

THE RELATIONSHIP OF VIOLATIONS OF RECEIVER EXPECTATIONS
AND RESISTANCE TO PERSUASION

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This investigation extended the development of a new model of resistance to persuasion. The model views the induction of resistance to persuasion an extension of the persuasion process. Support was found for the prediction that violations of induced receiver expectations are mediators of resistance to subsequent persuasive attacks. Positive violations of receiver expectations induce counterarguing which will lead people to be resistant to a second persuasive message advocating the same side of a given attitudinal issue. Negative violations of receiver expectations decrease the probability of counterarguing and increase the vulnerability of people to subsequent persuasive attacks. Competing explanations for the results were ruled out through the utilization of a counterbalanced design and stringent control procedures.

CHAPTER I RATIONALE

Of the research on resistance to persuasion, perhaps the most consistently tested and supported hypotheses have been generated by McGuire's (1964, 1969) inoculation model. McGuire bases the framework of the model on a biological analogy:

. . . the person is typically made resistant to some attacking virus by pre-exposure to a weakened dose of the virus. This mild dose stimulates his defenses so that he will be better able to overcome any massive viral attack to which he is later exposed . . .
(1964, p. 163)

McGuire suggests that analogous defensive techniques operate in persuasive situations. Thus the primary emphasis of inoculation research, and resistance to persuasion research in general, has centered on preexposing subjects to weakened forms of persuasive messages. This preexposure, or "inoculation," is operationalized through the use of refutational messages which both introduce and refute arguments against the subject's attitude that is to be made resistant.

A relatively large body of research has indicated that various pretreatment strategies are effective in inducing resistance to persuasion. However, Burgoon, Cohen, Montgomery and Miller (1978) have pointed out that this rather singular emphasis on inoculation theory and pretreatment message strategies has counterproductively restricted theory development in the area of resistance to persuasion.

Rather than viewing the induction of resistance to persuasion as distinct from the persuasion process, Miller and Burgoon (1973) suggest that the conferral of resistance to persuasion should be conceptualized as an extension of the persuasion process. Burgoon et al. (1978) indicate that such a conceptualization would allow for a better integration of findings in the persuasion literature with our present knowledge of the resistance to persuasion process, as well as allowing more conceptual specificity.

Threat and Counterarguing

As indicated above, continued singular interest in testing hypotheses directly drawn from the inoculation model may be less than productive. However, the inoculation framework does advance several theoretical notions which may be of heuristic value. One of the more intriguing is the importance of threat to an individual's attitudes in the conferral of resistance to persuasion.

The inoculation model assumes that threat is a necessary antecedent to resistance to persuasion. It is presumed that any pretreatment designed to make an individual's attitude resistant to subsequent persuasive attacks must motivate the individual to defend that attitude. This motivation to defend is supplied by exposing the vulnerability of the attitude through the use of refutational pretreatments. Refutational pretreatments are assumed to be intrinsically threatening. However, supportive pretreatments (messages which further support or bolster the individual's existing attitudes) are assumed to be inherently nonthreatening. This leads to the inoculation model prediction that refutational defenses lead to greater resistance than do supportive defenses (McGuire, 1964).

Since the inoculation model assumes the relative ineffectiveness of supportive pretreatments is due to the lack of threat implied by the message, it follows that an extrinsic threat to the attitude combined with supportive information should increase the efficacy of the pretreatment. Research (McGuire and Papageorgis, 1962) has supported this reasoning.

Support for the importance of attitudinal threat has also been found in numerous other studies. Tannenbaum (1967) points out that one of the most impressive predictions of inoculation theory is that the refutation of one set of arguments against a belief or attitude generalizes to induce resistance to attack messages composed of novel arguments (McGuire, 1961; Papageorgis and McGuire, 1961). The support of this prediction is especially relevant to the assumed threat-motivation-resistance relationship since the alternative explanation that the superiority of the refutational pretreatment is a function of remembering the rebuttals of the arguments is ruled out. McGuire (1963) predicted and obtained results indicating that the addition of an extrinsic threat increased the resistance-inducing effectiveness of the pretreatments. Additionally, the effectiveness of the supportive strategy was enhanced more than that of the refutational strategies. In direct tests of the relationship between threat and resistance to persuasion, Burgoon et al. (1976) and Miller and Burgoon (1977) have found that threat is a predictor of resistance. Moreover, their results indicate a curvilinear relationship such that moderate threat leads to greater resistance than either low or high threat.

Taken together, the empirical evidence strongly supports the notion that threat to an individual's attitude leads to a motivation

to defend that attitude which, in turn, leads to increased resistance to persuasion. Of major theoretic importance, then, are the defense mechanisms through which the increase in motivation is manifested.

Festinger and Maccoby (1964) and Osterhouse and Brock (1970) have emphasized that when exposed to persuasive attacks, individuals actively subvocalize counterarguments against the position advocated. This subvocalization of counterarguments is presumed to create resistance to the persuasive information the individual is being exposed to. It seems reasonable, then, that the effectiveness of the threat component of certain pretreatments is a function of increased counterarguing stimulated by the awareness that the individual's attitudes are vulnerable to attack.

The interest in counterarguing as a mediator of attitude change has led to lines of research focusing on the effects of inhibiting counterarguing, primarily through the presentation of some form of distraction concurrent with the persuasive attack message. Festinger and Maccoby (1964) hypothesized that since counterarguing creates resistance to persuasion, any form of distraction which interferes with that process will lead to increased acceptance of persuasive attempts. However, McGuire (1966) and others (Freedman and Sears, 1965; Haaland and Venkatesan, 1968) have pointed out that the hypothesis that distraction should lead to increased acceptance of counterattitudinal information is directly opposed to predictions derived from a learning theory approach. The learning theory approach suggests that distractions should interfere with the learning of the persuasive information. This failure to adequately learn the persuasive arguments should lead to an inhibition of the attitude change process.

Research concerned with these alternative theoretic explanations has produced mixed results. Festinger and Maccoby (1964) supported their hypothesis that distraction should facilitate attitude change. Viewing of a humorous, irrelevant film served as the distraction. Rosenblatt (1966) used irrelevant slides as a distraction and also found support for the distraction-increased acceptance hypothesis. Freedman and Sears' (1965) results indicated a trend in the direction of the distraction-increased acceptance hypothesis, but failed to reach statistical significance. Osterhouse and Brock (1970) report two studies, both indicating that counterargument production is inhibited and communication acceptance is enhanced by distraction.

However, other studies have found an inverse relationship between distraction and communication acceptance. Haaland and Venkatesen (1968) found that the use of both irrelevant film presentations and answering multiple choice and semantic differential items as distractors decreased attitude change. Vohs and Garrett (1968) also used two different types of distractions (operations upon geometric shapes and solving simple arithmetic problems) and found the inverse relationship between distraction and attitude change. Still other studies have failed to find any relationship between distraction and attitude change (Breitrose, 1966; Gardner, 1966).

Several studies have investigated the interactive effects of distraction and other variables upon attitude change. Kiesler and Mathog (1968) found that the direct relationship between distraction and communication acceptance held only when the source of the communication was highly credible. They interpret this finding as being in keeping with the distraction-increased acceptance hypothesis,

reasoning that if the speaker is low on credibility the need to counterargue is diminished. The receiver can resist the persuasive message by simply derogating the source of the persuasive message.

Other research (Regan and Cheng, 1973) indicates that the structure of the persuasive attack message interacts with distraction. When presented with a complex message, subjects in distraction conditions changed their attitudes less than nondistracted subjects. However, when the message was simple to comprehend, distracted subjects exhibited more attitude change than did nondistracted subjects.

Although a great deal of research has indicated that various types of distractions mediate attitude change in similar ways (see Baron, Baron and Miller, 1973, for a review), the type of distraction employed does seem to have an effect on the amount and direction of attitude change obtained. Zimbardo, Snyder, Thomas, Gold and Gurwitz (1970) found that "receiver set" mediated the effects of distraction. When subjects were instructed to attend primarily to distracting tasks, attitude change was decreased. However, when instructed to attend primarily to the message instead of the distraction, distraction increased attitude change. Using similar procedures and distraction tasks, these results were replicated by Insko, Turnbull and Yandell (1974).

In sum, it would seem that there is little doubt that a subvocal counterarguing process does exist and that this phenomenon mediates the attitude change process. Although the results from distraction studies have been mixed, Osterhouse and Brock (1970) and Baron, Baron and Miller (1973) have concluded that distraction during the presentation of an influence attempt increases the persuasive impact of that

message, unless the distraction is severe enough to interfere with the cognitive processes of comprehension and recall of the persuasive arguments. Thus it seems that the relationship between distraction and communication acceptance is curvilinear, a relationship incorporating and compatible with both the suppression of counterarguing hypothesis and with learning theory explanations.

However, it should be noted that none of the studies discussed above investigated the effects of distraction during an initial message on acceptance of subsequent persuasive messages on the same topic. Conversely, the traditional resistance to persuasion paradigm has been concerned with the effects of pretreatment messages on acceptance of subsequent persuasive attacks, but has virtually ignored the ability of individuals to adequately resist persuasive attacks through the subvocal generation of counterarguments. Indeed, while acknowledging the existence of the counterarguing process, most inoculation research seems to assume that without being provided specific defenses against persuasive attempts the individual will change his attitudes in the direction advocated.

Threat and Violations of Expectations

Another line of research that has been somewhat overlooked in the traditional resistance to persuasion literature concerns violations of receiver expectations of communicative behavior. The majority of findings that are discussed in the literature have consisted of post hoc explanations for unexpected results in traditional persuasion studies (Burgoon, Jones and Stewart, 1974).

In one of the earliest systematic investigations of the effects of language intensity (the degree to which a source's language

expresses deviation from neutrality toward a concept) on attitude change, Bowers (1963) predicted that highly intense language would produce more attitude change than language of low intensity. The results of the experiment, however, indicated a significant difference opposite the direction predicted. That is, low intensity messages produced more attitude change than did high intensity messages. One explanation for the results is that the highly loaded statements (comparing a type of educational system to prostitution, calling American women "deranged," etc.) constituted a very severe negative violation of the receivers' expectations of the communication behavior of the source. This violation may have led to a "boomerang" effect on attitude change.

