergent leaders, confederates and other group members. The Before rating of Pseudo-emergent leaders does not differ significantly from those of the confederate or the other group members.

Hypotheses 6 and 9 both refer to the effects of the Crisis and No Crisis conditions upon the final rating of the leaders in the groups. In both a Crisis and a No Crisis situation, it was predicted that Emergent leaders would be rated more positively (i.e., a lower Change score) than would Pseudo-emergent leaders. Table 13 presents the summary data pertaining to both these hypotheses. These data are based upon the

TABLE 10.--Mean Before Ratings of Leaders, Confederates and Other Group Members for All Groups

CRISIS					
	Leader			Confederate	Other Members
	Emergent	Pseudo-emergent	Total		
N	16	16	32	32	96
	6.89	4.96	5.92	5.04	5.26

NO CRISIS					
	Leader			Confederate	Other Members
	Emergent	Pseudo-emergent	Total		
N	8	8	16	16	48
	6.67	4.83	5.75	5.16	5.18

TABLE 11. --Analysis of Variance Summary Table for Before Rating of Leader and Other Group Members Across Conditions

Source	df	MS	F
Crisis-No Crisis (A)	1	.04	<1
Subject Type (B)	1	110.88	502.10*
A X B	1	.68	<1
Error	236	.42	

*p<.05

TABLE 12.--Mean Before Ratings of Leader Type and Other Subjects

Group	$\bar{X}$
Emergent Leader	6.78_a
Pseudo-emergent Leader	4.89_b
Confederate	5.10_b
Other Members	5.22_b

Note.--Means with different subscripts are significantly different ($p < .05$) by Duncan multiple-range test

TABLE 13.--Mean Before, After and Change Scores: Summary Rating Evaluations for Group Leaders

CRISIS			
	Emergent	Pseudo-emergent	Total
Form			
N	16	16	32
Before[a]	6.89	4.96	5.92
After[a]	6.56	2.08	4.32
Change[b]	.33	2.88	1.60

NO CRISIS				
	Emergent	Pseudo-emergent	Total	Grand Total
Form				
N	16	16	32	64
Before[a]	6.67	4.83	5.75	5.83
After[a]	6.42	2.10	4.26	4.29
Change[b]	.25	2.73	1.49	1.54

[a]The higher the score, the more favorable the overall raection.

[b]The higher the score, the greater the change in the negative direction.

same 17 Likert type item scale administered after the practice problem and in the final questionnaire.

Table 14 presents the combined summary data for the analysis of variance of the Before, After and Change scores of the leader rating by the various groups. The results show across all three analyses a consistent main effect of leader type. As predicted in hypotheses 6 and 9, there is a main effect of leader type on Change scores and this effect is not significantly affected by the situation (Crisis versus No Crisis). The results of a Duncan multiple-range test on the mean Change scores for the two leader types shows that the Emergent leader is rated significantly higher than is the Pseudo-emergent leader (.29 for the Emergent leaders versus 2.80 for Pseudo-emergent leaders, $p < .01$).

In order to find out if the success of the group in intervening in the crisis had an effect or not, an analysis of variance was done for each leader type group, dividing the groups into those which intervened and those which did not. The mean Change scores for this analysis are shown in Table 15. The analysis of variance for Intervening versus Non-Intervening Emergent leader groups was not significant. The same analysis for Pseudo-emergent leader groups showed that the effect of the Intervention variable approaches significance but did not reach a significant level.

In terms of the specific scales. Emergent leaders tended to be rated more "efficient" and "self-assured" by

TABLE 14.--Analysis of Variance of Before, After and Change Scores of Leader Rating by Group Members

Source	df	Before MS	Before F	After MS	After F	Change MS	Change F
Crisis-No Crisis (A)	1	.20	<1	.05	<1	.12	<1
Leader Type (B)	1	39.06	74.18*	184.04	164.32*	103.72	152.67*
A X B	1	1.74	3.20	3.83	3.42	2.07	3.04
Error	60	.54		1.12		.68	

*p<.01

TABLE 15.--Mean Change Scores of Leader Types by Intervention

	Intervening			Non-Intervention		
	Emergent	Pseudo-emergent	Total	Emergent	Pseudo-emergent	Total
N	15	6	21	1	10	11
	.30	2.59	1.44	.36	3.17	2.76

their group members while Pseudo-emergent leaders were seen as more "frustrating", "distant" and "inefficient".

Effects on Rating of Group Atmosphere

The last major dependent measure to be considered was a 9 item scale on which the subject was asked to rate the atmosphere of the group in which he had participated. It was included as a part of the final questionnaire. Hypotheses 7 and 10 both predicted that, regardless of whether it was a Crisis or No Crisis group, the rating of the group atmosphere would be higher among members of Emergent leader groups than among members of Pseudo-emergent leader groups. Table 16 presents the summary data relevant to these two hypotheses.

The summary data of the analysis of variance for both types of leader groups are shown in Table 17. As can be seen, the predicted main effect on the Group Atmosphere rating is significant. The effects of the condition (Crisis vs. No Crisis) and the interaction effect are not significant. The results of a Duncan multiple-range test shows that the mean ratings for Emergent leader groups in the two conditions do not differ significantly from each other nor do those of the Pseudo-emergent leader groups; however, the two Emergent leader group means do differ significantly from the two Pseudo-emergent group means ($p<.01$). These reults support both hypotheses 7 and 10.

Table 18 shows the mean Group Atmosphere ratings divided according to the type of subject making the rating: leader or

other group member. An analysis of variance (Table 19) shows that there is a significant main effect on the Group Atmosphere rating by the type of subject evaluating the group. The difference between the total mean rating by leaders and that of the other group members is not significant by a Duncan multiple-range test; however, if the total mean rating by leaders is broken down into the ratings of leader types, then the mean rating for Emergent leader is significantly different from the mean rating by the other group members ($p < .05$), the difference between the mean ratings of the Pseudo-emergent leaders and the other group members is not significant.

An internal analysis of the various scale items shows that the Emergent leader groups tended to view the group as being more "efficient" and "close", while the Pseudo-emergent leader groups saw the groups as being more "distant" and "quarrelsome".

In sum, then, these results show that the members of the Emergent leader groups tended to view their experience more positively than did those who were led by Pseudo-emergent leaders. The ratings of the leader types parallel this feeling among their group members, and among all subjects, the Emergent leader tended to rate his group experience most positively.

Other Effects on Helping

The relationships of several individual difference variables with speed scores standardized by experimental group were examined. The correlations between speed score and the various personality and background measures are shown in Tables

TABLE 16.--Mean Rating[a] of Group Atmosphere for All Conditions

	CRISIS			NO CRISIS		
	Emergent	Pseudo-emergent	Total	Emergent	Pseudo-emergent	Total
N	16	16	32	8	8	16
	5.85	4.42	5.13	5.60	3.97	4.78

	GRAND TOTAL		
	Emergent	Pseudo-emergent	Total
N	24	24	48
	5.72	4.19	4.95

[a]The higher the score, the greater the satisfaction with the group.

TABLE 17.--Analysis of Variance of Group Atmosphere Rating by Leader Type Group in Crisis and No Crisis Conditions

Source	df	MS	F
Crisis-No Crisis (A)	1	.93	2.02
Leader Type (B)	1	3.04	6.60*
A X B	1	2.70	1.24
Error	188	.46	

*$p < .05$

TABLE 18.--Mean Group Atmosphere Rating By Subject Type

	Leader			Other
	Emergent	Pseudo-emergent	Total	
N	24	24	48	144
	5.72	4.19	4.95	4.56

TABLE 19.--Analysis of Variance of Group Atmosphere Rating by Subject

Source	df	MS	F
Subject Type	1	5.02	6.97*
Error	190	.72	

*p<.05

20 and 21. Speed of response was positively correlated with scores on the I-E Scale ($r = .23$, $p < .05$). There were no other important or significant correlations of response speed with these measures.

