

AN INVESTIGATION OF ATTITUDES TOWARD AGGRESSION
AND AROUSAL OF ANGER AS A FUNCTION OF GENDER
OF SUBJECT, GENDER OF AGGRESSOR, AND
TYPE OF PROVOCATION

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CHAPTER I

INTRODUCTION

The last two decades have seen an increasing interest in the problem of human aggression, as evidenced by the abundance of articles and books on the subject. Authors have stressed various reasons for the importance of investigating the area of aggression. Stonner (1976) foresees increasing pressure on psychologists to investigate aggression as a social problem and to recommend means of control over violent behavior. Berkowitz (1962) has stated

Aggression is a complex problem, whether the hostile acts are performed by the average American or by juvenile gangs. . . . Much has yet to be learned about the factors determining the likelihood of an aggressive outburst. . . . The citizens of a democracy concerned with the problem of controlling aggression through legal and educational institutions must have some awareness of the nature of aggression (pp. 1-2).

The societal ramification for understanding human aggression voiced by Berkowitz is echoed by Kahn (1972), who expands the area of concern by focusing on the level of violence that is socially sanctioned.

. . . Individuals, communities and nations differ in the levels of violence they find justifiable, as they differ in the levels of violence that they actually commit. Moreover, I believe that these two classes of phenomena--justification and violent behavior--are related, and for at least two reasons. No doubt people tend to justify their violent actions, as they do their other behavior. More important, I believe that the values and attitudes, beliefs and norms which justify or condemn violence in a society are among the factors that determine the amount of violent behavior in that society. . . . One measure of the quality of life in a society, I would propose, is the level of violence that people are prepared to justify (p. 156).

The relationship between justification and behavior in regard to aggression or violence stated by Kahn is especially notable when viewed in the context of a proposition by Rule and Nesdale (1976). They observe the likelihood that ". . . tolerance for extreme violence may have its roots in tolerance for more minor aggressive incidents" (p. 54). Thus, the value of systematically studying the justification of aggression in socially sanctioned circumstances is paralleled by the value of investigating moral judgments in everyday circumstances.

Rule and Nesdale (1976) have recognized that

. . . somewhat surprisingly, the systematic assessment of such questions has been largely ignored in psychology until quite recently when the importance of morality as a legitimate focus of inquiry has been stressed (p. 38).

Kelley (1971, p. 293) has emphasized the ramifications of systematic examination of moral judgments, stating that they "play an important mediating role between the social or moral system and the behavior of individuals." Feshbach (1971) has endorsed the study of moral judgments, expressing the point that

psychological methods are uniquely suited to describe variations in the moral evaluation of violent acts, to isolate dimensions of the context and of the action which contribute to differences in evaluation and to determine the degree to which personality and sociocultural factors influence moral attitudes (p. 281).

Pittel and Mendelsohn (1966) reviewed efforts from the turn of the century to the early 1960's in conceptualizing and measuring moral values. They concluded that an important improvement in the field would be for researchers to focus more on investigating moral values as subjective phenomena in their right rather than simply as verbal predictors of moral behavior. Rest (1976, p. 199) reiterated this argument in saying that "The purpose of moral judgment assessment is not simply

to collect verbal statements in order to predict observable behavior." He offered an alternative purpose in proposing that such verbal information serves as an indication of inner thought patterns and processes. Thus, although the scientific study of moral judgments seems to have become acceptable only within the past few years (Brown, 1965; Hoffman, 1969; Kohlberg, 1969), it is considered by several foremost social psychologists as a worthy endeavor, not only because of its possible predictive capabilities for behavior, but more importantly so because of the information it provides as to cognitive processes. The purpose of this study was to investigate moral judgments specifically as they relate to the justification of aggression in everyday circumstances.

Geen (1976) has specified that aggression in everyday circumstances appears to be an extremely complex phenomenon, dependent on numerous variables related to the subject, aspects of the provocative event, and stimuli in the environment. In regard to subject variables, gender appears to be an important determinant of differences. Golin and Romanowski (1977) state that it is generally agreed that males are more likely to show physical aggression than females. In addition, they note that such sex differences in physical aggression are ordinarily viewed as a consequence of different social expectations for physical aggression for male and female roles. However, research findings also support genetic differences in physical "roughness" as one of the best established sex differences is the much greater incidence of mock fighting among boys (Maccoby and Jacklin, 1974). Bandura, Ross, and Ross (1961) support a socialization perspective in their report that boys showed more imitation of physical aggression than girls, but that boys did not differ from girls in imitation of verbal

aggression. This finding is congruent with the postulation of Berkowitz (1962), who theorized that verbal expression of aggression is consistent with female role expectations and suggested that females are as likely to display verbal aggression as males. Likewise, Feshbach (1970), in his careful review of the literature on sex differences in children's aggression, suggested that when differences are found, they stem not from the motivational state (i.e., "aggressive drive") but from mode of aggression, with boys showing a higher proportion of physical aggression than do girls. Bandura (1973) came to essentially the same conclusion and believed that this reflected differences in what is socially permissive behavior for each sex. Frodi et al. (1977) found in their review of the literature that of the 72 studies involving a measure of some form of aggressive behavior, 61 percent did not show the expected difference that males are more aggressive than females. They hypothesized that the major determinants of sex differences in aggressive behavior could be the mode of response available to subjects in specific situations.

The aforementioned studies strongly suggest potential gender differences in the moral judgment of aggression. Gender differences in attitudes toward the justification of aggression were, in fact, found in a study by Patterson (1978), who had adolescents rate 48 provocative situations on a five-point scale according to whether or not they would feel justified in aggressing (operationally defined as hitting or slapping). Patterson's results demonstrated a main effect for gender, with males indicating more situations than females in which they would feel justified in aggressing. Dailey (1981), utilizing a complex experimental design which allowed for potential interactions between

subject variables (age and gender), item variables, and response variables, also found a significant main effect for gender in regard to the justification of aggression across diverse situations. Males again justified aggression (operationally defined as hitting, slapping, or shoving) in more situations than did females, even though the provocation was verbal across the situations.

The important methodological aspect to consider, in light of the preceding discussion about the relationship between gender differences and mode of aggression, is that in the Patterson and Dailey studies, physical aggression was operationalized. It was hypothesized that the gender differences found in these two studies may be the result of providing the subject with only a physically aggressive response choice and that female subjects find physical aggression justified in very few situations. Given this fact, the present study of moral judgments of aggression made available to both male and female subjects the choice of verbal aggressive responses.

Recalling Geen's (1976) statement about the complexity of aggressive phenomena in everyday circumstances and, more specifically, his enumeration of the variables affecting such phenomena, one becomes aware that "aspects of the provocative event" or situational variables are important inclusions in an investigation of the moral judgments of aggression. Rule and Nesdale (1976, p. 42) suggest possible situational variables in pointing out that ". . . it is not known how the nature of the act, unconfounded by severity of harm, combines with other factors, such as characteristics of the victim or aggressor, to influence morality judgments."

An important characteristic of the victim or aggressor--a situational variable--is acknowledged by Frodi et al. (1977), who direct attention to their discovery that many of the studies they reviewed matched subjects with provokers or potential victims of the same sex. The authors indicate that this makes the findings of such studies susceptible to explanation in terms of confounding of sex of subject with sex of instigator or target of aggression. They further state that the sex of instigator is a factor that appears to elicit or inhibit sex-role-based behavioral guides. Evidence for such a proposition is provided by Silverman (1971), who found that male targets tend to receive more aggression than female targets, and Maccoby and Jacklin (1974), who note that the majority of studies reveal that both males and females behave less aggressively toward females than toward males.

Taylor and Epstein (1967) reason that if one considers direct social training, males would be expected to be aggressive toward male antagonists and relatively unaggressive toward female antagonists. One of the most reliable differences found in their study was that subjects of both sexes facing aggressive females exhibited far less aggression than when facing equally aggressive males. Taylor and Epstein observe that there appeared to be a general reluctance to inflict pain on a female commensurate with her aggressive provocation. (Subjects were led to believe that they were administering shocks of varying intensity to an opponent designated by the experimenter as either male or female when, in fact, no one was subjected to the pain of electric shock.) On the other hand, females were extremely aggressive (as measured by their choice of degree of shock

intensity) to aggressive males. The authors concluded that, in the latter case, males had clearly violated the code of socially acceptable behavior by becoming increasingly aggressive to females who had not provoked them. Thus, it appears that "sex-role based behavioral guides" are subject to elicitation or inhibition as a function of the gender of the instigator and the instigator's provocation as suggested by Frodi et al. (1977).

