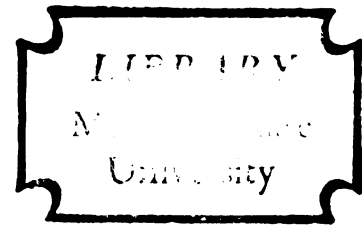


AN INVESTIGATION OF THE
RELATIONSHIPS BETWEEN PERSONALITY
AND TYPES OF INSTRUCTOR CRITICISM
IN THE BEGINNING SPEECH-
COMMUNICATION COURSE

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
JACKSON RICHARD HUNTLEY
1969



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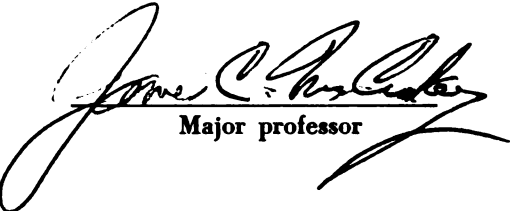
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ABSTRACT

AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN PERSONALITY AND TYPES OF INSTRUCTOR CRITICISM IN THE BEGINNING SPEECH-COMMUNICATION COURSE

by Jackson Richard Huntley

This study attempted to determine the relationships between the personality typology of introversion-extraversion and types of oral, instructor criticism (audience-oriented and speaker-oriented) in the beginning speech-communication course. Speech anxiety, attitudes toward the course and the instructor, achievement of course goals, and examination scores served as dependent variables. The purpose of the investigation was to find a method by which one might better individualize instruction in a course which allows considerable student-instructor interaction.

Introversion-extraversion was determined by a median split of S scores based upon the Eysenck Personality Inventory, Form A. The approach to oral, instructor criticism was meant to heighten, in one case, and minimize, in the other, the degree of interaction experienced between the speaker and the instructor during the critique period following the speech. The audience-oriented critique,

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indirect criticism, was delivered to the classroom audience, and the speaker was never addressed. The speaker-oriented critique, direct criticism, was delivered to the speaker, and the classroom audience was ignored.

Because the introvert is known to dislike oral, social interaction, and the extravert is said to enjoy such involvement, it was hypothesized that the introvert would produce more favorable change than the extravert on the dependent variables with audience-oriented critiques, while the extravert would produce more favorable change than the introvert with speaker-oriented critiques.


Seventy-six students enrolled in the beginning speech-communication course offered by the Department of Communication at Michigan State University served as Ss. Two graduate teaching assistants, each teaching one audience-oriented section and one speaker-oriented section, participated in the investigation. Twenty-three students in an American Thought and Language course at the above university served as the control group.

The hypothesis was confirmed on the speech anxiety measure. Instructor differences confounded results on the other dependent variables. In general, significant, predicted differences were found between the experimental and the control groups.

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The study concluded that, with further successful replication, a partial solution to speech anxiety may be the critique-by-personality approach. Further investigation is suggested for instructor differences influencing this learning situation.

Accepted by the faculty of the Department of Speech,
College of Communication Arts, Michigan State University, in
partial fulfillment of the requirements for the Doctor of
Philosophy degree.



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AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN PERSONALITY
AND TYPES OF INSTRUCTOR CRITICISM IN THE
BEGINNING SPEECH-COMMUNICATION COURSE

By

Jackson Richard Huntley

A THESIS

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To Jeanette

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CHAPTER I

INTRODUCTION

One of the elements of the multi-university which is a source of continual distress to this writer is that the undergraduate student, and especially the freshman and sophomore, consistently finds himself a member of large enrollment courses. Typically subjected to "educational techniques" of "live" or video-taped lectures, assigned readings, an examination, and a final grade, the individual student is provided with little, if any, opportunity for interaction with either his instructor or his peers. If one can assume that it is theoretically possible to apply learning theory to education (surely not an overly burdensome task), it would seem that the educator might come to the conclusion that the large enrollment course smacks of educational illiteracy. The opportunity for directed, positive, and immediate reinforcement simply does not exist in this situation. Thus, whether real learning takes place is definitely not a moot point.

That there are those educators who bewail the beginning speech-communication course which involves a practicum is, of course, no secret. Ranging from the

administrator who desires a greater instructor-student ratio for reasons of economy to members of the field who are theoretically opposed to practical application of speech-communication theory at this level, the beginning course is constantly being examined and scrutinized. But aside from its economical and theoretical opposition, it is the stand of this writer that the object of such attacks is also one of the most educationally sound reasons for maintaining student involvement in the course. Namely, the fact that a student must participate in a number of oral transactions with an audience by necessity limits the section size of such a course. This more reasonable instructor-student ratio allows the opportunity for directed, positive, and immediate reinforcement in the learning situation. The result is an opportunity for meaningful education--a feature quite unique to the beginning speech-communication course, enveloped within the multi-university.

The investigation described in this thesis was prompted by a dedication to such education. This study is an attempt to find better means of individualizing learning in the beginning speech-communication course.

Goals of the Beginning Speech-Communication Course

Any worthy beginning speech-communication course must be conducted in an attempt to attain certain theoretical

and behavioral goals. Such goals obviously vary from instructor to instructor, and from course to course; however, the following three major objectives are suggested as relevant, if not paramount, for the course under consideration.

First, the student must gain an essential knowledge and understanding of the process of communication. Basically, the areas of concern would be the components of that process. One would be an understanding of the human person, i.e. attitude formation, attitude change, factors influencing perception, etc. The student must be capable of understanding those characteristics which influence the individual functioning as a source and as a receiver in a communication event. Such knowledge would also extend to the human group, and the impact groups have upon attitude formation, attitude change, and perception. Applying this knowledge to the analysis of messages and message variables would be the next area of consideration. The encoding, transmission, and decoding of such messages would be essential. It would be expected that such knowledge and understanding then serve as a basis for the implementation of oral communication events and their subsequent analysis and criticism. Thus, it is an assumption underlying this goal that a knowledge and understanding of the process of communication, by analyzing its component parts, would serve as a basis for the following course goals. It might be

suggested that most courses do deal with the goal of knowledge and understanding of principle course content. However, it might be suggested that these same courses also, altogether too often, stop here. Fortunately the size of the beginning speech-communication course allows it to go beyond this point and achieve additional educational objectives. Thus, based upon the first, the following goals are meant to be realized with as much stress and status as the first.

Second, it would seem necessary that the basic course in speech-communication improve the individual student's ability to function and participate in communication events. As a source and as a receiver, the student should achieve the ability to recognize those constituents that make up effective oral communication. In the beginning course, for instance, one would hope that the student achieve the ability to become audience-oriented in his approach to the communication event, realizing that adaptation to the audience is the key to effective oral communication. Also, that message content is the means through which a source primarily influences receiver behavior must be emphasized. Thus, the course should concentrate on the audience and the message, rather than the speaker and delivery of the message. Such should enable the individual to utilize his knowledge of the communication process by implementing such information in practical oral application.

It should enable him to more effectively engage in the self expression of his thought processes; and it should enable him to participate more fully in a society based upon the exchange of ideas. It has been suggested to this writer by one of his committee members that perhaps one of the specific goals of education in the field of speech-communication is that we need to prepare individuals to function effectively in ambiguous situations. The integration of the above two goals should serve as key factors in the realization of such a suggestion.

Third, the entire course should culminate in the formation of an attitude on the part of the student. It might be asserted that, first, this should probably be the paramount objective in any course, and, second, that it is probably the most ignored objective in most courses. If we are going to face the educational situation realistically, and if we truly are attempting to give students the tools and the experience to allow them to alter their behavior, then it would only seem sensible that the behavior change rest upon the students' change in attitude. It would seem that such attitudes will be formed in certain, measurable areas. An attitude will obviously form towards the course instructor, as the individual offering the directed, positive, immediate reinforcement; another attitude will also emerge towards the course itself, representing whether or not this has been a meaningful experience for the student.

With some degree of reliability, such attitude formation should give the student a respect for the importance of good oral communication and for the constituents which make up effective interaction. In essence, he should gain an appreciation for improvement and for effectiveness in human communication.

In order to attain such goals, the beginning speech-communication course has typically undertaken a dichotomous structure of the presentation of speech-communication theory via lecture and text, along with a practical involvement in oral communication events. Typically employed is a system whereby the student acts as the source of an oral message before a classroom audience. This is usually followed by an oral and/or a written critique which serve as means of analysis and evaluation. This critique becomes the predominant means of instigating the directed, positive, and immediate reinforcement for the speech-communication student indicated above as so essential in meaningful education.

Statement of Purpose

With enrollment size allowing at least some opportunity for more individualized instruction, and with the utilization of oral, instructor critiques as the predominant means of reinforcement, it became the purpose of this study to attempt to discover a method of strengthening the role

instructor criticism could play as a reinforcement agent in accordance with certain, specific personality variables. Thus, it became an attempt to better individualize instruction in the beginning speech-communication course. Specifically, the study was designed to determine the relationships between an audience-oriented critique vs. a speaker-oriented critique and the personality variables of introversion and extraversion¹ as measured by specified dependent variables.

Theoretic Rationale and Generation of Hypotheses

An alert instructor who has interaction with his students soon recognizes that he is dealing with different personality types. That the personality should have an influence upon individual learning seems a palatable assertion. Research in the area of personality and learning substantiates this notion. Forlano and Axelrod (1939) investigated the effects of repeated praise and blame on the performance of children classified as extraverts and introverts. They based their study upon the assumption that ". . . the effectiveness of any incentive depends not only on the set-up of the experiment and the intellectual level of the group, but is also conditioned by the emotional

¹An alternate spelling of extraversion is extroversion. "Extraversion" will be used in this study, except when another author who uses the alternate spelling is directly quoted.

and personality differences of the subjects. Differences in personality may produce a wide variation in the motivation of different members of the same group resulting in wide divergences in performance."

Analyzing a wide variety of personalities, Bird (1927) attempted to investigate the causes of variety in achievement, using subjects with normal intelligence, in the mastering of reading. Inductively, this researcher drew a similar conclusion which served as the basis for the Forlano-Axelrod study. Bird suggests that for the thirty SS studied possessing habitual personality handicaps (two of whom were described as being introverted), "learning was blocked by irrelevant interests based upon inner urges and drives." The study concluded that "the overtimid, the antisocial, the chronic introvert, . . . and the excessively sociable are all victims of habits that divert the attention from the task at hand." The important generalization that can be drawn from these investigations is that personality, in general, does have an influence upon learning.

