

THE EFFECTS OF FRUSTRATION, INSULT, AND
VERBAL REPORTS OF VIOLENCE
ON AGGRESSIVE BEHAVIOR

By

NORMAN RAY HENRY

Bachelor of Science

Bethany Nazarene College

Bethany, Oklahoma

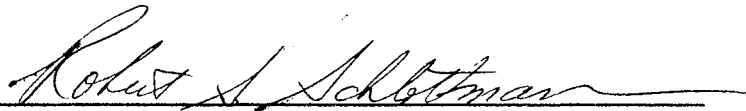
1969

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
December, 1973

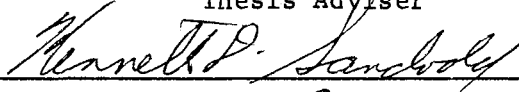
APR 10 1974

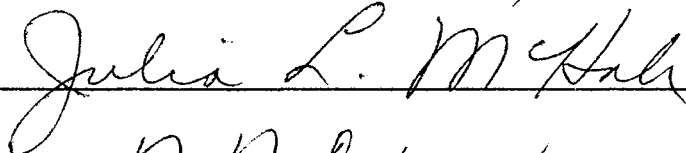
THE EFFECTS OF FRUSTRATION, INSULT, AND
VERBAL REPORTS OF VIOLENCE
ON AGGRESSIVE BEHAVIOR

Thesis Approved:



Thesis Adviser







Dean of the Graduate College

877217

ACKNOWLEDGMENTS

I wish to express my appreciation to those members of the Psychology Department at Oklahoma State University who have given support and assistance in the completion of this paper and throughout my graduate efforts. To my thesis adviser, Dr. Robert Schlottmann, thanks for his valuable guidance and assistance in carrying out this study. Appreciation is also expressed to Dr. Kenneth Sandvold and Dr. Julia McHale for their interest and support throughout the work on this paper and the years of graduate study.

I want to also thank Art Rousseau for the many hours that he served as the confederate during the data collection phase.

Finally, I reserve my deepest thanks for my wife, Ruth, who took full responsibility for the typing of this paper and who has helped in so many other ways in all that I have accomplished.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
II. LITERATURE REVIEW	3
Frustration-Aggression Hypothesis	3
Effects of Observing Violence	4
Factors Involved in the Effects of Observed Violence	9
III. PROBLEM	13
IV. METHOD	17
Subjects	17
Apparatus	17
Procedure	18
Design	22
V. RESULTS	23
VI. DISCUSSION	30
VII. SUMMARY	35
BIBLIOGRAPHY	37
APPENDIX A - DIAGRAM OF APPARATUS	40
APPENDIX B - INTRODUCTION TO THE EXPERIMENT	41
APPENDIX C - INTRODUCTION TO THE INTELLIGENCE TEST	42
APPENDIX D - WESTERN INTELLIGENCE SCALE	43
APPENDIX E - INSTRUCTIONS FOR CURRENT EVENTS TASK	46
APPENDIX F - VIOLENT NEWS REPORT	47
APPENDIX G - QUESTIONS FOR NEWS REPORT	50
APPENDIX H - INSTRUCTIONS FOR THE SHOCK TASK	51
APPENDIX I - SUBJECT'S NONSENSE SYLLABLE LIST	54

Chapter	Page
APPENDIX J - RECORD FORM FOR SHOCKS	55
APPENDIX K - NEWMAN-KEULS TEST OF SHOCK INTENSITY FOR THE FOUR CONDITIONS	56
APPENDIX L - INDIVIDUAL SUBJECT'S SCORES	57

LIST OF TABLES

Table	Page
I. Summary Table for Analysis of Variance of Shock Intensity . . .	24
II. Summary Table for Analysis of Variance of Shock Duration . . .	28

LIST OF FIGURES

Figure	Page
1. Mean Shock Intensity for Four Conditions	25
2. Mean Shock Intensity per Trial	26
3. Mean Shock Duration for Four Conditions	29

CHAPTER I

INTRODUCTION

Violence is a prevalent problem facing our society which threatens us with destruction unless it can be controlled. People are exposed daily to accounts of violence, both actual and fiction, through the mass media. Television, movies, radio, magazines, newspapers, and books all give graphic portrayals of violence.

Gerbner (1971) studied the violent content of television entertainment programs. Gerbner surveyed the program content of selected network programs during one week in October for three consecutive years. Violent episodes occurred at the rate of eight per hour. Cartoons were found to contain the most violence, 94 to 97 percent contained some form of violence. Barcus (1971) surveyed Saturday morning television programs. He found 30 percent of the programs saturated with violence and 71 percent had at least one incident of human violence.

The news media focuses on reports of actual violent events. Every day people are exposed to reports of events such as wars, riots, murders, shootings, and fights. Instances of violence occur regularly and frequently in the media. The increased coverage of violence by the news sources has increased the public's exposure to violence.

What effects exposure to violence through the media has on an individual has become a major concern. Much of this concern has centered around televised violence. A Scientific Advisory Committee

was recently appointed to investigate the impact of televised violence (Surgeon General's Scientific Advisory Committee on Television and Social Behavior, 1972). In its report to the Surgeon General, the committee concluded that viewing violence can increase aggressive behavior.

Areas still to be explored include the effects of other forms of media, and the situational and predispositional factors which increase the probability that exposure to violence will lead to aggression.

The purpose of this experiment was to look further into the question of what effects reported violence may have on individuals in our society and the influence of arousal experiences upon these effects. In specific, this study investigated the relative and combined influence of two aggression arousal methods, task-frustration and verbal attack or insult, on aggressive behavior following exposure to a radio news broadcast of violent events.

CHAPTER II

LITERATURE REVIEW

Frustration-Aggression Hypothesis

Much controversy still exists over the potency of frustration as an instigator of aggression. The original formal statement of this relationship between frustration and aggression, maintained that the occurrence of aggression always presupposes the existence of frustration and, contrariwise, that the existence of frustration always leads to some form of aggression (Dollard, Doob, Miller, Mowrer, and Sears, 1939). Miller (1941) later clarified this statement by rephrasing the hypothesis thus: "Frustration produces instigations to a number of different types of response, one of which is an instigation to some form of aggression" (p. 30). Whether or not an act of aggression is the first response to frustration depends upon whether aggressive behavior is the strongest member of the response hierarchy. If other responses, for example, are stronger they will occur. If these responses do not remove the frustration, they will weaken and the probability of an aggressive act will increase. When an aggressive act occurs, there is a reduction in the tendency to aggress, whether the aggressive act is effective in removing the frustration or not. Aggression should have a cathartic effect, reducing the tension built up toward aggression.

Modern statements concerning the determinants of aggression vary in the importance attached to frustration as a cause of aggression. Buss (1961, 1966) views frustration as at best a weak antecedent of aggression. It is only one of several determinants of aggression. In addition to intensity of frustration, and probability and intensity of punishment for aggression, other major determinants include arbitrariness of aggression, type of aggression, and instrumental value of aggression in removing the frustrating object (Buss, 1963). Berkowitz (1962, 1965b) however states that frustration is a major factor in creating a readiness for aggressive acts. In a modification of the frustration-aggression hypothesis, Berkowitz (1969) maintains that frustration creates a predisposition for aggression. The aggressive responses will not occur, however, even given this readiness, unless there are suitable stimuli present to elicit the responses. These are stimuli which have been previously associated with aggressive behaviors and have become capable of eliciting these behaviors. The results of testing the frustration-aggression hypothesis are equivocal. While some studies have found frustration to lead to aggression, other studies have failed to confirm this relationship. Berkowitz suggests that perhaps the aggressive reactions did occur in these studies, but the appropriate cues were not available to elicit the observable behavior.

Effects of Observing Violence

Catharsis Hypothesis

The catharsis hypothesis states that symbolic expression of aggression or vicarious participation in aggressive activity discharges

hostile emotions. Thus, exposure to aggression reduces hostile impulses and thereby decreases the tendency for aggression (Feshbach, 1955). This position views the exposure to violence in the mass media as having beneficial effects (Klapper, 1960). It offers the angered person a chance to vicariously express his hostility in a safe way.

In a well-known study involving the expression of aggression through fantasy, Feshbach (1955) found support for the catharsis hypothesis. Angered college students were given the opportunity to write aggressive stories in response to TAT cards. Feshbach found this activity led to a reduction in subsequent aggressive tendencies as evidenced on a questionnaire concerning the experimenter and the experiment. In another study of the cathartic effect of witnessing aggression, Feshbach (1961) found that the cathartic effect occurs only when the observer is hostility-aroused at the time of the exposure. College students were shown either a ten-minute fight scene or a film about how rumors spread in a factory. Half of the students seeing each film were anger-aroused and half were not. Using aggressive responses to a word association test as a measure, it was found that exposure to an aggressive fight scene resulted in a reduction in aggression level for the anger-aroused subject but not for the non-aroused student.

Mallick and McCandless (1966) used third grade children to study the catharsis hypothesis. One group of children was frustrated by a child confederate while a second group was not frustrated. Each group was then involved in a play activity of shooting guns at targets. After this activity, the children were given the opportunity to "get even" with their frustrator by giving him low like-dislike ratings, by interfering with his completion of a task, or by giving him electric

shocks. The opportunity to be involved in aggressive play did not result in decreased aggressive tendencies for either the frustration group or the nonfrustration group. A reasonable positive explanation for the frustrator's actions, however, was effective in reducing aggressive tendencies.

Instigation to Aggression

A great number of studies have questioned the cathartic value of violence in the mass media. Berkowitz (1962), after reviewing the literature believes that instead of reducing the tendency to aggress, exposure to aggression reduces the inhibitions against aggression. The great majority of studies have found that exposure to aggressive models in various forms increases aggressive behavior. Support for this view suggests that the extensive coverage of violence by the mass media may have detrimental effects on society.