Golin and Romanowski (1977), employing a verbal measure of aggression, reported that under conditions of provocation by a female target, verbal aggression toward a female target occurred to the same extent as toward male targets (targets were confederates of the experimenter and utilized verbal insult as provocation). In addition, females did not differ from males in the expression of verbal aggression toward either the male or female target. The important methodological aspect to note in the latter study is the use of a verbal mode of aggression while varying the gender of both the subject and the aggressor. This allows for the investigation of more subtle differences in verbal aggression as a function of possible interactive effects between gender of subject and gender of aggressor. In the present study the same methodological considerations were incorporated into the situational variables, presenting both male and female subjects with provocative stimuli systematically varying as to gender of aggressor.

The preceding discussion suggests another situational variable upon which the moral judgment of aggression is likely dependent--type of provocation. The studies reviewed thus far have dealt mainly with physical or verbal forms of provocation. However, it is extremely probable that the terms physical and verbal are gross generalizations

of all existing types of provocation and that further delineation is possible. Frodi (1977) designated four categories of provocation: insensitivity, lack of efficiency, condescending attitude, and physical/verbal. Her findings suggested that typically men are most angered by the display of physical or verbal aggression by another male, but, given a female provoker, a condescending attitude triggers hostile feelings. For women, the most anger-provoking behavior is condescending treatment, regardless of the sex of the provoker. If males and females differ in terms of their emotional response to a given provocation, investigators may be reporting gender differences in aggression that are a reflection of utilizing a single type of provocation which effectively arouses anger in only one gender. Frodi states:

In several experiments on aggression, in which sufficient attention was not paid to the manipulation of anger/provocation, the observed sex differences might well have been due to different emotional states mediating the overt behavior rather than differences in aggressive behavior per se (p. 114).

This notion of gender differentiated provocation is indirectly supported by Duncan and Hobson (1977), who found that adult males and females differ significantly as to situations in which they feel they are most likely to be aggressive. Given these findings, varying types of provocation were employed as a situational variable in the present study.

Although the use of provocative situations conceptually parallels the methodologies employed in the study of moral development, it departs from the widespread use of the Buss (1961) and Milgram (1974) paradigm in the study of aggression. It can be argued that these commonly used paradigms suffer in terms of generalizability for at least two reasons. One is that the mode of aggression chosen for study is the delivery of shocks and that it has been recognized by Frodi et al. (1977) that

angered women tend to shy away from physical aggression--at least from shocking people. Secondly, subjects may see their possibly injurious behavior as being of a prosocial nature because of its potential scientific usefulness. Research has suggested that aggression motivated by prosocial reasons is perceived as more right and less deserving of punishment than aggression motivated by personal reasons (Rule et al., 1975).

Feshbach (1971), in regard to the common Buss and Milgram laboratory procedures, has noted that the use of deception is usually a central requirement and that its effectiveness may vary. In addition, he points out the artificial quality of these procedures and, more importantly, the distress to the subject, even if it is only mild and temporary. Feshbach states:

We have currently found that anger can be reliably and effectively aroused by having subjects privately rehearse and briefly describe events . . . which made them angry and which still make them angry when they think of these situations (p. 285).

The presentation of various provocative situations in the present study was thus conceptually analogous to the argument voiced by Feshbach. Direct support for presenting subjects with provocative situations was also found in a statement by Rule and Nesdale (1976, p. 224) about research in aggression: "The experimental paradigm which has been employed in research studies usually involves the presentation of information describing aggressive incidents to research participants."

Types of provocation selected for inclusion in this study paralleled those identified by Frodi (1977): insensitivity, lack of efficiency, condescending attitude, and physical/verbal; although physical provocation was excluded. Dailey (1979) found that physical

provocation resulted in the justification of aggression significantly more often than did verbal provocation. In replacing Frodi's physical/verbal category with a "verbal insult" category (thus excluding forms of physical provocation), it was hoped that more subtle differences in the justification of aggression might be illuminated.

Numerous items comprising the four types of provocation were the product of anger-provoking examples listed by Frodi (1977), while other items were inspired by the work of Patterson (1978) and Dailey (1981). The key differences in methodology between the work of the above researchers and the present research center around the fact that neither Frodi nor Patterson employed systematic experimental manipulation of categories of provocative items and that, while Dailey conducted an elegant experimental manipulation of variables affecting the justification of aggression, she utilized only verbal forms of provocation. In addition, both Patterson and Dailey identified the perpetrator of potentially provocative acts only by the phrase "a person" or "someone" in order to control the stimulus value of the actor. As discussed in the introduction to the present paper, the stimulus value of the actor, especially in terms of gender, was considered to be a significant factor in the moral judgments of aggression.

The types of provocation used in the present research are thus described as: insensitivity, lack of efficiency, condescending attitude, and verbal insult. The present study investigates the effects of the subject variable (gender) and the situational variables (gender of aggressor and type of provocation) on the dependent measure (attitudes toward the justification of aggression).

A second dependent measure (i.e., degree of anger arousal) was utilized to address the issue previously mentioned by Leventhal (1973, p. 133): ". . . research on sex differences in emotion has suggested that there are differences in anger arousal that will have to be clearly described before an understanding of sex differences in aggression is gained." In a similar vein, Frodi et al. (1977, p. 649) conjectured from their review of the literature that there may be some "reliable sex differences in what leads to anger and from anger to aggression," and further stated that it appears both sexes may respond differently to certain kinds of aggressive cues in the environment.

Thus, the present research was designed to investigate the effects of the subject variable (gender) and situational variables (gender of aggressor and type of provocation) on two dependent measures:

1. Attitudes towards the justification of aggression--i.e., the willingness to personally sanction a verbally aggressive response (operationally defined as "to yell at, insult, or hurt the feelings of the person committing the provocative act") in various situations.

2. Degree of anger arousal--i.e., the degree of anger expected to be experienced in response to provocation in various situations.

This second dependent variable involves cognitive attributional processes, anger-arousal, and the hypothesis that the emotional state of anger mediates aggression. Geen (1976) has identified the variables in aggression research as falling into three groupings: antecedents, intervening, and outcome. Foremost among antecedents are variables concerned with provocation while intervening variables are

of two types: those that mediate which are recognized as emotional states such as anger, hostility, and generalized arousal, and those that inhibit, which are recognized as the emotional states of anxiety, guilt, and fear. In regard to anger as an intervening variable, Harris and Huang (1974, p. 210) state: ". . . it seems to be generally accepted that the emotion of anger and aggressive behavior are highly correlated." This relationship is congruent with aggressive drive theory which states that provocation, such as attacks or insults, create a behavior-specific drive state that motivates aggressive counterresponding (Geen, 1976). Social learning theory, on the other hand, postulates that provocation generates a state of increased general arousal (Bandura, 1973). Such arousal, when it occurs, is not response specific, but may instead activate behaviors other than aggression if they happen to be relatively dominant for the individual. Dengerink (1976), applying cognitive-attributional processes at the intervening level, suggests that an individual's reaction to provocation depends not only on how aroused he has become, but also on how he interprets that arousal and whether he labels it as anger. Berkowitz and Turner (1974) advance this hypothesis in stating that people attack a target not only when they interpret their arousal as anger but when they also believe that target has been the cause of their feelings. Thus, it appeared that the relationship between the intervening variable anger and aggression may be more complex than that proposed by aggressive drive theory.

In regard to the present study, it might have been hypothesized that anger mediates moral judgments such that aggression will be justified more often in those situations regarded as the most

anger-provoking. However, in some circumstances, the willingness to sanction aggression may be independent of anger arousal. Indirect support for such a possibility is available in a study by Berkowitz, Lepinski, and Angulo (1969). They found, in an all-male-subject study, that the strongest aggression displayed was by men who were led to think that they were moderately angry with their tormentor, while the highly angry male students restrained their attacks, presumably because they regarded their strong anger as inappropriate. In addition, Taylor and Epstein (1967) note that while they found only limited expression of aggression to females by both males and females, this did not seem to be a reflection so much of an absence of anger as of control of aggressive behavior. They relate that statements of anger were often spontaneously expressed by both sexes but that during encounters with aggressive female opponents, statements of anger were rarely followed up with corresponding behavior. As Harris and Huang (1974) voice the general consideration that the emotion of anger may be present without any accompanying aggressive act, so did it seem highly probable that a high degree of anger arousal might exist without the associated personal sanction of aggression.

