

AN ANALYSIS OF A RADIO PROGRAM USED BY THE PONCA
CITY, OKLAHOMA, BRANCH OF CONTINENTAL
OIL COMPANY AS AN EMPLOYEE AND
PUBLIC RELATIONS TOOL

by 680

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CHAPTER 1

INTRODUCTION

Communication managers are constantly seeking improved methods of communicating with employees. In recent years radio and television have become prominent tools used to disseminate company information to employees.

Many plant managers buy fifteen minutes of radio time to broadcast company information while their workers are driving to work.¹ "Scores of plants . . . use local radio stations in much the same manner that the local newspaper is used to promote community and employee good will."²

Sol Taishoff, editor and publisher of Broadcasting magazine, indicated that "use of radio stations--even television stations--for employee relations is a rather widespread practice, particularly in communities where one large company may dominate employment." The format is usually one of a company-information program or of a company talent program.³

.Although many companies used radio and television as

¹Willard V. Merrihue, Managing by Communication (New York: McGraw-Hill, 1960), p. 73.

²Glenn Griswold and Denny Griswold, Your Public Relations (New York: Funk & Wagnalls Company, 1948), p. 160.

³Letter from Sol Taishoff, editor and publisher of Broadcasting magazine, July 5, 1968.

employee information tools, no actual number of companies utilizing such means could be established for this study. Taishoff estimated the total number of companies using radio exceeds several hundred.⁴

In an extensive study of forty companies, Raymond W. Peters found that nine per cent of the companies surveyed broadcast programs designed especially for employees over local radio stations within the plant community.⁵

Published studies concerning actual programs were limited. In the author's search for historical background for such a study, information directly concerned with radio as an information dissemination tool for employees was found to be very limited. The majority of the background information for the study was found in the reports of Willard V. Merrihue, Glenn Griswold and Denny Griswold, Raymond W. Peters, A. R. Heron, Robert Newcomb and Marg Sammons, and Joseph M. Docher.

Other studies concerning laboratory research related to radio and television as information dissemination tools were found. Studies in sociology, psychology, and mass communication provided background and understanding of related areas. Evidence of communication's effect on group effort was found in reports of experimental laboratory studies.⁶ The relation of

⁴Ibid.

⁵Raymond W. Peters, Communication Within Industry (New York: Harper & Brothers, 1950), p. 95.

⁶Alex Bavelas and Dermot Barrett, "An Experimental Approach to Organizational Communication," Personnel, (March, 1951), pp. 366-371.

these areas to this study is examined in the Selected Relevant Literature section of this presentation.

The lack of printed material in the area caused the author to question the amount of research in the area. Harry B. Funk and Robert C. Becker reported that without development of tests and evaluation of communication programs, "it is probable that waste and ineffectiveness will continue to characterize communication programs in business and industry."⁷

Doohar emphasized the need for communication research and improvement when he observed that four-fifths of the working time is spent communicating.⁸ It is perhaps the highest, most exacting skill of management he observed, but the most neglected.⁹

Herbert A. Simon in speaking of communication administrators' functions, said the next steps in research must be the development of adequate case studies and techniques for improvement.¹⁰

Although Bernard Berelson proclaimed communications research to be in a "withering" state, he saw seven "current lines" which may develop into the major focus. One line he terms the "practical affairs" line which is defined as dealing

⁷Merrihue, op. cit., p. 226.

⁸M. Joseph Doohar, ed., Effective Communications on the Job (New York: American Management Association, 1956), p. 125.

⁹Ibid., p. 15.

¹⁰Herbert A. Simon, Administrative Behavior: A Study of Decision-Making Processes in Administration Organization (New York: The Free Press, 1966), p. 247.

with practical problems to which the communications discipline can contribute answers.¹¹

Wilbur Schramm in responding to Berelson's main theme of withering communications research said, "I find it an extraordinarily vital field at the moment."¹² The author hopes this study can contribute to the field of communications by dealing with the practical problem of employee communications.

Proposal for Study

This study analyzed "Conoco Time," a company-information program sponsored by the Ponca City, Oklahoma, branch of Continental Oil Company. The daily program was broadcast from 6:45 A.M. to 7:00 A.M. on Monday through Friday over WBBZ, the only AM radio station in Ponca City.

The study analyzed as its primary investigation the employee listening audience of "Conoco Time," the type of information desired, and the program's ranking among all employee informational tools, printed or oral. As a secondary, but inherent, part of the study the author analyzed the listening audience made up on Ponca City residents who were not Continental Oil Company employees.

This appeared to be inherent in the study because the program was broadcast over a local station and not exclusively to employees. Although "Conoco Time" was provided for

¹¹Bernard Berelson, "The State of Communication Research," The Public Opinion Quarterly, XXIII (Spring, 1959), pp. 1-6.

¹²Wilbur L. Schramm, "The State of Communication Research," The Public Opinion Quarterly, XXIII (Spring, 1959), P. 9.

employees, it was assumed Ponca City residents listened to the program and had an interest in Continental Oil because it was the largest industry of the study. If the study did not take into account the effect the program had on the residents, it would have been isolating employee relations from the total company, which cannot be done in modern business.¹³

When the study of the radio program was initiated, the Supervisor of Employee Relations for the Ponca City offices of Continental Oil Company indicated that no formal research had been done by the company in the area and that the program was started without formal preliminary testing or surveying concerned with the need for such a program or the informational content desired by the employees. He further indicated that no studies within the industry or communications field were to his knowledge available.¹⁴

The owner and manager of the Ponca City radio station considered the program aired during prime time as he considered six to eight in the morning as "drive time." The radio manager agreed with the information from the Oklahoma Broadcasting Association that no other station in the State of Oklahoma had a program with the similar purpose, objective, or content.

The radio station did not conduct scientific surveys, but did have an annual request for listeners to send criticisms

¹³Otto Lerbinger and Albert J. Sullivan, eds., Information, Influence, and Communication: A Reader in Public Relations (New York: Basic Books, Inc., 1965), p. 23.