Brooks and Scheidel (1968) unexpectedly found that an initially unfavorably evaluated source was evaluated more positively after he delivered a short prayer. Concern over whether this finding was generalizable, or simply an artifact of the research, led Brooks (1970) to conduct a more systematic investigation into the phenomenon. His results indicated that the phenomenon is indeed generalizable. Specifically, his research indicated that after exposure to a short message, sources who were previously evaluated unfavorably were evaluated more positively; and sources who were initially evaluated favorably were evaluated more negatively. Brooks advanced a post hoc explanation of the results concerning possible "contrast effects" which may have been produced by violations of receivers' expectations:

. . . unfavorable (or favorable) speakers may be perceived more (or less) favorably not because their behavior is intrinsically persuasive (or dissuasive) but because it contrasts with stereotyped expectations which audiences hold for notorious (or popular) public figures. (1970, p. 155)

In a related study, Burgoon (1970) preceded the presentation of a moderate message on race relations with the introduction of a "name set." Although the message was not attributed to the name mentioned in the name set manipulation, it was predicted that response sets introduced through the evaluation of "militant" names would lead to the perception that the message was more militant than would response sets introduced through the evaluation of "nonmilitant" names. Contrary to the prediction, whites who were given the nonmilitant set judged the message to be more militant than did those who received the militant set. Burgoon (1970) suggested that since the white subjects reacted very unfavorably toward the militant names, that the moderation of the subsequent message introduced a contrast effect. Burgoon also echoes Brooks (1970) by concluding that the reactions of individuals to speakers may often be a function of the speaker's communication behavior contrasting with stereotyped expectations.

One study has attempted to integrate the violations of expectations notion into the traditional resistance to persuasion paradigm. Burgoon and Chase (1973) reasoned that exposure to refutational pretreatments creates expectations about future messages which may be used in influence attempts. They suggested that the most effective refutational strategy would be one that matches the intensity of the persuasive attack message. This strategy would avoid the contrast effect that might lead to more attitude change when a highly intense pretreatment message is followed by a message of moderate or low intensity and would also avoid the possibility of a low intensity pretreatment failing to threaten the subjects enough to motivate them to defend their attitudes. Their results support their reasoning.

Although most of the above studies discussed their findings on a post hoc basis, Burgoon, Jones and Stewart (1974) have attempted to integrate the violations of expectations notion into a limited propositional framework. Based on the research reviewed above they advance two propositions concerning violations of expectations, language intensity and attitude change:

Given the passive message reception condition, when a source uses a level of language intensity that violates the receiver's expectations in a positive manner, significant attitude change will occur in the direction advocated by the source.

Given the passive message reception condition, when a source takes an unexpectedly intense position, it will result in minimal or even negative attitude change. (Burgoon, Jones and Stewart, p. 243)

In the first study designed to test this reasoning, an interaction hypothesis was advanced such that female sources would be more effective utilizing low intensity language, while male sources would be least effective with low intensity language. Burgoon, Jones and Stewart (1974) assumed that the stereotype of females in this society involves such impressions as "submissive," "complimentary" and "domestic." Based on the propositions discussed above, it was reasoned that highly intense language would violate the receiver's expectations of the communicative behavior of a female in a negative manner, thus leading to reduced attitude change.

The second study hypothesized that low credible speakers would be more persuasive using low intensity language, while high credible speakers would be more effective utilizing highly intense language. This hypothesis received partial support.

Taken together, the research discussed above and the propositional framework advanced by Burgoon et al. (1974) strongly support the notion that violations of receiver expectations are an important mediator of the attitude change process. In addition, the research of Burgoon and Chase (1973) has emphasized the importance of receiver expectations in the traditional resistance to persuasion paradigm.

A New Model of Resistance to Persuasion

As indicated above, most research on resistance to persuasion has maintained consistency with the inoculation approach and has dealt almost exclusively with the development of pretreatment message strategies designed to lessen the impact of a future persuasive message. Although the inoculation model has served a valuable and informative function, there is a limit to the heuristic capacity of any analogy. Indeed, it has been argued that the continued singular interest in the inoculation model has restricted rather than enhanced our knowledge of the resistance to persuasion process.

Burgoon et al. (1978) have developed a new model of resistance to persuasion that attempts to expand the restricted view of the inoculation approach. While retaining the notion of attitudinal threat as an important variable, they suggest that for conceptual reasons it is best to view the resistance to persuasion process as an extension of the persuasion process. Conceptually, this type of approach allows for the integration of existing knowledge of persuasion into our theorizing and research on resistance to persuasion.

This model attempts to integrate our current knowledge of the effects of distraction and receiver expectations with McGuire's notions on the importance of threat in the resistance to persuasion

process. They suggest that receiver expectations and attitudinal threat can be affected by directing the attention of receivers to different types of distracting tasks during the presentation of persuasive message. Differential types of critical tasks are assumed to induce differing critical response sets (or receiver expectations) which, in turn, are related to the amount of counterargumentation produced during and subsequent to the presentation of an initial persuasive message. This differential in counterargumentation is assumed to enhance or inhibit attitude change produced by subsequent persuasive messages.

More specifically, this model suggests that when people are asked to critically evaluate attributes of a communicator and are to look for negative source and/or delivery characteristics, they should be vulnerable to subsequent persuasive attacks. Burgoon et al. (1978) argue that several factors combine to produce this effect. The evaluation of negative speaker characteristics should inhibit the persuasive effectiveness of the message and should minimize threat to the receiver. In addition, the attention to source characteristics should distract the person from counterarguing crucial arguments in the persuasive message. Thus after the reception of one persuasive message, the receiver will be unpracticed in defending his or her attitudes and, because of the lack of attitudinal threat, unmotivated to counterargue in the future. This should result in increased vulnerability to a second persuasive attack.

Conversely, attention to positive source characteristics should enhance the effectiveness of an initial persuasive message. Also, threat to the receiver should be increased since his or her attitudes

have been shown to be vulnerable. The increase in motivation induced by the attitudinal threat results in increased counterargumentation which should shift attitudes back toward the initial negative position after receipt of a second message. Research has supported both of these predictions.

Although their initial research incorporated notions of receiver expectations, Burgoon et al. (1978) do not explicitly deal with the importance of confirmation or disconfirmation of these expectations. They assume that the expectations themselves affect the amount of threat to the receiver. Although their research seems to support this view, it can be argued that an equally important factor is whether these receiver expectations are confirmed or, if disconfirmed, what form of disconfirmation is involved. As previous research (Bowers, 1963; Brooks, 1970; Brooks and Scheidel, 1968; Burgoon, 1970; Burgoon and Chase, 1973; Burgoon, Jones and Stewart, 1974) indicates, violations of receiver expectations lead to powerful effects on message reception and attitude change.

Consistency between the previous research and the propositional framework advanced by Burgoon et al. (1974) demonstrates that when a source violates a receiver's expectations in a positive manner, the effect of an initial message should be enhanced. Similarly, when a source violates receiver expectations in a negative manner, the effect of an initial message is inhibited. It would seem valuable to integrate this knowledge with the new model of resistance to persuasion developed by Burgoon et al. (1978).

It can be argued that when an individual is asked to evaluate the highly intense characteristics of a counterattitudinal message, and the

message consists entirely of low intensity language, that the individual's expectations are violated in a positive manner. This reasoning is consistent with the theorizing and research of Burgoon, Jones and Stewart (1974). As indicated above, this type of positive violation should lead to a contrast effect which should enhance attitude change after the receipt of this first message. However, the realization that persuasive arguments counter to one's beliefs can be advanced in a reasonable, moderate manner should threaten the individual and increase the motivation to counterargue in the future. Thus upon exposure to a second persuasive message on the same attitudinal issue, attitude change should be inhibited, or even reversed.

Similarly, when an individual is asked to evaluate the low intense statements of a counterattitudinal message, and the message consists entirely of highly intense statements, the individual's expectations are violated in a negative manner. This negative violation should prove distracting and should also inhibit the counterargumentation process. However, reasoning analogous to that of Kiesler and Mathog (1968) indicates that in this type of situation, the need to counterargue is reduced. Persuasive information can be resisted through derogation of the source or of the message style without the need to systematically counter each argument. This ability to resist without counterargumentation should decrease threat to the individual and reduce the motivation to counterargue in the future, thus leading to increased vulnerability to subsequent persuasive message on the same attitudinal topic.

It is evident that this line of reasoning is consistent with the prior research on violations of receiver expectations and is also

compatible with the model of resistance to persuasion advanced by Burgoon et al. (1978). It maintains consistency with their view that any message may affect the persuasive efficacy of a subsequent persuasive attack. By suggesting that a critical variable in this process is the confirmation or disconfirmation of the expectations developed by the induced response sets, the reasoning advanced above also extends their assumption that the induction of critical response sets may either inhibit or enhance the effect of forthcoming messages.

Derivation of the Hypotheses

The model of resistance to persuasion advanced by Burgoon et al. (1978) provides a synthesis of research illustrating the relationship of threat, distraction, counterargumentation and critical response sets to resistance to persuasion. It can be argued that the confirmation or disconfirmation of these critical response sets are of overriding importance in this view of resistance to persuasion. Positive violations of receiver expectations create a contrast effect leading to an enhancement of attitude change attributable to a first persuasive message. This enhancement effect points out the vulnerability of the receiver's attitudes, thus threatening him and motivating him to counterargue in the future. The increased counterargumentation will lead to a reversal of attitude change upon exposure to a second persuasive message on the same attitudinal topic. This reasoning leads to the first hypothesis:

H_1 : People who are initially induced to expect highly intense messages of a counterattitudinal nature, but who receive low intensity messages, will be initially more positive toward the attitude issue.

Upon receipt of a second attack message, however, these individuals will revert to being more negative.

In an analogous manner, when an individual's expectations are violated in a negative manner, the effect of a first persuasive message will be inhibited. However, the individual will not feel threat to his attitudes and thus will not be motivated to counter-argue in the future. Upon receipt of a second persuasive message on the same topic the individual will not be adequately prepared to defend his attitudes. This will result in attitude change in the direction advocated by the persuasive message.

H₂: People who are initially induced to expect low intensity messages, but who receive highly intense messages, will be initially more negative toward the attitudinal issue, but will demonstrate attitude change in the direction advocated by a second persuasive attack.

Both Hypothesis 1 and Hypothesis 2 deal with violations (or disconfirmations) of receiver expectations of the communication behavior of a source. Although no specific predictions will be formalized, it is important to note that the rationale advanced by this investigation assumes differences in the outcomes produced by disconfirmations and confirmations of receiver expectations.

Based on the reasoning and prior research of Burgoon et al. (1978), a second set of hypotheses may be advanced. Exposure to a first persuasive message should be perceived as more threatening than a subsequent message received after time has been allowed to prepare defenses. Individuals should indicate more confidence in their

decisions after exposure to two messages since they will have prepared defenses and already have changed or maintained their attitudes. The second attack message should be perceived as more expected than the first persuasive attack since subjects will have already seen the same attitudinal position advocated in the prior communication.