Bandura, Ross and Ross (1963) studied exposure to violence in nursery school children. One group of children saw a live adult model aggressing towards a Bobo doll. The second group of children saw a film of the same adult model on a TV screen. The third group of children saw the adult dressed as a cartoon character aggressing towards the Bobo doll. Each child was mildly frustrated and observed in a free play situation with a Bobo doll. All three conditions resulted in increased aggressive behaviors by the children toward the doll.

Lovaas (1961) had children observe either an aggressive cartoon or a nonaggressive cartoon. Later the children were allowed to play with one of two games activated by levers. In one of the games, activation of the lever caused one doll to hit another doll, in the

other, activation of the lever resulted in a bouncing ball. The children who had observed the aggressive cartoon chose the doll-hitting toy more often than those who observed the neutral cartoon.

In another study involving children, Mussen and Rutherford (1961) also found that exposure to aggression results in an increased tendency to aggress. First grade children were given a copying task during which half of them were frustrated by being criticized by their teacher and half of them were not. Then they either observed an aggressive cartoon, observed a non-aggressive cartoon or observed no cartoon. The measure of aggression consisted of a verbal expression of a desire to pop a balloon. Children who saw the aggressive cartoon were more inclined toward balloon-popping than the other two groups. There was no significant difference found between the frustrated and non-frustrated children.

The above studies involved children as subjects. Instigation to aggression effects have also been found with adult subjects. Walters, Thomas, and Acker (1962) exposed adolescents and adults from lower socioeconomic groups to either the knife-fight scene from "Rebel Without a Cause" or to a film about cooperative behaviors. Subjects who saw the violent film expressed more verbal aggression and delivered more electric shock as part of a learning experiment than subjects who saw the non-violent film.

In another study, this time using college students, Geen and Berkowitz (1967) exposed male adults to either an aggressive prize-fight scene, or to a non-aggressive track race film. When later given the opportunity to give electric shocks as part of a learning experiment, subjects who had observed the prize-fight scene gave higher

shocks than subjects who had observed the track race film. Wheeler and Caggiula (1966) used enlisted Navy men and obtained similar findings measuring verbal aggression.

The majority of the research done on the effects of the observation of violence and aggression have been concerned with live aggressive models or filmed aggressive models. Recently the emphasis has been on the effects of televised violence (Singer, 1971; Surgeon General's Scientific Advisory Committee on Television and Social Behavior, 1972). But the effect of exposure to violence and aggression does not appear to be limited to visually witnessed events. Scharff (1971) found that subjects who were first angered and then exposed to a violent radio news broadcast gave higher electric shocks than subjects who listened to a radio news broadcast of neutral material. S. Schuck, A. Schuck, Hallam, Mancini, and Wells (1971) found similar results using radio broadcasts, as did Wilkins (1972). A study by Shore (1973) which involved reading printed accounts of violence, such as those found in books or newspapers, found relative differences in aggression consistent with the previous findings. Goldstein and Arms (1971) found that attendance at a competitive sport event such as football would increase feelings of hostility.

Eron, Lefkowitz, Huesmann, and Walder (1972) have found evidence that the influence of televised violence is not confined to short-term effects. The violence ratings of favorite television programs were found to be positively related to peer-rated aggression in third grade boys. Similar ratings were taken ten years later. There was a positive relation between the boys' preference for violence in the third grade and their aggressive behavior ten years later. On the

basis of contrasting these relations with other relations among the variables, the authors concluded that a preference for violent television and the viewing of violent television in the third grade contributes to the development of aggressive habits manifest ten years later. Viewing of violent television programs in childhood is one probable cause of aggressiveness in young adulthood.

In summary, it appears that observation of violence does not tend to decrease aggression but increase it. Thus, the majority of experimental research would lend support for the instigation to aggression hypothesis. Berkowitz (1970), after a review of the literature and extensive research of his own, concluded: "Aggression is all too likely to lead to still more aggression" (p. 6).

Factors Involved in the Effects of Observed Violence

Observation of violence does appear to increase the probability of aggression occurring. But under what conditions is this effect most clearly evident? What factors contribute to the effect of observed violence? One factor which has been shown to influence this effect, is whether the observed violence is seen as justified or unjustified. Berkowitz, Corwin, and Heironimus (1963) showed male college students either a prize-fight scene or a neutral film. Prior to viewing one of these films half of the subjects were insulted, while half were not. As an introduction to the fight scene, half of the subjects in this condition were given a summary of the film which provided a justified explanation of the aggression and the other half received a summary which provided a non-justified explanation for the

aggression. Measures of aggression consisted of evaluations of the experiment and the experimenters by the subjects. Results from this study indicate that if the observed aggression is justified, the increase in the tendency to aggress may be even more likely than if the observed aggression is unjustified. Similar results were also found by Berkowitz and Rawlings (1963). Meyers (1972) found this relationship for real film violence as well as fantasy aggression. Angered college students who observed justified real film violence gave more shocks and more intense shocks than subjects who viewed non-justified real film violence.

Berkowitz (1970) stated that the viewing of "legitimate" aggression may make a person's own aggression appear "morally proper", and thus reduce a person's inhibitions toward aggression. Aggression is socially acceptable toward persons who deserve it. The viewing of justified violence seems to make the viewer believe that if he feels a person deserves punishment it is acceptable to attack him.

Another factor which has been shown to influence the effect of the observation of violence on the tendency to aggress is the magnitude of the pain cues from the victim. Baron (1971a, 1971b) has attempted to regulate the information about the pain of the victim that the aggressor receives by the means of a "psychoautonomic pain meter." This meter supposedly provided the aggressor with information regarding the degree of pain experienced by the victim after each shock. In fact, the pain-meter reading was controlled by the experimenter. Baron found that as the magnitude of the pain cues from the victim increased, the intensity of aggression decreased. This held true whether the subject was angered or not and whether the subject and the victim were

similar or dissimilar. The more it seemed the victim was suffering, the less intense the aggression.

The stimulus properties of the potential target of aggression is another factor which influences the effects of observed violence. Geen and Berkowitz (1967) exposed insulted male college students to a fight scene in which the actor, Kirk Douglas, received a bad beating. For one group of subjects, the insulter was introduced as "Kirk". For the other group, the insulter was introduced as "Bob". When later given the opportunity, subjects administered stronger shocks to the insulter whose name had been associated with the name of the victim in the observed violence than to the insulter whose name had not been associated with the victim. It appears that the degree of similarity between the observed violence situation and the real-life situation influences the effect of the observation of violence on increased aggressive tendencies.

Individual personality factors also affect the strength of aggressive behavior after the observation of violence. Wolf and Baron (1971) exposed college students and prisoners to a live aggressive model. Both groups delivered more intense shock after observing the model but the prisoners delivered even more intense shock than the college students. This finding suggests that the laboratory measure of aggression, willingness to give electric shock, does assess the strength of the subject's tendency to attack and attempt to harm another person.

Wilkins (1972) found that persons who have existing tendencies to aggress react differently to anger-arousal and exposure to violence than persons more restrained. Persons having these existing tendencies were selected on the basis of a high score on the Psychopathic Deviate

Scale (Scale 4) of the Minnesota Multiphasic Personality Inventory. Listening to violent radio news broadcasts increased aggression for persons who scored both low and high. For subjects scoring low on Scale 4 (non-aggressive subjects), insult combined with the violent broadcast resulted in even higher aggression than the violent broadcast alone. However, for subjects scoring high (aggressive subjects), insult combined with the broadcast did not result in a higher aggression level than observation of the broadcast alone. Aggressive subjects administered higher shocks on the pretest than non-aggressive subjects. It was only when non-aggressive subjects were insulted that they behaved as aggressively as the aggressive subjects. Thus, it seems possible that persons having aggressive tendencies do not need to be anger-aroused for observation of violence to elicit an increase in aggression.

Some variables have therefore been shown to contribute to the effect of the observation of violence on subsequent aggressive tendencies.

CHAPTER III

PROBLEM

An increasing amount of research has demonstrated that observation of aggression or violence can increase the tendency toward aggression (Bandura, Ross, and Ross, 1963; Berkowitz, 1965a; Berkowitz and Rawlings, 1963; Lovaas, 1961; Mussen and Rutherford, 1961). The great majority of these studies have involved the observation of live models or filmed models. A few studies have shown that listening to a radio broadcast of violence increases the tendency to aggress (Scharff, 1971; Wilkins, 1972). A recent study which involved reading printed accounts of violence, such as those found in newspapers and magazines, found relative differences in aggression consistent with previous studies (Shore, 1973).

Much still needs to be learned about the conditions which determine the postobservational occurrence of aggression. The emotional state of the observer is an important determinant of behavior. Since the formal statement of the frustration-aggression hypothesis (Dollard, Doob, Miller, Mowrer, and Sears, 1939; Miller, 1941) much of the research on aggression has been conducted in the context of this hypothesis. This hypothesis assumes that frustration leads to the expression of aggression. The stronger the frustration and the weaker the punishment for aggression, the more intense the aggression. Studies investigating the determinants of the tendency to aggress have employed various types of

frustration-arousal methods with differing results. Hence there is a large difference in the importance attached to frustration as a determinant of aggression. Buss (1961, 1966) feels that frustration is at best a weak determinant of aggression, while personal attack, verbal or physical, is a more important determinant. Berkowitz (1962, 1969) however feels that frustration is a major determinant of aggression. In a restatement of the frustration-aggression hypothesis, Berkowitz maintains that frustration predisposes a person toward aggression, but appropriate cues must be necessary to elicit this response. Aggressive behavior will not occur unless stimuli related to aggression are present.

