THE INFLUENCE OF VOICE DISTINGUISHABILITY ON SOURCE CREDIBILITY

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ABSTRACT

THE INFLUENCE OF VOICE DISTINGUISHABILITY ON SOURCE CREDIBILITY

By

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Purpose of the Study

The purpose of this study was to measure the extent to which a distinguishable voice sound (aural cue) associated with a Black speaker and a distinguishable voice sound (aural cue) associated with a Caucasian speaker used as narrators for an automated sound slide presentation affect the source credibility of a recorded message to a selected group of students. Of specific interest to this study was the extent to which believability of message and voice preference were affected by the identification of a distinguishable voice sound (aural cue) associated with a Black or Caucasian narrator.

Procedures

The experimental population consisted of 160 Caucasian students enrolled in eight workshop sections of Education 450, School and Society, conducted at Michigan State University during the 1971 Spring quarter. All

students were enrolled in the Michigan State University Teacher Education Program and had completed student teaching requirements.

Eight sections were randomly selected from the total of ten workshops. Eight experimental treatments were randomly assigned to the eight workshop sections. Four workshops received a treatment with a Black voice arguing either for the con or pro position on "Community Control of Schools." Four workshops received a treatment with a Caucasian voice arguing either for the pro or con position. The subjects in all workshops were administered the same semantic differential consisting of twelve items relating to "voice preference" and thirteen items relating to "believability." The mode of presentation for the treatments (automated slide-tape presentation) was the same for all workshops. The statistical hypotheses were tested by using the multivariate analysis procedure, and the probability level selected for rejecting the null hypothesis was at the .05 alpha level.

Conclusions

The analysis of the differential test results supports the following conclusions:

1. When Caucasian undergraduate students are exposed to information communicated by a Caucasian communicator they generally gave higher credibility to a Caucasian information source than they will give to a Black communicator source.

2. "Voice preference" is perceived more positively with voice sound associated with a Caucasian than with voice sound associated with a Black speaker.

3. Distinguishable voice sound associated with different Black speakers was perceived as having approximately the same level of credibility.

4. "Voice preference" was rated in a negative direction when associated with a distinguishable Black voice sound.

5. The perception of "voice preference" and "believability" was rated in a positive direction when associated with a distinguishable Caucasian voice sound.

6. The "believability" of a message can not be assured by the position a speaker takes on an issue.

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By

Arthur I. Boone

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DEDICATION

To my wife, Zola, who sacrificed her own professional job advancement and encouraged me to take this venture. Her moral support, understanding, and inspiration sustained me throughout this task. This task would not have been completed without the labor and many long hours she spent typing and retyping thesis drafts. Her understanding of the many anxious moments was a constant source of encouragement to me.

To my children, Monica, Denise, and Ivan, who somehow understood what I was doing and why I was absent from the home for many long hours. Their understanding made the task a little easier.

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Further gratitude and appreciation are expressed to Dr. Harry Johnson, who has been a counselor, friend, and professional confidant throughout my professional career. Special thanks is also extended to the instructors in Education 450 whose cooperation made it possible for me to collect the data for this study.

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Arthur I. Boone

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER I

INTRODUCTION

The effectiveness of communication depends to a considerable extent upon the person or group who delivers it.[1] However, the attitude of the audience toward the communicator is one of the major factors in determining the degree of credibility attributed to the communicator. Berlo[2] suggests that the more source credibility the communicator is perceived to have, the more likely the receiver is to accept the transmitted message. Similarly the perception of the message is generally influenced by a variety of cues (variables) directly associated with the communicator. These cues often take a variety of forms such as dress, mannerisms, social status, voice, and ethnic group identification. Accordingly the attitude of the audience toward these cues will affect its perception of the credibility of the source.

The variables affecting source credibility are inherent in the proposition that the audience's perception of

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[1]Carl I. Hovland, Janis L. Irving and Harold H. Kelly, Communication and Persuasion (New Haven: Yale University Press, 1953), p. 19.

[2]David Berlo, James B. Lemert and Robert Mertz, "Dimensions for Evaluating the Acceptability of Message Sources," The Public Opinion Quarterly, Vol. 33 (Winter, 1969-70), p. 563.

the source will influence the response to the message.[3] Miller[4] suggests further that physical and vocal variables play a part in shaping our reaction to a speaker if for no other reason than that various personality stereotypes are associated with certain physical and vocal characteristics. These physical and vocal characteristic variables are particularly significant in situations where white audiences are placed in a position to judge the source credibility of Black communicators. The attitudes reflected by a white audience toward a Black communicator often appear to be distinctively discernible on the basis of racial distinguishability.

Miller[5] describes two possible reasons why the variable of communicator race leads to differences in the perception of source credibility relating to Caucasian and Black communicators. One reason is the variation in the cue properties of visual stimuli serving to identify race. He states that:

> . . . in the case of white audiences, individuals are exposed more frequently to messages presented by white communicators than to communications originating from Negro communicators. Thus when white

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[3]Gerald R. Miller and Murray A. Hewgill, "The Effect of Variations in Nonfluence and Audience Ratings of Source Credibility," The Quarterly Journal of Speech, Vol. 1, No. 1 (February, 1964), 36.

[4]Ibid.

[5]Gerald Miller and Kenn Roberts, "Communication Race, Open- and Closed-Mindedness, and Response to Informative Communications," Audiovisual Communication Review, Vol. 13, No. 3 (Fall, 1965), 259.

> communicators are paired with messages, visual stimuli denoting race will be high, and their distinctiveness, along with the novelty of the stimulus situation, will lead white audience members to respond in ways calculated to reduce attention to the message content.

Miller[6] suggests that racial attitudes held by white audiences is a second reason why the race of the communicator will influence audience perception of the source. If some members of such audiences entertain certain prejudices and hold certain negative stereotypes of Blacks in general, negative responses, such as perceptions of low source credibility and distortion or avoidance of message content usually result. Thus, it is expected that a white audience exposed to a Black communicator would retain less of the message content than would a white audience exposed to a white communicator.

Obviously, however, the communicator's race will not exercise an equal impact on all audience members; rather, it is probable that certain personality variables associated with the communicator will determine the extent to which the race of the source will alter response to the message.[7]

It was previously pointed out that the audience's attitude toward voice cue is one of the variables affecting the perception of source credibility. In a study by

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[6] Ibid.

[7] Ibid., 263.

Nerbonne,[8] it was concluded that listeners can differentiate accurately between Black and Caucasian speakers. He[9] suggested further that differentiations between Black and Caucasian speakers can be made more effective on the basis of prepared aural cues (oral reading) than on the basis of spontaneous oral cues (extemporaneous speech).

With this view in mind, this study is designed to define and delineate further one of the variables (voice cue) which appears to influence the audience's perception of source credibility.

Statement of the Problem

The purpose of this study is to investigate the extent to which the recognition of voice sound (aural cue) functions as a basis for source credibility of a recorded message. Specifically, this study is designed to measure the extent to which a distinguishable voice sound (aural cue) associated with the Black speaker and a distinguishable voice sound (aural cue) associated with a Caucasian speaker used as narrators for an automated sound slide presentation affect the source credibility of a recorded message presented to a selected group of students. Of specific interest to this study is the extent to which believability of message

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[8]Patrick G. Nerbonne, "Identification of Speaker Characteristics on the Basis of Aural Cues," unpublished doctoral dissertation, Michigan State University, 1967, p. 114.

[9]Ibid., p. 44.

and voice preference are affected by the identification of a distinguishable voice sound (aural cue) associated with a Black or Caucasian narrator.

General Statement of Hypothesis

The hypothesis formulated for this study is generally stated as follows: The mean score of source credibility for listener response to voice sound (aural cue) associated with a Caucasian narrator on a recorded message will be greater than the mean score of source credibility for listener response to voice sound (aural cue) associated with a Black narrator.

Significant Questions

The following questions are posed as a basis for this study:

1. Can voice sound (aural cue) be distinctively identified and clearly associated with a particular ethnic group by the listener?
2. Can voice sound (aural cue) be distinctively identified and clearly recognized as belonging to a Black speaker on a recorded message?
3. Can voice sound (aural cue) be distinctively identified and clearly recognized as belonging to a Caucasian speaker on a recorded message?
4. If voice sound (aural cue) can be distinguished clearly as belonging to a Black or Caucasian speaker, then to what extent does the recognition of voice sound (aural cue) affect listener response to a recorded message?
5. To what extent does the identification of distinguishable voice sound (aural cue) by the listener function as a basis for source credibility?

The Need for the Study

The solicitation of positive response and attitude toward the information source is one of the major premises upon which effective communication is based. There are a variety of cues generally associated with all information sources which are peculiar to those sources. How the audience receives and reacts to these cues determines to a considerable extent the degree of credibility given to the information source. In order to provide more evidence in this area, a continuing collection of research data is needed, particularly in the area of source credibility as it relates to verbal cues in general and to Blacks in particular. In a recent study, Berlo[10] states that:

> We need empirical evidence establishing the criteria that in fact are used by receivers to evaluate information sources. We need to know how many dimensions are required to account for these evaluations, whether these are independent dimensions, and what types of response characterize each.

In view of Berlo's statement, this study will be significant in that it can help to reduce the seeming paucity of research in this area.

Paucity of Research

The general area of source credibility is broad and exhaustive. However, there appears to be very little reported research dealing with credibility source as it

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[10]Berlo, Lemert and Mertz, op. cit., p. 564.

relates solely to distinguishable voice sound as an aural cue and its association with a particular ethnic or racial group, particularly Blacks. While considerable emphasis has been placed on the "who the source is" dimension, little consideration has been given to "how the source says it." Or, expressed in a more scientific idiom, investigators have largely ignored those classes of physical and vocal variables likely to influence the audience's perception of the source's credibility.[11]

Much of the research regarding source credibility as it relates to race has emphasized the role of visual stimuli in shaping audience response to a communication situation.[12] Miller[13] states that, ". . . it is reasonable to assume that the race of a communicator may exercise an effect on audience response to a communicator, however, there is a paucity of reported research dealing with this variable." One exception is a recent study by Kraus[14] which demonstrates that a drama performed by a racially mixed cast produced significantly more favorable attitudes toward the integration of Blacks in education than did the same drama performed by all-Black or all-white casts.

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[11] Miller and Hewgill, op. cit.

[12] Ibid., p. 258.

[13] Ibid.

[14] S. Kraus, "Modifying Prejudice: Attitude Change as a Function of the Race of the Communicator," Audiovisual Communication Review, Vol. 10 (January-February, 1962), 14-22.

Evidence of the lack of research dealing with the race of a communicator and the visual stimulus of race as it relates to source credibility appears to substantiate Miller's observations. More significant to this study is that research dealing specifically with the question of race of the communicator and the aural stimulus (voice cue) of race as it relates to source credibility is practically non-existent in the literature.

Obviously, there is a great need for additional research on source credibility as it relates to the race of the communicator and the aural stimulus associated with the communicator. To this extent, this study is important in that it can make a contribution in the following three ways:

1. Make gains in reducing the paucity of research done in the general area of source credibility,
2. Provide additional knowledge input to the specific area of aural stimulus as it relates to source credibility, and
3. Broaden the knowledge base for further empirical examination of the relationship between source credibility and distinguishable aural cues associated with a particular racial or ethnic group.

Investigations as to the ability of listeners to identify the ethnic group of speakers have been sparse. The same can be said of objective studies in which an attempt is made to specify various vocal or conversational

cues by which to make such differentiations.[15] Therefore, one of the single most important contributions that a study of this nature can make is the filling of the existing void of research evidence concerning the identification of distinguishable ethnic (Black American) aural cues as a function of source credibility.

Criteria for Evaluation

A trend has developed in recent years in the field of education in the publication of print and the production of non-print media. As a result of this trend, there is a noticeable increase in the pictorial visibility of multi-racial and ethnic groups, particularly Blacks, appearing in both print and non-print media. Through an examination of print media such as textbooks, work-books, and other similar media, evidence of the increase in the visibility of multi-racial and ethnic groups in pictorial illustrations beccmes reasonably obvious. Likewise, this trend is also evident in non-print media such as instructional films, filmstrips and slides.

The degree and extent of the visibility of multi-racial representations in pictorial illustrations in print media and non-print media is often one of the criteria used for evaluating the authenticity and credibility of these forms of media. Actions taken by some school systems

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[15]Nerbonne, op. cit., p. 27.

(districts, regions, etc.) exemplify this concern when formulating criteria for the evaluation of print and non-print media. Faculty committees and other similar bodies are often established to evaluate and assess print and non-print media on the basis of the extent of multi-racial group representation found in those media used in their school system. For example, the State of Michigan was recently involved in such an evaluation process at the public school level. One of the criteria used for evaluation was the degree and kind of multi-racial representation evident in print media.[16]

This apparent trend in the field of education in general and within certain school districts in particular to consider the visibility of multi-racial representation, particularly Blacks, as one of the criteria for evaluating print and non-print media is considered a recent dimension. However, these criteria for evaluation do not include concern for the representation of the multi-racial distinguishability and identification of voice sound used with non-print media as it is associated with a particular racial or ethnic group.

In this sense, this study can contribute to the probable expansion of those criteria used for evaluation by many school systems. This study can be beneficial to school personnel by directing the school's attention to the

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[16]"State Cites Flaws in Textbooks," The Lansing State Journal, March 18, 1971, p. 12.

need to examine non-print media such as audio tapes and recording discs for the accuracy and degree of representation of those distinguishable voices associated with the Black voice.

Packaged Programs

Packaged programs are described as the incorporation of filmstrips, motion pictures, disc and tape recordings, manipulative devices and realia to assist in the teaching-learning process.[17]

Packaged programs often combine filmstrips and audio-tapes in a single package. Repetitive film loops are combined with sound and pictures. A combination of synchronized audio-tapes and slides is also a common example of the variations utilized in packaged programs. In each of these variation-combinations, the inclusion of sound via audio track is a common element present in the packaged program.

The communication effectiveness of a slide-audio tape program, like other similar packages, is only successful to the extent that some basis for criteria for evaluation is established to determine its merit and effectiveness in the situation in which it is intended for use. In

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[17]Robert A. Weisgerber, Instructional Process and Media Innovations (Chicago: Rand, McNally and Co., 1968), p. 329.

evaluating slide-tape packaged programs, the quality of the audio-track is invariably one of the criteria which is judged in the evaluation process.

A vast majority of slide-audio tape packaged programs are commercially produced.[18] The absence of distinguishable ethnic and regional dialect on recorded audio tracks is evident in commercially produced packaged programs. The professionally trained speaker with little or no distinguishable ethnic or regional dialect in his voice is the typical kind of narrator often used to record audio tracks for commercially produced packaged programs.

A study of this nature can contribute significantly by alerting those persons who produce commercially packaged programs to consider the need to incorporate more distinguishable ethnic voices for narration. This study can conceivably provide a broader and a more significant implication for the selection of distinguishable ethnic and regional voice dialects to be used for recorded narrations and commentary used with instructional films, audio tapes, video tape programs, and discs.

Limitations of the Study

The following limitations are acknowledged as inherent in this study and the scope of its findings is restricted accordingly:

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[18] Ibid.

1. The population of this study is limited to students enrolled in Education 450, Schools and Society, for the Spring Quarter (1971) at Michigan State University. The total test population was comprised of 240 students divided into 10 workshop sections. The sample used for this study consisted of 8 sections, approximately 30 for each section.

2. This study is further limited in scope by the small number of sample population. Inferences to broader generalizations to other groups not included in this study are beyond the limited scope of this study.

3. This study is limited to the use of an automated slide presentation. Results obtained are not intended to function as a basis for inferences to broader generalizations concerning other mediated packages including media such as films, discs, and video tapes.

4. This study is limited to measuring listener response in the affective domain. Measurement of listener response in the cognitive domain is not included in the scope of this study.

5. The assumed personal bias of the participating subjects is a limitation in that complete objectivity of listener response may be lacking.

6. The scope of this study is limited in that no assumptions or inferences are made concerning the probable bias of the listeners included in the sample population.

7. The study is limited to measuring listener response to voice sound (aural cue). The measurement of listener response to visual cues is beyond the scope of this study.

8. The scope of this study is further limited to measuring listener response to "credibility" as defined in the context of this study. Inferences to "credibility" beyond the scope of this study will be limited.

Definition of Terms

An understanding of the key terms used in this study is paramount to the interpretation of the findings; accordingly, the following definitions are stated:

1. Voice sound (aural cue)

   The voice narration recorded on the slide tape presentation.

2. Recorded message

   Refers to the content of the recorded narration on the automated slide-tape package.

3. Automated Slide-Tape Presentation

   Refers to a combination synchronized audio tape and slide sequence automated with a cue signal using a 35mm slide projector.

4. Distinguishable voice sound

   Refers to that voice (aural cue) which is associated with either a Black or Caucasian speaker by the subjects.

5. Pre-test script

   Refers to one paragraph statement.

6. Master tape

   Refers to audio tape recording composed of five Black and five Caucasian voices.

7. Script Readers

   Refers to those Blacks and Caucasians selected to read the pre-test script.

8. Primary Tape

   Refers to the audio tape selected and used with the automated slide-tape presentation.

9. Source Credibility

   Refers to listener response as measured by two dimensions of voice sound (aural cue). Those dimensions are believability and voice preference.

10. Script

    Refers to the content of the recorded message. The script is composed of two messages, a "pro" and "con" position on the topic "Community Control of Schools."

11. Black

    Those individuals born in America and are labeled as belonging to the Black minority, ethnic group.

12. Caucasian

    Those individuals born in America and are labeled as beonging to the white ethnic group.

13. Judges

    Refers to those students constituting the sample population who judge the pre-test script for the distinguishability of voice sound (aural cue) as it is associated with a particular ethnic group.

Overview

A frame of reference for this study is developed in Chapter I. Included are the introduction, the need for the study, statement of the problem, general statement of the hypothesis, basic assumptions, significant questions, limitation of the study and definition of terms.

In Chapter II, a review of the related research literature is presented. This includes a review of the literature examining source credibility in two main areas: (1) communicator credibility and (2) communicator racial cues and stereotyping.

The design of the study and the procedures followed in the research are reported in Chapter III. Information in this chapter includes sources of data, the research instruments, and the treatment of the data.

The examination and analysis of the data are reviewed in Chapter IV. Included in the chapter is an analysis of the data obtained from each research instrument as it applied to the testable hypotheses.

In Chapter V, a summary of the study, conclusions, and implications for further research are presented.

CHAPTER II

REVIEW OF THE LITERATURE

The literature related to this study is reviewed in this chapter. A thorough review of the literature reveals a paucity of research studies directly related to the specific problem investigated in this study. However, there are research reports which deal with the general concept of source credibility, the primary focus of this study. The literature reported in this chpater is quite diverse in origin being attributable to the fact that studies pertaining to source credibility arise from such diverse subject fields as psychology, speech, sociology, and education. Nevertheless, the common element present in these studies and of relevance to this study is the exploration of the concept, source credibility. Consistent with the thesis, purpose, and rationale presented in Chapter I, this chapter is divided into two main sections: (1) source credibility and (2) racial stereotyping.

Source Credibility

A review of the literature indicates that the concept, source credibility, is defined in many different ways. The components or dimensions comprising source credibility are reflected by the varied interests of the investigation

and also by the range and number of factors related to source credibility which are being examined. Berlo[1] emphasizes the point that such terms as prestige, charisma, image, ethos, and source credibility are used synonymously throughout the research literature when referring to the general concept, source credibility. In defining source credibility, he further states that an individual's acceptance of information and ideas is based in part on "who said it." The variable such as the source's role in communication effectiveness is labeled or defined as source credibility. In further discussion of source credibility, Berlo hypothesizes the notion that, typically, "credibility" is implicitly assumed to be unidimensional, dichotomous (either high or low) and specifiable in terms of objective characteristics of the source, such as social status. Hovland et al.[2] expressed general agreement with Berlo regarding the importance of whom the source is. They state that:

> The effectiveness of a communication is commonly assumed to depend to a considerable extent upon who delivers it. Persons with prestige, highly respected persons or organizations may have much the same positive effect as if they originated the message. The impact of a message probably depends also upon the particular publication or channel through which it is transmitted. The above examples suggest the importance of persons, groups, or media which can be subsumed under the general category of "sources."

