Quantification of source credibility variables for oral interpretation of literature

Wayne Lowell Houston

The University of Montana

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QUANTIFICATION OF SOURCE CREDIBILITY VARIABLES
FOR ORAL INTERPRETATION OF LITERATURE

By
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B.A., Montana State University, 1974

Presented in partial fulfillment of the requirements
for the degree of
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UNIVERSITY OF MONTANA
1976

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ABSTRACT

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Quantification of Source Credibility Variables for Oral Interpretation of Literature

Director: William W. Wilmot

This thesis attempted a two fold approach to the study of communication. It attempted to identify conceptual and operational definitions for the oral interpretation of literature and source credibility constructs, two constructs that have rarely been studied together. Measurement assumed equal importance with conceptualization; this study attempted to quantify source credibility variables for competitive oral interpretation of literature settings.

Two independent data analysis techniques were employed, Statistical Package for the Social Sciences Factor Analysis, and TORSCA 2, a nonmetric multidimensional scaling program. Although convergent validity evidence was not one-to-one in nature between the factor analytic solutions and multidimensional scaling solution, striking similarities were apparent. In addition, free response criteria generated from the multidimensional scaling portion of the study, when analyzed, provided external support for convergence.

Analysis of results indicate that a one dimensional solution for the multidimensional scaling portion and one emergent factor for the factor analytic solutions seem to be most appropriate indications of raters' perceptions of contest oral interpreters. This seems to indicate that the complexity of perceptual differentiation for the subjects rating contest oral interpreters was very low. Subjects tended to make wholistic rather than differentiated judgments. Implications were drawn, and a case was made for the objectification of the competitive oral interpretation of literature event.
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Members of the University of Montana
Debate and Oratory Association

This thesis is dedicated to all students and contestants of oral interpretation, that they might grow in their knowledge and study of literature.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Theoretical Definitions</td>
<td>2</td>
</tr>
<tr>
<td>Operational Definitions of Constructs</td>
<td>5</td>
</tr>
<tr>
<td>Summary</td>
<td>8</td>
</tr>
<tr>
<td>II REVIEW OF LITERATURE</td>
<td>11</td>
</tr>
<tr>
<td>Review of Empirical Interpretation Literature</td>
<td>14</td>
</tr>
<tr>
<td>A Survey of Source Credibility Literature</td>
<td>21</td>
</tr>
<tr>
<td>Source Credibility Measurement</td>
<td>30</td>
</tr>
<tr>
<td>Summary</td>
<td>34</td>
</tr>
<tr>
<td>III METHODOLOGY</td>
<td>39</td>
</tr>
<tr>
<td>Purpose</td>
<td>39</td>
</tr>
<tr>
<td>Pre-testing</td>
<td>39</td>
</tr>
<tr>
<td>Identification of Source Credibility Factors</td>
<td>40</td>
</tr>
<tr>
<td>Results</td>
<td>41</td>
</tr>
<tr>
<td>Conclusions</td>
<td>43</td>
</tr>
<tr>
<td>Data Collection</td>
<td>45</td>
</tr>
<tr>
<td>Data Analysis Techniques</td>
<td>47</td>
</tr>
<tr>
<td>SPSS Factor Analysis</td>
<td>47</td>
</tr>
<tr>
<td>MDS TORSCA 2</td>
<td>49</td>
</tr>
<tr>
<td>IV RESULTS</td>
<td>53</td>
</tr>
<tr>
<td>Factor Analytic Results</td>
<td>53</td>
</tr>
<tr>
<td>Interpretation of the Results</td>
<td>58</td>
</tr>
<tr>
<td>MDS Results</td>
<td>58</td>
</tr>
<tr>
<td>Interpretation of the Results</td>
<td>62</td>
</tr>
<tr>
<td>V SUMMARY</td>
<td>63</td>
</tr>
<tr>
<td>Conclusions</td>
<td>63</td>
</tr>
<tr>
<td>Summary</td>
<td>64</td>
</tr>
<tr>
<td>Self-Critique and Implications</td>
<td>65</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>4.1</td>
<td>Round I: Factor Analytic Solution</td>
</tr>
<tr>
<td>4.2</td>
<td>Round II: Factor Analytic Solution</td>
</tr>
<tr>
<td>4.3</td>
<td>Round III: Factor Analytic Solution</td>
</tr>
<tr>
<td>4.4</td>
<td>Class Tournament: Factor Analytic Solution</td>
</tr>
<tr>
<td>4.5</td>
<td>Class Tournament: MDS Solution</td>
</tr>
<tr>
<td>4.6</td>
<td>Content Analysis of Free Choice MDS Criteria</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 One Dimensional Solution Graph</td>
<td>59</td>
</tr>
<tr>
<td>4.2 Shepard Diagram</td>
<td>61</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

Some aspects of any aesthetic experience are not presently, and may never be, amenable to scientific investigation. Manipulation and measurement in the social sciences can produce at best only an analogy to the actual aesthetic experience. On the other hand, we must reject just as firmly the notion that empirical methods can produce nothing of value to the artist. Insofar as we can study interpretation, for example, and teach it as an academic discipline, there must be principles or hypotheses we can test. Such principles are tested empirically every day. They are advanced in textbooks; in analytic and in classroom lectures; they are tested informally in performance; and they are discarded on empirical grounds if they are consistently unsuccessful. No one of us could cope with his environment if it were not for constant, albeit informal, empiricism. We generate hypotheses on the basis of past experience; we test those hypotheses in subsequent experience; and we plan future behavior on the basis of such tests.¹

The process of oral interpretation involves the author, the reader and the audience. First, the author writes the material and experiences the emotional impact of creativity. Next the potential reader searches for the proper selection to read and he experiences various physiological reactions to what he reads before making his final choice. The third experience in the process is that of the reader performing before an audience, his reaction to the material and to his audience. The fourth and final experience in the process is the audience's response, both visible and audible, that adds to the total presentation by serving as a guide to the total effectiveness of the reading.

The focus of this thesis is upon the third and fourth areas mentioned above, namely, the reader, and the audience. It is concerned
with the audience's perceptions of the oral interpreter's credibility based on his performance of the literature in a competitive setting.

Theoretical Definitions

Both the concept of oral interpretation and the construct of source credibility suffer from "definitional overload." Consequently it is necessary to preface subsequent material with clear theoretical definitions of the primary areas of concern.

Cronkhite defines oral interpretation in the language of systems analysis, as:

The study of the interface between a written symbol system and an oral-physical symbol system...This rigorous definition will be most acceptable to those devoted to purely intrinsic textual criticism. If one admits the utility of extrinsic textual criticism and does not see red at the mention of the word communication, it is possible to extend the definition and present a more complex model. The study of interpersonal communication has been defined as the study of the interface between human cognitive systems. The special case of interpretation is complicated by the fact that an additional cognitive system--that of the interpreter--is interposed as part of the interface between the transmitting system of the author and the receiving system of the listener. A still more atomistic description is that in which the paradigm of interpretation is viewed as consisting of three cognitive systems; those of transmitter or author, interpreter or reader, and receiver or listener. The study of interpretation could be uniquely defined on the basis of that description as the study of sequential interfaces linking three or more cognitive systems. It is necessarily the sequential nature of the interfaces which uniquely distinguishes the paradigm of interpretation from other types of interpersonal communication.²

According to Brooks, Bahn, and Okey, "today's academic area of oral interpretation places equal emphasis on literature, reader, and listener, recognizing that each is dependent on the others."³ A review of our oral interpretation heritage reveals that this has not
always been the case. The pendulum of emphasis has swung in various directions, will be demonstrated in subsequent chapters. Briefly however, during several periods of history, consideration was entirely on the reader. There have also been times which the stress has been placed on literary analysis and synthesis, with the reader and the listener in subordinate positions. Until recently "the importance of the listener has never been the predominant emphasis, and this lack of attention has been a serious error. Today's recognition of the importance of the listener--given impetus by a significant increase in listening research, an awareness of the importance of feedback, an increased social awareness, and real desire by students to be participants in processes of communication and not merely spectators--has added structure, relevancy, and totality to the academic study of oral interpretation."^4

Most recently, the study of listener's response has been the focus of concern. The present study continues that trend, while at the same time recognizing the importance and interdependence of all of the steps involved in the interpretation process.

The theoretical definition of oral interpretation employed in this thesis corresponds closely with both definitions previously cited. Oral interpretation refers to the process by which printed literature is studied through its oral communication by a reader to an audience. This definition attempts to capture the essence of interpretation as a theoretical construct. The definition attempts to maintain an equality of emphasis on the inter-related aspects of the author and his literature, the interpreter who edits and performs that literature, and the audience who responds to the unique interpretation of that literature.
The construct of source credibility or ethos has been defined and redefined for many situations, and few researchers agree as to what exactly constitutes the essence of the construct.

Wenburg and Wilmot capture a large portion of the operationalization of the credibility construct when they state that source credibility is "the degree of believability or acceptability a receiver gives to a source." When this is combined with McCroskey's definition of source credibility which includes, "competence, character, intention, personality, and dynamism," a meaningful theoretical definition begins to take shape.

As Baxter stated, "the list of synonyms alone suggests the lack of consensual definition of the construct: ethos, prestige, status, reputation, authority, image, charisma, and source credibility." As Baxter remarked, "research may indicate that these various definitions are (all) in fact equivalents, or at least conditional equivalents given certain sources, situations, and subjects." This study purports to find out if this is the case. For the purposes of this thesis, source credibility will be defined theoretically as the perceived degree of believability that the listener gives to the source as a result of perceived traits that are exhibited, (which may include, but is not limited to: expertness, competence, character, intention, dynamism, personality, delivery, organization, and audience adaptation). The definition attempts to capture the essence of the construct without excluding either a priori or spontaneous criteria that the listener may grant to the source.
Operational Definitions of Constructs

Since the primary purpose of this thesis is to quantify source credibility variables specifically for the competitive oral interpretation of literature situation, the constructs are operationalized for those situations. Thus the operational definition of oral interpretation is easy. It is simply limited to those acts of oral interpretation that occur at college forensics meets.

