

72095

NCJRS

SEP 30 1990

ACQUISITIONS

**This is an authorized facsimile  
and was produced by microfilm-xerography  
in 1980 by  
UNIVERSITY MICROFILMS INTERNATIONAL  
Ann Arbor, Michigan, U.S.A.  
London, England**

## INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again -- beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

**Xerox University Microfilms**

300 North Zeeb Road  
Ann Arbor, Michigan 48106

76-29,842

DEUTSCH, Francine Meryl, 1948-  
THE REJECTION OF VICTIMS.

Columbia University, Ph.D., 1976  
Psychology, social

Xerox University Microfilms, Ann Arbor, Michigan 48106

© 1976

Francine Meryl Deutsch

All Rights Reserved

THE REJECTION OF VICTIMS

by

Francine Meryl Deutsch

Dissertation Committee:

Professor Morton Deutsch, Chairman  
Professor R. Gary Bridge  
Professor Albert Brok

Submitted in partial fulfillment of the  
requirements for the degree of Doctor of Philosophy  
under the Executive Committee of the Graduate  
School of Arts and Sciences  
Columbia University

1976

## ABSTRACT

### THE REJECTION OF VICTIMS

Francine Meryl Deutsch

Recent research has indicated that observers tend to reject and devalue victims. Two major theories have been formulated to account for this phenomenon, "just world" theory (Lerner & Simmons, 1966) and "defensive attribution" theory (Shaver, 1970).

Experiment I examined the effects of personal vulnerability and similarity on observers' evaluations of victims. On the basis of defensive attribution theory, it was hypothesized that subjects who were uncertain of their own fate would evaluate the victim more negatively than those who expected to share the victim's fate or those who did not. In addition, similar subjects were expected to be more positive than dissimilar subjects in evaluating the victim.

Seventy-one female college students watched a videotape of a girl who appeared to be receiving electric shocks as part of a learning experiment. In all conditions subjects expected to participate in the same learning experiment they had observed. However, in the "not vulnerable" conditions subjects thought they would not be shocked, while in the

"vulnerable" conditions subjects did expect to be shocked. In the "uncertain" conditions they did not know what their fate would be. Similarity was manipulated by varying the number of preferences the subject was led to believe she shared with the victim.

Contrary to prediction, subjects in the vulnerable conditions evaluated the victim most negatively,  $p < .02$ . The derogation of the victim by vulnerable subjects was interpreted as their attempt to dissociate from a victim with whom they identified in order to avoid the stress produced by empathizing with the victim's plight. It was further suggested that if an alternate means of dissociation were available, denigration would not occur.

Experiment II was designed to examine this interpretation. It was hypothesized that subjects who expect to share the victim's fate would evaluate her more negatively than those who do not. It was also hypothesized that if observers are "detached", their own anticipated fates would not affect their evaluations of the victim.

The procedure in Experiment II was basically the same as that used in Experiment I. Subjects were 56 female college students. The fate similarity manipulation was equivalent to the vulnerability manipulation in Experiment I. "Dissimilar fate" subjects knew they would not be shocked, and "similar fate" subjects knew they would be shocked.

Detachment was manipulated by altering the instructions the subject received. The "not detached" instructions were



identical to those received by the subjects in Experiment I. In the "detached" conditions subjects were given additional instructions which emphasized their roles as detached observers.

The original hypotheses were not confirmed. The only effect of the experimental variables was a tendency for subjects who expected to share the victim's fate to evaluate her more positively than those who did not,  $p < .13$ . Further internal analyses revealed an interaction effect of fate and identification (a constructed variable),  $p < .005$ . Observers who expected fates similar to the victim's evaluated her more positively if they identified with her than if they did not. However, observers who anticipated dissimilar fates evaluated the victim more positively if they did not identify with her than if they did.

These results were interpreted as partially supporting the theory that victim's are denigrated in order to reduce the anxiety aroused by identifying with them. However, it appears that when identification serves a positive function, no denigration occurs. It was further suggested that an individual difference variable affects the degree to which an observer identifies with a victim. Differences between the two studies were discussed.

## Acknowledgements

I would like to thank Dr. Morton Deutsch, my major advisor, for his critical reading of this paper, for his suggestions, and for his support of this work.

I am indebted to Dr. Gary Bridge for providing guidance and assistance whenever needed, and especially for his patience, encouragement, and confidence in me.

I also wish to thank Dr. Joyce Slochower for her convincing performance as the "victim", for her theoretical and editorial criticisms of the paper, and for her moral support and indefatigable optimism.

The contributions and concern of Elizabeth Hay, Hedda Orkin, Stella Manne, Cynthia Cohen, and Carole Shapiro are gratefully acknowledged.

In addition, I am grateful to my parents, Muriel and Samuel Deutsch, for their faith in me and for giving me the freedom to choose my own direction.

Finally, a special word of thanks is due Peter Hwang for his invaluable assistance throughout the course of this work. Among his many contributions were videotaping, helping with statistical and computer analysis, and typing innumerable drafts of the manuscript. In addition, his ability to share both the joys and disappointments of this endeavor are especially appreciated.

The research was supported by National Science Foundation Grant SOC74-02477, principal investigator, Dr. Morton Deutsch.

F.M.D.

## TABLE OF CONTENTS

| Chapter   | Page |
|---|------|
| I. INTRODUCTION . . . . .   | 1    |
| Review of the Literature . . . . .                                  | 2    |
| Just World Theory and<br>Experimental Evidence . . . . .            | 2    |
| Defensive Attribution Theory<br>and Experimental Evidence . . . . . | 5    |
| Implications of Defensive<br>Attribution Theory . . . . .           | 8    |
| Experimental Evidence . . . . .                                     | 10   |
| The Effect of Personal<br>Similarity . . . . .                      | 14   |
| Experimental Hypotheses . . . . .                                   | 17   |
| II. EXPERIMENT I: METHOD . . . . .                                  | 19   |
| Overview of the Procedure . . . . .                                 | 19   |
| Subjects . . . . .  | 20   |
| Procedure . . . . .   | 21   |
| Independent Variables . . . . .                                     | 23   |
| Vulnerability . . . . .   | 23   |
| Similarity . . . . .  | 24   |
| Manipulation Check . . . . .  | 25   |
| Dependent Measures . . . . .  | 25   |
| III. EXPERIMENT I: RESULTS . . . . .                                | 26   |
| Manipulation Checks . . . . .                                       | 26   |
| Vulnerability . . . . .   | 26   |

| Chapter   | Page |
|---|------|
| Similarity . . . . .                                  | 26   |
| Dependent Measures . . . . .                          | 29   |
| Evaluation of the Victim . . . . .                    | 29   |
| The Effect of Denigration . . . . .                   | 34   |
| Unexpected Findings . . . . .                         | 37   |
| IV. EXPERIMENT I: DISCUSSION . . . . .                | 38   |
| Critique of Defensive Attribution<br>Theory . . . . . | 38   |
| Possible Motives for Denigration . . . . .            | 41   |
| The Avoidance of Stigma . . . . .                     | 42   |
| The Avoidance of Empathy . . . . .                    | 43   |
| The Effects of Similarity . . . . .                   | 45   |
| Experimental Evidence . . . . .                       | 45   |
| Alternate Means of Avoiding<br>Empathy . . . . .      | 46   |
| Experimental Hypotheses . . . . .                     | 47   |
| V. EXPERIMENT II: METHOD . . . . .                    | 49   |
| Overview of the Procedure . . . . .                   | 49   |
| Subjects . . . . .                                    | 50   |
| Procedure . . . . .                                   | 51   |
| Independent Variables . . . . .                       | 52   |
| Fate Similarity . . . . .                             | 52   |
| Detachment . . . . .                                  | 53   |
| Manipulation Checks . . . . .                         | 54   |
| Dependent Measures . . . . .                          | 55   |
| VI. EXPERIMENT II: RESULTS . . . . .                  | 56   |
| Manipulation Checks . . . . .                         | 56   |

| Chapter   | Page |
|---|------|
| Detachment . . . . .  | 56   |
| Fate . . . . .  | 59   |
| Dependent Measures . . . . .  | 60   |
| Evaluation of the Victim . . . . .  | 60   |
| The Effect of Detachment . . . . .  | 64   |
| Other Effects of Identification . . . . .   | 69   |
| Unexpected Findings . . . . .   | 69   |
| VII. DISCUSSION . . . . .   | 71   |
| Perception of Similarity . . . . .  | 73   |
| Comparison of Detachment Measures . . . . .   | 74   |
| Comparison of Experiments I and II . . . . .  | 75   |
| Implications and Suggestions for Future Research . . . . .                          | 77   |
| Summary . . . . .   | 79   |
| REFERENCES . . . . .  | 80   |
| APPENDICES  |      |
| A. Experiment I: Experimental Manipulations . . . . .                               | 83   |
| B. Experiment I: Manipulation Check and Dependent Measure Questionnaires . . . . .  | 90   |
| C. Experiment I: Taped and Verbal Instructions to Subjects . . . . .                | 94   |
| D. Experiment I: Factor Analysis . . . . .  | 98   |
| E. Experiment I: Additional Analyses . . . . .                                      | 100  |
| F. Experiment II: Fate Manipulations . . . . .                                      | 105  |
| G. Experiment II: Manipulation Check and Dependent Measure Questionnaires . . . . . | 108  |

|  | Page |
|--|------|
| H. Experiment II: Taped and Verbal<br>Instructions to Subjects . . . . .   | 113  |
| I. Experiment II: Factor Analysis . . . . .  | 117  |
| J. Experiment II: Correlations, Means and<br>Standard Deviations, and Analyses of<br>Variance for Additional Dependent<br>Measures . . . . . | 119  |

## LIST OF TABLES

| Table   | Page |
|---|------|
| 1 Means and Standard Deviations for Vulnerability Manipulation Check . . . . .  | 27   |
| 2 Analysis of Variance for Vulnerability Manipulation Check . . . . .   | 28   |
| 3 Newman-Keuls Comparison of Means for Vulnerability Manipulation Check . . . . .                                       | 28   |
| 4 Means and Standard Deviations for Subjects' Perceived Similarity to the Victim Subsequent to Viewing the Tape . . . . | 30   |
| 5 Analysis of Variance for Subjects' Perceived Similarity to the Victim Subsequent to Viewing the Tape . . . . .        | 31   |
| 6 Simple Effects Tests for Subjects' Perceived Similarity to the Victim Subsequent to Viewing the Tape . . . . .        | 31   |
| 7 Means and Standard Deviations for Overall Victim Evaluation . . . . .   | 32   |
| 8 Analysis of Variance for Sum of Subject's Ratings of Victim . . . . .   | 33   |
| 9 Analysis of Variance for Comparison between Victim Evaluation and Average Student Evaluation . . . . .                | 33   |
| 10 Means and Standard Deviations for Constructed Victim Evaluation . . . . .  | 35   |
| 11 Analysis of Variance for Constructed Victim Evaluation . . . . .   | 36   |
| 12 Newman-Keuls Comparison of Means for Constructed Victim Evaluation . . . . .   | 36   |
| 13 Means and Standard Deviations for Detachment Manipulation Checks . . . . .   | 57   |

| Table |  | Page |
|-------|--|------|
| 14    | Analysis of Variance for Detachment<br>Manipulation Checks . . . . .   | 58   |
| 15    | Means and Standard Deviations for<br>Total Victim Evaluation . . . . .   | 62   |
| 16    | Analysis of Variance for Total Victim<br>Evaluation . . . . .  | 62   |
| 17    | Means and Standard Deviations for<br>Constructed Victim Evaluation . . . . .   | 63   |
| 18    | Analysis of Variance for Constructed<br>Victim Evaluation . . . . .  | 63   |
| 19    | Means and Standard Deviations for<br>Constructed Victim Evaluation--<br>Detachment by Fate by Identification . . . . .         | 66   |
| 20    | Unweighted Means Analysis of Variance<br>for Constructed Victim Evaluation--<br>Detachment by Fate by Identification . . . . . | 67   |

#### APPENDIX D

|   |  |    |
|---|--|----|
| 1 | Factor Loadings of Victim Evaluation<br>Scales . . . . . | 99 |
|---|--|----|

#### APPENDIX E

|   |   |     |
|---|---|-----|
| 1 | Means and Standard Deviations for<br>Subjects' Perceptions of Severity of<br>Shock . . . . .    | 101 |
| 2 | Analysis of Variance for Subjects'<br>Perceptions of Severity of Shock . . . . .                | 102 |
| 3 | Newman-Keuls Comparison of Means for<br>Subjects' Perceptions of Severity of<br>Shock . . . . . | 102 |
| 4 | Means and Standard Deviations for<br>Additional Dependent Measures . . . . .                    | 103 |
| 5 | Analysis of Variance for Additional<br>Dependent Measures . . . . .                             | 104 |



## APPENDIX I

|   |  |     |
|---|--|-----|
| 1 | Rotated Factor Loadings of Rating Scales . . . . . | 118 |
|---|--|-----|

## APPENDIX J

|    |  |     |
|----|--|-----|
| 1  | Correlations of Pre- and Post-Manipulation Checks . . . . .  | 120 |
| 2  | Means and Standard Deviations for the Question "How did you feel as you watched the videotape?" . . . . .                      | 121 |
| 3  | Analysis of Variance for the Question "How did you feel as you watched the videotape?" . . . . .                               | 121 |
| 4  | Means and Standard Deviations for Victim Maturity Index . . . . .  | 122 |
| 5  | Analysis of Variance for Victim Maturity Index . . . . .   | 122 |
| 6  | Means and Standard Deviations for Victim Maturity Index--Detachment by Fate by Identification . . . . .                        | 123 |
| 7  | Unweighted Means Analysis of Variance for Victim Maturity Index--Detachment by Fate by Identification . . . . .                | 124 |
| 8  | Simple Interaction Effects Tests for Victim Maturity Index--Detachment by Fate by Identification . . . . .                     | 124 |
| 9  | Means and Standard Deviations for Constructed Victim Evaluation--Detachment by Fate by Emotional Involvement . . . . .         | 125 |
| 10 | Unweighted Means Analysis of Variance for Constructed Victim Evaluation--Detachment by Fate by Emotional Involvement . . . . . | 126 |
| 11 | Means and Standard Deviations for Constructed Victim Evaluation--Detachment by Fate by Imagine Self . . . . .                  | 127 |

| Table |  | Page |
|-------|--|------|
| 12    | Unweighted Means Analysis of Variance for Constructed Victim Evaluation--Detachment by Fate by Imagine Self . . . . .  | 128  |
| 13    | Means and Standard Deviations for Constructed Victim Evaluation--Detachment by Fate by Anxiety . . . . .   | 129  |
| 14    | Unweighted Means Analysis of Variance for Constructed Victim Evaluation--Detachment by Fate by Anxiety . . . . .   | 130  |
| 15    | Means and Standard Deviations for Subjects' Perceived Similarity to the Victim Subsequent to Viewing the Tape--Detachment by Fate by Identification . . . .                | 131  |
| 16    | Unweighted Means Analysis of Variance for Subjects' Perceived Similarity to the Victim Subsequent to Viewing the Tape--Detachment by Fate by Identification . . . .        | 132  |
| 17    | Means and Standard Deviations for Subjects' Perception of Victim's Performance--Detachment by Fate by Identification . . . . .   | 133  |
| 18    | Unweighted Means Analysis of Variance for Subjects' Perception of Victim's Performance--Detachment by Fate by Identification . . . . .                                     | 134  |
| 19    | Means and Standard Deviations for Subjects' Estimates of the Number of Shocks Received by the Victim and the Number of Shocks They Would Receive if in Victim's Place. . . | 135  |
| 20    | Analysis of Variance for Subjects' Estimates of the Number of Shocks Received by the Victim and the Number of Shocks They Would Receive if in Victim's Place. . .          | 136  |
| 21    | Means and Standard Deviations for Subjects' Comparison of Own and Victim Performance . . . . .   | 137  |
| 22    | Analysis of Variance for Subjects' Comparison of Own and Victim Performance . . . . .  | 137  |
| 23    | Means and Standard Deviations for Additional Post-Manipulation Checks . . . .  | 138  |

| Table |  | Page |
|-------|--|------|
| 24    | Analyses of Variance for Additional<br>Post-Manipulation Checks . . . . .    | 139  |
| 25    | Means and Standard Deviations for<br>Additional Dependent Measures . . . . . | 140  |
| 26    | Analyses of Variance for Additional<br>Dependent Measures . . . . .          | 141  |

## LIST OF FIGURES

| Figure |   | Page |
|--------|---|------|
| 1      | Graph of Two-Way Interaction between<br>Fate and Identification . . . . . | 68   |

## Chapter I

### INTRODUCTION

The ways in which individuals respond to victims has serious implications for how those victims will be treated by society. Some recent research indicates that rather than being viewed sympathetically, victims are often blamed and derogated. This paper will examine several reasons which might account for these negative responses to victims. Two theoretical approaches will be examined--just world theory and defensive attribution theory. The limitations of each of these explanations will be discussed. Experiment I focuses on some of the implications of defensive attribution theory. The results suggest that reactions to victims in certain contexts may be explained by a third motivating force, the desire to avoid identification in order to avoid empathizing with a victim's pain. The conditions under which this kind of motivation operates will be examined in Experiment II.

A victim will be defined as anyone who experiences a negative outcome. No assumptions will be made about the degree of the victim's responsibility for the outcome since the perception of that responsibility is one of the variables which is affected by the context of the onlooker.

In addition, the assumption will be made that the

onlooker or observer, whose reactions are the focus of the paper, does not perceive her/himself responsible in any way for the victim's fate. Although perceived responsibility is probably a significant variable in determining reactions to victims, and onlookers who feel responsible may have reason to devalue the victim, the dynamics underlying those responses are beyond the scope of this paper.

### Review of the Literature

#### Just World Theory and Experimental Evidence

One theoretical perspective which purports to explain these phenomena is the "just world" hypothesis. Lerner and his colleagues have asserted that people, in general, want to believe that they will get what they deserve. They have what Lerner calls a "need to believe in a just world" (Lerner & Simmons, 1966). Their theory rests on the assumption that the existence of innocent victims threatens that belief. According to Lerner, when an observer becomes aware of the victim s/he has two choices. S/he can give up her/his belief in a just world, acknowledge the existence of injustice, and admit that s/he could also be subject to injustice; or, s/he can convince her/himself that the victim deserved her/his fate (Lerner & Simmons, 1966). In general, a victim's behavior will be seen as the cause of her/his misfortune and will be viewed negatively. However, if the harm the victim receives is clearly unrelated to her/his behavior, s/he will be devalued and rejected; the negative

consequences incurred will be attributed to the victim's bad character. Thus, the observer can maintain the belief that bad things only happen to "bad" people. Accordingly, the more "innocent" the victim, the more threatening s/he is to a belief in a just world and the more s/he will be derogated.