In summary, then, the proposed research utilized an experimental design to:

1. Investigate the effects of a selected subject variable (gender) and selected situational variables (gender of aggressor and type of provocation) on attitudes towards the justification of aggression;
2. Investigate the effects of the same variables on the degree of anger arousal; and,

3. Investigate the relationship between anger arousal and moral judgments of the individual's right to respond aggressively.

CHAPTER II

METHOD

Subjects

From a larger pool of university students at Tulsa University, 50 were selected using random number tables to provide equal sample sizes of males and females. All students selected for participation were in the age range of 17-21 years, and were enrolled in introductory psychology courses.

Instrument

A questionnaire was developed by the present experimenter based on a paradigm previously utilized to investigate attitudes toward the justification of aggression (Patterson, 1978; Dailey, 1981). This paradigm consisted of an actor ("a person" or "someone") performing a provocative act against another individual. The questionnaire was comprised of 32 items varying provocative (potentially aggression-instigating) stimuli along two dimensions: type of provocation (insensitivity, lack of efficiency, condescending attitude, and verbal insult) and gender of aggressor (male and female). Items thus fell into eight categories of four items each, with four values of the type variable orthogonally combined with the two values of the aggressor variable. These categories are represented in Figure 1.

| | | Gender of Aggressor | |
|---------------------|------------------------|---------------------|--------|
| | | Male | Female |
| Type of Provocation | Insensitivity | | |
| | Lack of Efficiency | | |
| | Condescending Attitude | | |
| | Verbal Insult | | |

Figure 1. Item Categories

The 32 items were randomly ordered with the restriction that no two items from any one category follow each other. Each item consists of a sentence in which a male or female actor ("a guy," "a man," "a girl," "a woman," etc.) is behaving in a potentially aggression-instigating fashion ("ridicules," "acts like he's better," "humiliates," etc.) toward a male or female subject. Specific linguistic paradigms were utilized to operationalize each of the four types of provocation. These paradigms are as follows:

1. Insensitivity - "Despite Person B's concerns (hopes, wants, needs, desires), Person A does X."

2. Lack of efficiency - "Person A fails to perform X, which Person B had expected, and when not performed, will cause Person B difficulties."

3. Condescending attitude - "Person A reveals to Person B the attitude that Person B is inferior in competency (intellect, career, ability, experience)."

4. Verbal insult - "Person A insults (ridicules, pokes fun at, humiliates, says bad things about) Person B."

(See Appendix A for categories of items.)

Scoring

Each item had two scores, both based on two separate 1-5 point Likert scales. The dependent variables rated on these scales were justification of aggression (JA) and degree of anger arousal (AA). (See Appendix B for cover sheet, instructions to subjects, and questionnaire.)

Procedure

The questionnaire was administered to several classes of students enrolled in introductory psychology courses. The written instructions on the cover sheet were read aloud:

Listed on the next few pages are a variety of situations in which people may feel they have a right to yell at, insult, or hurt the feelings of another person. After each situation, there are two groups of statements you could make about each situation. In each group, I want you to circle the one statement that most closely represents how you would feel if you were in that situation.

In the first group of statements, I want to know whether you would feel you have the right to yell at, insult, or hurt the feelings of the person doing the action. I am not asking you if you would do these things, but only if you think you have the right to yell at, insult, or hurt the feelings of that person. Circle the number that represents how you would feel in that situation. Also, underline which one of the three actions--yell at, insult, or hurt the feelings--you feel you would have the right to take if you were in that situation.

In the second group of choices, I want to know how angry you would feel if you were in that situation. Circle the number that most closely represents how you would feel in that situation.

The time required to complete the task was approximately 15-20 minutes. After the questionnaires were collected, they were checked for completeness with all complete questionnaires being sorted into male and female categories. A randomization procedure (random number table) was employed to draw 25 questionnaires from each of the two groups.

Debriefing

A written debriefing statement consisting of two pages was given to each subject following completion of the questionnaire. The first page included a statement of the purpose of the research, an explanation of the questionnaire, and the researcher's name and phone number. The second page included open-ended questions about provocative situations in general and requests the subjects' thoughts, feelings, and behavioral intentions in response to these situations. It also included two of the items from the questionnaire and asked subjects about the thought processes involved in their ratings of the items (see Appendix C).

Statistical Analysis

Pearson's correlation coefficient was computed to assess the degree of relationship between the justification of aggression (JA) and anger arousal (AA) ratings. This correlation coefficient was computed over the 1600 pairs of ratings resulting from the 50 subjects' ratings of both dependent variables on each of the 32 items. A more detailed investigation of the covariation between the JA and AA ratings was completed, beginning with the following two analyses of variance.

These were done to investigate the dependent variables in isolation:

1. Justification of aggression scores were used as the dependent variable in an ANOVA performed on an Items within (Type by Aggressor) by Subjects within Gender design. This design, referred to as the JA-ANOVA, allowed for the testing of hypothesis reflecting the relationship between the subject variable, situational variables, and the subjects' willingness to justify an aggressive response.

2. Anger arousal scores were used as the dependent variable in an ANOVA performed on the same design as that stated above. This ANOVA, referred to as the AA-ANOVA, allowed for the testing of hypotheses reflecting the relationship between the subject variable, situational variables, and subjects' self-attribution of anger arousal.

Finally, an ANOVA was performed on a Dependent variable by Items within (Type of Aggressor) by Subjects within Gender design. Here the two dependent variables (justification of aggression and anger arousal) were treated as two levels of an independent variable. This design, referred to as the DV-ANOVA, allowed for a powerful and detailed test of hypotheses pertaining to the potential covariation between the two dependent variables across a variety of levels of the independent variables (gender of subject, type of provocation, and gender of aggressor). Thus, the mediating role of anger in the moral judgment of aggression was investigated across combinations of the subject variable and item variables. Briefly, this design served as a means to contrast the results of the two univariate ANOVA's on an effect-by-effect basis. (For a more comprehensive explanation of this DV-ANOVA, consult Appendix D.)

Expectations

In terms of the interaction between the gender of aggressor ("aggressor") and gender of subject ("gender") variables, the following questions were considered as to whether males and females would differ as a function of the aggressor's gender:

1. Would females as a group justify aggression more toward male aggressors than toward female aggressors?

2. Would females as a group be angered as much by a male aggressor as by a female aggressor? Would males' anger differ as a function of the aggressor's gender? (AA-ANOVA.)

3. Although females might be most angered by male aggressors, would it be necessarily true that females would also justify aggression more toward male aggressors? Would this also be true for males as a group? (DV-ANOVA.)

In terms of the interaction between the gender of subject and type of provocation (gender X type), the following questions were considered as to whether males and females would differ as a function of the type of provocation:

1. Would males as a group justify aggression more often when the type of provocation was verbal insult (or when it was some other type of provocation)? Would females do the same? (JA-ANOVA.)

2. Would males as a group be most angered by verbal insult? Would this be true for females as a group or would females be most angered by condescending attitude? (AA-ANOVA.)

3. Would males as a group be most angered by a condescending attitude but not necessarily justify aggression more in response to

this type of provocation? Would this be the same for females?

(DV-ANOVA.)

In terms of the three-way interaction for the variance component "aggressor X gender x type" the following questions were considered as to whether males and females would differ as a function of the aggressor's gender and type of provocation:

1. Would females as a group justify aggression more towards male aggressors only when the type of provocation was verbal insult? Under which type of provocation from a female aggressor would males justify aggression more often? (JA-ANOVA.)

2. Would males as a group be most angered by a condescending attitude from female aggressors? Would this be true for female subjects? (AA-ANOVA.)

3. Although females as a group might be most angered by a condescending attitude from other females, would it necessarily be true that they would also justify aggression more often in this situation? Would this likely be the same for males as a group? (DV-ANOVA.)

CHAPTER III

RESULTS

Pearson's correlation coefficient was computed to assess the degree of relationship between the justification of aggression (JA) ratings and arousal of anger (AA) ratings for each of the 1600 data points (50 subjects X 32 items) on the questionnaire used in this study. A correlation of $-.6043$ was found, indicating an inverse relationship between the two dependent variables. In the construction of the questionnaire it was thought that the two dependent variables might be directly related and that the direction of magnitude for the anger variable should be reversed from that of the justification variable in order to control for response set. Thus, while the magnitude of the justification variable increased from 1 to 5 on the ratings scale, the magnitude of the anger arousal variable decreased from 1 to 5. Since the direction of the correlation coefficient indicates that this scale reversal was indeed a reversal at the response level (i.e., subjects tended to indicate an increased willingness to justify aggression with increased arousal of anger), this warranted reversing the magnitude of the anger variable to its original state. All data presented will refer to this variable as reversed so that the direction of magnitude will be the same for both variables in the discussion of results.