Speed of response was positively related to the initial rating of the group leader ($r = .26$, $p < .05$) and the rating of Group Atmosphere ($r = .21$, $p < .05$). The correlation with the initial rating of the confederate was not significant. The initial rating of the leader was also significantly related to the rating of Group Atmosphere ($r = .33$, $p < .01$).

Observational Data

The verbal and nonverbal behavior of the groups during the discussions was also observed. A comparison can be made between the Crisis and No Crisis groups only for the first three discussion periods since it was during the fourth problem that the crisis occurred while the No Crisis groups went on to finish all five problems.

During these three discussions, an average of 7.69 verbal comments were made by group members other than the confederate which could be categorized as "Disagrees", "Shows Tension", or "Shows Antagonism" in the Bales category system. There were no significant differences between groups in the mean number of such comments.

However, there was a significant difference in terms of which members made such comments. In Emergent leader groups, 64% of the comments were made by the leader, while in Pseudo-emergent leader groups, only 23% were made by the leader ($X^2 =$

TABLE 20.--Personality Correlates of Stabdardized Speed of Helping

Personality Test	r
Rotter's Internal-External Scale	.23
Christie's Machiavellianism Scale	.11
Marlowe-Crowne Need for Approval Scale	.05

TABLE 21.--Biographical Correlates of Standaedized Speed of Helping

Item	r
Year in College	-.06
Age	-.03
Birth Order	.09
Number of Siblings	.14
Father's Educational Level	.07

16.38, df= 1, p<.01).

Several nonverbal gestures and movements were displayed during the discussion periods. The frequency and distribution of these behaviors did not differ from group to group. Appendix F shows the types and frequencies of such behaviors.

Reactions to the Experiment: Responses to the Final Questionnaire

Subjects in all groups were given the same final questionnaire concerning their mood and their reactions to the experiment. On a check-list of 13 adjectives designed to assess any differences in mood between the Crisis and No Crisis groups, 87% of the subjects said they were "interested", 69% "friendly to other subjects", 63% "surprised", 57% "happy", 57% "concerned about the problem", 53% "pleased with the experience", 46% "relieved", 39% "annoyed with the other subjects", 12% "afraid", 6% "angry at experimenter", 2% "ashamed", 2% "confused", and 2% "angry at myself" (subjects checked an average of 5.8 adjectives). There were several significant differences between Crisis and No Crisis groups in checking certain of these adjectives: significantly more members of groups in the Crisis condition checked "surprised" (78% to 48%; X^2= 19.43, df= 1, p< .01), "happy" (86% to 28%; X^2= 83.34; df= 1, p<.01), "pleased with the experience" (66% to 40%; X^2= 66.21, df= 1, p<.01), and "relieved" (65% to 27%; X^2= 18.18, df= 1, p<.01). Significantly more members of No Crisis groups checked "annoyed with other subjects" (61% to 17%; X^2= 41.63, df= 1, p<.01).

Two of the questions in the final questionnaire asked

the subject which member of the group they thought helped the group the most and the least and they were then asked what percentage of the group's product was due to this member. These questions were designed to see if there would be differences in the perception of the leader and the confederate in the two types of leader groups. Eighty-eight percent of the Emergent leader group members said that the leader contributed the most while only 24% of the members of the Pseudo-emergent groups saw their leaders as helping the most in their groups. This difference is significant ($X^2 = 86.52$, df= 1, $p<.01$). Emergent leaders were seen as being responsible for approximately 60% of their group's product. There was no significant difference between groups in whom they perceived as the least helpful member of the group: 92% of the subjects said that it was the confederate and that he was responsible for only about 5% of the group's work.

In response to one of the other two questions on the final questionnaire, 87% of all subjects said that they would be willing to take part in similar experiments in the future (there were no group differences). On a 5-point scale, 87% found the experiment either "very interesting" or "interesting", the two extreme points. The only sign of a difference here was between Crisis and No Crisis groups: 56% of the fromer and 24% of the latter checked the most extreme interest ($X^2 = 16.27$, df= 1, $p<.01$).

CHAPTER IV
Discussion

This study was desigend for two basic porposes: firstly, it was meant as a replication and extension of a previous study by the writer (Colamosca, 1972) to ascertain whether the differences between leader types in response to a group member in a crisis would be found in a different group interaction situation. It had been found previously that those individuals who directed their groups and generally tried to bring their groups to consensus in discussion situations (Emergent leaders) had significantly more success in dealing with a crisis which threstened one of the group's members. These individuals reacted in a quicker manner and more often to help that member than did those individuals who were least likely to be dominant in group discussions (Pseudo-emergent leaders). The interest in the present study was to find out if a hostile group member who later became the victim of an emergency would modify the level of effectiveness of the varying group leader types.

The second basic purpose of this study was to investigate some of the relevant dimensions related to the occurrence of helping behavior. Previous studies have focuse upon the effects of group size and several of the characteristics of potential helpers (race, sex, competence) upon helping. The present study was designed to look at two specific characteristics of the victim (hostility and responsibility for the crisis) and at one of the dimensions involved in the development of a situation which may lead to helping (the presence of

hostility and aggressive feelings between victim and potential helpers). It was a further attempt to get away from the experimental methods used in previous studies which involved isolation and the use of deceptive tape-recordings and non-intervening confederates and an attempt to better reporduce what actually takes place in an interacting, real-life group.

The study investigated the helping response of interacting groups under several conditions: it varied the type of leader who was selected to lead the group during discussions, it varied whether or not the victim was perceived as being responsible for the crisis to himself, and it looked at the relationship between prior hostility on the part of the victim and the likelihood and speed of his being helped. It also made several comparisons between groups in which a crisis occurs and those in which it does not. In all, 10 hypotheses were advanced. Of these, eight were confirmed by the results, one must be revised in light of the findings and one was not confirmed by the results of the study.

It was found that in groups in which a crisis occurs after the expression of hostility by a group member, groups led by Emergent leaders were more likely to intervene in the crisis and do so in a shorter length of time than were the groups led by Pseudo-emergent leaders (hypothesis 2). It was also found that members of such crisis groups rate the previously hostile member more positively than do groups in which there was no crisis intervening between the expression of hos-

tility by the group member and the rating of that confederate (hypothesis 3); that in groups in which a crisis does occur, those groups led by Emergent leaders rate the hostile group member less negatively than do groups led by Pseudo-emergent leaders (hypothesis 4); and that in the groups undergoing a crisis, there is a difference in liking of the group leader by the other group members, with the Emergent leaders being rated significantly more positively than Pseudo-emergent leaders (hypothesis 6). Among those groups which do not undergo a crisis, it was found that those groups led by Emergent leaders rated the hostile group member more negatively than did members of Pseudo-emergent groups (hypothesis 8) and that, in the rating of the group leaders, Emergent leaders were rated more positively by their group members than were Pseudo-emergent leaders (hypothesis 9). In both Crisis and No Crisis groups, it was found that members of Emergent leader groups rated the group atmosphere more positively than did members of Pseudo-emergent groups (hypotheses 7 and 10).

