

THE EFFECT OF ORIENTATION INSTRUCTIONS  
USING A TERMINAL VALUE AS  
AN EXTRINSIC MOTIVATOR ON  
LISTENING COMPREHENSION

By

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## CHAPTER I

### THE RESEARCH PROBLEM

#### Introduction

Businesses, industries, and organizations are demanding more effective listening by their members. Much is done to train individuals how to speak, but little is being done to train individuals to send messages which will be comprehended. This study was conducted to expand the knowledge the sender can use to improve the listening comprehension of the audience.

Smeltzer (50) in his concluding remarks of a study presented to the American Business Communication Association, New Orleans, 1981, stated that much work is still needed to determine how to develop high incentives to improve listening comprehension. At the present time, few studies have analyzed the influence a group leader can have toward motivating a group to listen. This current study has been experimentally designed to determine the effect a variable used by the sender can have on the receiver's listening comprehension.

Research was conducted by Sewell (48), to determine the effects of orienting instructions and monetary incentives on listening achievement. His study

considered orienting instructions as an intrinsic motivator--relating to the anticipated levels of interest or boredom in the speech. This present study considered orienting instructions as an extrinsic motivator--as the information presented in the instructions did not directly relate to the content of the message delivered.

Studies have been conducted to determine the effect of extrinsic motivators--such as monetary reward, testing, punishments, and rewards--on listening comprehension. No significant work has been conducted to determine the effect the sender can have on the listening comprehension of the receiver if the following condition is met: receivers are oriented to the concept that the message they will listen to is especially important if they believe a selected value is important. This study used an extrinsic motivator (receiver's orientation to a selected value) and determined its use by the sender to improve listening comprehension. The idea behind this study was that senders of messages can be more effective (listening comprehension may improve) if senders understand the values of the receivers and can give an orientation for the message relative to those values.

Uniquely characteristic of this study was that the tape the experimental group listened to was that of a group discussion. The purpose of using this format opposed to that of a single lecturer is twofold: first, it separates the study from related studies using taped messages; and, secondly, it provides an assimilation that could very well

correspond to an organizational board meeting or discussion. Therefore, the results of the research can be extrapolated to fit a business situation.

### Need for the Study

Evidence of the need for the study may be provided by reviewing (a) current literature related to the need for improved listening comprehension and (b) literature related to studies which have been conducted to provide information on methods a sender could use to improve listening comprehension.

Thousands of dollars are estimated lost each year by businesses due to poor listening. Keefe (25) in 1971 stated:

American managements have spent a billion dollars a year since the middle 1950's in communicating with employees. Most of the effort has brought a sea of words, an avalanche of paper, a babel of noise, and a pitifully small return of the investment (p. 7).

Research conducted by Nicholas and Stevens (39), found that managers and executives spend as much as 63% of their communicating time listening. When financial decisions are based on incomplete information, business suffers. Studies indicate that 75% of spoken information is lost after 48-hour period (25) by most people. Thus, most people operate at an efficiency level of approximately 25% in listening situations (32). Penny (25, p. 10) stated: "The art of effective listening is essential to clear communication, and clear communication is necessary to management success."

Any study providing organizational leaders more concrete methods for improving listening comprehension during group discussions should prove valuable. More work must be done to determine the effect of positive extrinsic motivators on receiver listening comprehension. This study defines a possible positive extrinsic motivator and determines its effect on the listener's comprehension. As listening is the primary activity among the direct types of business communication (53), it is important that research be conducted to help personnel improve listening. Weinrach and Swanda (53, p. 30) recommend: "It is essential for the professional ranks within business communication to spend more time on developing effective listening skills."

The scarcity of research in this area clearly indicates the need for continued study. In 1951, Brown (7) reported that as few as twenty research studies had been completed on listening. In 1968, Duker (11) reported 1332 articles on listening in his Listening Bibliography. The number of doctoral dissertations included in this number is 198. The number of master theses included is 241. An extensive ERIC search provided a total of 1214 citations. Descriptors used in this search were: listening, listening comprehension, listening comprehension test, listening groups, listening habits, and listening skills.

An analysis of this information and a review of Dissertation Abstracts revealed four research studies directly related to this present study. The review of

literature (Chapter II) includes a critical look at each of these studies. Their contributions and their shortcomings will be noted. Shown will be how this study goes beyond research already completed. Not only did this study determine if an orientation can affect listening comprehension, it also identified if a sender could increase the listening comprehension of his or her audience by understanding its values and using the information in the orientation instructions of any given message.

Though there has been much speculation, many proported assumptions, and basic theory developed on what makes a good listener, little real research has been conducted. Even less research has been completed to help the sender of messages know how to improve the listening comprehension of the receiver. Thus, the need for this study.

#### Purpose of the Study

The purpose of the study was to determine the effects of orienting instructions on listening comprehension when:

1. the orientation instructions include a terminal value that the receiver ranked in an order of importance, and
2. the receiver is listening to a group discussion.

If listening comprehension is improved by using orientation instructions which include what the receiver values,

senders could use this information to improve the listening comprehension of their audiences. This information would benefit anyone wishing to communicate more effectively. Business leaders would be challenged to understand the values of their employees; teachers--their students; speakers--their audiences; and directors of boards--their board members.

#### Statement of the Problem

The problem of this study was to determine if an extrinsic motivational factor would improve listening comprehension. The specific extrinsic motivational factor used was the sender's orientation instructions. These instructions included specific information that if the receiver listens he or she would gain insight about a selected terminal value. The importance the receivers placed in the terminal value was compared to their listening comprehension of the message following the instructions. The message in the tape was not intrinsically related to the value in the orientation instructions.

#### Research Question

This research attempts to answer the question: Can a sender of a message design orientation instructions, by including emphasis on a terminal value that the receiver deems important, so the receiver's listening comprehension will be affected?

## Null Hypotheses

The following null hypotheses were tested to determine if orientation instructions can be developed that will improve listening comprehension:

1. There will be no significant difference on listening comprehension (as measured by the Cloze procedure) between those who rank the selected terminal value (salvation) high from those who rank it low after listening to a taped message of a group discussion unrelated to the terminal value selected.
2. There will be no significant difference on listening comprehension (as measured by the Cloze procedure) between those receiving orientation instructions including emphasis on the selected terminal value (salvation) from those who do not receive orientation instructions including emphasis on the selected terminal value (salvation) after listening to a taped message of a group discussion.
3. There will be no significant difference on listening comprehension (as measured by the Cloze procedure) between any combination of the ranking of the selected terminal value (salvation) and the presentation or nonpresentation of orientation instructions including emphasis on the selected terminal value (salvation).



### Alternate Hypotheses

The following alternate hypotheses were tested:

1. There will be significant difference on listening comprehension (as measured by the Cloze procedure) between those who rank the selected terminal value (salvation) high from those who rank it low after listening to a taped message of a group discussion unrelated to the terminal value selected.
2. There will be significant difference on listening comprehension (as measured by the Cloze procedure) between those receiving orientation instructions including emphasis on the selected terminal value (salvation) from those who do not receive orientation instructions including emphasis on the selected terminal value (salvation) after listening to a taped message of a group discussion unrelated to the terminal value selected.
3. There will be significant difference on listening comprehension (as measured by the Cloze procedure) between any combination of the ranking of the selected terminal value (salvation) and the presentation or nonpresentation of orientation instructions including emphasis on the selected terminal value (salvation).

## Delimitations

Many factors seem to affect listening comprehension. This study investigated only one of the possible factors. The factor of orientation instructions used by the sender of the message as it affects listening comprehension was investigated in this study. Orientation instructions used included a terminal value which each student had previously ranked in priority. This ranking allowed the research to identify the importance of the value to the student. The message the students listened to was taped and consisted of a group discussion unrelated to the value used in the orientation instructions.

Therefore, the delimitations of this study include:

1. The possible effects of only one factor on listening comprehension--that being orientation instructions which include reference to a terminal value.
2. The values used in this study were terminal, not instrumental.
3. The tape used was that of a group discussion.
4. The tape was 16 minutes in length.
5. As planned, the tape did not include information about the terminal value that the orientation instructions suggested it would.

## Limitations

Data obtained in this study was limited to the extent that the sample used may not be representative of the total

population. The junior and senior students who were the sample may not be reflective of all junior, senior business communication students. However, each class in the study seemed to be representative of the normal class as determined by the teachers of each class.

Though careful research methodology was used to conduct the experiment, another limitation was the use of intact classes. This should not adversely affect the study since no bias seemed to exist that might be expected to invalidate any generalizations based on the sample.

#### Definitions of Terms

The following terms are defined as they are used in the study:

Cloze Procedure--A procedure used as a diagnostic test of listening comprehension (19). This procedure is further outlined in the discussion of development of test instruments in Chapter III.

Extrinsic--That which does not inherently belong to the thing with which it is connected. This study uses extrinsic orientation instructions. Orientation instructions presented did not relate directly to the taped message. The study determined if an extrinsic motivational factor could improve listening comprehension. Previous studies have used such things as money (48) and test incentives (49) as extrinsic factors. The relative degree of importance an individual placed on the value of salvation

was considered the extrinsic factor in this study. Specifically the message did not include information about the value of salvation, but the orientation instructions stated that it would.

High Ranking--Students who ranked the selected value in the range of 1-6 were considered to have ranked it high.

Instrumental Values--Values which concern desirable modes of conduct. These values are one of the two types of groupings of values Rokeach (45) indicated are most recognized. For comparison, the other major grouping is that called terminal values. For further discussion read terminal values in this section.

Intrinsic--That which inherently belongs. This study used a taped message which included a value discussed in the orientation instruction. Therefore, orientation instructions should not be considered an intrinsic motivational factor.

Listening--Rankin (44), one of the early researchers in listening, defined listening as the ability to understand the spoken language. Rankin related listening to speech as reading is to writing. This definition has been referred to by most researchers in the area of listening; some using it in its entire content, some expanding upon it. Colburn (10, p. 10) presents for us a definition of listening which is representative of many of the definitions used in current literature: "Listening is the act of selectively discriminating among the available aural inputs within any

given environment." This study uses as a basis the above listening definitions plus an operational definition for the research conducted in the study: Listening is the process of comprehending spoken language as measured by the use of the Cloze procedure.

Low Ranking--Students who ranked the selected value in the range of 13-18 were considered to have ranked it low.

Receiver--Subjects listening to a message. Four college classes at Oklahoma State University in Organizational Communication General Administration (GENAD) 3223, Spring, 1981, represented the receivers in this study.

Rokeach Value Survey--A survey developed by Milton Rokeach used to rank the order of importance of terminal and/or instrumental values of an individual. This survey is discussed further in Chapter III in the section, Development of Test Instruments.

Selected Terminal Value--The value having the highest number of students ranking it either first or eighteenth on the terminal value survey. The value was then selected for use in the orientation instructions. The terminal value selected was salvation.

Sender--Source of a message. The sender of the message in this study was the researcher who presented the orientation instructions and the taped message to the four classes.

Terminal Value--Values associated with desirable end-states of existence. The other major grouping of values

according to Rokeach (45) is instrumental values. Terminal values were used in this study because the survey developed for use with terminal values show median reliability to be .87. The median reliability for surveys developed for use with instrumental values was lower, .60 (45).

Value--An enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

#### Assumptions

The following assumptions formed a basis for this study:

1. The Rokeach Terminal Value Survey is a valid instrument for measuring the importance a subject places in a terminal value (45).
2. The Cloze procedure is a valid instrument for measuring listening comprehension (19).
3. Taped presentations are effective tools for scientific research of listening comprehension (17).
4. The results of this study are generalizable to populations comparable to the structure of the sample used in this study. The results may also be extrapolated to the general population, if the sender of the message is aware of the values

of the receiver and designs his/her orientation in the manner used in this research.

### Organization of the Dissertation

With sound experimental research evidence of the effect of motivation upon listening comprehension lacking (11), definite need for study in this area was clear. The introductory chapter of this study has been concerned with the presentation of this need. The importance of the study and the statement of the problem have been shown. The presentation of the hypotheses, the delimitations and limitations have been included. And to provide further clarity, definitions and assumptions have been introduced.

The study is further organized in the following method: Chapter II presents related research which is relevant to this study. Only research directly related to this study was included in this review. The related research is arranged chronologically providing for a systematic view of literature used as a springboard for this study. Chapter III summarizes the procedures used for collecting and treating the data used in this study. Chapter IV presents an analysis of the findings. The concluding chapter, Chapter V, summarizes the study and presents the conclusions and recommendations of the research.

## CHAPTER II

### REVIEW OF RELATED RESEARCH

#### Introduction

Only those studies relevant to this study have been included in this section on related research. Analysis of studies in this section provides understanding of pertinent research directly related and sets the stage for this study. Related research was arranged in chronological order to provide a progressive look at the direction research in this area is taking.

Much research conducted on listening began after World War II (18). Psychological and educational literature examined show one article on listening appearing before 1920; eight articles between 1920 and 1930; twenty articles between 1930 and 1940; and forty-two articles between 1940 and 1947 (37). As indicated in the introductory chapter of this study (page 3) in 1951, Brown (7) reported that as few as twenty research studies had been completed on listening. Duker (11) in 1968 reported 1332 total articles in his Listening Bibliography. The number of doctoral dissertations included in this number was 198 and the number of master theses was 241. An ERIC search conducted in February, 1981, listed a total of 1214 citations.