This theory is consistent with the experimental evidence that the worse the victim's outcome the more s/he will be derogated. Just world formulations would assert that since people believe that individuals "get what they deserve", it follows that they would be evaluated more negatively, the more negative their fate.

In a study which was ostensibly designed to study person perception, subjects watched a tape in which a girl received electric shocks, supposedly as part of another experiment. Subjects devalued a victim less if she was to receive \$30 compensation than if she received no compensation or \$10 compensation. The degree to which she was devalued corresponded to the degree of her perceived suffering (Lerner, 1971). In an earlier study (Lerner & Simmons, 1966) subjects were more likely to derogate the victim when she would continue to be shocked than when her suffering was perceived to be at an end. This result was obtained whether the subject was responsible for terminating the victim's shock or not. It appears that when her suffering was at an end, the victim was derogated less because her suffering was seen as less intense.

In support of his assertion that the more innocent the victim, the more s/he will be derogated, Lerner cites the experimental evidence that victims who agree to submit to electric shocks so that other students could receive academic credit were evaluated more negatively by subjects than victims who did not espouse any altruistic motives (Lerner & Simmons, 1966). However, an alternate explanation for these results is that the "martyr" is denigrated more than the ordinary victim, not because she is innocent, but because by her initial reluctance to be shocked she calls attention to the severity of the punishment.

In any case, innocence has not been operationalized the way it was originally defined. In the theoretical formulation innocence was defined as a lack of connection between the victim's behavior and her/his outcome; the more random the event, the more innocent the victim. In the Lerner and Simmons (1966) study innocence is operationalized as altruism, or more generally, virtue. The innocent victim is one who suffers despite her virtue, in this study, a girl who will undergo shock so that others might get credit for their psychology courses.

When the victim's responsibility was operationalized as the degree of her/his behavioral control over the victim's outcome, no differences were found between the evaluation of responsible and not responsible victims (Stokols & Schopler, 1973). However, this finding must be qualified due to methodological problems in the experiment. The fate



involved was unwanted pregnancy. Responsibility was manipulated by changing the way in which the girl became pregnant. In the "responsible" conditions, pregnancy was the result of her own careless use of contraception, while in the "not responsible" conditions, the girl was said to have been raped. It seems that other factors may have been operating. For example, unwanted pregnancy as a result of careless use of contraception may be a more familiar and common occurrence to the girls who participated in the study than is rape. Thus, although this study does provide counter-evidence to the "just world" assertion that the more innocent the victim, the more s/he is derogated, it is not conclusive.

#### Defensive Attribution Theory and Experimental Evidence

Another theoretical perspective for explaining reactions to victims is the defensive attribution theory. Although this theory also asserts that the existence of victims may create a threat for the onlooker, it does not conclude that the basis of that threat is the general need to believe in a just world. Instead, the theory asserts that the observer is motivated to avoid the perception that s/he could become a victim her/himself. According to these theorists (Shaver, 1970; Chaikin & Darley, 1973), derogating the victim does not serve to make one's situation appear just, but is a strategy for attenuating the threat by differentiating oneself from

the victim. By dissociating oneself from the victim this way, the observer reduces the perception that s/he could be subject to the same negative consequences. Rather than trying to maintain the more global belief that the world is just, the individual strives to maintain the expectation that no untoward circumstances will befall her/him personally.

Defensive attribution theory is also consistent with the prediction that the worse the victim's fate, the more s/he will be denigrated. Defensive attribution theory would posit that the more severe the misfortune another suffers, the greater the threat it will pose to the observer's sense of personal security. One will have a greater desire to dissociate oneself from the victim in order to maintain a general anticipation of positive outcomes for oneself (Shaver, 1970).

Additional experimental evidence demonstrates the inverse relationship between the severity of the victim's fate and positive evaluation of her/him. In Walster's study (1966), subjects attributed more responsibility to the victim of an automobile accident when the consequences were severe than when they were mild. Stokols and Schopler (1973) found that when their female college student subjects evaluated girls who had become pregnant as a result of either careless use of contraception or rape, the subjects derogated the victims more when the consequences of the pregnancy were severe than when they were mild.

Although the two theories articulated are both consis-

tent with the finding that the more severe the victim's outcome, the more s/he will be derogated, additional findings have provided evidence which is consistent with defensive attribution predictions and contradictory to "just world" formulations. In the first experiment (Chaikin & Darley, 1973) subjects evaluated a videotape in which they ostensibly saw two other subjects working on a task together; one as the "worker", the other as the "supervisor". During the taped interaction, either a mild or severe accident befell the "worker". Regardless of the severity of the accident derogation of the victim did not generally occur. However, the more serious the accident, the more likely subjects were to assign a cause rather than attribute the accident to chance. The observer assigned blame as a function of his own identification with subjects on the tape. If he anticipated participating in the worker role, he blamed the supervisor for the accident. If he anticipated participating in the supervisor role he tended to blame faulty equipment for the accident. This behavior is consistent with defensive attribution theory because attributing responsibility for the accident to the supervisor or to faulty equipment may have protected the subject from the perception that he could either cause or be victim to the same accident. However, it contradicts Lerner's theory because justice is not restored to the situation. The victim is still perceived to suffer through no fault of his own (Chaikin & Darley, 1973).

Further evidence in opposition to the just world hypothesis was obtained in the Shaw and Skolnick study (1971). They found that for male subjects, the victim of a negative accident is blamed more when the accident is severe than when it is mild; while the beneficiary of a positive accident is given more credit when the accident has trivial consequences rather than when it has important consequences. In contrast, the "just world" hypothesis implies that regardless of whether the consequences of an accident are positive or negative, the greater the magnitude of the consequences, the more responsibility will be attributed to the recipient of those consequences.

In reality, subjects evaluate the most positive accidents as occurring by chance so that they can believe an event that desirable might one day happen to them. As in the previous study described, the subjects appear to be motivated by a desire to preserve comfortable perceptions about their own future outcomes rather than maintain a general belief in a just world.

#### Implications of Defensive Attribution Theory

Since defensive attribution theory claims to supercede "just world" theory it would be useful to derive some additional hypotheses that differentiate it from "just world" theory. Although the question has not been examined in the literature, it follows from defensive attribution theory, contrary to the assertions of "just world" theory, that innocent victims per se do not create a greater threat for

onlookers than victims who are not innocent. Since the purpose of derogation is to protect the observer, the crucial factor in determining his or her response to the guilt or innocence of the victim is the onlooker's own similarity with the victim on the relevant behaviors. For example, according to the definition of innocence as the absence of behavioral control over an outcome, a nonsmoker who develops lung cancer is more innocent than a smoker who has the same fate. On the basis of defensive attribution theory, however, we cannot assume that the nonsmoker (or innocent victim) will be more threatening or will be denigrated more than the smoker. In this case, the factor determining her/his response will be whether or not s/he smokes. To the smoker, the lung cancer victim who smokes is more threatening and will be denigrated more, while to the nonsmoker the lung cancer victim who does not smoke is more threatening and will be denigrated more. Unfortunately, no research has yet been done to test these hypotheses.

In addition to severity and relevant behavioral similarity to the victim, defensive attribution theory implies that personal vulnerability may be a significant variable in determining reactions to victims. If the motive underlying the response to victims is self-protective, then we would not expect derogation of the victim to occur if the witness were not vulnerable to the same fate, regardless of the severity of that fate. If the observer is certain of her/his safety with respect to the victim's negative outcome,

no personal threat has been created and there is no subsequent reason for denigrating the victim in order to minimize the threat.

In addition, since defensive attribution theory asserts that derogation mediates the observers' perceptions of her/his own anticipated outcomes, we would expect onlookers who are victims themselves to have no reason to denigrate those who are similarly victimized. When one is certain about one's own negative fate, it is impossible to change that expectation by differentiating oneself from those with similar fates. As Shaver points out (1970), one way to distinguish between the just world theory and defensive attribution theory is with regard to how the observer reacts when s/he is the victim. If one did have a global need to believe in a just world, one would derogate himself. According to the defensive attribution formulation, if the observer were also the victim, it would not be self-protective to derogate the victim.

It is only when the observer is uncertain about her/his own fate that s/he will have reason to derogate the victim. If the negative consequence incurred by the victim might sometime befall the observer, s/he will be motivated to avoid that perception. One way of accomplishing that end is to derogate the victim.

#### Experimental Evidence

Some support for the hypothesis that individuals who are not vulnerable to the victim's fate will not devalue

her/him may be gleaned from the failure of Walster's second study (Walster, 1967) to find that more responsibility will be attributed for a serious accident than for a trivial one. The crucial difference between Walster's second experiment and either her first experiment (1966) or the Stokols and Schopler experiment (1973), may be the subject's own perceived vulnerability to the accident. The automobile accident which subjects evaluated in Walster's first experiment (1966) could conceivably have befallen them personally. Similarly, Stokols and Schopler's (1973) subjects, female college students, were vulnerable to the same fate of the girls they were evaluating, unwanted pregnancy. However, mudslides in California and land investment in the Southwest, the content used for the accidents in Walster's second experiment (1967), are a far cry from the lives of Minnesota college students (Shaver, 1970). Although subjects did see severe accidents as more foreseeable than trivial accidents, there was no corresponding derogation of the victim. Presumably, since they did not see themselves as vulnerable to the same negative occurrence they had no need to derogate the victim.

In a more recent study vulnerability was manipulated directly (Sorrentino & Boutiler, 1974). Subjects in this study, run in two groups, were told that they were all in the negative reinforcement condition of a learning experiment and that five (25%) of them would be chosen randomly to be shocked while the rest of them would watch on a closed

circuit television and evaluate the person being shocked. In one group (the "fates dissimilar" condition) the five fictitious members were chosen before the subjects watched and evaluated the person who was supposedly chosen as the first "learner". In this "fates dissimilar" condition the subjects watching knew that their numbers had not been chosen and that they were not vulnerable to the same fate.

In the second group (the "fates similar" condition) only the first "learner" was chosen before the subjects watched and evaluated her. Thus, the subjects watching knew that they were vulnerable to the same fate. There was a chance that they would also be shocked.

The results obtained were that individuals in the "fates dissimilar" condition evaluate the victims more negatively than those in the "fates similar" condition. Although the authors claim that their results support defensive attribution theory and parallel the results of Chaikin and Darley (1973), their assertions are unfounded. Defensive attribution theory would predict, contrary to their findings, that subjects who were not vulnerable to the victim's fate would evaluate her/him more favorably than those who were vulnerable.

The analogy drawn to the Chaikin and Darley (1973) study is fallacious. Sorrentino and Boutlier (1974) assert that the "fates dissimilar" condition in their study parallels the condition in the Chaikin and Darley (1973) study in which the observer anticipates participating in the same



role as the perpetrator of the accident. However, in that "perpetrator-relevant" condition, the subjects' identification with the perpetrator is what is crucial in determining their perceptions, not simply that they have a dissimilar fate and are not vulnerable to the same accident which harmed the victim.

In addition, subjects who anticipated participating in the same role as the victim of the accident could blame the supervisor they had observed for perpetrating the accident. Since they expected to be working with a different supervisor, blaming the one they had observed reduced their fear that they would also be a victim. In contrast, the subjects in the Sorrentino and Boutilier (1974) study had no functional target on whom to blame the victim's fate. The desire to avoid the perception that they might be shocked does not appear to have been the determining factor in their subjects' evaluations of the victim.

There are two confounding factors in the Sorrentino and Boutilier (1974) study which might account for the conflicting results. In the "fates dissimilar" condition the subject is not only not vulnerable to the victim's fate, but in a roundabout way he may perceive himself as responsible for the victim's fate. Since their fates are contingent on one another, the observer might realize that his good fortune at not being shocked is dependent on the victim's being shocked. As a result, he may feel guilty. Additional support for this interpretation is found in another study

(Lerner & Matthews, 1967) in which subjects devalue a victim more when their fates are interdependent and they have randomly determined them, than when their fates are independent.

A second problem with the study is that in the fates similar condition, the subjects believe that if they are chosen to be shocked they will be evaluated by the rest of the subjects. They may evaluate the victim they observe more positively out of concern for their own potential evaluation.

The Sorrentino and Boutilier study is misleading in another respect. Although their discussion of the results implies that those in the fates similar condition see their fates as identical to the victim's fate (at one point they refer to subjects in this condition as "other losers"), their fates were not the same. Those subjects did not know whether or not they would be shocked. They were uncertain. It is important to distinguish between this kind of uncertainty and the certain anticipation of a negative outcome, because defensive attribution theory predicts different consequences for each of them. Those who have certain expectations of negative outcomes would not be motivated to derogate the victim while those who are uncertain would.

#### The Effect of Personal Similarity

In several studies personal similarity with the victim has been manipulated in order to indirectly manipulate perceived vulnerability. The assumption underlying this

operation is that individuals who perceive themselves as similar in any way to the victim will feel more threatened by the victim's negative outcomes than individuals who do not perceive themselves as similar to the victim. Since the similar victim will be more threatening, defensive attribution theory would predict more derogation of her/him than of the dissimilar victim. However, in two studies Shaver (1970) found that similar victims were not derogated but were treated more leniently. Subjects evaluated similar victims more positively and attributed less blame to them than to dissimilar victims.

These findings indicated to Shaver that all kinds of personal similarity with the victim may not be threatening to the observer. She proposed that the effect might be limited to aspects of personal similarity which were relevant to the particular victimization. In a third study, Shaver used sex as the similarity variable (Shaver, 1970). Male and female subjects evaluated a male engineer who had an accident while demonstrating some machinery. Shaver assumed that because the male subjects were more likely to become engineers and find themselves in similar circumstances as the victim, they would find the accident more threatening and subsequently evaluate the victim more severely than the female subjects would. However, the results were the same as in the other two similarity studies. Subjects evaluated similar victims more positively than dissimilar victims. However, there is some evidence that simil-

arity is in some way threatening, since those in the similar-severe consequences condition denied their similarity to the victim.

A serious methodological problem exists in each of Shaver's three studies (Shaver, 1970). The stimulus person being evaluated, who is described by Shaver (1970) as the "victim", is not the principal victim in the situations described. In the automobile accident two bystanders were involved and in the third experiment the injury was inflicted on a small child although the "victim" to be evaluated was the engineer who precipitated the accident. The subjects' behavior may have been analogous to that of the perpetrator relevant subjects in the Chaikin and Darley (1973) experiment. Since they identify more with the perpetrator of the accident, similar subjects are less likely to denigrate him than are dissimilar subjects.

In two other studies which examined the effects of similarity with the victim, this methodological problem was eliminated. In both of these studies observers were in the relatively detached position of evaluating someone whose folder they read. The personal characteristics of the stimulus person were manipulated to make them appear similar or dissimilar to the subject (Lerner & Agar, 1972; Novak & Lerner, 1968). In the first study mental breakdown was the negative consequence the stimulus person had experienced (Novak & Lerner, 1968). In the second study it was drug addiction (Lerner & Agar, 1972). In both of these studies

similar subjects were more likely to avoid the similar victim than the dissimilar victim. The introduction of control conditions in the later study (Lerner & Agar, 1972) in which subjects evaluated similar or dissimilar normals or addicts revealed a significant interaction between similarity and addiction, such that similar normals are more attractive than dissimilar normals while the opposite was true for addicts.

Although similarity did result in more negative evaluations of the victims in these studies, it is reasonable to suggest, as Shaver (1970) has, that this result may be limited to victims whose fates are perceived to be related to personal characteristics. Drug addiction and mental breakdowns may simply be two examples of negative fates which are related to personality characteristics. In the situation in which personal characteristics are not related to the negative outcome experienced by the victim, we can hypothesize that s/he will be evaluated more positively when s/he is similar than when s/he is dissimilar. This prediction is based on the abundance of literature which relates similarity with positive evaluation.

#### Experimental Hypotheses

Experiment I is designed to test the two major hypotheses which have been asserted in the introduction:

Hypothesis I. Regardless of whether s/he is similar or dissimilar to the victim, the observer's own perceived vul-

nerability to the victim's fate will significantly affect her/his evaluation of the victim. An observer will evaluate the victim more negatively when s/he is uncertain of her/his own fate than when s/he knows definitely whether or not s/he will be subject to the same negative consequences.

Hypothesis II. Similar victims will be rated more positively than dissimilar victims.

## Chapter II

### EXPERIMENT I: METHOD

#### Overview of the Procedure

The study employed a 3 X 2 factorial design, varying three levels of vulnerability and two levels of similarity. All subjects watched a videotape of a girl who appeared to be receiving electric shocks as part of a learning experiment. Each time the victim made a mistake she was shocked. In all conditions subjects were led to believe that they would participate in the same learning experiment they had observed. Vulnerability was manipulated by creating, in differing conditions, different perceptions about how likely the subjects were to receive the shocks. In the "not vulnerable" conditions the subjects were informed that they would be in a condition which would not involve shock. In the "uncertain" conditions, subjects did not know whether they would be assigned to the condition in which they would receive shock. In the "vulnerable" conditions they were led to believe that they had been assigned to the same condition as the girl they had watched. They believed that they too would be shocked.

Similarity was manipulated by leading the subject to believe that she had some preferences which were either similar or not similar to the preferences of the girl she was

observing.

The major dependent measure was the observer's overall evaluation of the victim. This measure was based on the subjects' responses on 15 bipolar adjective scales describing the victim's personality characteristics.

### Subjects

The subjects included in the analysis were 71 undergraduate female students. There were sixty white students and eleven black students. All subjects were assigned randomly to the experimental conditions, but an attempt was made to equalize the number of black students who were included in each condition. Nine subjects who were run in the experiment were eliminated from the analysis because they were suspicious about the procedure.<sup>1</sup> Two other subjects did not complete the procedure, and their data was not analyzed. Subjects were recruited through advertisements in college newspapers, in the Village Voice, and in flyers which were posted on college bulletin boards.

---

<sup>1</sup>The relatively high number of suspicious subjects is due to the fact that a film of the Milgram obedience studies is shown in many introductory psychology courses. As a consequence, subjects who have seen the film are aware that bogus shocks are sometimes used in psychology experiments. Three of the suspicious subjects were in the vulnerable conditions (one in the similar and two in the not similar group), four were in the uncertain conditions (one in the similar and three in the not similar), and the other two were in the not vulnerable-similar condition.