The fact that the personality typology of introversion-extraversion is the product of both extensive and thorough research is but one of the reasons for its utilization in this study. Other relevant factors shall be discussed below. This extensive and thorough research, conducted by many investigators, analyzed and reanalyzed by even more, leads to the conclusion that the typology, first,

does exist, and, second, that it can be recognized and measured. Eysenck (1955), who has conducted the most exhaustive research on this personality variable, has compiled an analysis of his research in comparison with that done by others. In a thorough and analytical report of this comparison, he draws a number of conclusions, two of which are relevant to the immediate discussion. Eysenck states that "work in the taxonomic analysis of personality concludes: (First), human conduct is not specific, but presents a certain amount of generality; in other words, conduct in one situation is predictable from conduct in other situations. (Second), the main dimensions involved in the analysis of personality for which sufficient experimental data are available to make possible a theoretical formulation are neuroticism and extraversion-introversion." In addition to the second conclusion being crucial for this study, the first conclusion has far-reaching implications concerning the prediction of behavior in the speech-communication situation from the behavioral traits of the personalities involved.

As with most measures of attitude and behavior, questions have arisen concerning the capability of measuring instruments to assess the variable with accuracy. Many measures have been devised, ranging from the questionnaire to objective instruments. Carrigan (1960) has most thoroughly analyzed all such measures, and comes to the

following conclusion:

The . . . analyses indicate that it is possible to identify in all extensively studied measures and media at least one factor which bears resemblance to traditional conceptions of extraversion-introversion. The favorable results of early rating studies find confirmation in Catell's discovery of the extraversion-introversion factor in data from behavioral observation. Clear-cut factors have likewise emerged from analyses of various multi-dimensional questionnaires. In various media, then, the situation remains essentially as Eysenck found it in 1958, with well-defined extraversion-introversion factors appearing in questionnaire and rating studies, suggestive ones in analyses of objective and projective tests.

Because Eysenck's introversion-extraversion research has been so thorough, and seems to have been successfully verified by other investigators of personality, this study employed the Eysenck Personality Inventory to categorize introverts and extraverts.

Apparently the ready existence and measurability of the introversion-extraversion dichotomy, and the applications to which the measure can be made has contributed to its use in educational testing and diagnosis. Graves (1958) before discussing the use made of such testing suggests its appropriateness for utilization by stating that ". . . studies have been made at the University (Michigan) which reveal that relatively permanent personality dimensions exist in every student. Two of these dimensions are security-insecurity and extroversion-introversion." One might also cite the extensive use made of the Minnesota Multi-Phasic Inventory at the University of Minnesota. Contained in this inventory is a measure of

introversion-extraversion often used in psychological research. The introversion-extraversion measure, indeed, lends itself well both as a tool of the behavioral researcher, and as a basic instrument for assessing the nature of students. Such is basically the rationale for utilizing this approach to personality measurement in this study.

The Independent Variables

Audience-Oriented vs. Speaker-Oriented Critiques.--

The concept of the audience-oriented, speaker-oriented critiques which were originated for this study were conceived to have one primary, distinguishing difference. This basic distinction was the object or "audience" of the critic--the distinguishing difference was to whom the critique was given. The audience-oriented critique was orally directed to the classroom audience. This critique referred to the audience as "we," and the speaker as "he" or "she." Never was the speaker directly addressed; rather, upon concluding his speech, he merged back into the audience and the heightened effects of direct, oral interaction with him were eliminated. He became another member of an audience listening to an analysis of a communication event which had just been experienced.

The speaker-oriented critique became a direct, oral interaction between the speaker and the instructor. In this situation, the speaker was addressed as "you," and the

audience as "they." Here the object or the "audience" of the critique was the speaker, and the rest of the class was ignored during the oral interaction. The speaker was not allowed to merge back into the rest of the classroom audience. The instructor stood in the front of the room and talked directly to the speaker, analyzing the communication event in the form of an oral critique. Thus, it was the rationale of the two types of critiques that the audience-oriented critique would minimize the degree of social interaction between the speaker and the instructor, and the speaker-oriented critique would maximize this social interaction between the two members involved.

No other chief distinctions were to exist between the two critique forms. Within the capabilities of the instructors teaching the experimental sections, the best, most appropriate critique possible was to be given for each speaker involved.

Attention was to be given, however, to the amount of positive and negative criticism offered in each critique. There is evidence to believe that negative criticism alone, without any reward, or positive elements involved, whatsoever, adversely affects the performance of introverts (Komazaki, 1956). Forlano and Axelrod (1939), however, found blame to be a more effective incentive in the performance of both introverts and extraverts. It should be noted that neither of these studies have the element of

social approval or disapproval involved--one of the "expected rewards or punishments" acting as incentive reinforcers in the Hovland, Janis, and Kelley (1953) learning-theory paradigm. Neither was the praise or blame made public, nor did it involve social interaction as incorporated in these studies. Such, of course, would be the case in this personality-critique study. In an attempt to hold the influence of praise and blame constant, it was decided that never would a critique be given consisting of entirely praise or blame, and that an effort would be made to balance the critiques with positive and negative criticism.

Introversion-Extraversion.--The concepts of introversion and extraversion have been regarded both as traits of personality and as attitudes toward reality. As the subsequent discussion shall indicate, both designations seem acceptable. This portion of analysis shall examine several viewpoints of the personality dichotomy, draw some conclusions, and then analyze some of the implications the dichotomy has for social contact, learning theory, and conditioning.

Eysenck (1947) makes three basic generalizations concerning the typology. He finds that the introvert is more subjective, and the extravert more objective in their outlook; the introvert shows a higher degree of cerebral activity, while the extravert shows a higher degree of

behavioral activity; and the introvert shows a tendency of inhibition, while the extravert has a tendency to lack such control. All three of these generalizations have implications concerning the individual's social involvement, and should relate to his behaviors in the speech-communication classroom.

Allport (1937) suggests more specifically the reaction of the two personality types toward the nature of criticism. It is his contention that the extravert shows a preference for participation in the world of objective (social) reality, and in practical affairs. This individual possesses an absence of prolonged self-analysis and self criticism. He tends to be tough-minded, and has a pragmatic outlook. The introvert, on the other hand, has a preference for the imaginative world, and displays a delicacy of feelings. This person undertakes a large amount of self-analysis and self criticism. He also demonstrates a sensitivity to the criticism of others. He is "touchy" and has a tendency to take all things personally. If the analysis of Allport is correct, the speaking situation and the subsequent oral criticism of the beginning speech-communication course should have definite implications for both the introvert and the extravert.

Expressive gregariousness is the distinguishing characteristic of the extravert according to McDougall (1921). He states that the "well-marked extroverts are

those whose emotions flow out easily into bodily expression and action. They are vivid, vivacious, active persons who charm us by their ease and freedom of expression, their frankness, their quick sympathetic responses. The introvert, on the other hand, is slow and reserved in the expression of his emotions. He has difficulty in adequately expressing himself." Murray (1963) describes the personalities in a similar fashion. He finds the extravert to be heartily gregarious and uninhibited in social actions. This person's course of action is determined by social approval, and Murray finds him open to suggestions. The introvert is characterized as having a preference for solitude, as being sensitive and self-conscious, and as being one who dislikes suggestions. He also becomes negativistic when coerced.

Freyd (1924) defines the introvert as an "individual in whom exists an exaggeration of the thought processes in relation to directly observable behavior, with an accompanying tendency to withdraw from social contacts. The extrovert is an individual in whom exists a diminution of the thought processes in relation to directly observable behavior, with an accompanying tendency to make social contacts." Murray, from his own investigations and in collaboration with others analyzing this personality typology, developed an extensive list of behaviors which distinguish the introvert from the extravert. Of that

compilation, the following characteristics have significance for this study. The introvert is found: to blush frequently and to be self conscious; to avoid all occasions for talking before crowds and to find it difficult to express himself in public; to prefer to work alone, rather than with people, and to work at tasks which do not bring him into contact with people; to dislike and avoid any process of selling or persuading anyone to adopt a certain point of view; to depreciate his own abilities; to feel hurt readily; to be apparently sensitive about remarks or actions which have reference to himself; to keep in the background on social occasions; to avoid leadership; to be reticent and retiring; to fail to talk spontaneously; to indulge in self pity when things go wrong; to express himself better in writing than in speech; to be strongly motivated by praise; to prefer to read of a thing rather than to experience it. The extravert, according to Freyd, is said to have just the opposite behavioral characteristics.

Heidbreder (1926) utilized Freyd's list of behaviors in an attempt to find if the traits in question actually do distinguish between introverts and extraverts. Applying the traits to a single group of normal Ss, Heidbreder found that the list was a justifiable instrument for discriminating between the two types of personality. In order of discriminating power, the following hierarchy of behaviors was established. The chief characteristics which

distinguish between the introvert and the extravert are that the introvert: feels hurt easily and is sensitive about remarks in reference to himself; gets rattled easily and loses his head in moments of stress; prefers to work alone, rather than with people; blushes easily and is self conscious; expresses himself better in writing than speaking; avoids talking in crowds; finds it difficult to express himself; and dislikes and avoids any process of selling or persuading anyone to adopt a certain point of view.

Such definitions, then, serve to give one an idea of the nature of the personality typology under consideration. It should be noted that the research indicates that the behavioral dichotomy is inclusive, rather than denoting a specific characteristic. This has both its advantages and disadvantages. Since the speaking situations involved in this study were approached with a variety of attitudes and feelings by the individual students, the extravert-introvert measure is parsimonious. The speaking situation is a social situation, as is the interaction experienced during the critiques. From this viewpoint, this personality measure seems appropriate. The disadvantage, of course, is that it might be too broad, too behaviorally inclusive, to predict the effects that a specified criticism might have in conjunction with a specified personality.

One must then consider what the personality traits imply in the social situation of the speech-communication

classroom. Bingham (1925) suggests that in social situations, introversion is marked by heightened self-consciousness, and an inhibition to overt expression. Such would indicate definite problems for the introvert in the speaking situation. Mann (1959) investigated the relationships between personality (introversion and extraversion) and performance in small groups. It was his conclusion that extraversion was positively related to popularity, total activity rate, and leadership. Such might be the ready conclusion in view of the above definitions of the personality typology. This was corroborated by Lerea and Goldberg (1961) when investigating the effects of socialization upon group behavior. Using the Minnesota Multi-Phasic Inventory to determine introverts and extraverts, it was predicted that high scoring Ss on the inventory (introverts) in a group would interact less frequently because of their social ineptness and passivity. The author confirmed his hypothesis.

Thus, it may be concluded that one of the chief characteristics of the introvert is that this individual is uncomfortable in the social situation, and that this definitely has a bearing on his oral verbal behavior. Further implications of these traits upon learning and conditioning will be discussed below, along with statements of hypotheses.