The areas of competitive oral interpretation was isolated for study for a number of reasons. The first and most important reason was to determine whether subjects would differentiate as to the judgmental criteria that they use to evaluate each other's performances. The second consideration was the attempt at inquiry about and standardization of emergent criteria for future oral interpretation contests. Contest oral interpretation has become very popular, but very few tournaments employ the same criteria for entry into the event, and even fewer judges judge with uniform standards. It is hoped that the results of this research will be the beginning of a trend toward making interpretation as a contest event, more coachable, and easier to judge. It is also hoped, by this student of oral interpretation, that other students of interpretation will find this research useful both in terms of self-assessment and the assessment of others.

The operationalization of the source credibility construct is hardly as easy as that of the interpretation construct, as a variety of measurement devices have been used in credibility research. Recently researchers have turned to multivariate techniques, primarily the factor of analysis of semantic differential data. Usually raters
evaluate a source on semantic differential comprised of scales thought appropriate to assess source credibility, and this data is submitted to a factor analysis. Thus the credibility construct is operationally defined as the emergent factor structure for that particular case.

Some other alternative measures have been investigated but they have not been systematically employed in any fashion. McCroskey, for example, developed a set of twenty-two Likert-type items to represent dimensions of credibility. These items as well as the \textit{a priori} dimensions were both taken from McCroskey's factor analytic work. Peter Anderson applied \textit{Q} Methodology to the source credibility of political and non-political public figures. The dimensions and the adjective items that he employed were also taken from the factor analytic work of McCroskey \textit{et al.}^{10}

Tuppen has analyzed credibility through a cluster analysis technique, essentially in a challenge of the orthogonal rotation and assumptions that are so prevalent in the use of factor analysis. And McLaughlin has applied a points-of-view analysis (basically a \textit{Q} analysis) to the credibility perceptions of public political figures, but her technique has not received much application.\textsuperscript{12}

Another technique, or family of techniques, that has surfaced is that of multi-dimensional scaling (hereafter referred to as MDS), and can be used for an alternative assessment of source credibility. Although mathematical groundwork for MDS was laid in the 1930's it was not until the 1950's that the Princeton group, most notably Torgerson, developed the first MDS analyses."\textsuperscript{13} The Torgerson approach is known as classic or metric MDS, and requires interval level data input. More
recently the metric approach has been associated with contemporary work by Woelfel at Michigan State.14 Another MDS technique was developed in the early 1960's at Bell Telephone Laboratories, primarily through the work and research of Shepard and Kruskal. This technique was called non-metric MDS and requires ordinal level data input.15 Fully non-metric MDS techniques were developed by Coombs and by Bennett and Hays.16

Even though there have been numerous alternative measurements that have surfaced recently, factor analysis of semantic differential data is still the most widely used technique for assessment of source credibility. Kerlinger posited that, "factor analysis serves the cause of scientific parsimony. It reduces the multiplicity of tests and measures to greater simplicity. It tells us, in effect, what tests or measures belong together--which ones virtually measure the same thing, and how much they do so. It thus reduces the number of variables with which the scientist must cope. It also helps the scientist to locate and identify unities or fundamental properties underlying tests and measures."17

The originators of the semantic differential technique, Osgood, Suci, and Tannenbaum, however, have recognized the need for convergent validation of the semantic differential to insure validity.18

This study undertakes a dual approach to the study of credibility. It employs both the factor analysis of semantic differential data and the use of non-metric MDS techniques. Both methods are employed to attempt to show many of the emergent credibility criteria that raters use in judging the competitive oral interpretation situation. This study attempts to meet the challenge of earlier researchers for con-
vergent validation by employing two different assessment techniques.

Summary

Subsequent chapters provide a more specific rationale, review of the literature, hypotheses, discussion of methodology, and presentation and discussion of findings. For introductory purposes, the following summary statements can be drawn from the above:

1. There has been a lack of consensus in the theoretical definitions of oral interpretation of literature and of source credibility. This thesis offers a theoretical definition for oral interpretation in terms of the process of a reader orally communicating literature from the printed page to an audience. It offers a theoretical definition of source credibility in terms of perceived believability.

2. Current researchers rely heavily on the factor analysis of semantic differential data, many times without convergent validation through additional implementation of alternative assessment techniques. In light of the desirability of convergent validation, this thesis explores in addition to factor analysis, an alternative assessment technique, non-metric MDS.

2. Ibid., pp. 283-284.


15. Ibid., p. 5.

16. Ibid., p. 5.

CHAPTER II

REVIEW OF LITERATURE

The purpose of Chapter II is fourfold: (1) to present an historical overview of the oral interpretation construct; (2) to review empirical literature related to the oral interpretation construct; (3) to survey the major literature related to the source credibility construct; and (4) to address source credibility measurement techniques.

Throughout the ages many different activities have been grouped under the rubric of oral interpretation. (In this first section the history of interpretation will be traced from its earliest known beginnings to the present.)

Most records indicate that Herodotus (484 B.C.) may have started the profession of telling stories orally. Closely following Herodotus were the Greek poets (followers of Plato and Aristotle) whose presentations were known as rhapsodies. These rhapsodies became a center of ideological controversy between the men who followed the teaching of Plato and those of the Aristotelian school. The Aristotelians placed oral interpretation in the milieu of art, and to them, the essential difference between rhetoric and the poetic lay in their different goals. The goal of rhetoric, they agreed, was persuasion; while the goal of poetics is to create a work of art that can awaken an aesthetic response.¹

Although the study of classical oratory led by such men as Cicero and Quintilian, was at its height, the art of oral reading was not forgotten, and reached great heights during the Golden Age of Literature—76 B.C. to 14 A.D. With the death of Cicero, circa 43 B.C.,
came the Augustan Age. New emphases were placed on oral reading. Courts employed special readers, and Virgil and other poets made a practice of reading their own poetry.  

Both the Augustan Age, which lasted about 165 years, and the Silver Age (14 A.D. to 180 A.D.) were periods in which the art of oral reading flourished. But with the dawning of the Golden Ages of Greece and Rome, oral reading as an integral part of cultural life ended too.  

There was no noticeable revival of oral reading until around 1066 when the troubadors began reading accompanied by music. Other types of reading with song took on significance in everyday life because of groups like the troubadors, jongleurs, the Dutch poetry guilds, and the meistersingers in Germany. These balladeers went from town to town commenting on the political and moral issues of the day through their songs and stories.  

In the early fifteenth century it was Stephen Hawes, the author of Pastime of Pleasure, who developed the first theory of oral interpretation emphasizing the importance of delivery. It was through his groundwork that the art became firmly established in the Renaissance which followed.  

After the Renaissance, there was period when the emphasis shifted from the spoken word to the written word, and people were more concerned with style than with delivery. In eighteenth century England the art of oral reading began to take an upswing. Two schools of thought emerged from this new movement which were called the Elocutionary Movement. One group, loosely called the Mechanical School, was most
concerned with rules for using gestures and controlling the voice to simulate different emotions. The Natural School, on the other hand, emphasized the importance of the meaning of the literature. The Elocutionary Movement spread to America as well, where most teachers gave attention to the theories regarding the physical movement of the body. Most schools shared the aims of: character development, study of fine literature, development of articulation, and the freeing of the voice from restricting habits and tensions. As time went on, elocution acquired an unfavorable and unfortunate connotation, mostly associated with "spinster school mams." More recently the emphasis has been placed on subtlety, suggestion, and the emotional aspects of the literature being read.

Interscholastic and intercollegiate speech meets often feature contests for interpretative reading, and in the past decade, Oral Interpretation of Literature and its various subsets (reading of prose, poetry reading, declamation, play reading, humorous/serious duo, humorous/serious solo, etc.) has become the most popular and most heavily entered event at speech meets across this country.

It is through this type of orientation and background that the author has become interested in oral interpretation. The desire to study interpretation empirically and to quantify source credibility variables for it has come out of many years of interest in, and competition, and coaching of oral interpretation of literature. It is hoped that this thesis will be of interest for serious students of oral interpretation as well as for those people interested in the study of credibility.
The following review of literature deals specifically with audience perceptions of oral interpreters. While it is not exhaustive of all of the types of research being done in the field of oral interpretation of literature, it does cover most of the major empirically based studies that have been completed to date that are of relevance to this thesis. This review attempts to draw not only from the discipline of communication but from other related disciplines as well. Studies are presented in a chronological order to the extent possible, with an attempt made to group studies of like nature together.

The earliest quantitative research in speech, according to Thompson, was a study related to audience retention of content presented by public reading. Although not a study that was analyzed statistically, this early study by Woulbert reports differences that are very large. This study was of modern design, with clearly identified independent and dependent variables. Eleven modes of delivery were the independent variables, and comprehension was the dependent variable. Woulbert computed means but not standard deviations, and he applied no tests of significance for the differences between the means.

Woulbert found that when Ss departed from median intensity they had lower impressiveness. He found that quality made a pronounced difference in impressiveness, while departures from median range in time made little, if any, loss of impressiveness.

The listener's reactions to the reader's delivery has been studied by other experimentalists. Harwood found no significant differ-
ences in listenability for stories tape-recorded at 125, 150, 175, and 200 words per minute. Cobin established audience preference for a reader's maintenance of good eye contact in a face-to-face situation.

Several graduate theses and dissertations have reported experimental studies in listener reception of oral interpretation of literature. The following studies used varying methods of delivery as the stimulus.

In an experimentally planned and statistically implemented study in 1949 at the University of Oklahoma, Paul W. Beardsley compared the effects of listening to literature, with listening while reading along with the reader. His conclusions are based on the calculations of the significance of the difference in the means of the two methods of presentation. In none of his criteria did listening show a statistically significant gain over listening and reading in appreciation.

In a study of the listener's evaluative reactions to performance, Seedorf compared student judgments with teacher and qualified critic judgments. She found no statistically significant differences in variations of evaluations between any of the four groups: (1) professionally trained in criticism, (2) trained in giving an artistic interpretation, (3) nonexperienced, carefully instructed in the definition and criteria used, and (4) uninstructed, wholly inexperienced. Nevertheless, variations did occur among groups—enough to alter standings if rated by one group rather than by another. Variations were particularly apparent between some judges' scores and those of the instructors in the subjects.

