

PERSONALITY TYPE AND THE PROBABILITY OF
RETALIATION FOLLOWING EXPOSURE TO
AN ADULT AGGRESSIVE MODEL

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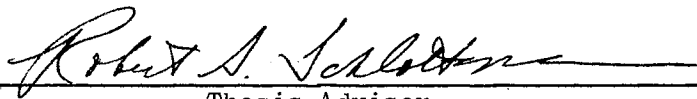
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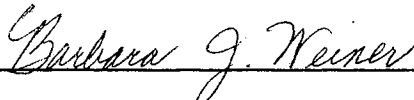
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CHAPTER I

INTRODUCTION

Everyday, we are bombarded with a multitude of influences from the individuals we come in contact with and from the news media. Each of these sources exposes us to a wide variety of behaviors, many of which are not in our repertoire of previous behaviors. Not only are we exposed to situations, conflicts and circumstances which we might not ever directly experience ourselves, we also become aware of a wide variety of alternative ways of handling everyday problems. We learn that when some people are faced with a problem or stressful situation, they attempt to resolve the problem through appropriate, socially acceptable means. However, we also learn that others tend to respond in an aggressive or even violent manner. In other words, these sources provide us with models that we can use to pattern our own behavior. Different people respond in different ways following exposure to a model who behaves in a particular manner. The phenomena becomes even more complex when we realize that not only are different types of people influenced in different ways, but persons of different personality types also evaluate the potential consequences of their behaviors in different ways. The present study attempted to evaluate one aspect of this phenomena.

The purpose of this study was to investigate the behavioral response of aggressive and non-aggressive subjects when instructed to perform an action that probably was incompatible with their normal

standards of behavior. Each subject was asked to administer shocks to another individual for incorrect responses on a learning task after first observing an aggressive model administer shocks. The subjects were also exposed to different probabilities of retaliation to investigate this factor's influence upon their behavior.

CHAPTER II

REVIEW OF THE LITERATURE

Recently, a large number of experiments have indicated that both children and adults behave more aggressively following exposure to live or filmed aggressive models. Witnessing the aggressive model being rewarded (Bandura, Ross, and Ross, 1963b), ethnic similarity between the victim and the model (Epstein, 1966) and even a minimal degree of attraction between the subject and the aggressive model (Baron and Kepner, 1970) have all operated to facilitate imitative aggression.

Bandura, Ross, and Ross (1963a) attempted to determine the extent to which an aggressive model could increase the likelihood of aggressive behavior in children following frustration. The subjects were exposed to either real-life aggressive models, a filmed version of the same models behaving in an aggressive manner or a film depicting aggressive cartoon characters. Their results supported their hypothesis that the closer the model was to reality, the greater the likelihood that the aggressive behaviors would be imitated. Therefore, the real-life aggressive models were more influential than the filmed version of the same models and also more influential than the nonhuman aggressive cartoon characters in facilitating modeled aggression. The results clearly show that the sex of the model, the sex of the child, and the reality cues of the model can also contribute to increase the probability of modeled aggression. In a similar study, Walters and Thomas (1963)

exposed children to an aggressive movie sequence which resulted in a significant increase in aggressive pain-inducing responses.

Epstein (1966) concluded that ethnic similarity between the victim and model actually facilitated imitative aggression. Since the aggressive model also preceded the subject, the shock delivered by the subject with a Buss aggression machine served as a measure of imitative aggression. Epstein found that high authoritarians, as measured by their scores on the F scale, were more aggressive than low authoritarians. Also, high authoritarians were more inclined to imitate a White model than a Black model. However, a Black model was imitated more often by low than high authoritarians. It is important to note that in this study different personality types respond differentially to a model. An aggressive model is capable of eliciting varying degrees of aggressiveness depending upon the past experiences and behavioral repertoire of the subject who observes the model's aggression.

An investigation by Baron and Kepner (1970) manipulated the apparent degree of attitude similarity between subjects and model in an attempt to determine the influence of varying degrees of attraction toward the model on aggressive behavior. They concluded that males did significantly increase the intensity and duration of shock delivered to an anger instigator after being exposed to an aggressive model. The subjects were informed that the experiment was designed to investigate the effects of punishment on the learning of nonsense syllables. They used a Buss aggression machine to administer electric shock of varying intensity and duration to the learner. Baron and Kepner concluded that the level of shock administered increased following exposure to an

aggressive model even when there was a low level of attraction between the model and subject.

Hartmann (1969) introduced an added dimension when he exposed subjects with previous histories of antisocial behavior to filmed aggressive models. Seventy-two court committed adolescent males who had been residents of a delinquent home for at least six weeks were employed as subjects. One-half of the subjects were insulted on the basis of their performance on a pre-test measure of social judgement. The remaining subjects received neutral feedback. The subjects then viewed either a nonaggressive control film, a filmed fight scene which focused on the victim's pain responses or the same fight scene which focused on the attacker. Following the film, the subjects were instructed in the use of a Buss aggression box. The results indicate that vicarious experiences are influential in modifying behavior. In both the insult and no insult condition, those subjects who viewed the aggressive film sequence behaved more punitively than those subjects who were exposed to the non-aggressive control film. Exposure to both a symbolic aggressive model and aggressive arousal did further enhance punitive behavior. Also, he concluded that subjects with longer criminal records delivered more aversive stimulation than those with less extensive antisocial backgrounds.