The Dependent Variables

Speech Anxiety.--If the introvert and the extravert react differently to oral, social interaction, and if the prime difference between the speaker-oriented and the audience-oriented critique is the degree of oral, social interaction experienced between the individual speaker and the critic, then one might expect the type of criticism most palatable to the type of student personality involved would result in the best conditioning experience, and, thus, result in a more favorable reduction of speech anxiety.

Attitude toward the Course and toward the Instructor.--The above discussion of personality seems to indicate that individual students will approach and react differently to specific learning situations. In the speech-communication classroom, the learning situation would involve participation in communication events and subsequent criticism. The best combination of personality type and criticism type should produce the best learning situation for the individual involved. The best learning situation should produce a more favorable attitude toward both the course and the instructor, and, thus, be reflected in this dependent variable.

Attainment of Course Goals.--If the course primarily is concerned with an emphasis upon audience-oriented and content-oriented communication, and if the lectures, text,

and critiques fulfill this emphasis, then one might expect that the best combination of personality type and criticism type, producing the most favorable learning situation, would direct the student to an attainment and recognition of these goals.

Examination Score.--It would be hoped that the best learning situation in the classroom would also motivate the student to produce well on the examinations in the course. Admittedly, this dependent variable may be somewhat unrealistic. Ease of recall, validity of the examination and a number of other factors might confound this variable.

In sum, then, the theory behind the dependent variables is that a certain combination of personality type and criticism type is going to produce the best learning situation for the individual student concerned. This "best situation" should represent itself in the student's reduction of speech anxiety, in his change of attitude toward the course and the instructor, in his achievement of primary course goals, and in his examination score.

The Hypotheses

The introvert-extravert personality typology has been found to have definite effects upon the individual in a social, speaking situation. Waggener (1930) used the Galvanometer to determine relationships between personality and inner disturbances in speech training. She concluded:

(Prior research) indicates that speech training may be administered to bring about better adjustment in personality. This study would indicate that adjustment, as far as conditions represented by the galvanometer are concerned, is a matter of less bodily change or inner disturbance for the superior speaker, but that greater inner disturbance occurs in the inferior speaker in the various test situations presented. Insomuch as it has been shown that the extrovert, self-sufficient, dominant individual reflects less bodily disturbances as shown by the galvanometer, this study bears out (prior) findings that self-sufficiency, dominance and extroversion are characteristic of the experienced superior speaker.

As far as this study is concerned, the following conclusions appear tenable: 1) that superior speakers appear to manifest less inner bodily disturbances during speech than inferior speakers; with the dominant, self-sufficient, extroverted . . . speakers showing more stability than the submissive, low self-sufficient, introverted . . . speakers.

That introverts do have a tendency to develop anxiety is corroborated by Eysenck (1947), when he states that:

. . . we find that introverts show a tendency to develop anxiety and depression symptoms . . . According to their own statements, their feelings are easily hurt, they are self-conscious, nervous, given to feelings of inferiority, moody, and keep in the background on social occasions. Withal, they are rather rigid, and show little intrapersonal variability.

Thus, one may posit that in the beginning speech-communication class, the introvert is going to experience anxiety, probably both in speech-making and during the critique session if the critique is directed specifically at him.

Such anxiety would seem to have an influence on the individual. Research bears this out. Siegman (1957) hypothesized that the drive properties of manifest anxiety would have a facilitating effect on simple learning tasks,

and a disruptive effect on complex learning tasks. The hypothesis was confirmed that introverts would be superior to extraverts on a simple learning task, and inferior on a complex learning task. If the same philosophy can be made in the speech-communication classroom, then the effects of anxiety would not produce a good learning situation for the introvert.

Anxiety also seems to have its influence on conditioning. It is a prime hypothesis of Eysenck (1959) that introverts have a greater verbal conditionability than do extraverts. Costello (1967) found support for this theory. Sweetbaum (1960) adds further confirmation in that he found that an anxious group of Ss conditioned more easily than did the non-anxious group. From the viewpoint that introverts become anxious in the speech situation, and that they, in general, condition more easily verbally than do extraverts, it would suggest that the type of reinforcement given in the form of the oral criticism following speeches by introverts be perceived by them as positively reinforcing, rather than negatively reinforcing.

This idea may then be analyzed in relation to a learning-theory paradigm, along with the introvert-extravert personalities and the type of criticism in the speech-communication classroom.

Learning theory (Hull, 1943) involves stimulus, response, and reinforcement components. In elementary

terms, a need exists within an organism; within a series of random responses (trial and error), the dominant need is reduced; the indirect effect of need reduction, reinforcement, occurs. When a similar need reoccurs and similar responses diminish the need for appropriate reinforcement, conditioning has taken place.

Capitalizing on the reinforcement concept of learning theory, Hovland, Janis, and Kelley (1953) postulate the utility of reinforcement as a means of attitude change through a related opinion change.

Considering the learning theory paradigm, one might view the role that criticism plays in producing attitude change toward the communication process and the elements which make up effective performance. It might be expected that certain types of criticism in conjunction with certain types of personality variables might produce more favorable attitude change than other combinations may produce.

The introvert, then, is an individual who, in a social situation, displays a heightened self-consciousness. This should be the situation when giving a speech in the beginning course. A number of personality traits bear this out. Especially in the social situation involved in speaking, the introvert may find himself in an uncomfortable situation. This individual, possessing anxiety, is also easily conditioned. The type of criticism may be considered the reinforcement pattern in the learning theory paradigm.

The speaker-oriented critique is meant to heighten the amount of social, verbal interaction between the speaker and the instructor during the critique. Once again, this places the introvert in an uncomfortable situation. If this criticism is viewed as negatively reinforcing by the introvert, as it is posited it will, conditioning will take place, probably rather rapidly, and it will be negative conditioning. The audience-oriented critique is meant to remove the social pressure of interaction, by placing the speaker back into the classroom audience who listens to an analysis of a communication event which has just taken place. This type of critique should be more palatable for the introvert, because he no longer is made the object of social, oral interaction. This type of criticism, it is posited, would be more positively reinforcing, and, thus, produce a better learning situation.

The extravert, on the other hand, because he enjoys social interaction, should find the speaker-oriented critique more suiting to his personality, rather than minimizing his focus by placing him into the audience during an audience-oriented critique.

It should be noted that the disliking for social interaction is the factor disturbing the introvert. It might be argued that the audience-oriented critique is even more disturbing to the introvert, because a group may be perceived as registering opinion towards his performance,

rather than that of a single critic. Once again, it is the element of social interaction which is the problem of the introvert, not group opinion. As Eysenck (1957) states, "... the introvert is over-socialized, is less dependent on external circumstances, and that makes him less susceptible to group pressure." If the introvert does perceive the audience-oriented critique as a group consensus, it should make little difference. Numbers, or size, do not seem to influence the introvert; direct interaction does.

Thus, if the audience-oriented critique minimizes the degree of oral, social interaction between the speaker and the critic, and if, among other traits, the introvert is sensitive to criticism, dislikes oral expression, dislikes coercion, is hurt easily, and becomes anxious in the speech situation, the following hypothesis is established.

H1: Audience-oriented critiques for the introvert will produce more favorable change as measured by the dependent variables than will speaker-oriented critiques.

The extravert has just the opposite characteristics of the introvert. The direct, oral confrontation of the speaker-oriented critique should be more appealing to this personality. Slower to condition, the directness of this critique should also be a favorable factor. Thus,

H2: Speaker-oriented critiques for the extravert will produce more favorable change as measured by the dependent variables than will audience-oriented critiques.

Finally, because the type of critique is more parsimonious to the personality involved,

H3: Introverts will produce more favorable change as measured by the dependent variables than will extraverts with audience-oriented critiques; whereas, extraverts will produce more favorable change as measured by the dependent variables than will introverts with speaker-oriented critiques.

CHAPTER II

METHOD

Communication 101

This study was conducted within the basic framework of the beginning course, Communication 101, offered by the Department of Communication at Michigan State University. A discussion of the nature of this course follows.

Communication 101 is operated under the chairmanship of Dr. David C. Ralph. The individual recitation sections are instructed by graduate students within the Department of Communication.

The catalogue description of the course reads: "Principles of and practice in effective speaking in both informal and formal situations." As stated in the course syllabus, the general goal of Communication 101 is: "To assist students, through knowledge of and experience in the principles and methods of speaking, to operate more effectively as agents of change in speaking situations." In addition, specific goals are stated as follows:

- a. To help you understand and make effective use of the materials of speaking--materials of development, personal proof and materials of experience.

- b. To help you learn and put into practice the principles of good speaking--discovering or limiting the topic; adapting to the audience; organizing and outlining the speech; developing and using language for speaking; practicing and presenting the speech.
- c. To help you feel more secure in the speaking situation by assisting you in a personal adjustment to your role as a speaker.
- d. To help you understand and accept the responsibility of the speaker in society.
- e. To help you understand the role of speaking in our society.
- f. To help you develop the ability to analyze, criticize, and pass judgment on the speaking of others.

The design of the course is such that the student is required to enroll in and attend a televised lecture once a week and a recitation section meeting three times a week. The lectures are presented on video-tape via closed circuit television by Dr. Ralph and Dr. James C. McCroskey, both members of the Department of Communication. The recitation sections are offered either on a Monday-Wednesday-Friday, or a Tuesday-Thursday basis, and, as noted above, are conducted by graduate teaching assistants.

The required text for the course is Principles of Speaking, Second Edition, by Kenneth G. Hance, David C. Ralph, and Milton J. Wiksell. Students are held responsible for reading all chapters in this text.

The syllabus offers six basic speaking assignments, of which the instructors selected four for their specific sections. The assignments discuss the area of emphasis for

that assignment, the chapters to be read in preparation, the purpose of the assignment, the nature of the speech required, the written instructions, and the time limits for the speech. The speech subjects are of the student's own choosing, and an extemporaneous delivery of the speech is required. Each of the student's speeches receives an oral and a written critique, in addition to an evaluation score. Time limits are imposed on all speeches.

The course is normally set up on what is termed a "peer" basis. Each instructor is responsible for two sections of twenty-six students, both meeting at the same time. The instructor meets with one section of students for an entire assignment. In the adjoining room the second section gives their speeches. In the latter section, the oral and written critiques, and the evaluations are given by the speaker's peers, i.e. fellow students. During the following round of speech assignments, the instructor switches sections, the first section operates under the "peer" system, while the instructor criticizes and evaluates speeches in the second section. This peered system is the only major procedure of the course from which the experimental sections departed. This difference will be discussed below.

Each student is required to prepare a "speech plan" for each speech assignment. These plans are not graded separately. Rather, numerical points are deducted from the

oral speech evaluation for certain specified deficiencies in the plan.