### Procedure

Subjects were recruited for what were ostensibly two studies, an "impression formation" study and a "learning feedback" study. When they arrived at the laboratory their participation in these two studies was reconfirmed. The experimenter introduced herself, gave the subjects some written information about the learning feedback study, and excused herself in order to "check on some last minute details." Her absence gave the subjects the opportunity to read the information about the second study which, in fact, contained the vulnerability manipulation.

After a few minutes the experimenter returned, escorted the subject into a small experimental room, and gave her "a few departmental forms which all participants in research here are asked to fill out." The subject filled out three forms (see Appendix A). Two of these forms were identical. She was told that one of these forms was required for each study in which she participated. Most of the questions on these forms were filler questions, but the subject was also asked what condition she had been assigned to in the second study in order to reinforce the manipulation. Subjects also filled out an "activity preference" questionnaire which was to serve as the basis for the similarity manipulation. When they had completed these forms they were instructed to leave them on the departmental secretary's desk.

Subsequently, the subjects were escorted to a second

experimental room. This room was equipped with speakers, a television monitor, and a videotape deck. The subject then heard tape recorded instructions which included an experimental ruse providing a rationale for the procedures used (see Appendix C).

The experimenter returned, answered any questions the subject posed, and rewound the videotape reel. While the tape was being rewound, the experimenter mentioned that the people taped were the first 10 subjects who participated in the learning-feedback study. The subject was also told that she would be watching someone in the punishment condition. In this way, the subject was informed that the person whom she would be watching had been in the same study in which she anticipated participating. However, it was also implied that she would not herself be evaluated since she was not one of the first 10 subjects of the learning-feedback experiment.

After the experimenter turned on the videotape machine and left, the subject watched the ten minute videotape of a confederate. The subject heard the confederate receiving instructions for a paired associate learning task and then watched her alternately study the list and then try to associate the ten nonsense syllables with their pairmates. Each time the confederate made a mistake she received an electric shock. She went through the list four times and each time she made fewer mistakes. On the last trial she made only one mistake. The confederate gave off a minimum of affective cues. Her face was not shown when she was shocked. In

addition the subject never saw the pairs of nonsense syllables which the confederate was learning so she could not directly ascertain the difficulty of the task.

When the tape was finished the subject was given the manipulated "activity preference" questionnaire and told that it was some additional information about the person she watched. The subject was also given two sets of 15 evaluative 7-point bipolar scales to complete, one to evaluate the confederate, the other to evaluate the "average college student." A third short questionnaire which contained questions designed to assess other possible reactions to the experimental situation was also included. After the subject had completed the questionnaires she was completely debriefed.

### Independent Variables

#### Vulnerability

As mentioned previously, vulnerability was manipulated by the information given to the subject on a mimeographed paper while she was waiting for the experiment to begin. In all conditions the subjects were informed that the purpose of the learning feedback experiment was "to assess the effects of different kinds of feedback on learning." Subjects read that there were three conditions--the reward, the punishment, and the nonreinforcement conditions.

Since subjects in the not vulnerable conditions read that they had been assigned to the nonreinforcement condi-

tion, they were aware as they watched the videotape that they would not be shocked. In the uncertain conditions, subjects read that they would be assigned to one of the three conditions described (reward, nonreinforcement, or punishment) when they began the second experiment. They did not know whether to anticipate shock or not. In the vulnerable conditions, subjects read that they had been assigned to the punishment condition. While they watched the videotape they believed that they too would be shocked (see Appendix A).

### Similarity

The similarity manipulation was accomplished by giving the subject false feedback about the confederate's answers on the "Activity Preference Questionnaire." The questionnaire contained 16 forced choice questions, most of which were adapted from the Strong Vocational Inventory. In general, the choices were not concerned with basic values, but were more related to personality styles (see Appendix A).

The experimenter was able to create a fictitious activity preference questionnaire for the victim based on the subject's own questionnaire while the subject was watching the ten minute videotape. In the similar condition three-fourths of the questions on the questionnaire presented to the subject were answered identically to the way she had answered them. In the not similar condition half of the answers were the same as her own.

### Manipulation Check

A question was included in the final questionnaire to check on the vulnerability manipulation. Subjects were asked, "How likely are you to participate in the punishment condition of the learning experiment?"

### Dependent Measures

The 15 bipolar evaluative scales used in previous studies of reactions to victims (Lerner & Simmons, 1966; Lerner, 1971) comprised the main dependent measure (see Appendix B). These scales were used to rate both the victim and the average college student. They consisted of the following adjectives: intelligent/unintelligent, likeable/unlikeable, uncooperative/cooperative, bossy/easy-going, imaginative/unimaginative, immature/mature, irresponsible/responsible, nervous/calm, patient/impatient, reasonable/unreasonable, rigid/flexible, courteous/rude, selfish/unselfish, warm/cold, sincere/insincere.

In addition, the final questionnaire included the following questions: How similar are you to the person on the tape? How well did the person on the tape perform on the learning task? How well do you think you would do on the learning task? How severe was the punishment the person on the tape received? How justified was the punishment the person on the tape received? How anxious do you feel right now? (See Appendix B.)

### Chapter III

#### EXPERIMENT I: RESULTS

##### Manipulation Checks

###### Vulnerability

In order to check on the effectiveness of the vulnerability manipulation, subjects were asked, "How likely are you to participate in the punishment condition of the learning experiment?" As expected, subjects in the vulnerable condition were most likely to anticipate being shocked, and subjects in the not vulnerable condition were least likely to anticipate being shocked,  $p < .001$ . A Newman-Keuls comparison of the means of the three vulnerability conditions revealed that each was significantly different from the other two,  $p < .01$ . (See Tables 1-3.)

###### Similarity

The only check on perceived similarity was obtained after the subjects had evaluated the victim by asking them, "How similar are you to the person on the tape?" An analysis of variance performed on this measure revealed no significant main effect for similarity. Apparently, this manipulation was unsuccessful.<sup>1</sup> However, a significant interaction be-

---

<sup>1</sup>It is possible, of course, that the meaning of results on this measure is unclear since it was obtained subsequent to the subject's ratings of the victim and may be reactive with those measures.

Table 1  
Means and Standard Deviations for  
Vulnerability Manipulation Check

|            |           | Not Vulnerable | Uncertain | Vulnerable |
|------------|-----------|----------------|-----------|------------|
| Similar    | <u>M</u>  | 2.00           | 4.17      | 6.58       |
|            | <u>SD</u> | 1.48           | 1.90      | 1.44       |
|            | <u>n</u>  | 12             | 12        | 12         |
| Dissimilar | <u>M</u>  | 1.55           | 4.50      | 5.73       |
|            | <u>SD</u> | 1.81           | 1.31      | 2.28       |
|            | <u>n</u>  | 11             | 12        | 11         |

Note. Ratings were made on a 7-point scale; higher scores indicate that the subject thinks there is a greater likelihood of being shocked.

Table 2  
Analysis of Variance for  
Vulnerability Manipulation Check

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | 1.85      | .62      |
| Vulnerability | 2         | 112.90    | 37.94*   |
| Simil X Vuln  | 2         | 2.13      | .72      |
| Unit          | 64        | 2.98      |          |

\* $p < .001$

Table 3  
Newman-Keuls Comparison of Means for  
Vulnerability Manipulation Check

| Comparison         | <u>r</u> | Difference<br>between Means | <u>q(r, 67)</u> |
|--------------------|----------|-----------------------------|-----------------|
| Uncertain/Not Vuln | 2        | 2.56                        | 7.34*           |
| Vuln/Uncertain     | 2        | 1.82                        | 5.22*           |
| Vuln/Not Vuln      | 3        | 4.38                        | 12.56*          |

\* $p < .01$



tween similarity and vulnerability was revealed,  $p < .05$ . Only uncertain subjects perceived themselves as more similar to the victim in the similar condition than in the dissimilar (see Tables 4-6).

### Dependent Measures

#### Evaluation of the Victim

Overall evaluation of the victim was assessed by two different measures, the sum of the 15 bipolar scales rating the victim, and the difference between that sum and the sum of the subject's ratings of the average college student. Separate analyses of variance performed on each of these two measures revealed parallel results. However, these were not the results predicted. On both measures subjects in the vulnerable condition were most negative in their evaluations of the victim. This main effect of vulnerability was significant for both measures (sum of the victim ratings,  $p < .02$ , and evaluation of the victim as compared to the average college student,  $p < .06$ ). Contrary to prediction, there was no main effect for similarity. (See Tables 7-9.)

The 15 bipolar scales (on which the first two dependent measures are based) have been used in previous research under the assumption that they all reflect positive or negative evaluation (Lerner & Simmons, 1966; Lerner, 1971). In order to test that assumption a factor analysis was performed (see Appendix D). Evaluation, the first factor, accounted

Table 4  
Means and Standard Deviations for  
Subjects' Perceived Similarity to the Victim  
Subsequent to Viewing the Tape

|            |           | Not Vulnerable | Uncertain | Vulnerable |
|------------|-----------|----------------|-----------|------------|
| Similar    | <u>M</u>  | 4.00           | 5.08      | 3.50       |
|            | <u>SD</u> | 1.95           | 1.08      | 1.68       |
| Dissimilar | <u>M</u>  | 4.09           | 3.42      | 4.17       |
|            | <u>SD</u> | 1.70           | 1.38      | 1.70       |

Note.  $n = 12$  in every cell except the dissimilar-not vulnerable cell in which  $n = 11$ . Ratings were made on a 7-point scale; the higher the rating, the higher the subjects' perceived similarity.

Table 5

Analysis of Variance for Subjects' Perceived  
Similarity to the Victim Subsequent to Viewing the Tape

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | 1.63      | .63      |
| Vulnerability | 2         | 1.03      | .40      |
| Simil X Vuln  | 2         | 8.73      | 3.39*    |
| Unit          | 65        | 2.58      |          |

\* $p < .04$

Table 6

Simple Effects Tests for Subjects' Perceived Similarity  
to the Victim Subsequent to Viewing the Tape

| Source                        | <u>MS</u> | <u>F</u> |
|-------------------------------|-----------|----------|
| Similarity for Not Vulnerable | .05       | .02      |
| Similarity for Uncertain      | 16.67     | 6.46*    |
| Similarity for Vulnerable     | 2.66      | 1.03     |
| Unit                          | 167.41    |          |

\* $p < .05$

**Table 7**  
**Means and Standard Deviations for Overall Victim Evaluation**

|   |                       | Not Vuln |        | Uncertain |        | Vulnerable |        |
|---|-----------------------|----------|--------|-----------|--------|------------|--------|
|   |                       | Sim      | Dissim | Sim       | Dissim | Sim        | Dissim |
| Sum of subject's ratings of victim                        | <u>M</u> <sup>1</sup> | 77.5     | 78.4   | 77.3      | 73.5   | 66.8       | 70.3   |
|   | <u>SD</u>             | 11.2     | 9.8    | 9.5       | 10.6   | 12.3       | 11.1   |
| Comparison between victim and average student evaluations | <u>M</u> <sup>2</sup> | 6.1      | 7.8    | 11.0      | 6.0    | 1.2        | - .1   |
|   | <u>SD</u>             | 12.2     | 14.9   | 8.2       | 11.7   | 13.5       | 10.4   |

Note.  $n = 12$  in every cell except the dissimilar-not vulnerable cell in which  $n = 11$ .

<sup>1</sup>Scores are based on the sum of the 15 bipolar adjective scales for victim evaluation; the higher the score, the more positive the evaluation of the victim.

<sup>2</sup>Scores are based on the differences between the sum of the 15 bipolar adjective scales for victim evaluation and the sum of the same scales for the average college student. The higher the score, the more positively the victim was evaluated in comparison to the average college student.

Table 8  
Analysis of Variance for  
Sum of Subject's Ratings of Victim

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | .7        | .01      |
| Vulnerability | 2         | 552.0     | 4.74*    |
| Simil X Vuln  | 2         | 79.6      | .68      |
| Unit          | 65        | 117.0     |          |

\* $p < .02$

Table 9  
Analysis of Variance for Comparison between  
Victim Evaluation and Average Student Evaluation

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | 40.2      | .28      |
| Vulnerability | 2         | 420.9     | 2.95*    |
| Simil X Vuln  | 2         | 67.3      | .47      |
| Unit          | 65        | 142.7     |          |

\* $p < .05$

for 31% of the variance. A third measure of victim evaluation was constructed by taking the sum of the scales which loaded highest on the evaluation factor.<sup>1</sup>

An analysis of variance on this constructed victim evaluation measure again revealed a significant main effect of vulnerability,  $p < .02$ . A Newman-Keuls comparison of means showed a significant difference between the evaluation of the victim in the not vulnerable ( $M = 60$ ) and vulnerable conditions ( $M = 52.6$ ),  $p < .01$ . The uncertain subjects were not significantly different from either of the other two groups. Consistent with the results from the other two measures, there was no main effect for similarity and no interaction. (See Tables 10-12.)

#### The Effect of Denigration

The prediction that uncertain subjects would evaluate the victim most negatively was based on the assumptions that (1) denigrating the victim reduces an observer's subjective probability of being shocked, and (2) uncertain subjects are most susceptible to altering their own subjective probabilities.

Another way of testing this relationship is to examine the responses of uncertain subjects who did denigrate the victim. One would expect those who evaluated the victim most

---

<sup>1</sup>The four scales which were excluded from this constructed measure were cooperative/uncooperative, imaginative/unimaginative, calm/nervous, and flexible/rigid. The factor loading cut-off point used was .45.

Table 10  
Means and Standard Deviations for  
Constructed Victim Evaluation

|            |           | Not Vulnerable | Uncertain | Vulnerable |
|------------|-----------|----------------|-----------|------------|
| Similar    | <u>M</u>  | 58.4           | 56.5      | 50.6       |
|            | <u>SD</u> | 7.8            | 6.8       | 10.5       |
| Dissimilar | <u>M</u>  | 61.5           | 54.0      | 54.5       |
|            | <u>SD</u> | 8.0            | 8.5       | 9.3        |

Note.  $n = 12$  in every cell except the dissimilar-not vulnerable cell in which  $n = 11$ . The scores are based on the sum of the 11 bipolar scales which loaded highest on evaluation. A higher score indicates a more positive evaluation of the victim.

Table 11  
Analysis of Variance for  
Constructed Victim Evaluation

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | 38.7      | .53      |
| Vulnerability | 2         | 329.1     | 4.50*    |
| Simil X Vuln  | 2         | 71.4      | .97      |
| Unit          | 65        | 73.81     |          |

\* $p < .02$

Table 12  
Newman-Keuls Comparison of Means for  
Constructed Victim Evaluation

| Comparison         | <u>r</u> | Difference<br>between Means | <u>q(r, 68)</u> |
|--------------------|----------|-----------------------------|-----------------|
| Uncertain/Vuln     | 2        | 2.70                        | 1.54            |
| Not Vuln/Uncertain | 2        | 4.69                        | 2.68            |
| Not Vuln/Vuln      | 3        | 7.38                        | 4.22*           |

\* $p < .01$



negatively to have the lowest expectation of being shocked. This prediction was not borne out by the data. In fact, the opposite appears to be true; the more negatively the subject evaluated the victim, the higher her expectation of being shocked,  $r = -.49$ ,  $p < .05$ .

#### Unexpected Findings

The only additional significant effect of vulnerability was on the perception of the severity of the shock,  $p < .03$ . A Newman-Keuls comparison revealed that the not vulnerable subjects saw the shock as significantly less severe than subjects in the other conditions,  $p < .05$ . (See Appendix E, Tables 1-3.)

## Chapter IV

### EXPERIMENT I: DISCUSSION

The results of Experiment I were surprising. Contrary to the prediction that uncertain subjects would evaluate the victim most negatively, the degree of negative evaluation of the victim was a function of how vulnerable the subject felt. Subjects in the vulnerable condition rated the victim most negatively. Those in the not vulnerable condition rated the victim most positively. In addition, there was no evidence that derogation operated to reduce the subjective probability that the observer would obtain the same fate. Those subjects in the uncertain condition of the experiment who derogated the victim did not see themselves as less likely to be shocked than those who did not derogate her. These results suggest some limitations on the applicability of defensive attribution theory.

#### Critique of Defensive Attribution Theory

The failure of the hypothesis to be confirmed in Experiment I suggests that defensive attribution theory is limited in explaining negative reactions to victims in several ways. There are two reasons why a change in subjective probabilities may not have occurred in the uncertain conditions as was expected: (a) Derogation of the victim's character may

not lead to a change in subjective probabilities the way blaming the victim's behavior would; or (b) there may have been less possibility for a change in subjective probabilities in this situation, since the objective probabilities of the observer's being shocked were explicitly stated and she expected to learn her own fate almost immediately.

In the typical defensive attribution study subjects are asked to analyze the causes of an accident in which someone is victimized, and to assign blame to any of the parties involved, including the victim. By attributing the victim's fate to her/his behavior, the onlooker's subjective probability of being victimized is reduced as long as s/he believes s/he has a certain amount of control over her/his behavior. In contrast, in the Lerner-type paradigm, the onlooker merely evaluates the victim's character. Defensive attribution theorists (Shaver, 1970) have implied that character devaluation serves the same function. However, if the avoidance of the behavior which "caused" the victim's outcome is what mediates a change in subjective probabilities, differentiation from the victim by derogation of her/his character may not lead to a reduced subjective probability of the victim's negative outcome.

In any case, the attribution of responsibility to the victim's behavior is an effective way of reducing one's anxiety only if one believes that s/he can avoid the behavior in question. In Experiment I, it appears that the subjects did not believe they could avoid the situation.

Even if derogation of the victim's character does operate to reduce subjective probability in some situations, it may be limited to situations in which the onlookers' probabilities cannot be objectively determined and/or will not be determined for a period of time. Subjects in the uncertain conditions of this experiment know that there is one chance in three that they will be assigned to a condition in which they would receive shock. They expect to learn whether or not they will receive shock within a half and hour. These subjects may not be in a similar psychological state as an individual who learns of a crime or an accident and assesses the probabilities s/he has of becoming a victim.