At Ohio State University, Katherine Louise Wulftange completed an experimental study entitled "Audience Response to the Oral Interpretation-
tion of Literature as Perceived through Different Media." She investigated possible differences in audience response to the oral interpretation of three selected short stories when the performances were perceived by three methods: face-to-face, television, and audio tape. I will address her measurement techniques in a discussion of experimental tools later. Statistical tests for differences of means of all subgroups revealed significance in the following: (1) a difference in the aesthetic response for the story between face-to-face (preferred) and audio methods, (2) a difference in the degree of interest and in comprehension of content between television (preferred) and audio methods, and (3) an implication that the quality of the technique interacted with the quality of content to influence the aesthetic response in the television methods.  

Daniel M. Witt performed a study at the University of Denver entitled "A Comparative Analysis of Audience Response to Realistic and Anti-Realistic Drama When Perceived Through Acting, Reader's Theatre, and Silent Reading." A semantic differential scale developed elsewhere was used to measure the subjects' responses. Witt concluded that reader's theatre was preferred over silent reading and that acting was preferred over both the other means of presentation.  

In 1965 at the University of Montana, Judy Lee Svore completed a master's thesis, "An Investigation of Audience Response to Prose Literature When Perceived Through Silent Reading, Oral Interpretation, and Reader's Theatre." Subjects' responses were measured on two value criteria, ethical and aesthetic, with the conclusion that there were no differences in response to the various means of presenting the literature. There were some significant differences in the effects of
methods of presentation in terms of subjects' perception of the material as more or less serious. The reader's theatre method of presentation appears to evoke a more serious response from the audience.  

Several graduate research projects have developed or employed some new measuring tools in the process of their experimentation. Four studies completed at Ohio State University are within this category.

Edward Swingle's study in 1962, "A Scale for Measurement of Empathetic Effect in Terms of Emotional Impact," sought to develop an instrument to measure one kind of effect that the oral reading of literature may have upon individuals who listen to it—the effect termed "empathy." Rather than using the typical measuring instruments of most psychological studies that turn to physiological states of the individual, Swingle turned to the technique of attitude measurement, reasoning that the concept of attitude often includes an element of emotion. He developed an empathetic scale, and the study concluded that this scale was not standardized nor was it adequate for a large number of varied situations. However, the scale was applicable to those situations which deal with many types of literature and for which differences in groups as a result of presentation of different stimuli is desired. The empathetic scale was correlated with the impact scale, the semantic differential scale, and two items in the response scale, yielding correlations between them extending from +.41 to +.61. Finally, Swingle noted that empirical studies dealing with the effects of literature on individuals is practically nonexistent.
The 1962 Wulftange study previously mentioned developed some tools for measurement. The aesthetic response scale contained a seven point continuum with responses for extent of anticipation aroused by the introduction and the extent of response to emotions and mood, images and the situation of the selection itself. The technique scale measured facial expression, other bodily movement, and voice changes as techniques to produce listener involvement. The degree of interest scale was a simple continuum on interest. Finally, Wulftange also utilized comprehension questions on content.20

"The Construction and Testing of a Forced Choice Scale for Measuring Achievement in Oral Interpretation," was the title of a study by Agnes Porter in 1964. As an attempt to eliminate bias of the rater, her technique forces the rater to choose or to discriminate between two or more alternatives which appear equally acceptable, but which in fact differ in their significance. Porter's scale included twenty-two pairings, and she was able to use items from all categories of emphasis in oral interpretation. She found that time efficiency for administration of the forced choice scale was considerably longer than that required for a more simple checklist for reader effectiveness. However, there was no difference in rank order for readers as judged by the forced choice scale rather than by the checklist.21

Although the study by Allan Schramm in 1967 was not a study of listener effects, its title explains its pertinence to this thesis: "The Semantic Differential in Oral Interpretation Research." The experimental study supported Schramm's third hypothesis: The semantic differential is a suitable research technique for oral interpretation.
The ten scales used in the semantic differential included evaluative factors, activity factors, and potency factors. Schramm reported these values in his evaluation of the semantic differential:

1. Objectivity—the procedures of measurement are explicit and can be replicated, investigator bias is removed from the data itself.

2. Reliability—the same scores can be reproduced when the same objects are measured repeatedly.

3. Validity—because no independent criterion of meaning exists, face validity must be accepted.

4. Sensitivity—renders discriminations commensurate with the natural units of the material being studied.

5. Comparability—the extent to which the instrument can be applied across the range of situations relevant to what is being measured and its results interpreted in a constant fashion.

6. Utility—aside from construction of the scales, the tasks of administration, computation, and interpretation are no more difficult than they are with attitude scales.22

More recently there have been scattered studies that have dealt empirically with oral interpretation and the related areas of theatre and reader's theatre. Cronkhite, Mishler, and Kirk did one such study dealing with perceptions of a dramatic production. It is worthy of note because it attempts to measure different aspects of credibility for the dramatic production, a situation very similar in many respects to that which this thesis purports. Cronkhite et al. used Likert-type items, and while they did quantify the evaluative dimension of the dramatic production, they concluded that there are probably other dimensions for which acting is evaluated, and that the limited range of relevant items in their test probably obscured the multidimensionality of such judgments.23
David Williams and Dennis Alexander rated effects of audience responses on the performance of oral interpreters. They found that readers are able to identify the differences between negative and positive responses but there was no significant confirmation of hypotheses concerning the subsequent effects on the interpreters' performances.24

Stuart Kaplan and G. P. Mohrmann did an empirical investigation of the relationships between reader, text, audience, and cognitive tuning. Their study deserves mention because of their unique approach to oral interpretation as communication in the full sense of the word. They posit that a silent reader responds to literature and that is communication, while the oral interpreter responds differently to this same literature because an audience is anticipated, and that too is communication, but that the experience is different precisely because of the external audience. They have suggested that oral interpretation is a unique way to study literature and that perceptual differences between silent and oral reading start to arise at the very outset. It is the expectation of performance that shapes the initial impression of the literature.25

Bruce Manchester addressed the question of the interpreter's credibility at Purdue in 1971 in his Ph.D. dissertation. His research indicated that evaluations of interpreters' credibility are greatly affected by the attitude expressed in the literature. He further posited that in persuasive interpretation (such as that done at forensics tournaments) reactions to the ability of the interpreter are not independent of the attitudes toward the literature being communicated.
He further states that people with attitudes dissimilar to those expressed in the literature tend to give lower evaluations of the interpreters than do people who hold attitudes or values similar to those expressed in the literature. He concluded, "therefore that interpreters should recognize that their credibility is, at least in part, dependent upon the literature that they select and arrange to communicate orally."  

In summary to this review of empirical oral interpretation literature, several areas for further study arise. These include: further and more refined study of the interpreter's credibility (both intrinsic and extrinsic), and the effects of literature choice, organization, delivery, and audience adaptation on the interpreter's credibility. All of the studies reviewed so far have dealt with some aspect of the audience's perception of the oral interpreter, but to date, no known study has combined all of these above mentioned areas in an effort to study credibility for oral interpreters. This thesis purports to do exactly that.

A Survey of Source Credibility Literature

It is of theoretical consequence to determine the parameters of believability. If a theory of credibility is to have much predictive value for the advocate, researchers must explore the underlying components of credibility and the variables which affect their generalizability. This section is a review of the major research studies that are committed to this issue.

The construct of ethos is multidimensional. Exactly what these dimensions are has been a subject of speculation for many years.
Aristotle identified the dimensions as intelligence, character, and good will. Twenty-three hundred years later three social psychologists, Carl Hovland, Irving Janis, and Harold Relley, when studying source credibility, identified the dimensions as expertness, trustworthiness, and intention toward the receiver. An examination of these writings reveals that they are remarkably similar. Aristotle and the three psychologists agree that a source is judged by the audience in terms of its knowledge of the source's subject of discourse, veracity, and attitude toward the well being of the audience.27

With the advent of modern computers and the sophisticated statistical procedures of factor analysis, empirical researchers have directed their attention to the dimensional character of the ethos construct.

Berlo, Lemer, and Mertz,28 for example, reported finding three relatively stable dimensions which they labeled "competence," "trustworthiness," and dynamism." Whitehead reported four dimensions, "trustworthiness," "competence," "dynamism," and "objectivity." McCroskey30 found two dimensions, "authoritativeness" and "character," which he believes correspond roughly to the "competence" and "trustworthiness" dimensions of Berlo, Lemert, and Mertz. He did not find a "dynamism" dimension. 31

The factor analytic work of Berlo, Lemert, and Mertz represents a landmark in empirical investigation of the credibility construct. The Berlo et al. research was the first to examine the empirical nature of credibility's dimensionality, even though Aristotle in the fifth century B.C. had speculated as to the multidimensional nature of the ethos construct. Berlo and his colleagues factor analyzed semantic differential responses of college students and East Lansing adults toward four types
of sources: public sources with no associated message, public sources speaking on irrelevant topics; and interpersonal sources selected by the subject. Both the college and adult samples' data were submitted to principal axis factor analysis with orthogonal rotation.

The emergent factors of the Berlo et al. research are reported earlier. These findings were descriptive of the grouped data, i.e., a factor analytic solution across message source types. They separately analyzed each message source type for the college sample data. The number of dimensions varied from three to six across source types. A little over half of their 83 scales had their highest loading on the same factor in all four of their analyses. Thus there appeared to be considerable source dimension interaction with differential dimensionality by source type. Further, even when the same message types were used, factor comparability was not exact.32

The McCroskey 1966 research is perhaps the most influential of the dimensionality investigations of source credibility.33 After surveys of the source credibility literature, McCroskey selected thirty items which were developed into Likert-type items and ten additional items (making forty total) for semantic differential use. Data from measurement scales were analyzed separately with principal component factor analysis with Varimax rotation. In a series of seven experiments with actual and hypothetical sources, McCroskey found substantial support for the reliability and validity of his Likert-type items and his semantic differential scales. He found the two scales to be highly correlated ("Authoritativeness" .85 and "Character" .82).