All students in the course are required to take the mid-term and the final examination. The mid-term, given the fifth Monday of the term, consists of fifty, five-foil multiple-choice questions, while the final examination consists of 125 such questions. The mid-term is given during a regularly scheduled lecture period, and the final examination is given during a common-examination time. Both examinations are constructed so that approximately thirty-five per cent of the questions cover lecture material, with the remaining sixty-five per cent covering the text.

Final grades are given according to the University Ten Point Grading Scale. The combined examinations are scored, and the scores are ranked by computer. This ranking is broken down into the ten point grading scale, and the grade point determined automatically becomes forty per cent of the individual student's final grade. The remaining sixty per cent is determined by the recitation instructor, based upon the student's classroom performance. A slight departure from this grading procedure was made in the experimental sections. Such is noted below.

Measurement of the Dependent Variables

Speech Anxiety.--The measuring instrument used for this dependent variable was the P R C A (Personal Report of

Communication Apprehension) - Form 269 (McCroskey, 1969).²

Each experimental section was given the survey on a pretest, posttest basis. The test is a twenty-item, Likert-type scale, with possible scores ranging from 20 to 100, the higher the score, the higher the speech anxiety. (See Appendix B.) The test has been found to have an internal reliability of .92, and test-retest reliability, over a ten day period, of .83.

Attitude toward Course.--The S's attitude toward Communication 101 was also measured on a pretest, posttest basis. The Ss were asked to register their attitude toward the course on a seven-step, seven-scale semantic differential, with bi-polar adjectives consisting of: good-bad, foolish-wise, beneficial-harmful, wrong-right, positive-negative, useless-useful, and valuable-worthless. The scales were scored 1-7, with 7 being the desired end of the scale. These scales were used in a previous study by two members of the Department of Communication at Michigan State University (McCroskey and Lashbrook, 1969).

Attitude toward Instructor.--On a pretest, posttest basis, the Ss were asked to register their attitudes toward their Communication 101 recitation instructor. A typical instrument for measuring source credibility was used,

²At the time of this writing, the most thorough discussion of the PRCA measure may be found in Nichols (1969).

involving six, seven-step scales for each dimension of credibility, namely: authoritativeness, dynamism, and character. The scales used for authoritativeness were: informed-uninformed, unqualified-qualified, reliable-unreliable, worthless-valuable, intelligent-unintelligent, inexpert-expert (McCroskey, 1966). The scales used for dynamism were: aggressive-meek, hesitant-emphatic, forceful-forceless, timid-bold, active-passive, tired-energetic (Berlo, Lemert and Mertz, 1966). The scales used for character were: unselfish-selfish, awful-nice, friendly-unfriendly, dishonest-honest, pleasant-unpleasant, sinful-virtuous (McCroskey, 1966).

Attainment of Course Goals.--An analysis of the goals of Communication 101 would indicate that a primary emphasis is placed upon the content of the speech and the adaptation of that content to the speaker's audience. In addition to the course syllabus, both the lectures and the required text of the course bear this assertion out. No specific televised lecture deals with "delivery aspects" alone. The approach of the text is that speech involves an oral communication process. The receiver becomes the focus of the source and of the message. Principles of speaking are not principles in and of themselves, but, rather, principles of communication focusing on the audience. The instructors involved in this experiment made it a specific point to adopt this point of view and apply it to their

critiques. The speaking done in the experimental classrooms was analyzed from the standpoint of the speaker's and message's relationship to the audience. Thus, although the speaker and the delivery of the speech were definitely not ignored in the course, the primary emphasis was placed upon the content of the message and the audience.

At the beginning of the course, the Ss in the experimental sections were asked to write an essay in which they were to evaluate themselves as the source of a message in an oral communication situation. They were also requested to view a filmed speech and then write an essay evaluating the communication event just observed. The essays were edited, removing misspellings, grammatical errors, and cues which would indicate pretest or posttest conditions. Fifteen judges were then contacted and asked to evaluate the essays.

The Ss recognition and utilization of the primary course goals discussed above were rated by the judges on a seven-step, four scale semantic differential, with bi-polar adjectives consisting of: shallow-deep, perceptive-unperceptive, speaker oriented-audience oriented, content oriented-delivery oriented. The scales were scored 1-7. It should be noted that the first two scales are qualitative in nature; the second two scales identify the student's utilization of the primary course goals. The latter two scales were the only scales used as data in the study. This measure was given on a pretest, posttest basis.

Of the fifteen judges, eleven were graduate students in the Department of Communication, two were undergraduate seniors in the Department of Communication, and two were area secondary instructors in speech departments. The essay approach and the scales used were the same as those used in a previous study by McCroskey and Lashbrook, noted above.

Examination Score.--The measuring instrument used for this dependent variable consisted of the combined scores of the common mid-term and final examinations.

Measurement of the Independent Variables

Speaker-Oriented vs. Audience-Oriented Critiques.--The guidelines for the critiques used in the experimental sections may be noted in Chapter I, and the procedures for the presentation of such critiques are discussed below. In order to determine if the Ss perceived the experimental treatment in their respective sections, a manipulation check was obtained. The Ss were asked, at the conclusion of the term, to write their general reactions to the critiques given in their respective sections, and then were asked to respond to the following statement: "If a speaker-oriented critique is an evaluative analysis of a communication event, and is directed toward the source of the message, and if an audience-oriented critique is an evaluative analysis of a communication event, and is directed toward the

receivers of the message, were the critiques offered in this class (check one): ____ speaker-oriented, ____ audience-oriented, or ____ both?"

Introversion-Extraversion.--The measuring instrument used for this independent variable was the Eysenck Personality Inventory, Form A (Eysenck, 1963). The scores for the four experimental sections and the control group were tabulated and a median split was made. Ss scoring 13 and below of a possible 22 were classified as introverts and Ss scoring 14 and above were classified as extraverts.

Procedures

Sixteen peered sections of Communication 101 were offered Spring Term, 1969. Of these sixteen, eight were selected as experimental sections. They were chosen on the basis of enrollment figures being of a size which allowed two peered sections to be combined into one section, thus, four sections consisting of two combined peered sections were used in the study. Two such sections met on a Monday-Wednesday-Friday basis, while the additional two sections met on Tuesday-Thursday. All four sections met in comparable classrooms in the Auditorium Building at Michigan State University. The two Monday-Wednesday-Friday sections met at 10:20 and 12:40 respectively for fifty minutes each day. The two Tuesday-Thursday sections met at 12:40 and 3:00 respectively for ninety minutes each day.

Two instructors, both in their final year of graduate study at Michigan State University, participated in the experiment. One was the author of this thesis; the other was a colleague. Both instructors had completed two years of university teaching before beginning their graduate work, and both had been involved with the instruction and operation of the Communication 101 course each quarter of their teaching assistantships. Each instructor taught two sections. Of the four sections involved in the study, two used a speaker-oriented critique as the basis of oral criticism of the student speeches, and two used an audience-oriented critique. In other words, if "Section 1" was designated as a speaker-oriented critique section, that was the only kind of critique used in that section. Each instructor used one type of critique in one of his classes, and the other type of critique in his other class. The sections were randomly assigned to the two instructors, and the type of critique used in the specified section was randomly assigned to each section.

Of the six speech assignments specified in the course syllabus, four specific assignments were agreed upon by the two instructors to be used in all four sections. The number of days to be used in orientation to the course and the number of class days to be spent upon each speech assignment were identified by the instructors, and a schedule was then constructed and given to the students of the

experimental sections. Time limits agreed upon for each of the four speeches were those identified in the course syllabus.

The sections utilized in the experiment were not peerred. The Ss gave all four speeches with the instructor present, and the instructor orally critiqued all four of the individual S's speeches. Thus, oral peer criticism did not become a confounding variable, since no opportunity for peer criticism was allowed.

Since attendance was thought to be an important factor in the experiment, it was agreed that attendance be enforced somewhat more stringently than might be the normal case. Therefore, five per cent of the student's final grade was based on attendance. If a S compiled no unexcused absences, he was automatically given a 4.5 (based on the ten point grading scale). For each unexcused absence, a total of 1.0 was deducted from that original 4.5. Thirty-five per cent of the S's final grade from the examination scores, and sixty per cent of the final grade came from the classroom speech evaluations.

The procedure followed by the instructors was to compose a written evaluation of the speech in the back of the classroom. Upon completion of that speech, the instructor went to the front of the room, and delivered an oral critique. If the section was a speaker-oriented critique section, the critique was directed specifically to

the speaker, and to no one else in the classroom. If the section was an audience-oriented critique section, the critique was given to the audience. Each speech was criticized orally by the instructor immediately upon the completion of that speech. Thus, each student gave four speeches, and each student heard four oral, instructor critiques of his speeches.

In an attempt to control instructor differences as much as possible, periodic visits were made by each instructor to the other's classroom. This was done by each instructor five times during the term, once during orientation, and once during each of the speech assignments. In addition, periodic tape recordings were made of the critiques of each of the instructors of each speech assignment. The instructors met almost every day to check problems and to discuss procedures of the experiment.

The control group was composed of students in a course in American Thought and Language, offered by the Department of American Thought and Language at Michigan State University. These Ss were given the pre- and posttest of attitudes toward the Communication 101 course, toward the instructor of that course, and they also wrote the four essays. Only those Ss who had never taken Communication 101 in the past, who were not currently enrolled in Communication 101, who were not enrolled in any other course in the Communication Department, and who completed both the pre- and the posttest were included in the control group.

In the experimental sections, only those Ss who took both the pre- and the posttest, who had not taken Communication 101 in the past, who were not enrolled in any other course in the Communication Department, who fulfilled all four speech assignments, and who took the mid-term and the final examination were considered Ss in the study. The cell sizes then realized were:

Instructor 1, Speaker-Oriented . . .	26
Instructor 1, Audience-Oriented . .	28
Instructor 2, Speaker-Oriented . . .	23
Instructor 2, Audience-Oriented . .	19
Control Group	23

The testing of the Ss was conducted in the following manner. On the first regularly scheduled class period of each experimental section, an experimenter, other than the two instructors involved in the experiment, conducted the pretest. This experimenter introduced himself as a member of the Communication Department, and told the Ss that they were being asked to participate in a study which was being conducted by the Department designed to improve both the content and the instruction of its courses. They were told that the actual course instructor would meet with them when the testing had been completed.