Sometimes it may be possible for an onlooker to exaggerate the extent to which s/he is capable of avoiding the responsible behavior. However, this kind of distortion is less likely if the onlooker anticipates finding her/himself in the victim's circumstances shortly. For example, in Experiment I, one might expect subjects in the vulnerable condition to attribute the shocks to a bad performance on the part of the victim and cling to the belief that they could avoid the shocks by making no or at least fewer mistakes. However, there is no evidence that this occurred. The vulnerable subjects did not perceive the victim's performance as any less competent than did subjects in other conditions, nor did they expect to perform any better in comparison to the victim. Possibly, in this situation, subjects are inhibited from believing in their own super-

iority without any evidence for it, because the quality of their own performance will soon be evident.<sup>1</sup> If so, when a situation in which an observer may not be able to avoid the victim's behavior is imminent, the victim's negative outcome is less likely to be attributed to her/his behavior.

The most interesting information revealed in Experiment I was that subjects who expected to share the victim's fate evaluated her most negatively. Defensive attribution theory cannot account for the derogation which did occur when the subject was certain in the anticipation of negative outcomes. This result suggests that motives other than those examined by defensive attribution theory were operating in this situation.

#### Possible Motives for Denigration

Observers in Experiment I might have several motives for derogating victims. Derogation serves to dissociate the observer from the victim; two possible motives for dissociating

---

<sup>1</sup>It is, of course, possible that these female subjects may have been inhibited from directly expressing the expectation that they would perform in a superior fashion. They may have used a negative evaluation of the victim's character to serve the same function. In other words, although derogation may not have changed their expectation of whether or not they would participate in the punishment condition, it may have supported the belief that their experience of the punishment condition would be different. The belief that they were better may have consoled them into thinking that they would perform better and would not be shocked or would be shocked fewer times. If this analysis is valid, the derogation would not occur when the victim's fate is not contingent upon performance (if, for example, the shocks were random).

are (a) to avoid the stigma of victimization, and (b) to avoid the anxiety-arousing experience of empathizing with the victim. According to this interpretation, if identification with the victim is undesirable for whatever reason, the observer will denigrate her in order to avoid identifying with her.

Furthermore, the greater the basis for identification, the more negative an observer's evaluation must be in order to dissociate her/himself from the victim. Thus, because they have a strong basis for identification, victims evaluate other victims more negatively than would nonvictims.

Several other methods of dissociating may also be employed. Onlookers might deny similarity to a victim and avoid imitating one (Graciano, 1974). Similarly, victims might be avoided and denied help by those seeking to dissociate from them.

#### The Avoidance of Stigma

If a victim is seen as responsible for her/his fate s/he will be stigmatized. Consequently, others, particularly other victims, will tend to want to dissociate from her/him. In one study, subjects worked hard to help others in a similar situation. They did not do so, however, when the victim's innocence had not been made absolutely clear to them (Simmons & Lerner, 1968). Similarly, in another study, victims who were made to feel responsible in some way for their own fates responded more favorably in their evaluations of other victims who were not personally responsible than

they did to responsible victims. In this way, they could feel themselves similar to the innocent victim and could avoid feeling stigmatized. In contrast, "not responsible" (i.e. not stigmatized) victims showed no such behavior pattern and did not discriminate in their evaluation of "responsible" and "not responsible" victims (Heilman, Slochower, & Deutsch, in press).

#### The Avoidance of Empathy

In Experiment I, however, the observer was unlikely to blame the victim or see her as stigmatized by her fate. The victim, the observer believed, had been chosen to be shocked on a random basis. Although the shocks were contingent on performance, the observer apparently believed that the victim's performance was good. Denigration of the victim appears not to have been motivated by a desire to avoid stigma. Instead, observers may be motivated to dissociate themselves from the victim in order to avoid an unpleasant empathic experience. Some evidence for this interpretation is found in the social psychological literature on empathy.

In an examination of some of the effects of empathy, Tannenbaum and Gaer (1965) found that subjects who identified most with the protagonist of a film experienced most stress when the protagonist underwent a stressful experience. In another study reported by Stotland (1969) subjects watched a confederate undergo pain under varying degrees of identification. In one condition they were told to imagine them-

selves in the confederate's place. In the other condition they were simply told to watch him. They experienced more vasoconstriction and palmar sweating, two indicators of anxiety, in the imagine-self condition than in the watch-him condition. Their self-reports were consistent; they felt more nervous waiting for the observation to begin, saw the study as more unpleasant, and felt more nervous when the observation was over, if they were in the identification condition (imagine-self). This was in contrast to reactions of subjects in the condition which did not emphasize identification (watch-him).

On the basis of these studies, it is clear that identifying with a victim who is undergoing shock can be unpleasant. Devaluing the victim serves to dissociate the observer; it permits her/him to avoid empathizing with the victim. The subjects who were "vulnerable" (i.e. shared a common fate with the victim) in Experiment I had the greatest basis for empathizing with the victim. They, therefore, devalued the victim more than the not vulnerable subjects in order to dissociate.

This analysis may also account for some of the earlier results that Lerner obtained. It is reasonable to assume that most of Lerner's subjects had some basis for identification with the victims they evaluated. They were female college students, and the people they watched receiving electric shocks were also female college students. The subjects were participants in a psychology experiment as were



the victims. It follows that the more negative the victim's situation, the greater the need to dissociate from her and to avoid empathizing. Thus, as was found (Lerner & Simmons, 1966), we would expect that victims of continuing shock would be devalued more than victims undergoing only one set of shocks. Victims who were not compensated were devalued more than victims who received \$30 compensation. According to this explanation, devaluation occurred as a result of negatively valued identification rather than out of a desire to maintain a belief in a just world.

#### The Effects of Similarity

Common fate is only one of a number of possible bases for identification. According to Graciano (1974), perceptual identification occurs whenever an individual perceives a similarity between her/his identity characteristics and another's. Identity characteristics are defined as any of the attributes that form part of her/his identity: physical appearance, needs, goals, habits, attitudes, values, membership in a social group, and/or past experiences. Since any type of similarity potentially provides a basis for perceptual identification, it also provides a motive for dissociating from that victim. According to this analysis, we would expect that someone with similar personal characteristics would be more negative in their evaluation of a victim than someone with dissimilar personal characteristics.

#### Experimental Evidence

Contrary to these formulations, similar victims in

Experiment I were not evaluated any differently from dissimilar victims. Several reasons may account for this result. The timing of the manipulation was bad. Subjects were not given information about the victim's personal characteristics until after they viewed the tape. By that time they probably had already made a judgement about their similarity or dissimilarity to her on the basis of more salient factors (for example, her response to the shock).

If the manipulation did have an effect, subjects may simply have denied their similarity to the victim. Comparable results were obtained in the Graciano (1974) study in which subjects who experienced a negative perceptual identification with an unsuccessful confederate denied their similarity to her, despite the fact that 80% of their answers on a survey of controversial attitudes were identical to hers.

Although common fate is simply one example of a type of similarity, it may be unusually potent in some situations. Theoretically, denial of similarity can serve the same function as denigration, that of separating the onlooker from the victim. However, it may be difficult for an observer to simply deny similarity with the victim on a dimension which is so salient (this assumes that witnessing a negative fate which one also is expecting makes that fate salient).

#### Alternate Means of Avoiding Empathy

If, in fact, derogation of the victim serves to limit one's empathic responses, alternate means of dissociating

should eliminate the necessity for derogation of the victim. Research on empathy has shown that instructions which emphasize the observer's role as detached minimize the negative affect experienced while observing a victim.

For example, Spiesman et al. (1964) found that subjects experienced physiological stress when they watched a film about subincision. However, when they were given instructions which oriented them to intellectualize, they exhibited less physiological stress. Thus, if someone is observing from a detached viewpoint, her/his similarity or dissimilarity to the victim should not affect her/his evaluation of the victim.

#### Experimental Hypotheses

The following assumptions are based on the preceding analysis:

- a. Empathizing with a victim is unpleasant.
- b. Those who expect fates similar to the victim's have a greater basis for empathy than those who expect dissimilar fates.
- c. Devaluation of the victim serves to dissociate the observer from the victim and to reduce the empathy experienced.
- d. Observing from a detached viewpoint serves to dissociate the observer from the victim and reduces the empathic experience.

The following hypotheses follow from the above assump-

tions:

I. Observers who expect to share the victim's fate will be more negative in their evaluation of the victim, than will observers who do not expect to share the victim's fate.

II. If an observer witnesses a victim's fate in a detached manner, there will be no difference between the evaluations of observers who expect to share the victim's fate and observers who do not.

## Chapter V

### EXPERIMENT II: METHOD

#### Overview of the Procedure

The study employed a 2 X 2 factorial design, varying the similarity of fates between the victim and subject, and the detachment of the observer. All subjects watched a videotape of a girl who appeared to be receiving electric shocks as part of a learning experiment. The videotape was based on the one used in Experiment I. However, in this tape the victim ostensibly was shocked whether or not she made mistakes. In all conditions subjects were led to believe that they would be participating in the learning experiment they observed.

Fate similarity was manipulated by creating different perceptions about how likely the subjects would be to receive the shocks. In the "dissimilar fate" conditions the subjects were informed that they would be in a condition which did not involve shock. In the "similar fate" conditions they were led to believe that they had been assigned to the same condition as the girl they watched.<sup>1</sup>

---

<sup>1</sup>This manipulation is basically the same as the "vulnerability" manipulation in the first study. Subjects in the "dissimilar fate" conditions are analogous to "not vulnerable" subjects in the first study. Subjects in the "similar fate" conditions are analogous to "vulnerable" subjects in the first study.

The detachment of the observer was manipulated by altering the instructions she received about the way she should watch the videotape. In the "not detached" conditions the subjects were given instructions to simply watch the tape and form an impression of the person on the tape. In the "detached" conditions subjects were given additional instructions which emphasized their roles as detached observers.

The major dependent measure was the observers' overall evaluation of the victim. This measure was based on the subjects' responses on 15 bipolar adjective scales describing the victim's personality characteristics.

### Subjects

The subjects included in the analysis were 56 white female undergraduate students<sup>1</sup> attending college in the New York City Metropolitan Area. These subjects were assigned randomly to one of the four experimental conditions. Ten subjects who were run in the experiment were eliminated from the analysis. Eight of them were suspicious<sup>2</sup> about the procedure, and two refused to continue when they learned that they would be shocked. The subjects were recruited through

---

<sup>1</sup>Black students were not included in the study because in pre-testing the manipulations they appeared to respond differently to the experimental situation from white subjects. An examination of these differences was beyond the scope of this investigation.

<sup>2</sup>Five of the suspicious subjects were in dissimilar fates conditions (three in the detached and two in the not detached), and the other three were in the similar fate-not detached condition.

advertisements in college newspapers, in neighborhood newspapers, and in the Village Voice. Subjects were told they would be paid \$4 for their participation in two studies.

### Procedure

The initial procedures used in this study parallel those used in Experiment I.<sup>1</sup> Once the subject was seated in the second experimental room, however, there was no further contact with the experimenter. The remaining instructions were tape-recorded.

The subject, now seated in the second experimental room, listened to tape-recorded instructions which included both the experimental ruse and the "detachment" manipulation. During the instructions the subject was also informed that the person whom she would be watching was one of the first five people who participated in the punishment condition of the "learning-interference" experiment.

After the instructions were over, the subject completed a questionnaire which contained checks on the detachment manipulation. Then she watched the ten-minute videotape of the confederate. As in Experiment I, she heard the confederate receiving instructions for a paired associate learning task and then watched her alternately study the list and try to associate the ten nonsense syllables with their pairmates.

---

<sup>1</sup>However, since the similarity manipulation of Experiment I was not employed in this study, the subject was not required to fill out the "activity preference" questionnaire.

In this study, however, the confederate is subjected to shocks which are not given on the basis of performance, but rather, are delivered on a random basis, ostensibly to determine whether or not they interfere with learning. In all other respects, the videotape is almost identical to the tape used in the first study.

When the videotape was over, the subject completed two more questionnaires. The dependent measures were contained in these, as well as a second check on the fate manipulation. Subsequently, the subject was completely debriefed and paid for her participation.

### Independent Variables

#### Fate Similarity

As noted previously, the fate manipulation was similar to the vulnerability manipulation of Experiment I. Information containing the manipulation was given to the subject while she was waiting for the experiment to begin. In all conditions the subjects were informed that the purpose of the learning-interference experiment was to assess the effects of different kinds of interference on learning. Subjects read descriptions of three conditions: the reward, the punishment, and the neutral conditions. Subjects in the "dissimilar fate" conditions read that they had been assigned to the neutral condition, so they were aware when they watched the videotape that they would not be shocked. In the "similar fate" conditions subjects read that they had been



assigned to the punishment condition. While they watched the videotape they believed that they too would be shocked. (See Appendix F.)

### Detachment

In order to manipulate detachment, the instructions received by the subjects were varied. Subjects in both the detached and the not detached conditions heard the same basic instructions, but those in the detached condition got additional instructions, designed to dissociate them from the person they would be observing. All subjects heard the first part of the instructions:

The study in which you are about to participate is concerned with how people form accurate impressions of others when they have a limited amount of information. We are also interested in the effects of different kinds of media on the way those impressions are formed. You will be watching a ten-minute videotape. Some other subjects will hear an audio tape, and still others will see films. Your task will be to form an impression of the person you'll be watching.

In order to standardize these videotapes, we taped the first five participants in the "punishment" condition of Dr. Ross's learning-interference study. The punishment they received is electric shock. You will be watching one of these five participants.

In the detached conditions only, subjects then heard:

As you watch the tape, observe it in a detached manner. Try not to picture yourself in the place of the person you'll be watching. Instead, think of yourself in the role of a social scientist with an interest in assessing personality characteristics.

These "detached" instructions are adopted from some of the instructions used by Spiesman et al. (1964) to elicit "intellectualization" in subjects watching a stressful film. They found that students given these "intellectualization"

instructions experienced less stress while watching a film on subincision than those who did not. The goal of the intellectualization condition in that study was equivalent to the goal of the detached condition here, to create a psychological distance between the observer and the threatening aspects of the film. This was accomplished by differentiating the observer from the person being observed.

#### Manipulation Checks

The fate manipulation was checked twice. As mentioned previously, the subject, immediately following the manipulation, was required to record the condition to which she had been assigned in the learning-interference study. Thus, it was possible to check that the subject had absorbed the written information she had been given about her fate. In addition, a question on the final questionnaire was intended to tap whether or not the subject expected the same fate she had seen the person on the videotape undergo.

The questionnaire filled out by the subject immediately following the instructions was intended to check the detachment manipulation (see Appendix G). The following questions were included: (a) How emotionally involved do you expect to feel as you watch the videotape? (b) To what extent do you think you will imagine yourself in the place of the person on the videotape as you watch it? (c) How similar do you think you are to the person you will be watching on the videotape? (d) How do you feel right now?

### Dependent Measures

The 15 bipolar evaluative scales which were used in Experiment I were also used in this study (see Appendix G). The sum of the responses on these scales was employed as the principal dependent measure.

The final questionnaire included the following questions which may illuminate some of the thoughts involved in the evaluation of the victim: (a) How emotionally involved did you feel as you watched the videotape? (b) To what extent did you imagine yourself in the place of the person on the videotape? (c) How similar are you to the person on the tape? (d) How well did the person on the tape perform on the learning task? (e) How well do you think you would do on the learning task? (f) How many shocks would you estimate the person on the tape received? (g) How many shocks do you think you would receive if you were in the same condition of the learning-interference study? (h) How severe were the shocks? (i) How justified was the punishment the person on the tape received? (j) How did you feel as you watched the videotape? (See Appendix G.)

## Chapter VI

### EXPERIMENT II: RESULTS

#### Manipulation Checks

##### Detachment

The questions completed by the subjects before they watched the videotape were designed to measure the effectiveness of the detachment manipulation. The four questions included were: (a) How emotionally involved do you expect to feel as you watch the videotape? (b) To what extent do you think you will imagine yourself in the place of the person on the videotape? (c) How similar do you think you are to the person you will be watching on the videotape? (d) How do you feel right now? (calm/nervous) Separate analyses of variance on all four measures indicated that the manipulation of the experimental variable was successful. Subjects in the detached conditions thought that they would be less emotionally involved,  $p < .03$ , and would be less likely to imagine themselves in the victim's place as they watched the videotape,  $p < .02$ , than did subjects in the not detached conditions. Detached subjects expected to be less similar to the victim than did not detached subjects,  $p < .07$ . In addition, those in the detached conditions reported themselves to be less nervous than those in the not detached condition,  $p < .07$ . (See Tables 13 & 14.)

Table 13  
Means and Standard Deviations for  
Detachment Manipulation Checks

|   |           | Detached |      | Not Detached |      |
|---|-----------|----------|------|--------------|------|
|   |           | Dissim   | Sim  | Dissim       | Sim  |
| How emotionally involved do you expect to feel?   | <u>M</u>  | 3.93     | 4.36 | 5.07         | 4.93 |
|   | <u>SD</u> | 1.64     | 1.45 | 1.07         | 1.33 |
| To what extent do you think you will imagine yourself in the place of the person on the tape? | <u>M</u>  | 3.36     | 4.29 | 4.79         | 5.14 |
|   | <u>SD</u> | 1.65     | 1.63 | 1.63         | 1.88 |
| How similar do you think you are to the person you will be watching?                          | <u>M</u>  | 3.21     | 3.64 | 4.50         | 3.79 |
|   | <u>SD</u> | 1.42     | 1.50 | 1.02         | 1.63 |
| How do you feel right now?<br>(calm/nervous)  | <u>M</u>  | 2.93     | 4.14 | 4.43         | 4.29 |
|   | <u>SD</u> | 1.49     | 1.61 | 1.60         | 1.73 |

Note.  $n = 14$  in every cell. Ratings were made on 7-point scales, and higher scores indicate less detachment.