The work of Schweitzer and Ginsburg offered a clear break with prior research.34 Their work is worthy of note because they did not
support the factor invariance credibility judgments. They employed forty-six semantic differential scales drawn from respondents' free response descriptions of interpersonal source types, the researchers asked 181 subjects to evaluate two hypothetical sources. Factor analyses with principal axis solution and Varimax rotation produced 27 and 28 factors for the two sources, accounting for 60% and 74% of the total variance, respectively. Although the authors engaged in little factor interpretation their conclusion is noteworthy:

In the first place, it seems very likely that the recipient's judgment of the credibility of a communicator is based upon more than perceptions of what Hovland et al. call "trustworthiness" and "expertness"....Finally, the results of the present study strongly suggest that the particular cues, or perceived characteristics, which influence the recipient's judgment of credibility will vary across communication contexts and across populations of recipients.35

Whitehead (mentioned earlier) asked 152 college subjects to rate a high credible source and a low credible source on sixty-five bipolar scales.36 The two sources were factor analyzed separately. Employing orthogonal rotations and factor emergence on the criterion of eigenvalues ≥ 1.0, Whitehead found sixteen dimensions for both the high credible source and the low credible source. Total variance accounted for was 69.8% and 71.3% respectively. Whitehead labelled only the first four factors for each source type, deriving the aforementioned dimensions of "Trustworthiness," "Competence," "Dynamism," and "Objectivity." Although Whitehead employed the same factor labels for both source types, it is of interest to note that the factor order was dissimilar in the two structures and discrepancies existed in the scales that loaded on these factors. According to Whitehead, thirty-three out of the sixty-five scales showed commonality to the two sources.
McCroskey and his colleagues have undertaken a series of investigations to explore the generalizability of credibility dimensions. McCroskey, Scott, and Young examined peer and spouse credibility among 200 persons residing in Bloomington, Illinois. Data were analyzed with the usual principal components, Varimax rotation, and eigenvalue criterion of $\geq 1.0$ for factor emergence. McCroskey et al. employ perhaps the most stringent of criteria for factor interpretation; a factor must have at least two scales with loading $\geq .60$ and no secondary loading $\geq .40$. Although McCroskey et al. assessed the person most recently interacted with instead of the concept "peer," four factors emerged to account for 70% of the total variance. "Sociability" (25% of the total variance) was defined as "friendly-unfriendly," "nice-awful," "pleasant-unpleasant," "sympathetic-unsympathetic," "cooperative-negativistic," and "cruel-kind." The "composure" dimension (13% of total variance) was defined through the adjective parts "nervous-poised," "composed-excitable," and "calm-anxious." "Dynamism" (13% of total variance) was defined as "adventurous-cautious," "meek-aggressive," "bold-timid," and "extroverted-introverted." Last, the "Competence" dimension (20% of total variance) was typified with the pairs "qualified-unqualified," "inexpert-expert," "experienced-inexperienced," "trained-untrained," and "competent-incompetent."

Factor analysis of the spouse data yielded a six factor solution to account for 66% of the total variance. McCroskey et al. used the same factors as above, adding "Character" ("virtuous-sinful," "reliable-unreliable") and "Extroversion" ("silent-talkative," "extroverted-introverted"). Despite the use of identical factor labels with four of the factors, it is important to heed McCroskey et al.'s observation that
"there was very large variation from one source type to another as to precisely what scales dominated the factors."³⁸

Subsequent research by McCroskey et al. confirmed the lack of factor variance noted in their first investigation. Fortunately, all of the studies in this series have employed the same item-scale pool, making factor structure comparability easier to analyze.³⁹

McCroskey, Jensen, Todd and Toomb examined the credibility of organizations among samples drawn from six populations.⁴⁰ Considerable variation was noted among the six samples both in number and in content of factors.

McCroskey, Jensen, and Todd analyzed political figures in six sample populations, five of which were the same as those above.⁴¹ Again, wide variation in factor structure was noted among the six data samples.

McCroskey, Jensen and Valencia have examined credibility for peers, spouses, and mass media sources among six populations.⁴² Variability again was the overriding conclusion.

Baudhuin and Davis examined the credibility structure of a hypothetical similar source, a hypothetical source dissimilar to the subjects, Richard Nixon, and Charles Manson.⁴³ Twenty-five semantic differential scales were selected for use from prior credibility research. A traditional principal components analysis with orthogonal rotation was employed. In visually scanning the factor structures, Baudhuin and Davis concluded with "clear evidence of noncomparability."⁴⁴ In the similar source vs. dissimilar source comparison, only nine out of the twenty-five scales loaded on both structures, five of which were on entirely different factors. In the Nixon-Manson comparison, only eight
of the twenty-five scales loaded on both structures, all but two of which loaded on similar factors. Differences were noted also in the number of dimensions and the percent of variance accounted for.

Last, Baudhuin compared the credibility structure of Nixon before and after the Watergate events based on subject ratings of twenty-five semantic differential scales.\(^4\) The usual factor analytic procedures were employed. Despite Baudhuin's claim of factor comparability, only six of the twenty-five scales loaded on similar factors in the two analyses.

Many of the studies reviewed examined particular variables that may have specific application to oral interpretation of literature. The variables examined include: delivery, extrinsic and intrinsic credibility, organization, and audience adaptation.

McCroskey found that good delivery does not affect credibility, but that poor delivery can reduce credibility. Two aspects of delivery that he examined were: fluency-nonfluence and extroversion-introversion styles.\(^4\) Sereno and Hawkins found that nonfluency significantly lowered credibility ratings in terms of the competence and dynamism dimensions, but not in the trustworthiness dimension.\(^4\) McCroskey and Mehrley found that a fluent source was perceived as more credible than a nonfluent source on all dimensions (authoritativeness, character, and dynamism).\(^4\) Bowers examined extroverted-introverted styles of delivery and found that the audience attitude change toward speakers using the extroverted delivery style was more favorable than toward speakers using the introverted delivery style.\(^4\)

The following studies examined the extrinsic and intrinsic
credibility of speakers. Extrinsic credibility refers to variables external to the presentation of the message which contribute to the speaker's credibility (such as previous reputation of the speaker). Intrinsic credibility refers to those variables included within the message which enhance the speaker's credibility (such as self-reference and prestige reference).

Examining intrinsic credibility, Ostermeir tested the hypothesis that there would be a relationship between the use of reference (self-reference revealing first-hand experiences with the topic, prestige-reference revealing association with topic experts) and credibility (competence, trustworthiness, and dynamism) and attitude change. He found that: (1) increased frequency of self-reference increases competence ratings, (2) increased frequency of prestige reference increases trustworthiness ratings, (3) increases in perceived competence for the source is proportional to the increase in self-reference, (4) increases in perceived trustworthiness is proportional to the increase in both self-reference and prestige-reference, and (5) increases in attitude change are proportional to increases in self-reference. The results suggest that self-reference and prestige-reference both affect credibility and attitude change, but that self-reference is probably more important. The study also suggests that dynamism may not be an important factor.50

Wheeless attempted to expand analysis in this area by examining the independent variables: high-low credibility (extrinsic) and explicit-implicit credibility (intrinsic) and dependent variables: attitude change, overt behavior, and credibility (authoritativeness
and character dimensions). The only significant results were that the explicit-intrinsic credibility condition resulted in higher post communication character ratings than the implicit-intrinsic condition and that overt behavior was higher with explicit credibility than with implicit credibility. Several problems, however, ineffective credibility inductions, poor operationalization of intrinsic credibility variables, and high within error variance affected the results.  

McCroskey and Mehrley concluded that organization, like delivery, has a non-additive effect on credibility. They found that a well organized message may not increase credibility, but that a disorganized message will usually decrease credibility (especially on the authoritativeness dimension).  

Wenburg examined the relationship between audience adaptation and credibility. The adapted message included the use of relevant reference groups. He found that the inclusion of audience adaptation produced greater authoritativeness ratings than non-adapted messages. Character and dynamism dimensions were not significantly different with message types. Although more research in the area was suggested by the author, it appears that audience adaptation can increase the perceived credibility of the source.  

In summary several generalizations can be made about the credibility literature that was reviewed:  

1. The study of credibility has largely been the study of the different dimensions that comprise credibility.  

2. The most widely employed measurement techniques has been the factor analysis of semantic differential data.
3. Factors that emerge are content bound.

4. The study of credibility in the interpretation situation is in its early stages, and the review of studies done in other types of public presentation situations can only suggest what may be the case in the interpretive reading situation. Since there is a void in credibility findings in this area, oral interpretation of literature warrants study.

5. Finally, since just finding factor loadings hasn't been too fruitful, multidimensional scaling will be used as an attempt at convergent validation.

Source Credibility Measurement

This portion of Chapter II will address the two types of measurement that will be employed in this thesis: factor analysis of semantic differential data, and nonmetric multidimensional scaling (MDS).

Both measurement techniques are being explored because of the general advantage of offering a point of comparison and an attempt at convergent validation. Aside from the benefits of general comparability, nonmetric MDS deals specifically with some of the controversial elements of the factor analysis approach to credibility measurement. I will dress each in turn.

In assessing source credibility through traditional means, the researcher typically presents the respondent with a set of semantic differential-type scales selected for their presumed relevance to the credibility construct. The respondent evaluates one or more of several sources on the semantic differential scales. The next step involves computation of a correlation matrix for the semantic differential scales; for each pair of scales, a correlation coefficient is
derived from the scale values provided by the total respondent sample. After the correlation matrix of scales has been computed, factor analysis provides a method of understanding these scale interrelationships by positing the presence of underlying factors or dimensions. A variable or scale is viewed as a linear composite of these underlying factors. Two scales thus are interrelated to the degree to which they reflect the same underlying factors. Although there are many methods of determining the underlying factor structure, all factor analytic techniques produce an output indicating each scale's "loading," or correlation, on each of the emergent factors.  

All factor analysis models have in common the explicit separation of unique variance from common variance, and the assumption that the intercorrelations among the original variables are generated by some smaller number of latent variables. Depending on how explicit the researcher's preconceptions about the nature of these underlying variables are, each original variable's commonality (the percentage of its variance which is held in common with other variables) may either be produced as an offshoot of the analysis or may be specified in advance in order to arrive at a factor analytic solution. A factor analytic solution always includes a table indicating the correlation (loading) of each original variable with (on) each latent variable (factor), this table being referred to as the factor structure.