Upon being assured that their responses would in no way affect their course grade, the Ss were asked to put their name and student number on their questionnaire

booklet. After responding to three questions pertaining to previous enrollment in the course, etc., the printed directions concerning the completing of semantic differentials were read by the experimenter, and questions were answered. The Ss were then instructed to turn the page and complete the semantic differential scales pertaining to the course and the recitation instructor. Having completed this portion of the survey, the Ss were then asked to write the essay in which they were to "evaluate themselves as the source of a message in an oral communication situation." Following the writing of the essay, the Ss were told that they would then observe a filmed student speech, and upon its completion, they would be asked to "evaluate the communication event which they had just observed." The Ss were asked if they had any questions, the film was played, and the essay was written. The questionnaire booklets were then collected.

The Ss were then told that the Department was also conducting a survey to gain information as to the nature of students who enroll in Communication courses. The printed instructions of the personality inventory were read, questions were answered, and the Ss were then requested to complete the inventory.

Upon completion of the pretest, the questionnaires and the inventories were sealed in large envelopes, the

recitation instructor was introduced, and the normal proceedings of the course began.

It should be noted that neither of the instructors involved in the experiment saw any of the questionnaires or inventories of the pretest or the posttest until after final grades had been turned in to the University Registrar.

The pretest of the control group was handled in a similar fashion, except, upon the request of the course instructor, the Ss identified themselves on the questionnaire and on the survey only by the first four numbers of their student number. This was done to assure the Ss that they, in no manner, would be identified personally, and that their responses would be used as experimental data only.

The posttest in the experimental sections and in the control group was conducted by a different experimenter, other than the two instructors, from the Communication Department. The only additional measurement used at this time was the manipulation check used in the experimental sections mentioned earlier in this chapter. The data collected was also sealed in large envelopes, and was not reviewed until the final grades for the course had been determined.

CHAPTER III

RESULTS

Manipulation Check

In order for introverts and extraverts to react as predicted toward the two critique types, and, subsequently, respond on the dependent variables as hypothesized, it would be essential that the Ss accurately perceive the experimental treatment as administered. If an introvert in an audience-oriented critique section perceived the critique as speaker-oriented, or if an extravert in a speaker-oriented section perceived the critique as audience-oriented, confounding effects would result in measurement. It was also necessary to know if the critiques delivered by the instructors were consistent as to the critique type for a given section. If, for instance, an instructor erred and did directly speak to the speaker during an audience-oriented critique, this S might easily perceive the treatment as speaker-oriented. Thus, the manipulation check discussed in Chapter II was administered to more accurately determine the S's perception of treatment and the consistency of the critiques given by the instructors in their respective sections.

Table 1 shows the results of the manipulation check.

Table 1.--Response to Perception of Treatment Scale.*

Section	Speaker-Oriented Critique	Audience-Oriented Critique	Both
1. Instructor 1, Speaker-Oriented Section (n = 26)	24**	2	0
2. Instructor 1, Audience-Oriented Section (n = 28)	1	27	0
3. Instructor 2, Speaker-Oriented Section (n = 19)	16	3	0
4. Instructor 2, Audience-Oriented Section (n = 23)	10	9	4

*As stated in Chapter II, each S was asked to identify whether the critiques given in that section were speaker-oriented, audience-oriented, or both.

**Number of Ss who perceived the critiques as speaker-oriented (an accurate perception in this case).

An analysis of Table 1 indicates there was either a high degree of misperception or a high degree of inconsistency of critiques delivered in Section 4. Because of the confounding effect which would probably result from S misperception, it was decided to remove all Ss who misperceived the experimental treatment from the subsequent analysis of data. Thus, the total experimental N used in statistical analysis was reduced from 96 to 76, with the n of individual cells as follows:

1. Instructor 1, Speaker-Oriented . . . 24
2. Instructor 1, Audience-Oriented . . . 27

- 3. Instructor 2, Speaker-Oriented . . . 16
- 4. Instructor 2, Audience-Oriented . . . 9

Analysis of Results as Measured
by the Dependent Variables

The first statistical analysis employed in this study was an analysis of variance of pretest scores on the dependent variables. A .05 criterion for significance was set. If no significant differences were found on the pretest, an analysis of variance was run on difference scores between the pre- and the posttest. If significant differences were found on the pretest, results were interpreted from an analysis of covariance in which the pretest served as the covariate and the posttest served as the dependent variable.

The independent variables of instructor, critique type, and personality comprised the main effects of the analyses, respectively identified as "A," "B," and "C" effects. An effort was made as the study was conducted to synchronize the two instructors as much as possible, in an attempt to hold that variable constant. The interaction hypothesized was between treatment and personality, a BC interaction. The instructor variable was identified as an independent variable in an attempt to remove instructor differences from the interpretation of BC interaction.

Speech Anxiety.--The 2 X 2 X 2 analysis of variance conducted on the pretest speech anxiety scores indicated a

significant difference on one main effect level, specifically, the personality variable as predicted ($F = 3.27$, $p < .05$, one-tailed). Thus, an analysis of covariance of the posttest anxiety scores was conducted, the pretest anxiety score serving as the covariate. The analysis of covariance indicated a significant treatment-by-personality interaction ($F = 4.50$, $p < .05$). No other significant effects were observed on this dependent variable. (See Appendix A, Table 10.)

An analysis of the treatment-by-personality interaction revealed that introverts reduced speech anxiety more with audience-oriented critiques than with speaker-oriented critiques; while extraverts reduced speech anxiety more with speaker-oriented critiques than with audience-oriented critiques. Introverts also reduced speech anxiety more than did extraverts with audience-oriented critiques; while extraverts reduced speech anxiety more than did introverts with speaker-oriented critiques. (See Table 2.)

Table 2.--Adjusted Covariance \bar{X} s for BC Interaction on Anxiety.

	Audience-Oriented Critique	Speaker-Oriented Critique
Introvert	45.6	51.9
Extravert	49.0	46.3

Attitude toward Course.--The 2 X 2 X 2 analysis of variance of the pretest scores for attitude toward Communication 101 indicated no significant differences. Thus, an analysis of variance of the difference scores between the pre- and the posttest was computed. The only significant effect observed was an instructor-by-treatment interaction ($F = 5.41$, $p < .05$). (See Appendix A, Table 11.)

As Table 3 indicates, Instructor 1 produced a more favorable attitude toward Communication 101 with an audience-oriented critique, while Instructor 2 produced a more favorable attitude toward the course with speaker-oriented critiques.

Table 3.-- \bar{D} s for AB Interaction on Attitude toward Communication 101.

	Instructor 1	Instructor 2
Audience-Oriented Critique	7.4	0.6
Speaker-Oriented Critique	4.5	5.4

A t -test was computed between the experimental S 's and the control S 's pretest attitudes toward Communication 101. No significant differences were found between the two groups. Thus, a t -test was run on the change scores between the two groups. The \bar{D} for the combined experimental cells was 5.2, while the \bar{D} for the control group was 0.26. (See

Appendix A, Table 23.) This difference was significant ($t = 21.07$, $p < .05$). As opposed to the control group, the sum effect of the experimental cells was a significantly favorable change of attitude toward Communication 101.

Attitude toward Instructor, Authoritativeness.--

Since no significant differences were found on the $2 \times 2 \times 2$ analysis of variance of the pretest scores between experimental cells, the pretest-posttest difference scores were subjected to a $2 \times 2 \times 2$ analysis of variance. (See Appendix A, Table 12.) Here one source of variance was found to be significant, an instructor-by-treatment interaction ($F = 8.40$, $p < .05$). As Table 4 indicates, Instructor 1 received more favorable authoritativeness ratings with audience-oriented critiques, and Instructor 2 received more favorable authoritativeness ratings with speaker-oriented critiques.

Table 4.-- \bar{D} s for AB Interaction on Attitude toward Instructor, Authoritativeness.

	Instructor 1	Instructor 2
Audience-Oriented Critique	14.5	7.6
Speaker-Oriented Critique	10.6	12.4

The t -test on pretest scores toward authoritativeness of the experimental and the control groups indicated

no significant differences. A t -test on \bar{D} s toward authoritativeness of the instructor of Communication 101 between the experimental cells and the control group indicated a significant difference ($t = 50.24, p < .05$). The \bar{D} for the experimental group was 12.00, while the \bar{D} for the control group was 0.04. (See Appendix A, Table 23.) Again, a significantly more favorable change of attitude as measured on this dependent variable was realized by all experimental cells combined, as opposed to the control group.

Attitude toward Instructor, Dynamism.--No significant differences were found on the 2 X 2 X 2 analysis of variance of the pretest dynamism scores. Thus, the pretest-posttest change scores were subjected to a 2 X 2 X 2 analysis of variance. (See Appendix A, Table 13.) One source of variance was found to be significant, an interaction between instructor and treatment ($F = 14.28, p < .05$). Instructor 1 was perceived as more dynamic in the audience-oriented critique section, while Instructor 2 was perceived as more dynamic in the speaker-oriented critique section. (See Table 5.)

Table 5.-- \bar{D} s for AB Interaction on Attitude toward Instructor, Dynamism.

	Instructor 1	Instructor 2
Audience-Oriented Critique	11.9	4.7
Speaker-Oriented Critique	8.0	11.0

No significant differences were revealed by the t-test of the pretest scores between the experimental and the control groups. Thus, a t-test was conducted on the change scores between the two groups. The \bar{D} for the combined experimental sections was 9.59, while the control group's \bar{D} was 0.61. (See Appendix A, Table 23.) This difference was significant ($t = 37.75$, $p < .05$). The combined experimental sections, then, saw the Communication 101 instructors as more dynamic than the unexposed control group.

Attitude toward Instructor, Character.--No significant differences were observed on the 2 X 2 X 2 analysis of variance of the character pretest scores. Therefore, a 2 X 2 X 2 analysis of variance of character change scores was conducted. Two sources of variance were found to be statistically significant, an instructor-by-treatment interaction ($F = 8.65$, $p < .05$), and an instructor-by-personality interaction ($F = 4.86$, $p < .05$). (See Appendix A, Table 14.) \bar{D} scores revealed that Instructor 1 received higher character ratings with the audience-oriented critique and the introvert personality, while Instructor 2 received higher character ratings with speaker-oriented critiques and the extravert personality. (See Tables 6 and 7.)

The t-test run on the pretest scores of the combined experimental cells vs. the control group revealed no significant difference. Subsequently, a t-test was run on

the change scores between the two groups. The \bar{D} for the experimental group was 11.41, while the \bar{D} for the control group was 0.87 ($t = 44.28$, $p < .05$). (See Appendix A, Table 23.) Thus, the experimental cells again produced a significantly more favorable response toward the instructors than did the unexposed control group.

Table 6.-- \bar{D} s for AB Interaction on Attitude toward Instructor, Character.