Table 14

## Analyses of Variance for Detachment Manipulation Checks

| Source  | <u>df</u> | <u>MS</u> | <u>F</u> |
|---|-----------|-----------|----------|
| How emotionally involved do you expect to feel?     |           |           |          |
| Detachment  | 1         | 10.29     | 5.35*    |
| Fate  | 1         | .29       | .15      |
| Detach X Fate                                       | 1         | 1.14      | .59      |
| Unit  | 52        | 1.92      |          |
| To what extent imagine yourself in victim's place?  |           |           |          |
| Detachment  | 1         | 18.29     | 6.33**   |
| Fate  | 1         | 5.79      | 2.00     |
| Detach X Fate                                       | 1         | 1.14      | .40      |
| Unit  | 52        | 2.89      |          |
| How similar are you to person you will be watching? |           |           |          |
| Detachment  | 1         | 7.14      | 3.59***  |
| Fate  | 1         | .29       | .14      |
| Detach X Fate                                       | 1         | 4.57      | 2.30     |
| Unit  | 52        | 1.99      |          |
| How do you feel right now?                          |           |           |          |
| Detachment  | 1         | 9.45      | 3.64***  |
| Fate  | 1         | 4.02      | 1.55     |
| Detach X Fate                                       | 1         | 6.47      | 2.48     |
| Unit  | 52        | 2.60      |          |

\* $p < .03$ \*\* $p < .02$ \*\*\* $p < .07$

After subjects viewed the videotape they were asked the same four questions again. This time, they indicated how they had felt as they watched the tape. A comparison of subjects' responses on the first and second set of questions revealed that these responses were significantly correlated for three of the four questions,  $p < .001$  (see Appendix J, Table 1). It does not, however, seem valid to consider these second questions manipulation checks since subjects were exposed to the videotape and completed the main dependent measure prior to receiving these scales. Thus, their responses on these scales may be reactive with their evaluation of the victim. Those subjects who evaluated the victim more positively tended to then report themselves as more emotionally involved,  $r = .413$ ,  $p < .002$ , and perceived themselves as more similar to the victim,  $r = .471$ ,  $p < .001$ . In addition, the post-anxiety measure was probably affected by its placement immediately after the fate manipulation check in the post-questionnaire. Similar-fate subjects reported more anxiety than did dissimilar-fate subjects (see Appendix J, Tables 2 & 3).

#### Fate

As described in the "Methods" section, fate similarity was manipulated by assigning subjects to either the same or a different experimental condition as the victim. Two manipulation checks were obtained.

In the first check, obtained immediately following the fate manipulation, subjects were instructed to write in the

condition of the learning-interference study assigned to them. Fifty of the fifty-two subjects answered accurately.<sup>1</sup>

The second manipulation check was included in the final questionnaire. The subjects simply checked the condition of the learning-interference study in which they would be participating. Forty-nine of the fifty-two subjects checked the appropriate condition.<sup>2</sup> Thus, the fate manipulation was successful. In the similar fate conditions, participants expected to be shocked as the victim had been, while in the dissimilar fate conditions, they did not.

### Dependent Measures

#### Evaluation of the Victim

Overall evaluation of the victim was measured by taking the sum of the 15 bipolar scales<sup>3</sup> on which the subject indi-

---

<sup>1</sup>One incorrect response occurred in the similar fate-detached condition and one in the similar fate-not detached condition. In both cases the subjects misunderstood the questionnaire directions and recorded all three conditions of the learning-interference study.

<sup>2</sup>The three incorrect responses were all made by subjects in the similar fate-not detached condition who checked "neutral" instead of "punishment". During the debriefing these subjects revealed that they were cognizant of the fact that they would actually be participating in the punishment condition but had checked the condition they would have preferred.

<sup>3</sup>The 15 scales are: intelligent/unintelligent, likeable/unlikeable, uncooperative/cooperative, bossy/easy-going, imaginative/unimaginative, immature/mature, irresponsible/responsible, nervous/calm, patient/impatient, reasonable/unreasonable, rigid/flexible, courteous/rude, selfish/unselfish, warm/cold, sincere/insincere.



cated her impressions of the victim's personality characteristics. An analysis of variance was performed on this total victim evaluation and it revealed a main effect for fate,  $p < .08$ . However, this was not the predicted effect. Those subjects with similar fates tended to evaluate the victim more positively ( $M = 73.1$ ) than those with dissimilar fates ( $M = 67.2$ ), regardless of whether or not they were detached. There was no main effect for detachment and no significant interaction. (See Tables 15 & 16.)

Since defining the total victim evaluation as the sum of the 15 bipolar scales is based on the assumption that these scales all reflect positive or negative evaluation, a factor analysis was performed on the 15 scales to test that assumption (see Appendix I). The first factor, evaluation, accounted for 38.2% of the variance. A second measure of overall victim evaluation was constructed from the nine scales which loaded highest on evaluation in the rotated factor loadings.<sup>1</sup> An analysis of variance was performed on this constructed victim evaluation, and the results parallel the findings for total victim evaluation. Onlookers with similar fates tended to evaluate the victim more positively than did those who did not share the victim's fate,  $p < .13$ ; there was no effect of detachment and no interaction (see Tables 17 & 18).

---

<sup>1</sup>The scales which did not load highest on evaluation were intelligent/unintelligent, immature/mature, irresponsible/responsible, nervous/calm, uncooperative/cooperative, and reasonable/unreasonable.

Table 15  
Means and Standard Deviations for Total Victim Evaluation

|              |           | Dissimilar Fate | Similar Fate |
|--------------|-----------|-----------------|--------------|
| Detached     | <u>M</u>  | 65.9            | 70.6         |
|              | <u>SD</u> | 9.6             | 14.3         |
| Not Detached | <u>M</u>  | 68.6            | 75.6         |
|              | <u>SD</u> | 11.1            | 12.7         |

Note.  $n = 14$  in every cell. Higher scores indicate more positive evaluation of the victim.

Table 16  
Analysis of Variance for Total Victim Evaluation

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Detachment    | 1         | 208.3     | 1.44     |
| Fate          | 1         | 492.1     | 3.39*    |
| Detach X Fate | 1         | 18.3      | .13      |
| Unit          | 52        | 145.1     |          |

\*  $p < .08$

Table 17  
Means and Standard Deviations for  
Constructed Victim Evaluation

|              |           | Dissimilar Fate | Similar Fate |
|--------------|-----------|-----------------|--------------|
| Detached     | <u>M</u>  | 36.9            | 39.1         |
|              | <u>SD</u> | 7.6             | 7.5          |
| Not Detached | <u>M</u>  | 37.9            | 43.4         |
|              | <u>SD</u> | 11.4            | 9.9          |

Note.  $n = 14$  in every cell. Higher scores indicate more positive evaluation of the victim.

Table 18  
Analysis of Variance for  
Constructed Victim Evaluation

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Detachment    | 1         | 212.2     | 2.48*    |
| Fate          | 1         | 100.5     | 1.17     |
| Detach X Fate | 1         | 39.5      | .46      |
| Unit          | 52        | 85.5      |          |

\*  $p < .13$

Another index was created from the four scales which loaded highest on the second factor.<sup>1</sup> Although these scales do have an evaluative component, the more specific underlying dimension is maturity. An analysis of variance performed on this victim maturity index revealed no significant main effect or interactions. However, the means follow the same pattern as those for the total victim evaluation and the constructed victim evaluation; namely, there was a tendency for the victim to be evaluated more positively by similar-fate subjects than by dissimilar-fate subjects,  $p < .16$  (see Appendix J, Tables 4 & 5).

#### The Effect of Detachment

The detachment manipulation was intended to create a distance between the observer and the victim, to release the observer from identifying and empathizing with the victim. However, this experimental variable had no overall effect on the evaluation of the victim. In order to obtain a more precise measure of individual subjects' degree of identification with the victim, a second index of detachment was obtained. This measure was based on the subject's answer to the question, "How similar do you think you are to the person you will be watching on the videotape?" Subjects who responded above the mean on this question were considered "high identifiers," and subjects who responded below the mean were

---

<sup>1</sup>The four scales which comprised this index were: immature/mature, irresponsible/responsible, uncooperative/cooperative, and reasonable/unreasonable.

considered "low identifiers."<sup>1</sup>

A three-way unweighted means analysis of variance testing the effects of fate, detachment, and this new identification variable on the constructed victim evaluation was performed. There was an interaction effect of fate and identification,  $p < .005$  (see Tables 19 & 20). Observers who expected to be shocked evaluated the victim more positively if they identified with her than if they did not. However, observers who did not expect to be shocked evaluated the victim more positively if they did not identify with her than if they did.<sup>2</sup> (See Figure 1.)

Another three-way unweighted means analysis of variance was performed on the victim maturity index. A significant three-way interaction of fate, detachment, and identification emerged,  $p < .05$ . Tests for simple interaction effects indicated that it was primarily detached subjects who were responsive to the interaction of fate and identification,  $p < .03$ . For those detached subjects only, results on the victim maturity index paralleled the findings for all subjects on the "constructed victim evaluation." (See Appendix J, Tables

---

<sup>1</sup>The overall mean was 3.8 on a 7-point scale. A higher score indicated less detachment. The mean for "high identifiers" was 4.6; the mean for "low identifiers" was 2.2.

<sup>2</sup>Since the other three manipulation checks in the pre-questionnaire were designed to measure detachment, subjects were also divided into low and high identifiers according to their responses on these other three measures. However, these other identification variables did not affect evaluation of the victim (see Appendix J, Tables 9-14 for complete results).

Table 19  
Means and Standard Deviations for  
Constructed Victim Evaluation  
Detachment by Fate by Identification

|              |           | Dissimilar Fate |         | Similar Fate |         |
|--------------|-----------|-----------------|---------|--------------|---------|
|              |           | Lo Iden         | Hi Iden | Lo Iden      | Hi Iden |
| Detached     | <u>M</u>  | 39.3            | 34.4    | 31.5         | 44.8    |
|              | <u>SD</u> | 7.2             | 7.7     | 6.8          | 11.0    |
|              | <u>n</u>  | 7               | 7       | 6            | 8       |
| Not Detached | <u>M</u>  | 45.5            | 36.6    | 38.3         | 45.5    |
|              | <u>SD</u> | 5.0             | 7.2     | 14.2         | 7.7     |
|              | <u>n</u>  | 2               | 12      | 4            | 10      |

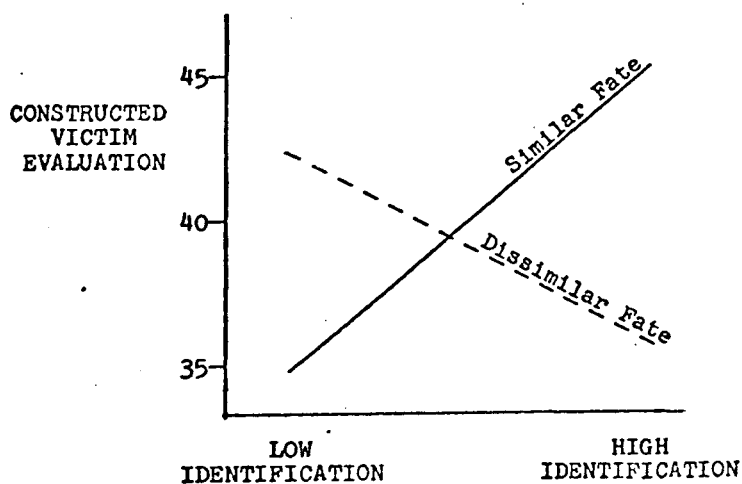
Note. Higher scores indicate more positive evaluation of the victim.

Table 20  
 Unweighted Means Analysis of Variance for  
 Constructed Victim Evaluation  
 Detachment by Fate by Identification

| Source                  | <u>df</u> | <u>MS</u> | <u>F</u> |
|-------------------------|-----------|-----------|----------|
| Detachment              | 1         | 166.7     | 2.30     |
| Fate                    | 1         | 11.7      | .16      |
| Identification          | 1         | 30.0      | .41      |
| Detach X Fate           | 1         | .5        | .01      |
| Detach X Iden           | 1         | 67.0      | .93      |
| Fate X Iden             | 1         | 777.6     | 10.74*   |
| Detach X Fate<br>X Iden | 1         | 2.5       | .03      |
| Unit                    | 48        | 72.4      |          |

\*p < .002

Figure 1  
Graph of Two-Way Interaction  
between Fate and Identification



Note. Higher score on Constructed Victim Evaluation indicates more positive evaluation.



6-8.)

#### Other Effects of Identification

There were significant interactions between fate and identification on two other dependent variables, perceived similarity to the victim after viewing the tape, and perceived competence of the victim's performance. These results paralleled the findings for the constructed victim evaluation. Dissimilar-fate subjects thought they were more similar to the victim when they did not identify than when they did, while similar-fate subjects thought they were more similar to the victim when they identified than when they did not,  $p < .05$  (see Appendix J, Tables 15 & 16). Also, subjects who did not anticipate being shocked evaluated the victim's performance more positively when they did not identify with the victim than when they did, while subjects who did anticipate being shocked evaluated the victim's performance more positively when they did identify with the victim,  $p < .06$  (see Appendix J, Tables 17 & 18). In short, it appears that the subjects who evaluated the victim most positively also saw themselves as similar to the victim and thought her performance was good. The subjects who evaluated the victim most negatively saw themselves as dissimilar and devalued her performance.

#### Unexpected Findings

Subjects were asked to estimate the number of shocks the victim had received and the number of shocks they would

expect to receive if they were in the victim's place. Separate analyses of variance for both of these questions revealed main effects for fate. In the similar fate conditions subjects believed that the victim received fewer shocks ( $\bar{M} = 15.3$ ) than did subjects in the dissimilar fate conditions ( $\bar{M} = 19.9$ ),  $p < .03$ . Also, when imagining themselves in the victim's place, similar-fate subjects expected to receive fewer shocks ( $\bar{M} = 15.0$ ) than did dissimilar-fate subjects ( $\bar{M} = 19.6$ ),  $p < .03$ . (See Appendix J, Tables 19 & 20.) Those in the similar fate conditions are more accurate since on the videotape the victim receives 15 shocks in total.

Subjects were also asked to anticipate their own performance level, as well as to assess the victim's performance. A comparison of subjects' expected success relative to the victim's was obtained by subtracting each subject's self-evaluation from her evaluation of the victim. An analysis of variance on this measure revealed a significant interaction of fate and detachment,  $p < .03$ . When subjects expected to be shocked, those who were not detached expected to perform more poorly in comparison to the victim than did those who were detached. In contrast, if they did not expect to be shocked, subjects expected to perform relatively poorly when they were detached than if they were not detached. (See Appendix J, Tables 21 & 22.)

There were no other significant effects.

## Chapter VII

### DISCUSSION

To recapitulate, the experimental hypotheses were not confirmed in Experiment II. The only major effect of the experimental variables on the evaluation of the victim was a tendency for subjects who shared the victim's fate to evaluate her more positively than those who did not. However, an examination of internal analyses suggests a revision of the original experimental hypotheses.

It was originally hypothesized that when subjects identified with the victim, they would denigrate her in order to avoid the stress produced by empathizing with her plight. However, this hypothesis does not consider the possibility that under certain conditions identification with a victim can serve positive functions. Specifically, subjects who anticipate being victims themselves may gain from identifying with a victim whom they perceive as similar to themselves. In this way, they can obtain information about the experience they will soon undergo, either (a) to evaluate the appropriateness of their emotional response (Festinger, 1954; Schacter, 1959), or (b) to help them cope with the threatening aspects of the experience. Although these observers may initially feel more anxiety, they may welcome the opportunity to imagine themselves in the stressful situation before they actually undergo it. The observer in this situation does

experience stress associated with identifying, but does not avoid it so that s/he can accrue the benefits it affords.<sup>1</sup> Thus, as was shown in the study by Latané et al. (1966), liking for another person increases as a result of sharing a stressful experience (receiving electric shocks), despite the fact that those who share the experience report it to be more unpleasant and disturbing than those who do not.

However, when the victim under observation is perceived as dissimilar, she does not provide subjects who expect to be shocked with useful information and is evaluated less positively. Instead, viewing a dissimilar victim reminds those subjects of the unpleasant experience they must undergo. Since the victim is dissimilar, her reactions are viewed as irrelevant by the observer and do not readily provide a coping strategy.

For subjects not anticipating being shocked (dissimilar-fate subjects), identification with the victim does not provide any positive value. Instead, identifying would merely tend to increase their anxiety and thus, motivate the need to dissociate by denigrating the victim. The dissimilar victim does not provoke the same degree of anxiety, and thus, there is less need to denigrate her.

---

<sup>1</sup>Some of the results in Experiment II indicate additional evidence for the contention that similar-fate subjects seek out information about the stressful experience they anticipate. Specifically, similar-fate subjects were more accurate in their estimate of how many shocks the victim received than were dissimilar-fate subjects. Apparently, the similar-fate subjects used the videotape to get information about what was going to happen to them.

An alternative explanation for the behavior of dissimilar-fate subjects is that watching a victim get shocked may arouse some degree of guilt in an onlooker, and the victim may be rejected on that account. Since a similar victim is a more relevant comparison person, the inequities of outcome will be more apparent, and more guilt will be felt in relation to her. In the Lerner and Matthews (1967) study, mentioned previously, victims were liked less when their fates were interdependent with those of the onlookers than when their fates were independent. Although, in Experiment II, subjects' fates are not interdependent, it is possible that the perception of similarity operates in the same way. The discrepancy between the observer's and the victim's outcomes may cause the observer discomfort which, in turn, produces devaluation.

#### Perception of Similarity

Another way to view these results is to consider what factors affect the degree to which an observer perceives the victim as similar. Although the detachment manipulation did affect the assessment of similarity, some subjects in both the detached and the not detached conditions reported that they felt similar to the victim. A possible explanation is that the subject's behavior may reflect an underlying personality dimension.

Since perceiving the victim as similar is threatening and arouses anxiety, perhaps the subjects who do so are those

who are most likely to perceive the threatening aspects of any situation. Byrne (1964) has postulated a personality dimension called "repressor-sensitizer" in which "repressors" tend to deny the threatening aspects of a situation while "sensitizers" tend to emphasize them. Thus, sensitizers will be more likely to see themselves as similar to the victim while repressors will see themselves as dissimilar.

#### Comparison of Detachment Measures

Although there were four measures of detachment, subjects' responses on the similarity question were the only ones related to their subsequent evaluation of the victim. This suggests that the other three manipulation checks were not measuring the same thing.

On closer examination, however, it appears that the assumed similarity question may be the most valid indicator of identification with the victim because it is the most indirect measure of the subject's feelings. The first two measures, "How emotionally involved do you expect to feel as you watch the videotape?" and "How much do you expect to imagine yourself in the victim's place?" have the strongest demand characteristics. They follow most closely from the tape-recorded instructions the subject has just heard. In the detached conditions she has been told to "observe it (the tape) in a detached manner" (i.e. do not be emotionally involved) and to "try not to picture yourself in the place of the person you'll be watching." It is possible that

responses on those two questions merely reflected how well the subject listened to the instructions or how compliant she was.<sup>1</sup>

In contrast, there is no demand in the detached-condition instructions to see oneself as "dissimilar" from the victim. The rationale behind the assumed similarity question is that if the detached instructions have put the subject in a state in which she dissociates herself from the victim, then she will also see herself as dissimilar to the victim in order to be consistent. This may be a self-attribution process in which the observer infers from her own lack of identification with the victim that she must be dissimilar.