¹⁴Lynn Smith, Supervisor of Employee Relations for Continental Oil Company, (Ponca City, Oklahoma), interview held May 15, 1968.

of programming to the station. The manager indicated the response to such a request usually produced approximately 300 responses with suggestions for the station. The responses concerned with "Conoco Time" had been only favorable.¹⁵

Since no research had been done concerning the program, the company did not know if the program was reaching the intended audience and if the objectives of the program were being fulfilled. The employee relations supervisor had contemplated a program in the afternoon for the refinery employees who did not have access to the program because the refinery work shifts changed at the time of the broadcast. Immediately before the study began, the refinery hours were changed which enabled all employees, except the ones working in the areas where radios were restricted for safety reasons, to have access to the program.

The supervisor indicated that he expected to find most employees were not regular listeners of the program. He thought communication in the company had improved laterally since the program was initiated, but because of recent labor union movements among the white collar workers, he doubted if horizontal communication improvement had occurred.

The relationship of the program and the labor union movement or the relationship of the communication tools and systems and the labor union movement was not considered in this presentation, although it in itself would have made an interesting

¹⁵Manager, WBBZ radio station, (Ponca City, Oklahoma), interview held May 15, 1968.

and enlightening study in the area of employee communication.

The author will mention that labor union news was broadcast on "Conoco Time," but only if the information has been approved for announcement by the employee relations supervisor. "This eliminates falsified or inaccurate information being sent into the station."¹⁶ The station was authorized to broadcast other news or announcements telephoned into the station by persons other than the supervisor.

The study was designed to determine:

1. If a dependency existed between the frequency of listening to "Conoco Time" and the subgroups designated by employment capacity, age, sex, educational level, length of employment with the company, and whether or not a family or household member were employed by the company.

2. If a significant relationship existed between the type of information desired on "Conoco Time" and the subgroups designated by employment capacity, age, sex, education, length of time employed with the company, and whether or not another family or household member were employed by the company.

3. If a significant relationship existed between the informational tools desired and the subgroups designated by employment capacity, age, sex, educational level, length of time employed with the company, and whether or not another family or household member were employed by the company.

4. If a significant relationship existed between the

¹⁶ Lynn Smith, interview.

radio listening habits of the employees and the "Conoco Time" listening habits of the employees.

5. If a significant relationship existed between the frequency of listening to "Conoco Time" and the subgroups designated by occupation, age, sex, education, and length of residency.

Purpose of the Study

The purpose of this study was to try to determine if "Conoco Time" were a major source used by employees to obtain company information and which employee subgroups (according to employment capacity, age, sex, educational level, and whether or not a family or household member were employed by Conoco) made the most use of "Conoco Time." Also, the program content was analyzed as to the type of information employees desire to hear on a company-information program.

The potential audience of "Conoco Time" was composed of Continental Oil Company employees, their families, and Ponca City residents. Because the study was oriented toward employee communication, the residents' opinions did not play a vital part in the analysis, but the opinions were considered and compared with, or to, the employees' opinions.

The study also attempted to determine the attitude toward communications tools used by, or in, the company. Seven forms of informational sources were listed for the study, plus a category of "other sources" for any possible tool which may have been overlooked by the author.

The list of sources included four publications provided

by the company: The Flash, an unscheduled bulletin news sheet used to disseminate information within two to three hours; The CONOCOan, the corporate magazine published monthly by the Houston office; The PONOCOan, the Ponca City monthly magazine published by the Ponca City office; The Grapevine, a monthly publication especially for Ponca City refinery personnel printed by the refinery personnel department.

"Conoco Time" completed the list of company provided tools. The local newspaper, The Ponca City News, and "word of mouth" were included in the list because the author considered them sources which employees used for obtaining information.

The Ponca City branch had other publications which were specialized for advertising items for sale, but did not provide company information, and hence were not included in the listing.

Definition of Terms

1. Conoco--Continental Oil Company, and for this study usually referring to the Ponca City branch of Continental Oil Company.
2. Ponca City resident--any person other than a Conoco employee listed in the 1967 City Directory and residing in Ponca City at the time of the study, except for the limitations explained in the methodology section of this paper.
3. Conoco employee--any person employed by Continental Oil Company, and for this study usually referring to the Ponca City personnel of Continental Oil Company unless otherwise stated.

4. Informational tool--any mean, medium, or method of disseminating information.

5. Subgroup--any segment of the sample population composed of individuals having a common characteristic.

6. Systematic sampling--selection of every k^{th} unit after the selection of the initial n^{th} unit.

Procedures and Limitations

This study was limited to the radio program "Conoco Time," used by the Ponca City branch of Continental Oil Company in Ponca City, Oklahoma.

The population for the employee study was the approximately 3,700 employees of the Ponca City Continental Oil Company plant. Approximately 1,000 of these persons were refinery employees. The population for the resident study was the approximately 20,000 residents of Ponca City, Oklahoma, as listed in the 1967 edition of the City Directory.

A systematic sample consisting of the selection of every k^{th} unit after the selection of the initial n^{th} unit was selected from each population. By selecting a systematic sample of the population, the author was able to obtain a workable number of responses while insuring a cross section of the population.¹⁷

A mail questionnaire was used to obtain responses. One questionnaire was designed for employees and one questionnaire was designed for Ponca City residents.

¹⁷Mildred B. Parten, Surveys, Polls, and Samples (New York: Harper & Brothers, 1950), p. 93.

The hypotheses of the study were treated statistically using the chi-square contingency method to find comparisons between different subgroups of the sampled populations. This enabled the author to determine whether differences existed among the subgroups which would verify the hypotheses of the study.

A chi-square table was used to determine independence of the variables at various degrees of freedom. Each hypothesis was accepted or rejected at the .05 level of significance.

Background

Background of Company

The Ponca City branch of Continental Oil Company is the "Service Center" of the worldwide company, which is among the top thirty-five largest United States companies in sales.¹⁸ Continental Oil Company operates with more than 30,000 employees in thirty-four countries. In the United States, Continental markets products under the red triangle "Conoco" (Appendix A-1) brand in the Rocky Mountain, Southwestern, and Midwestern states.¹⁹

Major offices for the company are located in Houston, Texas (domestic); New York City (corporate and international); Ponca City, Oklahoma (services); and London, England (European). Regional headquarters are in Ponca City; Denver, Colorado; and Fort Worth, Texas.