	Instructor 1	Instructor 2
Audience-Oriented Critique	13.4	8.6
Speaker-Oriented Critique	9.6	12.5

Table 7.-- \bar{D} s for AC Interaction on Attitude toward Instructor, Character.

	Instructor 1	Instructor 2
Introvert	12.3	8.4
Extravert	11.2	13.2

Course Goals, Essay Ratings.--An analysis of variance reliability check of the essay ratings of the five panels of three judges was conducted by means of the CENTRA program developed by Lashbrook (1968). The median reliability for the judge's ratings on the four essays used for analysis was as follows:

Self Essay, Speaker-Audience Scale = .20

Self Essay, Content-Delivery Scale = .29

Film Essay, Speaker-Audience Scale = .16

Film Essay, Content-Delivery Scale = .33

Since the reliability was very low, an attempt was made to gain more meaningful ratings, and, thus, a more meaningful subsequent analysis, by collapsing the rating scale. The seven-step scale was reduced to three steps, with a 1, 2, and 3 becoming a 1; a 4 becoming a 2; and a 5, 6, and 7 becoming a 3. Again the reliability check was computed by CENTRA, and the following median reliabilities were obtained:

Self Essay, Speaker-Audience Scale = .39

Self Essay, Content-Delivery Scale = .64

Film Essay, Speaker-Audience Scale = .41

Film Essay, Content-Delivery Scale = .59

As can be noted, the reliability of the judge's ratings did improve with this conversion, but still must be considered low. The implications of this low reliability will be discussed in Chapter IV.

A 2 X 2 X 2 analysis of variance run on the pretest scores indicated significant differences among the cells on all four essays. Thus, 2 X 2 X 2 analyses of covariance were conducted with the posttests serving as the dependent variables and the pretests serving as the covariates.

The t -tests conducted on the pretest scores of the combined experimental cells and the control group revealed significant differences on all four essays. Thus, a one-way analysis of covariance was run with the posttest serving as the dependent variable and the pretest serving as the covariate. Subsequent discussions of experimental vs. control group changes are analyzed from the results of the covariance runs.

Speaker Centered-Audience Centered Ratings on Self Essay.--The 2 X 2 X 2 analysis of covariance on the self essay, speaker-audience ratings revealed no significant differences for any of the sources of variance. (See Appendix A, Tables 15 and 16.)

The adjusted covariance \bar{X} was 4.5 for the combined experimental groups, while the adjusted covariance \bar{X} for the control group was 4.3 ($t = 1.0$, $p > .05$). Thus, the experimental classes were not more significantly successful in causing the student to attain and recognize this course goal than the control group which received no instruction. (See Appendix A, Table 23.)

Content Centered-Delivery Centered Ratings on Self Essay.--The 2 X 2 X 2 analysis of covariance on the self essay, content-delivery ratings revealed two sources of variance producing significant differences, instructor ($F = 5.27$, $p < .05$) and treatment ($F = 8.31$, $p < .05$). (See Appendix A, Table 17.) The adjusted covariance \bar{X} s disclosed

that Instructor 2's Ss tended to be more delivery-centered in this essay than were Instructor 1's Ss. The Ss in audience-oriented critique sections tended to be more delivery-centered in this essay than did the Ss in speaker-oriented critique sections. (See Appendix A, Table 18.)

The one-way analysis of covariance on the experimental vs. control groups indicated a significant difference between the two groups. The adjusted covariance \bar{X} for the experimental group was 5.6, while the adjusted covariance \bar{X} for the control group was 3.9 ($t = 5.65$, $p < .05$). The control group, then, remained more delivery-centered than the experimental groups. (See Appendix A, Table 23.)

Speaker Centered-Audience Centered Ratings on Film Essay.--The analysis of covariance resulted in a significant main effect for personality ($F = 4.07$, $p < .05$), and a significant instructor-by-treatment-by-personality interaction ($F = 4.97$, $p < .05$). (See Appendix A, Table 19.) An analysis of the adjusted covariance \bar{X} s indicated that introverts were more speaker-centered than were extraverts in this essay.

To properly interpret the third-order interaction, t-tests were conducted between the variable combinations. Table 8 indicates the adjusted covariance \bar{X} s.

The t-test conducted between A1,B1,C1 and A1,B1,C2 revealed a t-value of 2.43 ($p < .05$); while the t-test conducted between A1,B2,C1 and A1,B2,C2 revealed a t-value of

4.40 ($p < .05$). The t -test conducted between A2,B1,C1 and A2,B1,C2 revealed a t -value of 5.31 ($p < .05$); while the t -test conducted between A2,B2,C1 and A2,B2,C2 revealed a t -value of 3.06 ($p < .05$). It was, then, Instructor 1's higher rating with both types of critique with extraverts, and Instructor 2's higher rating with audience-oriented critiques with extraverts and speaker-oriented critiques in introverts that produced this significant third-order interaction.

Table 8.--Adjusted Covariance \bar{X} s for Ratings on Speaker Centered-Audience Centered, Film Essay.

	Instructor 1 (A1)		Instructor 2 (A2)	
	Audience Section (B1)	Speaker Section (B2)	Audience Section (B1)	Speaker Section (B2)
Introvert (C1)	4.14	3.92	3.50	4.84
Extravert (C2)	4.92	5.33	5.20	3.86

The one-way analysis of covariance on the experimental vs. control groups revealed an adjusted covariance \bar{X} of 4.5 for the experimental group, and 3.9 for the control group ($t = 1.78$, $p < .05$). The control group remained more speaker-centered than the experimental group and the difference between groups was significant.

Content Centered-Delivery Centered Ratings on Film Essay.--The 2 X 2 X 2 analysis of covariance conducted on

this dependent variable indicated no significant differences for any of the sources of variance. (See Appendix A, Tables 20 and 21.)

The one-way analysis of covariance on the experimental vs. control groups revealed an adjusted covariance \bar{X} for the combined experimental groups of 5.7 and an adjusted covariance \bar{X} for the control group of 5.1 ($t = 5.44$, $p < .05$). (See Appendix A, Table 23.) The experimental sections, then, were significantly less delivery-centered than the control group.

Examination Score.--The 2 X 2 X 2 analysis of variance conducted on the examination score indicated no significant differences on any of the sources of variance. (See Appendix A, Table 22.)

Since the Communication 101 examination was not given to the control group, a comparison could not be made between the experimental and the control groups on this dependent variable.

The Experimental Hypotheses

As set forth in Chapter I, the first hypothesis stated that "audience-oriented critiques for the introvert will produce more favorable change as measured by the dependent variables than will speaker-oriented critiques."

On the speech anxiety measure, the hypothesis was confirmed. The analysis of covariance revealed adjusted covariance \bar{X} s of 51.9 for introverts with speaker-oriented

critiques, and 45.6 for introverts with audience-oriented critiques. On no other dependent measure, however, was the hypothesis confirmed.

The second hypothesis stated that "speaker-oriented critiques for the extravert will produce more favorable change as measured by the dependent variables than will audience-oriented critiques." Again, on the anxiety measure, the hypothesis was confirmed. The analysis of covariance revealed adjusted covariance \bar{X} s for the extravert of 46.3 with speaker-oriented critiques, and 49.0 with audience-oriented critiques. On no other dependent measure, however, was the hypothesis confirmed.

The third hypothesis stated that "introverts will produce more favorable change as measured by the dependent variables than will extraverts with audience-oriented critiques; whereas, extraverts will produce more favorable change as measured by the dependent variables than will introverts with speaker-oriented critiques."

On the dependent measure of anxiety, this hypothesis was also confirmed. Again, the analysis of covariance revealed an adjusted covariance \bar{X} on audience-oriented critiques for the introvert of 45.6; whereas, the extravert \bar{X} was 49.0. The \bar{X} on speaker-oriented critiques for the extravert was 46.3; whereas, the \bar{X} for the introvert was 51.9. (See Table 9.)

Table 9.--Adjusted Covariance \bar{X} s on PRCA for Treatment-by-Personality Interaction.

	Audience Critique	Speaker Critique
Introvert	45.6	51.9
Extravert	49.0	46.3

On no other dependent measure, however, was this hypothesis confirmed.

CHAPTER IV

CONCLUSIONS, DISCUSSION, AND IMPLICATIONS FOR FURTHER RESEARCH

Conclusions

The purpose of this study was to investigate the relationships between the personality typology of introversion-extraversion and specific types of oral, instructor criticism, namely audience-oriented vs. speaker-oriented, in the beginning speech-communication course. Certain dependent variables served as the basis for analyzing the relationships between the above two independent variables. It was hypothesized that a treatment-by-personality interaction would take place. This specific interaction was found on but one dependent variable, speech anxiety. On all other measures, if significance was found, the instructor variable confounded the results. Conclusions are drawn below concerning the primary interaction, the confounding influence of the instructor variable, and the experimental vs. control group analyses.

The Primary Interaction

A significant interaction between treatment and personality was found on the speech anxiety measure.

Introverts reduced anxiety more with audience-oriented critiques, while extraverts reduced anxiety more with speaker-oriented critiques. Introverts also reduced anxiety with audience-oriented critiques more than did extraverts with the same critique type, while extraverts reduced anxiety with speaker-oriented critiques more than introverts did with that critique type. It then seems feasible to conclude that within the confines of this study a specific type of oral, instructor criticism better facilitates speech anxiety reduction with one personality type than another.

It should also be noted that an instructor variable was not found as a main effect on this measure, nor did the instructor variable enter into an interaction with either of the other two independent variables. If it is possible to generalize from this lack of interaction, there are meaningful implications for speech-communication pedagogy in the beginning course. If future replications of this study confirm the treatment-by-personality interaction, the conclusion may be drawn that a partial solution to the problem of speech anxiety reduction may be achieved by adapting the type of criticism employed to the personality type of the student.

The Instructor Variable

The primary treatment-by-personality interaction was not found on any other dependent measure. Rather, when

significant, though unpredicted, effects or interactions were found, the instructor variable entered into the significance and confounded the results. Although an effort was made to control the instructor variable through cooperation, conference, recording of critiques, and classroom observations, the confounding effects of the instructor supports this researcher's suspicions that one of the chief influences upon students' achievement of course objectives is, indeed, individual instructor differences and characteristics. It was not within the scope of this study to identify exact instructor differences to hypothesize third-order interactions. However, the fact that this independent variable did continuously confound the study's results seems to indicate that future research which carefully controls and/or manipulates instructor differences could provide meaningful data. Such is discussed in another portion of this chapter.