Differing definitions of frustration may account for the conflicting results of the ability of frustration to elicit aggression. Some investigators have defined personal attack (or insult) as a frustration and have found it to be effective at aggression-arousal (Berkowitz, 1962). Most of the investigators have compounded attack with other forms of frustration. Geen and Berkowitz (1967) found that subjects who were given a frustrating task prior to observing a violent film gave more intense shock than a non-frustrated control group. Subjects who had been insulted prior to viewing the violent film gave more intense shock than the frustrated group. However, insulted subjects had also been given the frustrating task.

Few investigators have compared the relative effectiveness of frustration and insult alone. Geen (1968) has pointed out the need to compare the effects of a personal attack and a "pure" frustration uncompounded by attack. In an attempt to measure these effects, Geen found that frustration followed by observation of filmed aggression increased aggressive behavior, but verbal attack followed by the

observation of filmed aggression increased aggressive behavior to an even greater extent. The effects of frustration combined with attack were not observed, however. A possible interpretation was made in terms of general arousal, verbal attack being more arousing than the frustration.

In a study which did not involve the observation of violence, Rule and Percival (1971) compared the effects of frustration, provocation (insult), and frustration combined with insult on aggressive behavior. Subjects were required to teach a list of syllables to a confederate, giving shocks for wrong answers. Subjects were frustrated by being led to believe the confederate was not learning as fast as he should. For subjects who had been frustrated, insulted or both, level of aggression increased over learning trials. For non-aroused subjects, level of aggression did not increase over trials. Insult had different effects upon aggressive behavior depending upon whether it was combined with frustration or not. When subjects had not been frustrated, insulted subjects gave higher shocks than non-insulted subjects. When subjects had been frustrated, insulted subjects gave lower shocks than non-insulted subjects.

It is possible that provocation (insult) combined with frustration may have led to increased arousal and aggression anxiety. The subsequent decrease in the tendency to aggress may have been a result of increased inhibition. If this were the case, exposure to the disinhibiting effects of violent cues after being aroused by insult combined with frustration should result in a subsequent increase in aggression beyond what would be expected from provocation or frustration alone. The purpose of this experiment was therefore to investigate

further the influence of anger-arousal experiences upon the effects of exposure to violence. More specifically, this study investigated the relative and combined influence of two aggression-arousal methods, task-frustration and verbal attack or insult, on aggressive behavior following exposure to a radio news broadcast of violent events. It was hypothesized that all arousal conditions would result in an increase in the tendency to aggress. Secondly, it was hypothesized that the insult-arousal condition would result in a greater increase in the tendency to aggress than the frustration-arousal condition. Finally, it was hypothesized that the combined arousal condition of both frustration and insult would result in a greater increase in the tendency to aggress than either frustration alone or insult alone.

CHAPTER IV

METHOD

Subjects

Forty male college students, ages 17-22, enrolled in various courses at Oklahoma State University were used as subjects. Approximately three of the subjects in each group volunteered for extra course credit. The remaining subjects in each group were from courses where extra credit was not available and were each paid \$1.50 for participating. There were ten students assigned randomly to each of the four experimental conditions.

Apparatus

A shock apparatus similar design to Buss' (1961) aggression machine was used. The apparatus consisted of a 11.5" x 22.5" x 11.5" black box-shaped structure. The front panel consisted of a series of ten levers, numbered in order from one to ten. The word "mild" was located near lever one and the word "strong" was located near lever ten. In addition, another lever designated "ready" was located in the middle of the panel below the ten levers. In the lower left hand corner were two lights, one labeled "correct" and one labeled "incorrect". Connecting wires ran from the box to an adjoining room to another small panel (14" x 6"). This panel housed a series of lights (numbered one to ten)

corresponding to the levers, an "alert" light located at the extreme right which corresponded to the "ready" lever, and two switches which corresponded to the correct and incorrect lights (see Appendix A). A microphone and amplifier were employed to allow the subject to present the learning task to the confederate. A Hunter Model 120A Klockcounter was also used to measure the duration of each shock. The list to be taught to the subject consisted of nonsense syllables with Glaze association values of 60 to 80 percent (see Appendix I).

Procedure

Ten subjects were randomly assigned to each of four conditions: (1) frustration at an assigned task prior to exposure to a verbal report of violence, (2) insult by a confederate prior to exposure to a verbal report of violence, (3) frustration at an assigned task and insult by a confederate prior to exposure to a verbal report of violence, and (4) neither frustration nor insult prior to exposure to a verbal report of violence. The two dependent variables measured consisted of the intensity and duration of shock administered to a confederate (see Appendix J).

Each subject was tested separately with a confederate (a male undergraduate student) who posed as a student from another class. To limit interaction between the subject and confederate prior to the experiment, the confederate arrived after the subject and the experiment began immediately. At the beginning of the experiment all subjects were told they were to participate in a study on learning. Subjects were told that previous research had shown that learning increases when a person is threatened with electric shock and that this experiment

would use shocks (see Appendix B).

In the first experimental task, both subject and confederate were asked to take what was believed to be an intelligence test. This test consisted of twenty questions involving arithmetic, vocabulary, and general information (see Appendix D). Twenty of the subjects (the frustration groups) were given instructions which emphasized the simple, easy nature of the test, and the expectation that they should be able to finish it in the time given (see Appendix C). However, no subject in the frustration groups was allowed to finish. Time was called when the subject reached question number fifteen. The subjects did not know how successful the confederate was on the test. The remaining twenty subjects (the non-frustration groups) were given instructions which emphasized that some of the questions may be harder than they seem at first and that the subject might expect to miss a few (see Appendix C). No time limit was set for this group and the subjects were allowed to finish the test. When the test was picked up, the experimenter indicated to the subject that he did quite well. The confederate turned in his paper shortly after the subject, and the subject did not know how successful the confederate was on the test.

Twenty subjects (ten in the frustration condition and ten in the non-frustration condition) completed the first task without incidence. The remaining twenty subjects (ten in the frustration condition and ten in the non-frustration condition) were insulted by the confederate. The confederate proceeded to make remarks indicating that the subject's form was easier than his, that he could have finished the subject's form in half the time that it took the subject, and that the subject would have had to really concentrate to complete the confederate's form.

The next procedure consisted of exposing all subjects to a four-minute tape of a violent news broadcast. The tape included such material as an incident in which a man who had held two men hostage at gunpoint was shot by FBI agents, an incident in which a man who had killed five persons was gunned down by policemen, bombing raids in Cambodia, and other similar reports of violence (see Appendix F).

The listening task was explained as a learning test of current events. To insure that each subject attended to the tape, each subject was informed before the broadcast that they would be asked some questions about the recording (see Appendix E). Four multiple choice questions were given to each subject, after he had listened to the tape (see Appendix G).

The final task consisted of obtaining a measure of the level of aggression (as indicated by the intensity and duration of an electric shock administered to a confederate) for all forty subjects. A fixed "lottery" was held to assign the role of teacher to the subject and learner to the confederate. Subjects were informed that they were to teach the learner a list of nonsense syllable pairs. After the confederate had been escorted into another room, supposedly to have the shock electrodes attached, the subjects were shown the shock apparatus. The levers ranging one through ten were pointed out and the subject informed that the shock level would increase and become more painful as he moved from lever number 1 to lever number 10. The subjects were also informed that the learner would receive shock as long as the lever was pressed, but the shock was not intense enough at any level to actually cause physical harm (see Appendix H).

Subjects were then presented with a list of eight pairs of

nonsense syllables and asked to teach this list to the confederate (see Appendix I). Subjects presented the list to the learner through an intercom located near the aggression box. At the beginning of each trial, the subject signaled that he was ready to begin by flipping the "ready" lever. In teaching the list, the subject read the first syllable in a pair, and then paused to let the learner give the second syllable. Actually, the learner never responded. The experimenter indicated to the subject whether a correct response was given or not by illuminating either the correct or incorrect light on the aggression machine. The subject presented the entire list five times. The first time through was a practice trial, no shocks were given. When an incorrect response was indicated on trials 1 through 4, the teacher administered "shock" to the learner at whatever level he chose. Then the subject gave the second syllable in the pair, whether a correct response was indicated or not, and whether a shock was administered or not, and then moved on to the next pair. The pairs were presented in order on each trial. No shocks were actually administered. The wires extending from the control panel were actually connected to ten lights and to a timer in the room where the experimenter and confederate were so that the subject's responses could be recorded.

After the instructions had been given, the experimenter went to the adjoining room to signal right and wrong responses and record the shocks administered. The experimenter signaled the subject to begin teaching by blinking the correct and incorrect lights. Over the four repetitions of the eight-pair list, the confederate appeared to make the following pattern of errors: 6, 5, 3, 2. Thus, it appeared that he learned the list.

After the completion of the testing session, each subject was questioned to determine if he had been able to ascertain the actual purpose of the experiment. Subjects who had some concept of the actual purpose of the investigation or those who did not believe the confederate was being shocked were discarded from the analysis. Subjects were also debriefed about the actual purpose of the experiment and the experimental manipulations before they left. They were cautioned not to reveal the actual purpose to other persons.

Design

The general design for this study was a $2 \times 2 \times 4$ repeated measures analysis of variance. There were two frustration conditions (frustration and no frustration), two insult conditions (insult and no insult) assigned between subjects and four trials assigned within subjects. For each subject, four scores on each dependent variable were recorded. Sixteen shocks were given with each score consisting of the mean of four shocks. Mean intensity of shock was one dependent variable while mean duration of shock was the second. A separate analysis was run for each dependent variable, as well as a Pearson product-moment correlation between them for each of the four groups.