Major areas of investigation have been:

1. Determining characteristics of the listening process
2. Relating listening to intelligence and reading
3. Determining how rate of listening affects retention
4. Analyzing listening's effectiveness as a learning tool
5. Development of test and measurements used with listening skills.

Separating this study from previous work is the emphasis of this study to determine how a sender might increase the receiver's listening comprehension. More specifically, this study determines how a sender can affect the listening comprehension of the receiver through the use of an extrinsic factor (orientation instructions that reflect not the information in the message but instead a terminal value).

Previous studies have measured the impact of theoretical interest of a receiver upon listening comprehension; i.e., how the listeners expressed interest in a presentation compared to comprehension (24). Studies presented by Gilkenson (16), Edwards (14) and others (3, 33, 41, 38) have not been summarized in this review. The reason for their deletion is they do not treat interest, attitudes, and/or values the receiver holds as extrinsic factors. Instead, they treat the attitude of the receiver as it deals directly with the information in the message.

However, it is interesting to note there is conflicting research indicating whether there is positive correlation between one's interest in a message, content of the message, and listening comprehension. Certainly research is not conclusive.

The related research in this review deals with studies attempting to determine ways to increase listening comprehension through possible methods that could be used by the sender to motivate the receiver. These methods have been divided by the researcher as using either intrinsic or extrinsic factors. The studies using intrinsic factors as indicated in the preceding paragraph have not been included in this review. If a possible motivating factor dealt directly with the content of the message it would be considered intrinsic. If, however, the possible motivating factor did not deal directly with the content of the message it was considered extrinsic. Extrinsic factors which have been studied previously include money (48), test scores (49), rewards and punishments (17), and anxiety (23). This review deals specifically with studies attempting to determine extrinsic motivational factors that affect listening comprehension. Research found no study which dealt with the components of measured terminal values of the receiver, their use in orientation instructions (the extrinsic factor in this case), an unrelated taped message of a group discussion, and listening comprehension.

Chronological Research Review of  
Extrinsic Factors Relative to  
Listening Comprehension

Higgins, 1964

Basic research of the study by Higgins (23) dealt with the two following questions:

1. Do low-anxious students perform as well or better than high-anxious students on standardized tests of listening comprehension?
2. Is the relationship between anxiety and listening linear or curvilinear?

The sample group was composed of 181 college freshmen from Pacific Union College, Angwin, California. All of the sample group were enrolled in a freshman course in communication skills. The Brown-Carlson Listening Comprehension Test and Sequential Test of Educational Progress: Listening were administered to test listening comprehension. The Pittsburgh Revision of the Manifest Anxiety Scale and the Test Anxiety Scale were administered to measure anxiety. The testing program was established to provide data which could be compared and analyzed.

Analysis of Higgins' data indicates that there was not statistically significant difference when comparing low-anxious, high-anxious students, and listening comprehension. Other conclusions were found in this study relating to test reliability, and comparisons with GPA. Since this data did not directly relate to the current study, it is not included.

Reason for inclusion of Higgins' research study in this review of literature was based upon the possible concept that anxiety could be an extrinsic motivating factor to listening comprehension. That is, if a method was found which could increase or decrease anxiety in a subject and if this would affect listening comprehension, a positive step in this area of communication might be taken. However, since Higgins' study indicated very little correlation between listening and anxiety, anxiety should not be viewed as a positive extrinsic motivator to listening comprehension. Further study would certainly be warranted in this area. What Higgins' study does not research is whether anxiety at a specific time would affect listening comprehension at that same time. His tests were administered to determine whether the total personality makeup of the individual was of low or high anxiety in nature. It would be interesting to determine if a person's high or low anxiety at a particular moment affected their listening comprehension to a topic that was not the nature of their anxiety.

Goodyear, 1969

Extrinsic motivational factors of punishment and reward were used by Goodyear (17). Goodyear's research indicated that

Fewer than a half-dozen research studies have actually manipulated either of these factors as an independent variable, and none have attempted to determine the relative effectiveness of the two approaches (p. 4).

His study dealt specifically with the administration of the Brown-Carlson Listening Comprehension Test to five classes of undergraduate students at the University of Texas at Austin. The classes heard two forty-second introductory presentations and identical copies of the taped test. The test was followed by an opinion questionnaire and a debriefing lecture.

This study showed no significant impact of extrinsic situational motivations of punishment or reward on immediate recall scores as measured by the Brown-Carlson Listening Comprehension Test (17, p. 55).

Though previous research substantiates that reward functions as a positive motivational force in learning (17), reward functions did not prove to be a positive motivating force in this study. Listening literature clearly indicates few quantitative research studies using motivation as a factor in listening comprehension (17). Further research should be conducted to see if Goodyear's findings can be supported. Due to the fact that Goodyear's hypothesis that "students receiving strong motivational incentives will score higher on a standardized test than unmotivated students" was not supported, this researcher believes further work on motivation and listening should be conducted.

The extrinsic motivation factor Goodyear used was that points would be either added or deleted from one's semester scores. Goodyear acknowledged that the possible lack of believability and possible hostility of the students could have very well biased the results of his experiment.

Conclusions of Goodyear's research leads this researcher to support the recommendation by Blubaugh (5, p. 17) in his study: "It seems desirable to know if one particular type of stimulus might have a greater effect than another.

Goodyear attempted to identify an extrinsic motivational stimulus of semester grades and found them not to be significantly related to listening comprehension.

#### Sewell, 1972

Sewell's (48) study investigates the effects of two motivational variables (orientation instructions and monetary incentive) on listening comprehension. His research was based upon his study that almost no studies have been concerned with variables affecting listening that can be classified as motivational. Sewell's study points out that research has been conducted that shows that by increasing extrinsic rewards significant positive results in improvement of performance do occur. Again, however, little work has been completed as to the specific extrinsic rewards which can be effectively used to improve listening comprehension.

Results of Sewell's study showed that orientation instructions, when used as an intrinsic motivator, do not significantly affect listening comprehension. The procedure Sewell used to determine this was by using 120 college students, instructing them to listen to a taped presentation of a lecture, giving part of the group instructions that the tape was boring and another part instructions the tape

was interesting, and then administering an achievement test and an opinion questionnaire regarding the tape. The null hypothesis stating that students hearing the interesting instructions would not achieve significantly better on the tape than the students hearing the boring instructions was not rejected. However, those who were told it was interesting rated it more interesting, and those who were told it was boring rated it as more boring.

The hypothesis using money as an extrinsic incentive was also rejected by Sewell. This hypothesis stated:

Subjects receiving an additional monetary incentive for superior performance will score significantly higher on an achievement test over the contents of the speech than subjects not receiving the additional monetary incentive (p. 15).

Though Sewell did not feel the findings of his study should be negated because of the use of volunteer subjects, he did feel it had an impact.

Research on the effects of volunteering to participate in behavioral research suggests that volunteer subjects tend to have a higher level of intelligence, a higher need for approval, and a higher need to seek arousal (pp. 69-70).

It was Sewell's contention that each of these factors probably was related to monetary incentives and orientation instructions,

A further note about Sewell's use of orientation instructions is necessary to clarify its relation to this current study.

There seems to be further similarity to this study and Sewell's because of the use of orientation instructions.

It does, however, need to be noted that the approach to orienting instructions differs. Sewell analyzed his use of orienting instructions regarding interestingness of the message as being an intrinsic motivator. This researcher analyzed orientation instructions including values as being an extrinsic motivator. The difference is explainable. This study's reference to a terminal value in the orienting instructions as measured by the observer places these instructions in the realm of the extrinsic. This is so because the message had no relation to the terminal value discussed. Sewell, however, identifies his orienting instructions as intrinsic because they included no other factors than their direct relationship to the message. This observer questions whether Sewell's orientation instructions were truly intrinsic as they do not seem to be inherently connected to the message. To clarify further, a true intrinsic orientation would be one that stated the message to be boring and in actual scientific measurement it could be measured as boring. It is this researcher's view that if one states a message is going to be boring or interesting and then proceeds to deliver the same message to each group, the orienting instructions then come closer to being extrinsic than intrinsic. This, however, does not affect the current study as there was no attempt to pursue a difference between an extrinsic or intrinsic orientation instruction. The major reason for the previous discussion is to clarify the placement of the



orientation instructions for this study in the realm of the extrinsic. Thus, comparison of research should not be made to this study and Sewell's study of orientation effects, but instead, to this study and Sewell's study of monetary effects as extrinsic incentives for listening comprehension.

Shellen, 1973

This research deals with two primary concerns as they relate to listening. The first concern dealing with how the listener measured the interestingness of the message compared to their listening comprehension. The second concern used orientation instructions with the awareness of a test following a listening exercise as a possible extrinsic motivating factor for listening comprehension. The second concern dealing with the extrinsic factor shall be explored further in this review of research.

Shellen (49) points out that it has been the assumption of researchers that with extrinsic incentives, listeners' motivation would increase so they would attend more closely to a message and score better on a listening comprehension test. His particular study researched whether

subjects listening to a message will score higher on a test over its content if (a) they are instructed prior to the message that they will be tested, and (b) if they are instructed that their test scores will apply toward a course grade (p. 7).

His review of literature supported what has previously been stated in this study. That is, that previous studies researching the effects of extrinsic motivational incentives

are inconclusive, conflicting, and ambiguous.

Three of the studies which claim to have found that extrinsic motivational incentives significantly increased listening achievement scores were confounded by the fact that the listeners who received incentives were also warned that they would be tested whereas the listeners who received no incentives were not warned they would be tested

For this reason these studies were omitted from extensive review in this related research. The goal of Shellen seems to be closely aligned to that of this researcher. Namely, to research an area which might determine a factor proving to be an extrinsic motivational factor to listening comprehension. As Shellen did, this present study was developed so that confounding the effects of awareness versus no awareness of a listening comprehension test would be avoided. The results of Shellen's research proved a significant correlation between tests when used as an extrinsic motivational factor for listening comprehension. However, Shellen's research also indicated that the significance existed only if the student was told the score would count toward his or her grade. The knowledge of an ungraded test showed no statistical significant difference at the .05 level. Shellen's findings compare with earlier research conducted by Knower, Phillips, and Koeppel (28), Bohn and Frandsen (6), Goodyear (17), and lend credibility to this research in attempting to find still further extrinsic factors which might influence listening comprehension.

## Summary

Study of extrinsic motivators as they affect listening comprehension have provided us with little and conflicting information. Though study in the area of listening appears to be increasing, few major research studies have dealt directly with the area of extrinsic motivators. These major studies presented in this review were prepared by Higgins, Goodyear, Sewell, and Shellen. Anxiety, punishment and reward, monetary incentives, and test scores were the extrinsic areas explored by each researcher, respectively. No major research could be found which dealt with the use of orientation instructions as a possible extrinsic motivator for listening comprehension.

As stated earlier, the results of the significance of extrinsic motivators are ambiguous. Higgins (23) in his study with anxiety indicated no significance when comparing low and high anxious students with listening comprehension. Goodyear (17) presents research that disputes claims that reward functions as a motivational device for listening comprehension (used as reward in his study were semester grades). Sewell (48) found that subjects provided with monetary incentives did not score significantly different than subjects without the incentives. Shellen (49) found a significant correlation between test when used as an extrinsic motivator and listening comprehension. As can be seen, the research previously conducted is conflicting.

Are there extrinsic motivators which can affect listening comprehension? This study moves the research one step closer to answering this question as it explores the area of orientation instructions as a possible extrinsic motivator for listening comprehension. The procedures for this research are presented in the following chapter.

## CHAPTER III

### PROCEDURES FOR COLLECTING AND TREATING DATA

#### Introduction

Whether a sender's orientation instructions can affect a receiver's listening comprehension was the purpose of this study. Specifically the orientation instructions were considered a possible extrinsic motivator as they included a selected terminal value which had been previously ranked in degree of importance by the receiver. The hypotheses of the study have been presented in Chapter I.

Presented in the following sections are procedures used to collect and treat the data used to test the hypotheses. These procedures are listed chronologically and include:

1. Selection of the sample
2. Development and administration of the value survey (Appendixes A, B)
3. Development of the taped message (Appendixes C, D)
4. Construction of orientation instructions
5. Administration of the tape message with and without the orientation instructions

6. Evaluation of subjects' listening comprehension using Cloze procedure (Appendixes E, F, G, H)
7. Statistical treatment of the data

#### Selection of the Sample

Subjects selected for the sample were students enrolled in Organizational Communication, Sections 2, 3, 4, 5, Spring, 1981. These sections were selected because the researcher was either the instructor or had periodically taught each section. The researcher taught on a regular basis Section 2. To assure the students were adequately familiar with the researcher, Sections 3, 4, and 5 had been previously exposed to the researcher as a substitute or co-teacher in their sections.