¹⁸"The 500," Fortune Magazine, June 15, 1968.

¹⁹Inside Conoco.

The Ponca City plant employs more persons than any other single Conoco plant, and its offices serve as the center for research, engineering, accounting, computer, pipe line, purchasing, and transportation activities.

The Ponca City refinery--with approximately 1,000 employees--is the company's largest refinery and manufactures gasolines, motor oils, jet fuel, and other minor products.

Most Conoco employees reside in Ponca City, but some 200 to 250 employees commute from towns fifteen to forty-five miles in distance.

Many of the employees, especially clerical personnel, are hired after completing one or two years at Northern Oklahoma College, a junior college located fifteen miles from Ponca City in the town of Tonkawa, Oklahoma.

Although Continental was begun as an oil company in 1875, it has developed into an "energy" company. The several companies of the Conoco group find and produce natural resources for "energy," chemicals, and plant foods. The total Continental Oil Company operation consists of: Consolidation Coal Company; partnership in the CER Genonuclear Corporation; Agrico Chemical Company, a fertilizer company; a fully integrated petroleum operation; and a chemical conversion operation.²⁰

Background of Ponca City

Ponca City is a city of approximately 30,000 located in the north central section of Oklahoma. Continental is the

²⁰Continental Oil Reserach and Development Center.

largest and main industry of the city. It is estimated that one-third of the Ponca City "breadwinners" work for Conoco and that one-half of the total population is directly connected with the company.²¹

Another oil refinery, Sequoia Refinery, is located next to the Conoco location. The location was purchased from Cities Service Oil Company in 1964, and Sequoia employs approximately 300 persons in Ponca City.

Continental Can Company (not related to Continental Oil Company) has a small plant in Ponca City. Nichols Machine Company, a light industrial manufacturer, and Gruner and Company, an oil tool manufacturer, are two firms employing fewer than 100 persons. The other major components of the Ponca City economy are wheat farming, cattle ranching, and service operations.

The city has one radio station, WBBZ, operating at 1230 megacycles in an approximate seventy-mile radius of Ponca City (Appendix A-2). The one newspaper, The Ponca City News, is published Monday through Friday evenings and on Sunday mornings.

Background of "Conoco Time"

The Vice President of Personnel for the Ponca City offices of Continental Oil Company introduced the radio program, "Conoco Time," into the Ponca City employee communications system in the fall of 1965, for the general purpose of disseminating information

²¹Lynn Smith, interview.

to the employees of the company. The proposal for the program outlined the specific purpose as:²²

The primary purpose of the company-sponsored radio program is to keep Conoco employees, their families, and the community informed on all matters which relate to the company as a business entity in the community and to the employees as members of the community.

The format for the fifteen-minute program was outlined in the proposal as including the Continental Oil Company stock market price, the weather report, and the following areas:²³

- Management Philosophy
- Local Company News
- Employee Information
 - employee hobbies
 - employee vacations
 - new employees
 - transfers
 - retirement awards
 - service awards
 - promotions
 - deaths
 - marriages
- Continental Employee Association (CEA) News
- Interviews
 - top management interviews
 - middle management interviews
 - employee interviews
- Public Service Announcements
- Special Interviews with Nonemployees
- Worldwide Company News
- Subsidiary News
- Local, State, and National News
- Music

When the position of Supervisor for Employee Relations was formed, "Conoco Time" was designated as one of the responsibilities of the position (Appendix A-3). The position, under the authority of the personnel director, was formed for the

²²Memorandum, Proposal for "Conoco Time," May, 1965.

²³Ibid.

basic functions of "planning, organizing, writing, and publishing communications media for the Northern Region and Ponca City operations and to develop a long-range educational communications program." Radio was listed as one of the specific responsibilities, which gave the supervisor full responsibility for "Conoco Time." The supervisor handled all information for the program.

The information for the program was provided by the Supervisor of Employee Relations. Employees of the company could telephone information into the radio station, if time did not permit it to be sent through the Supervisor of Employee Relations. The exception to this was labor union news which required written authorization for broadcast from the employee relations supervisor (refer to page 7).

Hypotheses

The hypotheses developed for this study were concerned with the relationships between subgroups of either the employee or resident sample and the listening habits of the subgroups. The hypotheses were divided into the following categories for ease in understanding. The actual hypotheses to be tested were subdivisions of each category and each hypothesis was accepted or rejected separately at the .05 level of significance. For statistical testing the hypotheses were stated in the null form. The following categories and hypotheses were tested.

Category 1

Category 1 tested the relationships between the employees'

listening frequencies of "Conoco Time" and the employee sub-groups of employment capacity, age, sex, educational level, length of time employed, and number of family or household members employed by the company.

Under this category the following hypotheses were tested:

1. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all capacities (management, professional, technical, clerical, or other) of nonrefinery employment.

2. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all capacities (management, labor, professional, craftsmen, technical, or other) of refinery employment.

3. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all age groups of employees.

4. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for males and females.

5. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all educational levels (junior high, high school, business or technical school, junior college degree, one year of college, two years of college work, three years of college work, bachelor's degree, master's degree, doctoral degree).

6. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all periods of employment (less than one year, one to five years, six to ten years, eleven to fifteen years, sixteen to twenty years, and more than twenty-six years).

7. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same whether or not the employee had at least one other family member employed with Conoco.

8. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same whether or not the employee had at least one other household member employed with Conoco.

Category 2

Category 2 tested the relationships between the type of information considered to be of most interest on "Conoco Time" and the subgroups of employment capacity, age, sex, education, and length of time employed.

Under this category the following hypotheses were tested:

1. The proportions of employees who preferred each of the types of program content were not the same for all capacities (management, professional, technical, clerical, and other) of nonrefinery employment.

2. The proportions of employees who preferred each of the types of program content were not the same for all capacities (management, labor, professional, craftsman, technical, or other) of refinery employment.

3. The proportions of employees who preferred each of the types of program content were not the same for all age groups of employees.

4. The proportions of employees who preferred each of the types of program content were not the same for males and females.