The results of the findings of frequency and speed of help of a comparison of the present study and Colamosca (1972) require that the first hypothesis of this study be qualified. These results show differential effects of the prior hostility of the victim on the speed and frequency of helping. A non-hostile victim is likely to be helped more quickly by others than is a hostile victim. The frequency of helping, however, is not affected by this variable of hostility. Rather, for

frequency, the important variable in these studies seems to be the type of leader in the group. It was found, across situations, that Emergent leader groups help more frequently than do Pseudo-emergent leader groups. However, it was noted that these two studies are not entirely comparable and the results for this hypothesis should be considered tentative until further information is gathered.

Hypothesis 5, which related to the variable of the responsibility for the crisis, was not confirmed by the results. Although the manipulation of responsibility was effective in terms of the perception by others of whether or not the confederate was responsible for the crisis, it did not have a significant effect on the rating of the confederate after the crisis, as had been predicted.

The results pertaining to hypothesis 2 may be explained in the following manner: Several studies (Bass, 1949, 1961; Bass et al., 1953; Heinecke & Bales, 1953) have shown than emergent leaders in originally leaderless groups act in such a way to maintain their position in later sessions of the group meeting. They possess the qualifications for leadership and assert these qualifications in the situation in order to solidify their position and prevent the next most likely emergent leader from gaining control and taking over the position of leader. In this present study, the subjects selected as Emergent leaders were selected on the basis of these qualifications (e.g., offering suggestions, qualifying, seeking consensus,

etc.) which they showed in the original leaderless practice discussion session. In the later discussion sessions, they continued to exert their power in the same way and in this manner solidified their position as leader. Consequently, in the crisis situation, when the confederate asked for aid, the Emergent leader acted as leader again and directed what was to be done to give aid. He sees himself and is seen by the other group members as the leader, the one best qualified to direct what should be done, and acts accordingly.

In the same way, the Pseudo-emergent leader was the member of the group who showed the least amount of suggestions, etc., in the initial leaderless discussion. He was the one who would least likely be termed leader. During the subsequent group discussion periods, this type of leader was observed to act differently than the Emergent leader. He maintained much more of a passive role in the discussions, usually remaining fairly quiet waiting for the other members of the group to come to a solution. Unlike the Emergent leader, he did not dominate the discussions nor attempt to impose his own solution to the problem on the others. Nor was he the one who responded to the criticisms of the hostile confederate during the discussion periods. In many of the Pseudo-emergent leader groups, the other member who would have been termed the emergent leader took over to a large extent, directed the discussion, and defended the group's ideas and solutions against the criticisms of the confederate. However, it was still the Pseu-

do-emergent leader who brought the solution to the problem to the experimenter.

In these groups, when the confederate asked for help, the Pseudo-emergent leader did not possess the qualities nor the group support to direct what should be done in the emergency situation. The group structure was not the same in these groups as in the Emergent leader ones. Rather than there being a quick response of helping to the crisis, there was a response of confusion. Consequently, it took a longer time for these groups to react in a psoitive way to the emergency and fewer groups were able to meet the criterion of helping before three minutes had elapsed.

In relation to these findings, one of the major findings of Colamosca (1972) was that the ineffectual Pseudo-emergent leader tended to be overthrown during the crisis situation by a stronger, more effective group member who took over and directed what was to be done to aid the victim. As mentioned above, this phenomenon also occurred during the present study. Of the 16 Pseudo-emergent leaders in the Crisis condition, 10 were overthrown. In the previous study, the overthrow began during the discussion periods but did not become completely manifest until the crisis occurred. However, the overthrow process seemed to occur earlier in the present study. In 8 of the 10 cases of overthrow, by the end of the third discussion period, the other effective group member had taken over leadership of the group. Although the Pseudo-emergent leader

still read the problem to the others, it was the dominant other who led the discussion of the problem, directed it and tried to bring the group to a consensus. This individual, rather then the Pseudo-emergent leader, was the one who tended to respond to the comments and criticisms made by the confederate. It would thus seem that the added pressure of a hostile member of the group accelerated the overthrow process. These results are consistent with Hamblin's (1958) findings in which an inefficient leader was overthrown in an "emergency" situation (a shuffleboard game in which the rules were changed without the subjects' knowledge).

The findings related to the overthrow of the Pseudo-emergent leaders also support Torrance's theory of leadership under stress (1961). According to this theory, groups prefer continuity of leadership from non-stressful to stressful situations. Even established leaders, however, must continue to validate their leadership roles by providing the structure and expertise necessary for group survival. Thus, leaders of long and distinguished experience must go to great lengths to demonstrate again and again their expertness. There will be conflicts and even failure to survive as a group, when the designated leader fails to provide this essential structure and expertness (Torrance, 1954). The incompetent leader may be abandoned or otherwise deposed and an able and popular individual spontaneously may assume command either by mutual consent or at a somewhat unconscious level.

Thus on the basis of this theory, the results may be explained in the following way: the Emergent leader acts in such a way in each discussion session to provide the structure necessary for group gunctioning and shows his expertness in order to re-validate his position. He acts the same way in the emergency situation by maintaining control of the group and delagating what must be done. The Pseudo-emergent leader is seen as incompetent and not validly possessing the position of leader during the group discussion sessions, but his incompetence is of no great import in these sessions because another member fulfills his role, directing the group to a solution and handling the hostile group member. In the crisis situation, the Peeuso-emergent leader's incompetence is of importance, and in order to take care of the emergency efficiently, he must be overthrown or deposed by the group. The factors of the Pseudo-emergent leader's inefficiency and the real emergent leader's attempt in such groups to take over the discussions combine to bring about the overthrow of the Pseudo-emergent leader.

This line of reasoning can also explain the differences found in the leader and group atmosphere ratings between the different leader type groups. Members of Emergent leader groups perceive their leader to be efficient, enthusiastic, etc., and rate him accordingly. Their group experience, though not completely pleasant due to the hostile confederate, is still rated more pleasant and efficient than the experience of members of Pseudo-emergent leader groups. In the same way,

Pseudo-emergent leaders are more tense, frustrating and inefficient than Emergent leaders, they are perceived as being such by their group members and are rated accordingly.

The results of the differential rating of the confederate by Pseudo-emergent and Emergent leader groups from Crisis to No Crisis situations may be explained in the following manner: The Emergent leader is task oriented (Bass, 1949, 1961; Bass et al., 1953). His leadership is defined in terms of getting the group's job done, attaining the goal of the group. In the discussion sessions, this goal is blocked, at least partially, and the Emergent leader comes to view the confederate in a negative manner. In the Crisis groups, two things happen which help to alleviate the hostility built up against the confederate. Firstly, the cause of the goal-blocking undergoes a crisis, he seems to be in pain and at least is uncomfortable. This has a cathartic effect upon the Emergent leaders and the other group members. Seeing the cause of the hostile feelings undergoing pain helps to reduce the hostility built up in the observers by this person (Doob, 1970; Doob & Wood, 1972; Bramel et al., 1968). This acts in such a way as to lower future aggressive behavior against the annoting agent (Doob, 1970). Thus, although the confederate is rated more negatively than he was previously in the Crisis condition, he is not rated as negatively as he would be had no crisis occurred.

The second aspect of this situation is that the crisis presents the group with a new goal, that of helping the confederate. While it takes longer for a hostile victim to be helped

(hypothesis 2), the Emergent leader groups are significantly better at attaining this goal than are Pseudo-emergent leader groups. Consequently, the goal is achieved by these leaders, they have re-validated their effectiveness and this also helps to reduce the negative feelings toward the confederate that has just been helped. Thus, what is being proposed here is that there may be an additive effect of catharsis and goal-attainment which significantly reduces the hostility felt toward the confederate and he is rated more positively than is a confederate who neither undergoes a crisis (allowing for no catharsis effect) and who continually blocks the only goal of the group (as in No Crisis groups).