#### Comparison of Experiments I and II

The not detached conditions of similar fate and dissimilar fate in Experiment II essentially parallel the not vulnerable and vulnerable conditions of Experiment I. However, in Experiment I those who expected a similar fate evaluated the victim more negatively than those who did not, whereas in Experiment II those who shared her fate were more sympathetic to the victim than those who did not. What accounts for this difference?

The major procedural difference in the two studies is

---

<sup>1</sup>The anxiety measure may not be a valid indicator of detachment simply because it measures more general feelings the subject may be experiencing about the entire situation, rather than the subject's specific reactions to watching the victim.

that in the first study the victim received shocks on the basis of her performance, while in the second study, shocks were delivered on a random basis. Thus, in the first study, it was possible for subjects to perceive the victim as responsible in some way for getting shocks, since the shocks were contingent on her performance. In Experiment II, the victim was clearly "innocent," her negative fate occurred regardless of her behavior.

There are two possible reasons why someone who anticipates sharing a victim's fate might have evaluated her more negatively when she was seen as responsible. First, it is possible that "similar-fate" subjects who saw the victim get shocked in the first study thought they would be able to perform better and avoid the shock. According to this analysis, they denigrated the victim in order to convince themselves that they were superior to her and to reduce their own subjective probability of being shocked (this interpretation follows from defensive attribution theory).

The second possible explanation is that the responsible victim is in some ways seen as stigmatized. Even if the onlooker is certain of being a victim herself, she may avoid identifying with someone who possesses that stigma. The results of the Simmons and Lerner (1968) study support this explanation. Subjects who had been victimized did not put as much effort into helping someone who had been victimized as they did to help someone who had not been a victim. When the victim's innocence was made unambiguously clear, the victim-



ized subjects worked harder for her than for someone who was not a victim.

### Implications and Suggestions for Future Research

The major results of this study suggest that denigration of victims may be motivated by a desire to avoid empathizing with them. The conditions under which this motivation is likely to occur are when the onlooker has some basis for identification but cannot profit from the victim's experience. However, future research is necessary to clarify and modify this notion. One question worthy of examination is how people who must deal with victims every day (e.g., those who work with terminally ill patients) cope with their feelings of identification. What is the effect of taking a helping role vis-à-vis victims? It seems reasonable to predict that if an individual is able to help the victim in some way (even if that help does not fundamentally alter the victim's status as a victim), her/his own anxiety may be somewhat reduced. This raises the question of whether emotional reactions to victims have any effect on the way those victims are later treated. It is possible that the opportunity or lack of opportunity to help a victim may to a large degree determine one's reaction to her/him, rather than vice versa.

Another area touched upon here is the role of personality factors and defensive coping styles in determining reactions to victims. Further research is necessary to

scrutinize some of the contentions of this analysis. A study comparing sensitizers' and repressors' reactions to victims when they do and do not share a common fate would cast light on whether that personality dimension underlies an individual's willingness to see her/himself as similar to a victim, as was asserted here.

The two major theories which examine negative reactions to victims are just world theory and defensive attribution theory. Just world theory asserts that people denigrate victims in order to maintain their own belief that the world is just, that individuals get what they deserve. According to this outlook, the more unjust a victim's outcome, the more threatening s/he is to a belief in a just world, and consequently, the more s/he will be derogated.

In contrast, defensive attribution theory asserts that denigration of victims serves a more specifically self-protective function. It is not that people have a global need to believe the world is just, but simply that they personally will attain their due. According to this notion, only victims who are threatening to the observer's expectations of personal outcome will be denigrated.

Neither of these theories can account for the results obtained here. Victims were evaluated differently in different conditions. Since all observers were certain of their fate (whether or not it was to receive shocks), defensive attribution theory would not predict any denigration of the victim. Just world theory would not have any basis for

predicting the conditions under which victims in this study would be viewed negatively. All victims in Experiment II were equally innocent, so none posed a more severe threat to a belief in a just world.

The avoidance of anxiety-arousing empathy as well as the need to cope with threat are motives that operate in this context. It appears that future work in this area of social psychology should not be addressed to conflict over which is the primary motive underlying the rejection of victims, but instead, should attempt to uncover the conditions under which each motive operates.

#### Summary

The data reported here offer new evidence supporting the theory that victims are denigrated in order to reduce the anxiety aroused by identifying with them, but that when identification serves a positive function, no denigration occurs. It has been further suggested that an individual difference variable affects the degree to which an observer identifies with a victim. Future research should investigate the nature of this coping strategy and this personality factor, as well as the real world implications of these findings.

## REFERENCES

- Byrne, D. Repression-sensitization as a dimension of personality. In B. A. Maher (Ed.), Progress in experimental personality research (Vol. 1). New York: Academic Press, 1964.
- Chaikin, A. L., & Darley, J. Victim or perpetrator? Defensive attribution of responsibility and the need for order and justice. Journal of Personality and Social Psychology, 1973, 25, 268-275.
- Festinger, L. A theory of social comparison processes. Human Relations, 1954, 7, 117-140.
- Graciano, A. M. A study on the consequences of positive and negative perceptual identification. Unpublished doctoral dissertation, Teacher's College, Columbia University, 1974.
- Heilman, M. E., Slochower, J., & Deutsch, M. The effects of victimization on reactions to other victims. 1976, in press.
- Latane, B., Eckman, J., & Joy, V. Shared stress and interpersonal attraction. In B. Latane (Ed.), Studies in social comparison, supplement of Journal of Experimental Social Psychology, 1966.
- Lerner, M. J. Observers' evaluation of a victim: Justice, guilt, and veridical perception. Journal of Personality and Social Psychology, 1971, 20, 127-135.

- Lerner, M. J., & Agar, E. The consequences of perceived similarity: Attraction and rejection, approach and avoidance. Journal of Experimental Research in Personality, 1972, 6, 69-75.
- Lerner, M. J., & Matthews, G. Reactions to the suffering of others under conditions of indirect responsibility. Journal of Personality and Social Psychology, 1967, 5, 319-325.
- Lerner, M. J., & Simmons, C. H. Observers' reactions to the innocent victim, compassion or rejection? Journal of Personality and Social Psychology, 1966, 4, 203-210.
- Novak, D., & Lerner, M. J. Rejection as a consequence of perceived similarity, Journal of Personality and Social Psychology, 1968, 9, 147-152.
- Schacter, S. The psychology of affiliation. Stanford, California: Stanford University Press, 1959.
- Shaver, K. C. Defensive attribution: Effects of severity and relevance of the responsibility assigned for an accident. Journal of Personality and Social Psychology, 1970, 14, 101-113.
- Shaw, J. I., & Skolnick, P. Attribution of responsibility for a happy accident. Journal of Personality and Social Psychology, 1971, 18, 380-383.
- Simmons, C. H., & Lerner, M. J. Altruism as a search for justice. Journal of Personality and Social Psychology, 1968, 9, 216-225.
- Sorrentino, R. M., & Boutlier, R. C. Evaluation of a victim as a function of fate similarity/dissimilarity. Journal

of Experimental Social Psychology, 1974, 10, 84-93.

- Spiesman, J. C., Lazarus, R. S., Mordkoff, A., & Dawson, L. Experimental reduction of stress based on ego defense theory. Journal of Abnormal Social Psychology, 1964, 68, 367-380.
- Stokols, D., & Schopler, J. Reactions to victims under conditions of situational detachment: The effects of responsibility, severity, and expected future interaction. Journal of Personality and Social Psychology, 1973, 25, 199-209.
- Stotland, E. Exploratory investigations of empathy. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 1). New York & London: Academic Press, 1969.
- Tannenbaum, P. H., & Gaer, E. P. Mood changes as a function of stress of protagonist and degree of identification in a film viewing situation. Journal of Personality and Social Psychology, 1965, 2, 612-616.
- Walster, E. Assignment of responsibility for an accident. Journal of Personality and Social Psychology, 1966, 3, 73-79.
- Walster, E. Second-guessing important events. Human Relations, 1967, 20, 239-249.

## APPENDIX A

### Experiment I: Experimental Manipulations

## [YELLOW MIMEOGRAPHED SHEET]

## Learning Feedback Experiment

investigator- Dr. A. Ross

The learning experiment you will be participating in today is an attempt to study how different kinds of feedback affect the speed of learning. There are three conditions:

- 1) reward - a small reward will be given for each correct response.
- 2) nonreinforcement - no rewards and no punishments will be given.  
Subjects will simply be informed whether their answers are correct or incorrect.
- 3) punishment - a punishment will be given for each mistake.

You have been designated to participate in the NONREINFORCEMENT condition. After you have finished the impression formation experiment proceed to room 330 Thompson where that condition will be run. More instructions will be given at that time.



[YELLOW MIMEOGRAPHED SHEET]

Learning Feedback Experiment

investigator- Dr. A. Ross

The learning experiment you will be participating in today is an attempt to study how different kinds of feedback affect the speed of learning. There are three conditions:

- 1) reward - a small reward will be given for each correct response.
- 2) nonreinforcement - no rewards and no punishments will be given.  
Subjects will simply be informed whether their answers are correct or incorrect.
- 3) punishment - a punishment will be given for each mistake.

When you have finished the impression formation experiment please proceed to room 330 Thompson. There you will be assigned to one of the three conditions (reward, nonreinforcement, or punishment) in the learning experiment. More instructions will be given at that time.

[YELLOW MIMEOGRAPHED SHEET]

Learning Feedback Experiment

Investigator- Dr. A. Ross

The learning experiment you will be participating in today is an attempt to study how different kinds of feedback affect the speed of learning. There are three conditions:

- 1) reward - a small reward will be given for each correct response.
- 2) nonreinforcement - no rewards and no punishments will be given.  
Subjects will simply be informed whether their answers are correct or incorrect.
- 3) punishment - a punishment will be given for each mistake.

You have been designated to participate in the PUNISHMENT condition. After you have finished the impression formation experiment proceed to room 330 Thompson where that condition will be run. More instructions will be given at that time.

Please fill out this form with the appropriate information about yourself.

Your name is unnecessary.

Experiment title \_\_\_\_\_

Condition \_\_\_\_\_

college \_\_\_\_\_ year in college \_\_\_\_\_

academic major \_\_\_\_\_ age \_\_\_\_\_ sex \_\_\_\_\_

Have you taken any psychology courses? \_\_\_\_ If yes, which ones?

How did you find out about participating in this experiment?

### Activity Preference Questionnaire

For each of the pairs below, please check the activity you prefer.

For statistical reasons it is important that you answer every question.

Even if you like neither of the alternatives or like both of them, please try to choose between them.

1. ☐ read a book  
☐ watch TV or go to a movie
2. ☐ develop plans  
☐ execute plans
3. ☐ activity that produces tangible returns  
☐ activity that is enjoyed for its own sake
4. ☐ work early in the morning  
☐ work late at night
5. ☐ smooth out tangles and disagreements between people  
☐ discuss ideals with others
6. ☐ outside work  
☐ inside work
7. ☐ work with a deadline  
☐ work without a deadline

8. ☐ attend art and music events  
☐ attend athletic events
9. ☐ travel alone and make own preparations  
☐ travel with someone else who makes all decisions
10. ☐ great variety in work  
☐ similarity in work
11. ☐ present a report in writing  
☐ present a report orally
12. ☐ work with few details  
☐ work with many details
13. ☐ listen to a story  
☐ tell a story
14. ☐ work where you move from place to place  
☐ work where you stay in one place
15. ☐ work alone  
☐ work on a committee
16. ☐ plan for the immediate future  
☐ plan for 5 years ahead

## APPENDIX B

### Experiment I: Manipulation Check and Dependent Measure Questionnaires

## Questionnaire I

We would like you to record your impressions of the person whose videotape you watched by using the 7 point scales listed below. The scales in each case represent a continuum which is named by the words at either end of the scale. To use the scale, please circle the one number on each scale that best describes the person you watched.

|               |                               |               |
|---------------|-------------------------------|---------------|
| intelligent   | --1---2---3---4---5---6---7-- | unintelligent |
| likeable      | --1---2---3---4---5---6---7-- | unlikeable    |
| uncooperative | --1---2---3---4---5---6---7-- | cooperative   |
| bossy         | --1---2---3---4---5---6---7-- | easy-going    |
| imaginative   | --1---2---3---4---5---6---7-- | unimaginative |
| immature      | --1---2---3---4---5---6---7-- | mature        |
| irresponsible | --1---2---3---4---5---6---7-- | responsible   |
| nervous       | --1---2---3---4---5---6---7-- | calm          |
| patient       | --1---2---3---4---5---6---7-- | impatient     |
| reasonable    | --1---2---3---4---5---6---7-- | unreasonable  |
| rigid         | --1---2---3---4---5---6---7-- | flexible      |
| courteous     | --1---2---3---4---5---6---7-- | rude          |
| selfish       | --1---2---3---4---5---6---7-- | unselfish     |
| warm          | --1---2---3---4---5---6---7-- | cold          |
| sincere       | --1---2---3---4---5---6---7-- | insincere     |

## Questionnaire II

Please rate the average college student on the following dimensions:

|               |                               |               |
|---------------|-------------------------------|---------------|
| intelligent   | --1---2---3---4---5---6---7-- | unintelligent |
| likeable      | --1---2---3---4---5---6---7-- | unlikeable    |
| uncooperative | --1---2---3---4---5---6---7-- | cooperative   |
| bossy         | --1---2---3---4---5---6---7-- | easy-going    |
| imaginative   | --1---2---3---4---5---6---7-- | unimaginative |
| immature      | --1---2---3---4---5---6---7-- | mature        |
| irresponsible | --1---2---3---4---5---6---7-- | responsible   |
| nervous       | --1---2---3---4---5---6---7-- | calm          |
| patient       | --1---2---3---4---5---6---7-- | impatient     |
| reasonable    | --1---2---3---4---5---6---7-- | unreasonable  |
| rigid         | --1---2---3---4---5---6---7-- | flexible      |
| courteous     | --1---2---3---4---5---6---7-- | rude          |
| selfish       | --1---2---3---4---5---6---7-- | unselfish     |
| warm          | --1---2---3---4---5---6---7-- | cold          |
| sincere       | --1---2---3---4---5---6---7-- | insincere     |



## Questionnaire III

The following questions are answered by using a seven point scale which appears below each question.

1. How similar are you to the person on the tape?

not at all similar --1----2----3----4----5----6----7-- very similar

2. How well did the person on the tape perform on the learning task?

very poorly --1----2----3----4----5----6----7-- very well

3. How well do you think you would do on the learning task?

very poorly --1----2----3----4----5----6----7-- very well

4. In which condition of the learning feedback experiment was the person on the tape participating? (Please check the appropriate choice)

\_\_\_\_ reward      \_\_\_\_ nonreinforcement      \_\_\_\_ punishment

Please answer questions 5, 6, and 7 only if the person you watched was in the punishment condition.

5. How severe was the punishment the person on the tape received?

not at all severe --1----2----3----4----5----6----7-- very severe

6. How likely is it that you will be in the punishment condition in the learning experiment?

not at all likely --1----2----3----4----5----6----7-- very likely

7. How justified was the punishment the person on the tape received?

not at all justified --1----2----3----4----5----6----7-- completely justified

8. How anxious do you feel right now?

not at all anxious --1----2----3----4----5----6----7-- very anxious

## APPENDIX C

### Experiment I: Taped and Verbal Instructions to Subjects

EXPERIMENTER enters waiting area, introduces herself, checks on the subject's name, and says:

You were recruited for two studies, the impression formation study and the learning feedback study, is that correct?

When the subject agrees, the EXPERIMENTER continues:

I will be conducting the impression formation study, and Dr. Ross will conduct the learning feedback study. You will be participating in the impression formation study first, and you will be paid for both at the end of both. (E hands the subject a yellow mimeographed sheet containing the vulnerability manipulation.) Here is some information about the second study you will be participating in. It will tell you, among other things, what room you have to go to once we've finished here. Before we begin the first study, I have to check on some last minute details next door. I'll be right back and then we can get started.

EXPERIMENTER leaves to allow subject time to read the vulnerability manipulation. Then the subject is escorted into the social psychology office. The E hands the subject two identical forms and states:

All participants in research here are asked to fill out a few general departmental forms. There's one form to fill out for each study you'll be participating in, so you'll fill out two.

Meanwhile, EXPERIMENTER has directed the subject to an experimental room equipped with a table and pencils. The E says:

The title of the first study is Impression Formation Study. You'll be participating in the videotape condition. You have the information about the second study on the yellow sheet. When you've finished filling out the forms just come out of the experimental room.

When the subject emerges she is instructed to leave the forms on the departmental secretary's desk and is led to another experimental room. After the subject is seated the taped instructions begin:

TAPED:

The study in which you are about to participate is concerned with how people form accurate impressions of others when they have a limited amount of information. We are also interested in the effects of different kinds of media on the way those impressions are formed. You will be watching a ten-minute videotape. Some other subjects will hear an audio tape, and still others will see films. Your task will be to form an impression of the person you'll be watching. When the tape is completed you will receive some additional information about the person. Then you will be asked to answer a number of questions based on your judgements. It is very important that you answer every question even if you feel uncertain about your answers. I will now come back into

your cubicle to answer any questions you may have.

EXPERIMENTER returns, answers any questions the subject poses, and rewinds the videotape reel. While the tape rewinds, the EXPERIMENTER casually mentions:

Since we needed videotapes for this study, Dr. Ross, who's running the learning feedback study, taped the first ten subjects who were in that study.

EXPERIMENTER hesitates briefly, checks the label on the videotape reel, and says:

The person you'll be watching was in the punishment condition.

EXPERIMENTER turns on the videotape and leaves the room. When the videotape is finished, E comes back into the experimental room, hands the subject the manipulated "activity preference questionnaire," and says:

Here is some additional information about the person you watched on the videotape. After you've looked it over, please fill out the questionnaires in the folder. Please do them in order. This means take out the first questionnaire, fill it out completely, and replace it in the folder. Then take out the second questionnaire and fill it out, etc. When you have finished, just come out of the experimental room.