5. The proportions of employees who preferred each of the types of program content were not the same for employees of all educational levels (junior high, high school, business or technical school, one year of college, junior college degree, two years of college work, three years of college work, bachelor's degree, master's degree, doctoral degree).

6. The proportions of employees who preferred each of the types of program content were not the same for all periods of employment (less than one year, one to five years, six to ten years, eleven to fifteen years, sixteen to twenty years, twenty-one to twenty-five years, and more than twenty-six years).

Category 3

Category 3 tested the relationships between the type of informational tool favored and the employee subgroups of employment capacity, age, sex, educational level, and length of time employed.

Under this category the following hypotheses were tested:

1. The proportions of employees who preferred each of the eight informational tools included in the questionnaire ("Conoco Time," The CONOCOan, The Flash, the Grapevine, word of

mouth, the local newspaper, other sources) were not the same for all capacities (management, professional, technical, clerical, or other) of nonrefinery employment.

2. The proportions of employees who preferred each of the eight informational tools included in the questionnaire ("Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, the local newspaper, other sources) were not the same for all capacities (management, labor, professional, craftsman, technical, or other) of refinery employment.

3. The proportions of employees who preferred each of the eight informational tools being studied ("Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, the local newspaper, other sources) were not the same for all age groups.

4. The proportions of employees who preferred each of the eight informational tools being studied ("Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, the local newspaper, other sources) were not the same for male and female employees.

5. The proportions of employees who preferred each of the eight informational tools being studied ("Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, the local newspaper, or other sources) were not the same for employees of all educational levels (junior high, high school, business or technical school, junior college degree, one year of college, two years of college, three years of college, bachelor's degree, master's degree, doctoral degree).

6. The proportions of employees who preferred each of the eight informational tools being studied ("Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, the local newspaper, other sources) were not the same for all periods of employment (less than one year, one to five years, six to ten years, eleven to fifteen years, sixteen to twenty years, twenty-one to twenty-five years, and more than twenty-six years).

Category 4

Category 4 tested the relationships between the radio listening habits and the habits of listening to "Conoco Time."

Under this category the following hypotheses were tested:

1. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all employees whether they are listeners or nonlisteners of radio station WBBZ.

2. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same for all subgroups regardless of their indicated listening time preference (6:00 to 7:00 A.M., 7:00 to 8:00 A.M., 12:00 to 1:00 P.M., 4:00 to 5:00 P.M., 5:00 to 6:00 P.M., 6:00 to 7:00 P.M., 8:00 to 10:00 P.M., 10:00 to 12:00 P.M., varies, evenings).

3. The proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same whether the employee considered the program time (6:45 A.M.) convenient or inconvenient.

Category 5

Category 5 tested the relationships between the listening frequency of "Conoco Time" and the resident subgroups of occupation, length of residency, age, and number of family or household members employed by Conoco.

Under this category the following hypotheses were tested:

1. The proportions of residents who listened either regularly, frequently, occasionally, or seldomly to "Conoco Time" were not the same for all occupations (professional, self-employed, labor, management, clerical or secretary, teacher, civil servant, sales person, retired or housewife, other) of the residents.

2. The proportions of residents who listened either regularly, frequently, occasionally, or seldomly to "Conoco Time" were not the same for all periods of residency (less than one year, one to five years, six to ten years, eleven to fifteen years, sixteen to twenty years, over twenty years).

3. The proportions of residents who listened either regularly, frequently, occasionally, or seldomly to "Conoco Time" were not the same whether or not the resident had a family member employed by Conoco.

4. The proportions of residents who listened either regularly, frequently, occasionally, or seldomly to "Conoco Time" were not the same whether or not the resident had a household member employed by Conoco.

5. The proportions of residents who listened either regularly, frequently, occasionally, or seldomly to "Conoco Time" were not the same for all age groups.

CHAPTER II

SELECTED RELEVANT LITERATURE

Because areas of communication cannot be isolated from other areas of human behavior, the review of literature for this study encompassed various areas of disciplines. The author reviewed literature concerning communication, its theories and practices; mass communications, journalism including public relations which includes employee and industrial relations; psychology; sociology; and business management and personnel administration.

Each of these areas overlapped at least one of the other areas and was in some way related to at least one other area. To completely isolate each area was impossible.

As Barzun and Graff explained in The Modern Researcher, historians have coined the term "sister disciplines" for sciences which can be extracted from broader sciences, but which are needed in the understanding of the broader science.²⁴ The author borrowed the term to mean a collection of facts, principles, and conclusions which mingle with one another and are directly related to or interrelated with the subject matter of radio as an employee relations tool. The review of literature will include literature from several "sister disciplines."

²⁴Jacques Barzun and Henry F. Graff, The Modern Researcher (New York: Harcourt, Brace & World Inc., 1962), p. 197.

In communication research done by Peters involving forty industrial companies with extensive communications programs, the study led him into related fields of human relations and industrial psychology which proved to provide information dealing with the underlying principles and philosophies important to a better understanding of communication problems. "No consideration of communication which by-passed these areas would be complete."²⁵

In the past few years communication has become part of the study of behavioral sciences. Increased emphasis has been placed on communication research in many areas. At least a dozen sciences are now concerned with analyzing communications.²⁶

"Journalism along with other disciplines such as psychology, sociology, economics, and political science, anthropology, and other social sciences has made advances in the field of learning, the invention, and the adoption of more precise means of studying human behavior in all of its manifestations."²⁷

Analyzing communication research one author said: "U.S. communications research is quantitative rather than speculative" ²⁸ and quantitative research in journalism is an

²⁵Peters, op. cit., xv.

²⁶Doohar, op. cit., p. 55.

²⁷Ralph O. Nafziger and Marcus M. Wilkerson, An Introduction to Journalism Research, (Baton Rouge: Louisiana State University, 1949), p. 3.

²⁸Wilbur L. Schramm, The Science of Human Communication (New York: Basic Books, 1963), p. 5.

initial step in the development of a science of communications.²⁹

With the emphasis on the need for better communications in almost all phases of society, extensive research has been done in the areas of industrial and organizational communication and group behavior related to communication within the organizational structure. "Lately there is a tendency to think of industrial relations and public relations as part of the larger problem of human relations."³⁰ "Perhaps the whole problem of communication is inseparable from the larger content of the over-all social problems of our time."³¹

The author reviewed literature concerning communication related to group behavior and various media and its effect upon the members of an industrial group. The literature concerning radio was reviewed, but quantity of such literature was difficult to find.