Baron (1971) attempted to determine the influence of an aggressive model on subjects who anticipated different probabilities of retaliation from the victim. He hypothesized that witnessing an aggressive model would increase the degree of aggressive responding when the threat of retaliation was low but would not affect the level of aggressive responding when the threat of retaliation was high. Following an insult

condition, subjects were either exposed to an aggressive model or to no model. All subjects used the Buss aggression box to punish or reward the victim's responses in a nonsense syllable task. The dependent measures were the intensity and duration of the shocks delivered by the subject. The results failed to support the hypothesis that a high probability of retaliation would override the influence of the aggressive model, therefore, producing no change in the level of aggressive responding. Rather, exposure to the model did increase the shock intensity and duration administered by the subjects regardless of the apparent probability of retaliation.

In summary, the results of the aforementioned research (Walters and Thomas, 1963; Epstein, 1966; Baron and Kepner, 1970; Hartmann, 1969; Baron, 1971) all indicate that the level of shock administered does increase following exposure to an aggressive model. Hartmann (1969) investigated the influence of an aggressive model on aggressive subjects. Whereas, Baron (1971) was interested in the influence of an aggressive model and the probability of retaliation on adult aggressive behavior. The following studies attempt to determine the influence various probabilities of retaliation have on subjects who differ in their level of aggressiveness.

One of the aspects investigated by Patterson, Littman, and Bricker (1967) was aggressive and counteraggressive behavior over time. Eighteen nursery school children ranging in age from 34-46 months were observed for a total of 60 sessions, each session lasting 2½ hours. The observers logged a detailed description of each aggressive episode including the time, the aggressive act, the aggressive response, the teacher's behavior and the consequences provided by the victim. The

threat of retaliation was not manipulated since all behavior occurred in a natural environment. The results indicated that passive and moderately aggressive subjects did increase their aggressive output over the 60 sessions. Highly assertive-aggressive subjects also maintained this behavior over time despite increased negative reinforcement for these aggressive acts. As counteraggressions were positively reinforced, the strength of the assertive behavior increased resulting in a greater probability that the victim would retaliate, thus initiating an aggressive episode. Patterson et al. did not utilize a confederate who served as an aggressive model nor did they purposely manipulate the probability of retaliation.

In an investigation by Peterson (1971), high and low aggressors were selected from a sample of third grade males on the basis of their scores on the Peer-Rating Index of Aggression. High and low aggressive subjects were tested under either a high threat of retaliation or no threat of retaliation. The subject was told that he was going to play a game with another boy who served as the target. The subject had previously rated the target as being high or low in aggressiveness. Both boys were always from the same classroom. The aggressor monitored the target's performance by administering a noxious sound with the Iowa Aggression Machine. The results indicated that low aggressive boys inhibit aggression when retaliation is expected. However, high aggressive boys aggress more when retaliation is expected than when it is not.

Edwards (1967) investigated the influence that threat of retaliation has upon the aggressive behavior of high and low aggressive male and female college students selected on the basis of their scores on the Iowa Aggression Machine. The subjects were instructed to administer

noxious stimuli as punishment for incorrect responses on a learning task. In the retaliation condition, subjects were told that following the completion of the learning task, they would become the learner while another new subject administered noxious stimuli in an attempt to teach them a learning task. Subjects in the no-retaliation condition were told that they were free to leave upon completion of their role as teacher. The results support the hypothesis that low aggressive males were less aggressive when faced with the threat of retaliation than when there was no possibility of retaliation. However, there was no significant difference in the way in which high aggressive males and females and low aggressive females responded under the two treatment conditions. Only low aggressive males responded differentially under threat of retaliation. It is important to note that Edwards selected her subjects on the basis of their scores on the Iowa Aggression Machine and did not expose the subjects to an aggressive model.

In summary, these studies have concluded that subjects with a history of low aggressiveness will inhibit aggressive responding when retaliation is expected (Patterson et al., 1967; Peterson, 1971; Edwards, 1967). The results are consistent for both child and adult subjects. However, there have been discrepancies reported concerning the manner in which high aggressors respond to the threat of retaliation. When high aggressive children were used, the threat of retaliation actually resulted in an increase in aggressive responding (Patterson et al., 1967; Peterson, 1971). No significant differences were found in the way in which high aggressive college subjects responded when they expected retaliation as compared to no threat of retaliation (Edwards, 1967).

CHAPTER III

STATEMENT OF THE PROBLEM

Buss (1961) suggested that retaliation or the threat of retaliation serves to inhibit aggressive responding. Buss also hypothesized that as the probability of retaliation increases, the frequency and intensity of the aggressive response decreases. More recently, researchers have attempted to determine if the threat of retaliation has a differential effect upon individuals with past histories of aggression (Edwards, 1967; Patterson, Littman, and Bricker, 1967; Peterson, 1971). These studies have concluded that subjects with a history of low aggressiveness will inhibit aggressive responding when retaliation is expected. Peterson's (1971) findings that low aggressive third grade males are less aggressive when they expect retaliation is congruent with the results of Patterson et al. (1967) based upon preschool subjects and with the results of Edwards (1967) based upon college subjects.