Through random assignment, the students in Sections 2 and 5 served as the control group. Section 2 met at 9:30 a.m. on Mondays, Wednesdays, and Fridays and had 46 students enrolled. Section 5 met at 1:30 p.m. on Mondays, Wednesdays, and Fridays and had 38 students enrolled. The students in Sections 3 and 4 were randomly assigned to the experimental group. Section 3 met at 10:30 a.m. on Mondays, Wednesdays, and Fridays, and had a total of 39 students enrolled. Section 4 met at 2:00 p.m. on Tuesdays and Thursdays and had a total of 46 students enrolled. The combined total of students enrolled in the control group was 84. The combined total of students enrolled in the experimental group was 85.

Of the 169 students enrolled in the four sections used for the experiment, 56 were used in the final statistical analysis. A total of 64 students were eliminated from the initial group for the following reasons:

1. Students who were present to complete the terminal value survey and who were not present to complete the Cloze Procedure listening comprehension test.
2. Students who were present to complete the Cloze Procedure listening comprehension test and who were not present to complete the terminal value survey.
3. Students who were not present to complete the terminal value survey and who were not present to complete the Cloze Procedure listening comprehension test.
4. Students who completed both the terminal value survey and the Cloze Procedure listening comprehension test, but failed to rank either high or low on the selected terminal value. The high and low ranking was predetermined by the researcher's advisory committee. A high ranking was one through six. A low ranking was thirteen through eighteen. Those students who ranked the selected terminal value seven through twelve were eliminated as subjects for inclusion in final analysis.

To obtain equal cell number for use of the analysis of variance (ANOVA) an additional 49 students were eliminated. This was done through a completely randomized method of drawing student numbers from a box. Since 14 was the lowest number of subjects in the lowest cell, it left a total sample of 56, or 14 subjects in each cell. This procedure is explained by Linton and Gallo (31) in their discussion on unequal number of subjects and analysis of variance.

Randomly discarding scores. Since in most designs S's are randomly assigned to conditions, they may also be randomly discarded from conditions. If in a 2 x 2 design you find you have 28, 30, 29, 32 scores in the four cells, you may randomly discard two scores from the cell that has 30, one from the cell with 29, and four from the cell that has 32. That would leave 28 scores per cell. Notice that we say discard randomly. Randomness must be rigidly adhered to. If the S's or scores are discarded on other than random basis, for example, if you don't like these scores, you are introducing a serious bias into your study. Randomly discarding scores is the simplest technique and is feasible whenever your smallest cell number is reasonably large (say 10) (p. 131).

Figure 1 shows the number of students in each cell before the random discarding. Figure 2 shows the number of subjects in each cell after the random discarding was conducted. Each cell used in the analysis of data consisted of 14 subjects. This provided enough subjects for sound statistical treatment of the data (see above). A total of 56 subjects composed the sample used in the ANOVA.



		ORIENTATION	
		With	Without
RANKING OF SALVATION	High	32	43
	Low	16	14

Figure 1. Number of Subjects in Each Cell Before Random Drawing

		ORIENTATION	
		With	Without
RANKING OF SALVATION	High	14	14
	Low	14	14

Figure 2. Number of Subjects in Each Cell After Random Drawing

Development and Administration  
of the Value Survey

The decision to use value orientation as the possible extrinsic motivator was made after reading research conducted by Rokeach (45). After extensive research in the area of human values, Rokeach has made several assumptions. One such assumption is "the consequences of human values will be manifested in virtually all phenomena that social scientists might consider worth investigating and understanding" (p. 46). Still another researcher, Williams (55, p. 10) writes that "value elements are potentially important as variables to be analyzed in all major areas of investigation." Further research in the value area divides values into instrumental and terminal. The survey developed for this study used terminal values because previous test-retest measures indicate reliability to be higher than test-retest conducted on instrumental values (45). Study completed by Rokeach

reveals that the terminal value reliabilities are consistently higher than the instrumental value reliabilities. One possible reason for this finding is that terminal values are learned earlier and thus become stabilized earlier in the development of the individual than do instrumental values (45, p. 34).

A value survey format including the same terminal values used by Rokeach in his study was designed by this researcher. The survey consisted of four pages (see Appendix A). The first page requested demographic information

from the student. To insure the student's anonymity, numbers were drawn by each student and placed on the first page instead of the student's name. The students were asked to maintain a record of the number and told they might be using it again later in the semester. The second page provided instructions to the students for completion of the value survey. The third page provided gummed labels with the values listed in alphabetic order, one on each label. The values included on the survey were:

- A comfortable life (a prosperous life)
- An exciting life (a stimulating, active life)
- A sense of accomplishment (lasting contributions)
- A world at peace (free of war and conflict)
- A world of beauty (beauty of nature and the arts)
- Equality (brotherhood, equal opportunity for all)
- Family security (taking care of loved ones)
- Freedom (independence, free choice)
- Happiness (contentedness)
- Inner harmony (freedom from inner conflict)
- Mature love (sexual and spiritual intimacy)
- National security (protection from attack)
- Pleasure (an enjoyable, leisurely life)
- Salvation (saved, eternal life)
- Self-respect (self-esteem)
- Social recognition (respect, admiration)
- True friendship (close companionship)
- Wisdom (a mature understanding of life)

Page four of the value survey provided area for the gummed labels to be placed. Each area was numbered consecutively from 1-18. The instructions earlier indicated that the gummed label should be placed in the area corresponding to the priority rank of the value to the subject; area 1 indicating the place for the value that was most important and area 18 indicating the location for the value that was least important to the subject.

The value survey format was designed and administered to each class of subjects prior to the day the taped message was presented and the listening comprehension test was given. This survey was used because of its high reliability as reported in Chapter I in definitions (see Terminal Value).

#### Development of the Taped Message

A unique component of this study was the fact the taped message utilized group discussion. This concept was developed because of the numerous occasions business personnel are exposed to situations requiring listening to several individuals as a group. Examples of such occasions include board meetings, informal and formal department meetings, and conference calls. Most research previously conducted using a taped message has been that of a single speaker or lecturer. The attempt here was to provide the listener with as realistic a situation as possible depicting a corporate board or organization meeting.

An assimilation was developed and role players were selected. The situation was adapted from a situation presented by Lewis (29) (see Appendix C) where a group was responsible for deciding whether a new medicine would be marketed. Since the research used the orientation instruction that would precede the taped message in the experimental group as a possible extrinsic motivator, it was important that the taped message did not deal with the selected terminal value of salvation. The role players were selected graduate students from the Department of Speech at Oklahoma State University. All the role players were current teaching assistants and the reason for their selection was because these students had been previously exposed to many various types of speaking situations. They were the most likely candidates for recording a message without fear of the recording situation.

The recording studio at Oklahoma State University Audio-Visual Center was selected as the site for taping the message. A studio technician set up the recording area and facilities for recording. The area within the studio consisted of a conference table with chairs for the researcher as well as for each role player. Placed in front of each role player was a separate microphone which was connected to the reel-to-reel recorder controlled by the center's technician in the studio booth. The preceding procedures were used to provide a clear recording with minimal distortion.

The length of the tape was 16 minutes. Sewell (48) suggested that the length of the taped message be less than thirty minutes.

If subjects were presented with an orienting instruction and then asked to listen to a brief speech, the effect of the orienting instruction might be more evident (p. 73).

Therefore, the group developing the tape was asked to keep their discussion approximately 15 minutes. This allowed for a message with sufficient content, a message that was not too long, and a message that could be used in either a 50- or 75-minute class period.

#### Construction of Orientation Instructions

Orientation instructions used with the experimental subjects were developed as a possible extrinsic motivator. To assure the orientation instructions were extrinsic, they were purposely designed not to include any relationship directly to the content of the taped message. Specifically, the orientation instructions stated the message would relate to the selected terminal value of salvation, when in fact the message did not. The purpose of using orientation instructions such as this was to determine if the sender could affect the listening comprehension of the receiver through the variable of orientation to the message.

The use of the terminal value of salvation was used because it had previously been ranked in degree of

importance by the subjects. Because the receiver's predisposition toward the selected value was known and because the orientation instructions for the experimental group did not relate directly to the taped message, the orientation instructions were considered possible extrinsic motivators for listening comprehension in this research. The orientation instructions for the experimental group which were memorized verbatim by the researcher to present to each experimental group were as follows:

The tape you will be listening to deals with the topic of salvation. Though it may be difficult for some of you to relate the significance of the following tape to salvation, you should pay close attention if you consider this Christian principle important. Realizing that salvation is especially important for some of you, I am sure you will want to listen carefully. Again, you may find the relevance of this tape to this religious concept difficult, but be assured it will provide you valuable information about salvation. You may not discover the significance of the tape until it is completed or until the next class meeting when we discuss it. Those of you who do not value this Christian principle may not find the tape of interest. But I highly encourage all of you who value salvation to be very attentive.

Instructions given to the control subjects prior to presenting the taped message did not include any reference to the selected terminal value of salvation. The instructions to the control group were as follows:

During this period you will be listening to a taped message. I highly encourage all of you to be very attentive.

The orientation instructions in both the experimental group and the control group were followed immediately by the taped message.

Administration of the Taped Message With  
and Without Orientation Instructions

All subjects were presented the taped message in a room designed at OSU for use of audio-visual equipment. Prior to the class meetings when the taped message and listening comprehension test were administered, the students were requested to report to the audio-visual room located in the library at OSU. Typically, this room is used for showing films and the students were accustomed to meeting there for viewing films.

Equipment for presenting the taped message was secured from the audio-visual department at OSU. Included in the equipment was a reel-to-reel player-recorder, an external speaker extension cord, and a 15-inch external speaker. Technicians in the audio-visual laboratory indicated that this equipment would provide for a clear presentation with very limited distortion for all students in the audio-visual room. The equipment was set before the students entered the room to give the best sound for both volume and clarity. After all students had entered the room, instructions with or without the value orientation were presented and the tape was turned on for the students to listen to. When the tape was over, a listening comprehension test was given to each student.



Evaluation of Subjects'  
Listening Comprehension  
Using Cloze Procedure

A Cloze procedure test was designed to test the listening comprehension of the subjects. Though study has not shown many listening researchers to have used this method for measurement of listening comprehension, there is evidence indicating its usefulness for this purpose. Gregory (19) found the Cloze test to be as valid a measure of listening comprehension and more reliable than the Brown-Carlson (which is the most widely used listening test in the United States). Advantages for use of the Cloze procedure with listening comprehension include its brevity and simplicity in administering and scoring.

The listening comprehension test using Cloze procedure (see Appendix E) was designed according to instruction presented by Taylor (15). These instructions indicated that the researcher should randomly select a starting point in a message, and then replace every fifth word with some type of deletion indication. This deletion indicator is usually ten spaces of typed underscoring and was the amount used in this study.

After the Cloze test was developed, it was pretested to determine how long the subjects would need to complete it. A student at OSU who was not in either subject group was administered the tape and asked to complete the

listening comprehension test (see Appendix F). The time for the pretest completion was 37 minutes. This indicated sufficient time would be available in a class period for the subjects to listen to the tape and complete the listening comprehension test.

The test was administered immediately following the presentation of the taped message. Both the control group and the experimental group were told that the test would not affect their semester grade in the class. The score for listening comprehension was determined by counting the number of identically correct responses the subjects had compared to the actual message (see Appendixes G and H). This score was used along with the ranking of the selected terminal value of salvation as variables in the statistical analysis of the research.

#### Statistical Treatment of the Data

The data obtained through the use of the value survey and the Cloze procedure was analyzed by using an analysis of variance (ANOVA)--complete randomized factors (two factors at two levels) (CRF-22). This statistical tool was selected for its strength and flexibility. Linton and Gallo (31, p. 122) state the "analysis of variance is one of the most powerful and flexible statistical tests of significance." The ANOVA CRF-22 allowed the researcher the power to investigate separately and together

the role of the terminal value (high/low salvation) and orientation/no orientation instructions based on that value as it affects listening comprehension.

To conduct the ANOVA CRF-22 used in this study the researcher needed two factors. The first factor, also considered the organismic independent variable, was the student's rank on a terminal value (salvation). Necessary was a value that enough students rated either high or low (high, low defined in Chapter I) to provide a sample large enough to ensure proper use of the ANOVA. The minimum number of students needed for each cell was ten (31). Analysis of the results of the value survey indicated that salvation was a value that could provide this. Salvation appeared to have a high degree of divergence; that is, with many students ranking it either high or low.

The second factor, also considered an independent variable, was the treatment used in this study. Treatment consisted of whether the student received orientation instructions emphasising the terminal value of salvation or whether they did not receive these instructions.

The dependent variable in this study was the student's score on the listening comprehension test (Cloze procedure).

The test of significance ANOVA CRF-22 to test for the differences between the two groups (those receiving orientation instructions and those not receiving orientation instructions) was employed after all the data needed was collected and cell size was equalized (refer to this chapter, Figure 1 and Figure 2).

The ANOVA CRF-22 was conducted to investigate the role of orientation instructions which included emphasis on a terminal value (salvation) on the listening comprehension of subjects who completed a listening comprehension test (Cloze procedure) over a taped message which did not relate to the selected terminal value of salvation. If the F-value obtained equalled or exceeded the tabled F-value needed to indicate a difference at the .05 level of confidence, it was considered significant. Chapter Four presents the major findings using these statistical tools.