The review of literature was initiated in the area of mass communications because it appeared a broad science containing the sister disciplines of journalism, electronic communications, and group behavior contained within it. Each of these disciplines was seen to have sister disciplines which included public relations, employee relations, media analysis, and persuasion.

²⁹Nafziger and Wilkerson, op. cit., p. 3.

³⁰Dartnell Public Relations Handbook (Chicago: The Dartnell Corp., 1957), p. 1082.

³¹Wilbur L. Schramm, Mass Communications, A Book of Readings (Urbana: University of Illinois Press, 1960), p. 327.

The Area of Communication

To understand the implications of today's studies of communications, the reader must understand the need and cause of mass communications. Mass communications came into being because "they are the most efficient means yet found to meet some of the pressing needs of society."³² As people developed patterned ways of distributing any commodity, they found a way of distributing information through mass media which are the "resultant forces set in motion when" man began to group together for protection.³³ As man progressed into a more complex life it became evident communication was essential to the forms of cooperative behavior.³⁴

Communication, although basically understood as the exchange of ideas, has different emphasis in accordance with the discipline being studied. For any study in the area, it is necessary to know and understand the various definitions of "communications."

Schramm defined communication when he talked of communication research as being "concerned with how to be effective in communications, how to be understood, how to be clear, how people use the mass media, how nations can understand each other, how society can use the mass media to its greatest good, and in general how the basic process of communication works."³⁵

³²Ibid., p. 115.

³³Ibid., pp. 3, 131.

³⁴Simon, op. cit., p. 106.

³⁵Schramm, Readings, p. 15.

Charles Redfield contended communication is the "broad field of human interchange of facts and opinions and not the technologies of telephones, telegraphs, radio, and the like."³⁶

Simon gave a broad definition of communication as "any process whereby decisional premises are transmitted from one member of an organization to another."³⁷

Merrihue defined communication as "any initiated behavior on the part of the sender which conveys the desired meaning to the receiver and causes desired responses from the receiver. Communication concentrates the attention of the organization on the goals to be reached, gives employees the information they need to do their part, motivates them to overcome the obstacles, seeks and channels their participation."³⁸

Peters defined communications when he wrote "to those who are striving to improve understanding among all the people of industry."³⁹

In striving for perfection in various fields, each discipline looks for different implications and emphasis.

Human behaviorists look for better understanding in human relations and human interaction. Communicators search for the best method of communications in order to better man and upgrade the area of communications. Business measures results of communications in relation to production and profit rates,

³⁶Charles E. Redfield, Communications in Management (Chicago: The University of Chicago Press, 1953), p. 3.

³⁷Simon, op. cit., p. 154.

³⁸Merrihue, op cit., pp. 15, 231.

³⁹Peters, op.cit., ix.

although it realizes high production for a short time might result in lower long-run production.

Although each discipline strives for perfection, it cannot be separated for long from the broad discipline. As the researcher studies an area, he must look at the entire concept of communication and employee relations and the sister disciplines for a valuable, worth-while, and useful study. To reach for the ultimate results, the researcher must understand the disciplines which mingle together.

The Area of Employee Relations

Employee relations comes under many different titles and positions of authority. One company may consider it part of the public relations department; another company may connect it with the personnel department; and yet another company may let it be an independent department.

Separating employee relations from other areas of communication within an organization is a difficult task. Areas of specialization such as employee relations, customer relations, and stockholder relations overlap with the general term of public relations. It is not easy to separate these areas from public relations or from each other.⁴⁰

Even if there were not a specialized department for employee relations authors generally agree that the "first step in a public relations policy is that of bettering employee relations."⁴¹

⁴⁰Lerbinger and Sullivan, op. cit., ix.

⁴¹Griswold and Griswold, op. cit., p. 200.

Although the physical structure of the job and the responsibility may differ, the basic concern of most employee relation supervisors or managers today is to communicate. After many years of considering the employee as strictly an economic factor for production, business today realizes "good communications is good business."⁴²

"Ten years ago the typical supervisor in industry did not use the word "communications," and he did not worry about communicating with his personnel. But, "Today's leaders of men recognize that communication is probably the most important responsibility" Although communication is not an end in itself, it is the process by which ends are accomplished.⁴³

Another author pointed out that "the art of communicating is old, but its rise to prominence in personnel administration is comparatively recent."⁴⁴

Although the emphasis is young, it is strong. Barnard considered development and maintenance of a communication system as the "first executive function."⁴⁵

Davis considered communications vital: "Communications is as necessary to business as the blood stream is to a person." If either is hardened, the efficiency is impaired.⁴⁶

⁴²Dooher, op. cit., p. 17.

⁴³Keith Davis, Human Relations in Business (New York: McGraw-Hill Book Company, Inc., 1957), p. 6.

⁴⁴Peters, op. cit., p. 71.

⁴⁵Chester I. Barnard, The Functions of the Executive (Cambridge, Mass.: Harvard University Press, 1938), p. 226.

⁴⁶Davis, op. cit., p. 222.

Managers recognize that communications is at the roots of successful industrial relations. "Most of the misunderstandings which arise between employee and employer can be traced to the failure of both sides to keep the other posted."⁴⁷

Not only has the attitude toward communication in industry changed, but so has the attitude toward the type of information disseminated to employees. Topics such as taxes and depreciation which used to be considered "over the heads" of employees are being communicated with employees now.⁴⁸

Docher pointed out the importance of communication in relation to time. He estimated that "four-fifths of the working time is spent communicating or trying to make someone understand us." When he added that ninety per cent of the average manager's time is spent communicating, he said: "Communication is perhaps the highest, the most exacting skill of management."⁴⁹

Researchers found by studying groups and the organizational patterns within groups that "it is obvious that without communication there can be no organization, for there is no possibility then of the group influencing the behavior of the individual."⁵⁰

Not only do they find that communication was necessary for the group existence, but communications influence the output

⁴⁷Dartnell Handbook, p. 797.