H₃: There will be a main effect for perceived threat with threat decreasing after receipt of a second persuasive message.

H₄: People will express more confidence in their attitudes toward the message topic after receipt of the second message.

H₅: Even though both messages argue the same side of an attitude issue, people will find the position advocated in the second message as more expected.

The rationale leading to the first two hypotheses assumes that attitudinal threat induced by exposure to a first persuasive message will motivate people to counterargue against future persuasive attacks. This assumption suggests that threat produced by exposure to a first persuasive message should be negatively related to attitude scores after a second persuasive message. This reasoning leads to a final hypothesis:

H₆: There will be a significant negative relationship between attitudinal threat after exposure to a first persuasive attack and attitudes toward the issue after receipt of a second persuasive attack.

Previous research (Burgoon et al., 1978) has indicated that violations of expected language usage may lead to differing perceptions

of communicator credibility. As they indicate, however, there is no theoretical base upon which to base exact predictions. Thus the following research questions are advanced:

- Q₁: To what extent will confirmations and disconfirmations of expected message intensity affect receiver perceptions of a source's competence, composure, character, sociability and extroversion?
- Q₂: To what extent will confirmations and disconfirmations of response sets induced prior to a first persuasive attack affect perceptions of competence, composure, character, sociability and extroversion of a source delivering a second persuasive message on the same attitudinal topic?

CHAPTER II METHODS

Design of the Experiment

Subjects were 219 undergraduate students enrolled in basic communication courses at the University of Wyoming. Subjects were randomly assigned to eight control groups (n=144) and four experimental groups (n=75). Each subject in the experimental conditions read two persuasive messages advocating the acceptance of a counterattitudinal position. Each message argued for the acceptance of the position on the basis of a different set of issues. Before presentation of the first message, experimental subjects were randomly assigned to one of two expectancy sets. One set induced the subject to evaluate the low intensity statements in the persuasive message, while the other induced the subject to focus on the highly intense statements of the message. Subsequently, each experimental subject was randomly exposed to either a high or low intensity persuasive message. At a later experimental session, subjects were exposed to a moderately intense second persuasive message advocating the same counterattitudinal position. No expectancy sets were experimentally induced prior to the presentation of the second message. Message order effects were controlled by randomly varying the order of message topic presentation within each experimental group and within the two message control groups.

Adequate tests of the hypotheses mandated the use of several control groups in the experiment. Prior to the presentation of a

low intense persuasive message, one control group received instructions to focus on both the high and low intensity language of the message. This control received a second message (moderate intensity) at a subsequent experimental session. A second control group received identical instructions and followed identical procedures, with the exception that the first experimental message they received was highly intense. The third control group received no expectancy set, but was presented with a low intensity message followed at a later experimental session by a moderate intensity message. Similarly, a fourth control group received no expectancy instructions, but was presented with a highly intense message followed by a moderately intense message at the second experimental session. The fifth control group received no expectancy instructions and received only one message (highly intense). The sixth control group also received only one message (low intensity) and received no instructions designed to introduce an expectancy set. The seventh control group received only one message (moderate intensity) and received no instructions to induce an expectancy set. The final control group received only a pretest and a posttest on their attitudes toward the experimental topic.

The utilization of the offset control group follows a recent trend in the research on resistance to persuasion. Burgoon and King (1974) have pointed out two distinct advantages of this design. First, it allows the determination of pretest attitudes from a random sample of the subjects. Secondly, and of critical importance to research on resistance to persuasion, it circumvents the problem of pretest sensitization encountered in change score designs. Since the pretest itself may induce resistance to persuasion, this design was crucial to the investigation. Table 1 illustrates the design.

TABLE 1

Design of the Experiment

<u>Group</u>	<u>Expectancy</u>	<u>Message at Time 1</u>	<u>Message Intensity at Time 1</u>	<u>Message at Time 2</u>
1. Pretest-Posttest Control	None	No	---	No
2. One Message Control I*	None	Yes	Low	No
3. One Message Control II	None	Yes	Moderate	No
4. One Message Control III	None	Yes	High	No
5. Two Message Control I	None	Yes	Low	Yes
6. Two Message Control II	None	Yes	High	Yes
7. Distraction Control I	Both Low and High	Yes	Low	Yes
8. Distraction Control II	Both Low and High	Yes	High	Yes
9. Experimental I	Low	Yes	Low	Yes
10. Experimental II	Low	Yes	High	Yes
11. Experimental III	High	Yes	Low	Yes
12. Experimental IV	High	Yes	High	Yes

*Even though this control group received one message, both experimental message topics are represented in this sample since subjects within each experimental and control group were randomly assigned to one of two message order conditions. Thus all cells are counterbalanced for message order effects.

Message Construction

The experimental messages utilized in the Burgoon et al. (1978) study served as the basis for the experimental materials used in the present investigation. Burgoon et al. point out that a significant body of research has indicated that attitude change is mediated through message variables. Thus in that investigation, as well as in the present study, it was deemed critical that certain message variables be controlled and accounted for in the experimental messages. Failure to insure these controls could render the results of the investigations uninterpretable.

The two experimental messages developed for the Burgoon et al. (1978) study each consisted of four arguments supporting the legalization of heroin sales in the United States. One message argued on the basis of health-related issues; the other argued on the basis of crime-related issues. Since comprehension may be related to sentence length, the two messages were developed to contain approximately the same average sentence length. In addition, the messages were both shown to have an extremely high Index of Contingency (Becker, Bavelas and Braden; 1961), which is a sensitive index of comprehension. Research by Clark and Begun (1971) has indicated that subject-predicate compatibility results in more favorable evaluations of messages by receivers. Thus the messages used by Burgoon et al. (1978) used stringent subjective controls in matching the messages on abstractness, humanness and animation.

In addition, Burgoon et al. controlled for the effects of language intensity by constructing both messages to be moderately intense. Although part of this control was judgmental, some objective controls

were utilized. Highly intense metaphors (Bowers, 1964) were not used. Present tense verbs were preferred over future tense verbs (McEwen, 1969); intense levels of adverbial qualification (Burgoon and Miller, 1971) and obscure or infrequently used words (Bowers, 1964) were deleted.

The experimental messages of the Burgoon et al. study served as the moderate intensity messages in the present investigation. High intensity and low intensity versions of the messages were created by systematically varying the adverbial qualification within the messages and by varying the severity of negative outcomes associated with failure to accept the positions advocated by the messages (Burgoon et al., 1976; Miller and Burgoon, 1977). This procedure resulted in the development of six experimental messages: high, moderate and low intensity versions of both the health-related and crime-related messages.

The message variables controlled in the Burgoon et al. investigation were similarly accounted for in this experiment. Each message contained four arguments advocating the legalization of heroin sales in the United States. The high, moderate and low intensity versions of the crime-related message contained 593 total words (average sentence length = 22.81 words), 526 total words (A.S.L. = 20.23 words), and 585 total words (A.S.L. = 22.5 words), respectively. The high, moderate and low versions of the health-related message contained 637 total words (A.S.L. = 23.59 words), 615 total words (A.S.L. = 22.78 words) and 631 total words (A.S.L. = 23.37 words), respectively.

Experimental Procedures

Male experimenters were randomly assigned to administer treatments. Experimental packets were randomly distributed to subjects. The first page of the experimental packets contained written instructions assigning subjects to experimental and control conditions prior to exposure to the first experimental message. Experimental groups then read a message which utilized either health- or crime-related issues. Message issues were randomly assigned to groups of subjects. Subjects evaluated the intensity of statements in the messages by underlining phrases as they read. After reading the messages, each subject completed a four-item attitude measure consisting of seven-interval semantic differential-type scales bounded by the bipolar adjectives good-bad, foolish-wise, pleasant-unpleasant, and worthless-valuable. To test the research questions advanced by the study, each subject also responded to the measures of five dimensions of source credibility developed by McCroskey, Jensen and Todd (1972). In addition, perceptions of threat, confidence in the decision, and message expectancy were measured by three separate five-item scales consisting of seven-interval semantic differential-type items bounded by bipolar adjectives.

Experimental and control conditions receiving a second experimental message were tested two to three days after the initial experimental sessions. Subjects were instructed to read the messages carefully. No expectancy sets were introduced. After reading the messages, subjects again completed the attitude, source credibility, threat, confidence and expectancy measures. Control groups who received only one message completed a differing form of the attitude

measure at the second experimental session. The pretest-posttest control group filled out differing forms of the attitude measure at both experimental sessions.

CHAPTER III RESULTS

Tests of the Theoretic Hypotheses

Hypothesis 1 predicted that people induced to expect a highly intense counterattitudinal message would evidence relatively more positive attitudes toward the issue after exposure to a low intensity message. Upon receipt of a second counterattitudinal message, however, it was predicted that they would revert to a more negative attitude. The second hypothesis predicted that persons whose expectations were violated by receiving a high intense message when a low intense message was expected would be initially more negative toward the attitude issue but would demonstrate more positive attitudes upon receipt of a second persuasive attack.

A 2 (expectancy of high or low message intensity) \times 2 (receipt of high or low intensity message) \times 2 (time of measurement) repeated measures analysis of variance with time of measurement as the repeated variable was computed. The results of the analysis indicated significant main effects for message expectancy ($F = 9.41$, $df = 1/71$; $p < .05$), message intensity ($F = 4.27$, $df = 1/71$; $p < .05$), time of measurement ($F = 8.68$, $df = 1/71$; $p < .05$), and a significant expectancy by intensity interaction ($F = 15.28$, $df = 1/71$; $p < .05$). These effects were overridden by a significant expectancy by intensity by time of measurement interaction ($F = 7.63$, $df = 1/71$; $p < .05$).

Summaries of the cell means and the analysis of variance are presented in Table 2.

TABLE 2

Mean Attitude Scores and Analysis of Variance
Summary for the Experimental Groups

		<u>Time of Measurement</u>				
		<u>Time 1</u>		<u>Time 2</u>		
		<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>	
<u>Expected Intensity</u>	<u>High</u>	6.53* n=17	10.55 n=22	10.47 n=17	7.68 n=22	
	<u>Low</u>	8.68 n=19	13.18 n=17	11.73 n=19	15.06 n=17	
<u>Source of Variance</u>		<u>SS</u>	<u>Analysis of Variance Summary</u>			
			<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean		16308.03	1	16308.03	367.26	<.05
Expectancy		417.98	1	417.98	9.41	<.05
Intensity		189.47	1	189.47	4.27	<.05
EXP × INT		100.57	1	100.57	2.26	NSD
Subj. w. groups [error (between)]		3152.77	71	44.41		
Time		83.78	1	83.78	8.68	<.05
Time × EXP		34.49	1	34.49	3.57	NSD
Time × INT		147.41	1	147.41	16.28	<.05
Time × EXP × INT		73.58	1	73.58	7.63	<.05
Time × Subj w. groups [error (within)]		685.12	71	9.65		

*Range of attitude measure: 4 (opposed) to 28 (favorable)

A direct test of Hypothesis 1 was made by computing a correlated t-test between attitudes toward the issue at Time 1 and Time 2. People who expected a highly intense message, yet received a low intensity message, indicated significantly more negative attitudes toward the legalization of heroin after receipt of the second persuasive message advocating that policy (t = 11.94, df = 21; p < .05). The combined

results of the analysis of variance and the a priori comparison provide strong support for the first hypothesis.