Another possibility which may account for this differential rating of the confederate from Crisis to No Crisis conditions is that of the cohesiveness or bonding which may be present in the Crisis groups. The fact that a member of these groups--even though he is a hostile member--undergoes the attack may act in such a way as to draw the members of the group into a more tight-knit, cohesive group, resulting in less derogation of the confederate.

Both Crisis and No Crisis groups have been engaged in the same task under the same conditions. In each, on of the members of the group has reacted to the other group members in a negative, hostile manner. The difference between the two groups is the crisis. It may be that the crisis itself acts to facilitate group cohesiveness and strengthen any bond which may exist among

the members of the group.

In other words, when the crisis occurs, it may have the effect of "raising the confederate's stock" in the eyes of the group members. The crsis calls for some type of action on the part of the group. In the crisis, the confederate is an integral part of the situation. He is acting in a responsive, cohesive manner now, not in a disruptive manner. The bond of cohesiveness which may develop in this situation may result in the less negative evaluation of the confederate. The confederate, in effect, has now acted as one of the group, he has not thwarted the goal of the group (indeed, he has provided the goal) and there will be less rejection on this basis.

Thus the sequence may have been the following: the crisis occurs and successful action in meeting the crisis results in enhanced cohesiveness or bonding, leading to less rejection of the confederate as revealed in the ratings of the confederate.

The higher negative evaluations of the confederate in the No Crisis condition are consistent with the findings of several studies. Jones & de Charms (1957) found that when the failure of one affects the goal attainment of all, more negative characteristics are ascribed to that person when his failure implies group failure than when it does not. Buss (1966) and Epstein & Taylor (1967) found less negative evaluations of a peer whose apparenlty nonhostile behavior thwarts the subject's success on a task that when he is thwarted by a hostile peer.

A variable which is important in relation to these find-

ings is the arbitrariness of the frustration or hostility (Pastore, 1952). Deutsch & Solomon (1959) found that if the perceiver believes he has done something to earn attack or insult, he is less likely to derogate the attacker than if the attacker was unreasonable or arbitrary. The same type of results were found by Berkowitz (1960) and Aronson & Linder (1965). The hostility of the confederate in the present study is purely arbitrary, he does not know any of the subjects, the task is not necessarily a boring or distasteful one, and the confederate had been friendly to the other subjects during the initial interchange of background and interests and in the practice problem.

The difference in speed of helping found between the Crisis groups in the present study and the results of Colamosca (1972) points to hostility acting as a barrier to helping. Although there was no significant difference in the frequency of helping between the two studies, there was a difference in the speed of response. Allen (1972) and Piliavin et al. (1969) have pointed to other barriers to helping and the results reported here helps to delineate further what such barriers may be and what effects they exert upon the frequency and speed of helping.

The only hypothesis which was not at least partially supported by the results related to the responsibility for the crisis. Piliavin et al., (1969) had found that drunk people were less frequently helped on a subway than were sick people. The ex-

planation these authors give for this result was that the bystanders attributed the responsibility for the crisis to the drunk person and not to the sick one. Lerner (1966) and Lerner & Simmons (1967) had found that if a victim was seen as responsible for her own suffering, the positive evaluation of that person was enhanced. In the study presented here, there were no differences in either helping or Change scores between the Responsibility and No Responsibility conditions. That the responsibility manipulation resulted in a difference in the perception of responsibility for the crisis by the other group members is attested to by the difference in response to a question posed by the experimenter, as reported in the previous chapter.

Possible theoretical explanations of why responsibility had no effect on the rating include the following: in this situation, the confed rate told the other group members the reason why he was feeling ill (he had not eaten, had not had anything sweet that day, etc.) and this may have given the others the explanation necessary to maintain their belief in a "just world" (Lerner, 1966) and they did not have to further derogate the confederate in order to give themselves an explanation for the crisis. They know the "misdeed" of the subject which results in his attack and so do not need to invent one by derogating him. Lerner (1966) found that rejection of a suffering person will not occur if the observer can attribute the suffering to something the victim did or failed to do. This may have been what happened in the present situation.

Another possibility is that there is an interaction between the responsibility and hostility variables. By the time the confederate told the group he was ill and needed their help, he had already acted in a hostile manner during three successive discussions. The negative feelings of the other group members toward the confederate may already have reached their highest point and the responsibility manipulation had no significant effect.

One reason why there was no effect on the rate of helping may have been that the confederate in this case made a direct appeal for help to the others (unlike the situation in Piliavin et al.) and there was already an existing relationship (although negative) between the victim and his potential helpers. No such relationship existed in the Piliavin et al. study. These two variables may have negated any inhibitory effects the responsibility variable may have had on helping.

A very practical explanation of the results relating to responsibility for the crisis may simply be that the distinction aimed at in varying what the confederate said about his responsibility for the crisis simply was not strong enough. The distinction envisioned by the author may not have been perceived as a distinction by the subjects. Any future attempt to manipulate this variable will have to further refine the distinction and make it clearer to the subjects.

The results of the present study help to particularize some of the relevant parameters in helping behavior as proposed

by Allen (1972) and others. They point to the fact that the relationship between the victim and his potential helpers is important and show that the prior hostility of the victim is of importance in defining those characteristics of the victim which affect helping.

The present study was conducted to investigate various relevant dimensions of helping behavior. One main problem encountered in the planning of a study such as this was involved in the conceptualization of helping behavior. How is helping behavior defined? What various behaviors may be classified as helping behavior? Is a kind word to the victim the same type of behavior as attempting to intervene in the situation? There are a variety of ways in which a person can respons to such an emergency situation. First of all, he may act in some positive manner or he may ignore the situation completely. If he chooses to act in a psoitive way, there are again several alternative ways of acting. The difficulty in this study was to decide upon a particular type of helping behavior as a criterion. It was decided to use the act of actively seeking help by leaving the experimental room as the criterion of helping behavior.

There are other conceivable behaviors which could have been employed as the criterion. Some of the other reactions which occurred during the crisis situation were verbal in nature (e.g., asking the victim "What is the matter?", "Do you have some gum?", saying to him "Take it easy, relax."); others were motor in nature (e.g., moving toward the victim). The criterion

of actively seeking help was decided upon because it is an overt and active response to the situation which implies definate intention to give aid to the victim. It was experimentally feasable to measure a response such as this. What is indictated, though, is the necessity to study in a much more detailed manner the variety of possible helping responses which may occur in an emergency or crisis situation. This investiagtion ideally should include a cataloguing of the possible internal and covert reactions of the bystanders as well as their overt reactions.

Variations in the present study could also be valuable in delineating reactions to emergency situations. It would be interesting to find out what would have happened if the experimenter had not been physically present and the group consequently had to seek aid in some other fashion. It would be informative to see precisely what would have been done in this case and whether or not the reactions of helping would have been the same and how the leader would have handled the situation.

The results of the present experiment may have been very different if, when the other members told the experimenter that it was the confederate who was causing the delays in problem-solving and that he was acting in a negative and hostile manner, the confederate denied this to the experimenter in front of the others and said that he was doing nothing to block the group or cause any sort of trouble. It would be expected that the group's evaluation of the confederate would be quite different and there might be interesting effects on the type and frequency of helping during the crisis.

Another extension of the present study would be to make the hostile confederate the leader of the group and have him control whether or not the group received a reward (money or course points). If they were continually deprived of such rewards, the group members might display quite different behaviors than those found in the present study in terms of helping and in rating the leader.