⁴⁸John W. Hill, Corporate Public Relations, (New York: Harper & Brothers, 1958), p. 95.

⁴⁹Docher, op. cit., p. 125.

⁵⁰Simon, op. cit., p. 154.

of the group. "Groups in which there is a free-flow of communication are superior to groups in which differentiation impedes communication"51

Studies have indicated that groups having common objectives require a certain minimum of communication. "Not all individuals must be able to communicate with one another, but in some cases it is enough if they are touched by some part of a network of communication."52

Studies in industrial groups have also indicated that economic factors are not the only factors which influence employees. "It is a fallacious assumption that employees are governed strictly by economic motives."53

Researchers have linked communication and morale, and have found that employee morale is related to the organization of the company which includes the communication systems and lines.54 "Free-flowing communication and natural participation are common denominators in employee morale."55

⁵¹Peter M. Blau and Richard W. Scott, Formal Organizations: A Comparative Approach (San Francisco: Chandler Publishing Company, 1962), p. 124.

⁵²Harold J. Leavitt, "Some Effects of Certain Communication Patterns on Group Performances," in Readings in Social Psychology, ed. by Eleanor E. Maccoby, Theodore M. Newcomb, and Eugene L. Hartley (New York: Holt, Rinehart, and Winston, Inc., 1958), p. 53.

⁵³Chester I. Barnard, Organization and Management (Cambridge, Mass.: Harvard University Press, 1948), p. 16.

⁵⁴Schuyler Dean Hoslett, ed., Human Factors in Management (New York: Harper & Brothers, 1951), p. 16.

⁵⁵Allen H. Center, Public Relations Ideas in Action (New York: McGraw-Hill Book Company, 1957), p. 15.

Generalizations concerning the positive reactions to communications must be avoided. The Massachusetts Institute of Technology found in experiments that communication is a variable which can affect both morale and efficiency, but not necessarily in the same direction. One system may be more effective in improving one factor than the other or may improve one factor while impairing the other.⁵⁶

With the emphasis and research placed on communication, it has become somewhat of a fad in much of industry. "Industrial management seems to be constantly concerned with the communication. The pattern seems to be: The more communication the better. A few are beginning to ask whether or not there might be too much communication."⁵⁷

Along with the warnings of too much communication come the precautions of the ill-planned communications program. "Having a lukewarm communications program is worse than having none at all."⁵⁸

As in all parts of management, planning was emphasized by the authorities. They urged that plans must be made for programs which would improve communications and which would grow with the company. If the knowledge of improvements in current communication programs is not implemented, "the waste

⁵⁶Redfield, op. cit., p. 68.

⁵⁷Barleigh Bradford Fardner and David G. Moore, Human Relations in Industry (Chicago: Richard D. Irwin, 1947), p. 13.

⁵⁸Hill, op. cit., p. 103.

and ineffectiveness will continue to characterize communication programs in business and industry."⁵⁹

Growth of the United States economy and business necessitates information systems to grow. Business must establish long-range objectives for information systems which will enable business to operate more effectively at lower costs and to grow with business.⁶⁰

Plans necessitate foresight and awareness of the advancements in communication tools and techniques. New tools and techniques of communications are constantly appearing. The electronic media, radio and television, have joined the printed media in the employee communications programs.⁶¹

Bushnell and Wood challenged the communication manager: "Your aim is to develop a well designed communication package that employs a range of media designed to stimulate the greatest possible interest from the broadest number of those for whom it's intended."⁶²

In the experimental laboratory Bavelas found that different networks of information caused the different levels of morale, speed, and accuracy. He indirectly confirmed the basic communication principle that better communication is accomplished

⁵⁹Merrihue, op. cit., p. 226.

⁶⁰Ibid., p. 92.

⁶¹Griswold and Griswold, op. cit., p. 329-37.

⁶²David S. Bushnell and William R. Wood, "Are You Getting Across to Employees?" Nation's Business (The Chamber of Commerce of the United States, July, 1965), p. 1.

through several techniques and media, rather than one alone.⁶³

All media available and possibly available in the future should be examined when the communicator is planning such a program. "Failure to use to the utmost communications tools available is to accept a harmful handicap."⁶⁴

The Area of Radio

As stated in the introduction, Sol Taishoff, editor and publisher of Broadcasting magazine, indicated in a personal letter that radio was used by numerous companies for employee relations. "Use of radio stations--even television stations--for employee relations is a rather widespread practice, particularly in communities where one large company may dominate employment. We have no record of stations that sell time for this purpose but it would be my guess that the total number in radio would exceed several hundred."⁶⁵

Raymond Peters found in research done involving forty companies that nine per cent of the companies used radio programs designed especially for employees as part of their employee relations program.⁶⁶

Griswold and Griswold found that "scores of plants are using local radio stations in much the same manner that local newspaper is used to promote community and employee good will."

⁶³Bavelas and Barrett, op. cit., pp. 366-71.

⁶⁴Bushnell and Wood, op. cit., p. 3.

⁶⁵Letter from Sol Taishoff.

⁶⁶Peters, op. cit., p. 95.

In their study they found daytime hours of radio broadcast particularly effective for disseminating information to the wives of the employees.

They studied a program sponsored by the Bridgeport Chamber of Commerce where groups of women visited community plant officials and then reported their observations in an informal session over the local radio station. The program was found to compete successfully with the standard morning soap operas.⁶⁷

Some researchers strongly advocated radio. "We know that all kinds of radio can be successfully used, national network, regional network, and local radio. We realize that it does not require a budget capable of supporting a cast of actors and an orchestra."⁶⁸

Merrihue also pointed out the expense factor as an advantage. "Local radio time is so relatively inexpensive that any plant, no matter how small, can justify its use as an institutional medium of communication." He found that many plants buy fifteen minutes of radio time to broadcast local, national, and company news while their employees drive to work.⁶⁹

Radio Versus Written Communication

With the introduction of radio as an employee relations tool and informational dissemination tool, analysis of its

⁶⁷Griswold and Griswold, op. cit., p. 160.

⁶⁸Ibid.