Opinions differ on what constitutes sample size adequacy for factor analysis. Nunnally suggests the use of ten times as many subjects as variables (scales). Guilford argues for a minimum sample size of two hundred subjects. Comrey favors samples ranging in size from 500 to 1000.
While factor analysis has some parsimonious utility by reducing the multiplicity of the tests and measures by telling us which test or measures belong together, which ones measure the same things, and to what extent; by itself it still leaves some gaps. One of the gaps left is that of the uniqueness of the solution. A given factor structure simply represents a description of the original intercorrelations in terms of a particular frame of reference. It merely reduces the original data to factors, but it does not generate unique perspectives or factors.\textsuperscript{59}

One advantage that nonmetric MDS has over the traditional factor analysis is that it is not dependent on the correlation coefficient as data input. Functionally, this offers partial advantage over factor analysis in sample size requirements. In fact, MDS literature typically reports high solution reliability with far fewer than one hundred respondents.\textsuperscript{60}

One additional reason that the convergent use of nonmetric MDS is attractive for the purposes of this thesis is that it may provide yet another source of generation of criteria, as typically it involves an open-ended request for the respondents to list their own criteria that they employed in rating subjects.\textsuperscript{61}

MDS techniques rely on the basic notion of proximity. (Some synonyms for proximity include: perceived similarity, relatedness, and substitutability). Data collection can be either direct respondent judgments of proximity or derived correlations based on judged profile data or behavioral indicators.\textsuperscript{62}

Nonmetric MDS takes the "proximity" data and derives a geometric representation in some N-space (usually 1-5 dimensions). Each stimulus
or object under investigation is represented as a point in this space and the distance that separates any two points reveals the similarity or "proximity" in the original data. (The closer the two points in space, the greater their similarity.)

MDS achieves this "spatial view" of the stimulus objects by a series of successive approximations or iterations. Typically, from 15 to 100 iterations are necessary to achieve a monotonic fit between the final spatial interpoint distances and the initial "proximity" data. That is, MDS tries to create a perfect correspondence between the rank order of the interpoint distances and rank order (ordinal level) from the initial proximity data.

For example, correlation-like proximities (similarity measures) have large values if object pairs are alike, and small values if they are different; conversely, distance-like proximities (dissimilarity measures) take on large values if pairs are different and small values if they are alike. Given such data, MDS helps the user determine: (a) the number of factors or dimensions necessary to account for object proximity and (b) the projects or coordinates of each object on each dimension, from which a spatial representation of the objects can be constructed. The final result is an attempt at reduction of a complex matrix of numbers to a simple picture that shows the interrelationships among objects. The factor analysis tells us which variables are related to each other variable. MDS further assists the researcher in understanding the relationships among objects by the visual representation of the summary picture.
Summary

Chapter II provides a review of pertinent literature on both the interpretation and credibility constructs. In addition, it examines literature that addresses the two convergent techniques to measure credibility. Chapter III will deal more specifically with measurement as it relates to the methodology employed in this study. Some conclusionary statements can be inferred from the literature:

1. The semantic differential has been defended as a suitable measurement tool for oral interpretation.

2. It is desirable to employ alternative, independent techniques to attempt to convergently validate factor-analytic approaches.

3. Nonmetric MDS may be a useful alternative approach to generate additional criteria and to attempt convergent validation.
NOTES


2 Ibid., p. 16.

3 Ibid., p. 16.

4 Ibid., p. 17.

5 Ibid., p. 17.

6 Ibid., p. 17.

7 Ibid., p. 18.


10 Wayne N. Thompson, Quantitative Research in Public Address and Communication, (New York, 1967), p. 82.


19 Reynolds, op. cit., p. 246.

20 Wulfange, op cit., p. 246.

21 Reynolds, op cit., p. 246.

22 Ibid., p. 247.


32 Baxter, op cit., p. 36.

33 McCroskey, op cit.


38Ibid., p. 11

39Baxter, op cit., p. 45.


44Ibid., p. 300.


46McCroskey, op cit., p. 72.


52 McCroskey and Mehrley, *op cit.*, p. 21.


58 Comrey, *op cit.*, p. 201


61 Ibid., p. 2.


63 Ibid., p. 1.

64 Ibid., p. 1.


66 Ibid., p. 387.
CHAPTER III
METHODOLOGY

Purpose

The purpose of Chapter III is to examine thoroughly the methodology employed in this thesis, taking particular note of its strengths and weaknesses. Discussion of pre-testing, data collection, and data analysis techniques will be included.

Pre-testing

In order that measurement techniques could be tested and that testing difficulties could be worked out, a pre-test was designed as a pilot study to test the credibility of contest oral interpreters. After an extensive review of literature was completed by the author, the subjects were tested on the basis of pre-selected variables from the review that fell under four main categories:

1. Delivery
2. Extrinsic and Intrinsic credibility
3. Organization
4. Audience adaptation

A factor analysis was run on the data utilizing a program, SPSS 10 (a factor-analytic program that is a part of Statistical Package for the Social Sciences). The subjects were 33 oral interpretation of literature contestants at the 1975 Treasure State Invitational Forensics Tournament.

Ss filled out semantic differentials for thirteen variables on each others' performances during the two preliminary rounds and the two elimination rounds of the tournament. After or during each person's speech, contestants marked their impressions of the speaker's credibility
on prepared semantic differential forms which had been provided for them
prior to the round. Due to incomplete data by some Ss, as well as
some forms not returned, the factor analysis was run for 85 cases in
Round I, 74 cases in Round II, 14 cases in Semi-final Round, and 20
cases in the Final Round. (Each completed form was considered to be
a case.)

Identification of Source Credibility Factors

The purpose of this investigation was to identify source credi-
bility factors that interpreters used in rating their competitors. To
identify these factors, a set of semantic differential scales was
developed which attempted to measure the raters' appraisals of each
contestants' credibility in the interpretation situation. The semantic
differential consisted of thirteen variables, the first two dealing
with (1) whether or not the rater had heard the contestant before,
and (2) whether the contestant had a reputation, and if so, what kind
of reputation as an interpreter. Following were six bipolar semantic
differential scales designed to measure the degree of: (3) clarity,
(4) interest, (5) organization, (6) enthusiasm, (7) competence, and
(3) experience, generated by the interpreter. These scales were
followed by four scales designed to measure the raters' degree of
agreement with: (9) admiration of the speaker's ability, (10) desire
for personal friendship, (11) desire for sameness with the interpreter,
and (12) the extent to which the interpreter made the literature come
alive for the rater. Finally, there was one scale, (13) that was
designed to rate the reaction to the contestant's overall performance
from superior to poor. (See Appendix A for a copy of the scales.)

Scales 3, 7, 9, 11, and 13 were considered to be scales designed to attempt the measure of the delivery factor. Scales 1, 2, 8, and 13 were designed to attempt the measure of intrinsic and extrinsic credibility; and scales 5, and 13 were designed to measure organization. Finally, scales 4, 6, 10, 12, and 13 were designed as measures of audience adaptation.

Prior to each round, scales were distributed to all Ss. Additional scales were given to all judges for distribution to those who had either neglected to pick up scales, or those who did not have enough scales. Each person rated each other person in their rounds. Scales were collected by the judges for each round, and returned to the tournament tabulation room. The data for these rounds were submitted to the previously mentioned factor analysis utilizing an orthogonal rotation of the factor matrix with the varimax criterion. For an item to be considered loaded on a resulting factor, the SPSS criteria were employed: a factor loading of .600 or higher was required with no loading of .35 or higher or any other factor. For a factor to be considered meaningful, it had to contribute five percent or more to the total variance, and it had to have at least three variables which met the loading criteria and an eigenvalue of 1.0 or more.

Results

The following results were found from the factor analysis of the semantic differential data of this pre-test:
In all four rounds the heaviest loading occurred on the delivery factor.

- Round I: 82.9% of Total Variance
- Round II: 49.1%
- Round S.F.: 51.9%
- Round F.: 47.4%

In the first two rounds the next highest loadings appeared on the factor attempting to measure extrinsic and intrinsic credibility.

- (Factor 2) Round I: 17.1%
- (Factor 2) Round II: 12.5%

In the elimination rounds, Semi-finals and Finals, the extrinsic and intrinsic credibility factor was found to be of lesser impact, and appeared on the third factor.

- (Factor 3) Round S.F.: Not Significant (Did not meet loading criteria)
- (Factor 3) Round F.: 8.2% of Total Variance

The last factor on which variables loaded significantly was the factor measuring audience adaptation.

- Round I: Not Significant (Did not meet loading criteria)
- Round II: 8.6%
- (Factor 2) Round S.F.: 23.5%
- (Factor 2) Round F.: 13.7%

No factor emerged for the category designed to measure organization in any round.
Conclusions

From this pilot study several methodological considerations and conclusions were arrived at. These will each be discussed further and include: consideration of sample size, need for convergent validation, validity, consideration of varied rotation, and general conclusions based on data analysis.

The small sample size posed some problem in the pilot study. The reason for the problem is that as the number of observations from which the correlations are computed increases, the reliability of the obtained correlations goes up, although as Comrey admits, with diminishing returns. Guertin and Bailey (1970) have shown that with smaller samples the random errors of the less reliable correlation coefficients increase the absolute size of the correlations in the matrix. This results in greater commonalities and a larger amount to common-factor variance, although the increase is due to spurious common-factor variance. This additional variance thrown into the analysis tends to produce distortions the seriousness of which is a function of the absolute amount of spurious variance added. The problem posed by small size was weighed carefully by the author, and the conclusion reached was that since there are only so many contestants at any given forensics tournament in the oral interpretation event, and since the semantic differential was one of the quickest and least disruptive (in terms of tournament facilitation) measurement tools available, that the benefits of using this approach outweigh the potential problems posed by small sample size. This potential problem also sparked the search for another measurement technique to use for convergent validation.
To compensate in part for the sample size potential problems, and to add yet another set of dimensions to the study of the interpreter's credibility, the nonmetric MDS program was decided upon as a data analysis technique to attempt to convergently validate the study. One of the benefits of the MDS technique is that the size of the sample does not affect the results of the analysis. In addition, the free-choice generated criteria that can be used in combination with MDS adds yet another bonus for this approach for studying the credibility construct. One drawback of the MDS technique is the time it takes to administer it. For this reason, it was decided that MDS would only be used in the semi-final and final rounds.