Two analyses of variance were performed to investigate the dependent variables in isolation:

1. Justification scores were used as the dependent variable in an ANOVA performed on an Items within (Type X Aggressor) by Subjects within Gender design. In this design gender was a between-subjects variable, while items, type, and aggressor were within-subjects variables. Items were nested in the type by aggressor interaction. This design, to be referred to as the JA-ANOVA, allowed the testing of relationships between the subject variable and situational variables, and the subjects' willingness to justify a verbally aggressive response.

2. Anger scores were used as the dependent variable in an ANOVA performed on the same design as that described above. This design, to be referred to as the AA-ANOVA, allowed the testing of relationships between the subject variable and situational variables, on the one hand, and the subjects' perceptions of the degree of anger-arousal on the other.

A third ANOVA was performed on a Dependent Variable by Items within (Type by Aggressor) by Subjects within Gender design. Here the two dependent variables (justification and anger) were treated as two levels of an independent variable crossed with the previously mentioned design. This design, to be referred to as the DV-ANOVA, provided a powerful and detailed test of the relationship between the two dependent variables. Briefly, this design served as a means to contrast the results of the two univariate ANOVA's on an effect-by-effect basis.

For the three ANOVA's performed, both subjects and items were treated as random effects, as recommended by Clark (1972). This greatly expands generalizability of the results to not only the population of subjects from which the sample was drawn but also to the universe of all possible items. For all the statistical tests performed,

$p = .05$. After a discussion regarding the reliability and validity of the measures, the results of the three ANOVA's will be presented by categories of the components of variance tested: subjects, items, aggressor, type, and gender.

Reliability

With respect to the scales used, extreme significance was found for the main effects of items for both the JA- and AA-ANOVA's, implying that subjects as a whole were in agreement with one another as to which items were most provocative. Thus, it is apparent that the scales for justification and anger were being used meaningfully, since the inter-subject agreement (reflected by the items' effects) implies the ratings tasks were similarly interpreted by the subjects. The significant dependent variable by items' interaction ($p < 10^{-10}$) suggests that subjects agreed generally that certain items provoked justification of aggression to a greater degree and that certain different items evoked a higher degree of anger-provokingness. Taken together, these results suggest that the measures used were both internally valid and reliably distinct from one another.

Subjects

Tables I and II reveal that a significant main effect for the variance components of subjects within gender was found for both the AA- and JA-ANOVA's; respectively, $F = 15.15$, $p < 10^{-60}$ and $F = 25.65$, $p < 10^{-67}$. These results indicate that within a particular gender, there were individual differences in the ratings of the justification and anger variables. This also implies that subjects were consistent

TABLE I

AA-ANOVA

| Source of Variance | df | SS | MS | df* | F | p < |
|--|------|----------|---------|------|--------|------------|
| Gender | 1 | 10.3911 | 10.3911 | 58 | .8227 | .368 |
| Subjects/Gender | 52 | 601.8291 | 11.5736 | 1248 | 15.151 | 10^{-60} |
| Aggressor | 1 | 13.3706 | 13.3706 | 24 | 1.166 | .291 |
| Aggressor X Gender | 1 | .1128 | .1128 | 22 | .062 | .806 |
| Aggressor X Subjects/Gender | 52 | 39.9791 | .7515 | 1248 | .984 | .508 |
| Type | 3 | 166.1943 | 55.3981 | 25 | 4.663 | .0101 |
| Type X Gender | 3 | 2.3589 | .7863 | 34 | .350 | .789 |
| Type X Subjects/Gender | 156 | 185.1343 | 1.1868 | 1248 | 1.554 | .00006 |
| Items/(Types X Aggressor) | 24 | 275.00 | 11.458 | 1248 | 14.999 | 10^{-48} |
| Gender X Items/(Type X Aggressor) | 24 | 43.7042 | 1.821 | 1248 | 2.384 | .0002 |
| Aggressor X Type | 3 | 58.9443 | 19.6481 | 23 | 1.723 | .1902 |
| Aggressor X Type X Gender | 3 | 8.3589 | 2.7863 | 22 | 1.576 | .224 |
| Aggressor X Type X Subjects/Gender | 156 | 110.8843 | .7108 | 1248 | .9304 | .711 |
| Subjects X Items/Gender X Type X Aggressor | 1248 | 953.2959 | .7639 | | | |

*df for the denominator estimated in accordance with Meyers (1972, p. 309) in the case of pseudo-Fratios.

TABLE II
JA-ANOVA

| Source of Variance | df | SS | MS | df* | F | p < |
|---|------|-----------|---------|------|---------|------------|
| Gender | 1 | 8.4731 | 8.4731 | 58 | .3696 | .546 |
| Subjects/Gender | 52 | 1164.4473 | 22.3932 | 1248 | 25.651 | 10^{-67} |
| Aggressor | 1 | 72.9316 | 72.9316 | 25 | 6.16 | .0201 |
| Aggressor X Gender | 1 | .0972 | .0972 | 26 | .0578 | .812 |
| Aggressor X Subjects/Gender | 52 | 59.8774 | 1.515 | 1248 | 1.3190 | .068 |
| Type | 3 | 58.1924 | 19.3975 | 25 | 1.6186 | .2102 |
| Type X Gender | 3 | 8.9224 | 2.9741 | 35 | 1.6271 | .2007 |
| Type X Subjects/Gender | 156 | 202.2290 | 1.2963 | 1248 | 1.4849 | .000298 |
| Items/Type X Aggressor | 24 | 277.4677 | 11.561 | 1248 | 13.2428 | 10^{-45} |
| Gender X Items/type X Aggressor | 24 | 33.7084 | 1.4045 | 1248 | 1.6088 | .032 |
| Aggressor X Type | 3 | 39.7139 | 13.2380 | 24 | 1.1425 | .352 |
| Aggressor X Type X Gender | 3 | .8174 | .2725 | 23 | .1905 | .902 |
| Aggressor X Type X Subjects/ Gender | 156 | 140.1875 | .8986 | 1248 | 1.0293 | .395 |
| Subjects X Items/Gender X Type X Aggressor | 1248 | 1090.0738 | .873 | | | |

*df for the denominator estimated in accordance with Meyers (1972, p. 309) in the case of pseudo-Fratios.

TABLE III
SIGNIFICANCE LEVELS FOR COMPONENTS OF VARIANCE
TESTED IN THE AA-, JA-, AND DV-ANOVAS

| Source | AA ANOVA | JA ANOVA | DV ANOVA |
|---|-------------|-------------|-------------|
| Gender | * | * | .036 |
| Subjects/Gender | 10^{-60} | 10^{-67} | 10^{-70} |
| Aggressor | * | .02 | .02 |
| Aggressor X Gender | * | * | * |
| Aggressor X Subjects/Gender | * | * | * |
| Type | .01 | * | .009 |
| Type X Gender | * | * | .096 |
| Type X Subjects/Gender | .00006 | .0003 | * |
| Items/Type X Aggressor | 10^{-48} | 10^{-45} | 10^{-10} |
| Gender X Items/Type X Aggressor | .0002 | .032 | .064 |
| Aggressor X Type | * | * | * |
| Aggressor X Type X Gender | * | * | * |
| Aggressor X Type X Subjects/ Gender | * | * | * |
| Subjects X Items/Gender X Type X Aggressor | * | * | * |

*p > .1

with themselves in responding to the items presented. In addition, Table III indicates that in DV-ANOVA, a significant interaction of this variance component (subjects within gender) with the dependent variable was found ($F = 26.21, p < 10^{-70}$). This result suggests that those subjects who scored high in the justification of aggression were not necessarily the same subjects who scored high on the anger variable. The pattern of individual differences on the JA variable was not the same pattern observed on the AA variable.

From Tables I and II it can also be seen that significant effects were found for the interaction of type by subjects within gender for both the JA- and AA-ANOVA's (respectively, $F = 1.48, p < .0003$ and $F = 1.55, p < .00006$). These results indicate that for both the justification of aggression and arousal of anger, different subjects (within the same gender) responded differentially to different types of provocation. Despite the significance of the type by subjects within gender effect for justification and anger, this effect was not significantly different across the two dependent variables.