An interesting variation would be to have the leader be another confederate and have him verbalize the intent to not intervene. This might either cause the others to have to "regroup their forces" in order to intervene and it might result in individuals acting (as individuals rather than as members of the group's concerted action) or it might serve as a model for nonintervention on the part of the other subjects.

It should be added at this point that, ideally, studies such as the present one and its extensions should be conducted in a field setting. Such studies as those of Bryan & Test (1967), Piliavin et al. (1969), Allen (1972) and studies mentioned in Latane & Darley (1970) have shown that it is feasable to take the study of helping behavior into its natural setting. There are of course numerous difficulties with a field setting, but it should be constantly kept in mind by investigators in this area that the phenomena they are dealing with are real-life phenomena and should be studied whenever possible in the settings of their natural occurrence.

It has been mentioned in the previous chapter in connec-

tion with Figure 1 that the curves representing the cumulative proportion of groups helping level off after particular points in time. It has also been suggested that, from the appearance of these curves, it would seem that this is not a function simply of the arbitrarily set three minute time period. These findings and statements are in accord with those of Latane & Darley (1968), Darley & Latane (1968), Scwartz & Clausen (1970) and Bickman (1971). None of these previous studies used the design utilized in the present study. As has been mentioned, the subjects in these studies were separated, non-interacting individuals. They were isolated in separate rooms and thus could very easily continue to ignore the occurrence of the crisis after an arbitrarily set time limit due to lack of feedback, rationalizations, etc. This is not possible in the present study. Groups which did not intervene by the end of three minutes did not just sit passively while the victim suffered. Rather, they were active--slow, perhaps, but nevertheless active-- in attempting to do something about the crisis. Many of the groups were hampered by a lack of group structure (especially in the Pseudo-emergent leader groups) and were not successful in mmeting the criterion. Subjects in the other previous studies could ignore the crisis in various ways, this is simply not possible in a face to face situation (they cannot just sit there; the crisis does not disappear, the victim is still in front of them). Therefore, it is felt that a revision of the above statements concerning the leveling off of helping responses: it is hypothesized that in inter-

acting face to face group, a bimodal distribution of helping will occur. The first part of this distribution is represented by the present study. These are the groups which encountered a minimum of difficulty in reacting to the crisis situation. The second part of the distribution (which it is supposed would be found had the experiment gone on for a longer period of time) would represent those groups which met difficulties in intervening in the crisis quickly and efficiently. The intervention represented by this second part of the distribution might be qualitatively different. It could represent, for example, intervention of a single individual rather than a concerted group action. This whole area deserves further consideration and research.

This hypothesized bimodal distribution of helping serves to point out the basic differences between the situation under study here and that studied by previous researchers. These differences include: 1. Isolation vs. face to face. The present study uses a design in which all of the people involved interact in a face to face manner. In several studies (Darley & Latane, 1968; Schwartz & Clausen, 1970; Bickman, 1971), the authors use a situation in which each person is isolated in a separate room. 2. Naivete of subjects. In another study, Latane & Darley (1968) put a naive subject in with two confederates who were instructed not to act during the emergency situation (smoke filling a room) and found less intervention than in a naive subject alone condition. The design of the present study was such that except for the confederate who appealed for help, all of the subjects were naive. 3. Direct appeal for help. The confederate in this study

made a direct appeal for help to the others in the group and to the leader in particular, and also told them what could be done to aid him. In Latane & Darley's studies, no such direct appeal is used; rather the situation is so constructed that it is ambiguoius and there is no direction as to what should be done. 4. Ability to escape or ignore the crisis. The designs of the other experiments in this area were such that they allow the naive subject to escape or ignore the emergency situation. No such possibility to escape or ignore the emergency was present in this study.

These differences help to underline the need to integrate research on helping in emergency situations. Latane & Darley and the majority of the other laboratory researchers have been looking at one particular situation: the responses of people who are isolated, operating as individuals and who have had no face to face interaction with the victim prior to the crisis. The field studies of Piliavin et al. and Allen represent another situation: the responses of aggregate face to face groups who have had little interaction prior to the crisis. The present study investigates still a third situation: the responses of an interacting, face to face group with some limited interaction with the victim prior to the crisis. There are sother situations along this continuum (e.g., long-standing interacting groups, groups of freinds, etc.) which could be studied. Each of the various situations presently studied had yielded differences in proportion of people helping. Before any general conclusions

can be drawn concerning intervention, non-intervention, diffusion of responsibility, or whatever, all of these various situations (and the relationships between victim and helpers involved in them) must be investiagted and analyzed. At this point, it is difficult to make any general statements concerning the phenomenon of bystander intervention (or nonintervention) because the whole area is just beginning to be explored. Numerous suggestions for further research on bystander intervention have been put forward here and by several other authors. It is hoped that though these various research approaches it will be possible to come to an understanding of this interesting and puzzling area of behavior.

CHAPTER V

Summary and Conclusions

This study attempted to investigate several of the variables involved in helping in emergency situations. Specifically, it looked at the effect of various types of leaders on the group's frequency and speed of response to a crisis affecting one of its members, the effect of previous hostility by the victim of the crisis to his potential helpers, and the role played by whether or not the victim was seen as responsible for the crisis which befell him.

Ten hypotheses were advanced. Of these, eight were confirmed by the results, one must be revised in light of the findings and one was not confirmed by the results of the study.

It was found that in groups in which a crisis occurs after the expression of hostility by a group member, groups led by Emergent leaders were more likely to intervene in the crisis and to do so in a shorter length of time than were groups led by Pseudo-emergent leaders (hypothesis 2). It was also found that members of such crisis groups rate the previously hostile member more positively than do groups in which there was no crisis intervening between the expression of hostility by the group member and the rating of that confederate (hypothesis 3); that in groups in which a crisis does occur, those groups led by Emergent leaders rate the hostile group member less negatively than do groups led by Pseudo-emergent leaders (hypothesis 4); and that in the groups undergoing a crisis, there is a difference in liking of the group leader

by the other group members, with the Emergent leaders being rated significantly more postively than Pseudo-emergent leaders (hypothesis 6). Among those groups which did not undergo a crisis, it was found that those groups led by Emergent leaders rated the hostile group member more negatively than did members of Pseudo-emergent groups (hypothesis 8) and that, in the rating of the group leaders, Emergent leaders were rated more positively by their group members than were Pseudo-emergent leaders (hypothesis 9). In both Crisis and No Crisis groups, it was found that members of Emergent leader groups rated the group atmosphere more positively than did members of Pseudo-emergent groups (hypotheses 7 and 10).

The results of the findings of frequency and speed of help of a comparison of the present study and Colamsoca (1972) require that the first hypothesis of this study be qualified. These results show differential effects of the prior hostility of the victim on the speed and frequency of helping. A non-hostile victim is likely to be helped more quickly by others than is a hostile victim. The frequency of helping, however, is not affected by this variable of hostility. Rather, for frequency, the important variable in these studies was the type of leader in the group. It was found across situations that Emergent leader groups help more frequently than do Pseudo-emergent leader groups.

Hypothesis 5, which related to the variable of the responsibility for the crisis, was not confirmed by the results.

Although the manipulation of responsibility was effective in terms of the perception by others of whether or not the confederate was responsible for the crisis, it did not have a significant effect on the rating of the confederate after the crisis, as had been predicted.

Various theoretical explanations for the possible occurrence of these results were advanced. Alternative explanations for the non-confirmation of hypothesis 5 were also discussed.