## APPENDIX D

### Experiment I: Factor Analysis

**Table D.1**  
**Factor Loadings of Victim Evaluation Scales**

| Scale                     | Factors    |       |       | Communality |
|---------------------------|------------|-------|-------|-------------|
|                           | Evaluation | 2     | 3     |             |
| Intelligent-Unintelligent | .567       | .198  | -.497 | .608        |
| Likeable-Unlikeable       | .553       | -.082 | -.340 | .440        |
| Uncooperative-Cooperative | .252       | .597  | .487  | .657        |
| Bossy-Easy-going          | .476       | -.313 | .469  | .545        |
| Imaginative-Unimaginative | .116       | .460  | -.139 | .245        |
| Immature-Mature           | .665       | .207  | -.358 | .613        |
| Irresponsible-Responsible | .538       | .391  | -.355 | .568        |
| Nervous-Calm              | .390       | .453  | .340  | .472        |
| Patient-Impatient         | .618       | .235  | .491  | .678        |
| Reasonable-Unreasonable   | .729       | -.126 | -.037 | .548        |
| Rigid-Flexible            | .419       | .249  | -.058 | .241        |
| Courteous-Rude            | .673       | -.205 | .392  | .649        |
| Selfish-Unselfish         | .595       | -.243 | -.118 | .427        |
| Warm-Cold                 | .690       | -.322 | -.053 | .583        |
| Sincere-Insincere         | .653       | -.456 | .047  | .636        |
| Latent Roots              | 4.623      | 1.659 | 1.627 | 7.909       |

**Note.** Factors were extracted with 1.0 in the diagonal of the correlation matrix. The scales were adjusted so that the higher the score on each rating, the more positive the victim was rated.

## APPENDIX E

### Experiment I: Additional Analyses



Table E.1  
Means and Standard Deviations for  
Subjects' Perceptions of Severity of Shock

|            |           | Not Vulnerable | Uncertain | Vulnerable |
|------------|-----------|----------------|-----------|------------|
| Similar    | <u>M</u>  | 3.58           | 4.42      | 4.67       |
|            | <u>SD</u> | 1.68           | 1.17      | .99        |
| Dissimilar | <u>M</u>  | 4.00           | 5.00      | 4.58       |
|            | <u>SD</u> | 1.90           | .60       | .51        |

Note. n = 12 in every cell except the dissimilar-not vulnerable cell in which n = 11. Ratings were made on a 7-point scale; the higher the score, the more severe the shocks were judged to be.

Table E.2  
Analysis of Variance for  
Subjects' Perceptions of Severity of Shock

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Similarity    | 1         | 1.66      | 1.08     |
| Vulnerability | 2         | 6.08      | 3.97*    |
| Simil X Vuln  | 2         | .71       | .47      |
| Unit          | 65        | 1.53      |          |

\* $p < .03$

Table E.3  
Newman-Keuls Comparison of Means for  
Subjects' Perceptions of Severity of Shock

| Comparison         | <u>r</u> | Difference<br>between Means | <u>q(r, 68)</u> |
|--------------------|----------|-----------------------------|-----------------|
| Vuln/Not Vuln      | 2        | .83                         | 3.30*           |
| Uncertain/Vuln     | 2        | .08                         | .33             |
| Uncertain/Not Vuln | 3        | .92                         | 3.63*           |

\* $p < .05$

**Table E.4**  
**Means and Standard Deviations for**  
**Additional Dependent Measures**

|   |                       | Not Vuln |        | Uncertain |        | Vulnerable |        |
|---|-----------------------|----------|--------|-----------|--------|------------|--------|
|   |                       | Sim      | Dissim | Sim       | Dissim | Sim        | Dissim |
| How justified was the punishment the person on the tape received? | <u>M</u> <sup>1</sup> | 3.00     | 4.09   | 3.25      | 3.58   | 3.58       | 2.92   |
|   | <u>SD</u>             | 1.91     | 1.81   | 2.34      | 1.69   | 2.43       | 1.51   |
| Subjects' self-reported anxiety                                   | <u>M</u> <sup>2</sup> | 3.42     | 4.18   | 4.58      | 4.42   | 4.50       | 4.58   |
|   | <u>SD</u>             | 2.43     | 2.32   | 1.31      | 1.78   | 1.83       | 1.98   |
| Subjects' perception of victim's performance                      | <u>M</u> <sup>3</sup> | 4.75     | 4.46   | 4.67      | 4.83   | 4.33       | 4.25   |
|   | <u>SD</u>             | 1.14     | 1.37   | 1.44      | .94    | 1.23       | .62    |
| Subjects' anticipation of own performance                         | <u>M</u> <sup>4</sup> | 4.33     | 4.27   | 4.00      | 3.25   | 4.42       | 3.63   |
|   | <u>SD</u>             | 1.37     | 1.42   | 1.13      | 1.05   | 1.31       | 1.34   |
| Subjects' comparison of own and victim's performance              | <u>M</u> <sup>5</sup> | .42      | .18    | .67       | 1.58   | -.08       | .42    |
|   | <u>SD</u>             | .79      | 2.27   | 1.97      | 1.73   | 1.00       | 1.44   |

Note.  $n = 12$  in every cell except the dissimilar-not vulnerable cell in which  $n = 11$ . For the first four measures, ratings were made on 7-point scales.

<sup>1</sup>The higher the score, the more justified the shock was judged to be.

<sup>2</sup>Higher scores indicate a greater degree of self-reported anxiety.

<sup>3</sup>The higher the score, the more positive was the evaluation of the victim's performance.

<sup>4</sup>The higher the score, the more positive the subject expects her own performance to be.

<sup>5</sup>Comparison scores are based on subject's ratings of their own and victim's performances on 7-point scales. Subject's self-rating is subtracted from the victim rating to obtain comparison measure. The higher the score, the more poorly subjects expected to perform in comparison to the victim.

Table E.5

## Analyses of Variance for Additional Dependent Measures

| Source   | <u>df</u> | <u>MS</u> | <u>F</u> |
|--|-----------|-----------|----------|
| How justified was the punishment?                  |           |           |          |
| Similarity   | 1         | 1.13      | .29      |
| Vulnerability                                      | 2         | .52       | .13      |
| Simil X Vuln                                       | 2         | 4.59      | 1.18     |
| Unit   | 65        | 3.91      |          |
| Self-Reported Anxiety                              |           |           |          |
| Similarity   | 1         | .92       | .24      |
| Vulnerability                                      | 2         | 4.11      | 1.06     |
| Simil X Vuln                                       | 2         | 1.38      | .35      |
| Unit   | 65        | 3.88      |          |
| Subjects' Perception of Victim's Performance       |           |           |          |
| Similarity   | 1         | .09       | .07      |
| Vulnerability                                      | 2         | 1.29      | .98      |
| Simil X Vuln                                       | 2         | .32       | .24      |
| Unit   | 65        | 1.33      |          |
| Subjects' Anticipation of Own Performance          |           |           |          |
| Similarity   | 1         | 3.83      | 2.36     |
| Vulnerability                                      | 2         | 2.92      | 1.80     |
| Simil X Vuln                                       | 2         | .77       | .47      |
| Unit   | 65        | 1.63      |          |
| Subjects' Comparison of Own and Victim Performance |           |           |          |
| Similarity   | 1         | 2.75      | 1.07     |
| Vulnerability                                      | 2         | 6.38      | 2.47     |
| Simil X Vuln                                       | 2         | 2.01      | .78      |
| Unit   | 65        | 2.58      |          |

## APPENDIX F

### Experiment II: Fate Manipulations

[GREEN MIMEOGRAPHED SHEET]  
Learning Interference Experiment

Investigator - Dr. A. Ross

The learning experiment you will be participating in today is an attempt to study how different kinds of interference affect the speed of learning. There are three conditions:

- 1) reward - several rewards will be given during the learning trials.

These rewards will be distributed randomly, not on the basis of performance. The participant will receive the same number of rewards regardless of the number of mistakes he/she makes.

- 2) neutral - no rewards or punishments will be given. A bell will ring after some of the participant's responses, regardless of whether or not those responses are correct.

- 3) punishment - several punishments will be given. These punishments will be distributed randomly, not on the basis of performance. The participant will receive the same number of punishments, regardless of the number of mistakes he/she makes.

You have been designated to participate in the NEUTRAL condition. After you have finished the impression formation experiment proceed to room 330 Thompson where that condition will be run. More instructions will be given at that time.

[GREEN MIMEOGRAPHED SHEET]  
Learning Interference Experiment

investigator - Dr. A. Ross

The learning experiment you will be participating in today is an attempt to study how different kinds of interference affect the speed of learning. There are three conditions:

- 1) reward - several rewards will be given during the learning trials.

These rewards will be distributed randomly, not on the basis of performance. The participant will receive the same number of rewards regardless of the number of mistakes he/she makes.

- 2) neutral - no rewards or punishments will be given. A bell will ring after some of the participant's responses, regardless of whether or not those responses are correct.

- 3) punishment - several punishments will be given. These punishments will be distributed randomly, not on the basis of performance. The participant will receive the same number of punishments, regardless of the number of mistakes he/she makes.

You have been designated to participate in the PUNISHMENT condition. After you have finished the impression formation experiment proceed to room 330 Thompson where that condition will be run. More instructions will be given at that time.

## APPENDIX G

### Experiment II: Manipulation Check and Dependent Measure Questionnaires



## Subject Information Form

Please fill out one of these forms for each experiment you will be participating in. Your name is unnecessary.

Experiment title \_\_\_\_\_

Condition \_\_\_\_\_

college \_\_\_\_\_ year in college \_\_\_\_\_

academic major \_\_\_\_\_ age \_\_\_\_\_ sex \_\_\_\_\_

Have you taken any psychology courses? \_\_\_\_\_ If yes, which ones?

How did you find out about participating in this experiment?



## Post-Questionnaire I

We would like you to record your impressions of the person whose video-tape you watched by using the 7-point scales listed below. The scales in each case represent a continuum which is named by the words at either end of the scale. To use the scale, please circle the one number on each scale that best describes the person you watched.

|               |         |       |       |       |       |       |     |               |
|---------------|---------|-------|-------|-------|-------|-------|-----|---------------|
| intelligent   | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | unintelligent |
| likeable      | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | unlikeable    |
| uncooperative | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | cooperative   |
| bossy         | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | easy-going    |
| imaginative   | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | unimaginative |
| immature      | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | mature        |
| irresponsible | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | responsible   |
| nervous       | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | calm          |
| patient       | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | impatient     |
| reasonable    | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | unreasonable  |
| rigid         | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | flexible      |
| courteous     | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | rude          |
| selfish       | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | unselfish     |
| warm          | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | cold          |
| sincere       | --1---- | 2---- | 3---- | 4---- | 5---- | 6---- | 7-- | insincere     |



## APPENDIX H

Experiment II: Taped and Verbal Instructions to Subjects

EXPERIMENTER enters waiting area, introduces herself, checks on the subject's name, and says:

You were recruited for two studies, the impression formation study and the learning-interference study, is that correct?

When subject agrees, the EXPERIMENTER continues:

I will be conducting the impression formation study, and Dr. Ross will conduct the learning-interference study. You will be participating in the impression formation study first, and you will be paid for both at the end of both. (E hands the subject a green mimeographed sheet containing the fate manipulation.) Here is some information about the second study you will be participating in. It will tell you, among other things, what room you have to go to once we've finished here. Before we begin the first study, I have to check on some last minute details next door. I'll be right back and then we can get started.

EXPERIMENTER leaves to allow subject time to read the fate manipulation. Then the subject is escorted into the social psychology office. The E hands the subject two identical forms and states:

All participants in research here are asked to fill out a few general departmental forms. There's one form to fill out for each study you'll be participating in, so you'll fill out two.

Meanwhile, EXPERIMENTER has directed the subject to an exper-

imental room equipped with a table and pencils. The E hands the subject a card with "IMPRESSION FORMATION STUDY, CONDITION videotape" printed on it and says:

This card gives you the title and condition of the first study you'll be participating in, and you have the information about the second study on the green sheet. When you've finished filling out the forms just come out of the experimental room.

When the subject emerges she is instructed to leave the forms on the departmental secretary's desk and is led to another experimental room. After the subject is seated the taped instructions begin:

TAPED:

The study in which you are about to participate is concerned with how people form accurate impressions of others when they have a limited amount of information. We are also interested in the effects of different kinds of media on the way those impressions are formed. You will be watching a ten-minute videotape. Some other subjects will hear an audio tape and still others will see films. Your task will be to form an impression of the person you'll be watching.

In order to standardize these videotapes, we taped the first five participants in the "punishment" condition of Dr. Ross's learning-interference study. The punishment they received is electric shock. You will be watching one of these five participants.

In the "detached" conditions subjects then hear:

As you watch the tape, observe it in a detached manner. Try not to picture yourself in the place of the person you'll be watching. Instead, think of yourself in the role of a social scientist with an interest in assessing personality characteristics.

The end of the audio tape instructions is the same for subjects in all conditions:

Now, before the videotape begins, please take out the questionnaire in the folder labelled "before" and fill it out. It is very important that you answer every question, even if you feel uncertain about your answers. When you have completed the questionnaire, put it back in the folder. The videotape will begin shortly.

EXPERIMENTER begins the videotape as soon as the subject has completed the questionnaire. When the videotape is finished, the subject hears the following instructions:

TAPED:

Now take out the folder labelled "after". Fill out the questionnaires in order. This means take out the first questionnaire, fill it out completely, and then put it back in the folder. Then take out the second questionnaire, complete it, and replace it in the folder. Be sure to answer every question. When you have completed both questionnaires, come out of the experimental room.



## APPENDIX I

## Experiment II: Factor Analysis

Table 1.1  
Rotated Factor Loadings of Rating Scales

| Scale                     | Factors    |       |       | Communality |
|---------------------------|------------|-------|-------|-------------|
|                           | Evaluation | 2     | 3     |             |
| Intelligent-Unintelligent | .075       | .126  | -.584 | .363        |
| Likeable-Unlikeable       | .636       | .139  | .064  | .428        |
| Uncooperative-Cooperative | .294       | .788  | .002  | .707        |
| Bossy-Easy-going          | .822       | .236  | -.151 | .753        |
| Imaginative-Unimaginative | .700       | .100  | .284  | .581        |
| Immature-Mature           | .185       | .593  | -.478 | .615        |
| Irresponsible-Responsible | -.074      | .918  | -.070 | .852        |
| Nervous-Calm              | .015       | -.047 | -.760 | .580        |
| Patient-Impatient         | .645       | .210  | -.312 | .557        |
| Reasonable-Unreasonable   | .402       | .696  | -.043 | .648        |
| Rigid-Flexible            | .719       | .252  | -.218 | .628        |
| Courteous-Rude            | .844       | .075  | -.105 | .730        |
| Selfish-Unselfish         | .635       | .167  | -.315 | .531        |
| Warm-Cold                 | .760       | -.027 | -.089 | .587        |
| Sincere-Insincere         | .519       | .305  | .213  | .408        |
| Sum of Squares            | 4.761      | 2.636 | 1.570 | 8.968       |

**Note.** Factors were extracted with 1.0 in the diagonal of the correlation matrix. A Varimax rotation was used. The scales were adjusted so that the higher the score on each rating, the more positive the victim was rated.

## APPENDIX J

Experiment II: Correlations, Means and Standard Deviations,  
and Analyses of Variance for Additional Dependent Measures

Table J.1  
Correlations of Pre- and Post-Manipulation Checks

| Manipulation Measure          | <u>r</u> |
|-------------------------------|----------|
| Pre/post emotionally involved | .483*    |
| Pre/post imagine-self         | .517*    |
| Pre/post similarity           | .147     |
| Pre/post anxiety              | .683*    |

\*p < .001

Table J.2

Means and Standard Deviations for the Question  
 "How did you feel as you watched the videotape?"

|              |           | Dissimilar Fate | Similar Fate |
|--------------|-----------|-----------------|--------------|
| Detached     | <u>M</u>  | 3.43            | 4.64         |
|              | <u>SD</u> | 1.70            | 1.82         |
| Not Detached | <u>M</u>  | 4.00            | 5.07         |
|              | <u>SD</u> | 1.57            | 1.86         |

Note.  $n = 14$  in every cell. Ratings were done on a 7-point scale, and higher scores indicate greater self-reported nervousness.

Table J.3

Analysis of Variance for the Question  
 "How did you feel as you watched the videotape?"

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Detachment    | 1         | 3.50      | 1.15     |
| Fate          | 1         | 18.29     | 6.03*    |
| Detach X Fate | 1         | .07       | .02      |
| Unit          | 52        | 3.03      |          |

\* $p < .02$

Table J.4  
Means and Standard Deviations for  
Victim Maturity Index

|              |           | Dissimilar Fate | Similar Fate |
|--------------|-----------|-----------------|--------------|
| Detached     | <u>M</u>  | 21.6            | 22.4         |
|              | <u>SD</u> | 3.8             | 3.9          |
| Not Detached | <u>M</u>  | 21.6            | 23.6         |
|              | <u>SD</u> | 4.2             | 3.0          |

Note.  $n = 14$  in every cell. Higher scores indicate more positive evaluation of the victim.

Table J.5  
Analysis of Variance for  
Victim Maturity Index

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Detachment    | 1         | 5.8       | .42      |
| Fate          | 1         | 28.6      | 2.05*    |
| Detach X Fate | 1         | 5.8       | .42      |
| Unit          | 52        | 13.9      |          |

\*  $p < .16$

Table J.6  
Means and Standard Deviations for  
Victim Maturity Index  
Detachment by Fate by Identification

|              |           | Dissimilar Fate |         | Similar Fate |         |
|--------------|-----------|-----------------|---------|--------------|---------|
|              |           | Lo Iden         | Hi Iden | Lo Iden      | Hi Iden |
| Detached     | <u>M</u>  | 23.6            | 19.6    | 20.0         | 24.1    |
|              | <u>SD</u> | 3.1             | 3.4     | 3.9          | 2.9     |
|              | <u>n</u>  | 7               | 7       | 6            | 8       |
| Not Detached | <u>M</u>  | 21.5            | 21.6    | 24.3         | 23.4    |
|              | <u>SD</u> | 2.1             | 4.5     | 2.63         | 3.3     |
|              | <u>n</u>  | 2               | 12      | 4            | 10      |

Note. Higher scores indicate more positive evaluation of the victim.