The second hypothesis was also put to direct test by computing a correlated t-test between Time 1 and Time 2. The results indicated that those people expecting a low intense message, but receiving a high intense message, had significantly more positive attitudes after receipt of a second message (t = 11.74, df = 18; $p < .05$). The combined results of the analyses provide strong support for Hypothesis 2. The obtained three-way interaction and the pattern of the cell means also indicate that disconfirmation of receiver expectations produces different effects than do confirmations of receiver expectations.

Tests of the Supplemental Hypotheses

Hypotheses 3, 4 and 5 predicted main effects for time of measurement on the dependent variables of threat, confidence in the expressed attitudes and message expectancy. All groups who received induced expectancy sets and both persuasive messages were used in the computation of three separate $3 \times 2 \times 2$ repeated measures analyses of variance, with time of measurement as the repeated variable in each test. A summary of the cell means for each dependent variable is presented in Table 3.

Hypothesis 3 predicted that less perceived threat would be evidenced after the receipt of the second persuasive message. No significant effects were indicated by the analysis, however. The only effect to approach significance was the three-way interaction (F = 2.49, df = 2/94; $.05 < p < .10$).

As predicted by Hypothesis 4, people expressed increased confidence in their attitudes following the receipt of a second attack

TABLE 3
Mean Scores of Threat, Confidence and Expectancy

<u>THREAT</u>		<u>Time 1 Intensity</u>		<u>Time 2 Intensity</u>	
		<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
	<u>High</u>	22.88*	23.40	22.29	23.23
	<u>Low</u>	24.84	23.11	21.32	24.06
	<u>Both</u>	25.38	21.25	23.17	24.69

<u>CONFIDENCE</u>					
	<u>High</u>	27.24*	28.00	25.76	29.20
	<u>Low</u>	25.68	26.08	26.68	27.38
	<u>Both</u>	25.17	25.33	28.42	29.33

<u>EXPECTANCY</u>					
	<u>High</u>	21.12*	20.68	21.64	19.91
	<u>Low</u>	18.47	16.94	20.37	17.71
	<u>Both</u>	18.42	18.15	18.58	19.92

*Range of scores on each measure: 5 (Low) to 35 (High)

message ($F = 5.21$, $df = 1/90$; $p < .05$). Analysis of variance summaries for the dependent variables threat and confidence are presented in Table 4.

TABLE 4

Analysis of Variance Summary for the Dependent
Variables Threat and Confidence

THREAT

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	103990.00	1	103990.00	1621.59	<.05
Expectancy	14.20	2	7.10	.11	NSD
Intensity	88.09	1	88.90	1.37	NSD
EXP × INT	45.93	2	22.97	.36	NSD
Subj. w. groups [error (between)]	6028.09	94	64.13		
Time	6.04	1	6.04	.31	NSD
Time × EXP	26.89	2	13.45	.70	NSD
Time × INT	6.82	1	6.82	.35	NSD
Time × EXP × INT	96.09	2	48.05	2.49	<.10
Time × Subj. w. groups [error (within)]	1811.36	94	19.27		

CONFIDENCE

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	135379.25	1	135379.25	3056.33	<.05
Expectancy	40.06	2	20.03	.45	NSD
Intensity	52.34	1	52.34	1.18	NSD
EXP × INT	27.14	2	13.57	.30	NSD
Subj. w. groups [error (between)]	3986.53	90*	44.29		
Time	111.04	1	111.04	5.21	<.05
Time × EXP	110.14	2	55.07	2.58	NSD
Time × INT	17.89	1	17.89	.84	NSD
Time × EXP × INT	13.41	2	6.70	.31	NSD
Time × Subj. w. groups [error (within)]	1918.22	90	21.31		

*Four subjects did not complete this scale and hence were not used in the analysis.

Hypothesis 5 predicted that people would perceive the second persuasive attack as advocating a position more expected than the first persuasive attack. The failure of any effects to approach significance lends no support to this hypothesis. A summary of the analysis of variance is presented in Table 5.

TABLE 5

Analysis of Variance Summary for the
Dependent Variable Expectancy

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	71527.38	1	71527.38	947.42	<.05
Expectancy	254.39	2	127.19	1.68	NSD
Intensity	37.24	1	37.24	.49	NSD
EXP × INT	51.20	2	25.60	.34	NSD
Subj. w. groups [error (between)]	7096.75	94	75.50		
Time	25.19	1	25.19	1.51	NSD
Time × EXP	20.93	2	10.48	.63	NSD
Time × INT	.92	1	.92	.05	NSD
Time × EXP × INT	18.66	2	9.33	.56	NSD
Time × Subj. w. groups [error (within)]	1565.45	94	16.65		

Hypothesis 6 predicted a negative relationship between threat at Time 1 and attitudes toward the issue at Time 2. A Pearson Product Moment Correlation indicated a significant negative correlation between these variables ($r = -.23$, $p < .05$), thus providing support for the hypothesis.

Supplemental Credibility Analysis

The research questions concerned the effects of confirmation and disconfirmation of receiver expectations of message intensity on the credibility of the source of a persuasive message and on the credibility

of a source delivering a second persuasive message on the same attitudinal topic. To test these questions all subjects who had received expectancy sets and who had received two persuasive attack messages were utilized in computing five successive $3 \times 2 \times 2$ repeated measures analyses of variance, with time of measurement as the repeated variable. Table 6 presents a summary of the cell means for each of the dimensions of credibility used in the analysis.

Competence, Character and Composure

Significant time of measurement main effects were indicated for the dependent variables of competence, character and composure (Competence: $F = 11.56$, $df = 1/90$; $p < .05$; Character: $F = 8.49$, $df = 1/90$; $p < .05$; Composure: $F = 5.11$, $df = 1/90$; $p < .05$). Analysis of variance summaries for these variables are presented in Table 7. The effect was such that the source of a second attack message was perceived as more competent, of higher character and more composed. Since, however, this effect is evident in the distraction control cells as well as in the cells that received confirming or disconfirming messages, the effect cannot be attributed to the manipulated independent variables. No other main effects or interactions obtained significance.

Sociability and Extroversion

No main effects or interactions approached significance for the dependent variables of sociability or extroversion. Thus confirmation or disconfirmation of expected message intensity had no effect on the perceptions of initial source credibility or on the perceptions of the credibility of the source of a subsequent persuasive message on the same attitudinal topic. Analysis of variance summaries are presented in Table 8.

TABLE 6

Means on Credibility Dimension for Experiment
and Distraction Control Groups

COMPETENCE

	<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>
<u>High Expectancy</u>	12.71*	12.25	13.12	13.15
<u>Low Expectancy</u>	12.42	12.62	13.68	15.08
<u>Both</u>	13.00	10.80	13.25	13.00
	<u>Time 1</u>		<u>Time 2</u>	

CHARACTER

	<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>
<u>High Expectancy</u>	12.53*	11.25	13.94	12.50
<u>Low Expectancy</u>	11.59	12.15	12.53	13.46
<u>Both</u>	11.83	11.80	13.50	11.87
	<u>Time 1</u>		<u>Time 2</u>	

COMPOSURE

	<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>
<u>High Expectancy</u>	13.06*	12.20	13.06	13.05
<u>Low Expectancy</u>	12.89	13.38	13.68	14.23
<u>Both</u>	12.58	11.13	13.00	13.07
	<u>Time 1</u>		<u>Time 2</u>	

SOCIABILITY

	<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>
<u>High Expectancy</u>	14.47*	13.20	13.24	12.55
<u>Low Expectancy</u>	12.74	12.85	12.68	13.00
<u>Both</u>	13.50	12.53	12.83	12.87
	<u>Time 1</u>		<u>Time 2</u>	

EXTROVERSION

	<u>High Int.</u>	<u>Low Int.</u>	<u>High Int.</u>	<u>Low Int.</u>
<u>High Expectancy</u>	14.88*	16.50	15.53	16.70
<u>Low Expectancy</u>	15.63	14.85	15.16	15.31
<u>Both</u>	17.25	16.87	15.75	16.33
	<u>Time 1</u>		<u>Time 2</u>	

*Range of scores on each measure: 3 (Low) to 21 (High)

TABLE 7

Analysis of Variance Summaries for the Dependent Variables
Competence, Character and Composure

COMPETENCE

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	30957.85	1	30957.85	1550.29	<.05
Expectancy	27.09	2	13.54	.68	NSD
Intensity	2.13	1	2.13	.11	NSD
EXP × INT	29.20	2	14.60	.73	NSD
Subj. w. groups [error (between)]	1797.22	90*	19.97		
Time	72.15	1	72.15	11.56	<.05
Time × EXP	12.22	2	6.11	.98	NSD
Time × INT	17.03	1	17.03	2.73	NSD
Time × EXP × INT	4.15	2	2.08	.33	NSD
Time × Subj. w. groups [error (within)]	561.74	90	6.24		

CHARACTER

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	28558.66	1	28558.66	1780.70	<.05
Expectancy	2.88	2	1.44	.09	NSD
Intensity	10.66	1	10.66	.66	NSD
EXP × INT	39.39	2	19.69	1.23	NSD
Subj. w. groups [error (between)]	1443.41	90*	16.04		
Time	56.93	1	56.93	8.49	<.05
Time × EXP	1.67	2	.83	.12	NSD
Time × INT	2.53	1	2.53	.38	NSD
Time × EXP × INT	7.29	2	3.65	.54	NSD
Time × Subj. w. groups [error (within)]	603.58	90	6.71		

COMPOSURE

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	31067.38	1	31067.38	2677.57	<.05
Expectancy	36.52	2	18.26	1.57	NSD
Intensity	1.90	1	1.90	.16	NSD
EXP × INT	12.19	2	6.10	.53	NSD
Subj. w. groups [error (between)]	1044.26	90*	11.60		

Table 7 - continued

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Time	30.10	1	30.10	5.11	<.05
Time × EXP	4.41	2	2.20	.37	NSD
Time × INT	7.56	1	7.56	1.28	NSD
Time × EXP × INT	3.85	2	1.93	.33	NSD
Time × Subj. w. groups [error (within)]	530.62	90	5.90		