#### Summary of Procedures

Students at Oklahoma State University, enrolled in Organizational Communication classes, Spring, 1981, provided the data which was treated in this study. These students were asked to complete a value survey on which they prioritized eighteen terminal values. The subjects were also presented a taped message previously prepared by graduate students from the Department of Speech at Oklahoma State University. One half of the classes used in the experiment were given orientation instructions which emphasized the terminal value of salvation, indicating the tape would directly relate to this value, when in fact it did not. The other one half of the classes were given no orientation instructions before listening to the tape. All students were asked to complete a listening comprehension test (Cloze procedure) immediately

following their listening to the taped message. When all the data had been collected they were analyzed through the use of an ANOVA CRF-22. These findings are reported in the next chapter.

## CHAPTER IV

### FINDINGS

#### Introduction

The major purpose of this research was to determine if a sender of a message could improve the listening comprehension of the receiver by initially providing orientation instructions which related to a terminal value the receiver deemed important. This orientation was considered as an extrinsic motivator as it did not directly relate to the content of the message sent. The research problem, previously presented, asked the questions if the orientation by itself would affect listening comprehension, if the ranking of the value by the receiver affected listening comprehension, and if any combination of presentation/nonpresentation of the orientation instructions with the receiver's high or low ranking of the terminal value (salvation) would affect listening comprehension.

Students enrolled in four General Administration Organizational Communication classes at Oklahoma State University were used as subjects in this study. The findings are based on a total of 56 subjects. All 56 subjects completed a value survey, and completed a Cloze

procedure listening comprehension test after listening to a taped message of a group discussion. One half (28 subjects) of the students were presented orientation instructions related to the terminal value of salvation which they had previously ranked. This orientation indicated that the message would be related to this value, when in fact it did not. The other half (28 subjects) did not receive any orientation instructions before listening to the same taped message. The 56 students were selected from other students involved in the experiment through a randomized drawing for equalization of cell size for use of the statistical tool--ANOVA CRF-22.

This chapter reports the findings of this research in five sections:

1. Analysis of Homogeneity
2. Analysis of Variance CRF-22
3. Analysis of Simple Effects
4. Analysis of Strength of Association
5. Summary of Findings Applied to Hypotheses

#### Analysis of Homogeneity

Though a partial violation of homogeneity is not viewed as critical (27), an F-max test to test homogeneity was conducted because of the observable difference of variance in one cell ( $A_1 B_1$ ) (Table I).

This was conducted because of the assumption for computational results of an ANOVA to be valid that variances in the population are homogeneous (31).

The F-max test uses the following formula:

$$F\text{-max} = \frac{\text{largest of } \kappa \text{ variances}}{\text{smallest of } \kappa \text{ variances}}$$

Computed for this study:

$$F\text{-max} = \frac{370.0929}{24.995} = 14.8067 \text{ (} p < .01; \text{ df} = 4, 13 \text{)}$$

The variances were not homogeneous for the most different ( $a_1b_1/a_2b_2$ ). Variances, though, are not significant for the next most different variances ( $a_1b_1/a_2b_2$ ); ( $F\text{-max} = 1.05$ ,  $p .05$ ,  $df = 2, 14$ ). Analysis indicates F to be robust with a minor violation of homogeneity as evident in one cell.

#### Analysis of Variance--CRF-22

Using the Sigma SPSS computer program, the data were subjected to a CRF-22 ANOVA. The results are presented in Table II.



TABLE I  
SUMMARY OF ANOVA CRF-22

Factor I Salvation (A)	Factor II - Orientation (B)		
	With B <sub>1</sub>	Without B <sub>2</sub>	
High Ranking (A <sub>1</sub> )	$\bar{x} = 84.9286$ $\sigma = 4.9995$ $\sigma^2 = 24.995$ $n = 14$	$\bar{x} = 63.5714$ $\sigma = 18.7564$ $\sigma^2 = 351.8025$ $n = 14$	$\bar{x} = 74.25$ $\sigma = 17.3112$ $n = 28$
Low Ranking (A <sub>2</sub> )	$\bar{x} = 75.7143$ $\sigma = 18.5117$ $\sigma^2 = 342.6830$ $n = 14$	$\bar{x} = 72.3571$ $\sigma = 19.2378$ $\sigma^2 = 370.0929$ $n = 14$	$\bar{x} = 74.0357$ $\sigma = 18.6040$ $n = 28$

$\bar{x} = 80.3214$   
 $\sigma = 14.1081$   
 $n = 28$

$\bar{x} = 67.964$   
 $\sigma = 19.1727$   
 $n = 28$

N = 56

$\bar{X} = 74.1429$   
 $\sigma = 17.8054$

TABLE II  
 SUMMARY OF ANALYSIS OF VARIANCE INDICATING THE EFFECTS OF VALUE RANKING OF  
 SALVATION AND ORIENTATION INSTRUCTIONS ON LISTENING COMPREHENSION

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F
A (Value Ranking)	1	.6428	.6428	.002
B (Orientation)	1	2137.7856	2137.7856	7.848**
AB (Value x Orientation)	1	1134.0000	1134.0000	4.163*
Within	<u>52</u>	<u>14164.4340</u>	272.3928	
TOTAL	55	17436.8630		

\*P<.05

\*\*P<.01

As can be seen from the ANOVA, there was a significant difference for the main effect of orientation ( $p < .01$ ) instruction and a significant difference related to the interaction of value ranking (A) of salvation and orientation instruction (B) ( $p < .05$ ). This disordinal interaction is seen in Figure 3.

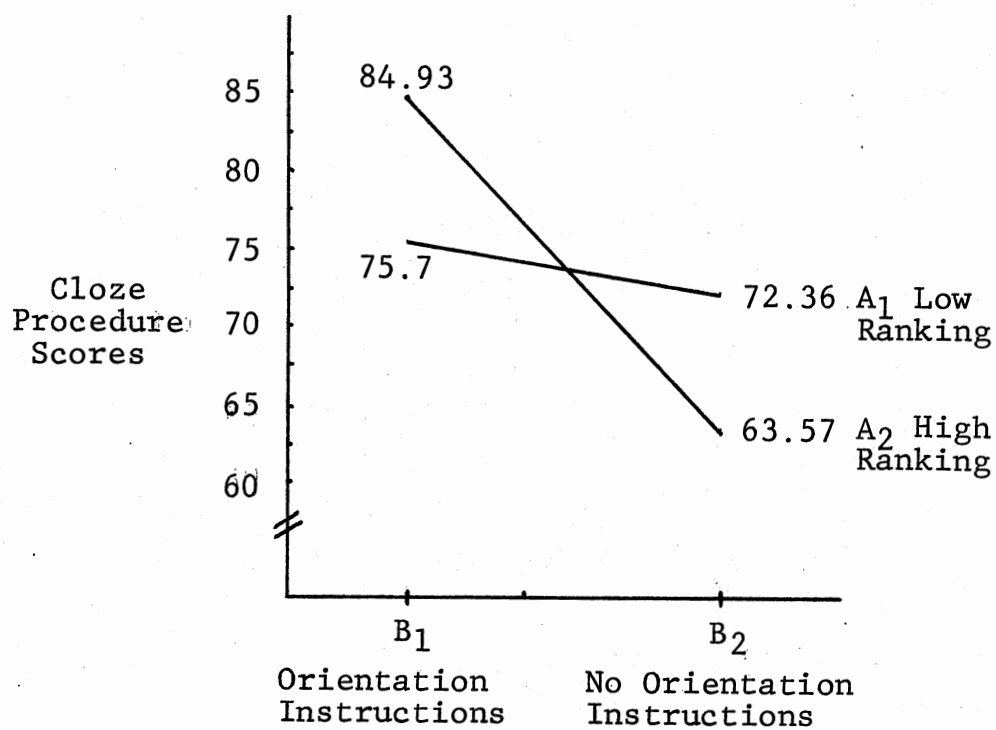


Figure 3. Significant Interaction of Value Ranking of Salvation (A) and Orientation Instructions (B)

### Analysis of Simple Effects

Since the interaction was significant, the interpretation of the main effects was deemphasized and significant differences among the simple effects were explored. This was done because the interaction denotes that there are differential main effects at different levels of the design. The results of this procedure can be seen in Table III.

The results of the simple effects analysis showed that there are significant differences ( $p < .01$ ) for those ranking salvation as a high terminal value when given orientation instructions directly related to this value over those with no orientation. No A posteriori test was performed since only two means were involved.

The significant interaction ( $p < .05$ ) showed differential main effects at different levels of the design. No other simple effects were shown to be significant which would have helped to understand the nature of the AB interaction (see Table III).

### Strength of Association

Though it would be convenient to stop the investigation of the data by only reporting the significant results, the researcher also felt it important to calculate strength of association measures to see the strength of the effects. Since salvation was the only value of

TABLE III

SUMMARY OF ANALYSIS OF VARIANCE INDICATING SIMPLE EFFECTS: COMPARISON OF MAIN EFFECTS AT EACH LEVEL OF EACH EFFECT FOR RANKING OF SALVATION AND ORIENTATION

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F
A	1	.6428	.6428	.0020
A at b <sub>1</sub>	1	594.3214	594.3214	2.1819
A at b <sub>2</sub>	1	540.3214	540.3214	1.9836
B	1	2137.7856	2137.7856	7.8480*
B at a <sub>1</sub>	1	3192.8928	3192.8928	11.7216**
B at a <sub>2</sub>	1	78.8929	78.8929	.2896
AB	1	1134.0000	1134.0000	4.163*
W/cell	<u>52</u>	<u>14164.4340</u>	272.3928	
TOTAL	59	21843.2909		

\*P&lt;.05

\*\*P&lt;.01

A = ranking of salvation as a terminal value  
a<sub>1</sub> = high ranking  
a<sub>2</sub> = low ranking  
B = orientation  
b<sub>1</sub> = orientation instructions speaking directly to salvation  
b<sub>2</sub> = no orientation instructions

concern, the researcher determined if differences are both real (statistically significant) and meaningful (accounting for a large portion of the variance in scores).

To achieve this, omega squared ( $\omega^2$ ) was calculated for the significant main effect of B (orientation) and the A x B interaction (see Table II and Table III). Linton and Gallo (31) recommend the calculation of  $\omega^2$  in all ANOVA studies and state that it is an estimate of the amount of variance that can be accounted for in the population.

For the main effect of B (orientation instructions):

$$\omega^2_B = \frac{SS_B - df_B (MS \text{ Error})}{MS \text{ Error} + SS \text{ Total}} = .1053$$

For the interaction of A x B (value ranking of salvation x orientation instructions):

$$\omega^2_{AB} = \frac{SS_{AB} - df_{AB} (MS \text{ Error})}{MS \text{ Error} + SS \text{ Total}} = .0487$$

Therefore, related to the significant main effect of B (orientation), more than 10% (.1053) of the variance in the dependent variable can be accounted for by the independent variable or orientation instructions. Therefore, the orientation instructions had a moderate experimental effect which was slightly improved ( $\omega^2_B$  at  $A_1 = 13.2\%$ )

when the high value of salvation was isolated from low salvation. The interaction of A with B yielded a  $\omega^2_{AB}$  of just under 5% ( $\omega^2_{AB} = .0487$ ) which though real (statistically significant) is a weak effect.

#### Summary of Findings Applied to Hypotheses

An ANOVA CRF-22 was used to interpret the data gathered in this study. To insure the use of the ANOVA was valid, a test of homogeneity (F-max) was performed. To analyze meaningfulness of any significant difference a strength of association test was performed.

Analysis provides information allowing acceptance or rejection of the null hypothesis. The first null hypothesis presented stated:

1. There will be no significant difference on listening comprehension (as measured by the Cloze procedure) between those who rank the selected terminal value (salvation) high from those who rank it low after listening to a taped message of a group discussion unrelated to the terminal value selected.

The results found that there was not a statistical significant difference between those who ranked the terminal value (salvation) as high or low and listening comprehension. Thus, the first null hypotheses was accepted.

The second null hypothesis presented stated:

2. There will be no significant difference on listening comprehension (as measured by the Cloze procedure) between those receiving orientation instructions including emphasis on the selected terminal value (salvation) from those who do not receive orientation instructions including emphasis on the selected terminal value (salvation) after listening to a taped message of a group discussion unrelated to the terminal value selected.

The summary table (Table II) of the ANOVA CRF-22 reflects significant difference between those receiving orientation instructions and those not receiving orientation instructions at the .05 level of confidence. Thus, the second null hypothesis was rejected.

Further investigation provided data which caused the researcher to reject the third null hypothesis:

3. There will be no significant difference on listening comprehension (as measured by Cloze procedure) between any combination of the ranking of the selected terminal value (salvation) and the presentation or nonpresentation or orientation instructions including emphasis on the selected terminal value (salvation).

The combination where difference was found to be significant at the .05 level of confidence was between those who



ranked salvation high and received or did not receive orientation instructions (Table III). Subjects who ranked salvation high and received orientation instructions scored significantly better than subjects who ranked salvation high and did not receive orientation instructions. No other significant differences were found.