CHAPTER V

RESULTS

The individual scores for each subject are included in Appendix L. The summary of the analysis of variance for mean shock intensity is reported in Table I. The main effect for the frustration condition was significant ($F = 7.26$, $df = 1/36$, $p < .05$). However, the frustration x insult interaction was also significant ($F = 5.11$, $df = 1/36$, $p < .05$), indicating that the effect of the frustration depended upon the presence or absence of insult (see Figure 1). To determine the various effects of the four conditions on intensity of shock administered, differences between group means were compared using Newman-Keuls test (see Appendix K). The means of the insult only group, the frustration only group, and the frustration combined with insult group all were significantly larger ($p < .05$) than the no frustration, no insult group. They did not, however, differ among themselves. Frustration alone resulted in higher intensity of shock, insult alone resulted in higher intensity of shock, but when insult and frustration were combined, the level of shock administered was not significantly different from that administered when only one of the arousal conditions was present.

The main effect for trials was also significant ($F = 55.26$, $df = 3/108$, $p < .001$). Intensity of shock administered increased as trials progressed (see Figure 2).

The summary of the analysis of variance for mean shock duration is

TABLE I
SUMMARY TABLE FOR ANALYSIS OF VARIANCE OF
SHOCK INTENSITY

Source	Sum of Squares	<u>df</u>	MS	<u>F</u>
<u>Between Subjects</u>	466.8854	39		
A (Frustration)	68.0166	1	68.0166	7.26*
B (Insult)	13.7007	1	13.7007	1.46
A x B	47.8735	1	47.8735	5.11*
Subjects w. groups	337.2946	36	9.3693	
<u>Within Subjects</u>	358.5885	120		
C (Trials)	208.4054	3	69.4685	55.26**
A x C	2.3423	3	.7808	< 1
B x C	2.5967	3	.8656	< 1
A x B x C	9.4729	3	3.1576	2.5118
C x Subjects w. groups	135.7712	108	1.2571	

*p < .05
**p < .001

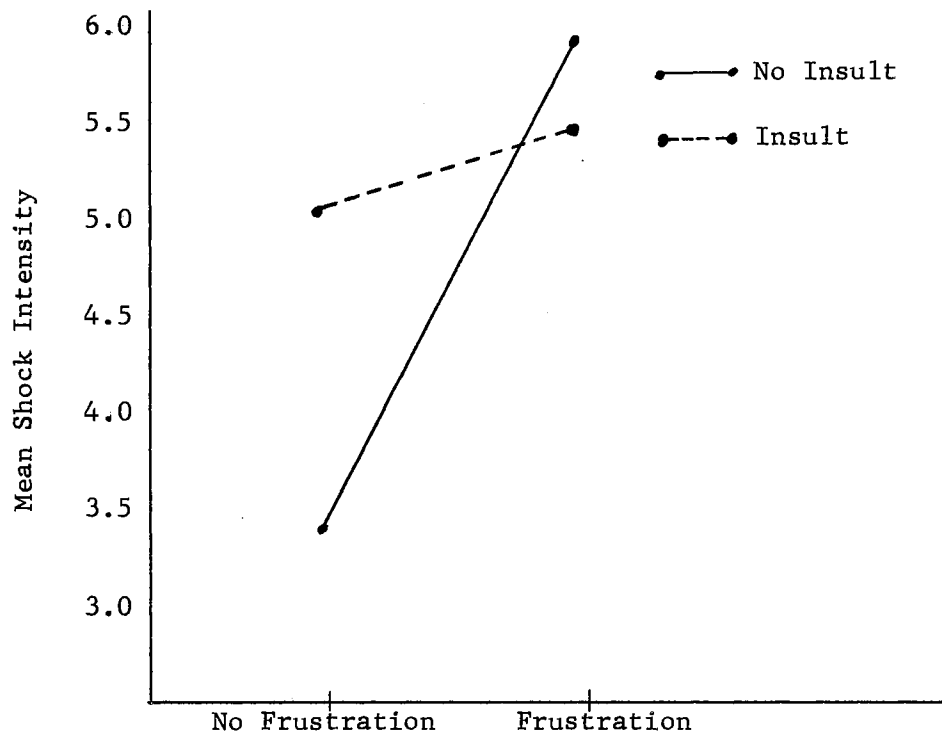


Figure 1. Mean Shock Intensity for Four Conditions

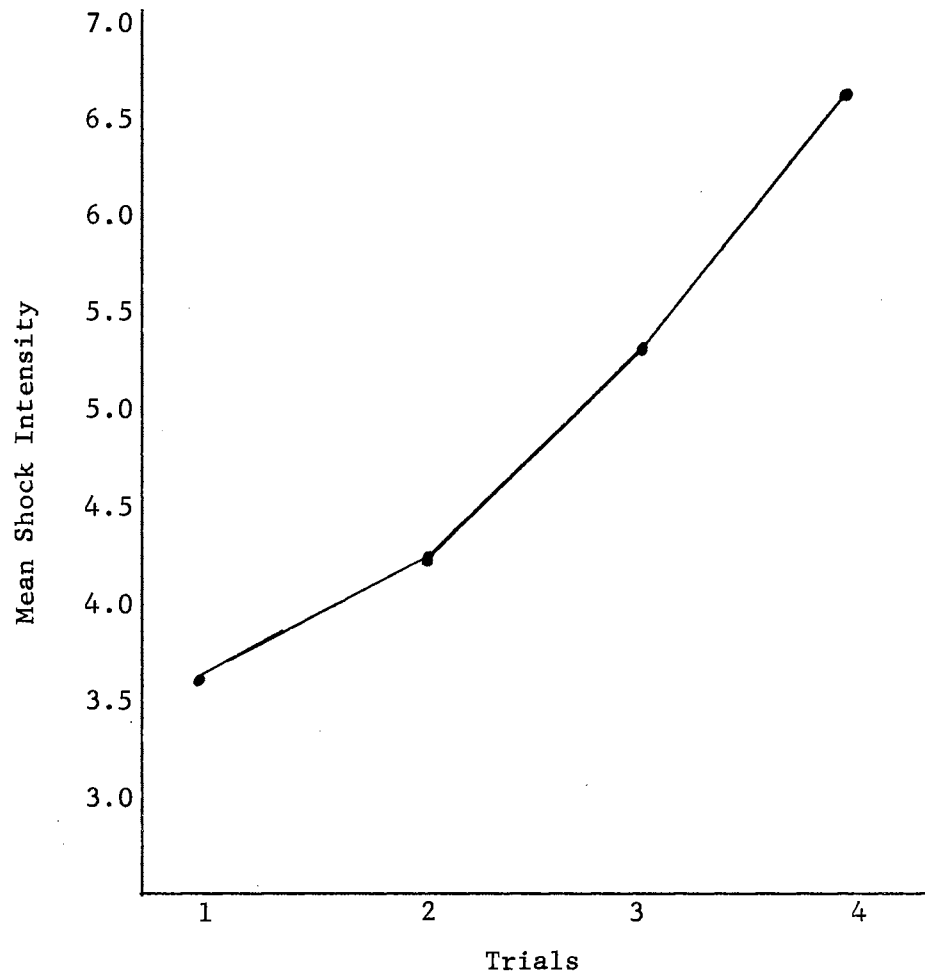


Figure 2. Mean Shock Intensity per Trial

reported in Table II. The main effect for the frustration condition was significant ($F = 5.58$, $df = 1/36$, $p < .05$). Frustrated subjects gave longer shocks than non-frustrated subjects (see Figure 3).

Correlations between intensity of shock and duration of shock administered were calculated using subjects' total score over the four trials. In the no frustration, no insult condition, intensity correlated with duration $-.016$, in the insult only condition $.618$, in the frustration only condition $-.288$, and in the frustration and insult condition $-.266$. Although none of the correlations were significantly different from zero at the $.05$ level, the correlation for the insult only group did approach significance and suggests that shock intensity and duration may have been directly related for subjects in this group.

TABLE II
SUMMARY TABLE FOR ANALYSIS OF VARIANCE OF
SHOCK DURATION

Source	Sum of Squares	<u>df</u>	MS	<u>F</u>
<u>Between Subjects</u>	30.1231	39		
A (Frustration)	3.8581	1	3.8581	5.58*
B (Insult)	1.3472	1	1.3472	1.95
A x B	.0165	1	.0165	< 1
Subjects w. groups	24.9013	36	.6917	
<u>Within Subjects</u>	5.6567	120		
C (Trials)	.0719	3	.0240	< 1
A x C	.0707	3	.0236	< 1
B x C	.0989	3	.0330	< 1
A x B x C	.0924	3	.0308	< 1
C x Subjects w. groups	5.3228	108	.0493	

*p < .05

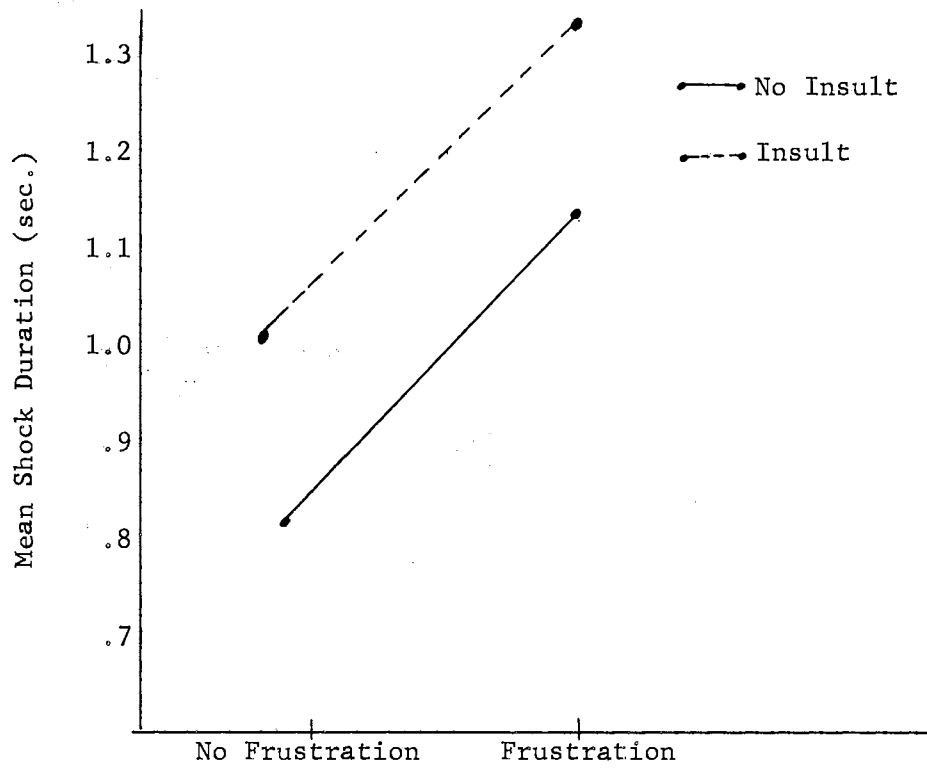


Figure 3. Mean Shock Duration for Four Conditions

CHAPTER VI

DISCUSSION

The first hypothesis predicted that all three arousal groups would show a greater tendency to aggress than the non-aroused control group. This hypothesis was clearly supported by the results. Subjects who were frustrated, insulted, or both frustrated and insulted prior to listening to a violent news report gave more intense shocks than persons who were neither frustrated nor insulted. These results indicate that if a person is anger-aroused by various methods prior to exposure to violence, his aggressive tendencies will be increased.