⁶⁹Merrihue, op. cit., p. 73.

effectiveness has come into being. Even in the one discipline of employee relations there was disagreement concerning the effectiveness of the various media and methods used. This is not an easy matter to evaluate because measurement is not uniform and varies with the situation.

Bushnell and Wood found ". . . plenty of evidence that, important as they are, written statements don't get the job done and that more effective methods of getting the word from top to bottom are urgently needed."⁷⁰

Cantril pointed out that radio is easy to listen to, and more personal than written communication, but he also pointed out that reading is fitted to the interest and convenience of the person. He warned that broadcasting lacks the permanence of the printed word.⁷¹

Harlan and Scott argue that "radio has the advantage of timeliness and circulation and is a good attention-getting device."⁷²

It was found that some of the factors of personal contact communication could be compared to radio, and thus reviewed in this section. In analyzing written and oral communications Merrihue said oral communication is too subject to distortion. "Written communication, on the other hand, is fast and

⁷⁰Bushnell and Wood, op. cit., p. 3.

⁷¹Hadley Cantril and Gordon W. Allport, The Psychology of Radio (New York: Harper & Brothers, 1935), p. 18.

⁷²Gene Harlan and Alan Scott, Contemporary Public Relations Principles and Cases (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1956), p. 44.

and accurate . . ."73

Klapper found that radio or other types of purely oral presentation was found by experiments to produce greater retention of simple material especially among the less educated and less intelligent and that the "broadcasting media are able to provide their audience with a sense of participation, personal access, and "reality" which approximate face-to-face."74

Lazarfeld, Berelson, and Gaudet in their report, "Radio and the Printed Page as Factors in Political Opinion and Voting," said the more personal the media, the more effective it is in converting opinions. Conversation is more personal than radio, radio is more personal than newspapers.75

Radio has three definite disadvantages which should be considered in the type of information disseminated over the medium: Radio messages are highly perishable, listening habits are very flexible, and definite circulation cannot be established.76

Communication managers recognize that each communication method and each medium has advantages and disadvantages and that in the best employee communications programs oral and written

⁷³Merrihue, op. cit., p. 179.

⁷⁴Joseph T. Klapper, The Effects of Mass Media (New York: Columbia University, Bureau of Applied Social Research, 1949), p. 111.

⁷⁵Paul F. Lazarfeld, Bernard Berelson, and Hazel Gaudet, "Radio and the Printed Page as Factors in Political Opinions and Voting," in The People's Choice (New York: Columbia University Press, 1948).

⁷⁶Harlan and Scott, op. cit., p. 45.

communications are interdependent. "There should be no effort on management's part to put the two in competition; each has a distinct function to perform and neither is able to function without the other."⁷⁷

Evaluating Employee Relations Communications

In evaluating companies' communications programs, several researchers have conducted studies concerning the influencing of persons through communication. Klapper emphasized that studies indicate it is easier to create an opinion than to convert a person to some way of thinking.⁷⁸

In choosing communication tools and techniques, these researchers pointed out that in every case of communication "the state of mind of the recipient, his attitudes and motivations, must be the basic factors in determining the design of the communication."⁷⁹

The attention that the communication will receive is not simply a matter of logic. "The source of the communication, and the way in which it is presented, will determine for its recipient how much consideration he will give it."⁸⁰

Griswold and Griswold urged communication managers to include information which served the three basic desires employees reveal in every scientific study of their attitudes--

⁷⁷Robert Newcomb and Marg Sammons, Employee Communications in Action (New York: Harper & Brothers, 1961), p. 287.

⁷⁸Klapper, op. cit., p.111.

⁷⁹Simon, op. cit., p. 164.

⁸⁰Ibid.

security, opportunity, and recognition.⁸¹

"In every case of communication the state of mind of the recipient, his attitudes and motivations, must be the basic factors in determining the design of the communication." Communication tends to be selected by the receiver and to be perceived by his attitudes, background, and biases.⁸²

"The function of the communication, after all, is not to get something off the mind of the person transmitting it, but to get something into the mind and actions of the person receiving it."⁸³

The Area of Community Relations

Even newer to industry than employee relations communication is communication involving community relations. The author reviewed this area, but not extensively, and found that business and industry have not always been concerned with community relations because business has not always been as complex as today. "A beginning in organized community relations was made early in the 1930's with the conception of the Dayton Plan."⁸⁴

Also within the community population were the employees' families who compose part of the community universe. This group was a cross between employee relations and community relations plus customer relations and possibly stockholder relations.

⁸¹Griswold and Griswold, op. cit., p. 164.

⁸²Simon, op. cit., p. 164.

⁸³Ibid.

⁸⁴Griswold and Griswold, op. cit., pp. 171-73.

"It is a recognized principle in management that most employees take their problems home," hence the family is directly involved in employee relations.⁸⁵

The author recognized that this is a relatively new area which deserves much study, but which cannot be dealt with extensively in this study. Many of the bibliography references could be used during the initial steps of a community relations study.

⁸⁵Dartnell Handbook, op. cit., p. 77.

CHAPTER III

METHODOLOGY

The actual study began by the author interviewing the Supervisor of Employee Relations for Conoco at Ponca City and the manager of WBBZ, Ponca City radio station which broadcast "Conoco Time." After obtaining background information, the author decided that opinions from not only employees, but Ponca City residents also would be valuable for the study. The residents were an inherent part of the audience and were considered important to the study (refer to page 4).

During the discussion, the author and the Employee Relations Supervisor decided a mail questionnaire would be the most effective means of obtaining candid opinions concerning the program. Although mail questionnaires have several disadvantages, this method was chosen after deciding telephone surveys or personal interviews would limit the number and detail of the responses possible.

For obtaining a population's opinion, researchers recommend a small workable sampling rather than using the entire population.⁸⁷ Systematic sampling, involving selecting every k^{th} unit after the initial selection of the n^{th} unit, was

⁸⁶Parten, op. cit., p. 86.

⁸⁷Newcomb and Sammons, op. cit., p. 87.

recommended because the population was essentially random. It was chosen over random sampling and stratified sampling because of the advantages of: 1. it is easier to draw a sample and often easier to execute without mistakes, 2. intuitively, it is likely to be more precise than simple random sampling, 3. it is spread more evenly over the population.⁸⁸

When the samples were selected, the n^{th} unit was randomly selected by the author to be the first name on the list from which every k^{th} unit was selected. In the resident sampling the n^{th} unit was the eleventh name on the list.