The null hypotheses have either been accepted or rejected by the use of statistical analysis using the ANOVA CRF-22. Chapter V provides a summary for the study, draws conclusions and makes recommendations based upon these findings.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V summarizes this study and presents conclusions and recommendations based upon the findings of the research.

#### Summary

Four areas of discussion are summarized in this section. They include (1) the research problem, (2) related research, (3) procedures used to conduct the research and, (4) findings of the research.

#### The Research Problem

There is definite need in the field of listening for research. This study sought to determine how a sender of a message might improve the listening comprehension of the receiver. Analyzed as a possible extrinsic motivator for listening comprehension was orientation instructions which referenced the terminal value of salvation and not the message of a group discussion the subjects listened to.

The hypotheses tested:

1. the significance of orientation instructions when used as a possible extrinsic factor to listening,

2. the significance how subjects ranked the terminal value of salvation on listening comprehension, and
3. any combination of orientation instructions and the subjects ranking of the terminal value of salvation on listening comprehension.

### Related Research

Previous research on the effect of extrinsic motivators on listening comprehension is limited. There are few studies dealing with possible extrinsic motivators for listening and the results of these studies are conflicting. Three major studies presented for review in this research including extrinsic motivators of anxiety (23), grades (17), and monetary incentives (48), did not find significant differences in listening comprehension between experimental groups. In another study (49), test scores when used as an extrinsic motivator did produce significant results between groups in listening comprehension. It is clear through the review of research more information is needed to determine how senders of messages may improve the listening comprehension of receivers with the use of extrinsic motivators.

### Procedures Used to Conduct Research

Subjects analyzed in the findings were randomly selected from students enrolled at Oklahoma State University, Spring 1981, in four Organizational Communication,

General Administration courses. All subjects completed a value survey to determine their ranking of a selected terminal value. The terminal value of salvation, which many students ranked either high or low, was used in the construction of orientation instructions. Two randomly selected groups of subjects were given orientation instructions with emphasis on the terminal value of salvation preceding listening to a taped message of a group discussion. The orientation instructions presented did not directly relate to the message presented to the groups. The other two groups of subjects did not receive these orientation instructions. All subjects completed a listening comprehension test after listening to the taped message. The subjects' listening comprehension scores were compared with how they ranked the terminal value of salvation and if they did or did not receive the orientation instructions.

#### Summary of Findings

Major findings, using an F-max test, an ANOVA CRF-22, and an omega squared, provided the following results as they apply to the hypotheses of this study:

1. The rank subjects placed on the terminal value of salvation did not significantly affect their listening comprehension.
2. The use of orientation instructions, related to the terminal value of salvation and unrelated to

- the taped message, significantly improved the listening comprehension of the subjects, and
3. The subjects who ranked salvation high and received orientation instructions related to the terminal value of salvation scored significantly better on the listening comprehension test than those who ranked salvation high and did not receive the orientation instructions.

### Conclusions

Findings provided by this research support the following major conclusion, which related to the initial research questions presented in Chapter I (p. 6):

Orientation instructions can be designed by a sender of a message which will improve the listening comprehension of the receiver. The specific design of the orientation instructions tested in this study include reference to the terminal value of salvation and not to the taped message of the group discussion which university students listened to.

This conclusion is supported by the findings which determined:

1. University students who listen to a group discussion will likely listen better if they are first given an orientation to the message which includes reference to a terminal value (salvation in this study); and,

2. University students who rank salvation high and receive orientation instructions to an unrelated taped message are likely to listen better than those who rank salvation high and do not receive orientation instructions.

This conclusion provides evidence of an extrinsic motivator which can be used to improve listening comprehension.

Another conclusion supported by the findings of this study indicates orientation instructions only had a significant affect on listening comprehension when it was directed to the high ranking of the terminal value. For subjects who ranked the value low, orientation instructions had no significant effect. Therefore, listening comprehension of subjects who rank the selected terminal value (salvation) low is not likely to be affected by orientation instructions which include reference to the value and not to the message.

#### Recommendations

Recommendations based on the findings and conclusions of this research are:

1. Senders of a message should be conscious of the values of the receivers as they might be able to improve the listening comprehension of the receiver (activating the organism to listen).

2. Since university students who received orientation instructions (constructed in this study as an extrinsic motivator with reference to salvation) scored significantly better than those who did not receive orientation instructions:
  - a. Other constructs of orientation instructions should be used to determine their effect on listening comprehension; i.e., orientation instructions which reference other terminal values or instrumental values
  - b. Other types of groups should be used to determine if the same effect occurs; i.e., different age groups, other cultures, or specific organizations.
3. Since university students who ranked salvation high and received orientation instructions related to salvation and not the message scored significantly better than those who ranked salvation high and did not receive the orientation instructions, more homogenous groups (such as church groups) should be tested to determine if the strength of association would be greater.
4. Since the presentation/nonpresentation of orientation instructions had no significant effect on subjects who ranked the terminal value (salvation)

low, other extrinsic factors should be explored to see if they affect listening comprehension. Such factors could include: social-economic status, high/low intelligence, additional research on reward and punishment, and stress and anxiety.

5. Since the taped message used in this study was of a group discussion, a study could be conducted to determine if similar results would be produced by a taped message of a single speaker.

Results of this study further emphasize the need for additional research in the area of listening. Specifically, additional research is needed to determine how listening comprehension might be improved. Not until more is actually known concerning how a sender can improve the listening comprehension of the receiver will there be real progress toward providing effective training for senders of messages--whether they be board chairmen, teachers, preachers, salespersons, political leaders, heads of households, employers, employees, or others.



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## APPENDIXES

APPENDIX A

SURVEY USED TO DETERMINE RANKING OF  
SUBJECTS ON TERMINAL VALUES

## VALUE SURVEY

BIRTH DATE \_\_\_\_\_ SEX: MALE \_\_\_\_\_ FEMALE \_\_\_\_\_

CITY AND STATE OF BIRTH \_\_\_\_\_

TIME OF CLASS \_\_\_\_\_ COLLEGE CLASSIFICATION \_\_\_\_\_

NAME OR NUMBER \_\_\_\_\_

(fill in as requested)



## INSTRUCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the following page.

Study the list carefully and pick out the one value which is the most important to you. Peel it off and paste it in the box immediately to the right of the number 1.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind feel free to change your answers. The labels peel off and can be moved from place to place. The end result should truly show how you really feel.

A COMFORTABLE LIFE (a prosperous life)	FAMILY SECURITY (taking care of loved ones)	PLEASURE (an enjoyable, leisurely life)
AN EXCITING LIFE (a stimulating, active life)	FREEDOM (independence for all)	SALVATION (saved, eternal life)
A SENSE OF ACCOMPLISHMENT (lasting contribution)	HAPPINESS (contentedness)	SELF-RESPECT (self-esteem)
A WORLD AT PEACE (free of war and conflict)	INNER HARMONY (freedom from inner conflict)	SOCIAL RECOGNITION (respect, admiration)
A WORLD OF BEAUTY (beauty of nature and the arts)	MATURE LOVE (sexual and spiritual intimacy)	TRUE FRIENDSHIP (close relationship)
EQUALITY (brotherhood, equal opportunity for all)	NATIONAL SECURITY (protection from attack)	WISDOM (a mature understanding of life)

1		10	
2		11	
3		12	
4		13	
5		14	
6		15	
7		16	
8		17	
9		18	

APPENDIX B

RAW DATA COLLECTED FROM  
VALUE SURVEY

CLASS: 9:30 A.M. MWF

Subject Number	Ranking of Terminal Values*																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	16	15	11	13	12	09	02	10	07	04	06	14	18	01	03	17	08	05
2	04	13	10	18	16	15	01	14	07	08	12	17	03	02	05	06	11	09
3	14	12	09	02	10	18	07	03	11	05	13	04	16	15	08	17	06	01
4	15	16	05	07	13	10	06	03	09	02	14	08	18	01	11	17	12	04
5	08	09	07	01	14	04	11	03	06	16	05	17	12	18	02	15	10	13
6	07	15	16	02	09	10	08	01	03	05	12	14	06	17	04	18	11	13
7	12	11	10	16	18	15	08	17	06	02	05	14	09	01	07	13	03	04
8	14	15	13	09	16	07	02	08	10	04	05	12	11	01	17	18	06	03
9	10	08	07	16	09	18	15	04	12	06	17	13	11	02	01	14	05	03
10	10	15	16	04	08	12	02	13	07	01	11	17	18	03	05	14	06	09
11	01	12	09	15	18	14	04	11	03	13	05	17	08	16	06	07	02	10
12	11	10	12	14	17	15	07	13	02	08	03	18	06	01	04	16	09	05
13	09	10	17	07	18	05	01	06	04	14	08	13	16	12	15	11	03	02
14	08	12	10	16	18	15	02	04	05	01	07	17	11	06	03	14	09	13
15	09	17	07	12	15	10	04	11	06	05	03	13	16	01	02	18	08	14
16	06	13	02	17	08	16	01	14	05	11	09	10	12	18	04	15	03	07
17	09	13	03	17	18	15	06	12	02	05	14	16	01	07	04	10	08	11
18	09	12	08	15	14	18	06	17	07	02	05	16	13	01	03	10	04	11
19	17	10	13	06	14	03	01	02	15	08	16	04	18	12	11	07	09	05
20	06	13	12	08	14	17	11	18	02	01	05	16	07	04	09	10	03	15
21	04	12	10	17	11	15	01	13	06	18	08	16	05	03	09	14	07	02
22	04	05	06	09	17	18	03	11	02	01	13	10	13	07	14	16	08	15
23	10	15	05	17	18	12	14	13	06	03	04	16	07	01	02	09	08	11
24	16	18	14	04	10	05	11	09	08	03	07	12	17	01	06	15	13	02
25	16	12	09	01	15	05	02	03	11	07	17	13	18	10	08	04	06	14
26	01	16	02	06	12	11	03	08	05	04	07	10	13	14	15	09	18	17
27	10	17	08	12	16	18	04	03	09	07	11	13	14	06	01	15	02	05
28	06	15	14	10	09	04	03	13	07	12	01	18	08	17	05	11	02	16
29	10	15	13	08	18	07	05	11	01	09	03	12	16	06	14	17	02	04
30	17	09	13	14	07	11	10	04	05	08	03	18	15	01	06	16	02	12
31	11	14	10	15	16	04	13	09	01	17	03	18	05	02	06	07	08	12
32	16	15	13	08	11	03	04	10	14	02	07	18	12	01	09	17	06	05
33	13	14	08	09	10	02	05	01	06	07	11	04	12	16	17	15	03	18
34	03	13	07	16	18	17	01	14	08	04	05	15	12	02	06	09	11	10
35	01	03	16	12	14	18	06	17	04	10	09	13	07	11	05	15	02	08
36	11	07	05	14	17	16	09	08	06	02	12	15	01	18	10	13	03	04
37	09	10	04	15	16	14	06	13	11	07	05	17	18	01	02	12	08	03

\*See page 80.

CLASS: 10:30 A.M. MWF

Subject Number	Ranking of Terminal Values*																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
38	02	10	04	07	18	16	03	06	05	15	01	14	11	13	12	17	08	09
39	09	12	07	17	18	15	14	10	03	02	13	16	11	01	04	08	06	05
40	01	11	13	07	17	18	08	03	02	04	09	12	06	15	14	16	05	10
41	04	16	02	14	03	11	09	13	15	01	07	17	18	10	05	12	08	06
42	08	14	13	16	07	10	05	15	04	02	09	18	12	01	11	17	03	06
43	06	07	10	17	13	18	12	15	03	01	09	16	08	14	02	04	05	11
44	10	14	13	04	18	05	06	16	12	03	02	15	08	01	11	17	07	09
45	02	06	12	18	10	16	04	15	01	09	03	17	08	13	07	11	05	14
46	05	15	06	09	18	04	12	14	08	11	02	16	13	07	03	10	01	17
47	08	05	13	12	18	03	14	02	06	15	10	11	16	01	04	17	09	07
48	11	08	15	06	10	17	03	16	12	02	04	18	14	01	07	13	05	09
49	04	09	14	16	18	15	07	17	11	10	03	12	08	01	05	06	02	13
50	16	13	05	08	17	09	07	11	12	04	02	14	15	01	10	18	06	03
51	17	16	10	05	06	15	03	07	12	09	14	08	18	04	01	13	02	11
52	15	16	07	03	05	02	06	01	11	10	12	18	17	08	14	13	04	09
53	16	12	11	01	09	04	07	02	15	05	10	18	14	17	06	13	08	03
54	15	07	05	04	12	13	03	08	14	11	09	02	16	18	06	10	17	01
55	14	13	18	10	15	09	02	08	11	03	05	16	12	01	06	17	07	04
56	01	09	15	11	17	18	02	16	07	10	05	13	12	04	03	14	06	08
57	05	08	16	09	17	13	10	15	01	07	14	06	04	11	02	12	03	18
58	11	12	01	06	10	05	03	07	08	15	16	18	14	09	04	13	02	17
59	01	07	09	15	16	17	04	14	02	11	06	18	08	03	05	12	10	13
60	12	07	03	14	18	15	10	11	04	06	08	17	13	02	01	16	05	09
61	18	12	13	02	09	11	10	06	07	08	15	14	17	03	05	16	04	01
62	06	15	09	17	12	14	07	02	01	13	03	16	08	10	05	18	04	11
63	10	12	13	15	11	08	03	07	01	05	06	18	02	16	14	17	04	09
64	01	08	09	12	15	05	02	11	13	14	03	18	16	17	04	07	06	10
65	08	11	10	17	16	14	04	15	02	03	12	18	13	01	05	06	07	09
66	14	06	11	17	18	15	08	13	04	05	02	16	09	01	10	12	03	07
67	03	13	06	08	17	11	02	01	10	16	14	07	05	18	12	04	09	15
68	08	13	09	10	14	12	04	02	07	01	03	18	15	16	05	17	06	11

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\*See page 80.