*Four subjects did not complete these measures, hence were not used in the analysis

TABLE 8

Analysis of Variance Summaries for the Dependent Variables
Sociability and Extroversion

SOCIABILITY

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	31513.57	1	31513.57	2729.96	<.05
Expectancy	11.30	2	5.65	.49	NSD
Intensity	7.82	1	7.82	.68	NSD
EXP × INT	11.90	2	5.95	.52	NSD
Subj. w. groups [error (between)]	1038.92	90*	11.54		
Time	5.77	1	5.77	1.44	NSD
Time × EXP	9.27	2	4.64	1.16	NSD
Time × INT	4.13	1	4.13	1.03	NSD
Time × EXP × INT	1.13	2	.56	.14	NSD
Time × Subj. w. groups [error (within)]	360.12	90	4.00		

EXTROVERSION

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Mean	46844.93	1	46844.93	3120.05	<.05
Expectancy	49.57	2	24.78	1.65	NSD
Intensity	7.13	1	7.13	.47	NSD
EXP × INT	27.10	2	13.55	.90	NSD
Subj. w. groups [error (between)]	1351.27	90*	15.01		

Table 8 - continued

<u>Source of Variance</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Time	1.85	1	1.85	.36	NSD
Time × EXP	16.35	2	8.17	1.60	NSD
Time × INT	2.72	1	2.72	.53	NSD
Time × EXP × INT	5.47	2	2.73	.54	NSD
Time × Subj. w. groups [error (within)]	458.89	90	5.10		

*Four subjects did not complete these measures, hence were not used in the analysis.

Experimental and Control Group Comparisons

An analysis using Duncan's multiple range test was computed to compare experimental and control conditions at both Time 1 and Time 2. Table 9 presents a summary of the means and results of the multiple comparisons.

At Time 1, only the experimental groups receiving low intensity messages that confirmed or disconfirmed receiver expectations differed significantly from the pretest-posttest only control condition. Although no predictions concerning confirmation of expectations were advanced, this is consistent with the Hypothesis 1 prediction that the disconfirmation of expected high intensity messages would immediately enhance attitudes toward the experimental issue. No control group differed significantly from the pretest-posttest only control condition.

At Time 2, the experimental group receiving disconfirmation of expected high intensity messages did not differ significantly from the pretest-posttest only control group, even though differences did exist at Time 1. This finding is also consistent with Hypothesis 1.

TABLE 9
Experimental and Control Group Comparisons

<u>Group</u>	<u>Time 1 Attitude Mean</u>	<u>Time 2 Attitude Mean</u>
Pretest-Posttest Only	6.53	6.37
One Message Control (High Intensity)	7.06	7.24
One Message Control (Moderate Intensity)	9.88	9.81
One Message Control (Low Intensity)	7.81	8.54
Two Message Control (High Intensity)	9.18	11.71**
Two Message Control (Low Intensity)	8.09	10.60**
Distraction Control (Low Intensity)	7.87	9.40
Distraction Control (High Intensity)	7.58	10.58
Experimental I (Low EXP, Low INT)	13.18*	15.06**
Experimental II (Low EXP, High INT)	8.68	11.74**
Experimental III (High EXP, Low INT)	10.55*	7.68
Experimental IV (High EXP, High INT)	6.53	10.47

*Indicates significant difference from pretest-posttest group
(p < .05) at Time 1.

**Indicates significant difference from pretest-posttest group
(p < .05) at Time 2.

The persuasive effectiveness of the combination of two messages is demonstrated by the significant differences between the pretest-posttest only condition and each of the two-message only control conditions. As predicted by Hypothesis 2, the experimental group experiencing disconfirmation of expected low intense language behavior differed significantly from the pretest-posttest only control group, even though this difference was not apparent at Time 1. The group experiencing confirmation of expectations of low intensity message reception remained significantly different from the pretest-posttest only control group at Time 2. Taken together, the experimental-control group comparisons lend further support to the rationale leading to Hypothesis 1 and Hypothesis 2.

Further comparisons indicated no significant change in the pretest-posttest only control group between Time 1 and Time 2. Similarly, no significant change occurred in any of the one-message only control groups between Time 1 and Time 2. Thus any differences between Time 1 and Time 2 in the other control and experimental groups may be attributed to the experimental manipulations. A comparison of the health-related and crime-related messages indicated no differences in effectiveness, thus obviating the need to consider this factor in the analysis.

Reliability of the Instruments

As a check on the internal consistency of the measurement instruments utilized in the study, Cronbach's coefficient alpha was computed for each dependent measure. Table 10 presents a summary of the coefficients for each instrument.

TABLE 10

Reliability Coefficients for the Dependent Measures

<u>Measure</u>	<u>α</u>
Attitudes	.93
Threat	.78
Expectancy	.76
Confidence	.79
Competence	.80
Character	.63
Composure	.72
Sociability	.52
Extroversion	.82

The reliability coefficient for the instrument measuring the variable of primary theoretic interest (attitudes toward the legalization of heroin) was extremely high ($\alpha = .93$). The measures of threat, expectancy and confidence in the decision were also satisfactory ($\alpha > .75$). The consistency of the measures of perceived source credibility were more variable, ranging from a low of .52 (for sociability) to a high of .82 (for extroversion).

CHAPTER IV DISCUSSION

Summary of Procedures and Results

This investigation tested two theoretic hypotheses concerning the relationship of violations of receiver expectations to resistance to subsequent persuasive attacks. The study utilized 219 subjects randomly divided into four experimental and eight control groups.

Since the rationale of this study is an extension of the reasoning advanced by Burgoon et al. (1978), an effort was made to facilitate between-experiment comparisons by using the same attitudinal issue as the experimental topic in both studies. The experimental issue, proposed legalization of the sale of heroin in the United States, was initially chosen because it is highly counterattitudinal for the subjects in the experiment.

Since the hypotheses concerned the effects of initial violations of receiver expectations on acceptance to subsequent persuasive attacks, each experimental subject was exposed to two persuasive messages. This required the construction of two messages which used different arguments to advocate the legalization of heroin sales in the United States. The persuasive messages used in the Burgoon et al. (1978) study served as the basis of the experimental messages used in this investigation. One message argued for the legalization of heroin sales on the basis of lowering the crime rate, while the other message argued on health-related issues. Since the intensity of the first

persuasive attack was a manipulated variable, three versions of each message were prepared. Care was taken to rule out potential intervening effects of other language and message variables.

Prior to exposure to the first persuasive message, each subject in the experimental conditions was led to expect either a high or a low intensity message. No information was given as to the persuasive nature of the messages or of the message topic. Each subject then read either a high or low intensity message advocating legalization of heroin sales. Two to three days later experimental subjects were exposed to a second persuasive message. All subjects received a moderately intense message using arguments different from those previously read. Message topic and message order differences were controlled by randomly varying the order of presentation within each experimental group. As an additional check, the effect of message topic on attitude scores was compared. No significant differences were found. Thus differences between attitude scores of the experimental groups cannot be attributed to message differences.

In addition to these procedures, several control groups were also utilized. The effects of message intensity and the presentation of only one persuasive message were assessed by the use of three one-message only control groups. One of these groups received a high intensity message; one received a low intensity message; and one received a moderate intensity message. The effect of receiving two persuasive messages was assessed through the use of two separate two-message only control groups. One group received a high intensity message followed by a moderate intensity message, while the other group received a low intensity message followed by a moderate intensity

message. Simple distraction effects were checked through the utilization of two separate two-message distraction control groups. One of these groups received a high intensity message followed at a later date by a moderate intensity message, while the other group first read a low intensity message, followed by a moderate intensity message. Both groups received instructions to evaluate both the high and low intensity statements in the first persuasive message. While this task was distracting, it did not induce expectations which would have been confirmed or disconfirmed as in the experimental conditions. A final control group received only a pretest and a posttest on attitudes toward the legalization of heroin sales.

The theoretic hypotheses were tested with a three by two by two repeated measures analysis of variance. The independent variables were receiver expectations concerning the first persuasive message (either high or low intensity), actual intensity of the first persuasive message (either high or low intensity) and time of measurement (either immediately following the first persuasive message or following the second persuasive message).

The results of the analysis were very supportive. The first hypothesis predicted that individuals who expected highly intense messages of a counterattitudinal nature, but whose expectations were disconfirmed by the reception of low intensity messages, would initially be more positive toward the attitude issue. It was further predicted that upon receipt of a second message these individuals would revert to being more negative. The second hypothesis predicted

that people initially induced to expect low intensity messages, but whose expectations were disconfirmed by the reception of a highly intense message, would be initially more negative toward the attitudinal issue. Upon receipt of a second persuasive message, they were predicted to become more positive toward the issue.

A significant three-way interaction with the pattern of the mean attitude scores consistent with the predictions was required for support of both of the hypotheses. The analysis indicated that the hypothesized interaction was significant, and an inspection of the cell means indicated that the obtained pattern matched the predicted relationships. Further support was provided for Hypothesis 1 by correlated t-tests indicating that the experimental group expecting a highly intense message but receiving a message of low intensity had significantly more positive attitudes toward the issue after receipt of a second persuasive message.

Taken together the results relevant to the theoretic hypotheses provide strong support for the rationale advanced by this investigation. It is evident that the support of Hypothesis 1 was crucial to this study. While support of the second hypothesis alone would have provided encouragement, the prediction that individuals expecting a low intensity message and receiving a high intensity message would be more positive toward the attitude issue after receipt of a second message could have been made without reference to the rationale advanced by this investigation. This effect could have been attributed to a simple repetition effect.

As mentioned above, however, the finding that individuals expecting highly intense messages and receiving a message of low

intensity become less favorable toward the issue after receipt of a second persuasive message is much more exciting and much harder to explain without reference to the extension of the Burgoon et al. (1978) model presented here. This finding falls outside the domain of both the inoculation analogy and congruity theory. Both of these approaches deal strictly with pretreatment message strategies and make no inferences about the possibility of one persuasive message affecting resistance to subsequent persuasive messages advocating the same attitudinal position. Moreover, the experimental and control group comparisons negate the possibility of explaining this finding through simple distraction or message repetition effects. All of the two-message distraction control groups, as well as the two-message only control groups, evidenced more positive attitudes after the receipt of a second message. This finding, then, provides very strong support for the rationale of the study.