Experimental vs. Control Results

In most all cases, the exception being one essay measurement, significant differences in the direction predicted were found between the experimental and the control groups. As was anticipated, the experimental sections of Communication 101 were conducted effectively enough to produce significant favorable changes in attitude toward the course and the instructors as opposed to no course at all. Rather interesting between-group results were found,

however, on the four essay ratings. On both the self- and the film-essays, significant differences between the experimental and the control groups were found on the content-delivery measure. The analysis of covariance of the post-test scores revealed that the control group was more delivery-centered than the experimental group. This should not be interpreted to mean that the experimental group's ratings were content-centered. The neutral point between the speaker-audience and content-delivery measures would be 2.0. The neutral point of the three summed judges' ratings would be 6.0. The experimental group's adjusted covariance \bar{X} on the content-delivery measure was very near the neutral point of 6.0. Significant differences between groups were found on the speaker-audience, film essay ratings, and only directional between-group differences on the speaker-audience, self essay ratings. On the analysis of covariance, the control group tended to be more speaker-centered, but, again, the adjusted covariance \bar{X} for the experimental group was slightly on the speaker-centered side of the neutral point.

It may be concluded, then, that although between-group attitude change was significantly different, the results on the essay measures were disappointing on two counts. First, on the one measure (speaker-audience, self essay) nonsignificant differences were found between the two groups; second, on the other measures (speaker-audience,

film essay and content-delivery, self and film essays), where significant between-group differences were found, the experimental group still failed to register audience-centered or content-centered \bar{X} scores.

Discussion

As was stated in Chapter I of this study, it was hypothesized that a treatment-by-personality interaction would be found on all dependent variables. The results of statistical analysis, however, indicated that the hypotheses were confirmed on but one dependent measure, speech anxiety. Although this one successful prediction is meaningful in and of itself, analysis in retrospect may shed some light on the reasons why more predictions were not supported.

The theoretical rationale was that introversion-extraversion are opposite personality types. Viewing the parent introvert-extravert population, a normal, bell-shaped curve was noted. By operationally defining introversion-extraversion as a median split of Ss, with the upper half considered extraverts and the lower half considered introverts, a considerable number of Ss are placed into opposite halves of the dichotomy, who, in reality, are very similar behaviorally. When the researcher employs more tenuous measurement, e.g. course goal attainment, perhaps the personality dichotomy is not distinct enough,

and the Ss in the middle half of the distribution distort the results. An alternative approach, if the logistics of the operation were not impossible, would be to create cells composed of Ss who register in the upper and lower quartile of the personality inventory. This would then allow an analysis based upon personality differences which are, indeed, distinct and categorical.

The theoretical derivation of hypotheses should also be reanalyzed. Existing literature indicates that the introvert dislikes social interaction, and, to the contrary, the extravert has a need for social involvement. Because of the differences in the two personality types, the introvert experiences more anxiety than the extravert in the social situation. Communication 101, of course, involves a considerable degree of oral interaction in which both personality types are required to participate. Theoretically, then, the introvert will approach the course with greater apprehension and anxiety than the extravert. The critiques were designed so that the speaker-oriented approach would heighten the degree of oral, social interaction between the instructor and the S. This was direct criticism. The audience-oriented approach was designed to lessen the degree of oral, social interaction between the instructor and the S, and was indirect criticism. The treatment-by-personality interaction on all dependent variables was predicted on the basis that the most harmonious

kind of criticism for the personality type involved would produce the best learning situation for that individual, and, thus, the S would react more favorably on the dependent measures. As has been stated earlier, the introvert with an audience-oriented critique would be one harmonious combination, while the extravert with the speaker-oriented critique would be the other harmonious combination.

Since one of the chief differences between the personality types is the degree of anxiety experienced in social interaction, the predicted treatment-by-personality interaction has a very parsimonious relationship to the dependent measure of speech anxiety, and, indeed, the prediction was confirmed. However, when one moves from this primary relationship to the prediction that the best combination of independent variables will produce the better learning situation, and that such will produce significant differences on attitudes toward the course and the instructor, the attainment of course goals, and examination scores, a secondary relationship perhaps exists between the independent and the dependent variables. The treatment-by-personality interaction prediction was not confirmed on these dependent variables. This lack of confirmation leads one to suspect that these dependent variables were not a parsimonious measure for the theoretical derivation leading to treatment-by-personality interaction predictions. From the theory explicated above, then, the inference that the

"better learning situation" would produce significant interactions on the dependent variables (other than speech anxiety) may have been unwarranted.

Rather, an examination of the results noted in Chapter III may lead one to believe that an instructor variable may be the significant determinant of S difference scores produced on the dependent variables of this study which failed to confirm the hypotheses. Personality only infrequently interacted within this generalization. An overview of the unpredicted, yet statistically significant, instructor effects seems to suggest that Instructor 1 was more influential with audience-oriented critiques, while Instructor 2 was more influential with speaker-oriented critiques. The instructor variable is, of course, a very elusive variable. It is, indeed, an area in which much more research is needed.

As to the low reliability of the judges' ratings on the essays, one can only speculate cause. Several factors may have been influential. One may have been the length of the essays given the judges. After editing the original essays, perhaps not enough verbage remained to offer sufficient cues for the judges to determine speaker-audience and content-delivery emphases. Another factor may have been the use of the seven-step semantic differential. Since collapsing the scale from seven to three steps raised the reliability level, it may have been more wise to use a

fifteen-step scale, collapsing it to a five-step scale, and then running the reliability check. Another factor may have been the adjectives used on the scales. "Speaker-audience" and "content-delivery" may not be sufficiently bi-polar to allow good judgmental distinction.

Regardless of cause, the low reliability of the essay ratings allow generalization from these results to be made only with caution.

The fact that significant differences were not found on any sources of variance for the examination score may also lead one to believe that the independent variables of treatment and personality were not primarily related to this dependent variable.

This researcher concludes that the meaningful implications of this study lie in the fact that a significant treatment-by-personality interaction resulted on the speech anxiety measure. Such seems to indicate that there is, indeed, a means by which instruction in the beginning speech-communication course can be more individualized according to the personalities of the individual students enrolled. Since such a course allows the opportunity for directed, immediate, and positive reinforcement in the learning situation, it may be recommended that subsequent replication of this study be made, and, if successful, the procedure be adopted as a means of reducing speech anxiety.

Implications for Further Research

As with much research, this study suggests the need for further investigation in several areas.

One of the primary analyses which should be made is a determination of which method of anxiety reduction is generally most successful and best implemented in the beginning course. Comparisons need to be made between approaches such as systematic desensitization and the critique-by-personality approach utilized in this investigation. It seems totally feasible that both approaches might be incorporated in a unified approach to anxiety reduction, systematic desensitization on a voluntary basis, and critique-by-personality as a basic approach to instructor criticism.

It must also be realized that anxiety reduction is but one portion of course objectives achievement. Chapter I suggested that suitable goals for the beginning course rest in the areas of knowledge and understanding, ability, and attitude change. The main significant finding of this study, treatment-by-personality interaction on speech anxiety, would best seem to tap the ability goal, and, on a more secondary level, be correlated with attitude change. The theory here, of course, would be that the reduction of anxiety better enables the individual to utilize his abilities in interpersonal communication, and, subsequently, influence his attitude toward communication. It has been suggested earlier in this chapter that the inferential leap

from such a theory to such measurement might be too great. The study did fail to confirm an interaction between critique types and personality as measured by attitude toward the course and the instructor, and in the attainment of content- and audience-centered course goals. It might be fruitful to analyze other theoretical approaches to these variables. Perhaps personality does not interact significantly with treatment in such cases.

The instructor variable, which was attempted to be held constant and not predicted to be a significant contributor to variance in this study, seemed to consistently confound the results. As has been stated earlier, it is the suspicion of this writer that instructor differences are a paramount factor in the learning process. With the instructor participating at such a personal level in the beginning course, it would seem especially important to try to pin down this elusive variable. In addition to the often used measure of source credibility, it might be valuable to find if other factors are instrumental in better facilitating the learning process. Measures of personality, dogmatism, self-esteem, and others might be suggested to serve as a basis for analysis. It is the notion of this writer that, other things being equal, identifiability between student and instructor serves as a prime motivational factor. It seems that little has been done to investigate and refine the factors contributing to that influence.

There are two additional areas of research, related to this study, which would serve as prime fields for further investigation. First, the speech-communication discipline needs to analyze the influence of negative and positive criticism on specific personalities. Although the implications of "playing" with personalities through the potential impact of negative and positive criticism research might be questionable, the information gained would, indeed, be valuable. If the "ethical" problems can be met, a measure of self-esteem or dogmatism might be parsimonious measures on a pretest-posttest basis. Such an investigation must be approached with caution, but if the study could be conducted, more individualized instruction might result. Second, the impact of grading speeches on motivation and learning is yet another area of needed research. It would seem that the effects of positive criticism for the average or below average speaker would serve as a definite motivational device. However, it would also seem that such effects would be negated by the grade that the average or below average speaker would receive on his performance. It might be posited that a non-graded, a pass-fail, or a credit-no credit course would best serve such students. The conclusions made from an analysis of the relationships between grading and speaking ability might serve as a basis for modifying the nature of the beginning speech-communication course.

In sum, more work is needed on anxiety reduction, the measurement of course goal achievement, the influence of instructor differences on learning, the impact of negative and positive criticism, and the relationships between grading and speaker ability.

Since the beginning speech-communication course is unique in that it allows close instructor-student contact, and conducive to immediate, positive, and directed reinforcement, considerable research is needed to refine and improve our educational approaches in this learning situation. This study has been devoted to that purpose.

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APPENDICES

APPENDIX A

Table 10.--Analysis of Covariance Summary on Anxiety.

Source of Variance	df	M.S.	F
Covariate	1	2888.4	33.83*
Instructor (A)	1	114.0	1.64
Treatment (B)	1	49.0	0.71
Personality (C)	1	17.6	0.25
AB	1	9.4	0.14
AC	1	65.2	0.81
BC	1	312.8	4.50*
ABC	1	16.3	0.23
Error	67	69.3	

*Significant at $<.05$ level

Table 11.--Analysis of Variance of Change Scores on Attitude toward Communication 101.

Source of Variance	df	M.S.	F
Instructor (A)	1	138.1	3.27
Treatment (B)	1	15.7	0.37
Personality (C)	1	25.3	0.60
AB	1	228.3	5.41*
AC	1	26.4	0.63
BC	1	1.8	0.04
ABC	1	4.8	0.11
Error	68	42.1	

*Significant at $<.05$ level

Table 12.--Analysis of Variance of Change Scores on Attitude toward Instructor, Authoritativeness.