CLASS: 1:30 P.M. MWF

Subject Number	Ranking of Terminal Values*																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
69	14	15	10	16	18	05	02	01	03	04	08	13	17	06	11	07	09	12
70	05	13	07	10	16	12	06	11	14	08	04	09	15	02	01	17	18	03
71	08	17	09	16	15	12	07	11	05	02	04	14	13	18	01	10	03	06
72	16	08	09	14	12	13	02	17	03	05	10	18	15	01	04	07	06	11
73	15	17	16	01	18	03	05	02	06	11	14	04	07	09	12	13	08	09
74	01	17	13	10	16	11	02	05	03	04	07	12	14	08	06	18	09	15
75	17	15	02	06	07	03	09	11	16	12	10	14	18	13	08	04	05	01
76	13	14	11	16	10	18	06	02	08	03	12	09	17	01	05	15	07	04
77	10	15	04	05	14	17	02	01	03	18	08	11	12	13	06	09	07	16
78	04	11	05	16	12	17	03	09	07	06	02	15	10	01	08	13	14	18
79	04	15	07	05	17	18	02	14	01	16	09	13	10	12	03	11	06	08
80	09	14	08	11	17	18	02	04	06	05	07	13	15	01	03	16	10	12
81	11	06	10	14	18	16	12	09	02	13	07	17	08	01	04	15	05	03
82	11	14	15	18	16	13	02	12	04	09	10	08	17	01	03	05	06	07
83	09	10	14	15	17	18	03	13	11	06	02	08	16	01	05	12	07	04
84	17	16	10	13	15	12	09	05	08	04	06	14	18	01	03	11	07	02
86	07	18	08	16	17	13	04	14	09	03	02	15	10	01	06	11	05	12
87	06	11	12	15	14	13	02	16	05	07	04	18	10	01	09	08	03	17
88	04	16	10	14	18	11	03	12	06	15	02	13	05	01	07	09	08	17
89	09	16	08	15	18	17	02	06	05	04	01	14	10	13	07	11	03	12
90	09	10	08	18	17	16	11	06	03	13	05	14	12	01	02	15	04	07
91	13	14	06	12	16	17	03	09	02	04	05	15	10	01	08	18	07	11
92	11	10	05	12	18	13	07	14	09	04	06	17	15	01	02	16	08	03
93	06	04	18	11	13	09	02	10	07	14	03	15	05	01	17	16	08	12
94	08	16	06	13	18	15	04	12	05	09	10	14	11	01	02	07	03	17
95	07	02	11	15	14	16	05	13	04	12	08	17	03	06	09	10	01	18
96	04	17	05	08	16	06	11	02	07	14	10	13	18	01	15	12	09	03
97	11	10	16	02	12	06	05	01	03	17	09	13	08	18	04	14	15	07
98	14	17	16	07	08	06	10	01	02	18	11	15	09	05	03	13	04	12

\*See page 80.

CLASS: 2:00 P.M. TTh

Subject Number	Ranking of Terminal Values*																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
99	18	09	12	13	10	07	17	05	08	04	11	14	16	01	03	15	06	02
100	11	09	05	18	08	17	07	04	15	16	12	14	13	01	03	10	02	06
101	10	11	17	05	12	06	02	13	08	03	16	04	09	01	14	15	18	07
102	02	08	15	13	18	14	03	09	06	17	07	12	10	01	05	16	04	11
103	15	16	11	09	14	12	03	10	05	02	07	08	17	01	13	18	04	06
104	13	05	11	15	18	14	07	10	01	02	03	17	09	08	04	12	06	16
105	11	01	03	14	13	12	02	15	04	06	08	17	10	18	07	16	05	09
106	11	07	09	16	17	15	05	10	03	18	04	14	13	01	02	12	06	08
107	10	11	17	12	14	16	03	18	04	06	02	15	08	01	05	07	09	13
108	09	13	12	01	16	17	04	11	07	03	05	15	14	02	10	08	06	18
109	09	11	18	16	15	05	04	13	01	10	07	17	12	03	14	08	06	02
110	02	09	04	14	16	13	01	12	05	17	10	15	08	11	03	06	07	18
111	06	05	07	17	16	14	04	02	10	13	11	18	15	01	09	08	03	12
112	03	04	15	06	16	05	08	07	01	10	11	09	17	18	02	13	12	14
113	08	07	14	13	17	16	18	11	05	02	10	15	09	01	04	12	06	03
114	14	08	05	13	16	06	11	15	12	01	07	09	17	10	02	18	04	03
115	06	07	18	17	15	11	01	14	08	03	09	16	10	05	02	12	13	04
116	07	04	06	17	18	16	14	15	02	12	03	13	05	01	08	10	09	11
117	02	10	13	15	16	17	07	11	01	03	04	14	05	18	08	12	06	09
118	08	06	16	03	10	09	15	13	04	12	01	18	07	02	11	14	05	17
119	03	06	05	14	17	11	01	09	02	08	12	13	15	18	04	16	07	10
120	05	10	13	16	18	14	04	15	01	03	02	17	11	09	08	12	06	07
121	17	14	08	15	09	13	02	06	07	16	03	12	18	01	10	11	04	05
122	15	08	10	11	14	13	05	12	01	03	04	16	17	02	09	18	07	06
124	05	03	18	09	14	17	07	16	01	02	06	15	04	10	12	11	13	08
125	04	02	10	06	15	16	01	17	03	13	05	11	08	18	09	07	14	12
126	17	14	09	03	13	05	11	04	07	02	15	12	16	01	08	18	10	06
128	06	05	12	15	17	10	13	14	09	02	01	16	08	18	03	07	04	11
129	03	13	08	12	17	18	02	14	10	09	05	06	15	01	04	11	07	16
130	18	04	17	13	12	11	06	10	05	03	02	14	16	01	08	15	07	09
131	01	12	08	14	16	13	02	04	03	06	07	15	09	17	05	10	11	18
132	17	09	15	12	11	13	08	07	04	06	10	14	16	01	03	18	05	02
133	15	14	09	11	16	18	05	10	04	03	02	07	13	01	08	17	12	06
999	10	12	03	14	15	13	05	07	04	16	09	18	17	01	02	11	08	06

\*See page 80.



TERMINAL VALUES ARRANGED IN  
ALPHABETIC ORDER

<u>Value</u>	<u>Notation</u>
A Comfortable Life	A
An Exciting Life	B
A Sense of Accomplishment	C
A World at Peace	D
A World of Beauty	E
Equality	F
Family Security	G
Freedom	H
Happiness	I
Inner Harmony	J
Mature Love	K
National Security	L
Pleasure	M
Salvation	N
Self-Respect	O
Social Recognition	P
True Friendship	Q
Wisdom	R

APPENDIX C

INFORMATION TO OSU GRADUATE SPEECH  
STUDENTS WHO PRODUCED THE  
TAPED MESSAGE

April 6, 1981

Reminder: This Wednesday, April 8, 2:30PM, has been scheduled to produce a tape that will be used as a tool in my dissertation research. We will meet in the OSU Audio Visual Sound Studio, 2nd floor of the library.

You will not need to bring anything with you, except a good voice and a willing heart. Briefly: you will be given a role and participate in a group discussion. This tape will be used later in a test of listening comprehension.

THANK YOU FOR AGREEING TO HELP!

You are a good group and I have enjoyed working with you thus far this semester.

Tim Clipson  
X7683-Hanner 307  
377-9316

IT IS YOUR RESPONSIBILITY TO DECIDE AS A BOARD WHETHER YOU ARE TO MARKET A NEW WEIGHT REDUCING DRUG, BYROTONIN.

The facts are:

Scientist and company doctors believe that the drug developed has several negative aspects and should not be marketed.

Company executives have rejected the doctor's request and are asking for the greenlight on production.

Factors to be considered are:

Pro:

the marketing manager predicts a good investment and high return on the dollar.

the company is facing a financial crisis and without the drug (that thousands of dollars has been spent on) the company could bankrupt

the doctors have been wrong in the past and if we listened to everything they said, we would never have a product to market

risk are necessary and it's a prescription only drug

Con:

Government clearances

Safety

FDA

Lawsuits

APPENDIX D

TRANSCRIPTION OF TAPED MESSAGE

This is the board of a corporation which is producing drugs and it's going to be the responsibility of this board to decide whether or not to market a new weight-reducing drug called Brytonian. Now the facts are that several scientists and company doctors believe that the drug developed has several negative aspects and should not be marketed. Company executives have rejected the doctors' request and are asking for the green light on production. Now let's sit in with the board and see what their decision is going to be.

Lannie: Well, I don't know why we can't just go ahead and market this product. Uh, sure there is some negative aspects about it but there's negative about everything that we do. You know we all drive cars to work every morning and there's a negative aspect that we could have a car wreck. Just all these things that we have to consider, so I just don't understand, you know, why we can't just go ahead and put this on the market and get started.

Robert: We need to get something on it right away because our stockholders getting a little antsy, our dividends were really down last time and we've got a lot invested in this and if we don't get it in the market we stand to lose a lot of money. We might even have to close down a plant or two.

Mike: Yeah, but at the expense of possible side effects that the drug has not been tested extensively yet. We don't know the side effects and you talk about reduction in stockholders interest and all that garbage, then we're in trouble. So. . .

Rick: But without the drug we're in deeper trouble. The prime goal of this organization is to produce and to make money. If we don't make money, if we go into the red, we're finished. There is no company. If we want to have a life as a corporation we're going to have to produce. This is our last chance. We've got to produce this drug; if we don't produce this drug we're through. Now yeah. There's several negative aspects that none of it's been proven. Everything that we've seen on it says yeah, it reduces weight, and yes it reduces weight at a significantly higher level than is now on the market. It's gonna create a big demand, we're going to make money for this corporation. I say, yeah, let's green light it.

Mike: Yeah, but Rick, I understand your capitalistic nature there. I mean but that is true. But if it's not extensive we are biasing some of our results there because we know we are in trouble. And we have not tested this thing extensively. We don't know it for sure. I mean, we're sorta wanting positive results and we're seeing positive results.

Teresa: Do you know how much we are going to be in the red if we go ahead and put a green light on this product and market it and we find out six months later that five people are dead from our drug. What is that FDA going to do from that? How many lawsuits are we going to be in? I mean you have to look at that. This has not been tested extensively, and every drug has to be tested extensively before it's ever marketed.

Robert: It has been tested though.

Teresa: But not extensively.

Rick: Well, how much, when are you going to say extensively? When are you going to say that we've got extensive testing on this drug? Like is it going to be six months? is it going to be a year? is it going to be a year and a half?; see extensively is such an abstract term and when you're looking at it, look at polio, the polio vaccination. If we'd had that extensive research done on it we'd be still in the still doing that extensive research and it still wouldn't be on the market and there'd be millions of people dead from polio.

Robert: Besides, Europe's already manufacturing it already and selling it. We're behind the times. They'll be having it over here in this market before long if we don't take a move.



Rick: Yes, sir.

Mike: Well, have we got all government clearances on this?

Lannie: No.

Mike: I don't think we have yet, do we?

Lannie: No, we do not.

Teresa: We don't have government or several scientists and doctors have not okayed this enough to where I think we would be in a heap lot of trouble from the government.

Robert: But we may not have the clearance yet, but that's just because some people have been holding up on the paper work. We've got the research, we've got the facts, we've got the figures. We just need to present it and then let's present it to them and see if the FDA will disapprove it or not.

Mike: The system is going to burn us if we try to manipulate red tape like that and try to get ahead of it. It'll turn right around and burn us. We can't afford to do that.

Robert: That's what happens in a democratic and a capitalistic society is that you've got to take those that risk every once in a while. You've got to put the money on the line to make money. If you don't put it out there we're going to be in the red, the company's going to be closed, we won't have any use for this anyway.

Tamara: I think to take the risk that we are taking is too large here. Our major emphasis is a little bit selfish. We're wanting to get out of the financial crisis that we are now in. That might be true for a season, we might be out of that financial crisis, but if something, if this drug is dangerous, and people die from it because it has not been you know proven to be safe, then in the long run we're going to be in a lot of financial trouble . . . and we could even go bankrupt because of that.

Robert: We've not had any serious side effects with the testings we have done and we've got something that really could benefit mankind. And, as we said, as we go through the procedures if we just go ahead and see if we can get FDA approval. Maybe if they disapprove at that time, but they haven't yet because they even haven't had a chance to look at it. So let's just go ahead with it.