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[1]Berlo, Lemert and Mertz, op. cit., 563.

[2]Hovland, Irving and Kelly, op. cit., p. 19.

Hovland et al.[3] further suggest that a distinction should be made between two components of source credibility: (1) the extent to which a communicator is perceived to be a source of valid assertions (his "expertness"), and (2) the degree of confidence in the communicator's intent to communicate the assertions he considers most valid (his trustworthiness"). In any given case, the weight given a communicator's assertions by his audience will depend upon both of these factors, and this resultant value can be referred to as the credibility of the communicator.

Regarding the definition of source credibility, Hovland et al. present a somewhat different perspective than the one expressed by Berlo. In attempting to explicate the concept of "source credibility" both theoretically and operationally, they[4] suggest a two dimensional conception: involving perceived expertness and trustworthiness. They make a distinction between credibility and other source-related variables such as affection, admiration, power, fear, and awe--but suggest the relevance to credibility of variables such as intelligence and sincerity. With respect to the functions of trustworthiness and expertise, they conclude that persuasion varies positively with credibility, although "from the results" it is not possible to disentangle the effects of the two main components of credibility--

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[3] Ibid., p. 21.

[4] Ibid., p. 35.

trustworthiness and expertise--but it appears that both are important variables.

Although the number of quantitative studies employing the term "ethos" is small compared to those that use terms such as "credibility" and "prestige" in defining source credibility, ethos is a term commonly used in the research literature.[5]

Anderson[6] defines "ethos" as the image held of a communicator at a given time by a receiver--either one person or a group.

The preceding three definitions indicate the diverse range and scope of the definitive statements used in describing the concept source credibility. More important to this study and particularly to the reader is the need for his awareness of the multiplicity of terms used to refer to the same general concept, source credibility. It should be noted by the reader that the review of literature in this chapter will reflect the use of a variety of terms in describing source credibility. However, the reader should not lose recognition of the fact that such terms as "prestige," "credibility," "ethos," "charisma," "ethical" and "communication effectiveness" are synonymous with the term source credibility.

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[5]Kenneth Anderson and Theodore Clevenger, Jr., "A Summary of Experimental Research in Ethos," Speech Monograph, Vol. 30, No. 2 (June, 1963),

[6]Ibid.

A number of studies which examine the ethos concept indicate that certain ethical factors can produce changes in attitude toward political and social issues. In a study conducted by Arnett, Davidson, and Lewis,[7] a group of graduate students were tested to determine the extent to which prestige operated as a factor in attitude changes. The Harper's test of liberalism was administered two times over a four week period, once at the beginning and once at the end of the four week period. They found that prestige produced a significant shift in attitudes in the group of graduate students toward agreements with graduate educators on the Harper's test of liberalism.

A study of Birch[8] was concerned with the effect of referential group or class prestige upon attitude change. Two statements, one labeled "Fascist" or "Communist," the other labeled "Reactionary" or "Liberal" were given to a group of college students. They were required to judge the two statements in terms of preference. Evidence shows that there was no significant differences in preference for the two statements judged by the students. In contrast to Birch's study, other studies have been directed toward an investigation of the prestige of individuals. Saadi and

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[7]Claude Arnett, Helen Davidson, and Hallett Lewis, "Prestige as a Factor in Attitude Chages," "Sociology and Social Research, XVI (1931), 49-55.

[8]Herbert Birch, "The Effect of Socially Disapproved Labeling upon a Well-Structured Attitude," Journal of Abnormal and Social Psychology, XL (1945), 301-310.

Farnsworth[9] found greater acceptance for dogmatic statements which were attributed to well-liked persons than to the same assertions when attributed to disliked individuals. Lorge and Curtis[10] found a significant tendency for subjects to shift opinion toward the supposed position of a prestige source, but they found no significant negative shift when the proposition was linked with a disapproved source.

In apparent conflict with these findings are the results obtained by Lewis.[11] She reported that college students remained relatively unchanged in their opinions in the evaluation of statements and that they tried to explain away the "prestige source" through rationalization.

Pertinent to this study are those studies designed to investigate the problem of whether differences in the speaker's prestige significantly influences the persuasive outcome of a speech. Haiman[12] presented to three groups a tape recorded speech variously attributed to Thomas Parran,

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[9]Mitchell Saadi and Paul Farnsworth, "The Degrees of Acceptance of Dogmatic Statements and Preferences for Their Supposed Makers," Journal of Abnormal and Social Psychology, XXIX (1934), 143-150.

[10]Irving Lorge and Carl Curtis, "Prestige Suggestions and Attitudes," Journal of Social Psychology, XII (1936), 386-402.

[11]Helen Lewis, "Studies in the Principles of Judgements and Attitudes: The Operation of Prestige Suggestion," Journal of Social Psychology, XIV (1941), 229-256.

[12]Franklyn Haiman, "An Experimental Study of the Effects of Ethos in Public Speaking," unpublished dissertation, Northwestern, 1948; Speech Monographs, XVI (September, 1949), 190-202.

Surgeon General of the United States; to Eugene Dennis, Secretary of the Communist Party in America; and to a "Northwestern University Sophomore." Not only was Parran rated significantly more competent than the other two, but also, as measured by the Woodward Shift-of-Opinion Ballot, his speech was significantly more effective in changing attitude than was either of the other two.

Employing essentially the same techniques (tape-recorded speech, differing introductions, and the Woodward ballot), Strother[13] and Paulson,[14] in separate studies, obtained results similar to Haiman's. Not only did Strother find significant differences in the persuasiveness of the "Parran" and the "Dennis" speeches, he discovered that only those who thought they had been listening to Dennis wrote unfavorable comments concerning the speech techniques employed. Paulson attributed a taped speech to a political science professor and to a student. For female auditors there was no significant difference in the effects of the "two speeches, but among the male auditors the proportion of those shifting opinion was greater for the group which thought it had been addressed by the professor."

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[13]Edward Strother, "An Experimental Study of Ethos as Related to the Introduction in the Persuasive Speaking Situation," unpublished dissertation, Northwestern, 1951.

[14]Stanley Paulson, "Experimental Study of Spoken Communication: The Effects of Prestige of the Speaker and Acknowledgement of Opposing Arguments on Audience Retention and Shift of Opinion," unpublished dissertation, Minnesota, 1952; Speech Monographs, XXI (1954), 267-271.

However, Hovland and Mandell,[15] in an effort to assess subtler sources of the speaker's image, manipulated credibility through the suggestion of differing degrees of selfish interest and self-motivation. The nonsignificant difference in attitude change which the speakers produced was very small, but the audiences, apparently reacting to their presumed prejudices, rated the "unbiased source" as the significantly fairer and more honest of the two.

A study of Kraus[16] likewise suggests the possibility of evaluating indirect, implicative sources of ethos. Using pairs which were racially homogeneous and others which were racially heterogeneous, he compared whites with Negroes in respect to their persuasiveness in filmed discussions of segregation issues. The results indicated that arguments favorable to integration were more persuasive when advanced by the heterogeneous pairs; and Kraus explained the results in terms of differing levels of credibility.

Because the experiment conducted by Miller and Hewgill is one of the few which attempted to measure source credibility based primarily on verbal cues, it is particularly

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[15]Carl Hovland and Wallace Mandell, "An Experimental Comparison of Conclusion Drawing by the Communicator and the Audience," Journal of Abnormal and Social Psychology, XLVII (1952), 581-588.

[16]Sidney Kraus, "An Experimental Study of the Relative Effectiveness of Negroes and Whites in Achieving Racial Attitude Change Via Kinescope Recordings," unpublished dissertation, Iowa, 1959; Speech Monographs, XXVII (1960), 87-88.

relevant to the present investigation. Therefore it will be described in detail.

Miller and Hewgill's[17] experiment was designed to test the effect of variations in nonfluency on audience ratings of source credibility. The purpose of the study is stated as follows:

> In the present study, interest is directed toward one class of vocal variables that may influence an audience's perception of a source's credibility. Specifically, the study had as its purpose the investigation of possible relationships between the quantity and type of nonfluency presented by a speaker and audience ratings of source credibility.

Miller[18] states the two major hypotheses as follows: (1) that as the number of nonfluencies presented by a speaker increases, audience ratings of the speaker's credibility will decrease; and (2) that this effect will be greater for a nonfluency typed repetition than for a nonfluency typed vocalized pause.

Ten treatment groups, each containing 16 subjects, were utilized in the study. Each of these groups heard a message that differed only in the amount and type of nonfluency it contained. The treatment conditions were as follows: 0 Vocalized Pause, 25 Vocalized Pause, 50 Vocalized Pause, 100 Vocalized Pause, 0 Repetition, 25 Repetition, 50 Repetition, 75 Repetition, and 100 Repetition. The messages were recorded by a trained speaker in order to minimize other presentational differences.

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[17] Miller and Hewgill, op. cit., 37.

[18] Ibid., 44.

Immediately after hearing the speech, each subject completed a rating instrument designed to measure his perception of the source's credibility. Three dimensions of credibility were included in the instrument: Competence, Trustworthiness, and Dynamism.

Analysis of the data obtained from subjects' ratings produced the following results:[19]

1. On the Competence factor, subjects who heard the speech that contained no nonfluencies rated the speaker significantly higher than did subjects who heard the speeches containing 50, 75, or 100 nonfluencies. Also, the decrease in ratings was more marked in the Repetition conditions than in the Vocalized Pause conditions. Thus, the findings on Competence tend to support both hypotheses of the study.

2. On the Trustworthiness factor, there were only six significant differences among all possible comparisons of treatment means. The data on Trustworthiness were interpreted as providing only minimal support for the first hypothesis of the study and no support for the second hypothesis.

3. On the Dynamism factor, subjects who heard the speech that contained no repetitions rated the speaker significantly higher than did subjects who heard speeches containing 25, 50, 75, and 100 repetitions. The decrease in Dynamism ratings was not as pronounced in the Vocalized Pause conditions, with only the comparison between the 0 Vocalized Pause and 75 Vocalized Pause conditions reaching significance. Thus the findings on Dynamism tend to support both hypotheses of the study.

It is evident from the findings by Miller and Hewgill that audience perception of verbal cues does exercise influence on source credibility.

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[19] Ibid., 43.

In an experiment concerned with the effects of the ethos of individual communicators conducted by Harms[20] it was shown that test scores are somewhat higher when the speakers are high in status than when they are low. The inferred reasons suggested for this result is that high status speakers are more "comprehensible." A further result, secured through a differential analysis of listener groups, is that listeners respond with greater comprehension to those from their own class than to speakers from either a higher or a lower class.[21]

A single study by Knower[22] has illustrated the possibility of investigating the effects of audience size upon the relationship between ethos and attitude change. Knower compared the effect of delivering a speech in an audience situation with giving the speech to one auditor at a time. The speech in the individual situation was somewhat more effective, women were more influenced than men, and women speakers obtained greater attitude shifts than did male speakers. In the audience situation, however, male speakers obtained greater shifts in attitudes than did women.

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[20]Leroy Stanley Harms, "Social Judgments of Status Cues in Language," unpublished dissertation, Ohio State University, 1959; Speech Monograph, XXVII (1960), 87.

[21]Ibid., 87.

[22]Franklin Knower, "Experimental Studies of Changes in Attitudes: I. A Study of the Effect of Oral Argument on Changes in Attitude," Journal of Social Psychology, VI (1935), 315-347.

While the studies by Harms and Knower investigated the immediate effect of prestige credibility and other ethical elements, Hovland and his associates have investigated the temporal effects of the source upon persuasion. The effect of ethos, according to many studies, has a temporal dimension. In other words, when the stimulus is not renewed, material presented by a high ethos source loses in persuasiveness and that material given by a low ethos source gains.

In one of their experiments Hovland and Weiss[23] held all of the message elements constant except for factors which produced an impression of high credibility for one source and low credibility for another. The subjects exposed to the former stimulus shifted in significantly greater numbers on immediate post-tests of attitude than did those receiving the message with low credibility. Over a period of one month the favorable effect, however, decreased, and the subjects exposed to the "inferior" source moved toward agreement with the attitudes expressed in it. Hovland postulated a "sleeper effect"--that in the absence of further stimuli agreement with high credibility sources decays while agreement with low credibility sources grows. The possible explanation is that the subject forgets the source but retains the information and the essential arguments.

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[23]Carl Hovland and Walter Weiss, "The Influence of Source Credibility on Communication Effectiveness," Public Opinion Quarterly, XVI (1961), 635-650.

In a specific test of the sleeper hypothesis, Kelman and Hovland[24] found that a high ethos source--one who was rated significantly fairer, better qualified to speak, and of sounder judgment than a supposedly low ethos source--produced significantly greater attitude shifts. Over a three-week period, however, the extent to which subjects agreed with the positive source decreased significantly, and the extent to which they agreed with the negative source increased nonsignificantly. Reinforcing the recall of the sources by playing back the introductions of the tape recorded messages produced greater agreement with the high prestige speaker and less agreement with the one of low ethos in an experimental group than occurred in a control group which received no repetition of the stimuli.

In a variation of the above approach Weiss[25] determined that a group exposed to a low credibility source showed less regression toward its original attitude than did a group exposed to a high credibility source.

Also supporting the sleeper effect is the finding of Cohen[26] that over a period of time those who originally

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[24]H. C. Kelman and C. I. Hovland, "Reinstatement of the Communicator in Delayed Measurement of Opinion Change," Journal of Abnormal and Social Psychology, 48 (1953), 327-335.

[25]Walter Weiss, "A 'Sleeper' Effect in Opinion Change," Journal of Abnormal and Social Psychology, XLVIII (1953), 173-180.

[26]Arthur Cohen, "Need for Cognition and Order of Communication as Determinants of Opinion Change," in Order of Presentation, ed. by Carl I. Hovland et al. (New Haven: Yale University Press, 1957), pp. 79-97.

disliked a communicator became slightly more positive toward him while those who had originally like him became slightly less favorable (nonsignificant). The results of Duncker's[27] study of the effect of prestige suggestions upon children's food preferences also confirm the Hovland findings regarding the sleeper effect in respect to both the decline of the effect over time and the renewal of strength following reinstatement.

Diverse as the four studies discussed above appear to be, they share a common model of ethos--that is, they are all based on the assumption that the speaker's image is relatively fixed throughout the period of communication. In contrast to this view is the ethical model based on a congruity principle enunciated by Osgood.[28] Intended to explain many psychological functions, the congruity principle holds that an image (or meaning) depends upon the other concepts with which it is associated and thus is subject to perpetual change. Among the factors causing these variations are the successive parts of the message.

Drawing upon this generalized congruity hypothesis, Tannenbaum[29] formulated predictions of attitude change

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[27]Karl Duncker, "Experimental Modification of Children's Food Preferences Through Social Suggestion," Journal of Abnormal and Social Psychology, XXXIII (1938), 489-507.

[28]Charles Osgood and Percy Tannenbaum, "The Principle of Congruity in the Prediction of Attitude Change," Psychological Review, LXII (1955), 42-55.

[29]Percy Tannenbaum, "Initial Attitude Toward Source and Concept as Factors in Attitude Change Through Communication," Public Opinion Quarterly, XX (1956), 413-425.

toward communication sources and then compared these estimates with the results obtained when college students were exposed to written messages. Since the correlation was .91, the conclusion was that attitude changes of the college students in this experiment supported the congruity hypothesis.

A study of the same hypothesis applied to public speakers showed that the congruity model predicted changes in attitude somewhat better than chance alone.

Unlike the studies of Osgood, Tannenbaum and Berlo, which typically attempted to assess the utility of a presumed or measured ethos, there are studies of equal importance to this study that are concerned with the means of generating or altering a receiver's image of a communicator. One such experiment by Berlo and Kumata[30] studied the effect of a dramatic allegory, "The Investigator," in modifying images. Attitudes toward Joseph McCarthy, the subject of the satire, tended to become more favorable while attitudes toward the source (the Canadian Broadcasting Company) and toward Congressional committees became significantly less favorable. It was the judgment of Berlo and Kumata that the extreme onesidedness of the presentation may have caused these "boomerang" effects.

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[30] David Berlo and Hideya Kumata, "The Investigator: The Impact of a Satirical Radio Drama," Journalism Quarterly, XXXIII (1956), 287-298.

In a similar experiment, Anderson[31] constructed three introductions designed to establish varying levels of prestige and authoritativeness for speakers dealing with the farm problem. His conclusions were: (1) students perceived significant differences between a college student and a Professor of Agriculture or a Farm Extension Agent on two scales: (a) the evaluative and the dynamism dimensions of a semantic differential designed to measure ethos; (b) authoritativeness as estimated by a Likert-type scale, (2) the expected differences between the professor and the extension agent did not result except on the authoritativeness scale, and (3) there was no prcof that the variations in ethos and authoritativeness affected persuasiveness.

One of the basic questions underlying this study is whether or not the presentation format of the message affects the audience's perception of the credibility of that message. In one such investigation Hovland, Lumsdaine, and Sheffield[32] found (1) that the "both sides" presentation was significantly more effective for subjects with a high school education when the weight of evidence clearly supported one side; and (2) that a one-sided presentation was more effective with subjects initially favoring the advocated

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[31]Kenneth E. Anderson, "An Experimental Study of the Interaction of Artistic and Nonartistic Ethos in Persuasion," unpublished dissertation, Wisconsin, 1961, p. 118.

[32]Carl Hovland, Arthur Lumsdaine, and Fred Sheffield, Experiments on Mass Communication: Vol. III of Studies in Social Psychology in World War II (Princeton: Princeton University Press, 1949).

view and with subjects who had not completed high school.

Similarly, Paulson's[33] experiment involved two speeches, one of which omitted opposing arguments and the other of which made the barest mention of them. Opinion changes did not differ significantly, but the "both sides" speech was significantly superior in respect to the amount of information which was obtained.

Investigating a similar problem, Ludlum[34] constructed a speech in which he incorporated several elements designed to increase the credibility of the source. His techniques included the acknowledgement of opposing arguments, "leading thoughts rather than forcing," showing alleged facts to be consistent with known facts, showing material to be recent, and manifesting a "high degree of credibility" by means of self-praising statements. Comparing the persuasiveness of this speech with that of a "straight agrumentative" address, he found the latter to be more effective. The experiment by Ludlum points up the importance of specifying carefully any differences in content between speeches intended to produce high credibility and those against which their effects are to be compared.

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[33]Paulson, op cit., 267-271.

[34]Thomas Ludlum, "A Study of Techniques for Influencing the Credibility of a Communication," unpublished dissertation, Ohio State University, 1956.

The message which an audience receives during a speech involves more than verbal stimuli. Several studies indicate that nonverbal factors produce audience judgments concerning the speaker. Haiman[35] found (1) that an audience rated a graduate male speaker higher in competence than it did an undergraduate male and two females; (2) that with content held constant, graduate speakers obtained higher rates of fairmindedness, sincerity, and likeableness than did undergraduates; (3) that in two experiments shifts of opinion within the audience were correlated positively with the speakers' competence ratings and with nothing else; and (4) that although variations in ratings of lifeableness and physical attractiveness could be produced through changes in appearance and demeanor, significant changes in attitude did not result.

Many of the variables in the Haiman study are those associated with differences in social status. Harms[36] has shown that, regardless of their own position, listeners in general assign high credibility to speakers of high social status and low credibility to those of low status. Such judgments occur even though the stimulus is nothing more than a short tape-recorded sample of speech. The Harms study further shows that listeners can discriminate class difference with rough accuracy and that they identify the

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[35]Haiman, op. cit., 198-199.

[36]Harms, op. cit., 91.

low status speakers somewhat more readily than they do those of superior background.