A final variance component related to subject effects is the aggressor by type by subjects within gender interaction. No significant effects were found for this component in any of the three ANOVA's.

Items

In terms of the variance component, items within type by aggressor, significant main effects for items are found in both the AA- and JA-ANOVA's (respectively, $F = 14.999, p < 10^{-48}$ and $F = 13.24, p < 10^{-45}$). This implies that within a particular type by aggressor category, some items are rated significantly higher than others on the

justification variable, and that some items are rated higher than others on the anger variable. In the DV-ANOVA, a significant dependent variable by items within type by aggressor was found ($F = 3.94$, $p < 10^{-10}$). This finding suggests that those items eliciting high (or low) ratings on the justification variable were not necessarily the same items that elicited high (or low) ratings on the anger variable.

The gender by items within type by aggressor interaction was significant for each of the dependent variables. In both the JA- and AA-ANOVAs, males and females assigned scores differently across items within categories (respectively, $F = 1.61$, $p < .032$ and $F = 2.38$, $p < .0002$). The dependent variable by gender by items effect was not significant, implying that the differential assignment of scores by males and females was more similar than different for the two dependent variables.

Aggressor

The main effect for aggressor was significant in the JA-ANOVA ($F = 6.16$, $p < .0201$), implying that justification scores are assigned differently, across all subjects, as a function of the sex of the aggressor. Male agents of provocation elicited higher justification scores than female agents. In contrast, this component of variance was nonsignificant in the AA-ANOVA. However, the dependent variable by aggressor effect was significant ($F = 6.51$, $p < .025$), indicating that although justification scores were significantly higher when the aggressor was male, this was not the case for anger scores, where there

was no differential assignment of scores as a function of the aggressor's gender.

Type

The main effect of type was significant for the anger variable ($F = 4.66$, $p < .0101$), but not for the justification variable. This suggests that, although different types of provocation do not result in different levels of the justification of aggression, the resultant arousal of anger responses do differ significantly, depending upon the type. In addition, the type by dependent variable interaction was significant ($F = 4.75$, $p < .0009$), indicating that this difference between significance in the AA-ANOVA and nonsignificance in the JA-ANOVA was, itself, a significant difference. In Table IV, the differences in means for the various types of provocation can be seen as a function of the dependent variable.

TABLE IV
MEAN JUSTIFICATION AND ANGER SCORES
BY TYPE OF PROVOCATION FOR
ALL SUBJECTS
(N=50)

| | Type of Provocation | | | |
|---------------|---------------------|-----------------------|---------------------------|------------------|
| | Insensitivity | Lack of Efficiency | Condescending Attitude | Verbal Insult |
| Justification | 2.921 | 2.799 | 2.456 | 2.882 |
| Anger | 3.259 | 3.398 | 2.579 | 3.088 |

Gender

The main effect for gender was not significant in either the JA- or AA-ANOVA. However, a significant dependent variable by gender interaction was found ($F = 4.61, p < .0631$). This suggests that, although males and females did not assign justification and anger scores in a significantly different manner, the patterns of assignment are significantly different for the two dependent variables. From Table V it can be seen that the differences between males' and females' scores are in opposite directions for the two dependent variables.

TABLE V
MEAN JUSTIFICATION OF AGGRESSION AND
AROUSAL OF ANGER SCORES FOR
MALES AND FEMALES

| | Gender | |
|-----------------------------|--------|---------|
| | Males | Females |
| Justification of Aggression | 2.834 | 2.694 |
| Arousal of Anger | 3.003 | 3.159 |

CHAPTER IV

DISCUSSION

One of the issues addressed in the current study and studies cited in the discussion of related literature is the relationship between the gender of the agent of provocation and the gender of the target of provocation. This relationship is involved in questions as to whether the agent's gender influences the likelihood of retaliatory measures on the target. Investigators have generally found that both males and females behave less aggressively toward females (Taylor and Epstein, 1967; Silverman, 1971; Maccoby and Jacklin, 1974). The finding in the current study that male aggressors elicited higher justification of aggression scores than female aggressors appears consistent with the results of these studies.

Explanations for this phenomenon appear to center around considerations of direct social training which is believed to sanction (and possibly even encourage) aggressive behavior toward and between males while establishing social prohibitions for aggressive behavior toward and between females. Males are thought to share a general value system which makes aggression toward females unacceptable (Taylor and Epstein, 1967). On the other hand, aggression in general seems to be typically labeled as female-inappropriate behavior (Bandura, 1962), thus suggesting that females would be unlikely to express aggression toward either males or females. However, Taylor and Epstein (1967)

found that females were extremely aggressive toward aggressive males and reasoned that females behaved in this manner because they perceived males' aggressive behavior as violating socially acceptable behavior. At the same time, the authors reported that females maintained a general reluctance to be aggressive toward other females. Apparently, female subjects frequently expressed amazement in experiencing aggression from others whom they were led to believe were females. It is important to bear in mind that, while the results of the current study appear to be in agreement with the findings and views of other authors, the component of variance being considered in the present study is the main effect for aggressors. Higher justification of aggression scores against male aggressors thus reflects the responses of the total group of subjects and does not provide information as to interactive effects between gender of aggressor and gender of target. This will be addressed following a discussion of the main effect for subject gender.

The absence of a significant main effect for subject gender in the present study is in direct contrast to the presence of such an effect in the work of Patterson (1978) and Dailey (1979). Although the present study utilized a similar paradigm as these studies in mode of presentation of potentially aggression-instigating stimuli to subjects, it differed from these studies by confining aggressive responses to verbal aggression. The Patterson and Dailey studies were concerned with physical aggression and found that males indicated more situations than females in which they would feel justified in aggressing. It is likely that females consider physical aggression justified in very few situations. However, they may view verbal aggression as

justified in a greater number of situations. From the results of the present study, females apparently are similar to males in the expression of verbal aggression. However, though significant differences between males and females were not found for the justification and anger variables, the significant dependent variable by gender interaction generally suggests that males tended to be more "retaliation oriented" while females tended to be more "internalization oriented." Females demonstrated slightly higher anger scores but slightly lower justification scores than males. Especially interesting is that when subjects in the present study were asked to describe what they considered the most anger-provoking situation, males most frequently listed physical provocation by another male, while not one female indicated physical provocation by another female. One might conclude that the societal prohibition against physical aggression by females is so potent that females do not spontaneously consider it in the realm of possibly provoking behavior.

The important aspect to consider in the preceding discussions is that research of gender differences in aggression has generally focused on physical modes of aggressive behavior, most notably the administration of electric shock. Some authors are of the opinion that the mode of aggression operationalized for the purposes of systematic investigation is itself an important factor in the determinance of gender differences (Feshbach, 1970; Frodi et al., 1977; Bandura, Ross and Ross, 1961; Berkowitz, 1962; Golin and Romanowski, 1977). It is believed that, in contrast to physical aggression, males and females may not differ in the expression and reception of verbal aggression. As Berkowitz (1962) has noted, the verbal expression of aggression may be

more consistent with female role expectations. Gender differences in physical aggression and the absence of such differences in verbal aggression may be a reflection of socially permissive behavior (Bandura, 1973; Feshbach, 1970; Zillman, 1979). In accordance with these propositions, the present study found that males as a group and females as a group did not differ as to justification of aggression toward either male or female aggressors. This absence of interactive effects between subject gender and aggressor gender is in direct agreement with the findings of Golin and Romanowski (1977), who also employed a verbal measure of aggression. Thus, gender differences in aggression may not stem from a difference in aggressive drive per se, but rather from the mode of aggression chosen for investigation (Feshbach, 1970).

In addition to addressing potential interactive effects between the subject and aggressor variables, the current study also addressed potential interactive effects between these variables and a third variable, type of provocation. Several authors (Duncan and Hobson, 1977; Frodi, 1977; Frodi et al., 1977; Leventhal, 1973; Maccoby and Jacklin, 1974) have observed that there may be reliable gender differences in what leads to anger and anger to aggression. It is believed that a given provocation may be perceived differently by males and females and may result in different emotional states. If females are not angered but rather made anxious or frightened by a given provocation, any gender-related difference in aggression may be attributed to the emotional states which mediate overt behavior (Maccoby and Jacklin, 1974). Given this, it seems possible that a significant proportion of variance in aggression between (and probably within) genders can be accounted for by emotional states such as guilt, anxiety arousal, or

anxiety avoidance (Frodi et al., 1977). In addition to the differential effect of a given provocation is the greater likelihood that different types of provocation will not only result in different emotional states, but also similar emotional states of varying intensity. This is in part substantiated by a survey Frodi (1977) conducted with a large group of male and female college students in order to gather information as to what the subjects considered the most anger-provoking behavior other males and females could display toward them. Percentages of responses revealed that, given a male agent of provocation, males were most angered by physical and verbal aggression and given a female agent of provocation, males were most angered by a condescending attitude. Female subjects, on the other hand, were most angered by a condescending attitude, regardless of the gender of the agent of provocation. Frodi concluded that because of interactions between subject gender, aggressor gender, and type of provocation, the observed gender differences in several experiments on aggression may have been due to the fact that experimenters did not devote sufficient attention to these potential interactions and utilized a single type of provocation which was gender-specific in its arousal of anger.