The next conclusion arrived at was that the semantic differential scales described appeared to be adequate measures of the selected variables. The set of scales in uni-dimensional and accounts for 70-100% of the variance. It is hoped that when a similar set of scales is combined with the MDS findings that the two will serve as insurances of each other's adequacy for the final study. One criticism of the uni-dimensionality and linearity of results from factor analytic studies is that the results are based on circular reasoning. Rozeboom succinctly comments on the aspect of circular reasoning:

> If the data variables are to be analyzed as linear combinations of factors which are themselves, in turn, defined as composites of data variables, aren't we just going in circles? Well yes—in a way we are, but sometimes the view from one point on a circle is more interesting than from another, and some ways to say the same thing are more illuminating than other ways.²

One potential problem that was noted was in the selection of the varimax rotation. In this rotation, independence between variables is assumed. To compensate for the fact that the variables may indeed be
interrelated, the same data were subjected to the same programs with an oblique rotation instead of an orthogonal rotation. No significant differences appeared in the resultant matrices, and it was decided that the oblique rotation would be utilized in the final study.

Finally, some general statements about the measured credibility constructs seem warranted:

1. In all rounds variables measuring delivery are marked highest by raters.

2. Intrinsic and extrinsic credibility factors tended to be of second highest importance in the preliminary rounds, but tended to be of lesser importance in elimination rounds where the contestants have already had the opportunity to hear each subject's performance.

3. Audience adaptation factors tend to be of lesser importance in preliminary rounds, but tend to become increasingly more important as difficulty of competition increases (i.e., in elimination rounds).

4. Organization seems to be a non-additive factor to oral interpretation competition.

5. Equal numbers of scales to measure the variables in the final study seems warranted.

Data Collection

Data collection for this study was completed at the Province of the Northwest Regional Pi Kappa Delta Speech Tournament, March, 1976, at Fairmont Hot Springs, Montana and in a class tournament run as a part of Interpersonal Communication 261. Subjects were all contestants in both Junior and Senior Oral Interpretation of Literature competition, and class members of INCO 261. Prior arrangements were made by the author to be the oral interpretation of literature event director at the Pi Kappa Delta tournament so as to make the data
collection process go more smoothly, and the author is the instructor of INCO 261. Precautions were made to insure that enough forms will be available for all subjects and pencils will be provided for those who need them. All forms will be given to judges complete with sets of instructions. A meeting prior to the tournament as well as a meeting after the tournament to debrief subjects has been planned. It is hoped that the distribution of the scales in this manner will insure a higher completion ratio and a more careful evaluation of each contestant's performance by raters. Approximately 40 Ss are expected, which should generate approximately between 160-200 cases per round. If this many cases can be obtained, the problems of the sample size may be reduced greatly.

Likert-type scales similar to those described for the pilot study will be employed in the final study, with the addition of two scales to rate the subject's choice of literature being added. Likert-type scales were decided upon for the final study because they seemed to be easier for Ss to mark. The final measurement tool for the factor analytic portion of this thesis was developed by the author and Dr. Leslie Baxter (See Appendix B for a copy of the scale). Items on the Likert-type scales in the order they appeared include: extrinsic credibility, delivery, intrinsic credibility, literature, audience adaptation, organization, organization, audience adaptation, extrinsic credibility, delivery, literature, and intrinsic credibility. Only two scales were included for each variable because of the limited amount of time that Ss had to complete the scales. The author realized that only having two scales per variable could jeopardize the reliability of the measure, but when weighed against the time element, the trade-
off was considered to be a justifiable risk.

For the MDS portion of the study, all raters were asked to make \( N(N-1)/2 \) pairwise comparisons of similarities of contestants' performances before they fill out the semantic differential scales. In addition, raters will be asked to list the criteria that they employed in making their pairwise comparisons of the subjects' presentations in the semi-final and final rounds. The measurement tool for the MDS portion was developed by the author and Dr. Leslie Baxter (See Appendix C for a copy of the scale).

**Data Analysis Techniques**

Two data analysis techniques were employed in completing this thesis—factor analysis of semantic differential data, utilizing SPSS program for factor analysis with an oblique rotation; and Torsca 9, a nonmetric MDS program. Both have been referred to earlier, but will be discussed now in further detail.

**SPSS Factor Analysis**

In this thesis, the SPSS factor analysis was employed for exploratory uses—the exploration and detection of patterning of variables with a view to the discovery of new concepts and the possible reduction of data.

The term factor analysis is not a unitary concept, and it subsumes a fairly large variety of procedures, the most general classification of which may be organized around the major alternatives at each of the three customary steps of the factor analysis. The three ordinary steps are (1) the preparation of the correlation matrix, (2) the extraction of the initial factors—the exploration of possible data reduction, and (3) the rotation of the terminal
solution—the search for simple and interpretable factors. Major options at each stage are summed up by three dichotomies: R type versus Q type factor analysis in step 1, defined versus inferred factors in step 2, and orthogonal versus oblique rotation in step 3. Each will be discussed in further detail.4

The first step in the factor analysis is the evaluation of appropriate measures of association for a set of relevant variables (that the author has pre-defined, see results of pilot study). Also closely related is the selection of appropriate measures of association; this program uses moment correlation coefficients. In this particular exploratory study, the correlation will be between variables and thus the (R-Type) factor analysis will be utilized.

In the second step of the factor analysis, data reduction possibilities are explored by constructing a new set of variables based on the interrelations in the data. "In doing so, the new variables can be defined as exact mathematical transformations of the original data, or inferential assumptions may be made about the structuring of the variables and their source of variation."5 This thesis uses the former approach, called principle-component analysis. Principle-component analysis is a relatively straightforward method of transforming a given set of variables into a new set of composite variables or principle components.6

In the third step of the factor analysis it is important to note that the exact configuration of the factor structure is not unique; one factor solution can be transformed into another without violating the basic assumptions or the mathematical properties of a given solution. In other words, there are many statistically equiva-
lent ways to define the underlying dimensions of the same set of data. The major option available at this step is the choice between orthogonal or oblique rotation. Because the factors of this study are expected to be correlated (based on the pilot study) the oblique rotation was chosen. Jae-On Kim posits that, "orthogonal factors are mathematically easier to handle, but that oblique factors are empirically more realistic."^7

In summary, then, the factor analytic portion of this thesis employed R-Type Factor Analysis, with product moment correlation coefficients, principle-component analysis, and oblique rotation.

**MDS TORSCA 2**

The second data analysis technique to be employed in this thesis is TORSCA 2, a program developed by the L. L. Thurstone Psychometric Laboratory at the University of North Carolina. MDS has been addressed and introduced in Chapter II. This chapter presents the technique in greater detail.

The TORSCA 2 program computes a geometric representation of a data matrix from the aforementioned pairwise comparison data, such that the distances between the points (which in this case will be relative oral interpretation scores from contestants) in the representation best reproduce the order of the entries in the data matrix. The representation may be in any Minkowski space (in this case, the Minkowski space will be Euclidian space). The data matrix will be symmetric which means that the input in this mode consists of a square symmetric matrix. The diagonal values are ignored. Any off-diagonal values which are zero or negative are assumed to represent missing data.7
The main part of the program can be viewed as consisting of four steps. The steps are as follows:

1. TORSCA 2 starts with an arbitrary (or rational) arrangement of \( n \) coordinate points (x's) in two dimensions.

2. It then computes the \( n(n-1)/2 \) distances between coordinate points in Step 1, and places the distances in ascending order.

3. It next computes the stress index, which is a measure of how well the order of distances in Step 2 agrees with the order required by the \( n(n-1)/2 \) input proximities. Low stress values indicate close agreement between the two orderings, and high stress values mean the opposite. More precisely, stress is analogous to the standard error of estimate in bivariate regression. However, stress is a normalized sum of squared deviations about a monotonic curve fit to scatter plot of corresponding distance and proximity values. Because of normalization, stress can be expressed as a proportion or a percentage and the smaller the stress is, the better.

4. Finally, the TORSCA 2 program returns to Step 1 and rearranges the test configuration of coordinates (x's) slightly so as to decrease stress. Roughly speaking, two coordinate points are moved closer together if the interpoint distance in Step 3 was ordered higher than the corresponding proximity value and points are moved apart if the distance rank in Step 3 was less than the corresponding proximity rank.

Steps 1-4 are repeated until a two or more dimensional configuration of \( n \) points is found whose stress value cannot be further decreased. This final configuration is the best representation of the original proximity relationships. (In practice, the desired final configuration may not be two-dimensional.) In fact, the experimenter does not know how many dimensions are necessary to represent the input proximities. This difficulty is overcome by using Steps 1-4 to obtain a best representation in one dimension, a best representation in two dimensions, and so on. The experimenter then selects one of these solutions.\(^8\)
In summary, then, for the MDS portion of this thesis this nonmetric program takes proximity data and derives a geometric representation in some N-space (usually 1-5 dimensions). Each stimulus or object under investigation is represented as a point in this space, and the distance that separates any two points reveals the similarity or proximity in the original data. MDS achieves the spatial view of the stimulus objects by a series of successive approximations or iterations. The program attempts to achieve a monotonic fit between the final spatial inter-point distances and the initial proximity data. That is, MDS tries to create a perfect correspondence between the rank order of the inter-point distances and the rank order (ordinal level) from the initial proximity data.

The convergent uses of MDS, TORSCA 2, and SPSS Factor Analysis provided two independent measures of credibility data for this exploratory study. Both techniques employed reduce original input data, but both get at different underlying assumptions. The SPSS Factor Analysis indicates which variables are grouped together, while the MDS analysis shows how closely the variables are correlated, and in addition, it gives a picture of the output that further demonstrates the correlation.

By employing two different data analysis techniques, for convergent validation attempts, the author of this thesis attempted to meet the challenges of earlier researchers to employ multi-method approaches to the empirical study of source credibility.
NOTES CHAPTER III:


2Ibid., p. 200.


5Ibid., p. 470.

6Ibid., p. 470.


CHAPTER IV
RESULTS

The purpose of this chapter is the reporting of the results of the SPSS Factor Analysis and the MDS TORSCA 2 analysis, and the subsequent interpretation of those results.