The second hypothesis predicted that the insult group would show a greater tendency to aggress than the frustrated group. The results did not support this hypothesis. Frustration alone was as effective in increasing aggression as insult alone. Buss (1966) maintains that frustration is at best a weak determinant of aggression. Attack (such as insult) is a major determinant. The results of this study clearly do not support Buss' position. Berkowitz (1969) in his modified frustration-aggression hypothesis maintains that when appropriate aggressive cues are present, frustration is a major determinant of aggression. Frustration produces an emotional arousal which creates a readiness for aggression. Aggressive cues elicit the aggressive response that the individual is ready to make. The findings in this study clearly support Berkowitz's view. Frustrated subjects who

listened to a violent news recording, were more aggressive than non-frustrated subjects. They were as aggressive as insulted subjects who listened to the same recording.

The effects of insult alone have been compared to the effects of frustration alone in only two other studies besides the present one. Rule and Percival (1971) found frustration to be more effective than insult in increasing aggression. Geen (1968) found insult to be more effective than frustration in increasing aggression. The relative difference between the effects of frustration and insult will depend on the operational definition of both. Many different means of frustrating a subject have been used, probably none with equal effectiveness. The insult used to arouse subjects varies with wording, emphasis and situational factors. Possibly the question to investigate in this area, is under what circumstances are frustration and insult effective in increasing aggressive behavior.

The third hypothesis predicted that the combined arousal group, frustration combined with insult, would show a greater tendency to aggress than either the frustration or insult alone groups. The differences among these groups in aggressive behavior were not significant. Frustration alone and insult alone increased aggression as effectively as frustration combined with insult.

These findings are difficult to explain. For frustrated subjects, the presence or absence of insult made no significant difference in the level of aggression. For non-frustrated subjects, the presence or absence of insult made a significant difference in the level of aggression (see Figure 3). It may be that the insult is perceived differently by the subject under different circumstances and hence responded to

differently. Possibly, when subjects were not frustrated but were insulted, they perceived the insult as unjustified, and when subjects were frustrated and then insulted they perceived the insult as justified. This is the explanation offered by Rule and Percival to explain their finding that frustrated and insulted subjects gave significantly lower shocks than frustrated only subjects. The nature of the frustration and insult in the present study would lend themselves to this latter perception when both were present. Subjects were frustrated by not being allowed to finish an intelligence test. Following this, they were insulted by the confederate making remarks indicating he felt he was smarter than the subject. The subject may have seen these remarks as justified considering that he had been led to believe he should have been able to finish the test.

An alternative interpretation for these results would involve arousal and aggression anxiety. It might have been that the combined arousal group was not only higher in arousal than the frustration and insult alone groups, but also higher in aggression anxiety. The effects of the violent recording may not have been "strong enough" to counter the inhibition of this group towards responding aggressively.

Aggressive behavior increased for all groups as trials progressed. This effect might be due to increased ease in using the apparatus or to perceived instrumentality of the shock in improving performance. This increase might also be due to subjects becoming desensitized towards giving shock as the trials progressed. Rule and Percival (1971) also found that aggression increased over trials, but the anger-arousal of the subjects was also increased over trials since subjects were insulted and frustrated before each trial. In the present study, the

arousal occurred before any shocks were given. Statements by the subjects indicated that the task itself was not frustrating. The learner appeared to be making adequate progress. Thus, the increase in aggressive behavior cannot be attributed to an increase in anger-arousal. This increase in aggression over trials indicates that the expression of aggression may lead to more aggression, not less.

Lack of agreement between the results for the two measures of aggression brings into question the comparability of different measures of aggression. Shock intensity increased over trials, shock duration did not. Insult alone resulted in increased intensity of shock, but not in increased duration. It seems questionable whether results using different measures of aggression are comparable. Of the correlations between these two measures for each group, none were significantly greater than zero with only that for the insult group approaching significance. The relation between these two measures may be dependent upon the arousal method. The low correlations between shock intensity and duration for three of the four groups indicate that dependent measures based upon combinations of these variables, as in the Rule and Percival study, should be interpreted with caution.

Future research might investigate several of the areas that have been mentioned. A comparison of the effects of different forms of observation of violence, such as radio and television might be made to see the relative effects of each on aggressive behavior. The various methods of measuring aggressive behavior might be compared on their sensitivity to experimental manipulations and their correlation with aggressive behavior outside the laboratory. Another possible line for future research might investigate the effects of various arousal

methods when aggressive cues are present and when they are not, and when the aggression is perceived as instrumental in removing the frustration and when it is not. A final suggestion for research might be to compare the effects of insult when it is seen as justified and not justified.

CHAPTER VII

SUMMARY

This study investigated the influence of two anger-arousal methods, frustration and insult, upon subsequent aggressive tendencies following exposure to verbal reports of violence. It was predicted that both frustration and insult would increase aggressive tendencies and that frustration combined with insult would result in a greater increase than either one alone. While participating in a supposed learning experiment, subjects gave "shocks" to the confederate for wrong answers. Two measures of aggression were taken, intensity of shock and duration of shock administered.

It was found that subjects who were anger-aroused by frustration, insult, or both before listening to a violent news recording gave significantly higher shocks than subjects who were not anger-aroused. The arousal of frustration combined with insult did not, however, result in a higher level of shock than frustration or insult alone. The effects of frustration alone and insult alone were not significantly different on intensity of shock. The level of shock increased as trials progressed for all subjects. It was also found that frustrated subjects gave longer shocks than non-frustrated subjects, whether they were insulted or not. Shock intensity and shock duration were not significantly correlated in any of the conditions.

It was concluded that aggression-arousal, such as frustration

and insult, when combined with exposure to violence may increase subsequent aggressive tendencies. However, the effects of these arousal methods are not equally reflected in different measures of aggression. Possible lines for further research were discussed.

BIBLIOGRAPHY

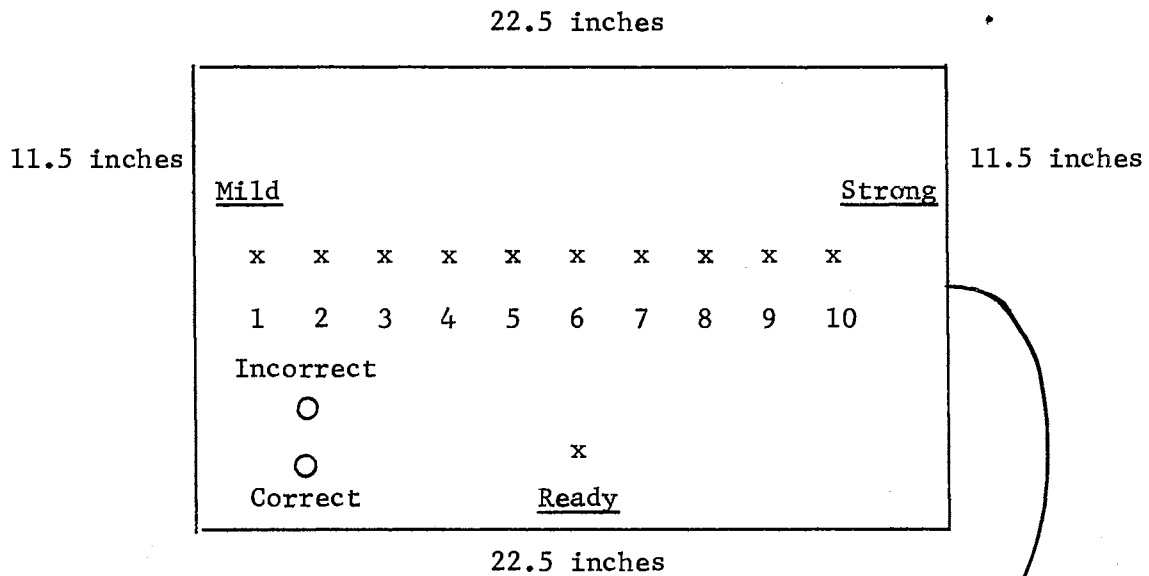
- Bandura, A., D. Ross and S. A. Ross. "Imitation of Film-Mediated Aggressive Models." Journal of Abnormal and Social Psychology, 66 (1963), 3-11.
- Barcus, F. E. Saturday Children's Television: A Report of TV Programming and Advertising on Boston Commercial Television. Boston: Action for Children's Television, 1971.
- Baron, R. A. "Aggression as a Function of Magnitude of Victim's Pain Cues, Level of Prior Anger Arousal, and Aggressor-Victim Similarity." Journal of Personality and Social Psychology, 18 (1971a), 48-54.
- Baron, R. A. "Magnitude of Victim's Pain Cues and Level of Prior Anger Arousal as Determinants of Adult Aggressive Behavior." Journal of Personality and Social Psychology, 17 (1971b), 236-243.
- Berkowitz, L. Aggression: A Social Psychological Analysis. New York: McGraw-Hill, 1962.
- Berkowitz, L. "Some Aspects of Observed Aggression." Journal of Personality and Social Psychology, 2 (1965a), 359-369.
- Berkowitz, L. "The Concept of Aggressive Drive: Some Additional Considerations." In Advances in Experimental Social Psychology, L. Berkowitz (Ed.) Vol. 2, New York: Academic Press, 1965b.
- Berkowitz, L. "The Frustration-Aggression Hypothesis Revisited." In L. Berkowitz (Ed.) Roots of Aggression. New York: Atherton Press, 1969.
- Berkowitz, L. "Experimental Investigations of Hostility Catharsis." Journal of Consulting and Clinical Psychology, 35 (1970), 1-7.
- Berkowitz, L., R. Corwin, and M. Heironimus. "Film Violence and Subsequent Aggressive Tendencies." Public Opinion Quarterly, 27 (1963), 217-229.
- Berkowitz, L., and E. Rawlings. "Effects of Film Violence on Inhibitions Against Subsequent Aggression." Journal of Abnormal and Social Psychology, 66 (1963), 405-412.
- Buss, A. H. The Psychology of Aggression. New York: Wiley, 1961.