However, there have been discrepancies reported concerning the manner in which high aggressors respond to the threat of retaliation. Edwards (1967) found no significant differences in the way in which high aggressive college subjects responded when they expected retaliation. Other results suggest that the expectation of retaliation does increase aggressive responding in children with a past history of high aggressiveness (Patterson et al., 1967; Peterson, 1971). A possible explanation for the discrepant results is that adult subjects, as used in the

Edwards (1967) study, are more capable than children in inhibiting their aggressive impulses when stimulus cues capable of eliciting aggressive responses are not present. The high aggressive college subjects did possess the necessary readiness for aggressive behavior as demonstrated by their scores on the Iowa Aggression Machine taken two weeks prior to the experiment. However, the subjects were not exposed to an aggressive model, nor to a violent film sequence which would have provided the necessary stimulus cues for aggressive behavior to occur. The disinhibiting effects of aggressive models and violent exposures have been emphasized by Berkowitz (1965) who hypothesized that previously acquired aggressive habits can establish a readiness for aggressive behavior. This state of readiness does not necessarily imply that an aggressive response will be forthcoming. Rather, this readiness must be accompanied by stimulus cues which are associated with present or previous anger instigators. A number of recent experiments have indicated that exposure to an aggressive model does increase the level of aggressive response in both child and adult subjects (Bandura, Ross, and Ross, 1963a; Baron and Kepner, 1970; Hartmann, 1969).

This study used Scale 4 (Psychopathic Deviant) of the Minnesota Multiphasic Personality Inventory to select out those individuals who are more or less prone to aggressive behaviors. Individuals who score high on Scale 4 (generally defined as a T-score above 70) are usually considered to be aggressive (Hathaway and Meehl, cited in Dahlstrom and Welsh, 1960). High 4 individuals described as more impulsive and immature than the normal population (Gilberstadt and Duker, 1965). Low scorers on Scale 4 (generally defined as a T-score below 50) can be

described as relatively restrained, conventional, conforming individuals (Dahlstrom and Welsh, 1960).

In the present study, it was hypothesized that following exposure to an aggressive model, non-aggressive subjects (low Scale 4 scorers) will aggress less under threat of retaliation than under no threat of retaliation. However, aggressive subjects (high Scale 4 scorers) will aggress more when retaliation is expected than when it is not. To investigate these hypotheses, aggressive and non-aggressive subjects were exposed to an aggressive model who supposedly administered very high intensity shocks of long duration following incorrect responses on a nonsense syllable learning task before the subjects were also given the opportunity to administer shocks. One-half of the subjects were told that the learner would not have an opportunity to retaliate while the other one-half were told that they would switch places with the learner. The dependent measures of aggression were the intensity and duration of the "shock" ostensibly administered by the subject.

CHAPTER IV

METHOD

Subjects

Forty male college students enrolled in introductory psychology classes at Oklahoma State University participated in an experiment for extra credit. The subjects were selected on the basis of their scores on Scale 4 of the MMPI with the K correction which was administered to approximately 475 introductory psychology students. The aggressive group consisted of 20 students whose T-score was 70 or above. The non-aggressive group was composed of 20 students whose T-score was 50 or below. Subjects with a T-score above 70 or below 50 on the K scale were excluded from the sample population. Approximately 75 subjects met the stated criteria from which 40 subjects were chosen to participate in the experiment on the basis of availability.

Apparatus

A modified Buss aggression box was used (Buss, 1961). The apparatus was a 11.5" x 22.5" x 11.5" rectangular shaped, black box. The front panel was composed of 10 levers which the subjects depressed whenever the learner made an error. The levers were numbered from one to ten with the word "mild" over the first lever, and the word "strong" placed over the tenth lever. The panel also contained two lights which the experimenter controlled from the confederate's room to signal the

subject whether the learner's responses were correct or incorrect.

Wires from the box extended into the adjoining room to a panel which had a series of 10 lights corresponding to the levers on the box. A Hunter Model 120A Klockcounter was wired to the panel. The learner was therefore able to record the intensity and duration of the shocks administered by the subject.

Lists of 40-50% Archer association value nonsense syllables were used as the learning task. Subjects read these nonsense syllables to the learner through the intercom system. However, the learner could not communicate to the subjects.

Procedure

Scale 4 of the MMPI with K correction was administered to all male introductory psychology students by someone other than the experimenter. Approximately one week later, the experimenter entered the introductory classes with a list of high and low scorers on Scale 4. The experimenter told these classes that he was dissatisfied with the usual method of obtaining subjects on a volunteer basis since this introduced error into the experiment. Therefore, he had randomly selected a list of males to be subjects in his experiment. He strongly urged those males he had selected to participate in his experiment for extra credit. This procedure eliminated the possibility that the subjects could connect the experiment with the administration of Scale 4 of the MMPI.

On the waiting room wall, a "Please remain quiet until the experimenter arrives" sign was posted to decrease the interaction between the subject and confederates. As soon as the subject and two confederates (C_1 and C_2) were seated in the waiting room, the experimenter arrived

and proceeded to lead them all into the room containing the aggression box. The experimenter explained that the experiment was designed to study the effects of punishment on learning. In order to do this, the experimenter explained that two people would serve as the teachers and the other person would be the learner. Through the use of a rigged lottery system, each of them drew a card to create the impression that their roles in the experiment were due to chance. Since all the cards said "Teacher Number 2", the subject was assured of this position. C₁ reported that he was the first teacher and C₂ reported that he was to be the learner. The experimenter instructed C₁, the aggressive model, and the subject to remain silent until he returned. The experimenter then conducted the learner into an adjoining room supposedly to attach the shock electrodes.

Upon returning to the room with the subject and the aggressive model, the experimenter proceeded with detailed instructions. The aggressive model who served as the first teacher was instructed to read the 8 pairs of nonsense syllables to the learner only once. On the succeeding four trials, the teacher would only read the first syllable of the list. Since the experimenter was in the adjoining room with the learner, he would signal whether the learner made a correct response or not. If the light labeled correct appeared on the panel, the teacher knew that the learner had responded correctly. If the light labeled incorrect appeared on the panel, the teacher would shock the learner as punishment for making a mistake. The teacher was told that he could give the learner any intensity of shock he wished. The shock ranged from mild to strong, but the teacher was told that none would actually cause physical harm to the learner. The higher the number, the stronger

the shock. After the shock, the teacher read the learner the correct nonsense syllable, then continued with the next syllable on the list (see Appendix A for instructions).