Consistent with these results is the experimental finding that audiences may construct relatively complete assessments of a speaker's personality and physical characteristics on the basis of his voice. Other conclusions to this study were that personality, physical characteristics and occupation were likely to be perceived correctly, that consistency of response (right or wrong) was a stronger tendency than accuracy of judgment, and that gross psychological characteristics were judged more accurately than physical features.[37]

In another investigation of combinations of variables Anderson[38] used two tape-recorded speeches, both of which were attributed to three sources described in tape-recorded introductions. The principal results were: (1) despite great manuscript variations which speech experts predicted would produce different levels of ethos, the only significant differences between the two speeches were those measured on a dynamism scale, (2) the elements of artistic and inartistic ethos did interact significantly in producing the final image of the speaker, and (3) the variations in ethos did not cause a significant difference in persuasiveness.

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[37]Gordon Allport and Hadley Cantril, "Judging Personality from Voice," Journal of Social Psychology, V (1934), 37-55.

[38]Anderson, op. cit., p. 125.

It was noted previously that variations in the definition of source credibility and the origin of research relating to it arise from many different subject fields. Subsequently, the number and kind of components comprising source credibility are determined to a large extent by the nature of the research and the emphasis and interest of the investigator. A variety of characteristics of the communicator may evoke attitudes related to expertness. Among these are included age of the communicator, position of leadership in a group, status, values, point of view, and intent of the communicator.

A limited number of investigations have been conducted which examine the effects of variations in expertness on opinion change. However, one such study by Bowden, Caldwell, and West[39] examines the question of attitudes toward various solutions of the economic problem of an appropriate monetary standard for the United States. The major question concerning Bowden et al. was the amount of agreement demonstrated by the subjects when exposed to statements attributable to men in different professions such as ministers, lawyers, and educators. Results showed that statements attributed to businessmen and educators were approved most frequently, while statements which were attributable to ministers were approved least frequently.

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[39] A. O. Bowden, F. F. Caldwell, and A. G. West, "A Study in Prestige," American Journal of Sociology, 40 (1934), 193-204.

A similar study was made by Kulp.[40] His findings show that social and political opinions attributable to professional educators and social scientists are somewhat more influential than the opinions of lay citizens. These studies by Bowden et al. and Kulp seem to suggest that the effects of variations in expertness on opinion change are determined to some extent by the source.

Opinion change is also caused by attitudes of trust and distrust as perceived by the audience toward the communicator. The effect of this component (trust and distrust) of credibility on opinion change is substantiated in a study by Hovland, Lumsdaine and Sheffield.[41] Audience reactions to the War Department's orientation films were measured. Soldiers were shown the film "The Battle of Britain." Following the showing of the film, the soldiers were divided into two response groups. One was "propagandistic" while the other was "informational." A comparison of the two groups in relationship to opinion change produced by the film showed the film to be less effective with men who judged its intent to be propagandistic than with men considering it informational.

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[40]D. H. Kulp II, "Prestige as Measured by Single-experience Changes and their Permanency," Journal of Educational Research, 27 (1934), 663-672.

[41]Hovland, Lumsdaine and Sheffield, op. cit., pp. 100-103.

Consistent with this finding is an experiment conducted by Lazarsfeld et al.[42] Results indicated that casual and nonpurposive comments seem to derive part of their effectiveness from the fact that the recipient is usually unaware that he is the object of influence by the communicator source. It can be generally stated that if the source is perceived as having a definite intention to persuade others, then the likelihood of distrust in the source will be greater than where the intent is unknown. A special aspect of this problem which dealt with the degree of agreement between a communicator's announced intentions and the audience's initial bias was examined by Ewing.[43] In general Ewing's results support the hypothesis that when a communication comes from an unknown or ambiguous source, acceptance will be increased if, at the beginning, the communicator explicitly claims that his own position is in accord with that held by the audience.

An experimental variation in source credibility through the use of communicators differing in trustworthiness was produced in a study by Hovland and Weiss.[44] An identical communication was presented to two groups. One

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[42]P. F. Lazarsfeld, B. Berelson, and Hazel Geudet, The People's Choice: How the Voter Makes up his Mind in a Presidential Campaign (New York: Duell, Sloan & Pearce, 1944), pp. 152-153.

[43]T. N. Ewing, "A Study of Certain Factors Involved in Changes of Opinion," Journal of Social Psychology, 16 (1942), 63-88.

[44]Hovland and Weiss, op. cit., 635-650.

group received communication from a source of high credibility while the second group received the communication from a source of low credibility. The experimental format was designed in such a way that each group was exposed to a source of low and high credibility and also to affirmative and negative versions of the communications. The data revealed that there was a significant difference in the credibility of the sources used with the communications.

Another study involving variations in source credibility was conducted by Kelman and Hovland.[45] This study consisted of presenting to the audience a recording of an educational radio program. Three different introductions were given for the speaker on the program. One introduction was negative in nature. The second was neutral while the third was positive. It was concluded that audience judgments concerning credibility of the presentation were much more favorable when the recording of the educational program was given by the positive communicator than by the negative one. The judgments for the neutral communication were intermediate but more similar to those for the positive.

Racial Stereotyping

A thorough review of the literature reveals very limited research dealing with audience perception of communicator's credibility based upon cues directly associated with the race of the communicator or speaker.

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[45]Kelman and Hovland, op. cit., 327-335.

However, a recent study by Miller and Roberts[46] examines this problem. This study was directed toward the effect of the communicator's race on audience-retention of message content, although audience attitudes toward the content were also examined as a dependent variable of secondary interest. In addition, a potentially relevant personality variable, openmindedness, was incorporated in the study design. Miller hypothesized the following: (1) for white audiences, presentation of a message by a Black communicator will result in lower retention of message content than will presentation of the same message by a white communicator, and (2) for white audiences, presentation of a message by a Black communicator will result in less favorable attitude toward the message content than will presentation of the same message by a white communicator. Miller and Roberts concluded that maximum retention of message content on the part of white audience members is facilitated by use of a white, rather than a Black, communicator. However, this conclusion is tempered by a number of situational variables, including the personality characteristics of the audience and the audience and the initially perceived credibility of the communicator.

The credible communicator takes into account the fact that his audience's feelings toward him can impede or

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[46]Miller and Roberts, op. cit., 259-269.

increase his persuasiveness. Hovland et al.[47] outlined the relationship of these feelings toward the communicator as follows:

> We shall assume that . . . various effects of the communicator are mediated by attitudes toward him which are held by members of the audience. Any number of different attitudes may underlie the influence exerted by a given communicator. Some may have to do with feelings of affection and admiration, and stem in part from desires to be like him. Others may involve awe and fear of the communicator based on perceptions of his power to reward or punish according to one's adherence to his recommendations or demands. Still other important attitudes are those of trust and confidence. These are related to perceptions of the communicator's credibility, including beliefs about his knowledge, intelligence, and sincerity.

The attitudes this statement seems to summarize are apparently brought about through the manifestation of certain emotional and psychological characteristics of the communicator. While these characteristics are admittedly important, Kraus[48] has raised the question of the importance of the physical characteristics exhibited by the communicator. Kraus investigated just one such physical characteristic, that of race. More specifically, the study was concerned with the relative effectiveness of Black and white actors in changing the attitudes of eleventh grade white children toward Blacks. One of the major questions investigated by Kraus of relevance to this study was whether white performers in a kinescope effect greater attitude

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[47] Hovland, Irving, and Kelly, op. cit., p. 40.

[48] Kraus, "Modifying Prejudice: . . .," op cit., 14-22.

modification than Black performers or vice versa, or should the cast include both whites and Blacks. He assumed that the prestige of the communicator was influential in restructuring the stimulus, a kinescope recording. The experiment, then, proposed to examine the relative effectiveness of such a kinescope in changing attitudes toward Blacks with the independent variable being the race of the actors involved.

The findings in this study seem to indicate that the sincerity of credibility of the race of the communicator is judged by the favorable context in which Black and white communicators are perceived by the audience.

In a similar study, Williams[49] reported that children's participation in dramatization was the most effective teaching method for changing their attitudes toward Blacks; their viewing of motion pictures was second; their listening to material read by the teacher was least effective.

A series of recent technical reports conducted by Williams et al.[50] deals with several aspects of ethnicity and speech stereotyping. One such study dealt with the

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[49]Dorothy M. Williams, "A Study of the Relative Effectiveness of Selected Teaching Procedures in the Modification of Children's Attitudes Toward the Negro," unpublished doctoral dissertation, New York University, 1946.

[50]Frederick Williams, Jack Whitehead, and Jane Traupmann are research associates at the Center for Communication Research, University of Texas at Austin, Texas.

exploration of the degree to which teacher-subjects' ratings of videotape samples of children's speech would correspond to ratings of the speech that teachers might presume to hear from children of certain ethnic and social status group. Williams et al[51] assumed that a teacher's rating of the speech that she would anticipate from a child who was described to her in terms of ethnic and social status characteristics would represent a close approximation to that teacher's stereotype. Accordingly, the question then was whether ratings obtained under such conditions would correspond to ratings obtained when the teacher judged the speech of a child selected a priori to represent a specified ethnic and status group.

A set of six two-minute videotape stimuli was prepared, one for each of six ethno-status groups, Black-Middle and Lower; Mexican-American-Middle and Lower; and Anglo-Middle and Lower. Six brief descriptions for the ethnic and status groups of children represented in the videotapes were composed for use in eliciting subjects' stereotypes.

In an average of one week's time before participation in the video-tape presentation, subjects were visited in their classes and were requested to fill in the stereotype response booklets described above. This was also done

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[51]Frederick Williams, Jack Whitehead and Jane Traupman, "Correspondence Between Semantic Differential Ratings of Children's Speech and Speech Anticipated Upon the Basis of Stereotype," Technical Report, Center for Communication Review, University of Texas at Austin, August, 1970, pp. 2-7.

between three and five days after the experiment. No mention was made of stereotyping and the like when subjects would agree in terms of the speech associated with types of children.

Videotape testing was undertaken individually with the subjects where each subject was given the opportunity to control the stimulus presentation and the order in which he chose to fill in the 15 cards issued to each one.

One of the findings significant in this study was in the case of the middle status cluster. Ratings of the videotape of the middle class Black child were significantly different from the two stereotype ratings, which were not different from each other. This difference was in the direction of the speech being rated as more ethnic and non-standard than the stereotypes.

In another study by the same researchers[52] effort was made to assess the effects of racial sterotyping in a design where ratings of the same standard English audio samples could be compared under conditions of appearing with the video image of a Caucasian, Black and Mexican-American child. If racial stereotyping was affecting speech ratings then it was hypothesized that (1) the ratings of the same language samples would differ in the above comparisons, and (2) that the direction of difference would

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[52]Frederick Williams, Jack L. Whitehead and Leslie Miller, "Ethnic Stereotyping and Speech Attitudes," Technical Report, Center for Communication Research, University of Texas at Austin, February, 1971, pp. 2-10.

be biased toward stereotyped ratings given the minority group children.

Four video tapes were selected for the present research, one each of a Black and a Mexican-American child, and two of Caucasian children. Slight lip movement in the video segments was detectable, but was insufficient for lip-reading by viewers. For purposes of the testing design, two "ethnic guise" versions of each of the minority group children were prepared by using the audio tracks from the standard-English-speaking Caucasian children. For each of the Black and Mexican-American children's videotapes, there was the original version with a nonstandard English audio track, then two additional versions each with one of the standard English audio recordings paired with it.

Each group viewed (1) a Black or Mexican-American child whose nonstandard speech had been replaced by dubbing-in the speech of a standard English speaking child, (2) a Black or Mexican-American child speaking nonstandard English, and (3) a Caucasian child speaking standard English. Each subject saw either the Black or Mexican-American child in the standard English version, but not both.

In general, findings indicated that the videotape image showing the child's ethnicity does affect ratings of his language, and the bias does appear to be in the direction of racial stereotype expectations. For Black children

the bias was in the direction of expecting them to sound more nonstandard and ethnic than their Caucasian peers. For Mexican-American children, the bias was not only one of ethnicity-nonstandardness but also that they were more reticent and nonconfident in their speech.

Summary

The literature reviewed in this chapter reports the examination of source credibility in terms of two broad but distinct areas. One area is concerned with the diversity of communicator source; the second area is focused primarily on the race of the communicator source.

The findings in the literature dealing with communicator source indicate that prestige of the source is related in some way to the impact of the message. This generalization appears to be applicable to communicated messages in such varied fields as politics, social science, religion and economics. Other studies indicate that ethos has a temporal dimension, suggesting that if high ethos source diminishes, low ethos source gains. It is further suggested that noncontent stimuli such as dress, voice, and manner apparently affect the attitude of the audience toward the communicator. Further review of the literature provides evidence relative to the great diversity in the variations of the conceptual framework in which source credibility functions. And the number of components or dimensions comprising source credibility is borne out by the

literature in offering a multiplicity of definitive statements describing source credibility.

Literature reviewed concerning the attribute of race of the communicator source suggests that those cues denoting race of the communicator as a minority member generally serve to diminish credibility of that minority communicator. However, some studies indicate that because the differences of the characteristic variables of the minority communicator and audience composition, perception of credibility source generally fluctuates.

CHAPTER III

PROCEDURES AND METHODOLOGY

Statement of the Problem

The purpose of this study was to investigate the extent to which recognition of voice sound (aural cue) functions as a basis for source credibility of a recorded verbal message. Specifically, this study was designed to attempt to measure the extent to which a distinguishable voice sound (aural cue) associated with a Black speaker and distinguishable voice sound (aural cue) associated with a Caucasian speaker used as narrators for an automated slide presentation affect the source credibility of a recorded message presented to a selected group of students. Of specific interest to this study was the extent to which believability of message and voice preference were affected by the identification of a distinguishable voice sound (aural cue) associated with a Black or Caucasian narrator respectively. The subjects and the data collection instruments are described in this chapter. The specific procedures, the experimental design and data analysis, and the research hypotheses are also reported.

The Sample

The subjects participating in this study were two hundred forty (240) undergraduate Caucasian students at Michigan State University. The sample was selected from a population of ten workshop sections of Education 450, School and Society, conducted at Michigan State University during the 1971 Spring quarter. The subjects were students ranging in ages from 19 to 25 years old. All subjects were enrolled in the Michigan State University Teacher Education Program and had completed student teaching requirements. The group consisted of eighty-nine (89) male students and one hundred fifty-one (151) female students.

Each workshop section had an enrollment from 25 to 78 students. However, actual attendance at the workshops ranged from a minimum of 21 students to a high of 42 students. The fluctuation in attendance was due to the fact that attendance at the workshop sessions was optional. Because of the fluctuation in the number of students in attendance at each of the workshops, it was necessary to set the N for each experimental group at 20.

Instrumentation

One of the basic questions underlying this study was whether voice sound (aural cue) could be distinguished by the listener on the basis of ethnic group association. Before distinguishable voice sound (aural cue) association with a Black or Caucasian could be established, an instrument

to determine voice sound distinguishability had to be constructed for this study. A pre-test screening instrument was constructed which included the following procedures: (1) the selection of five Black and five Caucasian script readers, (2) the production of a preliminary audio tape, and (3) the construction of a voice sound (aural cue) distinguishability rating scale (see Appendix A).

Development of Pre-Test Screening Instrument

Five Black and five Caucasian male doctoral students enrolled in the College of Education at Michigan State University during the 1971 Spring quarter, were selected to serve as script readers. The selection of the five Caucasians was based on racial identity, availability, and willingness to participate as script readers. While race, availability, and willingness to participate were of equal importance for the Black script readers one additional criterion was considered. Because the voice sound of some Black and Caucasians are indistinguishable when compared with each other, the researcher selected the Blacks whom he perceived as possessing a distinguishable voice sound (aural cue) associated with a Black speaker. The five Black script readers were selected on an *a priori* basis by the researcher. The major concern in selecting the five Black script readers was that they would be positively identified by voice sound (aural cue) by the sample population during the pre-test treatment.

A one page paragraph was selected for the script (see Appendix B). This script was used as part of the pre-test instrument and met one general requirement. The content had to be understandable by the subjects, yet provide sufficient novel information to sustain interest and at the same time not distract the subjects from concentrating on the voice sound of respective script readers. The script readers were provided with ample time to become familiar with the script and also appropriate time for rehearsal.

The ten script readers, five Black and five Caucasians, were recorded on a preliminary audio tape reading the same one page script. From this preliminary audio tape, a master tape composed of the ten script readers' voices was then produced. Sequence and order of the script readers recorded on the master tape were determined by simple random assignment. The master tape was then used as part of the pre-test instrument to determine voice sound (aural cue) distinguishability.

Used in conjunction with the master audio tape was a five point voice sound distinguishability scale (see Appendix A). The voice sound distinguishability scale required the subjects to indicate their perceptions of voice sound (aural cue) based upon ethnic group association. Illustrated below are the typical choices and numerical point range comprising the voice scale to which the subjects were required to respond:

_____ 1. Sounds clearly distinguishable as a Black speaker.

_____ 2. Sounds like a Black speaker.

_____ 3. Sounds indistinguishable.

_____ 4. Sounds like a Caucasian speaker.

_____ 5. Sounds clearly distinguishable as a Caucasian speaker.

This pre-test screening rating scale instrument was developed for this study by the researcher. The construction of this rating scale followed the principles suggested by Guillford[1] and Kerlinger.[2] In summary, the pre-test instrument was comprised of the following: (1) a master audio tape composed of ten voices, five Blacks and five Caucasians, randomly ordered, and (2) a five point voice sound distinguishability scale with accompanying instructions.

Administration of Pre-test Instrument

A sample population (one workshop section) was randomly selected from the total population of the ten workshop sections of Education 450. This sample was excluded from the subsequent test treatment. The sample population section was composed of thirty subjects (N = 30).

A standard reel-to-reel tape recorder was placed in the classroom where the subjects met regularly approximately

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[1]J. P. Guilford, Psychometric Methods (New York: McGraw-Hill Book Company, Inc., 1954), pp. 263-301.

[2]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), pp. 564-580.

twenty minutes before the class was scheduled to meet. This was done to keep distraction at a minimum. In addition to setting the tape recorder up before the class actually met in session, the researcher placed the tape recorder in the rear of the classroom. This procedure was followed to minimize the subjects' attention on the tape recorder and at the same time maximize their concentration on listening to the voice sound (aural cue) of the speakers on the audio tape.

The researcher distributed the sheet of instructions (see Appendix C) to the subjects. Each subject was required to read the instructions. They were asked to raise their hands if, after reading the instructions, they had any questions. After all questions were answered, a voice distinguishability scale (see Appendix A) was distributed to each subject.

The master audio tape was played for the subjects. At the end of the reading of each paragraph by each of the respective script readers, the tape recorder was stopped. During this interval, the subject was required to indicate by checking the appropriate number on the five point voice distinguishability scale that best described his perception of the association of the voice sound (aural cue) with the corresponding ethnic group description on the scale. After the subjects had an opportunity to respond to all ten voices, the scales were collected and the data was computed

to obtain the mean score for each voice. Mean scores ranging between (1.0) and (2.0) indicated that the subjects perceived the voice sound to be either a clearly distinguishable Black voice or one that sounded like a Black voice. Those mean scores ranging between (4.0) and (5.0) indicated that the subjects perceived the voice sound to be either a clearly distinguishable Caucasian voice or one that sounded like a Caucasian voice.

A mean score of not more than (2.0) was the criterion established for determining distinguishability of voice sound (aural cue) associated with the Black voice while a mean score of not less than (4.0) was the criterion established for determining distinguishability of voice sound (aural cue) associated with the Caucasian voice. The computation of the mean scores showed that four Black voices received a mean score of not more than (2.0) while one Black voice was rated indistinguishable (3.03). The two Black voices receiving the two lowest mean scores (1.40 and 1.63) respectively were selected to narrate the messages (pro and con) for the automated slide-tape presentations used in the experimental treatments. The mean scores for the Caucasian voices showed that all five voices received a mean score of not less than (4.0). The two Caucasians with the two highest mean scores (4.60 and 4.26) were also selected to narrate the pro and con positions for the automated slide-tape presentations used in the

experimental treatments. Table 3.1 shows a summary of the mean scores on voice perception.

Table 3.1.--Mean scores on voice perception.

Voices	Mean
Caucasian**	4.60
Black	1.93
Black*	1.40
Caucasian	4.33
Black	1.80
Caucasian	4.03
Black*	1.63
Black	3.03
Caucasian	4.23
Caucasian**	4.26

** Caucasian voices used for the narration for the tape-slide presentations used in the experimental treatment.

* Black voices used for the narration for the tape-slide presentations used in the experimental treatment.