- Buss, A. H. "Physical Aggression in Relation to Different Frustrations." Journal of Abnormal and Social Psychology, 67 (1963), 1-7.
- Buss, A. H. "Instrumentality of Aggression, Feedback and Frustration as Determinants of Physical Aggression." Journal of Personality and Social Psychology, 3 (1966), 153-162.
- Dollard, J., L. Doob, N. Miller, O. Mowrer, and R. Sears. Frustration and Aggression. New Haven: Yale University Press, 1939.
- Eron, L., L. Huesman, M. Lefkowitz, and L. Walder. "Does Television Cause Aggression?" American Psychologist, 27 (1972), 253-263.
- Feshbach, S. "The Drive-Reducing Function of Fantasy Behavior." Journal of Abnormal and Social Psychology, 50 (1955), 3-11.
- Feshbach, S. "The Stimulating Versus Catharsis Effect of a Vicarious Aggressive Activity." Journal of Abnormal Social Psychology, 63 (1961), 381-385.
- Geen, R. G. "Effects of Frustration, Attack and Prior Training in Aggressiveness Upon Aggressive Behavior." Journal of Personality and Social Psychology, 9 (1968), 316-321.
- Geen, R. G. and L. Berkowitz. "Some Conditions Facilitating the Occurrence of Aggression After the Observation of Violence." Journal of Personality, 35 (1967), 666-676.
- Gerbner, G. "Violence in Television Drama: Trends and Symbolic Functions." In G. A. Comstock and E. A. Rubinstein (Eds.) Television and Social Behavior. Vol. 1. Content and Control, Washington: Government Printing Office, 1971.
- Goldstein, J. H. and R. L. Arms. "Effects of Observing Athletic Contests on Hostility." Sociometry, 34 (1971), 83-90.
- Klapper, J. (Ed.) The Effects of Mass Communication. Glencoe, Ill.: The Free Press, 1960.
- Lovaas, O. I. "Effect of Exposure to Symbolic Aggression on Aggressive Behavior." Child Development, 32 (1961), 37-44.
- Mallick, S. K. and B. R. McCandless. "A Study of Catharsis of Aggression." Journal of Personality and Social Psychology, 4 (1966), 591-596.
- Meyer, T. P. "Effects of Viewing Justified and Unjustified Real Film Violence on Aggressive Behavior." Journal of Personality and Social Psychology, 23 (1972), 21-29.
- Miller, N. E. "The Frustration-Aggression Hypothesis." Psychological Review, 48 (1941), 337-342.

- Mussen, P., and E. Rutherford. "Effects of Aggressive Cartoons on Children's Aggressive Play." Journal of Abnormal and Social Psychology, 62 (1961), 461-464.
- Rule, B. G. and E. Percival. "The Effects of Frustration and Attack on Physical Aggression." Journal of Experimental Research in Personality, 5 (1971), 111-118.
- Scharff, W. "The Effects of Violent Radio News Broadcasts on Aggression." Unpublished Master's Thesis, Oklahoma State University, 1971.
- Schuck, S. Z., A. Schuck, E. Hallam, F. Mancini, and R. Wells. "Sex Differences in Aggressive Behavior Subsequent to Listening to a Radio Broadcast of Violence." Psychological Reports, 28 (1971), 931-936.
- Shore, S. L. "The Effects of Printed Accounts of Violence on Aggression." Unpublished Master's Thesis. Oklahoma State University, 1973.
- Singer, J. L. "The Influence of Violence Portrayed in Television or Motion Pictures Upon Overt Aggressive Behavior." In The Control of Aggression and Violence. J. L. Singer (Ed.) New York: Academic Press, 1971.
- Surgeon General's Scientific Advisory Committee on Television and Social Behavior. Television and Growing Up: The Impact of Televised Violence. Washington, D. C.: U. S. Government Printing Office, 1972.
- Walters, R. H., E. L. Thomas, and C. W. Acker. "Enhancement of Punitiveness by Visual and Audiovisual Displays." Science, 136 (1962), 872-873.
- Wheeler, L., and A. A. Caggiula. "The Contagion of Aggression." Journal of Experimental and Social Psychology, 2 (1966), 1-10.
- Wilkins, J. "Personality Type and the Effects of Verbal Reports of Violence on Aggression." Unpublished Master's Thesis. Oklahoma State University, 1972.
- Wolf, B. M. and R. A. Baron. "Laboratory Aggression Related to Aggression in Naturalistic Social Situations: Effects of an Aggressive Model on the Behavior of College Student and Prisoner Observers." Psychonomic Science, 24 (1971), 193-194.

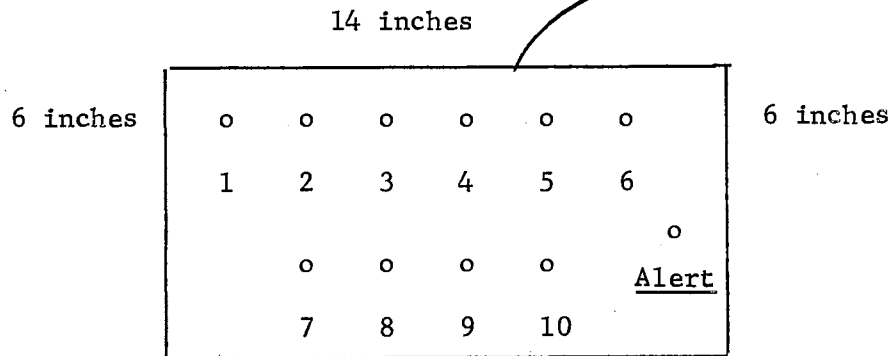
APPENDIX A

DIAGRAM OF APPARATUS



Front Panel of Shock Apparatus

x = levers



Response Board

○ = lights

APPENDIX B

INTRODUCTION TO THE EXPERIMENT

Will one of you please sit here, and the other here (pointing to chairs positioned such that the subject could not determine the success of the confederate and could hide his own performance from the confederate). I would like for you to participate in an experiment on learning. This experiment will consist of three separate tasks. In the first task, both of you will take a short intelligence test. In the second task, both of you will take a test of current events. In the third task, one of you will teach a list of syllables to the other.

There is evidence to show that a person's learning ability increases with higher motivation for learning. Much research has been done showing that both positive and negative reinforcement, that is reward and punishment, increase learning ability. Along this line, in a previous experiment, we found that when a person is threatened with electric shock, learning increases. In the third task, I would like for you to participate in a similar experiment. The electric shock will vary from mild to strong although it will never be high enough to seriously hurt either of you. It will be administered to the finger tip. I realize this is an unusual request, but I would appreciate your help. Do either of you have any objection to participating in a study that involves shock? Have either of you ever served in an experiment before?

APPENDIX C

INTRODUCTION TO THE INTELLIGENCE TEST

For the Frustration Group

First, I want you both to take an intelligence test. You will each have different forms. This is a short and simple test. There's only twenty questions, so you shouldn't have any difficulty finishing within the time limit. It will be timed, so do your best and work as fast as you can. You should be able to finish though. Please fill in the blanks at the top of the first page. (After subject has filled in blanks). Follow along as I read the instructions. (Experimenter reads instructions on test). Go ahead with the sample questions. (After subject has completed sample questions). Any questions? Go ahead and begin.

For the Non-Frustration Group

First, I want you both to take an intelligence test. You will each have different forms. It's a short test. Some of the questions may be harder than they first appear, however, so you may not get all of them correct. You might expect to miss a few questions. Go ahead and complete the first page and then stop. I'll tell you when to begin with question 1. (After subject has completed the first page). Any questions? Go ahead and begin. (After the experimenter has picked up the test). You did quite well, finishing that quickly.

APPENDIX D

WESTERN INTELLIGENCE SCALE

Form A

Name _____

Age _____ Date _____

Classification _____

INSTRUCTIONS: You are to answer questions and solve problems. This test takes very little time. But you must read carefully and do your best. How well you work now may tell how well you can learn. This is a test of your ability to learn. Be sure to answer all questions. Below are sample questions to be answered. Complete these sample questions and wait for the examiner's instruction before continuing.

5 SADNESS is the opposite of:

1. Numbness 2. Misery 3. Trouble 4. Pessimism
5. Gladness

The right answer is Gladness. This is number "5", so "5" is the answer on the line to the left.

Now you do the next one.