**Table J.7**  
**Unweighted Means Analysis of Variance for**  
**Victim Maturity Index**  
**Detachment by Fate by Identification**

| <u>Source</u>           | <u>df</u> | <u>MS</u> | <u>F</u> |
|-------------------------|-----------|-----------|----------|
| Detachment              | 1         | 8.0       | .63      |
| Fate                    | 1         | .3        | .02      |
| Identification          | 1         | 20.4      | 1.61     |
| Detach X Fate           | 1         | .5        | .04      |
| Detach X Iden           | 1         | 8.5       | .67      |
| Fate X Iden             | 1         | 34.2      | 2.71     |
| Detach X Fate<br>X Iden | 1         | 54.3      | 4.30*    |
| Unit                    | 48        | 12.6      |          |

\*  $p < .05$

**Table J.8**  
**Simple Interaction Effects Tests for Victim Maturity Index**  
**Detachment by Fate by Identification**

| <u>Source</u>                   | <u>MS</u> | <u>F</u> |
|---------------------------------|-----------|----------|
| Fate X Iden for detached Ss     | 87.2      | 6.90*    |
| Fate X Iden for not detached Ss | .4        | .03      |
| Unit                            | 12.6      |          |

\*  $p < .03$



Table J.9  
Means and Standard Deviations for  
Constructed Victim Evaluation  
Detachment by Fate by Emotional Involvement

|              |           | Dissimilar Fate |        | Similar Fate |        |
|--------------|-----------|-----------------|--------|--------------|--------|
|              |           | Lo Inv          | Hi Inv | Lo Inv       | Hi Inv |
| Detached     | <u>M</u>  | 35.4            | 39.4   | 38.9         | 39.3   |
|              | <u>SD</u> | 7.6             | 7.5    | 11.2         | 12.5   |
|              | <u>n</u>  | 9               | 5      | 7            | 7      |
| Not Detached | <u>M</u>  | 36.6            | 38.6   | 40.3         | 45.8   |
|              | <u>SD</u> | 5.4             | 8.7    | 13.1         | 6.8    |
|              | <u>n</u>  | 5               | 9      | 6            | 8      |

Note. The emotional involvement variable was based on the subjects' answers to the question, "How emotionally involved do you expect to feel as you watch the videotape?" Subjects who responded above the mean were assigned to the high emotional involvement category. Subjects who responded below the mean were assigned to the low emotional involvement category. Higher scores indicate more positive evaluation of the victim.

Table J.10  
 Unweighted Means Analysis of Variance for  
 Constructed Victim Evaluation  
 Detachment by Fate by Emotional Involvement

| Source                        | <u>df</u> | <u>MS</u> | <u>F</u>   |
|-------------------------------|-----------|-----------|------------|
| Detachment                    | 1         | 56.7      | .64        |
| Fate                          | 1         | 168.7     | 1.89       |
| Emotional<br>Involvement      | 1         | 115.2     | 1.29       |
| Detach X Fate                 | 1         | 48.5      | .54        |
| Detach X Emo Involv           | 1         | 7.4       | .08        |
| Fate X Emo Involv             | 1         | .004      | very small |
| Detach X Fate<br>X Emo Involv | 1         | 40.7      | .46        |
| Unit                          | 48        | 89.3      |            |

Table J.11  
Means and Standard Deviations for  
Constructed Victim Evaluation  
Detachment by Fate by Imagine Self

|              |           | Dissimilar Fate |         | Similar Fate |         |
|--------------|-----------|-----------------|---------|--------------|---------|
|              |           | Lo Imag         | Hi Imag | Lo Imag      | Hi Imag |
| Detached     | <u>M</u>  | 37.6            | 34.3    | 40.1         | 38.0    |
|              | <u>SD</u> | 7.9             | 7.0     | 9.4          | 13.8    |
|              | <u>n</u>  | 11              | 3       | 7            | 7       |
| Not Detached | <u>M</u>  | 40.9            | 34.9    | 38.5         | 45.4    |
|              | <u>SD</u> | 6.2             | 8.0     | 14.2         | 7.7     |
|              | <u>n</u>  | 7               | 7       | 4            | 10      |

Note. The imagine self variable was based on the subjects' answers to the question, "To what extent do you think you will imagine yourself in the place of the person on the videotape?" Subjects who responded above the mean were assigned to the high imagine self category, while those who responded below the mean were assigned to the low imagine self category. Higher scores indicate more positive evaluation of the victim.

Table J.12  
 Unweighted Means Analysis of Variance for  
 Constructed Victim Evaluation  
 Detachment by Fate by Imagine Self

| Source                       | <u>df</u> | <u>MS</u> | <u>F</u> |
|------------------------------|-----------|-----------|----------|
| Detachment                   | 1         | 68.4      | .79      |
| Fate                         | 1         | 155.2     | 1.80     |
| Imagine Self                 | 1         | 14.8      | .17      |
| Detach X Fate                | 1         | 2.7       | .03      |
| Detach X Imag Self           | 1         | 29.1      | .34      |
| Fate X Imag Self             | 1         | 145.0     | 1.68     |
| Detach X Fate<br>X Imag Self | 1         | 104.0     | 1.20     |
| Unit                         | 48        | 86.4      |          |

Table J.13  
Means and Standard Deviations for  
Constructed Victim Evaluation  
Detachment by Fate by Anxiety

|              |           | Dissimilar Fate |        | Similar Fate |        |
|--------------|-----------|-----------------|--------|--------------|--------|
|              |           | Lo Anx          | Hi Anx | Lo Anx       | Hi Anx |
| Detached     | <u>M</u>  | 37.0            | 36.6   | 37.8         | 39.8   |
|              | <u>SD</u> | 7.8             | 7.9    | 10.8         | 12.3   |
|              | <u>n</u>  | 9               | 5      | 5            | 9      |
| Not Detached | <u>M</u>  | 35.2            | 39.3   | 50.0         | 41.6   |
|              | <u>SD</u> | 6.9             | 7.8    | 7.0          | 10.1   |
|              | <u>n</u>  | 5               | 9      | 3            | 11     |

Note. The anxiety variable was based on subjects' answer to the question, "How do you feel right now?" (calm/nervous) Subjects who responded above the mean were assigned to the high anxiety category, while subjects who responded below the mean were assigned to the low anxiety category. Higher scores indicate more positive evaluation of the victim.

Table J.14  
 Unweighted Means Analysis of Variance for  
 Constructed Victim Evaluation  
 Detachment by Fate by Anxiety

| Source                     | <u>df</u> | <u>MS</u> | <u>F</u> |
|----------------------------|-----------|-----------|----------|
| Detachment                 | 1         | 165.6     | 1.89     |
| Fate                       | 1         | 327.4     | 3.73     |
| Anxiety                    | 1         | 5.2       | .06      |
| Detach X Fate              | 1         | 126.9     | 1.45     |
| Detach X Anxiety           | 1         | 24.9      | .28      |
| Fate X Anxiety             | 1         | 75.4      | .86      |
| Detach X Fate<br>X Anxiety | 1         | 163.0     | 1.86     |
| Unit                       | 48        | 87.8      |          |

Table J.15  
Means and Standard Deviations for Subjects' Perceived  
Similarity to Victim Subsequent to Viewing the Tape  
Detachment by Fate by Identification

|              |           | Dissimilar Fate |         | Similar Fate |         |
|--------------|-----------|-----------------|---------|--------------|---------|
|              |           | Lo Iden         | Hi Iden | Lo Iden      | Hi Iden |
| Detached     | <u>M</u>  | 3.86            | 3.43    | 2.50         | 4.00    |
|              | <u>SD</u> | 1.95            | 1.72    | 1.38         | 1.69    |
|              | <u>n</u>  | 7               | 7       | 6            | 8       |
| Not Detached | <u>M</u>  | 4.00            | 3.08    | 2.75         | 4.20    |
|              | <u>SD</u> | 2.83            | 1.56    | 1.71         | 1.75    |
|              | <u>n</u>  | 2               | 12      | 4            | 10      |

Note. Ratings were made on a 7-point scale; the higher the score, the higher the subjects' perceived similarity to victim.

Table J.16

Unweighted Means Analysis of Variance for Subjects'  
 Perceived Similarity to Victim Subsequent to Viewing the Tape  
 Detachment by Fate by Identification

| Source                  | <u>df</u> | <u>MS</u> | <u>F</u> |
|-------------------------|-----------|-----------|----------|
| Detachment              | 1         | .04       | .01      |
| Fate                    | 1         | .56       | .19      |
| Identification          | 1         | 1.71      | .58      |
| Detach X Fate           | 1         | .28       | .10      |
| Detach X Iden           | 1         | .19       | .07      |
| Fate X Iden             | 1         | 12.21     | 4.15*    |
| Detach X Fate<br>X Iden | 1         | .13       | .04      |
| Unit                    | 48        | 2.95      |          |

\* $p < .05$



Table J.17  
Means and Standard Deviations for  
Subjects' Perception of Victim's Performance  
Detachment by Fate by Identification

|              |           | Dissimilar Fate |         | Similar Fate |         |
|--------------|-----------|-----------------|---------|--------------|---------|
|              |           | Lo Iden         | Hi Iden | Lo Iden      | Hi Iden |
| Detached     | <u>M</u>  | 5.43            | 5.29    | 5.17         | 6.00    |
|              | <u>SD</u> | .79             | 1.98    | .75          | 1.07    |
|              | <u>n</u>  | 7               | 7       | 6            | 8       |
| Not Detached | <u>M</u>  | 5.50            | 4.50    | 4.75         | 5.60    |
|              | <u>SD</u> | .71             | 1.00    | 1.50         | 1.08    |
|              | <u>n</u>  | 2               | 12      | 4            | 10      |

Note. Ratings were made on a 7-point scale; the higher the score, the more positive was the evaluation of the victim's performance.

Table J.18  
 Unweighted Means Analysis of Variance for  
 Subjects' Perception of Victim's Performance  
 Detachment by Fate by Identification

| Source                  | <u>df</u> | <u>MS</u> | <u>F</u> |
|-------------------------|-----------|-----------|----------|
| Detachment              | 1         | 1.55      | 1.12     |
| Fate                    | 1         | .43       | .31      |
| Identification          | 1         | .19       | .14      |
| Detach X Fate           | 1         | .01       | .01      |
| Detach X Iden           | 1         | .47       | .34      |
| Fate X Iden             | 1         | 5.29      | 3.81*    |
| Detach X Fate<br>X Iden | 1         | .51       | .36      |
| Unit                    | 48        | 1.39      |          |

\* $p < .06$

Table J.19

Means and Standard Deviations for Subjects' Estimates of  
the Number of Shocks Received by the Victim and  
the Number of Shocks They Would Receive if in Victim's Place

|   |           | Dissimilar Fate |            | Similar Fate |            |
|---|-----------|-----------------|------------|--------------|------------|
|   |           | Detach          | Not Detach | Detach       | Not Detach |
| Estimated shocks<br>received by<br>victim                             | <u>M</u>  | 19.4            | 20.4       | 15.5         | 15.0       |
|   | <u>SD</u> | 7.1             | 10.4       | 4.1          | 5.8        |
| Estimated shocks<br>subjects would<br>receive if in<br>victim's place | <u>M</u>  | 18.9            | 20.4       | 15.4         | 14.5       |
|   | <u>SD</u> | 6.8             | 10.5       | 4.3          | 5.8        |

Note.  $n = 14$  in every cell.

Table J.20

Analyses of Variance for Subjects' Estimates of the  
 Number of Shocks Received by the Victim and the  
 Number of Shocks They Would Receive if in Victim's Place

| Source  | <u>df</u> | <u>MS</u> | <u>F</u> |
|---|-----------|-----------|----------|
| Estimated Number of Victim's Shocks                 |           |           |          |
| Detachment  | 1         | .9        | .02      |
| Fate  | 1         | 297.2     | 5.68*    |
| Detach X Fate                                       | 1         | 7.9       | .15      |
| Unit  | 52        | 52.4      |          |
| Estimated Number of Own Shocks if in Victim's Place |           |           |          |
| Detachment  | 1         | 1.6       | .03      |
| Fate  | 1         | 292.0     | 5.57*    |
| Detach X Fate                                       | 1         | 18.3      | .35      |
| Unit  | 52        | 52.4      |          |

\* $p < .03$

Table J. 21  
Means and Standard Deviations for  
Subjects' Comparison of Own and Victim Performance

|              |           | Dissimilar Fate | Similar Fate |
|--------------|-----------|-----------------|--------------|
| Detached     | <u>M</u>  | 1.21            | .71          |
|              | <u>SD</u> | 1.37            | 1.07         |
| Not Detached | <u>M</u>  | .36             | 1.50         |
|              | <u>SD</u> | 1.28            | 1.70         |

Note.  $n = 14$  in every cell. Scores are based on subjects' ratings of their own and victim's performance on 7-point scales. Subject's self-rating is subtracted from victim rating to obtain comparison measure; the higher the score, the more poorly subjects expected to perform in comparison to victim.

Table J. 22  
Analysis of Variance for  
Subjects' Comparison of Own and Victim Performance

| Source        | <u>df</u> | <u>MS</u> | <u>F</u> |
|---------------|-----------|-----------|----------|
| Detachment    | 1         | .02       | .01      |
| Fate          | 1         | 1.45      | .77      |
| Detach X Fate | 1         | 9.45      | 5.02*    |
| Unit          | 52        | 1.88      |          |

\* $p < .03$

Table J.23  
Means and Standard Deviations for  
Additional Post-Manipulation Checks

|  |                       | Detached            |                  | Not Detached |      |
|--|-----------------------|---------------------|------------------|--------------|------|
|  |                       | Dissim <sup>1</sup> | Sim <sup>1</sup> | Dissim       | Sim  |
| How emotionally involved did you feel as you watched tape? | <u>M</u> <sup>2</sup> | 3.07                | 3.86             | 5.00         | 4.71 |
|  | <u>SD</u>             | 1.77                | 1.92             | 1.18         | 1.00 |
| To what extent did you imagine yourself in victim's place? | <u>M</u> <sup>3</sup> | 4.14                | 4.86             | 5.21         | 5.14 |
|  | <u>SD</u>             | 1.56                | 1.99             | 1.05         | 1.35 |
| S's perceived similarity to victim subsequent to tape      | <u>M</u> <sup>4</sup> | 3.64                | 3.36             | 3.21         | 3.79 |
|  | <u>SD</u>             | 1.78                | 1.69             | 1.67         | 1.81 |

Note.  $n = 14$  in every cell. Ratings were made on 7-point scales.

<sup>1</sup>Dissim = Dissimilar Fate; Sim = Similar Fate.

<sup>2</sup>Higher scores indicate greater emotional involvement.

<sup>3</sup>The higher the score, the more likely subjects imagined themselves in victim's place.

<sup>4</sup>Higher scores indicate greater perceived similarity.

Table J.24  
Analyses of Variance for Additional  
Post-Manipulation Checks

| Source  | <u>df</u> | <u>MS</u> | <u>F</u> |
|---|-----------|-----------|----------|
| How emotionally involved while watching tape?     |           |           |          |
| Detachment  | 1         | 27.16     | 11.82*   |
| Fate  | 1         | .88       | .38      |
| Detach X Fate                                     | 1         | 4.02      | 1.75     |
| Unit  | 52        | 2.30      |          |
| To what extent imagined self in victim's place?   |           |           |          |
| Detachment  | 1         | 6.45      | 2.76**   |
| Fate  | 1         | 1.45      | .62      |
| Detach X Fate                                     | 1         | 2.16      | .93      |
| Unit  | 52        | 2.34      |          |
| Perceived Similarity to Victim Subsequent to Tape |           |           |          |
| Detachment  | 1         | 0.        | 0.       |
| Fate  | 1         | .29       | .10      |
| Detach X Fate                                     | 1         | 2.57      | .85      |
| Unit  | 52        | 3.02      |          |

\* $p < .002$

\*\* $p < .11$

Table J.25  
Means and Standard Deviations for  
Additional Dependent Measures

|  |                       | Dissimilar Fate   |            | Similar Fate |            |
|--|-----------------------|-------------------|------------|--------------|------------|
|  |                       | Detach            | Not Detach | Detach       | Not Detach |
| S's perception of victim's performance                   | <u>M</u> <sup>1</sup> | 5.36              | 4.64       | 5.64         | 5.35       |
|  | <u>SD</u>             | 1.45              | 1.01       | 1.01         | 1.22       |
| S's anticipation of own performance                      | <u>M</u> <sup>2</sup> | 4.14              | 4.29       | 4.93         | 3.86       |
|  | <u>SD</u>             | 1.35              | .91        | 1.21         | 1.46       |
| How justified was punishment the person on tape received | <u>M</u> <sup>3</sup> | 2.36              | 3.07       | 2.93         | 2.00       |
|  | <u>SD</u>             | 1.60              | 2.17       | 2.37         | 1.36       |
| S's perception of severity of shock                      | <u>M</u> <sup>4</sup> | 3.92 <sup>5</sup> | 4.00       | 4.21         | 4.36       |
|  | <u>SD</u>             | 1.89              | 1.11       | 1.48         | 1.34       |

Note.  $n = 14$  in every cell except as noted. For all of the measures, ratings were made on 7-point scales.

<sup>1</sup>The higher the score, the more positive the evaluation of the victim's performance.

<sup>2</sup>The higher the score, the more positive subjects expected their own performance to be.

<sup>3</sup>The higher the score, the more justified the shock was judged to be.

<sup>4</sup>The higher the score, the more severe the shock was judged to be.

<sup>5</sup> $n = 13$ .



Table J.26  
Analyses of Variance for Additional Dependent Measures

| Source                                       | <u>df</u> | <u>MS</u> | <u>F</u> |
|--|-----------|-----------|----------|
| Subjects' Perception of Victim's Performance |           |           |          |
| Detachment                                   | 1         | 3.50      | 2.50     |
| Fate   | 1         | 3.50      | 2.50     |
| Detach X Fate                                | 1         | .64       | .46      |
| Unit   | 52        | 1.40      |          |
| Subjects' Anticipation of Own Performance    |           |           |          |
| Detachment                                   | 1         | 3.02      | 1.93     |
| Fate   | 1         | .45       | .29      |
| Detach X Fate                                | 1         | 5.16      | 3.30*    |
| Unit   | 52        | 1.56      |          |
| How Justified Was the Punishment             |           |           |          |
| Detachment                                   | 1         | .16       | .04      |
| Fate   | 1         | .88       | .24      |
| Detach X Fate                                | 1         | 9.45      | 2.57     |
| Unit   | 52        | 3.67      |          |
| Subjects' Perception of Severity of Shock    |           |           |          |
| Detachment                                   | 1         | .17       | .08      |
| Fate   | 1         | 1.44      | .67      |
| Detach X Fate                                | 1         | .02       | .01      |
| Unit   | 51        | 2.17      |          |

\* $p < .08$