Factor Analytic Results

The matrices in Tables 4.1, 4.2, 4.3, and 4.4 represent the results of the SPSS Factor Analysis. Each table presents the emergent factor structure, the number of resulting factors, eigenvalues, percentages of variance, and total cumulative percentages of variance. Legends are presented at the bottom of each table for easier interpretation. Table 4.1 summarizes the factor analysis for Round I. Only one significant factor emerged, with the highest variable loadings on Delivery and Intrinsic Credibility. Table 4.2 summarized the factor analytic solution for Round II. As in Round I, only one significant factor emerged with the highest loadings on Delivery and Intrinsic Credibility variables. Table 4.3 shows results from Round II; as in Rounds I and II only one significant factor emerged. The highest loadings were on variables representing Delivery, Intrinsic Credibility, and Audience Adaptation. Table 4.4 summarizes the Class Tournament solution. As in all previous rounds, only one significant factor emerged. The highest loadings were on variables representing Delivery, Intrinsic Credibility, and Audience Adaptation.
TABLE 4.1

Round I: Factor Analytic Solution

<table>
<thead>
<tr>
<th>Factor 1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ1</td>
<td>-0.56358</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE1</td>
<td>-0.80136 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC1</td>
<td>-0.84110 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIT1</td>
<td>-0.65976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD1</td>
<td>-0.75648 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORG1</td>
<td>-0.70138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORG 2</td>
<td>-0.59071</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD2</td>
<td>-0.63799</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC2</td>
<td>-0.71544 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE2</td>
<td>-0.71936 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIT2</td>
<td>-0.75109 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC2</td>
<td>-0.67307</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---------|------------|--------------|-----------|
1        | 6.03580    | 100.0        | 100.0     |

Legend:

EC= Extrinsic Credibility  
DE= Delivery  
IC= Extrinsic Credibility  
LIT= Literature  
AD= Audience Adaptation  
ORG= Organization

* Denotes a significantly loaded factor
### TABLE 4.2

#### Round II: Factor Analytic Solution

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>-0.46079</td>
<td>-0.36036</td>
</tr>
<tr>
<td>DE1</td>
<td>-0.81086*</td>
<td>-0.19802</td>
</tr>
<tr>
<td>IC1</td>
<td>-0.83554*</td>
<td>-0.22890</td>
</tr>
<tr>
<td>LIT1</td>
<td>-0.72268*</td>
<td>0.22579</td>
</tr>
<tr>
<td>AD1</td>
<td>-0.73551*</td>
<td>-0.24403</td>
</tr>
<tr>
<td>ORG1</td>
<td>-0.58167</td>
<td>0.35192</td>
</tr>
<tr>
<td>ORG2</td>
<td>-0.52558</td>
<td>0.18718</td>
</tr>
<tr>
<td>AD2</td>
<td>-0.71404*</td>
<td>0.13633</td>
</tr>
<tr>
<td>EC2</td>
<td>-0.72210*</td>
<td>-0.26537</td>
</tr>
<tr>
<td>DE2</td>
<td>-0.73499*</td>
<td>0.16754</td>
</tr>
<tr>
<td>LIT2</td>
<td>-0.69128</td>
<td>0.35005</td>
</tr>
<tr>
<td>IC2</td>
<td>-0.75734*</td>
<td>-0.05839</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.84760</td>
<td>88.8</td>
<td>88.8</td>
</tr>
<tr>
<td>2 NS</td>
<td>0.73390</td>
<td>11.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Legend:**

- EC=Extrinsic Credibility
- DE=Delivery
- IC=Intrinsic Credibility
- LIT=Literature
- AD=Audience Adaptation
- ORG=Organization

* Denotes a significantly loaded factor

NS= not significant
### TABLE 4.3

#### Round III: Factor Analytic Solution

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>-0.40042</td>
<td>-0.57357</td>
</tr>
<tr>
<td>DE1</td>
<td>-0.71686*</td>
<td>0.15343</td>
</tr>
<tr>
<td>IC1</td>
<td>-0.61278*</td>
<td>-0.08454</td>
</tr>
<tr>
<td>LIT1</td>
<td>-0.56161</td>
<td>-0.27112</td>
</tr>
<tr>
<td>AD1</td>
<td>-0.82013*</td>
<td>0.22689</td>
</tr>
<tr>
<td>ORG1</td>
<td>-0.52251</td>
<td>-0.17890</td>
</tr>
<tr>
<td>ORG2</td>
<td>-0.46079</td>
<td>0.15264</td>
</tr>
<tr>
<td>AD2</td>
<td>-0.67115</td>
<td>-0.05995</td>
</tr>
<tr>
<td>EC2</td>
<td>-0.65334</td>
<td>-0.00422</td>
</tr>
<tr>
<td>DE2</td>
<td>-0.74330*</td>
<td>0.26194</td>
</tr>
<tr>
<td>LIT2</td>
<td>-0.61009</td>
<td>-0.20586</td>
</tr>
<tr>
<td>IC2</td>
<td>-0.69885</td>
<td>0.21005</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.12797</td>
<td>87.9</td>
<td>87.9</td>
</tr>
<tr>
<td>2 NS</td>
<td>0.70446</td>
<td>12.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Legend:**
- EC = Extrinsic Credibility
- DE = Delivery
- IC = Intrinsic Credibility
- LIT = Literature
- AD = Audience Adaptation
- ORG = Organization
- NS * not significant
- Denotes a significantly loaded factor
### TABLE 4.4

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>-0.22852</td>
<td>-0.06586</td>
<td></td>
</tr>
<tr>
<td>DE1</td>
<td>-0.76911 *</td>
<td>-0.12768</td>
<td></td>
</tr>
<tr>
<td>IC1</td>
<td>-0.86542 *</td>
<td>-0.01517</td>
<td></td>
</tr>
<tr>
<td>LIT1</td>
<td>-0.72417 *</td>
<td>0.31784</td>
<td></td>
</tr>
<tr>
<td>AD1</td>
<td>-0.77181 *</td>
<td>-0.19721</td>
<td></td>
</tr>
<tr>
<td>ORG1</td>
<td>-0.57327</td>
<td>0.07446</td>
<td></td>
</tr>
<tr>
<td>ORG2</td>
<td>-0.51195</td>
<td>0.34752</td>
<td></td>
</tr>
<tr>
<td>AD2</td>
<td>-0.80391 *</td>
<td>0.12819</td>
<td></td>
</tr>
<tr>
<td>EC2</td>
<td>-0.66352</td>
<td>-0.16488</td>
<td></td>
</tr>
<tr>
<td>DE2</td>
<td>-0.67207</td>
<td>-0.09501</td>
<td></td>
</tr>
<tr>
<td>LIT2</td>
<td>-0.67928</td>
<td>0.27083</td>
<td></td>
</tr>
<tr>
<td>IC2</td>
<td>-0.82335 *</td>
<td>-0.34808</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.78917</td>
<td>91.6</td>
<td>91.6</td>
</tr>
<tr>
<td>2 NS</td>
<td>0.53425</td>
<td>8.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Legend:
- EC = Extrinsic Credibility
- DE = Delivery
- IC = Intrinsic Credibility
- LIT = Literature
- AD = Audience Adaptation
- ORG = Organization

* Denotes a significantly loaded factor
NS = not significant
Interpretation of the Results

In each of the rounds tested, only one factor which met the criteria for significance emerged. The variables which loaded the highest in each case were: Delivery, Intrinsic Credibility, and Audience Adaptation. There were very few diversities in the loadings from round to round, and those that occurred were not significant. The significance of the high loadings on the Delivery, Intrinsic Credibility, and Audience Adaptation variables is that these are all variables that are internal to the interpreter's performance. Since the loading on these variables was very close (within .1000) this would seem to indicate that Ss did not differentiate between these aspects of the interpretation performance. This would seem to indicate that Ss tend to make wholistic judgments of the interpretation performance based on the internal factors of the interpreter's performance, and that they do not view the process of interpretation as being comprised of several small components.

The second factors (not significant) that emerged in Rounds II, III, and in the Class Tournament could possibly be artifacts of the small sample size. As discussed earlier, when sample size decreases, the measure is less reliable. This could account for the nonsignificant second factors in those rounds. Further research with larger samples could possibly produce different results.

MDS Results

The following configuration and graphs represent the MDS solution achieved from the Class Tournament. Figure 4.1 shows the one dimensional
solution graph. Points 1-5 represent the contestants in the Class Tournament. Their proximity is an indication of how closely they were perceived by raters in the class. Because of the close proximity of points 2, 3, 4, and 5, the points appear below the line with lines drawn toward their approximate positions on the line.

Interpretation: Raters perceived contestants 2, 3, 4, and 5 to be very similar, but contestant 1 was perceived as dissimilar from all of the others, as indicated by point 1 being isolated to the right of the other points.
Table 4.5 shows the values for the one dimensional solution that was achieved from TORSCA 2. Values represent relative distances between the perceptions of the contestants' performances. The solution was uni-dimensional, and a very low stress value was achieved (zero stress would be perfect). This shows that contestant 1 was perceived as being very dissimilar from contestants 2, 3, 4, and 5. The unidimensionality of the solution suggests that subjects rating the contestants did not differentiate between the credibility aspects of the performances, but rather judged them wholistically.
Figure 4.2, the Shepard Diagram represents the graph of the comparisons of each contestant with each other contestant, based on raters' perceptions of their credibility as interpreters.
## Table 4.6

**Content Analysis of Free Choice MDS Criteria**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Raters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery:</td>
<td>15 raters rated as highest</td>
</tr>
<tr>
<td>Intrinsic Credibility:</td>
<td>12 raters rated as second highest</td>
</tr>
<tr>
<td>Audience Adaptation:</td>
<td>5 raters rated as either first - third</td>
</tr>
<tr>
<td>Literature:</td>
<td>3 raters even mentioned</td>
</tr>
</tbody>
</table>

Examples of delivery criteria included: posture, vocal qualities, poise, and overall performance reactions.

Delivery factors were overwhelmingly used by raters to determine credibility ratings for oral interpreters in conjunction with the MDS questionnaires. Intrinsic credibility factors were also closely correlated with delivery.
Interpretation of Results

The MDS Solution achieved was uni-dimensional, which indicates that Ss tended to make wholistic judgments as they did in the case of the factor analyses. The one dimensional solution (shown in the preceeding table and figures is graphed as a line, with points representing contestants, and with the most similar points being the closest in proximity on the line. The Shepard Diagram shows the monotonic fit. This particular representation (Figure 4.2) indicates that TORSCA was able to fit the data to the configuration with minimal error in the one dimensional solution. Another indication of a "good fit" was the low stress value, .009.

The one dimensional solution correlates very closely with the one significant factor that emerged in each of the factor analyses. When viewed together, the MDS and factor analyses seem to convergently validate each other. In addition to the MDS analysis, a content analysis was done for the free choice criteria that Ss generated for the MDS questionnaires, and here too, the results add further credence to the uni-dimensionality of raters' perceptions of credibility (i.e., delivery, intrinsic credibility, and audience adaptation were all grouped conceptually together).