While the arguments presented by Frodi and others are viewed as valid and warranted inclusion in the design of the present study, no gender differences were found in terms of types of provocation for either the anger arousal or justification of aggression variables. In addition, no interactive effects were found between subject gender, aggressor gender, and type of provocation. Only a main effect for type was found in terms of the anger arousal dependent variable. The

combined group of male and female subjects indicated that they were most angered by lack of efficiency but that they did not find verbal aggression more justified in response to any one of the four types of provocation. As the findings of the current study are in contrast to the indications of Frodi's survey and the viewpoints of several other authors, the following discussion will be directed at this contrast.

In beginning this discussion it is important to acknowledge the fundamental differences in methodology between Frodi's survey and the current study, as the latter is experimental while the former is not. A survey method such as Frodi's is often limited by its failure to yield similar results when used by another experimenter with a different subject population. As the categorization of provocations listed by subjects is achieved on a subjective basis, similar responses by subjects may be categorized differently by different experimenters. These observations seem to be supported by the results of a survey accompanying the current study where, following their completion of the questionnaire, subjects responded to the same questions Frodi posed to her subjects. As in Frodi's survey, males in the current survey were most angered by physical or verbal aggression by another male and females were most angered by a condescending attitude on the part of males. However, unlike the males in Frodi's survey who were most angered by females' condescending attitudes, males in the current survey were most angered by female lack of sensitivity. Also, in contrast to Frodi's finding that females were most angered by other females' condescending attitudes, the present survey found that females were most angered by other females' lack of sensitivity. Thus,

there are similarities between these two independent surveys but also differences which are likely attributable to different subject populations and slightly different criteria for categorization.

While both surveys suggest interactive effects between subject gender, aggressor gender, and type of provocation and these effects are not paralleled in the current experimental investigation, it is important to note a considerable difference in variability of situations within the categories of provocation. The variability of the situations comprising the survey categories is less than the variability of the situations comprising the types of provocation utilized in the present experimental study. For instance, in the present survey, more than 50 percent of the females indicated "betrayal of confidence" as the most provoking behavior another female could display toward them. This situation thus accounts for more than 50 percent of the variance in the lack of sensitivity category in the survey. On the other hand, "betrayal of confidence" accounts for only one-fourth of the variance in the types of provocation labeled as lack of sensitivity in the experimental study. While the majority of females may agree as to the provokingness of betrayal of confidence by another female, there may be considerable disagreement as to the provokingness of the remainder of the situations designated as lack of sensitivity. Thus, the apparent differences in findings is possibly due to the lack of correspondence between the item categories of the experimental study and the response categories of the survey.

Most strikingly apparent in the provocations described by the subjects in the current study is the reference, both explicit and implicit, to the provoking behavior of individuals with whom the subjects

have or have had ongoing relationships--i.e., "significant others." In the construction of the questionnaire used in the present study, this was recognized as a potentially influential variable and was controlled for by allowing it to vary randomly across the various situations. Dailey (1981) recognized the potential effects of "relationship" and in systematically varying the subjects' relationships to the targets of physical provocation, found that subjects were more likely to justify aggression when the targets were a "significant other" than when the targets were the subjects themselves. (Dailey utilized a generalized "somebody" as the agent of provocation.) It appears that relationships with significant others may be an important determinant of individuals' decisions to personally sanction physical and verbal aggression. Future investigations could be limited to only relationships with significant others or designed to systematically vary the relationship between provoker and target.

The information provided by the subjects in the current study and Frodi's study also implies that there may be an interaction between relationships and type of provocation. Very few subjects in the Frodi survey and no subjects in the current study indicated "lack of efficiency" as what they considered the most provoking behavior. Apparently, when considering relationships with significant others, individuals view lack of efficiency as a minor transgression in relation to other types of provocation such as verbal insult, insensitivity, and condescending attitude. However, when a "general other" (e.g., mechanic, waiter, secretary, etc.) provokes through a lack of efficiency, individuals may be extremely angered. In the present experimental study, where the relationship with the agent of

provocation was not specified as a "significant other," the type of provocation indicated as the most anger-provoking across all subjects was "lack of efficiency."

While lack of efficiency yielded the highest anger-arousal scores, it did not differ significantly from the other types of provocation in terms of justification of aggression scores. It appears, from subjects' statements about their thought processes in certain potentially provoking situations, that individuals may respond somewhat cautiously to provocation from a "general other." Before they are willing to engage in retaliatory measures, individuals are likely to seek additional information about their provoker, especially in respect to intent and overall attribute of aggressiveness. Thus, following provocation from an unfamiliar person, individuals may first make what could be identified as an information seeking response or an assertive response. Dependent on the provoker's reaction to this type of response, individuals may engage in aggressive behavior or (as many subjects suggested) ignore the person.

Ignoring was often indicated as the mode of response appropriate for dealing with provocation. It appears that some individuals regard "ignoring" as aggressive counterresponding in the sense that it is intended to "hurt" and that these same individuals may regard various forms of physical and verbal aggression as inappropriate behavior. Thus, the absence of significant differences in justification of aggression scores for the selected types of provocation may be a reflection of individuals' reluctance to personally sanction verbal aggression toward a "general other" in response to a single instance of provocation. It may be that there is not an absence of willingness to aggress

but rather that the mode of verbal aggression operationalized for the purposes of investigation is not a preferred response choice for certain individuals. This reluctance to verbally (or physically) aggress and preference to ignore suggests that type of provocation may interact with mode of aggression and gender of target, such that individuals may retaliate physically, verbally, or "non-verbally," dependent on their relationship with the provoker and the nature and severity of the provocation. For instance, there may be a gender preference for non-verbal responses with aggressive intent, given a minor (or perhaps a major) provocation by an opposite-sexed general other. This notion is somewhat supported by Harris (1974), who studied reactions of people standing in line to a man who cut in front of them. Women made more nonverbal gestures of annoyance, consisting mainly of glaring at the intruder. To fully appreciate and understand gender differences in aggression and response to various types of provocation, it seems that the modes of retaliatory behavior investigated should not be limited to physical and verbal aggression, but should also include "non-verbal" modes. In addition, the specific effects of provocation need to be investigated in terms of interactions, as it appears that individuals often engage in intervening cognitive, emotional, and behavioral responses before responding aggressively to a single provocation. Individuals may immediately interact with a provoker in what could be considered a non-aggressive manner and may choose an aggressive course of action as a result of their cognitive and emotional response to the immediate interaction. Whether or not an individual continues to interact in an anger-provoking manner following an initial provocation, often

determines the course of action the target of that provocation selects as most appropriate.

This discussion of interactional processes and cognitive and emotional intervening variables leads to the question of the relationship between the two dependent variables. Anger is regarded in aggressive drive theory as a behavior-specific drive state that motivates or "mediates" aggressive counterresponding (Geen, 1976). Given a provocation, then, retaliatory physical or verbal aggression would be more likely to occur in those instances where the emotion of anger is highly aroused. In applying this relationship to the two dependent variables, verbal aggression would be considered as justified more frequently when the degree of anger arousal was high. If anger does indeed mediate the justification of verbal aggression, it would be expected that the patterns of significance would be similar for the two dependent variables. For each variance component where the anger arousal variable was significant, the justification of aggression variable would also be significant. However, this does not appear to be the situation which occurred in the present study. Rather verbal aggression occasionally seems to be justified independently of the degree of anger arousal. The relationship between the mediating variable anger and verbal aggression may be more complex than that suggested by aggressive drive theory. Social learning theory (Bandura, 1973), for example, hypothesizes that provocation generates a state of increased general arousal which may not be response specific, but instead may activate behaviors other than aggression. There may be additional mediating emotional and cognitive variables which are involved in an individual's reaction to provocation.