_____ What is the number left out?

- 66 62 58 _____ 50 46

The right answer is "54", so "54" should be the answer on the line at the left.

Do the next one.

_____ GO - LEAVE... Mean:

1. Same 2. Opposite 3. Neither same nor opposite

Go - Leave mean the "same", so "1" is the number that should go on the line at the left.

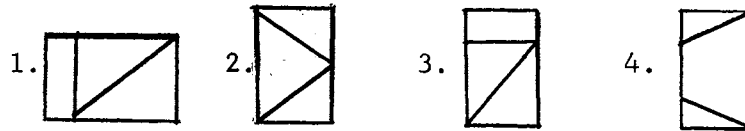
STOP

WHEN THE EXAMINER TELLS YOU TO DO SO, TURN THE PAGE AND ANSWER THE QUESTIONS.

- ___ 1. WARFARE means the opposite of:
 1. Amnesty 2. Fighting 3. Battle 4. Tactics
 5. Siege
- ___ 2. Which word differs from the others?
 1. Pastor 2. Plumber 3. Physician 4. Physicist
 5. Psychologist
- ___ 3. Arrange the words below to form a sentence. Is this sentence:
 1. True 2. False 3. Not certain
 FOODS AND ARE BREAD AS USED BUTTER
- ___ 4. PART means the opposite of:
 1. Leave 2. Detail 3. Segment 4. Trifle
 5. Total
- ___ 5. Oil sells at 30¢ a quart. At this price, how many quarts can
 you buy for \$4.50?
- ___ 6. Which number does not belong?
 27 24 21 18 14 12 9 6
- ___ 7. How many pairs of names below are the same:
 Johnson, B. C. Johnstone, B. C.
 Wright, T. H. Wright, T. H.
 Terrell, R. A. Terrell, R. A.
 Oliver, L. T. Oliver, T. L.
- ___ 8. The meanings of the two statements below are:
 1. Same 2. Opposite 3. Neither same nor opposite
 All's well that ends well.
 Let sleeping dogs lie.
- ___ 9. WINTER means the opposite of:
 1. Autumn 2. Spring 3. Summer 4. Fall
 5. Cold
- ___ 10. What number should follow the last number below?
 256 64 16 4 1 ___
- ___ 11. Which word differs from the others?
 1. Magazine 2. Radio 3. Newspaper 4. Automobile
 5. Television
- ___ 12. A soldier hits a target with a rifle 90% of the time. How
 many shots must he shoot to make 27 hits?

CONTINUE ON NEXT PAGE

- ___13. From these three parts which figure below can be made?



- ___14. A jet plane travels 450 miles in 50 minutes. At this rate, how many miles will this plane travel in an hour?
- ___15. If the first two statements below are true, what is the last statement?
 1. True 2. False 3. Not certain
 Most female dogs are smart.
 This is a female dog.
 This dog is smart.
- ___16. EXPENDITURE - RECEIPT mean:
 1. Same 2. Opposite 3. Neither same nor opposite
- ___17. What is the number left out?
 130 122 113 _____ 92 80
- ___18. A dealer bought a number of television sets for \$16,000. He sold them for \$19,000, making a profit of \$150 on each set he sold. How many sets did he sell?
- ___19. ACCEPT - DISTRUST mean:
 1. Same 2. Opposite 3. Neither same nor opposite
- ___20. The month with the least number of days is:
 1. January 2. February 3. March 4. April
 5. May

END

APPENDIX E

INSTRUCTIONS FOR CURRENT EVENTS TASK

This next task will be a learning test of current events. I want you both to relax and listen carefully to a recording of a news report. Be sure and concentrate, because when the recording is completed, I'm going to ask you some questions about it. Do either of you have any questions? Listen carefully, please. (After the recording) Please circle the correct answer.

APPENDIX F

VIOLENT NEWS REPORT

One gunman was killed and two others taken into custody in Peoria, Illinois, today after they held a classroom of students and a teacher hostage.

The three men sought refuge in the Saint Cecelia Roman Catholic elementary school taking over a classroom and holding 24 students and one teacher hostage. Another 100 students were in other parts of the school. The gunmen were running from police after robbing a Peoria variety store. They stayed in the school for nearly an hour and a half. One of the men came out holding a pistol in one hand and holding onto a student hostage with the other. He fired two shots in the air and shouted "Kill me, kill me". His young hostage ran and police shot and killed the gunman. He was later identified as 25 year old Melvin Birch of Peoria. Police gained entrance to the building and took the other two gunmen into custody. There were no injuries reported to anyone in the school, but four children were taken to a hospital, one having suffered an epileptic seizure, the other three shaken up.

An estimated 70 arrests were made last night around Wounded Knee S. Dakota, with U. S. Marshalls confiscating some weapons and ammunition. No negotiating was expected until Sunday following the mourning for a man who died of bullet wounds in recent exchange of gunfire with

the Indians.

At the Portland, Oregon international airport today an FBI agent shot and killed an airport employee who held a hostage on top of a fuel tank for almost 8 hours. Police identified the dead man as 25 year old William Howard Abernathy. Police said Abernathy armed with a shotgun and a rifle took two hostages, but released one of them with the demand that his divorced wife and two children be brought to him. Abernathy was threatening to blow up the fuel tank when the FBI agent shot him. The second hostage was reported safe and unharmed.

In state news, Tom Shroud, a deputy sheriff, was shot this afternoon in western Oklahoma. The shooting occurred in Dewey County as Shroud was transporting a 22 year old prisoner, Charles Stenson to Fort Supply. Highway patrol troopers picked up Stenson about a half-hour later and took him to the county jail at Taloga where murder charges are pending.

The fighting in Beirut that started yesterday intensified today and spread to areas outside the capital. Lebanese tanks and planes hit Arab guerrilla positions and casualties were reported heavy on both sides.

Cambodian insurgents have dug in across the Me Cong just two miles from the capital of Phenom Phen. Today they launched a rocket and mortar attack at Phenom Phen airport but most of the shells fell into a nearby refuge camp. At least 21 were killed, dozens injured.

American bombers continued heavy raids in support of a government effort to drive the communists out of this territory just two miles from Phenom Phen.

A man armed with a high powered rifle went on a shooting spree on a Memphis, Tennessee street today killing five persons before police cornered him in a house and shot him to death as he came out. Police said the dead included four bystanders and a police officer who was responding to the emergency. The gunman, later identified as 30 year old David Sanders of Memphis walked down the Ghetto street and for no known reason started firing his high powered rifle. One witness said Sanders opened fire in front of a liquor store first shooting a junk man who was pushing his cart up the street. Other victims included an ice-cream vendor, and a woman who worked in a candy store next to the liquor store. Sanders also shot and wounded a parole officer who was working in the area. He then ran toward a near-by house who's occupants were not home. Police officer David Clark approached the house and Sanders stepped out from behind the garage and shot him in the back. One hundred policemen were called to the scene and riddled the house with bullets as Sanders ran from window to window firing at officers. Police then used tear gas to flush him out. When Sanders appeared at the door with his 30-30 carbine in his hands, he was shot to death by a volley of police fire. Officer Clark's wife was widowed for the second time, her first husband also was a policeman, also was killed in the line of duty.

APPENDIX G

QUESTIONS FOR NEWS REPORT

1. A Portland, Oregon airport employee:
 - (a) hijacked a plane to Cuba.
 - (b) was burned to death in a fire.
 - (c) held a hostage at gunpoint on top of a jet fuel tank.
 - (d) lost his job for getting into a fist fight with a passenger.

2. An Oklahoma deputy sheriff:
 - (a) arrested nine persons in a drug raid.
 - (b) was killed in a car accident while pursuing a speeding driver.
 - (c) captured two persons wanted in a bank robbery.
 - (d) was killed by a prisoner he was transporting.

3. After robbing a Peoria, Illinois variety store, three gunmen:
 - (a) surrendered when the police surrounded them in their apartment.
 - (b) escaped from police with nearly \$1,000.
 - (c) held a classroom of elementary school students and their teacher hostage.
 - (d) were killed in an attempt to rob a second store.

4. David Sanders, a Memphis, Tennessee, ghetto resident:
 - (a) was shot by police after killing five persons with a high powered rifle.
 - (b) stabbed three persons in a fight at a local bar.
 - (c) was killed in the fighting in Beirut.
 - (d) kidnapped the son of a local businessman.

APPENDIX H

INSTRUCTIONS FOR THE SHOCK TASK

In the last task, one of you will be the teacher and one of you the learner. Your role will be selected randomly. I have teacher printed on one of these cards and learner printed on the other. Please select one of these cards to determine which you will be. (The subject is allowed to pick one of the face down cards and the remaining card is handed to the confederate. Both cards in fact have teacher printed on them.) Which are you? You (to subject) will then be the teacher for this task and you (to confederate) will be the learner. You (pointing to subject) will teach a list of paired nonsense syllables to the learner (pointing to confederate). Will you please remain seated here (to subject pointing to chair by aggression machine). And you please come with me (to confederate). I'll be back after I explain his part to him. (The experimenter then took the confederate into the adjoining room to supposedly hook him up to the shock apparatus and then returned to the subject).

(Instructions given to the subject when the confederate was in the other room). In front of you is a shock panel with levers numbered one through ten. The shock ranges from mild (number 1) to strong (number 10). As you move from lever number 1 to lever number 10 the shock given to the learner increases and becomes more painful. The shock will last as long as the lever is on. The shock is not intense

enough at any level, however, to actually cause physical harm. As I said, it is administered to the finger tips.