Source of Variance	df	M.S.	F
Instructor (A)	1	101.5	2.90
Treatment (B)	1	2.7	0.08
Personality (C)	1	5.4	0.16
AB	1	293.6	8.40*
AC	1	0.2	0.01
BC	1	9.0	0.25
ABC	1	0.7	0.02
Error	68	34.9	

*Significant at <.05 level

Table 13.--Analysis of Variance of Change Scores on Attitude toward Instructor, Dynamism.

Source of Variance	df	M.S.	F
Instructor (A)	1	67.8	2.42
Treatment (B)	1	20.7	0.74
Personality (C)	1	3.4	0.12
AB	1	398.5	14.28*
AC	1	43.8	1.57
BC	1	4.3	0.15
ABC	1	44.2	1.59
Error	68	27.9	

*Significant at <.05 level

Table 14.--Analysis of Variance of Change Scores on Attitude toward Instructor, Character.

Source of Variance	df	M.S.	F
Instructor (A)	1	14.2	0.53
Treatment (B)	1	0.1	0.00
Personality (C)	1	54.5	2.05
AB	1	230.0	8.65*
AC	1	129.3	4.86*
BC	1	0.0	0.00
ABC	1	28.8	1.08
Error	68	26.6	

*Significant at <.05 level

Table 15.--Analysis of Covariance Summary on Self Essay, Speaker-Audience.

Source of Variance	df	M.S.	F
Covariate	1	3.2	0.03
Instructor (A)	1	5.8	1.85
Treatment (B)	1	0.0	0.00
Personality (C)	1	0.8	0.26
AB	1	5.2	1.66
AC	1	0.3	0.09
BC	1	0.4	0.12
ABC	1	1.2	0.37
Error	67	3.1	

Table 16.--Adjusted Covariance \bar{X} s for Main Effects on Self Essay, Speaker-Audience.

Instructor 1	4.30
Instructor 2	4.91
Audience-Oriented Critique	4.48
Speaker-Oriented Critique	4.51
Introvert	4.62
Extravert	4.38

Table 17.--Analysis of Covariance Summary on Self Essay, Content-Delivery.

Source of Variance	df	M.S.	F
Covariate	1	10.2	4.23*
Instructor (A)	1	14.5	5.27*
Treatment (B)	1	22.8	8.31*
Personality (C)	1	1.6	0.59
AB	1	1.0	0.37
AC	1	0.6	0.22
BC	1	3.6	1.32
ABC	1	0.2	0.09
Error	67	2.7	

*Significant at <.05 level

Table 18.--Adjusted Covariance \bar{X} s for Main Effects on Self Essay, Content-Delivery.

Instructor 1	5.9
Instructor 2	5.0
Audience-Oriented Critique	5.0
Speaker-Oriented Critique	6.2
Introvert	5.4
Extravert	5.7

Table 19.--Analysis of Covariance Summary on Film Essay, Speaker-Audience.

Source of Variance	df	M.S.	F
Covariate	1	3.3	0.00
Instructor (A)	1	0.9	0.45
Treatment (B)	1	0.0	0.00
Personality (C)	1	8.5	4.07*
AB	1	0.0	0.00
AC	1	2.0	0.9
BC	1	3.8	1.82
ABC	1	10.4	4.97*
Error	67		

*Significant at <.05 level

Table 20.--Analysis of Covariance Summary on Film Essay,
Content-Delivery.

Source of Variance	df	M.S.	F
Covariate	1	9.9	4.53
Instructor (A)	1	0.6	0.16
Treatment (B)	1	9.9	2.50
Personality (C)	1	1.9	0.50
AB	1	2.5	0.70
AC	1	5.8	1.50
BC	1	3.6	0.90
ABC	1	1.8	0.45
Error	67	3.9	

Table 21.--Adjusted Covariance \bar{X} s for Main Effects on Film
Essay, Content-Delivery.

Instructor 1	5.9
Instructor 2	5.7
Audience-Oriented Critique	5.4
Speaker-Oriented Critique	6.2
Introvert	5.6
Extravert	6.0

Table 22.--Analysis of Variance Summary on Examination Score.

Source of Variance	df	M.S.	F
Instructor (A)	1	206.9	0.77
Treatment (B)	1	32.8	0.12
Personality (C)	1	538.9	2.00
AB	1	34.6	0.13
AC	1	49.9	0.18
BC	1	6.5	0.02
ABC	1	44.5	0.17
Error	68	269.9	

Table 23.-- \bar{D} s and Adjusted Covariance \bar{X} s for Experimental vs. Control Groups.

	Experimental	Control
Attitude toward Course	5.28	0.26
Attitude toward Instructor, Authoritativeness	12.00	0.04
Attitude toward Instructor, Dynamism	9.59	0.61
Attitude toward Instructor, Character	11.41	0.87
<u>Adjusted Covariance \bar{X}s</u>		
Self Essay, Speaker-Audience Ratings	4.5	4.3
Self Essay, Content-Delivery Ratings	5.6	3.9
Film Essay, Speaker-Audience Ratings	4.5	3.9
Film Essay, Content-Delivery Ratings	5.7	5.1

APPENDIX B

Speech Communication Research Project

Name _____ Student Number _____

In an attempt to evaluate its courses, the Communication Department is asking you to complete this brief survey. We thank you in advance for your cooperation.

Yes ___ No ___ Have you taken Communication (Speech) 101 in the past?

Yes ___ No ___ Are you currently enrolled in Communication (Speech) 101?

Yes ___ No ___ Are you currently enrolled in any other course in the Communication Department?

On the following page you will find two semantic differentials. You are to evaluate the concept preceding each set of scales in terms of the bipolar adjectives following each concept. Please make your judgments on the basis of what the concepts mean to you. For example, if you were to evaluate "Michigan State University" in terms of its reputation as an academic institution, and you feel that this concept is very closely related to one end of the scale, you should place your "X" as illustrated:

Reputable : X : ___ : ___ : ___ : ___ : ___ : ___ : Disreputable
or

Reputable : ___ : ___ : ___ : ___ : ___ : ___ : X : Disreputable

If you feel that this concept is quite closely related to one end of the scale, you should place your "X" as illustrated:

Reputable : ___ : X : ___ : ___ : ___ : ___ : ___ : Disreputable
or

Reputable : ___ : ___ : ___ : ___ : ___ : X : ___ : Disreputable

If you feel that this concept is only slightly related to one end of the scale, you should place your "X" as illustrated:

Reputable : ___ : ___ : X : ___ : ___ : ___ : ___ : Disreputable
or

Reputable : ___ : ___ : ___ : ___ : X : ___ : ___ : Disreputable

If you feel that neither adjective applies to the concept, or if you feel that both adjectives apply equally, or if you have no attitude toward the concept, or if you "don't know," you should mark your "X" as illustrated:

Reputable :__:__:__:X:__:__:__: Disreputable

IMPORTANT: Place your check-marks in the middle of the spaces, not on the boundaries. Be sure to check every scale for both concepts. Do not put more than one check-mark on a single scale.

Pretest, Posttest Attitude Measures

COMMUNICATION (SPEECH) 101

Good : __:__:__:__:__:__:__:__:__:__: Bad
 Foolish : __:__:__:__:__:__:__:__:__:__: Wise
 Beneficial : __:__:__:__:__:__:__:__:__:__: Harmful
 Wrong : __:__:__:__:__:__:__:__:__:__: Right
 Positive : __:__:__:__:__:__:__:__:__:__: Negative
 Useless : __:__:__:__:__:__:__:__:__:__: Useful
 Valuable : __:__:__:__:__:__:__:__:__:__: Worthless

COMMUNICATION (SPEECH) 101 INSTRUCTOR

Informed : __:__:__:__:__:__:__:__:__:__: Uninformed
 Unqualified : __:__:__:__:__:__:__:__:__:__: Qualified
 Reliable : __:__:__:__:__:__:__:__:__:__: Unreliable
 Worthless : __:__:__:__:__:__:__:__:__:__: Valuable
 Intelligent : __:__:__:__:__:__:__:__:__:__: Unintelligent
 Inexpert : __:__:__:__:__:__:__:__:__:__: Expert
 Aggressive : __:__:__:__:__:__:__:__:__:__: Meek
 Hesitant : __:__:__:__:__:__:__:__:__:__: Emphatic
 Forceful : __:__:__:__:__:__:__:__:__:__: Forceless
 Timid : __:__:__:__:__:__:__:__:__:__: Bold
 Active : __:__:__:__:__:__:__:__:__:__: Passive
 Tired : __:__:__:__:__:__:__:__:__:__: Energetic
 Unselfish : __:__:__:__:__:__:__:__:__:__: Selfish
 Awful : __:__:__:__:__:__:__:__:__:__: Nice
 Friendly : __:__:__:__:__:__:__:__:__:__: Unfriendly
 Dishonest : __:__:__:__:__:__:__:__:__:__: Honest
 Pleasant : __:__:__:__:__:__:__:__:__:__: Unpleasant
 Sinful : __:__:__:__:__:__:__:__:__:__: Virtuous

Instructions for Self Essay

We would now like you to write an essay in which you evaluate yourself in terms of your ability to function as the source of a message in an oral communication situation. Don't worry about terminology; just try to give an honest evaluation of what you perceive to be your strengths and weaknesses.

Instructions for Film Essay

You are now going to view a filmed student speech. Upon its completion, evaluate the communicative act which you just observed. Once again, don't worry about terminology; just give an honest evaluation of what you saw and heard.

PRCA - Form 269

This instrument is composed of 20 statements regarding feelings about communicating with other people.

Indicate the degree to which the statements apply to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree with each statement. Work quickly, just record your first impression.

Do not mark on this page. Please use the answer sheet provided.

1. While participating in a conversation with a new acquaintance I feel very nervous.
2. I have no fear of facing an audience.
3. I look forward to expressing my opinion at meetings.
4. I look forward to an opportunity to speak in public.
5. I find the prospect of speaking mildly pleasant.
6. When communicating, my posture feels strained and unnatural.
7. I am tense and nervous while participating in group discussions.
8. Although I talk fluently with friends I am at a loss for words on the platform.
9. My hands tremble when I try to handle objects on the platform.
10. I always avoid speaking in public if possible.
11. I feel that I am more fluent when talking to people than most other people are.
12. I am fearful and tense all the while I am speaking before a group of people.
13. My thoughts become confused and jumbled when I speak before an audience.
14. Although I am nervous just before getting up, I soon forget my fears and enjoy the experience.

15. Conversing with people who hold positions of authority causes me to be fearful and tense.
16. I dislike to use my body and voice expressively.
17. I feel relaxed and comfortable while speaking.
18. I enjoy preparing a talk.
19. I face the prospect of making a speech with complete confidence.
20. I would enjoy presenting a speech on a local television show.

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