In terms of emotional variables, if an individual experiences anxiety or guilt along with the arousal of anger, aggression may likely not occur. Alston (1971) sees the "anticipation of guilt" and the desire to avoid it as playing a major and perhaps an essential role in the transition from thought to action. Some authors (Frodi et al., 1977; Maccoby and Jacklin, 1974) have suggested that the arousal of aggression anxiety or guilt accounts for gender differences in aggression, indicating that such mediating emotional states may be aroused more frequently in females. Subjects' responses to the survey utilized along with the current experimental study included statements indicating that feelings of "hurt" and "rejection" often accompany and sometimes dominate feelings of anger. Responses to provocation in these instances were sometimes characterized by retaliatory guilt induction or withdrawal from the relationship. Other responses were of an information-seeking nature, where the individual experiencing rejection and anger first addressed the feelings of rejection and then, based on the information received, decided whether or not to respond aggressively.

This reference to decision-making in aggressive counterresponding underscores the mediating effects of cognitive processes. Berkowitz, Lepinski, and Angula (1968) reported that moderately angry male subjects displayed the strongest aggression in response to provocation, while highly angry male subjects displayed restraint, presumably because they assessed their strong anger as inappropriate. This cognitive mediation of aggressive counterresponding is also noted by Taylor and Epstein (1967), who found that aggressive females experienced limited retaliatory aggression from both males and females. In

their opinion this did not reflect an absence of anger but rather a cognitive control of aggressive behavior in that statements of anger were spontaneously expressed by both males and females when aggressive females were encountered but were seldom followed by corresponding behavior. Statements by subjects in the current survey revealed similar cognitive mechanisms as they frequently acknowledged highly angry states while regarding responses of verbal aggression as inappropriate and unjustified. It is interesting that when subjects were asked to elaborate the reasons for their responses to particular items from the questionnaire, they occasionally viewed verbal aggression as inappropriate because the setting involved an audience and public displays of anger and aggression are socially prohibited. Berkowitz (1962, p. 102) postulate that "aggressive behavior is often inhibited when the individual believes such behavior will incur disapproval, particularly if the others who would disapprove are highly attractive to him." Other subjects stated that, although they might be very angered by a given provocation, they did not believe that retaliatory verbal aggression was "worth it," alluding to the potential cost and consequences of such actions. Berkowitz (1974) stated that individuals know that they risk injury or punishment from others (or even from themselves) and that rewards become increasingly important as the costs of aggression become greater. He also believed that the "evaluation apprehension" of a provoker's pain and defeat could restrain the extent to which individuals sought retaliation for the harm another had done to them. Thus, it appears that individuals do engage in mediating cognitive processes in which they decide whether or not some form of retaliation is justified. This supports the purposes of the present study as it

is evident from the subject statements that the situation comprising the questionnaire evoked cognitive and emotional processes associated with the justification of aggression. In addition, the association between these various processes and justification of aggression appears congruent with Fraczek's (1979) proposition of a multifaceted determinant of aggressive behavior. He believes that the psychological mechanisms of such behavior cannot be limited to one simple unidimensional process, and also that such behavior is the result of the interaction of the individual characteristics with features of the situation.

Fraczek's mention of individual characteristics is highlighted by the finding in the current study that within a particular gender there were extremely significant individual differences in respect to both dependent variables. This suggests that in future research there is potential merit in systematically investigating various subject variables in addition to gender. Young et al. (1975) found that men who presumably believed that women should not be aggressive increased their aggression toward a woman when she behaved aggressively toward them. Likewise, Taylor and Smith (1974) reported that men with traditional attitudes toward women were more aggressive toward women, both before and after a female partner had increased her aggressiveness. It appears that subjects' gender role expectations, in interaction with the behavior encountered, may play a significant part in determining male and female aggressiveness. Additional subject variables are suggested by Rule and Nesdale (1976), who believe that an assessment of effects of such personality characteristics as authoritarianism, dogmatism, and cognitive complexity would prove fruitful. They also pose

the question as to whether age influences attitudes toward aggression. Dailey (1981) found that junior high students were more willing to justify aggression across a variety of circumstances than were college students. It is important to consider the confounding of age and educational level in interpreting these results. Differences between groups may be accounted for by either education or age alone (Jurkovic and Prentice, 1977; Kahn, 1972; Hornstein, 1973; Bandura, 1973; Rest et al., 1978). Subject variables other than gender may thus be more appropriate for drawing out the effects of situational variables such as those used in the current study (i.e., type of provocation and gender of aggressor).

In summary, the results of this study appear to support the conclusion that males and females do not differ in their willingness to justify a verbally aggressive response. However, males indicated a tendency toward greater likelihood of retaliation with slightly higher justification scores than females. Although gender of aggressor and type of provocation seem to be relevant to the dependent variable studied, additional subject variables other than gender need to be systematically incorporated to elicit the effects of such situational variables. Other situational variables such as age of aggressor and relationship between aggressor and target also warrant study. While verbal aggression was operationally defined to investigate more subtle gender differences than those evident in studies of physical aggression, future research should also include nonverbal modes of aggression and should attempt to determine those variables involved in individual decisions regarding mode of aggression response chosen for retaliation to a given provocation.

Males and females in the present study appeared to be similar regarding the likelihood of showing anger responses to provoking situations, although females exhibited slightly higher anger scores than males. Additional emotional responses may be aroused by such situations, and gender differences may exist in terms of these other feelings states.

It appears from the results of this study that the arousal of anger does not necessarily mediate an individual's willingness to sanction verbal aggression. Rather, there appears to be a number of intermediate emotional and cognitive processes which might be involved in the decision to retaliate and justify retaliation.

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APPENDIXES

APPENDIX A

CATEGORIES OF ITEMS

Categories of Provocative Items
Aggressor

| Type of Provocation | Male | Female |
|---------------------|---|---|
| Insensitivity | One of your male friends ignores you while he's with a group of his friends (23). | A woman with whom you've scheduled an important meeting keeps you waiting a long time (3). |
| | A man in your neighborhood always makes a lot of noise late at night when you're trying to sleep (17). | A friend borrows something expensive from you and when she returns it, mentions that she has broken it but leaves without offering to pay for repairs (13). |
| | A guy you're supposed to meet with on an important project doesn't show up and doesn't call (6). | A girl friend shares a secret with others that you told her in strict confidence (29). |
| | A young man continues to interrupt your conversation after you've politely stated "let me finish" (19). | A girl you're speaking with does most of the talking but doesn't pay attention to what you're saying (21). |
| Lack of Efficiency | When you go to pick up your car, the man who is fixing it tells you it will take a few days longer than he promised (31). | The woman cutting your hair becomes involved in a conversation and, because she is not paying attention, does a bad job (12). |
| | The waiter at your favorite restaurant brings your order late and it is not what you wanted because he did not pay attention to what you had said (26). | A girl friend borrows your car and has an accident because she was not careful (9). |
| | You and a fellow student must finish an assignment on time and, because he does not do his share, you must do extra work to meet the deadline (2). | You leave an important message with the secretary and she fails to deliver it, causing you a lot of problems (15). |

| Type of Provocation | Male | Female |
|----------------------------|--|--|
| Lack of Efficiency (cont.) | An older man causes you to have a minor accident because of his careless driving (4). | You are in a hurry and the checkout line delays you first by sending the clerk for an item she forgot and then being unable to find her wallet (15). |
| Condescending Attitude | <p>A guy you know always insists on doing things his way as if your suggestions were inferior to his (22).</p> <p>The guy you're with acts like he's better than you (1).</p> <p>After you carefully state your opinion in class, a guy snickers at you (5).</p> <p>The guy you're talking to constantly tries to put you down (25).</p> | <p>A girl you've passed on the sidewalk in your neighborhood never speaks to you and acts like you're not worth her time (11).</p> <p>One of the girls in your class listens to your ideas in a way that suggests she believes you are not smart enough to say something worthwhile (20).</p> <p>A young woman at a party seems to have the opinion that the career she has chosen is far superior to the one you have chosen (27).</p> <p>An expensively dressed woman looks disgustingly at you as you pass her when you're wearing old work clothes (14).</p> |
| Verbal Insult | <p>A male friend always makes fun of the way you dress (16).</p> <p>A guy you know jokes about one of your physical characteristics that you are very sensitive about (30).</p> <p>A man in a restaurant insults you (32).</p> | <p>A woman at a party ridicules your appearance (8).</p> <p>A girl in your class says bad things about you (24).</p> <p>A girl you've seen before pokes fun at your attempt to learn something new.</p> <p>A girl you know tries to fight with you by calling you names (18).</p> |

| Type of Provocation | Male | Female |
|--------------------------|--|--|
| Verbal Insult (cont.) | A guy you grew up with humiliates you by telling an embarrassing personal incident (10). | A girl you know tries to fight with you by calling you names (18). |

APPENDIX B

QUESTIONNAIRE

AGE _____ FRESHMAN _____ SOPHOMORE _____ JUNIOR _____ SENIOR _____

MALE _____ FEMALE _____ SINGLE _____ MARRIED _____ DIVORCED _____

Listed on the next few pages are a variety of situations in which people may feel they have a right to yell at, insult, or hurt the feelings of another person. After each situation, there are two groups of statements you could make about each situation. In each group, I want you to circle the one statement that most closely represents how you would feel if you were in that situation.