On all trials, the subject was first exposed to the aggressive model. Every time the learner made an error, the aggressive model would depress the high intensity shock levers 8, 9, or 10 and he would keep the lever depressed for 2.0 to 3.0 seconds.

After completing the instructions to the aggressive model and the subject, the experimenter proceeded to vary the expected probability of retaliation. In the Low Probability of Retaliation Condition, the experimenter stated that when both the aggressive model and subject finished the learning task, they were free to leave. They were told that neither of them would serve as the learner, nor would they be administered any shock (see Appendix B for instructions). In the High Probability of Retaliation Condition, the experimenter explained that one of them would change places with the learner upon completion of the learning task. The experimenter then designated the subject as the person who would switch places so that the learner could teach the subject a list of nonsense syllables (see Appendix C for instructions). After the aggressive model finished with the first list of nonsense syllables, the experimenter entered the room to restate the critical portion of the instructions concerning the probability of retaliation.

The aggressive model delivered a total of 20 shocks. On the four successive trials, the learner made 7, 6, 4, and 3 errors, respectively. The learner followed the same pattern of errors with both the aggressive model and subject. Therefore, the use of punishment appeared to

have a beneficial effect on learning. The subject was given an extensive debriefing before leaving the experimental setting.

Design

The mean shock intensity and duration was obtained for each subject on each of the successive learning trials. The data were then analyzed with a 2 x 2 x 4 repeated measures analysis of variance. The factors involved were probability of retaliation (high versus low), personality type (aggressive versus non-aggressive subjects), and trials. The mean shock intensity and duration for each subject over all four learning trials was also obtained and a Pearson product-moment correlation was computed for each of the four groups.

CHAPTER V

RESULTS

Table I presents the summary of the analysis of variance for shock intensity. The main effect for trials was significant ($F = 35.91$, $df = 1/36$, $p < .01$) indicating that the intensity of shock increased over trials (see Figure 1). Tukey's test was used to investigate the differences between all possible pair-wise combinations over trials. The results were significant for all possible pairs ($p < .01$). The analysis of variance for shock duration produced no significant results. The results of this analysis are reported in Table II.

Correlation coefficients between shock intensity and shock duration were calculated using the subject's total score over the four trials. These correlations are presented in Table III. The correlation obtained for aggressive subjects in the high probability of retaliation condition is significant at the .05 level. The correlation obtained for aggressive subjects in the low probability of retaliation condition was not significantly different from zero at the .05 level, however, it did approach significance. Therefore, intensity and duration of shocks delivered to the learner by aggressive subjects were closely related.

TABLE I

SUMMARY TABLE FOR ANALYSIS OF VARIANCE OF SHOCK INTENSITY

Source	Degrees of Freedom		SS	MS	<u>F</u>	<u>p</u>
<u>Between Subjects</u>	39		300.21			
A (Aggressive Subjects)	1		17.11	17.11	2.18	.25
B (Retaliation)	1		0.34	0.34	1	
A x B	1		0.61	0.61	1	
Subjects w. groups	36		282.15	7.83		
	Conventional	Conservative				Conservative
<u>Within Subjects</u>	120		262.30			
C (Trials)	3	1	122.82	40.94	35.91	.01
A x C	3	1	4.32	1.44	1.26	
B x C	3	1	9.41	3.10	2.71	.25
A x B x C	3	1	2.14	0.71	1	
C x Subjects w. groups	108	36	123.61	1.14		