The results of the analyses of the supplemental hypotheses are less clear. The first supplemental hypothesis (Hypothesis 3) predicted that perceived attitudinal threat would decrease after the presentation of a second persuasive message. This hypothesis was tested with a 3 (receiver expectations of message intensity) by 2 (actual message intensity) by 2 (time of measurement) repeated measures analysis of variance. Although there was a trend toward significance of the three-way interaction, no main effects or interactions obtained significance. The failure to support a hypothesis mandates a reexamination of both the procedures and methodology utilized in the testing of the hypothesis and of the logic of the rationale leading to the development of that hypothesis.

Initially, it was suggested that exposure to a highly counter-attitudinal message would be very threatening. However, it was reasoned that, given adequate time, a subsequent exposure to a second persuasive message on the same attitudinal topic would prove less threatening. This was suggested on the basis of two assumptions. First, it was assumed that a second exposure to a counterattitudinal message on the same topic would be more expected and therefore less threatening to the individual. In addition, it was suggested that time lapse between the initial exposure and the second exposure would allow people the opportunity to rehearse counterarguments and more adequately prepare their defenses.

The first assumption was tested by Hypothesis 5. This hypothesis formalized the prediction that individuals would find the second persuasive message more expected than the first. Since this hypothesis received no support, an important antecedent to the consequent predicted by Hypothesis 3 was not a factor in the design. This in itself reduces the possibility of finding support for Hypothesis 3. In addition, the assumption that the time lapse between exposures to the two persuasive messages would allow for increased preparation and counterargumentation may not have been appropriate in this investigation.

Although this assumption may be appropriate to many persuasive situations, it may not have been extended far enough in the present investigation. The rationale leading to the theoretic hypotheses argued that negative violations of receiver expectations would lead to a decrease in threat to the individual, while positive violations of expectations would lead to increased threat to the individual. An extension of this reasoning would suggest that an interaction effect

would have been a more appropriate prediction for this hypothesis. While the analysis did indicate a trend toward a three-way interaction, the interaction did not reach significance. There is also a problem in specifying the exact nature of the expected interaction. This problem arises in the lack of knowledge concerning the effects of a second message on reduction of threat. This problem is compounded by the consideration of the positive and negative violations of expectations which occurred by the presentation of the first persuasive message. Considering both the methodological problems and the failure to extend the rationale, the lack of support for this hypothesis is not unexpected. However, the trend toward a three-way interaction does provide some encouragement.

The rationale leading to Hypothesis 6 is very related to the third hypothesis. Hypothesis 6 predicted a negative relationship between threat induced by the first persuasive message and attitude scores following a second persuasive attack. A significant negative correlation between threat at Time 1 and attitudes at Time 2 provided support for this hypothesis. This finding was important as a check on an assumption of the rationale leading to the theoretic hypotheses. It was assumed throughout this investigation that threat is an important mediational variable in the resistance to persuasion process. Threat is assumed to operate as a "trigger" to the counterargumentation process. Thus the greater the threat induced by a first persuasive message, the more likely the individual will counterargue in the future, and the more likely that individual will resist a subsequent persuasive attack. The support of this hypothesis provides empirical substantiation for this assumption.

Hypothesis 4 predicted that individuals would express more confidence in their attitudes after the receipt of a second persuasive message. All subject groups receiving expectancy instructions and two persuasive messages were utilized in the analysis of this hypothesis. The three-way analysis of variance indicated a significant main effect for time of measurement such that confidence in the attitude was greater after receipt of a second persuasive message. No other main effect clearly provides support for the hypothesis. This is consistent with the reasoning, suggested by Burgoon et al. (1978), that after deliberating on two messages and being allowed to provide defenses and change or not change, people should be more confident in their attitudes.

The results of the tests of the supplemental research questions were varied. The effect of confirmations and disconfirmations of expected message intensity on receiver perceptions of a source's competence, composure, character, sociability and extroversion, and on perceptions of a source of a subsequent message were tested. All groups who received induced expectancy sets and both persuasive messages were included in the analysis. Five separate three-way analysis of variance tests were used to investigate the effects of the independent variables on the different dimensions of credibility.

The only effects to obtain significance were time of measurement main effects on the dependent variables of competence, composure and character. The effects were such that the source of the first attack message was seen as less competent, less composed and of lower character than the source of the second persuasive attack. Since, however, the same pattern of means appeared in the distraction control

conditions as in the experimental groups, the effects cannot be unequivocally attributed to confirmations and disconfirmations of receiver expectations. It may rather be a simple distraction effect or, possibly, a contrast effect attributable to receiving a moderate message subsequent to the reception of a high or low intensity counter-attitudinal message.

The comparison of the experimental and control groups provided manipulation checks and further support for the theoretic hypotheses. A Duncan's multiple range test indicated that at Time 1, only the experimental groups receiving a low intense message that either confirmed or disconfirmed their expectations differed significantly from the pretest-posttest only control group. No predictions concerning the reception of a low intense message which confirmed receiver expectations were made, but the finding that people expecting a highly intense message and receiving a low intense message would be initially more positive is consistent with Hypothesis 1.

At Time 2, the Duncan's multiple range procedure indicated that this group had reverted to a more negative attitudinal position and was no longer significantly different from the pretest-posttest only control group. This finding is also consistent with the first hypothesis. Similarly, the group which had expected low intensity language, but received high intensity language, was significantly different from the pretest-posttest only control group at Time 2, even though this difference was not evident at Time 1. This is consistent with Hypothesis 2. The persuasive effectiveness of the combination of two persuasive messages was evidenced by the significant differences between each of the two-message only control groups and the

pretest-posttest only control group. The experimental condition expecting and receiving low intense language remained significantly different from the pretest-posttest only control condition at Time 2. All of the one-message only control groups remained nonsignificantly different from the pretest-posttest only control group at Time 2. These experimental and control group comparisons are generally in the pattern predicted by the rationale of this investigation, providing additional support for Hypothesis 1 and Hypothesis 2.

Implications for Future Research and Conclusions

Burgoon, Cohen, Montgomery and Miller (1978) suggested that the import of their new model of resistance to persuasion is the reconceptualization of the resistance to persuasion process. They indicated that their initial investigation provided evidence suggesting that (1) any message might affect the persuasive efficacy of a subsequent persuasive attack, and (2) the induction of a critical response set may either inhibit or enhance the effects of a forthcoming message. The primary import of the present investigation is the further support and extension of this reconceptualization.

The present investigation extended the finding that critical response sets may either inhibit or enhance the effectiveness of a subsequent persuasive attack. The investigation provides evidence that not only are the response sets themselves important, the systematic violation of these receiver expectations may add to the enhancement or inhibition of a second persuasive attack. The findings of the present investigation also further support the assumption that any message may affect the persuasive efficacy of a forthcoming persuasive attack.

On a broader level the investigation mandates an end to the singular research emphasis on the pretreatment message strategies suggested by the inoculation approach to the induction of resistance to persuasion. While beginning the process, this investigation highlights the need and the utility of integrating findings from traditional persuasion research into investigations of resistance to persuasion. There are several areas in which this integration would appear to be especially beneficial.

First, the message variables and other factors of the communication situation which affect receiver perceptions of attitudinal threat need to be more carefully investigated with the model advanced in this investigation and the work of Burgoon et al. (1978). The rationale of this line of research suggests that threat is an important variable in the resistance to persuasion process because it serves as a "trigger" for counterargumentation. This knowledge of factors which induce attitudinal threat would allow the scope of this model to be broadened. For example, Burgoon et al. (1974) have argued that intense language usage by a female source constitutes a negative violation of expectations. It would seem, then, that the previous research of Burgoon et al. (1974) on the persuasion process might have immediate application in this new approach to resistance to persuasion.

Similarly, other types of violations of receiver expectations need to be researched and applied to this model. The present investigation considered violations of expected message intensity. It seems obvious, however, that the disconfirmation of other types of receiver expectations might also enhance or inhibit subsequent message acceptance.

Furthermore, it seems evident that while the knowledge of the persuasion process has application to this model, it can also be argued that this model of resistance to persuasion may also enhance understanding of the traditional persuasion process. This seems most evident concerning studies which utilize some type of message repetition. For example, Miller and Burgoon (1974) have pointed out that the relationship between message repetition and attitude change quickly become asymptotic. The concepts of attitudinal threat, receiver expectations and counterargumentation might be used to provide an explanation for these findings. Another area that might be reinvestigated in respect to these concepts concerns the relative effectiveness of message primacy and recency. More consistency within the research might be found using the concepts advanced in the present investigation.

In summation, as Burgoon et al. (1978) point out, this model avoids problems associated with relying solely on pretreatment message structures as predictors of resistance to persuasion. Moreover, this approach is more isomorphic with sequential message reception conditions in which persuasion normally occurs. This will allow the systematic integration of findings from traditional persuasion studies with this model of resistance to persuasion. In addition, the concepts used in this approach to resistance also have application to research on the persuasion process.

APPENDIX A
COVER STORY AND EXPECTANCY INDUCTIONS

Expectation of Low Intensity

The Department of Communication and Broadcasting is currently engaged in a project to compare video-taped, audio-taped and written messages on their effectiveness as means of information transfer. We are asking that your class aid us in this research by evaluating different aspects of written messages. Although other members of your class may be doing different tasks, we would like you to read the attached message and underline the statements that you consider to be the least intense, that is, the most weakly worded statements in the message.

PLEASE READ THE FOLLOWING VERY CAREFULLY

It is very important that everyone follow similar procedures in the completion of these tasks. Therefore, please follow these instructions very carefully. After you finish reading these instructions, you are to turn to the next page and begin reading the message. As you read, you are to underline statements that you feel are weakly worded. Underline as you read. After you have finished reading the message, turn this booklet face down and await further instructions. Thank you very much for your cooperation.

Expectation of High Intensity

The Department of Communication and Broadcasting is currently engaged in a project to compare video-taped, audio-taped and written messages on their effectiveness as means of information transfer. We are asking that your class aid us in this research by evaluating different aspects of written messages. Although other members of your class may be doing different tasks, we would like you to read the attached message and underline the statements that you consider to be the most intense, that is, the most strongly worded statements in the message.

PLEASE READ THE FOLLOWING VERY CAREFULLY

It is very important that everyone follow similar procedures in the completion of these tasks. Therefore, please follow these instructions very carefully. After you finish reading these instructions, you are to turn to the next page and begin reading the message. As you read, you are to underline statements that you feel are strongly worded. Underline as you read. After you have finished reading the message, turn this booklet face down and await further instructions. Thank you very much for your cooperation.

Expectation of Both High and Low Intensity

The Department of Communication and Broadcasting is currently engaged in a project to compare video-taped, audio-taped and written messages on their effectiveness as means of information transfer. We are asking that your class aid us in this research by evaluating different aspects of written messages. Although other members of your class may be doing different tasks, we would like you to read the attached message and underline the statements that you consider to be the least intense, that is, the most weakly worded statements in the message, and to circle the statements that you consider to be the most intense, that is, the most strongly worded statements in the message.