Development of Test Instrument

The test instrument for this study was developed by: (1) providing the two Black and two Caucasian script readers assistance and ample time for rehearsal, (2) selecting and editing the scripts that were used for the recorded messages, (3) producing audio tapes for the automated slide-tape presentation, (4) preparing an introductory

statement for the automated slide-tape presentation, (5) designing and producing original slides, (6) assembling the automated tape-slide presentations, (7) preparing two semantic differential scales to measure voice sound preference and believability, and (8) constructing a racial identification check form.

Narrators.--During rehearsal time the researcher explained to each narrator the purpose of the script, its relationship to the test instrument, and the importance of reading both of the scripts with the same delivery, enthusiasm, rate, and tone as possible. Not until the narrators were well rehearsed and thoroughly familiar with the script, did the researcher permit them to be recorded. Recording was done under the supervision of a professioanl sound technician. Each narrator read both scripts in one setting on the same day. Every precaution was taken to assure uniformity and consistency in the script reading. Extreme care was also given to the technical production of the audio tapes.

Message Content.--The topic, "Community Control of Schools," was selected to be used as the source of the message content for this study. The information used as the basis for the message content was excerpted from the article (see Appendix D) entitled, "Community Control of Schools: A Review of Issues and Options." This article is based

upon discussions and prepared case materials. The article presents a balanced statement in that for each "pro" position given a "con" position is also stated, and for each "pro" option statement a "con" option is also presented.

The subsequent recorded message used for this study dealing with the topic "Community Control of Schools" consisted of two separate messages (see Appendix E). One message dealt with the "pro" position on the topic, "Community Control of Schools," while the second message dealt with the "con" position on the same topic. The construction of the message content consisted of the following: (1) selecting a common introductory statement to be used for both "pro" and "con" positions, (2) selecting six statements supporting "pro" and "con" positions, and (3) selecting one "pro" option and one "con" option. The researcher used practically verbatim the language of the author of the article in constructing the message content used for the two recorded (pro and con) messages. These recorded messages were used for the narration with the test instrument in the experimental treatment. Language and writing styles were held constant for both "pro" and "con" statements selected for the recorded messages since the exposition of the statements are attributal to the same author. Extensive consideration was given to the language level of the recorded messages. Because the periodical, Urban and Social Change Review, is written in lay, and non-technical

terms and prescribed for popular consumption, it was assumed that the language level would be readily comprehensible to the subjects enrolled in Education 450.

Three basic factors were considered in selecting the topic "Community Control of Schools" for the message content used in this study. First, consideration was given to the target audience to whom the test instrument was going to be administered. It was decided that the message content should be of general interest to the subjects, one that would stimulate active listening as opposed to a passive involvement. Second, consideration was given to the currency of the message content. It was decided that the message content should be relevant to the subjects as well as clearly related to their professional experiences. The workshop instructors were informed by the researcher about the nature of the message content. All instructors expressed the consensus that the message content was timely and appropriate for their sessions. Third, consideration was given to a topic that was minimally controversial with options on both sides.

Message Format.--The message format was designed to meet the following criteria: (1) uniformity, (2) balance, and (3) consistency. The format for the two recorded messages was identical for both "pro" and "con" positions. Major segments of each message and their sequences were:

Topic: "Community Control of Schools"

Pro Position	Con Position
1. Introductory statement	1. Introductory statement
2. Six supporting "pro" statements	2. Six supporting "con" statements
3. One supporting "pro" option statement	3. One supporting "con" option statement

To assure uniformity and balance in the message format, the same introductory statement was used in both "pro" and "con" presentations. Extreme precaution was taken to avoid the inclusion of any editorial or subjective opinion in either the "pro" or "con" presentation. Consequently, the two presentations reflected accurately the statements in the article, "Community Control of the Schools: A Review of Issues and Options."

Audio Tape-Slide Presentation.--The audio tape-slide presentation used for the experimental treatment was produced with the assistance and under the supervision of a graphic artist and a professional sound technician. The audio tape-slide presentation included: (1) an automated tape-slide sequence and (2) an accompanying recorded message. The tape was cued with an audio signal which automatically changed the appropriate slides that were pre-arranged in the slide tray on the slide projector and pre-selected in accordance to the accompanying recorded message.

The two Blacks selected as narrators for the treatment narrated both "pro" and "con" positions on the topic,

"Community Control of Schools." Likewise the two Caucasians selected as narrators also were required to narrate both "pro" and "con" positions. For the purpose of this study and also for future reference, one Black narrator is designated as Black (Voice #1) while the second Black narrator is designated as Black (Voice #2). A similar designation is given to the two Caucasians. One Caucasian is designated as Caucasian (Voice #1) while the second narrator is designated as Caucasian (Voice #2). A total of eight automated tape-slide presentations were developed for this study. Each presentation was approximately three and a half minutes duration. Only two separate and distinct recorded messages (narration) were used for the eight slide-tape presentations. One recorded message dealt with the "pro" position on the topic, "Community Control of the Schools," while the second recorded message dealt with the "con" position of the same topic. The format for the slide-tape presentation treatment was as follows:

Slide-Tape Presentation	Voice	Position
Presentation #1	Black (Voice #1)	Pro
Presentation #2	Black (Voice #1)	Con
Presentation #3	Caucasian (Voice #1)	Pro
Presentation #4	Caucasian (Voice #1)	Con
Presentation #5	Black (Voice #2)	Pro
Presentation #6	Black (Voice #2)	Con
Presentation #7	Caucasian (Voice #2)	Pro
Presentation #8	Caucasian (Voice #2)	Con

Slides.--A series of four slides (see Appendix F) was developed for the study. The slides were selected in terms of: (1) originality, (2) simplicity, and (3) minimal distraction. Original line sketches for the four slides were done by the researcher. These black and white line drawings were subsequently reproduced by a professional graphic artist. A professional photographer then produced sets of 2x2 black and white slides. A title slide, one single word caption slide, a simplified chart, and a slide with caricatures of six faces (three Blacks and three Caucasians) constituted the composition of the four slides used. The simplicity of the slides was designed to reduce the probable influence of the visual image upon the accompanying recorded message. The slides were used as an "attention getter" and visual references for the subjects.

In contrast to the recommended time of allowing a single visual to be projected on a screen for approximately no longer than seven seconds before it loses its effectiveness, then, the slide-tape presentations developed for this study were automated so that each slide was projected on the screen for approximately 48 seconds. The assumption underlying the use of an extended projected time period was that once the subject had oriented himself to the visual image on the slide he would then tend to lose interest in the slide after such an extended viewing time. In this way the subject was less distracted by the slides during this

projected time period and was more inclined to listen more attentively to the voice sound (aural cue) and the recorded message.

Semantic Differential Scales.--Two semantic differential scales (see Appendix G) were developed for this study. Both scales were designed so that they could be presented on a single IBM form. One scale was designed to measure "believability" of message. The second semantic differential was designed to measure "voice preference." The semantic differential for measuring "believability" of message consisted of thirteen items. Twelve items identifying the acoustical features of the voice comprised the semantic differential which was developed to measure "voice preference." Both semantic differential scales were designed according to the principles and construction techniques suggested by Osgood[3] and Kerlinger[4] and were similar to items validated by Osgood's[5] research. Items appropriate for this study were included in the semantic differential for measuring "believability" of message. Other items validated by Berlo[6] were also included. The remaining items were selected and evaluated for appropriateness by the researcher.

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[3]Charles E. Osgood, George J. Suci and Percy H. Tannenbaum, The Measurement of Meaning (Urbana, Ill.: University of Illinois Press, 1957), p. 173.

[4]Kerlinger, op. cit.

[5]Osgood, Suci and Tannenbaum, op. cit.

[6]Berlo, Lemert and Mertz, op. cit., 568-569.

The semantic differential for measuring "voice preference" was designed in consultation with a specialist in speech and audiology. Some of the items developed in the classical study by Jakobson[7] that were deemed appropriate for this study were included in this scale. Additional items were recommended by Dr. Oscar Tosi in consultation with other colleagues in the Speech and Audiology Department. Measurement of voice sound preference in this study is similar to the principles and techniques suggested by Rothauser.[8]

Ethnic Group Identification Check Sheet.--Following the experimental treatment it was necessary to validate the subject's identification of distinguishable voice sound (aural cue) with the appropriate ethnic group association. To do so, an Ethnic Group Identification Check Sheet (see Appendix H) was developed. The primary purpose of this check sheet was to provide evidence as to whether the subjects did or did not make the correct ethnic group association based on their reaction to the voice sound (aural cue). These check sheets were distributed to the subjects after the semantic differential forms were collected

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[7]Roman Jakobson, Preliminaries to Speech Analyses: The Distinctive Features and Their Correlates (Cambridge: Massachusetts Institute of Technology Press, 1963) pp. 1-64.

[8]E. H. Rothhauser, "A Comparison of Preference Measurement Methods," The Journal of the Acoustical Society of America, Vol. 49, No. 4 (Part 2) (April, 1971), 1297-1308.

and the treatment had been completed. This procedure was followed in order to minimize any sensitizing or cueing effect toward ethnic group bias that may have been held by the subjects. Illustrated below are the typical choices presented to the subjects on the check sheet:

_____ Sounds like a Black American Speaker

_____ Sounds indistinguishable

_____ Sounds like an American Caucasian Speaker

This check sheet was attached to the response forms. The differential scale response form of a subject who failed to identify correctly the association of voice sound (aural cue) with the ethnic group speaker he heard was not included in the tabulation of the data on these forms. Table 3.2 shows the number of voice sounds

Table 3.2.--Number of distinguishable, indistinguishable and randomly excluded responses to voice sound.

Voice	Position	Total Number	Distinguishable	Indistinguishable	Randomly Excluded
Caucasian	Pro	22	20	2	
Black	Pro	20	20	0	
Caucasian	Pro	23	20	3	
Black	Con	29	20	1	8
Caucasian	Con	24	20	4	
Caucasian	Con	23	20	3	
Black	Con	22	20	2	
Black	Pro	47	20	7	20
Total		210	160	22	28

(aural cue) which were clearly identified as distinguishable and the number of responses which found the voice sound (aural cue) indistinguishable as recorded in each workshop section. Table 3.2 also shows the number of responses randomly excluded from two sections to make the number in each section twenty (20).

Procedure

In individual conferences with each of the instructors of the ten workshop sections in Education 450, the researcher explained the purpose and procedure of the experiment and obtained permission to conduct the experiment. However, the experiment was conducted in only eight workshop sections which were selected randomly.

The eight slide-tape presentations were randomly assigned for presentation to the eight workshop sessions. Each section saw and heard only one automated slide-tape presentation, either a "pro" or "con" position.

The experiment was conducted over a four day period. Each workshop testing period was approximately twenty minutes in length. The slide-tape presentation consumed approximately three and a half minutes of the total time. The random selection and assignment of voices, workshop sections, and positions on message are illustrated as follows:

Workshops	Position	Narrator
Section 1	Pro	Black (Voice #1)
Section 2	Con	Black (Voice #2)
Section 3	Con	Caucasian (Voice #1)
Section 4	Pro	Caucasian (Voice #1)
Section 5	Pro	Caucasian (Voice #2)
Section 6	Con	Caucasian (Voice #2)
Section 7	Con	Black (Voice #2)
Section 8	Pro	Black (Voice #2)

Approximately a half hour before actually meeting with each workshop section, the researcher set up the stereo tape recorder and Kodak carousel slide projector and checked the technical operation of the equipment to assure its proper functioning. After the workshop convened, the instructor for that particular workshop section introduced the proctor who administered the experiment. The proctor was a Black female graduate sutdent who had been well trained and thoroughly rehearsed by the researcher regarding the experimental procedure to be followed. The Black female proctor administered all eight experimental treatments, while the researcher, unknowing to the subjects, operated the equipment for all eight experimental treatments.

The experimental treatment was administered as follows: (1) The proctor read a prepared introductory statement (see Appendix I) indicating the purpose for viewing and listening to the slide-tape presentation and outlining the procedure to be followed by the subjects. No

reference was made to the racial identity of the narrator of the slide-tape presentation. The slide-tape presentation was presented to the subjects under the guise of soliciting their responses as part of a continuing evaluation process of a slide-tape presentation being developed. (2) The slide-tape was presented following the introduction, (3) The proctor then distributed the semantic differential response forms. (4) Upon completion of the semantic differential response forms, the subjects were given an ethnic group identification check sheet. (5) The IBM Semantic differential response forms and the ethnic group identification sheet were then attached together and collected by the proctor.

Design and Analysis

The design of the study and its various treatments are shown in Figure 1.

The ratings on the semantic differential forms were used to evaluate subjects' ratings of the two dimensions of source credibility which are: (1) believability, and (2) voice preference. These data were treated with two statistical procedures, the Pearson Product Moment correlation and multivariate analysis of variance. The correlation was calculated to determine the corelationship between "believability" and "voice preference" associated with a distinguishable Black voice sound (aural cue) and between

	MESSAGE	
	Position	
	PRO	CON
Black (Voice #1)		
Black (Voice #2)		
Caucasian (Voice #1)		
Caucasian (Voice #2)		

Legend

Message--Community Control of Schools

Pro--"Pro" Argument--Community Control of Schools
Con--"Con" Argument--Community Control of Schools

Figure 1.--Treatment design.

"believability" and "voice preference" associated with a distinguishable Caucasian voice sound (aural cue).

The multivariate analysis of variance was employed to simultaneously determine if significant difference existed between the mean scores of "believability" and "voice preference" of the Caucasian voice sound (aural cue) and the Black voice sound (aural cue). The .05 level of significance was selected as sufficient to reject the null hypotheses in the study.

The data were punched on computer cards and analyzed using a Control Data Corporation 3600 digital computer.

Statistical Hypotheses

This study was designed to determine if distinguishable voice sound (aural cue) identified according to ethnic group association exercised influence on source credibility. To test this thesis, eight statistical hypotheses were generated and tested. Each null hypothesis is presented first, followed by an accompanying alternate hypothesis. No significant interactions were anticipated or hypothesized.

Null Hypothesis 1_a There will be no difference between the mean score of "believability" for the Caucasian voice sound (aural cue) and the mean score of "believability" for the Black voice sound (aural cue).

Alternate Hypothesis 1_a The mean score of "believability" for the Caucasian voice sound (aural cue) will be greater than the mean score of "believability" for the Black voice sound (aural cue).

Null Hypothesis 1_b There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (aural cue) and the mean score of "voice preference" for the Black voice sound (aural cue).

Alternate Hypothesis 1_b The mean score for "voice preference" for the Caucasian voice sound (aural cue) will be greater than the mean score of "voice preference" for the Black voice sound (aural cue).

Null Hypothesis 2_a There will be no difference between the mean score of "believability" for the Black voice sound (Voice #1) and the mean score of "believability" for the Black voice sound (Voice #2).

Alternate Hypothesis 2_a The mean score of "believability" for the Black voice sound (Voice #1) will be greater than the mean score of "believability" for the Black voice sound (Voice sound #2).

Null Hypothesis 2_b There will be no difference between the mean score of "voice preference" for the Black voice sound (Voice #1) and the mean score of "voice preference" for the Black voice sound (Voice #2).

Alternate Hypothesis 2_b The mean score of "voice preference" for the Black voice sound (Voice #1) will be greater than the mean score of "voice preference" for the Black voice sound (Voice #2).

Null Hypothesis 3_a There will be no difference between the mean score of "believability" for the Caucasian voice sound (Voice #1) and the mean score of "believability" for the Caucasian voice sound (Voice #2).

Alternate Hypothesis 3_a The mean score of "believability" for the Caucasian voice sound (Voice #1) will be greater than the mean score of "believability" for the Caucasian voice (Voice #2).

Null Hypothesis 3_b There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (Voice #1) and the mean score of "voice preference" for the Caucasian voice sound (Voice #2).

Alternate Hypothesis 3_b The mean score the "voice preference" for the Caucasian voice sound (Voice #1) will be greater than the mean score of "voice preference" for the Caucasian voice sound (Voice #2).

Null Hypothesis 4_a There will be no difference between the mean score of "believability" for the "pro" position and the mean score of "believability" for the "con" position.

Alternate Hypothesis 4_a The mean score of "believability" for the "pro" position will be greater than the mean score of "believability" for the "con" position.

Null Hypothesis 4_b There will be no difference between the mean score of "voice preference" for the "pro" position and the mean score of "voice preference" for the "con" position.

Alternate Hypothesis 4_b The mean score of "voice preference" for the "pro" position will be greater than the mean score of "voice preference" for the "con" position.

Summary

Ten workshop sections of Education 450, School and Society, were offered during the 1971 Spring term at

Michigan State University. Eight sections were randomly selected from the total of ten workshops. Eight experimental treatments were randomly assigned to the eight workshop sections. Four workshops received a treatment with a Black voice arguing either for the con or pro position on "Community Control of Schools." Four workshops received a treatment with a Caucasian voice arguing either for the con or pro position. Subjects in all workshops were administered the same semantic differential consisting of twelve items relating to "voice preference" and thirteen items relating to "believability." The mode of presentation for the treatments (automated slide-tape presentation) was the same for all workshops. The hypotheses were tested by using the multivariate analysis procedure, and the probability level selected for rejecting the null hypotheses was at the .05 alpha level.

CHAPTER IV

ANALYSIS OF DATA

In this chapter an analysis of the data is reported. This chapter is divided into four main sections: scale reliability, scale intercorrelation, hypothesis tests and summary.

Scale Reliability

The estimates of reliability of the items comprising the semantic differential scales for "voice preference" and "believability" were computed by using the Hoyt Estimate of Reliability formula.[1] The computed reliability for the first twelve items (voice preference) yielded a reliability coefficient of r = .7551 indicating substantial intra-scale reliability. Similarly the reliability coefficient for the scale (believability) produced a reliability coefficient of r = .8352 indicating substantial intra-scale reliability for the items. The high intra-scale reliability for the test items of "voice preference" and "believability" were interpreted to mean that each scale was providing a stable estimate of a specific dimension.

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[1] C. J. Hoyt, "Test Reliability Estimated by Analysis of Variance," Psychometrika, Vol. 6 (1941), 153-160.

Scale Intercorrelations

A Pearson Product Moment correlation coefficient was computed to determine the strength of relationship between the "believability" and "voice preference" scales. The computed score yielded a correlation coefficient of $r = .372$ suggesting some interdependence as well as independence between the two dependent measures utilized to test the hypotheses. The correlation coefficient justifies the utilization of the multivariate analysis of variance test procedure since this statistic takes into account the degree of inter-dependence among the measures.

Hypotheses Tests

The statistical hypotheses were tested using a one way multivariate analysis. Scores on the "voice preference--believability" semantic differential scales were used as the dependent variables. The independent variables were race, position, and voice replication. All hypotheses were tested using the .05 alpha level with the appropriate degrees of freedom.

A summary of the analysis of group means is reported in Table 4.1.

Hypotheses

The testable form of the hypothesis for "believability" of Black voice versus "believability" of Caucasian voice is stated as follows:

Table 4.1.--Group means for voice preference and believability.[a]

	Narrator	Position[b]	Voice Preference[c]	Believability
Black	Black-Voice 1	Pro	34.6	37.7
	Black-Voice 2	Pro	32.2	37.4
	Black-Voice 1	Con	32.2	35.6
	Black-Voice 2	Con	34.7	37.1
Caucasian	Caucasian-Voice 1	Pro	27.3	30.9
	Caucasian-Voice 2	Pro	26.6	34.9
	Caucasian-Voice 1	Con	28.0	31.3
	Caucasian-Voice 2	Con	28.3	33.3

[a]Rows are groups; columns are variables.

[b]Pro Argument for "Community Control of Schools." Con argument against "Community Control of Schools."

[c]Higher scores indicate negative direction. Lower scores indicate positive direction.

Null Hypothesis 1_a There will be no difference between the mean score of "believability" for the Caucasian voice sound (aural cue) and the mean score of "believability" for the Black voice sound (aural cue).