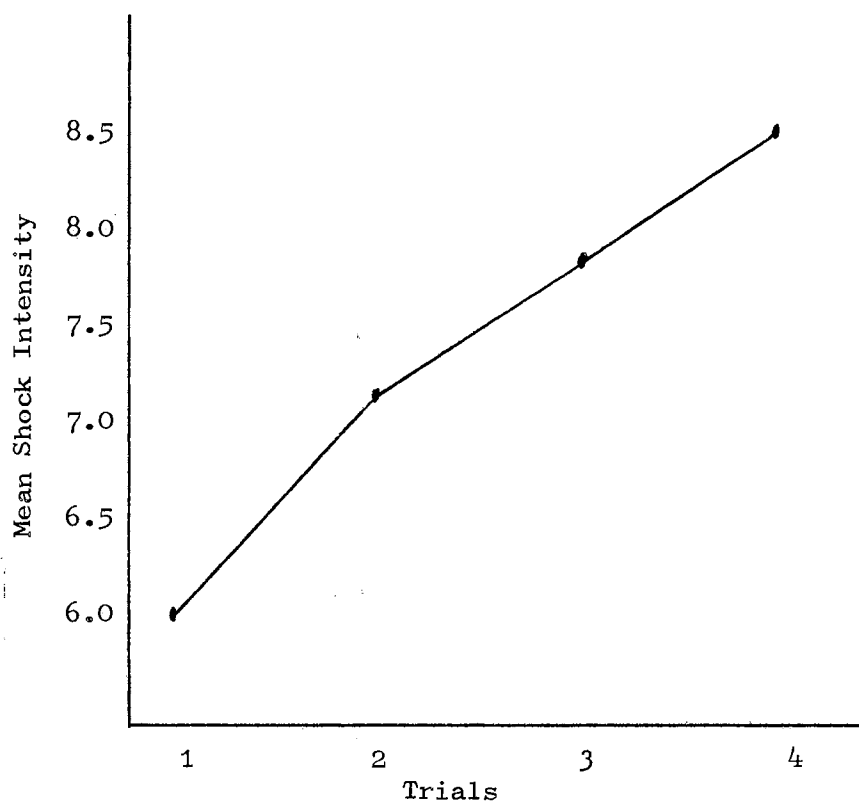


Figure 1. Mean Shock Intensity Per Trial

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>	28.16	39		
A (Aggressive Subjects)	-0.01	1	-0.01	< 1
B (Retaliation)	0.21	1	0.21	< 1
A x B	0.96	1	0.96	1.28
Subjects w. groups	27.00	36	0.75	
<u>Within Subjects</u>	7.14	120		
C (Trials)	0.08	3	0.02	< 1
A x C	0.17	3	0.05	< 1
B x C	0.11	3	0.03	< 1
A x B x C	0.05	3	0.01	< 1
C x Subjects w. groups	6.73	108	0.06	

TABLE III

CORRELATIONS BETWEEN SHOCK INTENSITY AND DURATION
USING SUBJECT'S TOTAL SCORE OVER FOUR TRIALS

Aggressive Subjects	.64*	.50
Non-Aggressive Subjects	-.10	-.03
	High Probability of Retaliation	Low Probability of Retaliation

CHAPTER VI

DISCUSSION

The hypothesis that following exposure to an aggressive model, non-aggressive subjects will aggress less under threat of retaliation than under no threat of retaliation was not supported. Both of the analyses for shock intensity and shock duration administered by the subjects were non-significant. The second hypothesis predicted that aggressive subjects will aggress more following exposure to an aggressive model when retaliation is expected than when it is not. The results did not support this hypothesis either. Thus, there was no support for the suggestion that probability of retaliation has a differential effect on aggressive and non-aggressive subjects.

One possible explanation for the results may be that not even a high threat of retaliation was sufficient to eliminate the disinhibiting effects produced by exposure to a highly aggressive model. In fact, the aggressive model utilized in this experiment was so effective that the mean shock intensity administered by the subjects was much higher than previous experiments employing similar designs and the same experimental apparatus. In an experiment by Wilkins (1972), subjects were given the opportunity to give electrical shocks to a confederate for supposedly incorrect answers on an extrasensory learning task following exposure to a tape recording of a violent news report. The mean shock intensity for aggressive and non-aggressive subjects was 5.5

and 4.9, respectively. As in the present study, subjects were selected on the basis of their scores on Scale 4 of the MMPI. Henry (1973) found that subjects who were exposed to a violent tape recording administered shocks having a mean shock intensity of 3.5. In the present experiment, the mean shock intensity was 7.6 for non-aggressive subjects and 7.3 for aggressive subjects. These results point out the effectiveness of an aggressive model as compared to audio recordings of violent news media in disinhibiting aggressive responding.

Recent research (Walters and Thomas, 1963; Epstein, 1966; Baron and Kepner, 1970; Hartmann, 1969; Baron, 1971) has shown that the level of shock administered does increase following exposure to an aggressive model. Baron (1971) also found that a high probability of retaliation from the victim failed to reduce the influence of an aggressive model. When considered together with the results of the present study, these findings suggest the need for further research designed to investigate the contingencies necessary for a model to exert an aggressive influence which eliminate or mask the influence of a high apparent probability of retaliation.

The intensity of shocks administered increased for all groups as trials progressed. Previous research (Baron and Kepner, 1971; Buss, 1963, 1966; Geen, 1968; Henry, 1973) all report an upward trend in shock intensity over trials. Possible explanations for this phenomena might be that there is an increased familiarity with the apparatus resulting in an upward drift in shock intensity or to an increasing desensitization to administering shocks as a form of punishment. While being debriefed following the experiment, the subjects frequently expressed a

belief that the learner's performance improved with the administration of shocks of greater intensity.

While shock intensity significantly increased over trials, shock duration did not. Similar results were obtained by Henry (1973). Baron and Kepner (1970) suggest that the duration measure is much more susceptible to momentary fluctuations in the subjects' level of emotional arousal than is the intensity measure of aggression. They suggest that future experiments obtain physiological measures of the subject's level of arousal as a possible means of explaining the discrepancy.

The correlation coefficient for the intensity and duration of shocks delivered to the learner by aggressive subjects was closely related in both the high and low probability of retaliation conditions, whereas, there was a near zero correlation for the non-aggressive subjects. The findings of Baron and Kepner (1970) may offer a possible explanation. They found that shock intensity and shock duration were positively related only under the condition of high attraction toward the model as measured by attitude similarity on a questionnaire. There is the possibility that aggressive subjects did perceive a similarity between themselves and the model on the basis of his modeled aggressive behavior. Further research is necessary to determine the validity of this explanation.