A short discussion of varieties of helping behavior was included and several variations and extensions of the present study were proposed.

A final statement was made concerning the necessity to realize that the various studies done in the area of bystander intervention have largely dealt with situations which vary along several dimensions. It was pointed out that in order for there to be a complete understanding of the phenomena occurring in bystander intervention, these distinctions must be noted and the information resulting from these various approaches must be combined and integrated.

APPENDIX A

Script Used In Experiment

On arrival of each S: "Hell, are you scgehduled to take part in the experiment going on here?" If yes: "Good, thank you for coming. My name is Me. Colamosca and I'll be directing what happens today. If you'll tell me your name, I'll vheck it off on the list here to make sure you get the hour's credit." After checking name: "Please take a seat at the table because we have to wait for some others to show up yet."

After all subjects had arrived: "Now let me tell you something about what we're going to be doing here today. The aim of this study is to look at how people work together in groups. Basically, we're interested in group processes and studying how groups come to decisions. What I'm going to do is to give you a series of problem situations which I want you to discuss among yourselves and then come to a group decision to the problem. Ok?"

"Now before we get to the problems themselves, I'd like you to fill out some forms which all of the subjects in this study have to fill out." Hand out Booklet 1: "Now as you can see, there is a page for some biographical data on yourselves and there are several questionnaires. All of these are being given to you so that we can get some idea of the caharacteristics of the people who are taking part in the study. There are instructions on each of the questionnaires. I don't want you to get up-tight and think that these things are all that important. First of all, please answer them honestly, don't answer them the way you think you should or the way you think I want you to, just answer what you really feel. OK? Allright, secondly, all of these answers are confidential, no body else will see them but me. You'll notice on the first page of each of the booklets is a number, either 1, 2, 3, 4, or 5. In order to assure anonymity, from now on you'll be known only by that number; don't write your name or student numberon anyof the material I'll be giving you, OK? Also, in regard to these questionnaires, I want you to understand fully that there are no right answers, only answers according to the way you yourself feel. Is all of that understood? OK, then please fill outout all of the things that I've just given you. Please work quickly and don't stay too long over an answer because we have a lot more to do. OK, please begin and give me your booklet when you're done."

After all had been handed in: "Before you start on the problems themselves, I'd like you to get to know each other a little bit better. So let's take a few minutes for you to introduce yourselves to each other. Just state your first name and tell the others something about your academic and extracurricular activities, OK? Let's start with you, number 1."

After going through the initital interchange: "I'd like to give

you one of these problems that I've been talking about to see how you do on it and to make sure there are no problems with it. I'ts also going to be necessary for one of you to act as group leader and we'll decide who that will be after you run through this sample problem. Now, I'll read the problem to you, and what I want you to do is to come to a decision within five minutes time, write down your answer on that pad and tell me the reasons why you came to that conclusion."

After this was done: "Now you're going to select a group leader. First I want you to take these forms and rate each of the other members of the group on them. You know each other slightly now and I'd like to know how you're reacting to each other. There is a sheet for ech member of the group; there are no names, only the numbers printed at the top. Please be as honest as you can. None of you will see these ratings either now or later. The instructions are printed on the first sheet. OK, please begin."

After the subjects had handed in the rating forms: "Now you're going to elect a leader for the discussion of the problems. Each of you take one of these slips of paper and just write down on it the number of the person you think would make the best leader for the group's discussions. When you're done that, fold the paper in half and give it to me." When this was done: OK, now give me a minute or two and I'll check these slips and see who has been elected leader. OK, the person you have selected as leader is person number _____."

"Now I'm going to be giving you five problems like the one you've already discussed. What I want you to do is this: The leader will read aloud what the problem is and then you will all discuss it and come to a solution as to what should be done about the problem. When you have done so, the leader will bring the result to me in my office down the hall where I will look at the problem. I will then give him the next problem to be solved. My office is two rooms down the hall on the same side of the hall as this room. The door will be open, so just come in. Remember that you will have five minutes to solve each problem, so be sure to work within that frame work of time. Are there any questions before I give you the first problem?" After any questions are answered: "OK, here's the first problem. Begin on it." Experimenter leaves the room.

After 5½ minutes have elapsed during the discussion of the first problem, Experimenter comes back into the room: "What's happening here? Aren't you done yet? Didn't you understand that you only have five minutes to do these problems? You've had plenty of time and are holding things up. We have a lot to accomplish so please finish this problem now and be sure you finish the rest of them in the five minutes alloted."

When the leader brought each solution to the office: "You're

done. Good. Here's the next problem."

When the No Crisis groups had completed all five problems and the leader brought the last solution: "OK, that takes care of all of the problems. Go on back to the room and have the group wait for me. I'll be there in a couple of minutes," After Experimenter came into experimental room: "Now, you've completed all f of the problems and I've been looking at your solutions. They will be included in with those of all of the other groups for one final thing and that's to fill out these booklets. In these, there are several questions about your experiences in this group. Please fill these out, turn your booklet into me and then wait until everyone is done. When you're all finished, I'll answer any questions you may have. Now please fill out these booklets."

In Crisis groups, if they had intervened in the crisis: "What's going on? My assistant here said something was wrong, what is it?" After being told about the confederate: "Jack (the assistant), please take this man down to the infirmary and tell them what's happened. Stay with him until everything's OK." After the two confederates had left the room: "Now tell me some more about what happened. What did you guys do, I mean, how did you handle it?" After each had said what the group and he individually had done: "What do you think made him get sick; was it the experiment, I mean, was it too much for him, did I do something wrong? Or was it because of something else, was he sick before? If it's due to the experiment, I want to know so I can change the design so that the same type of thing doesn't happen again." After the subjects answered: "This really presents a problem for the experiment. If the rest of you will wait here, I'd like to talk to your group leader in my office for a few minutes."

In the Crisis groups, if they had not intervened: "What's going on? The time is up for the discussion. What's the matter now?" After being told about the confederate: "Wait a minute, I'll get someone to take you down to the infirmary." Experimenter comes back with second confederate and says the same as with intervening Crisis groups from this point.

At the office: "Can you tell me anything more about what happened? I just can't understand it completely." After the leader was done: "Well, since one of the members of the group is kind of out of action, I guess we'll have to call a halt to the experiment. But I think I'll try to get some data from the group so it won't be a complete waste. Let me get these booklets and we'll do back there."

At the experimental room: "Since on of the members of your group was taken sick, I don't see how we can go through with the

rest of the problems. Normally, what I do after the group has solved all five of the problems is to give these booklets to them to fill out. They have questions in them about your experiences in the group. Now, even though you can't complete all five problems, I'm going to give you these booklets anyway, because you have been working together for some time. I think I can probably use the data I get from them. So, please fill these out an hand them in to me. And please wait around until everyone's done. When you're all finished, I'll answer any questions you may have. So, now please fill out these booklets" (Hand out booklet 2).

After the group is finished: "Now, do you have any questions about the experiment?" All questions were answered and the group was asked what the purpose of the experiment was. Gradually, the real situation was explained to them and they were asked for ways of improving the design and procedure to make it more powerful and credible. They were then asked not to reveal anything about the experiment to other people in their classes or friends on campus until after the semester was over. They were then thanked for their time and participation and dismissed.

APPENDIX B

Sample Personal Data Questionnaire

NAME _____

BIRTHPLACE _____

AGE _____

YEAR IN SCHOOL _____

NUMBER OF CHILDREN IN YOUR FAMILY _____

YOUR ORDER OF BIRTH IN YOUR FAMILY (firstborn, secondborn, etc.)