Alternate Hypothesis 1_a The mean score of "believability" for the Caucasian voice sound (aural cue) will be greater than the mean score of "believability" for the Black voice sound (aural cue).

The multivariate analysis of variance of means yielded a F-Ratio of 20.43 (degrees of freedom 2 and 151) which was significant at the P = .0001 level. A significant multivariate F Ratio can be interpreted as meaning that the two groups score significantly different from each other

on at least one of the dependent measures being simultaneously analyzed. To locate the differences a univariate analysis of variance of each of the dependent variables was subsequently conducted. A summary of the univariate analysis of believability scores is reported in Table 4.2.

Table 4.2.--Univariate analysis of believability scores of Black versus Caucasian voice sounds.

Variable	Between Mean Squared	Univariate F	Probability
Believability	752.5562	13.4288	0.0004
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Errors		152	

The one way analysis of variance of "believability" scores of Black versus Caucasian voices produced a F value of 13.42 which was significant beyond the .05 alpha level. The mean score of "believability" for the Caucasian voices was 27.75 while the mean scores for the Black voices was 36.90 (low scores indicate greater believability). Since the range between these two scores was significant beyond the .05 alpha level, the null hypothesis is rejected. Furthermore, an examination of the mean scores indicates the greater "believability" is associated with the Caucasian voice, therefore the alternate hypothesis is accepted.

The testable form of the hypothesis for "voice preference" of Black voice versus "voice preference" of Caucasian voice is stated as follows:

Null Hypothesis 1_b — There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (aural cue) and the mean score of "voice preference" for the Black voice sound (aural cue).

Alternate Hypothesis 1_b — The mean score for "voice preference" for the Caucasian voice sound (aural cue) will be greater than the mean score of "voice preference" for the Black voice sound (aural cue).

The multivariate of analysis of variance of means yielded a F-ratio of 20.43 (degrees of freedom 2 and 151) which was significant at the P = .0001 level. A summary of the univariate analysis of "voice preference" scores is reported in Table 4.3.

Table 4.3.--Univariate analysis of voice preference scores of Black versus Caucasian voice sounds.

Variable	Between Mean Squared	Univariate F	Probability
Voice Preference	1368.9000	39.0527	0.0001
Degrees of Freedom for Hypothesis	1		
Degrees of Freedom for error	152		

The one way analysis of variance of "voice preference" score of Black versus Caucasian voices produced a F-value of 39.05 which was significant beyond the .05 alpha level. The mean score of "voice preference" for the Caucasian voices was 27.53 while the mean scores for the Black voices was 33.87 (low score indicates greater "voice preference). Since the range between these two scores was

significant beyond the .05 alpha level, the null hypothesis is rejected. Furthermore, an examination of the mean scores indicates that greater "voice preference" is associated with the Caucasian voice, therefore the alternate hypothesis is accepted.

The testable form of the hypothesis for "believability" of Black (Voice #1) versus Black (Voice #2) is stated as follows:

Null Hypothesis 2_a — There will be no difference between the mean score of "believability" for the Black voice sound (Voice #1) and the mean score of "believability" for the Black voice sound (Voice #2).

Alternate Hypothesis 2_a — The mean score of "believability" for the Black voice sound (Voice #1) will be greater than the mean score of "believability" for the Black voice sound (Voice sound #2).

The multivariate analysis of variance of means yielded a F-ratio of .775 (degrees of freedom 2 and 151) which was significant at the P = .9255 level. The mean score of "believability" for Black (Voice #1) was 36.60 while the mean score for Black (Voice #2) was 37.00. The difference between the range of these two scores was not significant at the .05 alpha level, therefore the null hypothesis was not rejected. A summary of the univariate analysis of "believability" scores is reported in Table 4.4.

Table 4.4.--Univariate analysis of believability scores of Black voice #1 versus Black voice #2.

Variable	Between Mean Squared	Univariate F	Probability
Believability	7.8125	0.1394	0.7094
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for error		152	

The testable form of the hypothesis for "voice preference" of Black (Voice #1) versus Black (Voice #2) is stated as follows:

Null Hypothesis 2_b There will be no difference between the mean score of "voice preference" for the Black voice sound (Voice #1) and the mean score of "voice preference" for the Black voice sound (Voice #2).

Alternate Hypothesis 2_b The mean score of "voice preference" for the Black voice sound (Voice #1) will be greater than the mean score of "voice preference" for the Black voice sound (Voice #2).

The multivariate analysis of variance of means yielded a F-ratio of .775 (degrees of freedom 2 and 151) which was significant at the P = .9255 level. The mean score of "voice preference" for the Black (Voice #1) was 36.60 while the mean score for Black (Voice #2) was 37.00. The difference between the range of these two scores was not significant at the .05 alpha level therefore the null hypothesis was not rejected. A summary of the univariate analysis of "voice preference" scores is reported in Table 4.5.

Table 4.5.--Univariate of analysis of voice preference scores of Black (Voice #1) versus Black (Voice #2).

Variable	Between Mean Squared	Univariate F	Probability
Voice Preference	0.0125	0.0004	0.9850
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Error		152	

The testable form of the hypothesis for "believability" of Caucasian (Voice #1) versus "believability" of Caucasian (Voice #2) is stated as follows:

Null Hypothesis 3_a There will be no difference between the mean score of "believability" for the Caucasian voice sound (Voice #1) and the mean score of "believability" for the Caucasian voice sound (Voice #2).

Alternate Hypothesis 3_a The mean score of "believability" for the Caucasian voice sound (Voice #1) will be greater than the mean score of "believability" for the Caucasian voice sound (Voice #2).

The multivariate analysis of variance of means yielded a F-ratio of 1.935 (degrees of freedom 2 and 151) which was significant at the P = .1480 level. The mean score of "believability" for Caucasian (Voice #1) was 34.00. The difference between the range of these two scores was not significant at the .05 alpha level, therefore the null hypothesis was not rejected. A summary of the univariate analysis of "believability" scores is reported in Table 4.6.

Table 4.6.--Univariate analysis of believability scores of Caucasian (Voice #1) versus Caucasian (Voice #2).

Variable	Between Mean Squared	Univariate F	Probability
Believability	174.0500	3.1058	0.0801
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Error		152	

The testable form of the hypothesis for "voice preference" of Caucasian (Voice #1) versus "voice preference" of Caucasian (Voice #2) is stated as follows:

Null Hypothesis 3_b There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (Voice #1) and the mean score of "voice preference" for Caucasian voice sound (Voice #2).

Alternate Hypothesis 3_b The mean score for "voice preference" for the Caucasian voice sound (Voice #1) will be greater than the mean score of "voice preference" for the Caucasian voice sound (Voice #2).

The multivariate analysis of variance of means yielded a F-ratio of 1.935 (degrees of freedom 2 and 151) which was significant at the P = .1480 level. The mean score of "voice preference" for Caucasian (Voice #1) was 27.65 while the mean score for Caucasian (Voice #2) was 27.00. The difference between the range of these two scores was not significant at the .05 alpha level, therefore the null hypothesis was not rejected. A summary of the univariate analysis of "voice preference" scores is reported in Table 4.7.

Table 4.7.-- Univariate analysis of voice preference scores of Caucasian (Voice #1) versus Caucasian (Voice #2).

Variable	Between Mean Squared	Univariate F	Probability
Voice Preference	1.0125	0.289	0.8653
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Error		152	

The testable form of the hypothesis for "believability" of "pro" position versus believability of "con" position is stated as follows:

Null Hypothesis 4_a There will be no difference between the mean score of "believability" for the "pro" position and the mean score of "believability" for the "con" position.

Alternate Hypothesis 4_a The mean score of "believability" for the "pro" position will be greater than the mean score of "believability" for the "con" position.

The multivariate analysis of variance of means yielded a F-ratio of .7955 (degrees of freedom 2 and 151) which was significant at the P = .4533 level. The mean score of "believability" for the "pro" position was 34.30 while the mean score of "believability" for the "con" position was 34.30. The difference between the range of these two scores was not significant at the .05 alpha level, therefore the null hypothesis was not rejected. A summary of the univariate analysis of "voice preference" scores is reported in Table 4.8.

Table 4.8.--Univariate analysis of believability scores of "pro" versus "con" position.

Variable	Between Mean Squared	Univariate F	Probability
Believability	31.5062	0.5622	0.4546
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Errors		152	

The testable form of the hypothesis for "voice preference" of "pro" position versus "voice preference" of "con" position is stated as follows:

Null Hypothesis 4_b There will be no difference between the mean score of "voice preference" for the "pro" position and the mean score of "voice preference" for the "con" position.

Alternate Hypothesis 4_b The mean score of "voice preference" for the "pro" position will be greater than the mean score of "voice preference" for the "con" position.

The multivariate analysis of variance of means yielded a F-ratio of .7955 (degrees of freedom 2 and 151) which was significant at the P = .4533 level. The mean score of "voice preference" for the "pro" position was 30.00 while the mean score for the "con" position was 30.77. The difference between the range of these two scores was not significant at the .05 alpha level, therefore the null hypothesis was not rejected. A summary of the univariate analysis of "voice preference" score is reported in Table 4.9.

Table 4.9.--Univariate analysis of voice preference scores of "pro" versus "con" position.

Variable	Between Mean Squared	Univariate F	Probability
Voice Preference	15.6250	0.4458	0.5054
Degrees of Freedom for Hypothesis		1	
Degrees of Freedom for Error		152	

Although no interactions were hypothesized for hypotheses 2_a, 2_b, 3_a, 3_b, 4_a, and 4_b, these hypotheses were tested by no significant interactions were found.

Summary

Eight statistical hypotheses were generated and tested. Each hypothesis was tested using the one way multivariate analysis and using the .05 level of confidence for determining significance. Three hypotheses were formulated to determine the effect of voice sound (aural cue) on "believability." Three additional hypotheses were formulated to determine the effect of voice sound (aural cue) on "voice preference." One hypothesis was formulated to determine the effect of the position of argument on "blievability" while the remaining hypothesis was formulated to determine the effect of the position of the argument on "voice preference." A summary of results of the statistical analysis is presented in Table 4.10. A discussion of the findings and their implications is in Chapter V.

Table 4.10.--Summary of results.

	Null Hypothesis	Statement of Rejection or Non-rejection
1_a	There will be no difference between the mean score of "believability" for the Caucasian voice sound (aural cue) and the mean score of "believability" for the Black voice sound (aural cue).	Rejection*
1_b	There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (aural cue) and the mean score of "voice preference" for the Black voice sound (aural cue).	Rejection*
2_a	There will be no difference between the mean score of "believability" for the Black voice sound (Voice #1) and the mean score of "believability" for the Black voice sound (Voice #2).	Non-rejection**
2_b	There will be no difference between the mean score of "voice preference" for the Black voice sound (Voice #1) and the mean score of "voice preference" for the Black Voice sound (Voice #2).	Non-rejection**
3_a	There will be no difference between the mean score of "believability" for the Caucasian voice sound (Voice #1) and the mean score of "believability" for the Caucasian voice sound (Voice #2).	Non-rejection**

* Significant at or above the .05 alpha level.

** No significant difference.

Table 4.10.--(Continued).

	Null Hypothesis	Statement of Rejection or Non-rejection
3_b	There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (Voice #1) and the mean score of "voice preference" for Caucasian voice sound (Voice #2).	Non-rejection**
4_a	There will be no difference between the mean score of "believability" for the "pro" position and the mean score of "believability" for the "con" position.	Non-rejection**
4_b	There will be no difference between the mean score of "voice preference" for the "pro" position and the mean score of "voice preference" for the "con" position.	Non-rejection**

CHAPTER V

SUMMARY, FINDINGS, DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine what effect the recognition of a distinguishable voice sound (aural cue) associated with a particular ethnic group would have on "believability" and "voice preference." Specifically this study had two primary purposes. One purpose was to determine what effect a distinguishable voice sound associated with a Black narrator would have on "believability" and "voice preference." A second purpose was to determine what effect a distinguishable voice sound associated with a Caucasian narrator would have on "believability" and "voice preference."

One of the generalizations drawn from review of the literature indicates that the prestige associated with the information source is related in some way to the impact of the message. Review of the literature further indicates that source credibility has a temporal dimension, suggesting that if high prestige source diminishes, low prestige source gains. Important to this study and substantiated by the review of literature is the indication that noncontent

stimuli such as dress, voice, and manner apparently affect the attitude of the audience toward the communicator source. Further review of the literature reveals that there is a commonality of agreement in defining source credibility in spite of the great diversity in the variations of the conceptual framework in which source credibility functions.

The literature reviewed concerning the attribute of race of the communicator source suggests that those cues denoting race of the communicator as a minority member generally serve to diminish credibility of the minority communicator. Some studies indicate that because of the differences in characteristic variables of the minority communicator and audience composition, the perception of credibility source generally fluctuates.

Ten workshop sections of Education 450, School and Society, were offered in the Spring Term (1971) at Michigan State University. Eight workshop sections were randomly selected for the experimental treatment. Eight separate experimental treatments were randomly assigned to each of the eight workshop sections. Four workshop sections were administered an experimental treatment with a Caucasian voice arguing either for the pro or con position on "Community Control of Schools." Four workshop sections were administered an experimental treatment with a Black voice arguing either for the pro or con position on "Community Control of Schools."

The experimental population consisted of 160 white undergraduate students enrolled at Michigan State University. All subjects were enrolled in the Teacher Education program and had completed Student Teaching requirements. The sample of 160 subjects was divided into eight workshop sections consisting of twenty students each.

Two instruments were designed for this study. One was the pre-test screening instrument designed to determine whether or not voice sound could be distinctively identified as belonging to a Black or Caucasian speaker. Results of the data collected with this instrument indicated that differentiation can be made between the voice sound of Black and Caucasian speakers. The second instrument constructed was the semantic differential consisting of a total of 25 items. Twelve items related to voice preference and thirteen items to believability. Reliability of this instrument was substantiated by Hoyt's Estimate of Reliability formula.

The mode of presentation (automated slide-tape) for the treatment was the same with all workshop sections. The subjects in each treatment were administered the same semantic differential test. Results of the data collected by the semantic differential instrument supported the hypothesis that the mean scores of "believability" and "voice preference" would be greater for the distinguishable Caucasian voice sound than for the distinguishable Black voice sound.

Eight statistical hypotheses were generated and tested. Each hypothesis was tested using the multivariate analysis procedure and the .05 level of confidence for determining significance. Three hypotheses were formulated to determine the effect of distinguishable voice sound (aural cue) on "believability." Three additional hypotheses were formulated to determine the effect of distinguishable voice sound (aural cue) on "voice preference." One hypothesis was formulated to determine the effect of the position of argument on "believability," while the remaining hypothesis was formulated to determine the effect of the position of argument on "voice preference."

Findings

Hypothesis 1_a There will be no difference between the mean score of "believability" for the Caucasian voice sound (aural cue) and the mean score of "believability" for the Black voice sound (aural cue).

With respect to Hypothesis 1_a, it was found that there was a significant difference in the mean score for subjects' ratings of perceived source credibility on the "believability" dimension. Mean scores were higher for the distinguishable voice sound associated with the Caucasian narrator than for the distinguishable voice sound associated with the Black narrator. The data reveal that when white undergraduate students were exposed to information communicated by a Caucasian communicator they

gave higher credibility to the Caucasian information source than they will give to the Black communicator source.

Hypothesis 1_b There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (aural cue) and the mean score of "voice preference" for the Black voice sound (aural cue).

With respect to Hypothesis 1_b, it was found that there was a significant difference between the mean scores of "voice preference" for the Black narrator. Mean scores were higher for the Caucasian narrator than for the Black narrator. The data show that a clear distinction is made in "voice preference" between Black and Caucasian narrators. However, the acoustical features (tone, pitch, resonance, etc.) comprising voice preference is a highly personalized and subjective evaluation process. These acoustical features were not specifically measured by this study, however, based on the results of the data, it is concluded that there are "certain" acoustical features comprising the voice sound to which the listener attaches "certain" values in determining voice preference. What ever these "certain" values are, it appears that "voice preference" is perceived by white students as more positive with voice sound associated with a Caucasian than with voice sound associated with a Black speaker.

Hypothesis 2_a There will be no difference between the mean score of "believability" for the Black voice sound (Voice #1) and the mean score of "believability" for the Black voice sound (Voice #2).

With respect to Hypothesis 2_a, it was found that there was no significant difference in the mean scores of "believability" between Black voice sound (Voice #1) and Black voice sound (Voice #2). This result suggests that negligible differentiation is made between different Black communicator sources. It appears that perception of voice sound attributable to different Black communicators did not vary substantially in its effect upon "believability" of the information. It is concluded that distinguishable voice sound associated with different Black speakers will tend to be perceived as having approximately the same level of credibility.

Hypothesis 2_b There will be no difference between the mean score of "voice preference" for the Black voice sound (Voice #1) and the mean score of "voice preference" for the Black voice sound (Voice #2).

With respect to Hypothesis 2_b, it was found that there was no significant difference in the mean scores of "voice preference" between Black voice sound (Voice #1) and the Black voice sound (Voice #2). No negligible distinction was made between "voice preference" of (Voice #1) and (Voice #2). These results suggest that distinguishable voice sound associated with Black speakers will tend to be generally rated approximately the same on "voice preference." The combined mean scores generated from Hypotheses 2_a and 2_b were higher than combined mean scores generated from Hypotheses 3_a and 3_b. It is concluded that "voice preference"

was rated in a negative direction when associated with a distinguishable Black voice sound.

Hypothesis 3_a There will be no difference between the mean score of "believability" for Caucasian voice sound (Voice #1) and the mean score of "believability" for the Caucasian voice sound (Voice #2).

Hypothesis 3_b There will be no difference between the mean score of "voice preference" for the Caucasian voice sound (Voice #1) and the mean score of "voice preference" for Caucasian voice sound (Voice #2).

With respect to Hypotheses 3_a and 3_b, it was found that there was no significant difference in the mean scores of "believability" and "voice preference" between Caucasian voice sound (Voice #1) and Caucasian voice sound (Voice #2). It appears that distinguishable voice sound associated with Caucasian speakers differ little in how they are perceived in relationship to "believability" and "voice preference." The combined means scores generated from Hypotheses 3_a and 3_b were higher than the mean scores generated from Hypotheses 2_a and 2_b. From this evidence it is concluded that perception of "voice preference" and "believability" will tend to be rated in a positive direction when associated with a distinguishable Caucasian voice sound.

Hypothesis 4_a There will be no difference between the mean score of "believability" for the pro position and the mean score of "believability" for the con position.

Hypothesis 4_b There will be no difference between the mean score of "voice preference" for the pro position and the mean score of "voice preference" for the con position.

With respect to Hypotheses 4_a and 4_b, it was found that there was no significant difference in the mean scores of "believability" and "voice preference" between con and pro positions of the arguments. Furthermore, no significant interaction between the position taken in communicating the message and believability of the message. Results of the data suggest that the announced persuasive intent of the message had negligible effect upon "believability" of the message or upon "voice preference" associated with communicating the message. It is concluded that believability of the message can not be assured by the position a speaker takes on an issue.

Discussion

The general question under investigation in this study was to determine the extent to which distinguishable voice sound associated with a Black or Caucasian speaker influenced source credibility. Source credibility for the purpose of this study was defined comprising two dimensions: (1) believability, and (2) voice preference. Generally speaking the results obtained for "believability" and "voice preference" support the two major Hypotheses 1_a and 1_b of this study. "Believability" and "voice preference" were perceived and rated in a more positive direction for the Caucasian voice than for the Black voice. The mean scores were significantly higher for the Caucasian voice than for the Black voice. However, it should be noted that

these data can not adequately support the contention that these results will be duplicated under similar conditions. Due to the personality variables of the subjects and the variations of voice quality for Black and Caucasian speakers, the need for replication of this study is warranted. This fact emphasizes the highly fluid state operating in the communication process.