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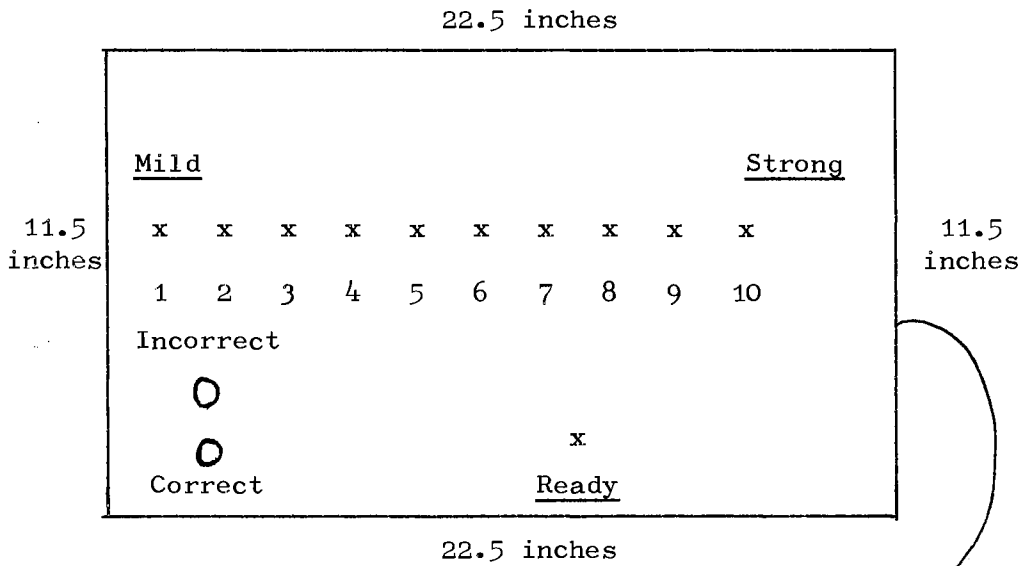
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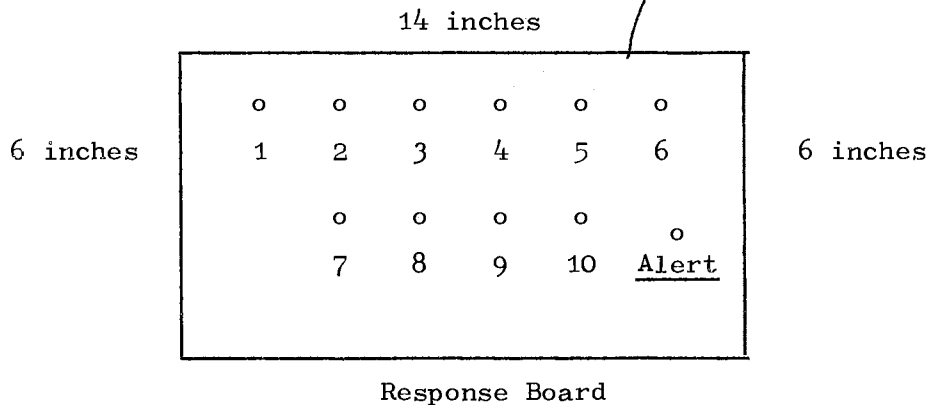
APPENDIX A

DIAGRAM OF APPARATUS



Front Panel of Shock Apparatus

x = levers



○ = lights

APPENDIX B

SCALE 4 AND SCALE K OF THE MMPI

Instructions

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

You are to mark your answers on the answer sheet you have. Look at the example of the answer sheet shown at the right. If a statement is TRUE or MOSTLY TRUE, as applied to you, blacken between the lines in the column headed 1. (See A at the right). If the statement is FALSE or NOT USUALLY TRUE, as applied to you, blacken between the lines in the column headed 2. (See B at the right). If a statement does not apply to you or if it is something that you don't know about, make no mark on the answer sheet.

Section of answer sheet.	
T	F
A (1) <input checked="" type="checkbox"/>	(2) <input type="checkbox"/>
B (1) <input type="checkbox"/>	(2) <input checked="" type="checkbox"/>

Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

In marking your answers on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks on this booklet.

Remember, try to make some answer to every statement.

You may now begin with statement number 1.

1. I have not lived the right kind of life.
2. These days I find it hard not to give up hope of amounting to something.
3. I liked school.
4. In school I was sometimes sent to the principal for cutting up.
5. There is very little love and companionship in my family as compared to other homes.
6. My way of doing things is apt to be misunderstood by others.
7. My sex life is satisfactory.
8. My parents have often objected to the kind of people I went around with.
9. I have very few fears compared to my friends.
10. I have been quite independent and free from family rule.
11. I have used alcohol excessively.
12. My relatives are rarely all in sympathy with me.
13. I have very few quarrels with members of my family.
14. I have periods in which I feel unusually cheerful without any special reason.
15. My family does not like the work I have chosen (or the work I intend to choose for my life work).
16. What others think of me does not bother me.
17. At times my thoughts have raced ahead faster than I could speak them.
18. My parents and family find more fault with me than they should.
19. I am against giving money to beggars.
20. If people had not had it in for me I would have been much more successful.
21. I am neither gaining nor losing weight.
22. I am happy most of the time.
23. My daily life is full of things that keep me interested.
24. I find it hard to keep my mind on a task or job.

25. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world."
26. I have been disappointed in love.
27. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.
28. My conduct is largely controlled by the customs of those about me.
29. I believe that my home life is as pleasant as that of most people I know.
30. Someone has it in for me.
31. I know who is responsible for most of my troubles.
32. I wish I could be as happy as others seem to be.
33. I am easily downed in an argument.
34. I am sure I am being talked about.
35. I have never been in trouble with the law.
36. No one seems to understand me.
37. I wish I were not so shy.
38. I like to talk about sex.
39. I am sure I get a raw deal from life.
40. I do many things which I regret afterwards (I regret things more or more often than others seem to do).
41. My hardest battles are with myself.
42. During one period when I was a youngster I engaged in petty thievery.
43. I have had very peculiar and strange experiences.
44. Much of the time I feel as if I have done something wrong or evil.
45. I have never been in trouble because of my sex behavior.
46. At times I have very much wanted to leave home.
47. I do not mind being made fun of.
48. I find it hard to make talk when I meet new people.

49. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
50. When in a group of people I have trouble thinking of the right things to talk about.
51. At periods my mind seems to work more slowly than usual.
52. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
53. I have never felt better in my life than I do now.
54. I have often met people who were supposed to be experts who were no better than I.
55. I find it hard to set aside a task that I have undertaken even for a short time.
56. I like to let people know where I stand on things.
57. At times I feel like swearing.
58. It takes a lot of argument to convince most people of the truth.
59. I have periods in which I feel unusually cheerful without any special reason.
60. At times I am all full of energy.
61. Criticism or scolding hurts me terribly.
62. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
63. At times I feel like smashing things.
64. Often I can't understand why I have been so cross and grouchy.
65. I certainly feel useless at times.
66. I get mad easily and then get over it soon.
67. What others think of me does not bother me.
68. I have very few quarrels with members of my family.
69. I am against giving money to beggars.
70. At times my thoughts have raced ahead faster than I could speak them.
71. I frequently find myself worrying about something.

72. People often disappoint me.
73. I find it hard to make talk when I meet new people.
74. I worry over money and business.
75. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
76. I often think, "I wish I were a child again."
77. When in a group of people I have trouble thinking of the right things to talk about.
78. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
79. It makes me uncomfortable to put on a stunt at a party even when others are doing the same sort of things.
80. I think nearly anyone would tell a lie to keep out of trouble.

APPENDIX C

INSTRUCTIONS FOR THE LOW PROBABILITY OF
RETALIATION GROUP

When both of you have finished presenting the learning task, you are free to leave. Neither of you will serve as the learner, nor will you be administered any shock.

After finishing the practice trial and the 4 subsequent trials, wait and I will return to give the second teacher (the subject) a different list of nonsense syllables. Now, go ahead with the practice trial. I'm going into the other room with the learner. Wait until I blink the correct and incorrect lights before you begin.

Please do not speak to each other during the experiment.

Are there any questions before you begin?

(Following exposure to the aggressive model the examiner returns to room.) You will follow the same procedure that the first teacher did. First read both syllables once, then go back through the list 4 times only reading the first syllable of the pair. When the correct light comes on, proceed with the next nonsense syllable pair. If I indicate that he was incorrect, you are to give him a shock of whatever degree you wish, and then re-read both syllables of the pair that the learner missed. Make sure that after each shock the lever is released by pulling the lever up lightly. It is also important that you speak closely

into the microphone so it will come through clearly for the other student. As I mentioned before, shock is not strong enough at any level to cause physical harm.

When you have finished with this list, you are free to leave. Neither of you will serve as the learner, nor will either of you be shocked.

Do you have any questions?

Wait until I blink the correct and incorrect lights before you begin. (Experimenter goes into the other room.)

APPENDIX D

INSTRUCTIONS FOR THE HIGH PROBABILITY OF
RETALIATION GROUP

When both of you have finished with your lists of syllables, then you will each be trading places with the learner.

After finishing the practice trial and the 4 subsequent trials, wait and I will return to give the second teacher (the subject) a different list of nonsense syllables. Now go ahead with the practice trial. I'm going into the other room with the learner. Wait until I blink the correct and incorrect lights before you begin.

Please do not speak to each other during the experiment.

Are there any questions before you begin?

(Following exposure to the aggressive model the examiner returns to the room.) You will follow the same procedure that the first teacher did. First read both syllables once, then go back through the list 4 times only reading the first syllable of the pair. When the correct light comes on, proceed with the next nonsense syllable pair. If I indicate that he was incorrect, you are to give him a shock of whatever degree you wish, and then re-read both syllables of the pair that the learner missed. Make sure after each shock that the lever is released by pulling the lever up lightly. It is also important that you speak closely into the microphone so it will come through clearly for the

other student. As I mentioned before, the shock is not so strong at any level to cause physical harm.

When you have finished with your list, each of you will be trading places with the learner.

Do you have any questions?

Wait until I blink the correct and incorrect lights before you begin. (Experimenter goes into the other room.)

APPENDIX E

NONSENSE SYLLABLE LIST FOR TEACHER NUMBER 1

1. BEM - DUH
2. DIB - QIK
3. WOH - MAB
4. LUF - DAK
5. ZEK - JIV
6. VOS - KES
7. FID - TAY
8. SOV - WEV

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. For incorrect answers, read both syllables of the pair which the learner missed. Then proceed to the first syllable of the next pair.
5. For correct answers, do not re-read the pair, just proceed to the first syllable of the next pair.

APPENDIX F

NONSENSE SYLLABLE LIST FOR TEACHER NUMBER 2

1. VIT - MEK
2. CAG - JUM
3. PIQ - TUS
4. ZEL - FEV
5. LUT - JAV
6. PEB - NAS
7. RAQ - WUD
8. CES - PIM

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. For incorrect answers, read both syllables of the pair which the learner missed. Then proceed to the first syllable of the next pair.
5. For correct answers, do not re-read the pair, just proceed to the first syllable of the next pair.