Rick: Tammy, you're seeing it like on one side of the coin. On one side of the coin we're looking at those possible risks of if we put it out on the market too early. Let's look at the advantages on the other side of the coin. On the other side of the coin we may have a lot of advantages on the reduction of weight that might reduce like the chance of heart attack from obesity, that might reduce a lot of adverse effects over here, so possibly by not putting it out on the market today, some of those people might not benefit. I'm saying, yeah, let's get it out on

the market, okay if we can go ahead and set it up, present it to the FDA. If the FDA doesn't clear it, we're fine. What I'm saying is that we need to get the green light on it and get it into production as much as possible and then if we don't get clearance, then we can go back. But I say right now we need to ---

Teresa: What are we going to do though? We going to put it into production and wait for this green light okay to go ahead and sell it? We're going to lose money if we're going to sit through and say no way you can't sell it. The FDA is not going to let you. We're not going to pass it. What are we going to do then? What are we going to do with this drug?

Rick: But, if the other happens, if they say yeah it's find, Go. We've got the jump on the market. We're going to make a lot of money; our people, our stockholders are going to make a lot of dividends off this.

Mike: Can we afford to take that chance?

Rick: I say yes.

Tamara: I don't think we can afford that risk at this point. Knowing our financial situation right now.

Robert: The point is, the drug rests upon the opinion and the prescription of doctors. These doctors out here, all the MD's and GP's and all these other fellows out there,

they'll know this drug, they'll know what's happening. They've got their little things that tell them what our drugs are doing, the PDR's and all this so it's up to them to prescribe it and if they feel it's good they will, if they don't they won't.

Lannie: No.

Robert: And, so . . .

Tamara: But look at the law suits that, one law suit could totally wipe us out.

Teresa: You know it doesn't go back to the doctor; if the doctor says if that drug was never on the market then I would never had of prescribed it. It goes back to the company that produced the drug. As for the lawsuit and the FDA and all these things, that's why they have the FDA in the first place. Because without them, no drugs could be passed to be put on the market.

Rick: Now look at the triple X drug that we put on the market last year. The doctors had told us in two studies that there was a high risk involved and then we came back after we put it on the market. We went ahead and okayed it and put it on the market. It came back. FDA said no problems, it went through, we made a profit on that drug. I'm saying the same is going to happen here; I'm saying that the doctors could be wrong that there is only one

major study on it, I say the doctors are wrong, I think I think we can make the money just as we did on triple X.

Tamara: Yeah, but with one major study like you said, we can't say that everything is going to turn out okay either.

Robert: We're not dispensing this to the entire population. It's a prescription only drug. And the doctor knows the patient, knows the condition, knows what the drugs do. They can make wise decisions of prescribing this.

Tamara: But I agree with that. That's right. But it doesn't go back to the doctor, it goes back to us and we have to keep that in mind. When we think about putting it on the market.

Rick: There's been no deaths. Not a one in our testing. I'm saying we're not going to be worried with deaths. And the side effects that are there, right now, is that the only one that we have the negative effect is that at twelve o'clock at night they run around in circles. Hey, I'm saying that that is the least thing that we can do. That's a risk we can afford to take. If that is the only risk there, and that's the only negative ---

Teresa: But with one major study we can't see if that's the only side effects that we've got with one major study.

I still think we should wait a while, we should investigate it more, we should test it.

Rick: How long?

Teresa: Well, there's a thing called moral ethics in a company, also. Are you going to put anything out on the market just to make money. No matter who it's going to hurt or what it's going to do to somebody.

Rick: Well, if I can see where it's not going to do any significant harm and I can see where it's going to keep our organization alive and keep it from folding, I say yeah, give it the green light. Let's put in on the market.

Mike: Well, okay, before we do I want to hear your contingency planning. We can't take an assinine approach one way. Let's hear what you guys say about contingency if something goes wrong.

Rick: OK, what I'm saying is, right. What I've mentioned before, what I've mentioned before fabulous Mike was that in the market what we are going to do we want to gear it up, we want to get it into production, we want to get it to the FDA, as soon as possible, so they can start checking it out. If they say no, that's going to be our green light, that's going to be our final green light, we can't push it on the market anyway without their okay. That will be our green light if they okay it, I say boom, let's flood the market.

We've got the money. If they cut us off, then we can drop back five and punt, then we can drop back five and start pushing our other product. But, I say this is our last chance, this is where all our money is.

Lannie: How can it come back to us anyway if the FDA's approved it? I mean you're saying, you know all these deaths are going to be caused, you know we're going to be the blame, not if it goes through the FDA, if the FDA approves it, it would be their mistake as much as ours and we would not be considered at fault.

Teresa: As much as ours; you have to keep that in mind.

Mike: Well, the FDA.

Teresa: As much. We will both be.

Tamara: We're going to suffer from it.

Teresa: We will suffer, if . . .

Robert: If!

Teresa: Yeah, but you're saying the same thing. If the FDA approves it. If there's no side effects, if it . . .

Rick: No, I'm saying if the FDA approves it, let's go. I'm saying that's my only if.

Robert: There are very few drugs that are totally free of side effects. Besides, like I said, you're saying the responsibility doesn't lie with the doctor. It does lie with the doctor. In knowing the chemistry of his patient of this drug and matching them together. Are we going to hold the manufacturers of guns or knives responsible for the people that get killed by the people that use them?

Mike: I think that you have a conflict of interest here Great Barth Breath. You need to figure out who you're representing. Are you representing doctors or are you representing this company?

Robert: Well, don't you think we need to get it out there to them?

Rick: Well, Tuna Lips, I think that getting back to what we're talking about, getting back to the ideal that this company No. 1 let's look at our goals of this company. It's to make money, to make a profit, to keep our company alive, to keep out 2,000 employees happy and making money. If we can't do that, then there's nothing here for us anyway. Now, our marketing manager predicts that we're going to make some money off this. He also said that we're facing financial crisis if we don't. We're through; we're bankrupt if we don't take this chance. I'm saying it's our only chance. I'm saying if the FDA approves it, we'll go full guns, if they cut us off there, that's where we can back off.



Robert: Let's be a little monetary here for a second. If we don't do it and we don't put it out on the market, we're going to suffer a great financial loss and we're going to be short about three positions on this board.

Rick: Those three.

Teresa: Well, I'm sorry, but I just soon not work for a company that's going to be morally wrong anyway.

Rick: Good-bye.

Lannie: Well, what about all the products that are already on the market? Let's say saccharin is on the market just full force and it killed all these little mice and rats. You know.

Robert: Coffee.

Teresa: Well, look at Valium. Valium was the same thing when it started out and look where it is now. It has made all those.

Rick: Are the companies being sued for it though? They are not.

Teresa: They are not.

Lannie: 60 Minutes says they are.

Rick: Oh, 60 Minutes is nothing more than a national inquirer magazine.

Lannie: If you think about it, think about everything in the world that causes cancer. I'm sure that all these products are still on the market.

Rick: The only thing that Brytonian does is make them run around and we've seen that they have a happy and healthy sex appetite after they take this drug.

Tamara: That's the only thing that we know it does.

Rick: That's the only adverse affect.

Lannie: It hasn't been tested enough to know the true safety.

Robert: But it was a six-month test.

Tamara: Are we going to be willing though, as Lannie said, to add on to that list of cancer-causing drugs?

Lannie: But how do we know that it needs to be tested further? How do we know that those products on the market are causing it? I mean, sure they may be in tremendous amounts, but as far as affecting me I drink saccharin every day and diet pops and tea and everything else and I have no side effects. Am I going to keel over tomorrow because of these tests that were run? Saying that saccharin was no good, that's the same thing I'm saying about these. This test ---

Teresa: Well, it's up to you Lannie, though. But that's because it's already on the market, but if we stop it here, people are dumb, U.S. consumer is dumb. Any time they say weight-reducing drug, we've got a weight-reducing drug that's going to predict, that's going to let you lose 12 pounds a week. Naturally they're going to jump to it like that. And whether they have side effects or not, it's not up to them, it's up to us.

Rick: OK, I do have a thing here, a little bit of a compromise. Since it's going to be a prescription drug, since we can we do not, I will admit we have not done total experimentation on this drug. What we can do is we can put a label on the packaging of the drug saying that this has not been totally tested and yes these are the advantages of this drug. Yes, but there could be some side effects.

Teresa: OK. That clears us then.

Robert: Then there's something about what you said. You said the American consumer basically is dumb. Well, maybe they are, but again that is why we're making it a prescription drug. Second of all, don't you realize that overweight and the resulting condition: heart attacks and blood hypertension and diabetis and all these other things. That obesity just by itself is one of the top three or four major killers in this country. And we're trying to help save lives.

Teresa: Yeah, but a doctor is going to prescribe something to his patients to keep them happy a lot of times.

Rick: Well, that's his job.

Robert: Well, the doctor better be out of business then if he's going to misprescribe. That's not our responsibility for misprescription.

Teresa: OK. Well, I think if we could put, like you said, a label stating the side effects and stating the hazardous aspects of this drug that we could go ahead and put a green light on it to get it okayed first with the FDA.

Rick and others: I'll concede to that.

Lannie: Do we have a majority rule here?

Mike: Sure, why not.

Rick: I think we have a consensus.

APPENDIX E

FORM USED TO CONDUCT CLOZE PROCEDURE  
OVER TAPED MESSAGE

Samples of the taped message you just listened to are on the following pages. Every fifth word was left out of the text, and blank spaces were put where the words were taken out.

Your job will be to guess what word was left out of each space and to write that word in that space.

It will help if you remember these things:

1. Write only one word in each blank.
2. Try to fill every blank. Don't be afraid to guess.
3. You may skip hard blanks and come back to them when you have finished.
4. Wrong spelling will not count against you if we can tell what word you meant.
5. Most of the blanks can be answered with ordinary words but a few may be contradictions like.....can't or weren't.

Please place the number you were assigned the day you took the value survey here\_\_\_\_\_.

- \* We're \_\_\_\_\_ dispensing this to the \_\_\_\_\_ population. It's a prescription only \_\_\_\_\_, and the doctors \_\_\_\_\_ the patient, knows the \_\_\_\_\_, knows what the drugs \_\_\_\_\_. They can make wise \_\_\_\_\_ of prescribing this.
- \* But \_\_\_\_\_ agree with that. That's \_\_\_\_\_. But it doesn't go \_\_\_\_\_ to the doctor, it \_\_\_\_\_ back to us and \_\_\_\_\_ have to keep that \_\_\_\_\_ mind. When we think \_\_\_\_\_ putting it on the \_\_\_\_\_.
- \* There's been no deaths. \_\_\_\_\_ a one in our \_\_\_\_\_. I'm saying we're not \_\_\_\_\_ to be worried with \_\_\_\_\_. And the side effect \_\_\_\_\_ are there right now, \_\_\_\_\_ that the only one \_\_\_\_\_ we have, the negative \_\_\_\_\_ is that at twelve \_\_\_\_\_ at night they run \_\_\_\_\_ in circles. Hey, I'm \_\_\_\_\_ that that is the \_\_\_\_\_ thing that we can \_\_\_\_\_. That's a risk we \_\_\_\_\_ afford to take. If \_\_\_\_\_ is the only risk \_\_\_\_\_ and that's the only \_\_\_\_\_.
- \* But with one major \_\_\_\_\_ we can't see if \_\_\_\_\_ the only side effects \_\_\_\_\_ we've got with one \_\_\_\_\_ study. I still think \_\_\_\_\_ should wait awhile, we \_\_\_\_\_ investigate it more, we \_\_\_\_\_ test it.
- \* How long?
- \* \_\_\_\_\_ there's a thing called \_\_\_\_\_ ethics in a company \_\_\_\_\_. Are you going to \_\_\_\_\_ anything out on the \_\_\_\_\_, just to make money; \_\_\_\_\_ matter who it's going \_\_\_\_\_ hurt or what it's \_\_\_\_\_ to do to somebody.

- \* We \_\_\_\_\_ to get something on \_\_\_\_\_ right away because our \_\_\_\_\_ getting a little antsy. \_\_\_\_\_ dividends were really down \_\_\_\_\_ time and we've got \_\_\_\_\_ lot invested in this \_\_\_\_\_ if we don't get \_\_\_\_\_ in the market we \_\_\_\_\_ to lose a lot \_\_\_\_\_ money. We might even \_\_\_\_\_ to close down a \_\_\_\_\_ or two.
- \* Yeah, but \_\_\_\_\_ the expense of possible \_\_\_\_\_ effects that the drug \_\_\_\_\_ not been tested extensively \_\_\_\_\_. We don't know the \_\_\_\_\_ effects and you talk \_\_\_\_\_ reduction in stockholders interest \_\_\_\_\_ all that garbage. Then \_\_\_\_\_ in trouble.
- \* But without \_\_\_\_\_ drug we're in deeper \_\_\_\_\_, The prime goal of \_\_\_\_\_ organization is to produce \_\_\_\_\_ to make money. If \_\_\_\_\_ don't make money, if \_\_\_\_\_ go into the red, \_\_\_\_\_ finished. There is no \_\_\_\_\_. If we want to \_\_\_\_\_ a life as a \_\_\_\_\_ we're going to have \_\_\_\_\_ produce. This is our \_\_\_\_\_ chance. We've got to \_\_\_\_\_ this drug. If we \_\_\_\_\_ produce this drug, we're \_\_\_\_\_. Now yeah, there's several \_\_\_\_\_ aspects, but none of \_\_\_\_\_ been proven. Everything that \_\_\_\_\_, that I've seen on \_\_\_\_\_ says yeah it reduces \_\_\_\_\_, and yes it reduces \_\_\_\_\_ at a significantly higher \_\_\_\_\_ than is now on \_\_\_\_\_ market. It's gonna create \_\_\_\_\_ big demand. We're going \_\_\_\_\_ make money for this \_\_\_\_\_. I say yeah, let's \_\_\_\_\_ light it.