In the first group of statements, I want to know whether you would feel you have the right to yell at, insult, or hurt the feelings of the person doing the action. I am not asking you if you would do these things, but only if you think you have the right to yell at, insult, or hurt the feelings of that person. Circle the number that represents how you would feel in that situation. Also, underline which one of the three actions--yell at, insult, or hurt the feelings--you feel you would have the right to take if you were in that situation.

In the second group of choices, I want to know how angry you would feel if you were in that situation. Circle the number that most closely represents how you would feel in that situation.

EXAMPLE: A girl lies to you about something important.

To yell at, insult, or
hurt her feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

It is important that you understand. Anyone who does not want to participate may withdraw at any time.

1. The guy you're with acts like he's better than you.

To yell at, insult, or
hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

2. You and a fellow student must finish an assignment on time and because he does not do his share, you must do extra work to meet the deadline.

To yell at, insult, or
hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

3. A woman with whom you've scheduled an important meeting keeps you waiting a long time.

To yell at, insult, or
hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

4. An older man causes you to have a minor car accident because of his careless driving.

To yell at, insult, or
hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

5. After you carefully state your opinion in class, a guy snickers at you.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

6. A guy you're supposed to meet with on an important project doesn't show and doesn't call.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

7. You leave an important message with the secretary and she fails to deliver it, causing you a lot of problems.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

8. A woman at a party ridicules your appearance.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

9. A girl friend borrows your car and has an accident because she was not careful.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

10. A guy you grew up with humiliates you by telling an embarrassing personal incident.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

11. A girl you've passed on the sidewalk in your neighborhood never speaks to you and acts like you're not worth her time.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

12. The woman cutting your hair becomes involved in a conversation and, because she is not paying attention, does a bad job.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

13. A friend borrows something expensive from you and, when she returns it, mentions that she has broken it but leaves without offering to pay for repairs.

To yell at, insult, or
hurt her feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

14. An expensively dressed woman looks disgustingly at you as you pass her when you are wearing your old work clothes.

To yell at, insult, or
hurt her feeling is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

15. You are in a hurry and the woman ahead of you in the checkout line delays you, first by sending the clerk for an item she forgot, and then being unable to find her wallet.

To yell at, insult, or
hurt her feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

16. A male friend always makes fun of the way you dress.

To yell at, insult, or
hurt his feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

17. A man in your neighborhood always makes a lot of noise late at night when you're trying to sleep.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

18. A girl you know tries to fight with you by calling you names.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

19. A young man continues to interrupt your conversation after you've politely stated "let me finish."

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

20. One of the girls in your class listens to your ideas in a way that suggests she believes you're not smart enough to say something worthwhile.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

21. A girl you're speaking with does most of the talking and doesn't pay attention to what you're saying.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

22. A guy you know always insists on doing things his way as if your suggestions were inferior to his.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

23. One of your male friends ignores you while he's with a group of his friends.

To yell at, insult, or hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

24. A girl in your class says bad things about you.

To yell at, insult, or hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

25. The guy you're talking to constantly tries to put you down.

To yell at, insult, or
hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

26. The waiter at your favorite restaurant brings your order late and it is not what you wanted because he did not pay attention to what you had said.

To yell at, insult, or
hurt his feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

27. A young woman at a party seems to have the opinion that the career she has chosen is far superior to the one you have chosen.

To yell at, insult, or
hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

28. A girl you've seen before pokes fun at your attempts to learn something new.

To yell at, insult, or
hurt her feelings is:

You would feel:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

29. A girl friend shares a secret with others that you told her in strict confidence.

To yell at, insult, or hurt her feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

30. A guy you know jokes about one of your physical characteristics that you are very sensitive about.

To yell at, insult, or hurt his feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

31. When you go to pick up your car, the man who is fixing it tells you it will take a few days longer than he had promised.

To yell at, insult, or hurt his feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

32. A man in a restaurant insults you.

To yell at, insult, or hurt his feelings is:

1. Not OK
2. Usually not OK
3. Sometimes OK
4. Usually OK
5. OK

You would feel:

1. Extremely angry
2. Very angry
3. Somewhat angry
4. Slightly angry
5. Not angry

APPENDIX C

DEBRIEFING STATEMENT

The questionnaire which you have just completed is part of the research which I am doing on people's judgments about potentially anger-provoking situations. I am especially interested in two judgments men and women might make about these types of situations: (1) whether they feel they have the right to yell at, insult, or hurt the feelings of the person provoking them; (2) how angry they would feel if they were in that situation. It was my guess that these two judgments by men and women could be influenced by at least two things in the situation: (1) is the person provoking you a guy or a girl? and (2) how does that guy or girl provoke you?

I chose four ways in which a person might provoke you. A person could: (1) be insensitive to you ("ignores you," "interrupts your conversation"), (2) not do something which you had expected to be done ("doesn't do his share," "doesn't fix your car on time"), (3) be condescending to you ("acts better than you," "tries to put you down"), (4) insults you ("jokes about one of your physical characteristics," "ridicules your appearance"). Thus, the situations which you read and responded to consisted of a male or a female behaving in one of the four ways listed above. The ratings (1-5) which you made on both judgments for each situation will be combined with the ratings of others into various groups of ratings to address such questions as:

1. Do males as a group feel justified more often when they are provoked by another male? Is this also true for females?
2. Are males as a group more angered when provoked by a female in a condescending way? Are females as a group more angered by another female who acts condescendingly?
3. Although females may find condescension from another female to be the most anger-provoking, is it necessarily true that they will then also justify aggression more often in that situation? Will this also be the case for males?

This last question deals with the relationship between anger and justification: Do people feel more justified in those situations they find most anger-provoking?--or--Are there situations that people find very anger-provoking but in which they feel they do not have the right to yell at, insult, or hurt the feelings of the person provoking them?

I hope this has given you some idea about what sorts of issues the results of this questionnaire can address. If you have any questions or any concerns, please ask me now or contact me at (918) 299-7375. (You may keep this page.)

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APPENDIX D

DEPENDENT VARIABLE ANOVA

A Description of the Dependent

Variable ANOVA

As briefly described in the Results Chapter, justification and anger scores were treated as two levels of an independent variable in the dependent variable ANOVA. This design served as a contrastive analysis relating the results, on an effect-by-effect basis, of the two univariate ANOVA's considered separately. Because each item evoked a response on both dependent variables, each cell of the JA design was mirrored by a cell in the AA design. Thus, each main effect or interaction in one design occurs in the other design. The DV-ANOVA treats the dependent variables as two levels of a fixed-effects factor (D) which has been orthogonally combined with the entire experimental design. Accordingly, the results of this ANOVA contain two effects for each effect of the univariate design. For example, for the Type main effect present in both of the univariate ANOVA's, the DV-ANOVA finds two effects: a type main effect and a D by type interaction. As the type main effect here represents the effect of summing across the two dependent variables, each of which has been investigated in its own analysis, it will be of little interest. The D by type effect, however, is precisely the sort of contrastive effect desired from this bivariate ANOVA. Namely, it allows us to determine whether the type effects (significant or not) from the two univariate ANOVA's are parallel or not. Since each effect (E) of the univariate designs appears in the DV-ANOVA as a D by E interaction, similar tests for the covariation of the dependent variables can be made across each of the effects common to both univariate designs.

2
VITA

Mark Anthony Sperle

Candidate for the Degree of

Doctor of Philosophy

Thesis: AN INVESTIGATION OF ATTITUDES TOWARD AGGRESSION AND AROUSAL OF ANGER AS A FUNCTION OF GENDER OF SUBJECT, GENDER OF AGGRESSOR, AND TYPE OF PROVOCATION

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