PLEASE READ THE FOLLOWING VERY CAREFULLY

It is very important that everyone follow similar procedures in the completion of these tasks. Therefore, please follow these instructions very carefully. After you finish reading these instructions, you are to turn to the next page and begin reading the message. As you read, you are to underline statements that you feel are weakly worded and circle statements that you feel are strongly worded. Underline and circle as you read. After you have finished reading the message, turn this booklet face down and await further instructions. Thank you very much for your cooperation.

APPENDIX B
EXPERIMENTAL MESSAGES

Low Intensity: Health Related

One concern of our society is the health and welfare of its citizens. This concern has resulted in legislation which has provided acceptable health care programs for the elderly, the poor and the unemployed. While these programs have benefited many people, several segments of our society remain in need of adequate health care. In fact, one of the groups which needs care as much as many others, heroin users, has been helped only slightly by current policies. Occasionally, the laws regulating the sale of heroin in this country have done almost as much harm as good. While some arguments concerning the legalization of heroin sales involve issues other than health care, we feel that our major focus should be on health-related issues.

Present criminal sanctions against the sale of heroin were, in part, designed to protect the American citizen from the medical harms which were thought to be caused by the drug. A possible result of some of those laws, however, is that a number of heroin addicts are in poor health from diseases caused by the drug's continued illegality. For example, in 1969, over 900 addicts in New York City were treated for tetanus and hepatitis. These diseases were not caused by heroin, but were the result of improper means of injection. Since hypodermic syringes cannot be obtained legally, some users choose to re-use and share needles. Thus the laws which ban the sale of heroin probably cause a number of heroin-related diseases each year.

A second health problem faced by the user is the purchase of impure heroin. Because the drug is available primarily on the illicit market, it is often prepared by street dealers who may or may not have much concern for the health of their clients. Since users are occasionally unsure of the amount or quality of the heroin they purchase, they are sometimes unable to regulate the exact dosage of the drugs they take. Perhaps as a consequence, a small percentage of heroin users may accidentally harm themselves from overdosages. Some people have speculated that if heroin users knew the actual strength of the drug they are using, medical problems caused by drug overdose might be reduced. If the sale of heroin were legalized, the government might be in a position to try and enforce some type of quality control on the heroin sold, perhaps reducing the number of heroin-related diseases each year.

Since the cost of illegal heroin is rather high, users are sometimes unable to afford supplemental items for use in maintaining good health. Addicts' failure to get supplemental nutrition, medication and doctors' care has been linked to their choosing to use much of their resources to pay inflated black market prices for the drug. Under a

system of legalized sales the price of the drug might be significantly reduced, and users would be better able to afford other health-related products.

Another issue that must be considered is whether the use of heroin constitutes a severe health problem. Some medical authorities now agree that heroin use causes little physical damage. In addition, researchers have shown that the symptoms of heroin withdrawal are no more dangerous than those associated with the withdrawal from alcohol. Therefore, when assured of the legal supply of the drug, the heroin user is perfectly capable of leading a meaningful and productive life.

Various arguments can be used to support the legalized sale of heroin. We feel, however, that even considering only the health care benefits, eliminating secondary infection, reducing the number of overdoses, and increasing the availability of nutrition and medication, coupled with the evidence that heroin itself causes little physical damage, justify the legalization of the sale of heroin in the United States.

Low Intensity: Crime Related

Most responsible citizens realize that something must be done to curb the rising crime rate in this country. What most people do not realize, however, is that in our major cities a small percentage of the crime reported is committed by heroin users seeking money to support their habit.

A prominent journal recently noted that in England, where the government controls the legal sale to heroin addicts, heroin-related crimes have been somewhat reduced. In short, the relationship between heroin use and crime may not be entirely caused by the drug itself, but rather may be at least partially the result of some of the laws which prohibit its use. Those who support the legalization of heroin argue from several acceptable points of view. However, we feel that the arguments related to crime are of average importance.

While we do not encourage the use of heroin, we still must view the problem realistically. In this society we tolerate the use of alcohol, tobacco and other drugs in the acceptable belief that individuals should have some freedom in choosing their own life styles. Strictly speaking, heroin use itself only harms the user. However, the fact that it is illegal could possibly result in its harming not only the user, but a few others as well.

Since heroin cannot be obtained legally, addicts sometimes choose to commit petty theft and other minor crimes against people to get money to pay high black market prices for the drug. Moreover, they occasionally turn to individuals who may or may not be connected with the underworld for their supply of heroin, possibly creating a profit for "organized crime."

Thus, legalizing heroin sales might possibly reduce crime in two ways. First, if heroin were legalized, it would be less expensive and the addict might not rob innocent people for money to pay high prices for the drug. Secondly, it would help in the fight against organized crime by reducing the profit on one source of the underworld's income.

Another often neglected fact is that the illegal sale of heroin is one of many sources of police corruption. Several independent commissions have pointed out that the trafficking of heroin is becoming a fairly common and somewhat lucrative source of graft available to policemen. Consequently, current laws are counterproductive; they are somewhat poor at reaching the goal of reducing drug-related crime and might possibly increase the amount of corruption in our police departments by turning them into illegal suppliers of heroin.

A major goal of any program concerning heroin use should be the rehabilitation of the heroin addict. However, several researchers have concluded that the fear of arrest may keep a few addicts from seeking help. Thus the laws making heroin illegal are a factor in preventing these few addicts from undergoing rehabilitation treatment. Putting

the addict in prison is not always the answer, either, since heroin is occasionally almost as easy to obtain in a few prisons as it is in some cities. It is clear that our current policies do not contribute as much as they could to the rehabilitation of the heroin addict.

Obviously we as a nation cannot condone the use of heroin, and certainly there are other OK points which support its legalization. However, we feel that reducing the crime rate, fighting organized crime, reducing one source of possible police corruption, and aiding in the rehabilitation of heroin addicts are fair reasons that provide some justification for a policy of legalizing heroin sales in the United States.

Moderate Intensity: Health Related

One of the major concerns of our society is the health and welfare of its citizens. This concern has resulted in legislation which has provided specialized health care programs for the elderly, the poor and the unemployed. While these programs have benefited many people, several segments of our society remain in desperate need of adequate health care. In fact, one of the groups which needs care the most, heroin users, has actually been helped the least by current policies. More often than not, the laws regulating the sale of heroin in this country have done more harm than good. While many arguments concerning legalization of heroin sales involve issues other than health care, we feel that our major focus should be on health-related issues.

Present criminal sanctions against the sale of heroin were, in part, designed to protect the American citizens from the medical harms which were once thought caused by the drug. The result of those laws, however, is that many heroin addicts are dying needlessly from diseases caused not by heroin, but from secondary complications which are promoted by the drug's continued illegality. For example, in 1969, over 900 addicts died in New York City from tetanus and hepatitis. These deaths were not caused by heroin, but were the result of improper means of injection. Since hypodermic syringes cannot be obtained legally, many users are forced to re-use and share needles, or they improvise with objects not designed for injecting drugs into the bloodstream. Thus the laws that ban the sale of heroin actually cause a significant number of heroin-related deaths each year.

A second health hazard faced by the user is the purchase of impure heroin. Because the drug is available only on the illicit market, it is haphazardly prepared by street dealers who have little concern about the health of their clients. Since users are never sure of the amount or quality of the heroin they purchase, they are often unable to regulate the dosage of the drugs they take. Consequently, many heroin users accidentally die each year from drug overdose. Research has indicated that when heroin users know the actual strength of the drug they're using, deaths and medical problems caused by overdosing are virtually eliminated. If the sale of heroin were legalized, the government would be in a position to enforce quality controls on the heroin sold, thus saving many lives each year.

Since the cost of illegal heroin is so excessive, users are often unable to afford items essential for maintaining good health. Addicts' failure to get needed nutrition, medication and doctors' care has been directly linked to their being forced to use all of their resources to pay inflated black market prices for the drug. Under a system of legalized heroin sales, the price of the drug would be greatly reduced, and users could afford other essential health-related products.

Another issue that must be considered is whether the use of heroin constitutes a real health problem. Medical authorities now agree that heroin causes little physical damage. In addition, researchers have

shown that the symptoms of heroin withdrawal are much less dangerous than those associated with the withdrawal from alcohol. Therefore, when assured of the legal supply of the drug, the heroin user is capable of leading a meaningful and productive life.

Various arguments can be used to support the legalized sale of heroin. We feel, however, that even considering only the health care benefits, eliminating secondary infection, reducing the number of overdoses, and increasing the availability of nutrition and medication, coupled with the evidence that heroin itself causes little physical damage, justify the legalization of the sale of heroin in the United States.

Moderate Intensity: Crime Related

Most responsible citizens realize that something must be done to curb the rising crime rate in this country. What most people do not realize, however, is that in our major cities a high percentage of the crime reported is committed by heroin addicts seeking money to support their habit.

A prominent journal recently noted that in England, where the government controls the legal sale to heroin addicts, heroin-related crimes are almost nonexistent. In short, the relationship between heroin use and crime is not caused by the drug itself, but rather by the laws which prohibit its use. Those who support the legalization of heroin argue from several points of view. However, we feel that the arguments related to crime are of primary importance.

While we do not encourage the use of heroin, we still must view the problem realistically. In this society we tolerate the use of alcohol, tobacco, and other drugs in the belief that individuals should have considerable freedom in choosing their own life styles. Strictly speaking, heroin use itself only harms the user. However, the fact that it is illegal results not only in its harming the addict, but many others as well.

Since heroin cannot be obtained legally, addicts are forced to commit crimes against many innocent people to get money to pay high black market prices for the drug. Moreover, they must turn to the underworld for their supplies of heroin, making organized crime richer and more powerful. Thus, legalizing heroin sales would reduce crime in at least two ways. First, if heroin were legalized, it would be relatively inexpensive, and the addict would not be forced to prey upon innocent citizens for money to pay exorbitant prices for the drug. Secondly, it would help in the fight against organized crime by taking away an important source of the underworld's income.

Another often neglected fact is that the illegal sale of heroin is a prime source of police corruption. Several independent commissions have pointed out that the trafficking of heroin is one of the most common lucrative sources of graft that is available to policemen. Consequently, current laws are counterproductive; they undermine the goal of reducing drug-related crime and increase the possibility of corruption in our police departments by turning them into illegal suppliers of heroin.