- \*            But            it was a six            test.
- \* Are we going            be willing though as            said to add on            to that list of cancer            drugs.
- \* But how do            know that it needs            be tested further. How            we know that those            on the market are            it. I mean, sure            may be in tremendous           , but as far as            me, I drink saccharin            and diet pops and            and everything else and            have no side effects.            I going to keel            tomorrow because of these            that were run, saying            saccharin was no good?            the same thing I'm            about these.  
This test
- \*            it's up to you            though. But that's because            already on the market.            if we stop it           , people are dumb, U.S.            is dumb. Anytime they            weight reducing drug, we've            a weight reducing drug            going to predict, that's            to let you lose            pounds a week. Naturally            going to jump to            like that. And whether            have side effects or            it's not up to           , it's up to us.
- \*           , I do have a            here, a little bit            a compromise, since it            going to be a            drug, since I will            we have not done            experimentation on this drug.            we can do, is            can put a label            the packaging of the            saying that this has            been totally tested and           , these are the advantages            this drug. Yes, but            could be some side effects.

APPENDIX F

COPY OF PRETEST OF CLOZE PROCEDURE  
TO DETERMINE TIME FOR COMPLETION

Samples of the taped message you just listened to are on the following pages. Every fifth word was left out of the text, and blank spaces were put where the words were taken out.

Your job will be to guess what word was left out of each space and to write that word in that space.

It will help if you remember these things:

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2. Try to fill every blank. Don't be afraid to guess.
3. You may skip hard blanks and come back to them when you have finished.
4. Wrong spelling will not count against you if we can tell what word you meant.
5. Most of the blanks can be answered with ordinary words but a few may be contradictions like.....can't or weren't.

Please place the number you were assigned the day you took the value survey here 000.

37 min,

- \* We need to get something on this right away because our investors getting a little antsy. Our dividends were really down this time and we've got a lot invested in this drug if we don't get it in the market we stand to lose a lot of money. We might even have to close down a plant or two.
- \* Yeah, but consider the expense of possible side effects that the drug that's not been tested extensively though. We don't know the side effects and you talk about reduction in stockholders interest and all that garbage. Then were in trouble.
- \* But without the drug we're in deeper trouble. The prime goal of this organization is to produce products to make money. If we don't make money, if we go into the red, were finished. There is no choice. If we want to maintain a life as a corporation we're going to have to produce. This is our last chance. We've got to market this drug. If we don't produce this drug, we're finished. Now yeah, there's several negative aspects, but none of its been proven. Everything that negative, that I've seen on it says yeah it reduces weight, and yes it reduces weight at a significantly higher level than is now on the market. It's gonna create a big demand. We're going to make money for this product. I say yeah, let's go light it.

- \* We're not dispensing this to the general population. It's a prescription only drug, and the doctors knows the patient, knows the drug, knows what the drugs affects. They can make wise decisions of prescribing this.
- \* But we agree with that. That's right. But it doesn't go back to the doctor, it goes back to us and we have to keep that that mind. When we think of putting it on the market.
- \* There's been no deaths. Not a one in our tests. I'm saying we're not needed to be worried with that. And the side effect that are there right now, well that the only one that we have, the negative one is that at twelve o'clock at night they run around in circles. Hey, I'm saying that that is the only thing that we can see. That's a risk we can afford to take. If this is the only risk around and that's the only problem.
- \* But with one major experiment we can't see if they're the only side effects and we've got with one major study. I still think we should wait awhile, we need investigate it more, we need test it.
- \* How long?
- \* And there's a thing called Moral ethics in a company board. Are you going to put anything out on the market, just to make money; no matter who it's going to hurt or what it's going to do to somebody.

- \* But it was a six months test.
- \* Are we going to be willing though as she said to add on more to that list of cancer causing drugs.
- \* But how do we know that it needs to be tested further. How do we know that those drugs on the market are causing it. I mean, sure they may be in tremendous amounts, but as far as take me, I drink saccharin everyday and diet pops and sweetener and everything else and I have no side effects. Am I going to keel over tomorrow because of these tests that were run, saying that saccharin was no good? Isn't the same thing I'm talking about these. This test
- \* But it's up to you now though. But that's because they're already on the market. And if we stop it now, people are dumb, U.S.; redtape is dumb. Anytime they want weight reducing drug, we've got a weight reducing drug we're going to predict, that's going to let you lose 12 pounds a week. Naturally they're going to jump to stuff like that. And whether if they have side effects or not it's not up to them, it's up to us.
- \* Well, I do have a suggestion here, a little bit of a compromise, since it is going to be a prescription drug, since I will admit we have not done extensive experimentation on this drug. What we can do, is we can put a label on the packaging of the drug saying that this has not been totally tested and evaluated, these are the advantages of this drug. Yes, but there could be some side effects.

APPENDIX G

CORRECT RESPONSES FOR CLOZE PROCEDURE

Samples of the taped message you just listened to are on the following pages. Every fifth word was left out of the text, and blank spaces were put where the words were taken out.

Your job will be to guess what word was left out of each space and to write that word in that space.

It will help if you remember these things:

1. Write only one word in each blank.
2. Try to fill every blank. Don't be afraid to guess.
3. You may skip hard blanks and come back to them when you have finished.
4. Wrong spelling will not count against you if we can tell what word you meant.
5. Most of the blanks can be answered with ordinary words but a few may be contradictions like.....can't or weren't.

Please place the number you were assigned the day you took the value survey here \_\_\_\_\_.



- \* We're not dispensing this to the entire population. It's a prescription only drug, and the doctors know the patient, knows the condition, knows what the drugs do. They can make wise decisions of prescribing this.
- \* But I agree with that. That's right. But it doesn't go back to the doctor, it goes back to us and we have to keep that in mind. When we think about putting it on the market.
- \* There's been no deaths. Not a one in our testing I'm saying we're not going to be worried with deaths. And the side effect that are there right now, is that the only one that we have, the negative effect is that at twelve o'clock at night they run around in circles. Hey, I'm saying that that is the least thing that we can do. That's a risk we can afford to take. If that is the only risk there and that's the only negative.
- \* But with one major study we can't see if that's the only side effects that we've got with one major study. I still think we should wait awhile, we should investigate it more, we should test it.
- \* How long?
- \* Well there's a thing called moral ethics in a company also. Are you going to put anything out on the market, just to make money; No matter who it's going to hurt or what it's going to do to somebody.

- \* We need to get something on it right away because our stockholders getting a little antsy. Our dividends were really down last time and we've got a lot invested in this and if we don't get it in the market we stand to lose a lot of money. We might even have to close down a plant or two.
- \* Yeah, but at the expense of possible side effects that the drug has not been tested extensively yet. We don't know the side effects and you talk about reduction in stockholders interest and all that garbage. Then we're in trouble.
- \* But without the drug we're in deeper trouble. The prime goal of this organization is to produce and to make money. If we don't make money, if we go into the red, we're finished. There is no company. If we want to have a life as a corporation we're going to have to produce. This is our last chance. We've got to produce this drug. If we don't produce this drug, we're through. Now yeah, there's several negative aspects, but none of it's been proven. Everything that we, that I've seen on it says yeah it reduces weight, and yes it reduces weight at a significantly higher level than is now on the market. It's gonna create a big demand. We're going to make money for this corporation. I say yeah, let's green light it.

- \* But it was a six month test.
- \* Are we going to be willing though as Lannie said to add on to to that list of cancer causing drugs.
- \* But how do we know that it needs to be tested further. How do we know that those products on the market are causing it. I mean, sure they may be in tremendous amounts, but as far as affecting me, I drink saccharin everyday and diet pops and tea and everything else and I have no side effects. Am I going to keel over tomorrow because of these tests that were run, saying that saccharin was no good? That's the same thing I'm saying about these. This test
- \* Well it's up to you Lannie though. But that's because it's already on the market. But if we stop it here, people are dumb, U.S. consumer is dumb. Anytime they say weight reducing drug, we've got a weight reducing drug that's going to predict, that's going to let you lose twelve pounds a week. Naturally they're going to jump to it like that. And whether they have side effects or not it's not up to them, it's up to us.
- \* Okay, I do have a thing here, a little bit of a compromise, since it is going to be a prescription drug, since I will admit we have not done total experimentation on this drug. What we can do, is we can put a label on the packaging of the drug saying that this has not been totally tested and yes, these are the advantages of this drug. Yes, but there could be some side effects.

APPENDIX H

RAW SCORES ON COMPLETED  
CLOZE PROCEDURES

SCORES ON CLOZE PROCEDURE FOR  
SUBJECTS WITH ORIENTATION

Subject Number	Score on Cloze Procedure	Rank on Value of Salvation
38	84	13
39	65	01
40	88	15
41	76	10
43	85	14
44	92	01
45	90	13
46	79	07
47	85	01
48	70	01
49	90	01
50	88	01
52	86	08
54	70	18
55	79	01
56	80	04
57	85	11
58	74	09
59	78	03
60	88	02
61	87	03
62	83	10
63	88	16
64	98	17
66	70	01
67	92	18
999	86	01
99	86	01
100	67	01
101	74	01
102	80	01
103	90	01
105	84	18
106	75	01
107	84	01
111	65	01
112	46	18
113	71	01
114	97	10
115	41	05
116	82	01
117	83	18
118	82	02
119	80	18

SCORES ON CLOZE PROCEDURE FOR  
SUBJECTS WITH ORIENTATION

(Continued)

Subject Number	Score on Cloze Procedure	Rank on Value of Salvation
120	66	09
121	80	01
123	42	17
124	82	10
125	83	18
126	89	01
127	72	05
128	75	18
129	86	01
130	70	01
131	44	17
132	80	01
133	83	01
104	85	08

SCORES ON CLOZE PROCEDURE FOR  
SUBJECTS WITHOUT ORIENTATION

Subject Number	Score on Cloze Procedure	Rank on Value of Salvation
01	42	01
02	83	02
03	87	15
04	70	01
05	81	18
06	73	17
07	51	01
08	104	01
09	96	02
10	54	03
11	84	16
12	69	01
14	94	06
15	94	01
16	80	18
18	97	01
19	60	12
20	81	04
21	41	03
22	90	07
23	96	01
24	100	01
25	62	10
26	78	14
27	89	06
28	98	17
29	78	06
30	81	01
31	71	02
32	96	01
33	42	16
34	85	02
35	79	11
36	81	18
37	93	01
69	52	06
70	67	02
71	87	18
72	53	01
73	19	10
74	93	08
75	47	13

SCORES ON CLOZE PROCEDURE FOR  
SUBJECTS WITHOUT ORIENTATION

(Continued)

Subject Number	Score on Cloze Procedure	Rank on Value of Salvation
76	88	01
77	53	13
78	62	01
79	81	12
80	86	01
81	81	01
82	43	01
83	82	01
84	68	01
86	99	01
87	87	01
88	102	01
89	85	13
90	92	01
91	91	01
92	83	01
93	78	01
94	65	01
95	63	06
96	45	01
97	37	18
98	36	05



APPENDIX I

RAW SCORES USED IN ANOVA  
AFTER RANDOM DRAWING  
WAS COMPLETED

## HIGH RANKING WITH ORIENTATION

Subject Number	Score on Cloze Procedure
099	86
103	90
106	75
116	82
126	89
129	86
133	83
44	92
47	85
49	90
55	79
59	78
60	88
999	86

## LOW RANKING WITH ORIENTATION

Subject Number	Score on Cloze Procedure
105	84
112	46
117	83
119	80
123	42
125	83
128	75
131	44
40	88
43	85
45	90
54	70
64	98
67	92

## HIGH RANKING WITHOUT ORIENTATION

Subject Number	Score on Cloze Procedure
01	42
07	51
10	54
15	94
21	41
30	81
34	85
70	67
72	53
78	62
84	68
91	91
94	65
98	36

## LOW RANKING WITHOUT ORIENTATION

Subject Number	Score on Cloze Procedure
03	87
05	81
06	73
11	84
16	80
26	78
28	98
33	42
36	81
71	87
75	47
77	53
89	85
97	37

2  
VITA

Timothy Wayne Clipson

Candidate for the Degree of

Doctor of Education

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A TERMINAL VALUE AS AN EXTRINSIC MOTIVATOR  
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