APPENDIX G

RECORD FORM FOR SHOCKS

Experimental Group _____

TRIAL 1	Shock Level	Shock Duration	TRIAL 2	Shock Level	Shock Duration
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>
3.	_____	_____	3.	_____	_____
4.	_____	_____	4.	_____	_____
5.	_____	_____	5.	_____	_____
6.	_____	_____	6.	_____	_____
7.	_____	_____	7.	_____	_____
8.	_____	_____	8.	_____	_____

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.	_____	_____	2.*	<u>No Shock</u>	<u>No Shock</u>
3.*	<u>No Shock</u>	<u>No Shock</u>	3.	_____	_____
4.	_____	_____	4.	_____	_____
5.	_____	_____	5.*	<u>No Shock</u>	<u>No Shock</u>
6.	_____	_____	6.*	<u>No Shock</u>	<u>No Shock</u>
7.*	<u>No Shock</u>	<u>No Shock</u>	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 H

INDIVIDUAL SUBJECT'S SCORES

Intensity of Shock

Aggressive Subjects and
High Probability of Retaliation

	Trials			
	1	2	3	4
1.	5.00	7.67	9.50	5.33
2.	7.00	6.50	5.75	8.00
3.	4.14	5.17	5.00	6.00
4.	7.14	7.33	7.25	8.66
5.	6.70	9.67	8.75	10.00
6.	5.86	5.83	7.00	7.33
7.	5.70	8.17	8.25	8.33
8.	6.57	7.33	6.75	6.67
9.	5.86	6.33	6.25	6.66
10.	8.71	9.50	9.00	8.66

Aggressive Subjects and
Low Probability of Retaliation

	Trials			
	1	2	3	4
21.	4.43	6.00	7.00	8.00
22.	5.43	7.00	7.25	9.33
23.	1.00	2.00	1.00	7.00
24.	7.43	6.67	8.75	8.67
25.	4.00	6.00	7.00	10.00
26.	10.00	10.00	10.00	10.00
27.	4.14	4.00	4.50	4.60
28.	8.04	7.83	9.00	10.00
29.	6.71	7.50	8.50	9.33
30.	4.57	8.67	8.00	7.33

Non-Aggressive Subjects and
High Probability of Retaliation

	Trials			
	1	2	3	4
11.	3.86	5.00	6.76	8.33
12.	6.57	7.83	8.75	9.33
13.	6.71	7.83	8.00	6.33
14.	8.86	9.00	8.75	9.33
15.	6.86	8.00	9.00	10.00
16.	6.57	8.50	8.75	9.66
17.	8.29	8.17	8.75	9.00
18.	4.00	6.00	9.00	9.33
19.	6.00	7.00	8.00	9.00
20.	6.43	7.50	5.50	6.00

Non-Aggressive Subjects and
Low Probability of Retaliation

	Trials			
	1	2	3	4
31.	7.67	7.17	8.75	9.00
32.	8.00	9.00	10.00	10.00
33.	5.00	7.00	9.00	10.00
34.	5.86	7.17	8.50	9.33
35.	3.00	8.50	10.00	10.00
36.	6.00	6.67	9.00	10.00
37.	4.86	6.33	6.50	5.33
38.	5.71	6.67	5.00	8.33
39.	4.00	7.33	9.00	8.33
40.	8.43	8.33	9.00	10.00

Duration of Shock

Aggressive Subjects and
High Probability of Retaliation

	Trials			
	1	2	3	4
1.	1.56	1.96	1.59	1.51
2.	2.04	1.28	1.63	1.43
3.	1.11	0.87	0.92	0.88
4.	1.99	2.33	2.20	2.32
5.	2.07	1.87	2.46	2.58
6.	1.09	0.69	0.54	0.52
7.	1.21	1.65	1.54	1.27
8.	1.35	1.12	0.90	0.76
9.	1.92	2.07	2.23	1.90
10.	1.69	2.27	2.23	2.08

Aggressive Subjects and
Low Probability of Retaliation

	Trials			
	1	2	3	4
21.	1.21	1.28	1.33	1.68
22.	1.77	1.31	1.54	1.56
23.	1.18	0.83	0.93	1.01
24.	1.33	1.99	3.01	2.00
25.	1.07	1.20	1.53	1.28
26.	1.78	1.91	1.95	1.89
27.	1.31	0.92	0.86	0.94
28.	1.02	1.05	0.76	1.02
29.	1.05	1.01	1.14	0.75
30.	1.22	1.62	1.55	1.57

Non-Aggressive Subjects and
High Probability of Retaliation

	Trials			
	1	2	3	4
11.	1.65	1.71	1.60	2.16
12.	1.55	1.69	1.78	1.57
13.	1.28	1.11	1.25	0.99
14.	1.35	1.16	1.11	1.12
15.	1.61	1.76	1.40	1.76
16.	1.45	2.15	2.38	1.79
17.	1.31	1.51	1.53	1.63
18.	1.15	1.32	1.35	1.19
19.	0.87	0.65	0.97	1.47
20.	1.54	1.84	1.81	1.56

Non-Aggressive Subjects and
Low Probability of Retaliation

	Trials			
	1	2	3	4
31.	1.61	1.39	1.54	1.63
32.	1.24	1.10	1.13	1.15
33.	0.86	0.99	1.08	1.12
34.	1.48	1.39	1.35	1.29
35.	0.80	1.07	0.96	0.66
36.	1.86	1.59	2.59	3.00
37.	1.79	1.72	1.46	1.39
38.	1.66	1.84	1.71	1.76
39.	1.88	1.86	1.96	1.97
40.	2.16	2.20	1.48	2.07

VITA

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Master of Science

Thesis: PERSONALITY TYPE AND THE PROBABILITY OF RETALIATION FOLLOWING EXPOSURE TO AN ADULT AGGRESSIVE MODEL

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