One of the basic questions underlying this study was answered by the data collected. Substantial support was given to the assumption that differentiation could be made between a Black and Caucasian speaker based on the distinguishability of aural cues. Out of a total of ten speakers (five Black and five Caucasian), four Blacks were accurately identified. One Black voice was judged to be indistinguishable. All five Caucasian voices were identified as such. Based on the extent of the recognition of voice sound, it appears that white students were negatively influenced in their reaction to information communicated by a distinguishable Black voice.

It was presumed that a certain amount of bias would be held by the white subject toward any single voice (Black or white). An effort was made to construct a design that would keep this source of bias at a minimal level thus reducing the impact of its effect upon the subjects recorded responses. In addition, this might have undertaken the task of developing an instrument

to pre-test the attitudinal bias of the subjects in order to better control this variable. However, this was not within the scope of the present study and would have been a major study by itself. To minimize this apparent weakness in the study, the researcher emphasized the reliability of the instruments constructed for this study. The pre-screening test instrument which enabled the researcher to clearly establish identification of and differentiation between Black and Caucasian voices proved to be extremely effective and valid. The semantic differential constructed to measure "believability" and "voice preference" proved to be substantially reliable. Reliability was supported by the Hoyt Estimate of Reliability formula. However, it is recognized that any instrument should be subject to continuous refinement. Therefore, the present instrument proved to be reliable under the conditions of this study, it should be subject to further refinement for future use.

Results of the data show that Black voices consistently received lower mean scores than Caucasian voices. Mean scores for "believability" and "voice preference" were significantly higher for Caucasians. In contrast to these results, mean scores were not significantly different between Black (Voice #1) and Black (Voice #2). The same results were apparent between the mean scores of Caucasian (Voice #1) and Caucasian (Voice #2). However, the combined mean scores of Black (Voice #1) and Black (Voice #2) were

significantly lower than the combined mean scores of Caucasian (Voice #1) and Caucasian (Voice #2). It appears that the attitudinal biases of the subjects were either inclined toward stereotyping or the experimental treatment did not effectively control this variable.

Another factor that may have indirectly influenced the subjects responses is the presence of a Black female proctor and a Black experimenter. Although no evidence is available to support this notion, this question nevertheless remains open. The data seems to support indirectly that speech dialect associated with a Black speaker appears to be one of many compounding variables which influence the Caucasian observer in forming certain stereotypic attitudes. It should be noted that this position is not fully substantiated by the present study.

It is noted that no significant interaction was evident between the position of argument taken by the Black narrators. However, the Black narrators were still perceived as being less credible than Caucasian narrators. These results indicate that voice sound (aural cue) played a significant role in the minds of the Caucasian subjects in their perception of source credibility.

The message format used as part of the experimental treatment appeared to be adequate for this study. Extreme care was taken to assure its uniformity. Each message consisted of an introductory statement, supporting pro or con

statements, and one pro or con option. Results of the data showed no significant interaction between the pro and con positions, suggesting that position of argument exercised no significant influence on source credibility of the message. This was significant to this study in that it suggests that voice sound (aural cue) was the dominating variable influencing source credibility.

The results of the data pertaining to the perceived source credibility of Black voices versus Caucasian voices show a significant difference. It would be difficult or unwise to generalize from these findings to other situations different than the conditions described in this study. This study was limited in the size of population and also limited by the mode (automated slide-tape presentation) of the experimental treatment. In view of this, it might be inappropriate to make generalizations about source credibility of voice sound relating to other media such as recording discs, video tapes, and instructional films.

Implications

Although it is difficult to generalize from the limited scope of this study, the researcher, nevertheless, feels very strongly that this study has broad implications beyond its present scope. These implications are particularly relevant to some of the aspects of the educational process. Education can generally be described as a process

of social interaction. It is during this process that the individual acquired behaviors, attitudes, and perceptions of other individuals with whom he interacts. With this point of view in mind, the following implications are suggested:

1. The unfavorable image in which the Black voice was perceived generally suggests that white students tend to hold negative attitudes toward the competencies of the Black individual. Implications of this observation point to a strong need for more exposure and contact by white students with Blacks in a variety of favorable educational situations.

2. Implications further suggest that distinct cultural speech patterns generally associated with the Black educator are often perceived by fellow Caucasian educators as being suggestive of deficiencies in professional knowledge. This indicates that the Black educator is often held in suspect by his Caucasian colleague regarding his proficiency. A need to develop mutual professional respect is indicated.

3. It appears that strong overtones of racial stereotyping are demonstrated in the Caucasian perceptions of the credibility of Blacks in an educational setting. A need for greater and more intimate academic exposure is implied. Hopefully through more favorable educational contact, a positive shift in attitude toward credibility of the Black educator will develop.

4. A serious question is raised in regard to the classroom environment, particularly in the lower grades, where Black teachers interact with white children. These children are part of a larger society in which negative attitudes toward the Black teacher are pervasive. Therefore, significance is attached to the young child and his perceptions of the Black teacher in relationship to his world. Implications of this study suggest that the effectiveness of the Black teacher can be drastically reduced. These implications suggest further that a value conflict can often develop within the child if he is subjected to strong racial biases and influences from his family and peer group that are anti-Black.

5. Although this study showed that Black voices were perceived in a less favorable image, the implications for instructional technology are significant. Based on the findings of this study, commercial producers of instructional technology (sound filmstrips, video-tape programs, films, etc.) will not look favorably upon using Black voices for narration based upon the findings of this study. However, the implications of this study suggest that commercial producers can make a unique contribution to the total educational process by providing a positive channel of communication by which Black voices can be incorporated in a manner in which is nonexistent at the present time. The general amount of exposure to and familiarity with Black voices in a positive image will be greatly enhanced.

Recommendations

The following suggestions are based on the analysis of the findings in this study and the insights gained during the course of this study. The recommendations for future research are stated below.

1. This study was restricted to a small experimental population. Future research in this area should include larger samples which would provide more definitive results than the present study provides.

2. The population of this study consisted of only University level senior students. It may prove beneficial for future research to examine populations of lower grade levels such as elementary, junior high, and senior high schools. Research at these levels should provide a broader basis for formulating more comprehensive conclusions regarding source credibility.

3. The present study was concerned primarily with a population composed of all white students. Further research should examine credibility using all Black students for the experimental population. As a result, some basis may be established for comparing the differences between Black and white students' perception of source credibility based on distinguishable voice sound.

4. Students represent only a small segment of society. This study was restricted to this single segment. In order to get a broader perspective and different insights to the question of source credibility, it may be

worthwhile to design future research in an attempt to examine other groups in society such as educators, social workers, and counselors.

5. This study used only male voices in determining audience reaction to source credibility. It would be of interest to future research to determine what influence distinguishable Black and white female voices would exercise on source credibility. From the search of the literature it appears that this has never been done.

6. A more comprehensive study should be undertaken in the future that would include a replication of this study across comparable groups throughout the University.

BIBLIOGRAPHY

BIBLIOGRAPHY

Allport, Gordon, and Cantril, Hadley. "Judging Personality from Voice." Journal of Social Psychology, V (1934), 37-55.

Anderson, Kenneth E. "An Experimental Study of the Interaction of Artistic and Nonartistic Ethos in Persuasion." Unpublished doctoral dissertation, University of Wisconsin, 1961.

Anderson, Kenneth, and Clevenger, Theodore, Jr. "A Summary of Experimental Research in Ethos." Speech Monographs, Vol. 30, No. 2 (June, 1963), 118.

Arnett, Claude; Davidson, Helen; and Hallett, Lewis. "Prestige as a Factor in Attitude Changes." Sociology and Social Research, XVI (1931), 49-55.

Berlo, David K.; Lemert, James B.; and Mertz, Robert. "Dimensions for Evaluating the Acceptability of Message Sources." The Public Opinion Quarterly, Vol. 33 (Winter, 1969-70), 563, 568-569.

Berlo, David, and Kumata, Hideya. "The Investigator: The Impact of a Satirical Radio Drama." Journalism Quarterly, XXXII (1956).

Birch, Herbert. "The Effect of Socially Disapproved Labeling Upon a Well-Structured Attitude." Journal of Abnormal and Social Psychology, XL (1945), 301-310.

Bowden, A. O.; Caldwell, F. F.; and West, A. G. "A Study in Prestige." American Journal of Sociology, 40 (1934), 193-204.

Cohen, Arthur. "Need for Cognition and Order of Communication as Determinants of Opinion Change." Order of Presentation. Edited by Carl I. Hovland et al. New Haven: Yale University Press, 1957.

Duncker, Karl. "Experimental Modification of Children's Food Preferences Through Social Suggestion." Journal of Abnormal and Social Psychology, XXXIII (1938), 489-507.

Ewing, T. N. "A Study of Certain Factors Involved in Changes of Opinion." Journal of Social Psychology, 16 (1942), 63-88.

Guilford, J. P. Psychometric Methods. New York: McGraw-Hill Book Company, Inc., 1954.

Haiman, Franklyn. "An Experimental Study of the Effects of Ethos in Public Speaking." Unpublished dissertation, Northwestern, 1948; Speech Monographs, XVI (September, 1949), 190-202.

Harms, Leroy Stanley. "Social Judgments of Status Cues in Language." Unpublished doctoral dissertation, Ohio State University, 1959; Speech Monograph, XXVII (1960), 87.

Hovland, Carl I.; Irving, Janis L.; and Kelley, Harold H. Communication and Persuasion. New Haven: Yale University Press, 1953.

Hovland, Carl; Lumsdaine, Arthur; and Sheffield, Fred. Experiments on Mass Communication: Vol. III of Studies in Social Psychology in World War II. Princeton: Princeton University Press, 1949

Hovland, Carl and Mandell, Wallace. "An Experimental Comparison of Conclusion Drawing by the Communicator and the Audience." Journal of Abnormal and Social Psychology, XLVII (1952), 581-588.

Hovland, Carl and Weiss, Walter. "The Influence of Source Credibility on Communication Effectiveness." Public Opinion Quarterly, XVI (1961), 635-650.

Hoyt, C. J. "Test Reliability Estimated by Analysis of Variance." Psychometrika, 6 (1941), 153-160.

Jakobson, Roman. Preliminaries to Speech Analyses: The Distinctive Features and Their Correlates. Cambridge: Massachusetts Institute of Technology Press, 1963.

Kelman, H. C., and Hovland, C. I. "Reinstatement of the Communicator in Delayed Measurement of Opinion Change." Journal of Abnormal and Social Psychology, Vol. 48 (1953), 327-335.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1964.

Knower, Franklin. "Experimental Studies of Changes in Attitudes: I. A study of the Effect of Oral Argument in Changes in Attitude." Journal of Social Psychology, VI (1935), 315-347.

Kraus, Sidney. "An Experimental Study of the Relative Effectiveness of Negroes and Whites in Achieving Racial Attitude Change Via Kinescope Recordings." Unpublished dissertation, University of Iowa, 1959; Speech Monographs, XXVII (1960), 87-88.

Kraus, S. "Modifying Prejudice: Attitude Change as a Function of the Race of the Communicator." Audio-visual Communication Review (January-February, 1962), 14-22.

Kulp, D. H. II. "Prestige as Measured by Single-Experience Changes and Their Permanency." Journal of Educational Research, 27 (1934), 663-672.

Lansing State Journal. "State Cites Flaws in Textbooks," March 18, 1971, p. 12.

Lazarsfeld, P. F.; Berelson, B.; and Gaudet, Hazel. The People's Choice: How the Voter Makes up His Mind in a Presidential Campaign. New York: Duell, Sloan and Pearce, 1944.

Lewis, Helen. "Studies in the Principles of Judgments and Attitudes: The Operation of Prestige Suggestion." Journal of Social Psychology, XIV (1941), 229-256.

Lorge, Irving, and Curtis, Carl. "Prestige Suggestions and Attitudes." Journal of Social Psychology, VII (1936), 386-402.

Ludlum, Thomas. "A Study of Techniques for Influencing the Credibility of a Communication." Unpublished dissertation, Ohio State University, 1956.

Miller, Gerald R., and Hewgill, Murray A. "The Effect of Variations in Nonfluence and Audience Ratings of Source Credibility." The Quarterly Journal of Speech, Vol. 1, No. 1 (February, 1964), 36-37.

Miller, Gerald, and Roberts, Kenn. "Communication Race, Open- and Closed-Mindedness, and Response to Informative Communications." Audiovisual Communication Review, Vol. 13, No. 3 (Fall, 1965), 259-269.

Nerbonne, Patrick G. "Identification of Speaker Characteristics on the Basis of Aural Cues." Unpublished dissertation, Michigan State University, 1967.

Osgood, Charles, and Tannenbaum, Percy. "The Principle of Congruity in the Prediction of Attitude Change." Psychological Review, LXII (1955), 42-55.

Osgood, Charles E.; Suci, George J.; and Tannenbaum, Percy H. The Measurement of Meaning. Urbana, Ill.: University of Illinois Press, 1957.

Paulson, Stanley. "Experimental Study of Spoken Communication: The Effects of Prestige of the Speaker and Acknowledgement of Opposing Arguments on Audience Retention and Shift of Opinion." Unpublished dissertation, University of Minnesota, 1953; Speech Monographs, XXI (1954). 267-271.

Rothhauser, E. H. "A Comparison of Preference Measurement Methods." The Journal of the Acoustical Society of America, Vol. 49, No. 4 (Part 2))April, 1971), 1297-1308.

Saadi, Mitchell, and Farnsworth, Paul. "The Degree of Acceptance of Dogmatic Statements and Preferences for Their Supposed Makers." Journal of Abnormal and Social Psychology, XXIX (1934), 143-150.

Strother, Edward. "An Experimental Study of Ethos as Related to the Introduction in the Persuasive Speaking Situation." Unpublished dissertation, Northwestern University, 1951.

Tannenbaum, Percy. "Initial Attitude Toward Source and Concept as Factors in Attitude Change Through Communication." Public Opinion Quarterly, XX (1956), 413-425.

Weisgerber, Robert A. Instructional Process and Media Innovations. Chicago: Rand, McNally and Co., 1968.

Weiss, Walter. "A 'Sleeper' Effect in Opinion Change." Journal of Abnormal and Social Psychology, XLVIII (1953), 173-180.

Williams, Dorothy M. "A Study of the Relative Effectiveness of Selected Teaching Procedures in the Modification of Children's Attitudes Toward the Negro." Unpublished doctoral dissertation, New York University, 1946.

Williams, Frederick; Whitehead, Jack L.; and Miller, Leslie. "Ethnic Stereotyping and Speech Attitudes, Technical Report, Center for Communication Research, University of Texas at Austin, February, 1971.

Williams, Frederick; Whitehead, Jack; and Traupman, Jane. "Correspondence Between Semantic Differential Ratings of Children's Speech and Speech Anticipated Upon the Basis of Stereotype." Technical Report, Center for Communication Review, University of Texas at Austin, August, 1970.

APPENDICES

APPENDIX A

VOICE DISTINGUISHABILITY RATING SCALE

Check the appropriate number which best describes how you perceive the voice sound of each speaker.

Speaker - Number 1

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 2

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 3

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 4

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 5

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 6

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 7

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 8

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 9

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Speaker - Number 10

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

APPENDIX B

PRE-TEST SCRIPT

APPENDIX B

PRE-TEST SCRIPT

Words and pictures are stimuli. What is learned from them depends on the kinds of responses that they elicit. For convenience of exposition they can be put into three major categories. In the first are all preparatory responses of attention, selective discrimination and perception which presumably have been learned previous to the presentation. Second are the responses involved in learning what the presentation purports to teach. These are called acquisition responses. In the third category are the responses involved in anchoring what has been learned so that it can be used on subsequent occasions. These are called consolidating responses.

APPENDIX C

INSTRUCTIONS

Instructions:

Please read the following instructions very carefully. If there are any questions after reading the instructions, please raise your hand.

You are going to hear a tape recording composed of ten speakers. Each speaker will read a very short paragraph. Please listen very attentively to the voice of each speaker.

Following each speaker, the tape recorder will be stopped. After the tape recorder is stopped following each speaker, do the following.

Check the appropriate number which best describes how you perceive the voice sound of each speaker.

Example:

Speaker - Number 0

_____1 Sounds clearly distinguishable as a black speaker

_____2 Sounds like a black speaker

_____3 Sounds indistinguishable

_____4 Sounds like a Caucasian speaker

_____5 Sounds clearly distinguishable as a Caucasian speaker

Please wait for instructions.

APPENDIX D

ARTICLE

REVIEW ARTICLE SECTION

The following article is based upon and inspired by the discussions and prepared case materials of the meeting concerning "Comm ity Control of Schools" of the Council on Urban Development of the Institute of Human Sciences held at Endicott House, Dedha Massachusetts on May 2-3, 1969.

COMMUNITY CONTROL OF SCHOOLS: A REVIEW OF ISSUES AND OPTIONS [1]

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At first glance the phrase "Community Control of Schools" seems to refer mainly to the problem of the locus of authority in our educational system. In the frequent current polemics on the issue, we read of parents from the ghetto and other large city neighborhoods complaining vigorously that their children are not receiving an adequate education and that teachers cannot or will not understand their children. We hear teachers (usually through a professional association or union) decrying outside interference in the educational process and the lack of discipline and poor capacities of ghetto youngsters while stressing their own rights to tenure and job security. And we see public officials taking other tacks in response to the turn of political breezes.

When we investigate the problem more deeply, however, we find that community control of schools is a complex political-economic-racial (or ethnic) issue. It is also an issue of overall urban policy and metropolitan planning. One of the most important underlying questions in the community control of schools issue is participation by members of the community in the management of matters affecting their existence, especially in the inner-city and ghetto areas of large metropolises. The school issue has been highlighted because it is somewhat easier to make a case for local control here than in other areas such as police, utilities, transportation, etc. This is true since so many more citizens are directly involved in education through their children. Also, even though they may not fully appreciate the importance of education, they do somehow see it as a vehicle to the "good life" for their children and as a means to personal fulfillment. As a result, schools and their staffs have become targets in what is really a deepseated and often deliberately planned struggle by minority groups for equality in political and economic realms. The problem stems from a general feeling of powerlessness on the part of people living in a highly technological and competitive mass society. The intensity of this feeling is multiplied many times in the case of those who belong to a minority group and who live in poverty in our urban centers.

Although the community control of schools issue is partially rooted in the demands of urban poor for more power and participation in a variety of realms, we wish to limit ourselves here specifically to "schools" in the sense of **public elementary and secondary schools**. Similarly, the term "community" has a variety of meanings, but we wish to focus on the "community" as a **neighborhood or natural sub-section of the core city of a large metropolitan area**. The rough size of such a community would be 50,000 people with a school population of 10,000-20,000 students. It is obvious that the issue of community control has a much different complexion in suburbs of metropolitan areas or in smaller isolated communities and rural areas.

The concept of "control" as commonly used in discussion of the present issue has two important yet separate facets that are often confused. First, there is community "control" of schools as **decentralization of bureaucratic authority in educational decision-making**. A decentralized system is one in which nearly all of the important and significant educational decisions are made at the community level or below by the community electorate and its elected and appointed representatives (school boards, school superintendent, principals, etc.). In a centralized metropolitan or large city school system, by contrast, most major decisions are made by higher level representatives or bureaucrats who have no direct personal tie to all neighborhoods involved -- which usually means that lower status areas go unrepresented in such decision-making processes.

The second facet of "control" refers to **citizen involvement in education and educational decision-making**. This means that the citizens of a community are both concerned about a good education for their children and actively participate in the establishment and implementation of educational goals in their community. The fact that a school board is elected periodically at the community level and has power over local educational decisions does **not** by any means guarantee that there will be a high degree of citizen involvement with education in that community.

PROS AND CONS

Since community control of schools involves these two separate facets -- decentralization and citizen involvement -- the pros and cons of these two facets will be considered separately.