The final chapter will discuss conclusions based on the above results, and will summarize the study. Finally, implications for interpreters and future researchers will be drawn.
CHAPTER V

SUMMARY

The purposes of this chapter are three-fold. First, conclusions will be generalized from the interpretations that were reported in Chapter IV. Secondly, an overall summary of this study from its conceptual beginnings, through its operationalizations and methodological findings will be given. Third, and finally, implications for future researchers will be given.

Conclusions

The following generalizations appear to be appropriate conclusions for this study of credibility for oral interpreters:

1. The complexity of perceptual differentiation for raters of the oral interpreters judged in this study was very low. Wholistic rather than differentiated judgments were made.

2. Since both data analysis techniques employed, MDS TORSCA 2, and SPSS Factor Analysis arrived at similar solutions independently, there seems to be enough evidence to show convergent validation of the two measures used: Likert-type scales and pairwise similarity judgments.

3. Forensic tournaments seem to offer excellent arenas for the collection of data for empirical research, but may pose problems due to small sample sizes.

4. Ss tended to make judgments of contestant's performances based more on variables internal to the contestant (i.e., delivery, intrinsic credibility, and audience adaptation), rather than on variables external to the contestant.

5. Based on the results of the content analysis of the "Free Choice Criteria," generated from the MDS portion of this study, there seems to be evidence in favor of content validity of the pre-chosen Likert-type items. The Likert-type items
were pre-chosen as representative measures of
the credibility of interpreters. Working inde­
pendently of these pre-chosen measures, Ss arrived
at very similar credibility criteria. The free
choice criteria that the Ss arrived at were pri­
marily internal criteria, rather than external
criteria (i.e., delivery, intrinsic credibility,
and audience adaptation criteria).

Summary

This thesis attempted a two-fold approach to the study of
communication. It attempted to identify conceptual and operational
definitions for the interpretation and credibility constructs, two
constructs that have rarely been studied together. Since measure­
ment assumed equal importance with conceptualization, this study
attempted to quantify source credibility variables for the opera­
tionalized situation, the competitive oral interpretation of litera­
ture event offered at forensic tournaments. Two independent data
analysis techniques were employed: SPSS Factor Analysis and MDS
TORSCA 2. Although convergent validity evidence was not one-to-one
in nature between the factor analytic solutions and the MDS solution,
striking similarities were apparent. In addition, the free response
criteria that were generated in conjunction with the MDS portion, when
analyzed for content, provided external support for convergence.

In analyzing results of this study it appeared that the one
dimensional solution for the MDS portion and one emergent factor for
the factor analytic portion seemed to be the most appropriate. This
seems to indicate that the complexity of perceptual differentiation
for the Ss rating contest oral interpreters in this study was very low.
Self-Critique and Implications

This particular approach to the study of oral interpretation through the quantification of source credibility variables has been one of the first of its kind undertaken. This thesis study has undertaken a unique approach to an area formerly considered most often under the rubric of "art." While this study has not tapped all aspects of the aesthetic interpretation experience, it has delved into the construct on both the conceptual and operational levels, and implications can be drawn that affect both levels of consideration.

With hindsight continually proving better than foresight we sometimes forget that when one door closes, another opens. Before the door is finally closed for this thesis, self-critique seem appropriate.

Several methodological ideals were sacrificed for the sake of pragmatism. Pre-testing was valuable for selection of the final items that were employed on the Likert-type scales, as well as for the revision of the instructions to S's on the MDS forms. In addition, the collection of data for the trial runs and the subsequent analyses, enabled the author to become familiar with both data analysis techniques that were employed.

Data collection could have been improved in several areas. Additional scales could have been incorporated into the Likert scales, which would have increased the reliability of the measure. The primary reason that the scales were kept as short as possible was so that their administration would not unduly interfere with the tournaments at which the data were collected. By relying on an availability
sample of oral interpreters at one invitational and one class tournament instead of a random sample of oral interpreters drawn from many tournaments, the generalizations are thus limited.

The comparisons of the factor analysis and the MDS analysis were completed only for the Class Tournament. I would suggest that any future researchers employ an invitational tournament of larger size for replication purposes. The small sample size could have affected the results in some phases of the analysis. In particular, the emergence of the second non-significant factors in Rounds II, II and the Class Tournament could be artifacts produced by the small sample size. A larger sample size may have corrected these errors.

I would encourage future researchers who plan on studying credibility for oral interpreters, to replicate this study with specific controls on the literature variable. (Several tournaments, including the University of Utah, which limit selections and authors for contestants, would be ideal for this type of investigation.) This type of replication could possibly show different credibility factors emerging due to the control of the literature variable.

In addition to controlling the individual variables, I would encourage future researchers to compare rating criteria of the interpretative act that are made by Ss other than interpreters. (Some suggested groups from which to draw Ss could include: debaters, extemporaneous speakers, orators, coaches, and lay judges.) Credibility results may well differ as emphases in criteria are shifted.

Future credibility researchers should be encouraged to further test the external credibility variables to see if stereotypes of oral
interpreters emerge. This is an area that this study attempted to test, but the results were not significant in the external credibility areas. Perhaps alternative measurement tools would have to be employed.

Future researchers should be urged to convergently validate their data, and MDS seems appropriate to use in conjunction with factor analytic studies. However, since the meaning of the MDS solution is external to the methodology, I would urge researchers to analyze the free choice criteria generated in conjunction with the MDS pairwise choices for their content so that an additional external check can be made on their factor analytic solution.

Finally, if oral interpretation of literature is to be retained as a forensic event, a move toward objectification of the criteria for the event should be implemented. In addition, the skills that are taught to students of interpretation in classrooms as well as the skills that are coached for contestants should be objectified so that students and contestants of interpretation can start to become more complex in their differentiations. This objectification of the criteria for oral interpretation of literature feeds back to the process and experience of the interpreters as well as helping to facilitate better adjudication of the event. If the process if objectified, hopefully, students will begin to make more complex judgments based on more differentiated criteria, and that is the essence of learning.
BIBLIOGRAPHY


Ostermeir, Terry E. "Effects of Type and Frequency of Reference Upon Perceived Source Credibility and Attitude Change." Speech Monographs. XXXIV. 1967, 137-144.


**APPENDIX A**

**Scale for Rating Performances**

**Oral Interpretation of Literature**

<table>
<thead>
<tr>
<th>Speaker's #__________</th>
<th>Your #__________</th>
</tr>
</thead>
</table>

I have heard this person in oral interpretation competition before: ____________ yes, ____________ no.

This person has a reputation as a: ___ good interpreter; ___ fair interpreter; ___ bad interpreter; ___ no reputation.

Please circle the number that you think is closest to the person's actual performance.

This person was:

<table>
<thead>
<tr>
<th>Clear</th>
<th>1 2 3 4 5 6 7</th>
<th>Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninteresting</td>
<td>1 2 3 4 5 6 7</td>
<td>Interesting</td>
</tr>
<tr>
<td>Organized</td>
<td>1 2 3 4 5 6 7</td>
<td>Unorganized</td>
</tr>
<tr>
<td>Exciting</td>
<td>1 2 3 4 5 6 7</td>
<td>Boring</td>
</tr>
<tr>
<td>Competent</td>
<td>1 2 3 4 5 6 7</td>
<td>Incompetent</td>
</tr>
<tr>
<td>Experienced</td>
<td>1 2 3 4 5 6 7</td>
<td>Inexperienced</td>
</tr>
</tbody>
</table>

I admire this person's ability in oral interpretation of Literature:

Strongly Agree ____________ Strongly Disagree

I would like to have this person as a personal friend:

Strongly Agree ____________ Strongly Disagree

I would like to interpret literature as this person does:

Strongly Agree ____________ Strongly Disagree

This person makes the literature come alive for me:

Strongly Agree ____________ Strongly Disagree

On a scale of 1-7, I rate this person's performance as:

Superior ____________ Poor

On a scale of 1-7, I rate this person's choice of literature as:

Superior ____________ Poor
ORAL INTERPRETATION OF LITERATURE QUESTIONNAIRE

Round   Section   Speaker's Code#   Your Code#

For each item on this questionnaire, rate your amount of perceived agreement with the statement. (Please circle your choice).

1. This person has a reputation for excellence in oral interpretation.
   Strongly Agree  1 2 3 4 5 6 7

2. This person's delivery was appropriate to his/her literature.
   1 2 3 4 5 6 7

3. On the basis of this round's performance I perceive this person to be a credible interpreter.
   1 2 3 4 5 6 7

4. This person has demonstrated poor thematic development.
   1 2 3 4 5 6 7

5. This person made the literature come alive for me.
   1 2 3 4 5 6 7

6. This person has demonstrated little ability to organize his/her introductions and/or transitions.
   1 2 3 4 5 6 7

7. This person presented his/her literature selections in an order appropriate to his/her thematic development.
   1 2 3 4 5 6 7

8. This person's performance was poorly adapted to the audience.
   1 2 3 4 5 6 7

9. In my judgement, this person is an experienced interpreter.
   1 2 3 4 5 6 7

10. This person's delivery lacked clarity.
    1 2 3 4 5 6 7

11. This person has selected literature which demonstrates poor thematic development.
    1 2 3 4 5 6 7

12. I would like to interpret literature as this person does.
    1 2 3 4 5 6 7
APPENDIX C
SPECIAL QUESTIONNAIRE FOR ALL ELIMINATION ROUND CONTESTANTS AND JUDGES OF ORAL INTERPRETATION OF LITERATURE

In the following items evaluate the degree of similarity between the contestants' credibility as interpreters based on their performances in this round.

First isolate your own personal criteria for determining the similarities in the interpreters' relative credibility.

Based on your own criteria, circle the number for each pair of contestants which best reflects how similarly you perceive those two contestants to be. (For example: If you perceive contestant A-1 and B-2 to be very dissimilar you would circle the following choice:

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<thead>
<tr>
<th>Speaker One (A-1)</th>
<th>Very Different</th>
<th>Very Similar</th>
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<tbody>
<tr>
<td>Speaker Four (B-2)</td>
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Please list briefly the judgemental criteria you employed in making the above similarity judgements:

Please complete the next pages for everyone other than yourself. Judges complete all.