A major goal of any program concerning heroin use should be the rehabilitation of the heroin addict. However, several researchers have concluded that the fear of arrest keeps many addicts from seeking help. Thus, the laws making heroin illegal are actually preventing rehabilitation of many of those addicted to the drug. Putting the addict in prison is no answer, either, since heroin is often easier to obtain in prison than on the streets. It is clear that our current policies contribute little to the rehabilitation of the heroin addict.

Obviously, we as a nation cannot condone the use of heroin, and certainly there are other points which support its legalization. However, we feel that reducing the crime rate, fighting organized crime, reducing a major source of police corruption, and aiding in the rehabilitation of heroin addicts are reasons that provide sufficient justification for a policy of legalizing heroin sales in the United States.

High Intensity: Health Related

One of the major concerns of our society is the health and welfare of its citizens. This concern has resulted in legislation which has provided specialized health care programs for the elderly, the poor and the unemployed. While these programs have benefited many people, several segments of our society remain in critical need of adequate health care. In fact, the one group which probably needs care the most, heroin users, has actually suffered irreparable damage under the terrible current policies. In every instance, the laws regulating the sale of heroin in this country have done more harm than good. While many excellent arguments concerning legalization of heroin sales involve issues other than health care, we feel that our major focus should be on health-related issues. •

Terrible criminal sanctions against the sale of heroin were, in part, designed to protect the American citizen from the despised medical harms which were once thought caused by the drug. The result of those very bad laws, however, is that thousands of heroin addicts are dying needlessly from horrible diseases caused not from heroin, but from deadly secondary complications which are the direct result of the drug's continued illegality. For example, in 1969, over 900 addicts suffered agonizingly slow deaths from tetanus and hepatitis. These deaths were not caused by heroin, but were the result of improper, almost medieval, means of injection. Since hypodermic syringes cannot be obtained legally, many users are literally forced to re-use and share needles--or they improvise with filthy objects not designed for injecting drugs into the bloodstream. Thus the laws which ban the sale of heroin actually cause an enormous number of heroin-related deaths each year.

A second health hazard faced by the user is the purchase of terribly impure heroin. Because the drug is available only on the illicit black market, it is haphazardly prepared by pushers who have absolutely no concern about the health of their clients. Since users are never sure of the amount or quality of the heroin they purchase, they are never able to regulate the dosage of the drugs they take. Consequently many heroin users accidentally die each year from drug overdose. Research has indicated that when heroin users know the actual strength of the drug they are using, the horrible deaths caused by overdosing are virtually eliminated. If the sale of heroin were legalized, the government would be in an excellent position to enforce quality controls on the heroin sold, thus saving many lives each year.

Since the cost of illegal heroin is so excessive, addicts are almost never able to afford the bare necessities essential for maintaining even adequate health. Addicts' failure to get needed nutrition, medication, and doctors' care has been a direct result of their being forced to use all of their resources to pay inflated black market prices for the drug. Under a system of legalized heroin sales, the price of the drug would be greatly reduced, and addicts could afford other essential health-related products.

Another issue that must be considered is whether the use of heroin constitutes a real health problem. Medical authorities now agree that heroin use causes no physical damage. In addition, researchers have shown that the symptoms of heroin withdrawal are much less dangerous than those associated with the withdrawal from alcohol. Therefore, when assured of the legal supply of the drug, the heroin user is perfectly capable of leading a meaningful and productive life.

Various excellent arguments can be used to support the legalized sale of heroin. We feel, however, that even considering only the health care benefits, eliminating secondary infection, reducing the number of overdoses, and increasing the availability of nutrition and medication, coupled with the evidence that heroin itself causes no physical damage, justify the legalization of the sale of heroin in the United States.

High Intensity: Crime Related

Every responsible citizen realizes that something must be done to curb the drastically rising crime rate in this country. What most people do not realize, however, is that in our major cities an extremely high proportion of the crime reported is committed by heroin addicts seeking money to support their habit.

A prominent journal recently noted that in England, where the government controls the legal sale of heroin to addicts, heroin-related crimes have become nonexistent. In short, the relationship between heroin use and crime is not a function of the drug, but is rather caused by the archaic laws which prohibit its use. Those who support the legalization of heroin argue from several excellent points of view. However, we feel that the arguments related to crime are the best of all and are of primary importance.

While we do not encourage the use of heroin, we still must face the cold, hard facts. In this society we tolerate the use of alcohol, tobacco, and other drugs in the knowledge that individuals must have considerable freedom in choosing their own life styles. It is a well-known fact that heroin laws that prevent its legal sale result not only in harming, perhaps even killing, the addict but many others as well.

Since heroin cannot be obtained legally, addicts are forced to commit heinous crimes against completely innocent people to get money to pay high black market prices for the drug. Moreover, they must turn to despicable underworld figures for their supplies of heroin--thus making organized crime richer and even more powerful. Thus, legalizing heroin sales would significantly reduce crime in at least two ways. First, if heroin were legalized, it would be much less expensive and the addict would not be forced to relentlessly prey upon the innocent citizenry of our country for money to pay exorbitant prices for the drug. Secondly, it would enormously help in the fight against organized crime by taking away an important, irreplaceable source of the underworld's income.

Another often neglected fact is that the illegal sale of heroin is a favorite, prime source of police corruption. Several independent commissions have discovered that the trafficking of heroin is the single most common and most lucrative source of graft available to policemen. Consequently, current laws are counterproductive; they undermine the goal of reducing drug-related crime and drastically increase the possibility of corruption in our police departments by turning policemen into illegal dealers of heroin.

A major goal of any program concerning heroin use should be the rehabilitation of the heroin addict. However, several researchers have concluded that the fear of a dreaded arrest and severe prison term keeps many addicts from seeking help. Thus the laws making heroin illegal are actually preventing rehabilitation of many of those addicted to the crime. Putting the addict in prison is no answer, either, since heroin is actually much easier to obtain in prison than

on the streets. It is clear that rather than contributing to the rehabilitation of the heroin addict, our current policies help condemn them to the pitiable life of a junkie.

Obviously, we as a nation cannot condone the use of heroin, and certainly there are other excellent points which support its legalization. However, we feel that reducing the crime rate, fighting organized crime, reducing a major source of police corruption, and aiding in the rehabilitation of heroin addicts are reasons that provide more than sufficient justification for a policy of legalizing heroin sales in the United States.

APPENDIX C
MEASUREMENT INSTRUMENT

PLEASE READ THE FOLLOWING VERY CAREFULLY

On the following pages you will find a series of statements and objects followed by several scales. Please mark each scale in the blank that BEST represents how you feel about the statement or object. For example, here is an item like the ones you will see:

The United States should withdraw from the United Nations.

Good _____:_____ : _____: _____: _____: _____: _____:Bad

Your job is to place a check mark (X) above the line that best indicates your feeling toward the statement. For example, if you feel that U.S. withdrawal would be a very good idea, you would check as follows:

Good X _____:_____ : _____: _____: _____: _____: _____:Bad

If you feel such a move (withdrawal) would be slightly beneficial, you would check as follows:

Good _____:_____ : X _____: _____: _____: _____: _____:Bad

If you feel neutral or indifferent about the proposition, or if you feel that particular scale is irrelevant to the proposition, you would check as follows:

Good _____:_____ : _____: X _____: _____: _____: _____:Bad

Remember: Fill out every scale and never make more than one mark on a single scale. Thank you for your cooperation.

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BIOGRAPHICAL SKETCH

Michael D. Miller was born September 19, 1952, at the Army-Navy Hospital in Hot Springs, Arkansas, to Henry T. and Billie Jean Miller. Contrary to a recurring rumor, it is only coincidence that the hospital of his birth was shortly thereafter converted to the Arkansas Rehabilitation Center. Most of his childhood was spent in such august metropolises as Pocahontas, Arkansas, and Gurdon, Arkansas. The rumor that during this period of Mr. Miller's life he was so ugly his mother had to tie a pork chop around his neck so the dogs would play with him is also untrue.

Mr. Miller's graduation from Gurdon High School in 1970 evidenced the first point of a linear relationship between the level of degree sought and the quality of the institution attended by Mr. Miller. No comment is made on whether this relationship is direct or inverse.

In May 1973, after learning more than he ever wanted to know about diagramming sentences and how to maintain order in public school lunchrooms, Mr. Miller received the degree of Bachelor of Science in Education from Henderson State College in Arkadelphia, Arkansas.

Continuing his tradition of attending only renowned centers of excellence in higher education, Mr. Miller began studies for the Master of Arts degree in the Department of Speech-Communication at West Virginia University. During his brief tenure with the Department of Speech-Communication, Mr. Miller learned many things from several

distinguished faculty, not the least of which were appropriate convention behavior and appropriate use of factor analysis. However, all things, both good and bad, must come to an end. In August of 1974 Mr. Miller received the Master of Arts degree from West Virginia University.

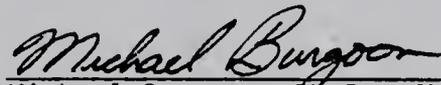
Not having satisfied his thirst for knowledge, Mr. Miller donned his Mae West and began studies on the Flagship, the University of Florida. The most significant aspects of his learning experiences on board the Flagship concerned aspects of professionalism and ethics.

In February of 1977 Mr. Miller wed the former Debra Bennett. It should be noted that at the time of the ceremony he was not wearing a pork chop necklace. They have one son, Andrew. In the summer of 1977, with professionalism at its zenith on board the Flagship, the Miller clan moved to Laramie, Wyoming, where Mr. Miller joined the faculty of the Department of Communication at the University of Wyoming.

Returning to the Flagship for the last time, Mr. Miller completed the requirements for the degree of Doctor of Philosophy in the summer of 1978.

At last report Michael, Debra and Andrew were going home to a place they had seldom been before, Hawaii. There Dr. Miller will combine the occupation of Assistant Professor of Communication at the University of Hawaii with that of beachbum.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



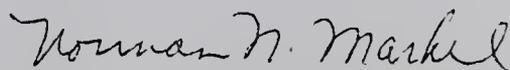
Michael Burgoon, Ph.D., Chairman*
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Michigan State University

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



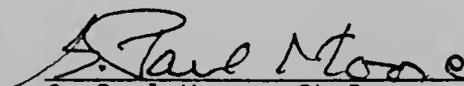
Judee K. Burgoon, Ed.D.**
Assistant Professor of Communication
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Norman N. Markel, Ph.D.
Professor of Speech

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



G. Paul Moore, Ph.D.
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**Formerly Assistant Professor, Speech, University of Florida

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in cursive script, reading "Barry R. Schlenker". The signature is written in dark ink and is positioned above a horizontal line.

Barry R. Schlenker, Ph.D.
Associate Professor of Psychology

This dissertation was submitted to the Graduate Faculty of the Department of Speech in the College of Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 1978

Dean, Graduate School

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