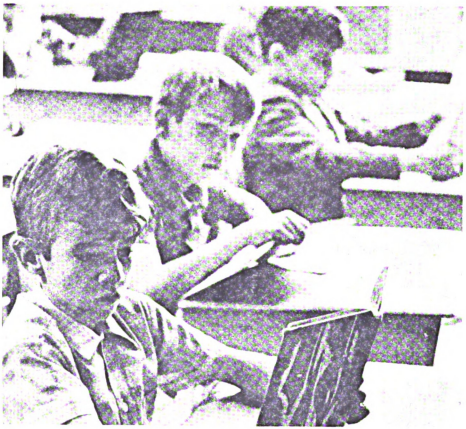
Decentralization

Probably the most frequently posed

rgument against decentralization is the uggestion that it hinders integration. The oint here is that it is, or could be, a step ack to enforced segregation or de facto egregation. This argument loses most of s force when we note that under the resent centralized educational systems, he percentage of blacks and hence de facto segregation in core city populations as been increasing steadily during this decade, so that decentralization could hardly make matters worse. While this trend is a reality, and insofar as it continues as projected by demographers, it is certainly fair that the residents of the core city communities or ghettoes have some say in the decisions affecting the education of their children — a situation that cannot easily exist without decentralization as a base. Too, it should be emphasized that the vast majority of those in favor of decentralized school systems are not proponents of segregation. All of the available means to foster integration (i.e., bussing, Head Start programs, suburban programs, etc.) could and should still be promoted in a decentralized system.

A second common argument against decentralization relates to the inefficient use of educational resources. Centralized bureaucracies permit certain economics of scale in the acquisition and use of resources by means of centralized purchasing, recruiting, etc. If this efficiency has to be sacrificed for the sake of more important values, so be it. However, the fact is that decentralization is quite compatible with the maintenance of certain centralized services. The central office still could be responsible for bid specifications, bulk purchasing, contracted maintenance, etc., but it would be the local officials who would decide priorities and would have the power to see to it that action is taken promptly. The central office would thus be simply implementing the decision of the local officials.

The most important reasons in favor of decentralizing our school systems spring from the greater likelihood that the decentralized system will be optimally



sensitive and responsive to local conditions and needs. Historically, large centralized bureaucracies have been noted for their insensitivity to the real needs of the local communities they purport to serve. Even when local needs have been recognized, large centralized bureaucracies have been ineffective in bringing about meaningful changes and implementing suitable programs. By contrast, there is a greater chance that decentralized school systems will be aware of special local needs, will be able to make relatively rapid decisions responding to these needs, and will more effectively implement appropriate programs and innovations.

Without this decentralization it is scarcely possible that widespread community involvement in the educational process will flourish. Centralized authority structures in large cities essentially eliminate any real possibility for meaningful community participation in educational decision-making. Decentralization guarantees that the important decisions affecting education will be made on a local level (through local school boards and local administrative staff) and this is a much-needed step in most core city communities, especially in ghetto areas where the current demands for increased "black power" must be answered. Yet organizational decentralization is not sufficient to bring about true community control of schools, since it may result in only token involvement of the local community in educational decisions by means of biennial school board elections. The need for bringing about even greater citizen involvement remains.

Citizen Involvement

Citizen Involvement has two distinct aspects, **concern** and **participation**. Concern here implies that citizens of the community are interested in education broadly, believe in its value for their children, urge their children to remain in school, encourage academic accomplishment both at home and at

school, and provide back-up support for teachers and other educational staff. This kind of citizen involvement is most characteristic of the suburbs and higher socio-economic areas in general. Lack of such concern is a vital problem in most core cities and high poverty areas.

Everyone seems to agree that **concern** for education is a good thing **per se**. Thus, there are no negative arguments to review here. The difficulties come in considering ways in which this concern can be brought about or increased and in dealing with the costs involved.

The great potential value of this kind of citizen concern is that it tends to foster educational achievement and aspiration in students. Substantial levels of educational achievement are a necessity in modern industrial society if the vicious cycle of poverty and ethnic discrimination is to be broken by the effective occupational competition and mobility of those who are presently deprived. Along with the increased occupational effectiveness of current ghetto residents and their children would come increased representation in the political power structure and in other important private and public positions in our society. The battle against ethnic prejudice and discrimination will have to continue unabated. But an increase, through education, in the competence levels of currently deprived ethnic minorities should go a long way toward fostering integration and equality of opportunity in our nation.

The participation aspect of citizen involvement goes beyond mere concern and refers to the active engagement of a variety of individuals from the local community in the selection and implementation of educational objectives within the school system. Here we have parents and other citizens entering a domain previously reserved to professional educators and a handful of school board members. This very fact is the root of one of the most telling arguments raised against community control of schools, especially by professional educators and their unions or professional associations.

Educators, not without some justification, feel that the act of teaching and its supporting activities demand an expertise that is not to be found in everyone who might have an interest in and concern for education. They worry about the possibility of citizens interfering directly in the day-to-day operation of the school. In addition to these worries regarding the task of educating children, professional educators at all levels are also quite concerned about the implications for their personal job security and tenure, salary and promotion, collective bargaining rights, and related matters.

There is no denying the existence of these professional and personal career problems of educators, but their existence is not sufficient reason to abandon the concept of citizen participation in community school systems. As will be shown in a moment, the values of this kind of participation for students, citizens, and education in general far outweigh the inherent problems. The answer must be to negotiate some form of compromise that avoids either the extreme of completely citizen-run schools, or the extreme of token involvement of parents in completely educator-run schools. The compromise must take into account the professional and personal career interests of educators while providing for some meaningful citizen participation in the local educational decision-making process.

Another kind of argument advanced against meaningful community participation is that quality standards for educational achievement will be diminished. Although sometimes proposed very sincerely, this is often a sham appeal to universal values that is intended to mask educators' actual concern for their own personal and professional career interests. Certainly there are few persons who would quarrel with the need for maintaining and even enhancing educational quality standards, but there is no clear evidence that citizen participation has a detrimental effect, and in fact, there is good reason to believe that it may have a positive effect, especially in the ghetto areas. It should also be pointed out that educational achievement is already so low in poverty and ghetto areas that there is no place to go but up.

The point is not to abandon quality standards of a universal nature entirely, but to broaden these standards to allow some room for the inclusion of local community values and educational objectives.

A final argument raised against citizen participation in the educational process has to do with the spectre of extremist and minority groups completely taking over the educational system in local communities. Many see this as a logical development from allowing the community to participate in the selection of educational objectives, but exploitation by extremists is no more necessitated by community participation in education than it is by community participation in city, state, or national government. This danger is inherent in the democratic process at all levels but it is a danger that can be guarded against by an alert and active citizenry and by provision of options and flexibility in the implementation of objectives.

Openness and flexibility can be maintained by having the local community select periodically the priorities it would like to have assigned to a series of educational objectives rather than attempting to arrive at a unanimous view on a single program that may not take into account minority opinions even within the local community. The implementation of these community-selected educational objectives should further maintain flexibility by providing students and parents some options in choosing courses and/or programs designed to meet these objectives.

As noted earlier, community concern with education is significantly related to student educational achievement. Where this concern is substantial, as in many of our suburban areas, a minimal amount of participation can be tolerated. Where this concern is weaker, as in most ghetto and poverty areas, a program of citizen

ticipation is needed to foster and serve citizen interest in education and schools.

Recent research[2] has shown that ident attitudes, expectations, and rsonality traits have a very substantial pact on educational achievement. ese range all the way from broad ings of efficacy and positive self-image the more specific attitudes toward the ues of education in achieving cupational success and the relevance of ecific courses and programs to eventual ccess in life. The ghetto child tends to ffer from a psychological deficiency on f these counts. Programs that attempt improve educational achievement in e urban schools merely by improving achers, support services, facilities, or hysical plant are likely to achieve only mited success,[3] insofar as they ignore e psychological components. An attack n the root cause of poor educational chievement in the ghetto and poverty reas must be made via student attitudes nd expectations. Since the latter are rimarily shaped in the home and the local ommunity, an effectively programmed pproach to changing student attitudes nd expectations must involve parents nd other citizens in the community at arge. This kind of involvement is what we ave been referring to as meaningful itizen participation in the educational rocess.

Participation of parents and other citizens in educational decision-making at the local level will lead to their increased commitment to their schools and to the educational process in general as well as increasing their sense of personal efficacy and confidence. Insofar as this participation has been effective, one may expect this sense of commitment and efficacy to be passed on to the children. In addition, effective community participation will have brought about certain changes in the school curriculum so that various courses and programs will be available that are intrinsically more meaningful to students from the local community.

The enhanced relevance of certain community-selected programs and courses as well as the increased parental concern brought about by direct participation will likely result in many students from disadvantaged areas experiencing some degree of efficacy in the school setting for the first time. In addition, community participation is a positive answer to many of the overt behavior problems plaguing our urban schools such as poor discipline, truancy, absenteeism, and general hostility or indifference to the schools.

Quite aside from the direct impact of citizen participation on student educational achievement, such participation also has an impact on the broader political, racial, economic issues which bear not only on the problem of community control of schools but also on numerous other pressing problems inherent in the urban scene. The root issue here is equality. People in disadvantaged areas are demanding their fair share of American life in terms of political and economic power and in terms of social position relative to the majority ethnic groups. As the Kerner Commission Report[4] amply shows, failure to meet such demands is significantly related to the occurrence of riots and other manifestations of civil unrest in core cities. Community control of schools, insofar as it involves meaningful citizen participation, is at least one big step — but by no means the only step — toward realizing equality. This kind of active involvement will serve to decrease the currently widespread alienation and apathy found in poverty areas while conversely fostering the development of a generally aware and active citizenry who are both willing and able to take their proper place as equal participants in running their communities, their states, and their nations.

OPTIONS

Implicit in all of the foregoing discussion has been the assumption that adequate funds will be available to bring about meaningful decentralization and citizen involvement in community education. Without adequate funds, community control of schools will be a sham. Generally speaking, funds for education in a given community may come primarily from within the community (either from individual families or through local taxation) or primarily from higher level political units (city, metropolitan, state, or national levels). By considering primarily intra-community vs. primarily supra-community funding for education together with decentralized vs. centralized educational authority and active citizen involvement vs. no effective involvement, several major practical options emerge.

OPTION 1 Centralized authority, no effective citizen involvement, supra-community fiscal base.

Option 1 describes the **status quo** in most large cities in this country today. The core urban areas and especially the ghettoes and disadvantaged areas have essentially no part in the decision-making affecting the education of their children and manifest no effective citizen involvement, either in the sense of concern or participation. Funds for education come from the total city fiscal base and other supra-community levels rather than primarily from within the community, but these funds are also allocated by the centralized supra-community educational authorities. As a result, the local citizenry have **no meaningful community control of education in any sense.** Out of this condition an increasing degree of alienation and dissatisfaction is developing. At best, therefore, Option 1 results in apathy and indifference toward education and local schools, and at worst it leads to outright hostility and widespread violence against the authority structure in general. The latter response is all too prevalent in our urban ghettoes and poverty areas today. Obviously, Option 1 does not facilitate either good education or domestic tranquility in core city areas, nor does it foster racial justice and the ultimate equality of opportunity for all persons in our society.

OPTION 2 Decentralized authority, no effective citizen involvement, community level fiscal base.
Under this option, the community controls local educational decision-making but also has the problem of raising adequate funds for education from within the local community. There is still no effective program for developing citizen involvement. In middle class or wealthy suburbs and towns, this option works fairly well for two reasons. First, the suburban community will generally be wealthy enough to raise adequate funds for education from within itself. Second, the parents and other citizens in a middle class (or higher status) suburban community will already tend to have a well-developed concern for education and at least a moderate level of citizen participation in the educational decision-making process. By contrast, in the ghetto and poverty areas of large cities (or in the poorer suburbs), the local citizens lack sufficient wealth to support a sound educational program from their own resources as well as having a lower level of concern for education and less opportunity for involvement in the schools.

As discussed in a preceding section, citizen involvement with education in poor or disadvantaged areas is not likely to occur merely because educational authority is decentralized. A specific program launched by, and through, local community leaders (as in Option 3 and 5) will generally be necessary to turn current apathy or hostility into positive concern for education and active citizen support of the schools. In sum, Option 2 simply turns the school system over to the local community while failing to provide adequate financial support from a supra-community fiscal base and at the same time failing to develop an effective program of citizen involvement. This option may provide self-determination at the community level, but its great danger is that it will probably lead to the further deterioration of the quality of education in the community and may ultimately result in aggravating the root problems of poverty, racial injustice, and inequality of opportunity.

OPTION 3 Decentralized authority, effective citizen involvement, community level fiscal base.
This option is the same as Option 2 except that an effective program for developing citizen involvement is now assumed. As mentioned in discussing Option 2, decentralization of educational authority without maintaining a primary fiscal base broader than the local ghe community will effectively emascul community control of education. Si Option 3 includes a program of citi involvement, it will probably have m positive effects on the quality of lo education and on local feelings of s determination than would Option 2. Option 3 carries with it even gre dangers in the long run than Optio because both decentralization educational authority and mobilization of local citizens for be

meeting including individuals from all areas of the local community. In order to make such a process more than a futile exercise, the final recommendations of the community should be implemented insofar as is practically possible by the local school board and school administration. Objectives that are especially difficult to accomplish or that tend to be rejected by the school board and/or school administration should be arbitrated. And, in fact, since the election of the local school board will rest in the hands of community citizens in any event, according to Option 5, members of the school board may be easily removed at the next election if they fail to carry out the wishes of their constituencies. A correlative activity will be to foster greater citizen interest in school board elections and local elections in general, as well as stressing and making meaningful the openness of school board meetings themselves

A third broad type of activity favoring citizen involvement in education would be an intensively pursued **adult education and continuing education** program for citizens of all ages who have left formal schooling. Part of the broad educational publicity campaign should emphasize the relevance of education not only for one's children but also for oneself, through adult education. Rather than being a relatively passive facility, as in suburban and middle class areas, adult educational programs should be aggressive recruiters of students in all disadvantaged areas. The course offerings and training programs must be carefully designed to meet the real needs of potential consumers. Further, all types of adult education programs should be made freely available, from basic literacy training up through college courses. It will also be necessary to make a variety of provisions for "school hours", including early morning, evening, late night, and weekend times. The greater the participation of citizens of the local community in adult education courses, the more likely these citizens are to pass on to their children by example a genuine concern for education.

A fourth important kind of citizen involvement activity deals with **pre-school learning** Through an active "Head Start" program and related activities, the parents of disadvantaged children should be contacted early and made aware of the importance of pre-school learning and stimulation in the home and neighborhood. In addition, special pre-school experiences should be provided on a very broad scale in ghetto areas in an attempt to counteract the cumulative pre-school experience deficit that usually occurs among ghetto youngsters

There are numerous kinds of activities that may be used to foster **increased communication among students, educators, and parents** in the local community. On the one hand, there might be special teacher orientation sessions run for new teachers by parents and other members of the local community so as to help close the gap between teachers and citizens in poverty areas. On the other hand, there should also be the reverse — orientation sessions for fairly small groups of parents run by teachers and other school staff, stressing not only the nature of the given school but also the vital importance of parental educational behavior and attitudes in affecting school attendance and school performance of children. Wherever the parents of a given student do not come to such sessions at the school, special attempts should be made to hold similar sessions at odd hours outside the school and to seek the parents out at home, if necessary Personalized home visits and special counseling of parents and other relatives, as well as their school age children, may have a marked impact on student educational achievement, especially if this is done by educators who have come from, or are at least close to, the local community in background (race, ethnicity, dialect, religion, etc.).

Another related way to increase citizen involvement in education is to provide greater opportunities for student participation in school activities that can be presented to parents. Such activities would range from more frequent "open house" occasions for parents to mor varied and frequent educationa demonstrations, plays, intellectual an artistic competitions, etc., run by student for parents and other local citizens. Sport events generate parental participatio also, but the foregoing kinds of mor strictly education-related activities ar likely to be more important for fosterin student achievement through parent concern and participation.

Finally, provision should be made fo the use of local citizens and others a resource persons and teacher aides in a many different kinds of courses an activities as possible. Such a prograr would further emphasize the closeness c ties between the school and the loc community. Wherever possible, especiall successful ghetto residents or forme residents should be brought bac frequently to talk with students and t encourage their educational achievemer and attendance. One highly successfu role model that students can identify wit may be worth a hundred lectures on th importance of education. A serious talk b a somewhat older and "sadder but wiser school dropout from the local communit would probably help also.

There are numerous other possibl ways of fostering effective citize involvement in addition to the ones ju mentioned, yet the foregoing will serve a an overview of what is needed The key t the effectiveness of any such program w be its breadth of approach, its style, an its sincerity. From the outset, the progra must operate through and under th direction of local community leaders an citizens if it is to be successful. It canno be effective if it is just one more "do gooder" program imposed on th community from outside by outsider Outsiders may provide some initial spark but the fuel must come from within

To sum up, Option 5 for Communi Control of Schools would seem to be th only one with a substantial chance f success in the long run Only this optio offers some substantial resolution both the strictly educational issue of stude achievement in poverty areas as well as

e broader political-economic-racial sues of participatory democracy, uality of opportunity, and racial-ethnic stice

oblems

ven that community control of schools an important goal to be accomplished it that it will involve a situation similar that outlined in Option 5, there are still merous difficulties to be resolved fore such community control can come a reality. The New York City hool decentralization controversy, scussed in the following article, amply monstrates that the road to community ntrol is not an easy one. There are merous vested interests on all sides at are eager to hold onto their present wers irrespective of the strength of guments for community control and respective of the damage that may be ne to others by their stands. Given such background, a long and difficult period negotiation, testing, and compromise ust be expected before effective mmunity control of schools is tablished and viable in the long run. Yet e must begin now.

One of the most critical problems to be solved is the precise mix of supra-community level funding that is best for a given poverty area and the kind of central disbursing unit that will accompany such funding. Can a method be devised whereby funds can come from a central disbursing source or sources directly to the community school board for the education of local children? Can this be done in such a way that the central source, whatever it may be, will not encroach upon the community's right to decide what kind of education is best for its children? Should this central source be primarily connected in some way with the existing government at federal, state, metropolitan, or city levels, or should it be a separate entity? How widespread and firmly held are the values of equality of opportunity and the right to a basic education provided by our society, whether ones' parents and family can afford it or not? Should progressive income taxation at the local, city, metropolitan, state, or federal levels support equal educational opportunity, and what mix of these sources is most feasible? What should be the responsibility of the federal government, particularly in view of the fiscal crisis of our core cities and the role of education in developing the nation?

Another problem area concerns the possible and indeed actual conflict at times between the community's desire to control its schools and the role of the professional educator. Can a compromise be worked out that will allow the educator to maintain or increase his status and economic position while making him directly responsible to the local community? What kind of protective devices can be worked out for the community (to avoid "being left with poor teachers") and for the educator (to provide some job security and to avoid arbitrary dismissal)?

A third key problem area is the need for more precise and extensive knowledge of the strictly educational impact of various experiences and situations upon children. Given all the best intentions and unlimited money, what exactly could one do with a normal ghetto child (or any child) to maximize his education? How early does one have to begin and what does one do? Can the hours a ghetto child is in school ever compensate for the other hours of the day and weekend when he is exposed to learning environments which are disturbing and often contradictory to his school experiences? Are teachers really useful in their traditional role any longer, or does the electronic age call for a new breed of teachers who take much greater advantage of such things as computer-aided-instruction, new audio-visual media, etc., in becoming guides to learning rather than sources of knowledge?

These are seen as key areas that need further negotiation, research, and exploration. Without minimizing the importance or the complexity of these problems, the movement toward effective community control of schools must not be delayed.

FOOTNOTES

1 In writing this article the authors made use of the various case materials regarding community control of schools that were prepared for the Council on Urban Development's May 1969 meeting, as well as drawing upon the actual discussions and notes taken at the meeting, and the brief statement of conclusions prepared by members of the Council and of the Institute of Human Sciences. For all of this inspiration and material the authors are indebted to the Council members and to the Institute of Human Sciences' staff. However, the views presented in this paper do not necessarily reflect the opinion of the Council as a whole nor of any individual member.

The Council is a deliberate body of distinguished scholars, professionals, scientists, members of the business community, government officials, and others who meet semi-annually to confront the major issues of urban life.