_____

HOW MANY YEARS DID YOUR FATHER ATTEND SCHOOL ? _____

YOUR MAJOR IN SCHOOL _____

EXTRACURRICULAR ACTIVITIES AND INTERESTS _____

_____

_____

_____

_____

_____

APPENDIX C

Discussion Problems

Practice Problem:

A low ranked participant in a national chess tournament, playing an early match with the top-favored man, has the choice of attempting or not trying a deceptive but risky maneuver which might lead to quick victory if successful or almsot certain defeat if it fails.

Trial Problems:

1. An American prisoner-of-war must choose between possible escape with the risk of execution if caught, or remaining in the camp where privations are severe.

2. A college senior planning graduate work in chemistry may enter university X where, because of rigorous standards, only a fraction of the graduate students manage to receive the PhD, or he may enter university Y which has a poorer reputation but where almost every graduate student receives the PhD.

3. A man with a severe heart ailment must seriously curtail his customary way of life if he does not undergo a delicate medical operation which might cure him or might prove fatal.

4. A successful businessman with strong feelings of civic responsibility must decide whether or not to run for Congress on the ticket of a minority party whose campaign funds are limited.

5. An electrical engineer may stick with his present job at a modest but adequate salary, or may take a new job offering considerably more money but no long-term security.

APPENDIX D

Final Questionnaire

Now that the experiment is concluded we would like you to answer the following questions about the experiment and your reactions to it. Please write your number (1. 2, 3, 4, or 5) on the line below.

SUBJECT NUMBER _____

1. You have just participated in a study concerning group problem solving and group discussions. We would like to know about some of your reactions to this study in general and to the group in particular. Below are listed several adjectives which can be used to describe the atmosphere of the group of which you have just been a member. These adjectives are separated by a line divided into 8 equal spaces. Please check that point along the line where you feel your group falls. For example, if you feel that the group was very efficient you would probably check that line in the following way:

   EFFICIENT ✓ INEFFICIENT

   Check each line. Please begin.

PLEASANT _____ UNPLEASANT

BAD _____ GOOD

WORTHLESS _____ VALUABLE

DISTANT _____ CLOSE

COLD _____ WARM

QUARRELSOME _____ HARMONIOUS

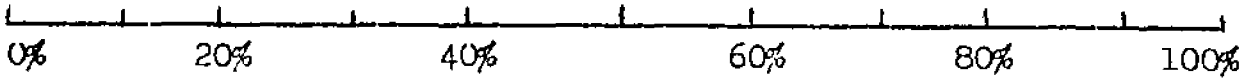
SELF-ASSURED _____ HESITANT

EFFICIENT _____ INEFFICIENT

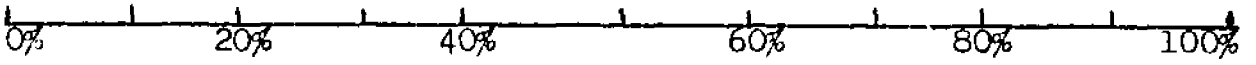
GLOOMY _____ CHEERFUL

2. In the group, which member do you think helped the group the most? Place his number here _____.

   How much of the result of the group's product would you say was due to this person?



3. In the group, which member do you think helped the group the least? Place his number here _____.



4. Listed below are a number of adjectives which may characterize how you feel right now in terms of your reactions to the experiment that has just taken place. Please place a check-mark next to those which you feel characterize your reactions at this time. You may check more than one adjective.

   _____ INTERESTED

   _____ SURPRISED

   _____ HAPPY

   _____ ASHAMED

   _____ ANGRY AT EXPERIMENTER

   _____ CONFUSED

   _____ CONCERNED ABOUT THE PROBLEM

   _____ PLEASED WITH THE EXPERIENCE

   _____ ANGRY AT MYSELF

   _____ AFRAID

   _____ FRIENDLY TO THE OTHER SUBJECTS

   _____ RELIEVED

   _____ ANNOYED WITH THE OTHER SUBJECTS

5. Would you be willing in the future to take part in experiments similar to the one in which you have just taken part?

_____ Yes _____ No

6. Do you think that the study you have just taken part in was interesting?

_____ very interesting

_____ interesting

_____ neither interesting nor uninteresting

_____ uninteresting

_____ very uninteresting

Beside rating the group as a whole as you did on page 1. we would also like you to rate the other members of the group to find out about the interpersonal relations that have developed during the experiment. You will rate the other four members of the group.

Personal Rating Form for Number _____

Please check that point along the line which you feel best applies to the person whose number is above. Please check each line.

PLEASANT		UNPLEASANT
FRIENDLY		UNFRIENDLY
REJECTING		ACCEPTING
HELPFUL		FRUSTRATING
UNENTHUSIASTIC		ENTHUSIASTIC
LOTS OF FUN		SERIOUS
TENSE		RELAXED
SUPPORTIVE		HOSTILE
DISTANT		CLOSE
COLD		WARM
COOPERATIVE		UNCOOPERATIVE
BORING		INTERESTING
QUARRELSOME		HARMONIOUS
SELF-ASSURED		HESITANT
EFFICIENT		INEFFICIENT
GLOOMY		CHEERFUL
OPEN		GUARDED

APPENDIX E

Types and Frequency of Aggressive Behaviors

Type of Behavior	Frequencies Per Group Per Problem			
	Crisis (32) (3 problems)		No Crisis (16) (5 problems)	
Verbal	Total #	$\bar{X}$	Total #	$\bar{X}$
1. Disagrees	219	2.2	191	2.3
2. Shows Tension	208	2.1	197	2.4
3. Shows Antagonism	238	2.4	191	2.3
4. Complaints/ Criticisms by Leader to E in E's office	101	1.1	65	.81
Nonverbal				
1. Turning head away from confederate	216	2.2	202	2.7
2. Shaking head in disgust or disbelief	187	1.9	148	1.8
3. Pushing chair away from table	81	.75	88	1.1
4. Facial grimaces	435	4.5	305	3.8
5. Drumming table with fingers	118	1.3	92	1.1
6. Changes in seating arrangement away from confederate	72	.74	11	.14
7. Other gestures	412	4.2	247	3.1
8. Other physical movements	233	2.4	203	2.5

BIBLIOGRAPHY

Allen, H. Bystander intervention and helping in the subway, in L. Bickman & T. Henchy, Beyond the Laboratory: Field Research in Social Psychology. New York: McGraw-Hill, 1972.

Aronson, E., & Linder. D. Gain and loss of esteem as determinants of interpersonal attractiveness. Journal of Experimental Social Psychology, 1965, 1, 156-172.

Bales, R.F. Interaction Process Analysis. Cambridge, Mass.: Addison-Wesley, 1950.

Bales, R.F. Personality and Interpersonal Behavior. New York: Holt, Rinehart & Winston, 1970.

Bandura, A.. & Walters, R.H. Social Learning and Personality Development. New York: Holt, Rinehart & Winston, 1963.

Bass, B. An analysis of the leaderless group discussion. Journal of Applied Psychology, 1949, 33, 527-533.

Bass, B. Some aspects of attempted, successful and effective leadership. Journal of Applied Psychology, 1961, 45, 120-122.

Bass, B., McGehee, C.R., Hawkins, W.C., Young, P.G., & Gobel, A.S. Personality variables related to leaderless group discussion behavior. Journal Of Abnormal and Social Psychology, 1953, 48, 122-128.

Berkowitz, L. Repeated frustrations and expectations in hostility arousal. Journal of Abnormal and Social Psychology, 1960, 60, 422-429.