(Presenting syllable list to subject) your task will be to teach the other student this list of paired nonsense syllables. You will present the list by reading it into the microphone. He will be able to hear you in the other room. You will have to speak closely into the microphone so it will come through clearly for the other student. Each time when you are ready to begin reading the list, flip the ready switch once and then begin. A light will come on in the other room signaling to the other student that you are beginning at the first of the list. Read the first syllable in the pair and then pause until one of these lights come on (pointing to the correct and incorrect lights). I am going back into the other room to record the responses given by the learner, and I'll indicate to you by way of these lights whether he was correct or incorrect. He must give the second syllable in a pair after you give the first in order to be correct. Whether he is correct or not go ahead and read the second syllable in the pair. If I indicate that he was incorrect, you are to give him a shock of whatever degree you wish, and then give the correct second syllable in the pair. Make sure after each shock that the lever is released by pulling the lever up lightly. Then move to the next pair. If I indicate that he was correct, do not shock him but go ahead and give the second syllable before you move on to the next pair. Present the pairs in order each time. When you finish the list, pause, flip the ready switch, and begin with the first pair again. You are to present the list 5 times. You may want to check off the trials to keep track. The first time will be a practice trial. Do not give any shocks during the first

trial. Then give the list 4 more times, shocking the learner for wrong responses with any degree of shock you wish. As I mentioned, the shock is not strong enough at any level to cause physical harm. Are there any questions? The procedure is listed at the bottom of this page in case you need to refer to it. Go ahead with the practice trial. (After practice trial). Now let me get located in the other room with the learner before you start with trials 1 through 4. I'll blink the correct and incorrect lights when I'm ready for you to begin. (Experimenter goes to the other room).

APPENDIX I

SUBJECT'S NONSENSE SYLLABLE LIST

1. POF - SEN
2. LIG - KAV
3. REW - BOD
4. FIM - GUP
5. TAS - CEL
6. VOX - WUR
7. HET - DIZ
8. JUK - MAB

Practice Trial - No Shocks

Trials 1 through 4 - Shock Wrong Answers

1. Flip the ready switch before beginning each trial.
2. Read first syllable and wait for correct or incorrect signal.
3. Shock incorrect answers.
4. Read second syllable in pair.
5. Move to next pair.
6. Read the list 5 times.

APPENDIX J

RECORD FORM FOR SHOCKS

Experimental group _____

Practice Trial (No Shocks)	Trial 1	Shock Level	Shock Duration	Trial 2	Shock Level	Shock Duration
1.	1.*	<u>No Shock</u>	<u>No Shock</u>	1.*	<u>No Shock</u>	<u>No Shock</u>
2.	2.*	<u>No Shock</u>	<u>No Shock</u>	2.	_____	_____
3.	3.	_____	_____	3.*	<u>No Shock</u>	<u>No Shock</u>
4.	4.	_____	_____	4.	_____	_____
5.	5.	_____	_____	5.	_____	_____
6.	6.	_____	_____	6.	_____	_____
7.	7.	_____	_____	7.	_____	_____
8.	8.	_____	_____	8.*	<u>No Shock</u>	<u>No Shock</u>
	Trial 3	Shock Level	Shock Duration	Trial 4	Shock Level	Shock Duration
	1.*	<u>No Shock</u>	<u>No Shock</u>	1.*	<u>No Shock</u>	<u>No Shock</u>
	2.*	<u>No Shock</u>	<u>No Shock</u>	2.*	<u>No Shock</u>	<u>No Shock</u>
	3.*	<u>No Shock</u>	<u>No Shock</u>	3.*	<u>No Shock</u>	<u>No Shock</u>
	4.	_____	_____	4.*	<u>No Shock</u>	<u>No Shock</u>
	5.	_____	_____	5.	_____	_____
	6.*	<u>No Shock</u>	<u>No Shock</u>	6.*	<u>No Shock</u>	<u>No Shock</u>
	7.	_____	_____	7.	_____	_____
	8.*	<u>No Shock</u>	<u>No Shock</u>	8.*	<u>No Shock</u>	<u>No Shock</u>

Comments:

*Correct Response Indicated to Subject

APPENDIX K

NEWMAN-KEULS TEST OF SHOCK INTENSITY
FOR THE FOUR CONDITIONS

Condition	No Frustration No Insult	Insult Only	Frustration Insult	Frustration Only
No Frustration No Insult = 13.908	---	1.679*	1.889*	2.398*
Insult Only = 20.625		---	.210	.719
Frustration Insult = 21.465			---	.509
Frustration Only = 23.5				---
Truncated Range		2	3	4
95(r,36)		2.88	3.46	3.82
95(r,36) $\sqrt{MS \text{ error}/nq}$		1.402	1.684	1.859

*p < .05

APPENDIX L

INDIVIDUAL SUBJECT'S SCORES

Intensity of Shock

<u>No Frustration and No Insult</u>					<u>Frustration Only</u>				
	Trials					Trials			
	1	2	3	4		1	2	3	4
1.	5.33	5.50	4.75	5.00	21.	4.75	5.25	7.25	9.00
2.	3.25	4.25	6.50	8.25	22.	2.00	1.75	4.75	5.75
3.	2.00	3.00	4.25	5.50	23.	5.25	5.00	6.25	6.25
4.	1.00	1.25	2.50	5.00	24.	5.50	6.00	6.25	4.75
5.	2.00	4.25	6.25	7.75	25.	3.25	3.00	5.00	7.50
6.	1.00	1.00	1.00	1.00	26.	4.00	5.25	6.75	7.00
7.	1.00	1.75	2.00	3.25	27.	5.25	5.50	5.25	4.75
8.	2.25	3.00	5.25	6.50	28.	7.50	7.25	7.50	8.25
9.	1.00	1.00	1.25	2.50	29.	5.00	6.25	7.25	8.75
10.	1.50	2.00	5.00	8.25	30.	7.50	6.25	6.75	8.50
<u>Insult Only</u>					<u>Frustration and Insult</u>				
	Trials					Trials			
	1	2	3	4		1	2	3	4
11.	4.50	5.75	7.50	8.75	31.	5.00	7.75	6.25	9.00
12.	1.00	1.50	2.00	2.25	32.	3.75	5.75	7.25	9.25
13.	4.00	4.50	5.25	7.25	33.	2.00	3.00	4.50	6.50
14.	5.50	7.00	8.00	9.25	34.	4.25	2.25	6.00	7.75
15.	6.75	4.75	7.00	3.50	35.	3.00	4.50	6.25	7.75
16.	3.25	5.75	5.25	6.00	36.	1.75	2.25	4.00	5.25
17.	4.00	7.00	6.50	8.75	37.	4.00	4.00	6.00	7.50
18.	2.75	3.00	3.00	3.00	38.	1.25	2.00	3.50	6.25
19.	2.00	4.75	6.50	9.50	39.	4.25	4.75	7.50	9.75
20.	3.00	5.50	4.25	6.50	40.	7.50	6.50	8.50	6.40

Duration of Shock

No Frustration and No Insult

	Trials			
	1	2	3	4
1.	.5900	.8765	.9785	.9478
2.	.6790	.5392	.6378	.5060
3.	1.1700	1.0240	1.0728	.4185
4.	.8187	1.0728	1.2618	1.2790
5.	.4380	.3058	.4205	.5282
6.	.8722	.7130	.9072	.7165
7.	.8530	1.0575	1.0172	.8050
8.	1.1915	1.2320	1.3435	.9698
9.	.3762	.3690	.2992	.2472
10.	.9308	1.2228	.8448	.8432

Frustration Only

	Trials			
	1	2	3	4
21.	1.1085	.9748	.9230	1.0935
22.	2.1945	1.8672	2.4952	2.3568
23.	.8722	.9580	.8130	.8352
24.	.6700	.9230	.9888	1.0485
25.	.5208	.4870	.5648	.5995
26.	1.0600	1.4655	1.3162	1.5870
27.	1.2670	1.0778	1.1668	.8182
28.	1.3695	1.5690	1.6303	1.9360
29.	.9902	1.1400	1.0722	.9508
30.	.6255	.6755	.7192	.8895

Insult Only

	Trials			
	1	2	3	4
11.	.9888	.9780	1.3355	2.1650
12.	.3790	.6022	.3882	.9315
13.	1.2312	1.3585	1.4958	1.3005
14.	.6342	.9142	1.1582	.6815
15.	1.9888	1.4920	1.1518	.6218
16.	.6610	.7615	.6705	.6048
17.	1.1805	1.2112	1.4247	1.4312
18.	.6168	.5332	.5712	.6772
19.	.9032	.8182	.7562	1.3830
20.	1.3172	1.4290	.8350	.9463

Frustration and Insult

	Trials			
	1	2	3	4
31.	1.0472	1.2680	1.1962	1.1313
32.	1.1170	.8530	1.1082	.7028
33.	1.9768	2.2505	1.9338	2.5142
34.	.9568	.8288	.7538	.5630
35.	.9352	.9580	1.1180	1.0855
36.	1.0405	.7332	1.2312	1.5110
37.	1.1045	1.1678	1.1935	1.3558
38.	1.0355	1.0442	.9105	1.2055
39.	1.3978	1.0828	1.2213	1.2825
40.	2.2710	2.0638	2.2425	2.1720

VITA ✓

Norman Ray Henry

Candidate for the Degree of

Master of Science

Thesis: THE EFFECTS OF FRUSTRATION, INSULT, AND VERBAL REPORTS OF
VIOLENCE ON AGGRESSIVE BEHAVIOR

Major Field: Psychology

Biographical:

Personal Data: Born in Hutchinson, Kansas, July 25, 1947, the
son of Ralph D. and Leota O. Henry; married Ruth Ann Payton,
August 24, 1968; son, Travis, born December 31, 1970.

Education: Graduated from Hutchinson High School, Hutchinson,
Kansas in May, 1965; received Bachelor of Science degree in
psychology from Bethany Nazarene College, Bethany, Oklahoma,
in 1969; enrolled in Master's program at Oklahoma State
University, 1970-1972; completed requirements for the Master
of Science degree in December, 1973.

Professional Experience: Graduate teaching assistant, Department
of Psychology, Oklahoma State University, 1970-1972.