2 Coleman, James, et al. **Equality of Educational Opportunity** (Washington, D. C.: U. S. Government Printing Office, 1966) p. 22 f., pp. 319 ff.; Nuttall, Ronald L., David Horton Smith, et al. **Predicting Grade Point Averages** (Chestnut Hill, Mass.: Institute of Human Sciences, Boston College, 1968), Sections VII to X, XIII, XIV; Lavin, David B., **The Prediction of Academic Achievement** (New York: Russell Sage Foundation, 1965), Chapter 5.

3 Fox, David J., **Expansion of The More Effective School Program** (New York: Center for Urban Education, 1967), p. 122f. indicates that elaborate and expensive **administrative changes** in disadvantaged schools do positively affect parental and teacher attitudes, but perhaps because these attitude changes are not effectively transmitted to the students involved, there is no noticeable improvement in student achievement.

4 National Advisory Commission on Civil Disorders, **Report of The National Advisory Commission on Civil Disorders** (New York: Bantam Books, 1968)

APPENDIX E

SCRIPT

APPENDIX E

SCRIPT: COMMUNITY CONTROL OF SCHOOLS--PRO POSITION

At first glance the phrase "Community Control of Schools" seems to refer mainly to the problem of the locus of the authority in our educational system.

When we investigate the problem more deeply, however, we find that community control of schools is a complex political, economic, racial (or ethnic) issue.

The concept of control as commonly used in discussion of the present issue has two important yet separate facets. First, there is community "control" of schools as decentralization of bureaucratic authority in educational decision-making. The second facet of "control" refers to citizen involvement in education and educational decision-making.

This speaker is in favor of community control of schools.

One of the most important reasons for decentralization is the strong likelihood that decentralization will be optimally sensitive and responsive to local conditions and needs. Decentralized school systems will be aware of special local needs, will be able to make relatively rapid decisions responding to these needs, and will more effectively implement appropriate programs and innovations.

A second argument for decentralization is that decentralization guarantees that the important decisions affecting education will be made on a local level (through local school boards and local administrative staff).

Another argument for decentralization is that participation of parents and other citizens in educational decision-making at the local level will lead to their increased commitment to their schools and to the educational process in general as well as increasing their sense of personal efficacy and confidence.

A fourth argument advanced for decentralization suggests that the enhanced relevance of certain community-selected programs and courses as well as the increased parental concern brought about by the direct participation will likely result in many students from disadvantaged areas experiencing some degree of efficacy.

An additional argument for decentralization is that community participation is a positive answer to many of the overt behavior problems plaguing our urban schools such as poor discipline, truancy, absenteeism, and general hostility or indifference to the schools.

A final argument raised for decentralization refers to minority groups realizing their share of equality in the terms of political and economic power and citizen participation in exercising authority in the community control of schools.

A second argument for decentralization is that decentralization guarantees that the important decisions affecting education will be made on a local level (through local school boards and local administrative staff).

Another argument for decentralization is that participation of parents and other citizens in educational decision-making at the local level will lead to their increased commitment to their schools and to the educational process in general as well as increasing their sense of personal efficacy and confidence.

A fourth argument advanced for decentralization suggests that the enhanced relevance of certain community-selected programs and courses as well as the increased parental concern brought about by the direct participation will likely result in many students from disadvantaged areas experiencing some degree of efficacy.

An additional argument for decentralization is that community participation is a positive answer to many of the overt behavior problems plaguing our urban schools such as poor discipline, truancy, absenteeism, and general hostility or indifference to the schools.

A final argument raised for decentralization refers to minority groups realizing their share of equality in the terms of political and economic power and citizen participation in exercising authority in the community control of schools.

In essence, decentralization is a desirable option for community-control of schools. With decentralization authority, effective citizen involvement, and broad fiscal base as an option, meaningful community control of schools is optimized by decentralizing educational authority to the local level by providing adequate funding from a fiscal base beyond the community level, and by developing an effective program of citizen involvement in education.

Decentralization provides the poor and other minority groups with greater opportunity of self-determination and participatory democracy.

SCRIPT: COMMUNITY CONTROL OF SCHOOLS--CON POSITION

At first glance the phrase "Community Control of Schools" seems to refer mainly to the problem of the locus of authority in our educational system.

When we investigate the problem more deeply, however, we find that community control of schools is a complex political, economic, racial (or ethnic) issue.

The concept of control as commonly used in discussion of the present issue has two important yet separate facets. First, there is community "control" of schools as decentralization of bureaucratic authority in educational decision-making. The second facet of "control" refers to citizen involvement in education and educational decision-making.

This speaker is not in favor of community control of schools.

One of the most frequently posed arguments against decentralization is the suggestion that it hinders integration. The point here is that it is, or could be a step back to enforced segregation or de facto segregation.

A second common argument against decentralization relates to the inefficient use of educational resources. Centralized bureaucracies permit certain economical savings in the acquisition and use of resources by means of centralized purchasing, recruiting, etc.

Another kind of argument advanced against meaningful community participation is that quality standards for educational achievement will be diminished.

A fourth argument against decentralization is that citizen participation in the educational process has to do with the spectre of extremists and minority groups completely taking over the educational system in local communities.

An additional argument against community control of schools is that educators feel that the act of teaching and its supporting activities demand an expertise that is not to be found in all the parents and other citizens who might have an interest in and concern for education.

A final argument against decentralization of community control of schools relates to its unlikliness that any really noteworthy long-term changes in the quality of educational achievement of ghetto children will occur under decentralized authority. Further, decentralization of educational authority will not effectively solve the psychological proglems of ghetto students relating to self-determination.

In essence, decentralization is not a desirable option for community control of schools. No effective program for developing citizen involvement exists. Particularly in the ghetto and poverty areas of large cities (or in the poorer suburbs), the local citizens lack

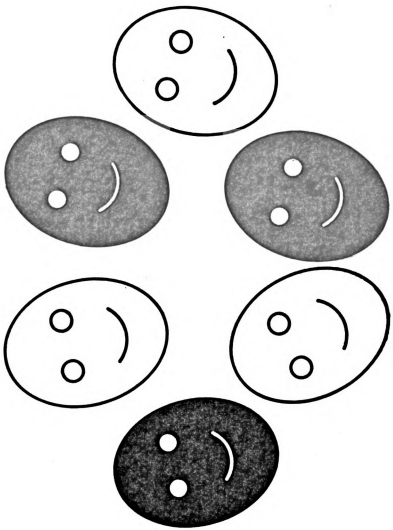
sufficient wealth to support a sound educational program from their own resources as well as having a lower level of concern for education and less opportunity for involvement in the schools.

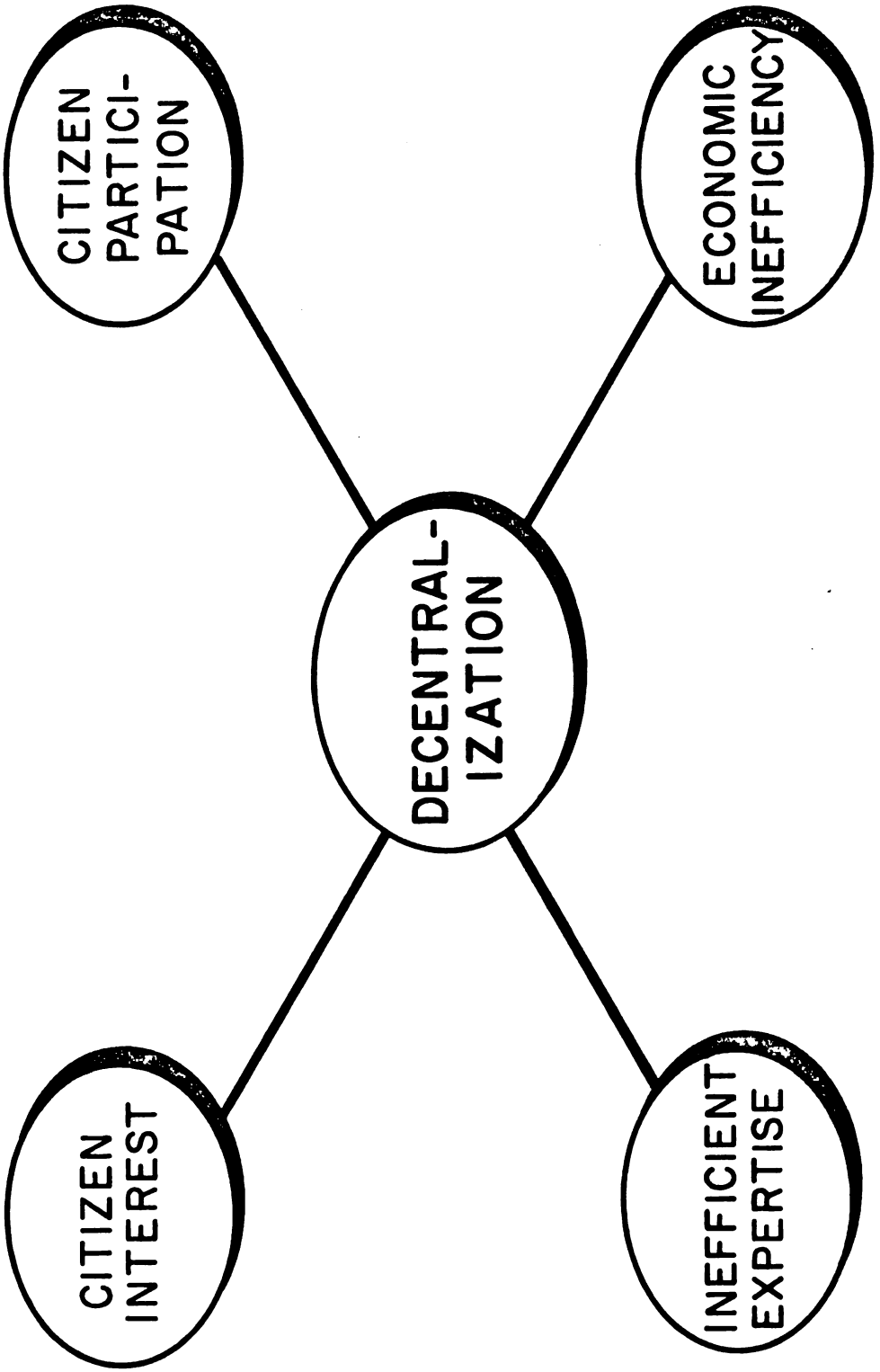
Citizen involvement with education in poor or disadvantaged areas is not likely to occur merely because educational authority is decentralized.

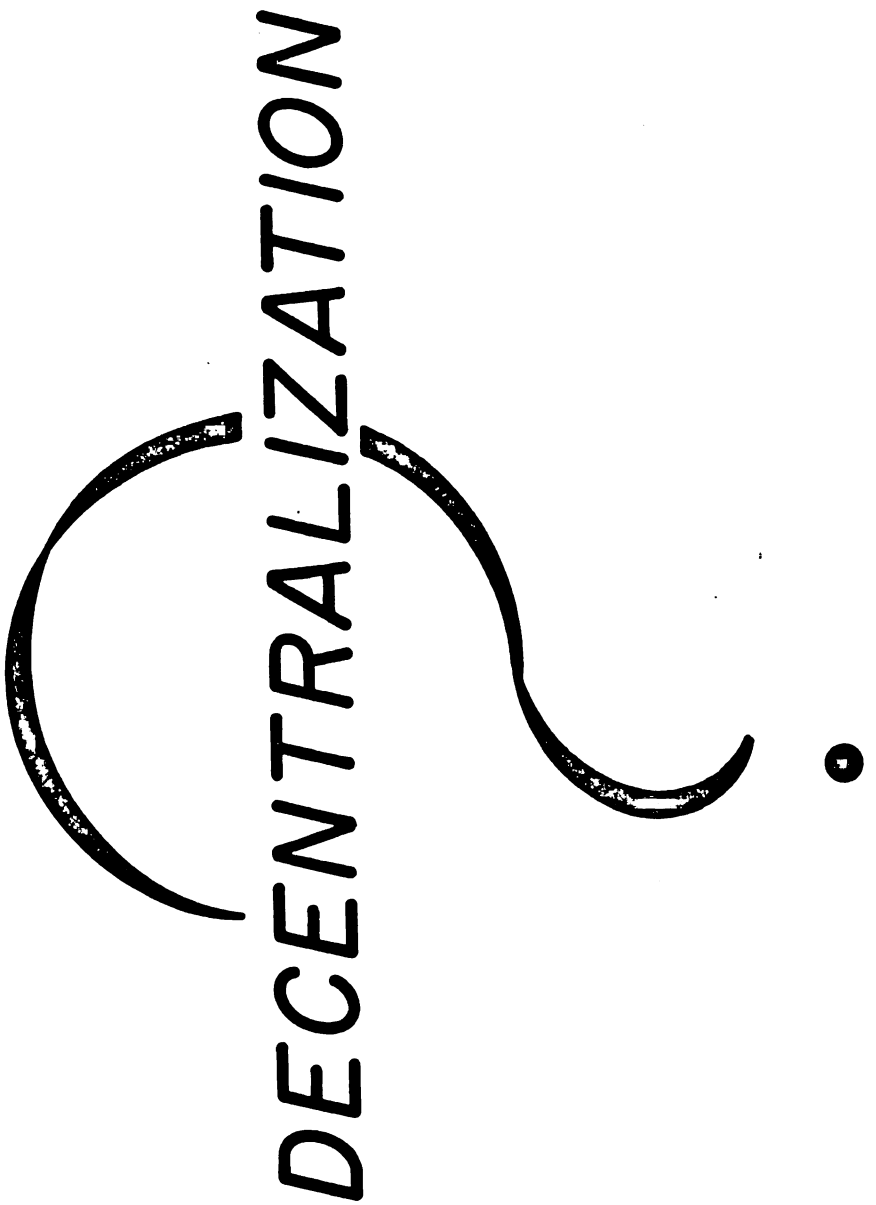
APPENDIX F

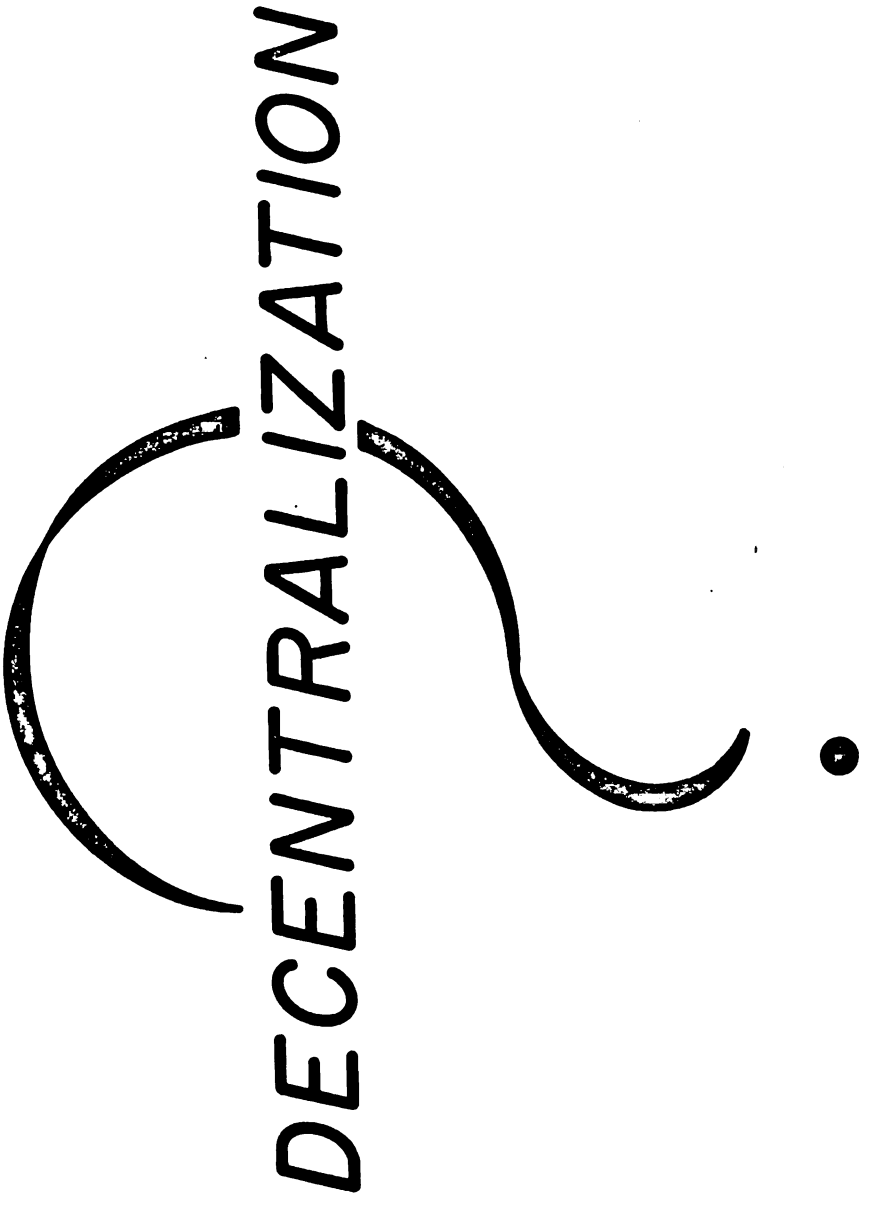
SLIDES

COMMUNITY CONTROL OF SCHOOLS




CITIZEN PARTICI-PATION
ECONOMIC INEFFICIENCY
DECENTRAL-IZATION
CITIZEN INTEREST
INEFFICIENT EXPERTISE


DECENTRALIZATION


DECENTRALIZATION

APPENDIX G

IBM SEMANTIC DIFFERENTIAL

INSTRUCTIONS: Blacken in the appropriate number (1 through 5) in the column to the right which corresponds to the number on the word scale which best describes your reaction. DO NOT BLACKEN THE (0) COLUMN.

REACTION TO VOICE SOUND:

1.	lively	1	2	3	4	5	sluggish
2.	calm	1	2	3	4	5	anxious
3.	clear	1	2	3	4	5	muffled
4.	lax	1	2	3	4	5	tense
5.	restrained	1	2	3	4	5	forced
6.	soothing	1	2	3	4	5	piercing
7.	mellow	1	2	3	4	5	harsh
8.	articulate	1	2	3	4	5	inarticulate
9.	nasal	1	2	3	4	5	oral
10.	smooth	1	2	3	4	5	rough
11.	pleasant	1	2	3	4	5	unpleasant
12.	warm	1	2	3	4	5	cold

REACTION TO RECORDED VERBAL MESSAGE:

13.	reliable	1	2	3	4	5	unreliable
14.	trustworthy	1	2	3	4	5	untrustworthy
15.	acceptable	1	2	3	4	5	unacceptable
16.	calm	1	2	3	4	5	agitated
17.	undoubtful	1	2	3	4	5	doubtful
18.	objective	1	2	3	4	5	subjective
19.	good	1	2	3	4	5	bad
20.	consistent	1	2	3	4	5	inconsistent
21.	questionable	1	2	3	4	5	unquestionable
22.	creditable	1	2	3	4	5	discreditable
23.	clear	1	2	3	4	5	vague
24.	disrefutable	1	2	3	4	5	refutable
25.	strong	1	2	3	4	5	weak

APPENDIX H

ETHNIC GROUP IDENTIFICATION CHECK SHEET

INSTRUCTIONS

Please read the following instructions carefully.

Check the appropriate space which best describes how you perceive the voice sound of the narrator on the automated slide presentation.

_____ Sounds like a black speaker.

_____ Sounds indistinguishable.

_____ Sounds like a Caucasian speaker.

APPENDIX I

INSTRUCTIONS FOR PROCTOR

APPENDIX I

INSTRUCTIONS FOR PROCTOR

The Instructional Media Center is presently developing instructional media kits. Your solicited reactions to the tape-slide presentation which I am going to present is part of a continuing evaluation process in the development of these instructional kits.

The title of the slide-tape presentation is "Community Control of Schools." Please listen carefully, paying particular attention to the narrator.

After the presentation is completed, you will receive an IBM response form. Please read the instructions and indicate your reactions by marking directly on the form.

After you have completed the IBM form, please raise your hand. At that time a second sheet will be distributed to you. Please read the instructions and then check the appropriate response. Please raise your hand after you have finished, and I will collect both forms together. Thank you.