Berkowitz, L. Aggression: A Social Psychological Analysis. New York: McGraw-Hill, 1962.

Berkowitz, L. A laboratory investigation of social class and national differences in helping behavior. International Journal of Psychology, 1966, 1, 231-242.

Berkowitz, L. Experimental investigations of hostility catharsis. Journal of Consulting and Clinical Psychology, 1970, 35, 1-7.

Bickman, L. The effects of another bystander's ability to help on bystander intervention in an emergency. Journal of Experimental Social Psychology, 1971, 7, 267-379.

Blake, R.R., Rosenbaum, M., & Duryea, R. Gift-giving as a function of group standards. Human Relations, 1955, 8, 61-73.

Borgatta, E.F. A systematic study of interaction process scores, peer and self-assessments, personality and other variables. Genetic Psychology Monographs, 1962, 65, 219-291.

Borgatta, E.F. A new systematic interaction observation system: behavior scores system (BSs). Journal of Psychological Studies, 1963, 14, 24-44.

Bramel, D., Taub, B., & Blum, B. An observer's reaction to the suffering of his enemy. Journal of Personality and Social Psychology, 1968, 8, 384-392.

Bryan, J.H., & London, P. Altruistic behavior in children. Psychological Bulletin, 1970, 73, 200-211.

Bryan, J H., & Test, M.A. Models and helping: Naturalistic studies in helping behavior. Journal of Personality and Social Psychology, 1967, 6, 400-407.

Buss, A.H. The Psychology of Aggression. New York: Wiley, 1961.

Buss, A.H. Physical aggression in relation to different frustrations. Journal of Abnormal and Social Psychology, 1963, 67, 1-7.

Buss, A.H. Instrumentality of aggression, feedback, and frustration as determinants of physical aggression. Journal of Personality and Social Psychology, 1966, 3, 153-162.

Colamosca, J.V. Bystander intervention: The effect of leader type on helping behavior. Unpublished Master's Thesis, Wayne State University, 1972.

Darley, J.M., & Latane, B. Bystander intervention in emergency sitautions: Diffusion of responsibility. Journal of sonality and Social Psychology, 1968, 8, 337-343.

Doob, A.N. Catharsis and aggression: The effects of hurting one's enemy. Journal of Experimental Research in Personality, 1970, 4, 291-296.

Doob, A.N., & Wood, L.E. Catharsis and aggression: Effects of annoyance and retaliation on aggressive behavior. Journal of Personality and Social Psychology, 1972, 22, 156-162.

Epstein, S., & Taylor, S.P. Instigation to aggression as a function of degree of defeat and perceived aggressive intent of the opponent. Journal of Personality, 1967, 35, 265-289.

Hall, E.T. A system for the notation of proxemic behavior. American Anthropologist, 1963, 1003-1026.

Hall, E.T. The Hidden Dimension. Garden City, N.Y.: Doubleday, 1966.

Hamblin, R.L. Leadership and crisis. Sociometry, 1958, 21, 322-335.

Heinecke, C., & Bales, R.F. Developmental trends in the structure of small groups. Sociometry, 1953, 16, 7-38.

Isen, A.M., & Levin, P.F. Effects of feeling good: Cookies and kindness. Journal of Personality and Social Psychology, 1972, 21, 384-388.

Jones, E.E., & de Charms, R. Changes in social perception as a function of the personal relevance of behavior. Sociometry, 1957, 20, 75-85.

Krebs, D.L. Altruism--An examination of the concept and a review of the literature. Psychological Bulletin, 1970, 73, 258-302.

Latane, B., & Darley, J.M. Bystander Intervention in Emergency Situations. Mimeo, New York University, 1966.

Latane, B., & Darley, J.M. Group inhibition and bystander intervention in emergencies. Journal of Abnormal and Social Psychology, 1968, 3, 215-221.

Latane, B., & Darley, J.M. The Unresponsive Bystander: Why Doesn't He Help? New York: Appleton-Century-Crofts, 1970.

Latane, B., & Rodin, J. A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. Journal of Experimental Social Psychology, 1969, 5, 189-202.

Lerner, M.S., & Matthews, G. Reactions to suffering of others under conditions of indirect responsibility. Journal of Personality and Social Psychology, 1967, 5, 319-325.

Lerner, M.S., & Simmons, C.H. Observer's reaction to the "innocent victim": Compassion or rejection. Journal of Personality and Social Psychology, 1966, 4, 203-210.

Midlarsky, E. Aiding responses: An analysis and review. Merrill-Palmer Quarterly, 1968, 14, 229-260.

Pastore, N. The role of arbitrariness in the frustration-aggression hypothesis. Journal of Abnormal and Social Psychology, 1952, 47, 728-731.

Pepitone, A., & Reichling, G. Group cohesiveness and the expression of hostility. Human Relations, 1955, 8, 327-337.

Piliavin, I.M., Rodin, J.A., & Piliavin, J.A. Good Samaritanism: An underground phenomenon? Journal of Personality and Social Psychology, 1969, 13, 289-299.

Rawlings, E.I. Witnessing harm to others: A reassessment of the role of guilt in altruistic behavior. Journal of Personality and Social Psychology, 1968, 10, 377-380.

Rosenbaum, M. The effect of stimulus and background factors on the volunteering response. Journal of Abnormal and Social Psychology, 1956, 53, 118-121.

Rosenthal, A.M. Study of the sickness called apathy. New York Times Magazine Section, May 3, 1967, 24.

Schwartz, S.H., & Clausen, G.T. Responsibility, norms and helping in an emergency. Journal of Personality and Social Psychology, 1970, 16, 293-310.

Smith, E.E. The effects of clear and unclear role expectations on group productivity anddefensiveness. Journal of Abnormal and Social Psychology, 1957, 55, 213-217.

Strickland, L.H., Jones, E.E., & Smith, W.P. Effects of group support on the evaluation of an antagonist. Journal of Abnormal and Social Psychology, 1960, 61, 73-81.

Thalhofer, N.N. Responsibility, reparation, and self-protection as reasons for three types of helping. Journal of Personality and Social Psychology, 1971, 19, 2, 144-151.

Tilker, H.A. Socially responsible behavior as a function of observer responsibility and victim feedback. Journal of Personality and Social Psychology, 1970, 14, 95-100.

Torrance, E.P. The behavior of small groups under the stress conditions of survival. American Sociological Review, 1954, 19, 751-755.

Torrance, E.P. A theory of leadership and interpersonal behavior under stress, in Luigi Petrullo & Bernard M. Bass (eds.), Leadership and Interpersonal Behavior. New York: Holt, Rinehart & Winston, 1967.

Weick, K.E. Systematic observational methods, in G. Lindzey & E. Aronson (eds.), The Handbook of Social Psychology (2nd ed.), Vol. II. Reading, Mass.: Addison-Wesley, 1968.

AUTOBIOGRAPHICAL STATEMENT

Name: John Vincent Colamosca

Birthdate: August 18, 1944

Education: Monsignor Bonner High School; Villanova University, Villanova, Pennsylvania, Bachelor of Arts in Psychology, 1966; Wayne State University, Detroit, Michigan, Master of Arts in Psychology, 1972

Experience: Research Assistant, Wayne State University, 1968-1960; Instructor of Psychology, Wayne State University, 1970-1971; Teaching Assistant, Wayne State University, 1969-1970, 1971-1972; Assistant Professor of Psychology, Drexel University, 1972-present

Memberships: National Defense Education Act Fellow, 1966-1968; Psi Chi; American Psychological Association (pending)