Procedures for Selecting Samples

The employee sample was selected through systematic selection from the Continental Oil Company's Ponca City mailing list, excluding subjects used for the testing of the sample questionnaire and the Supervisor of Employee Relations. The list was in alphabetical listings according to departments. Every ninth employee beginning with the first name (as had been selected randomly) was chosen to receive a questionnaire.

The resident sample was selected through systematic selection from the 1967 City Directory for Ponca City which at that time was the most current directory. From the City Directory every twelfth name was selected, excluding names which appeared more than once due to listings of business names, students and service men assumed not residing in Ponca City, names of businesses, and Continental Oil Company employees.

⁸⁸William G. Cochran, Sampling Techniques (New York: John Wiley & Sons, 1963), p. 206.

Just the names of individuals, not employed with Conoco, appearing to be residents of Ponca City and residing in Ponca City at the time were counted as the universe for the selection.

Construction of the Questionnaire

It was decided a separate, but similar questionnaire would be constructed for the employees and for the residents. The employee questionnaire was concerned with more areas of needed information. The employee questionnaire consisted of five pages and the resident questionnaire of four pages. The additional page of the employee survey pertained to company informational tools.

After consulting with the Department of Statistics at Kansas State University, the questionnaire was designed to obtain responses which could be treated statistically with a chi-square program. The first two sections of the employee questionnaire asked for information concerning the employee subgroup characteristics of: employment capacity, marital status, number of children, if the person were head of the household, if a household or family member were employed by Conoco, length of time with company, age, sex, educational level, and place of residency.

The first two sections of the resident questionnaire concerned information of the resident subgroups of: occupation, if a former Conoco employee, marital status, number of children, if the person were head of the household, if a household or family member were employed by Conoco, age, sex, educational level, and length of residency.

The third section of both questionnaires pertained to the respondent's listening habits of radio, WBBZ, and "Conoco Time." The format of the questionnaire was formulated in this manner because of the author's assumption that the radio listening habits might influence the listening habits of "Conoco Time" and if the questions pertaining to "Conoco Time" were asked first, the nonlistener would be likely to not return the questionnaire, or to return it without the information needed.

Section four, not included in the resident form, pertained to the informational tools used by the company and was aimed at obtaining opinions from listeners and nonlisteners in comparing and contrasting the types and kinds of information tools used.

The final section of the questionnaire pertained to the opinions and criticisms of "Conoco Time" by the listeners. The nonlisteners were instructed to not complete this section.

The questionnaire consisted of structured questions where the respondent checked a blank or structured response, ranking questions where the respondent ranked responses in order of preference, and open-end questions where the respondent answered with short answer responses.

After a sample questionnaire and cover letter to employees (Appendix B-1) explaining the study and giving instructions for completion of the questionnaire were complete, it was tested by Conoco employees of various employment capacities, age, sex, and education. The resident sample questionnaire and cover letter (Appendix B-2) were tested by residents of various occupations, educational levels, sex, and age.

In testing the questionnaire, the author gave no oral instructions. The subjects were asked to complete the questionnaire as if it had been mailed to them with the cover letter and questionnaire giving instructions. The author observed the comments and time length as subjects completed the questionnaires.

After the subjects had completed the questionnaire, they were asked to critique the questionnaire for clarity in understanding the instructions, clarity of the questions, and thoroughness of the questionnaire. Since these subjects would be eliminated from the sample population, they were asked orally about the program for any information which the author might overlook because of not being connected with the company. One category, local newspaper, was added to the questionnaire after the newspaper was mentioned by the employees to be a source of information.

The cover letter was signed from the Employee Relations Supervisor so that the employees and residents might feel closer to the study and the employees might feel more responsible in answering than if it were sent by an outside source.

Sending the Questionnaire

The employees' questionnaires were sent through the company mail in late July to the 414 employees selected by the sample. The envelope with return postage provided by Conoco enabled the employees to return the questionnaire through the company mails or through the regular mail. The postage charge was metered if the questionnaires were returned through the regular mail channels.

The questionnaires to the 613 Ponca City residents were mailed about the same time through the regular first class mail with a return envelope from Conoco providing metered postage.

The cover letter requested returns by August 16 which allowed the respondents approximately three weeks for completion and return. For ease in the study, the employee questionnaire was printed on yellow paper and the resident questionnaire on white paper. The questionnaires were printed at the Ponca City offices of Conoco.

Procedures for Treating Data

Of the 414 questionnaires, 183 employees returned the questionnaires. As the questionnaires were returned, they were reviewed for validity and numbered consecutively. None of the 183 employee questionnaires was rejected. One questionnaire had been returned to the author because the person was no longer employed by Conoco. It was not redistributed.

Of the 613 resident questionnaires, 126 were returned. Of the total questionnaires mailed, 25 had been returned because the subject could not be located. They were not redistributed.

Again, as the questionnaires were received, they were reviewed and numbered consecutively from 1 to 126. The employee and resident questionnaires were treated separately throughout the study, although they were treated similarly. Of the 126 questionnaires, a total of 15 were rejected: 6 because the respondents were Conoco employees, 4 because of inadequate completion or missing pages, and 5 because the respondent was no longer a Ponca City resident.

The data was tested using a chi-square contingency computer program supplied by the department of Statistics at Kansas State University.

The program required the questions for both the employee and resident questionnaires to be coded separately as variables from 1 to 76 for the employee survey and from 1 to 63 for the resident survey. Each variable was allowed 1 to 10 categories for the responses to the question. The responses of each question were coded using numbers from 1 to 10.

The coded information was then punched on IBM computer cards identifying each card as part of a particular questionnaire.

The program format produced four tables for each comparison of two variables with 1 to 10 categories each. The first table indicated the number of responses in each category and the total of each category. Below which a table indicated the expected values if the variables were independent and proportionally equal in responses.

Below this table appeared a table showing the responses in percentages of the total of the row variable and below this a table showing the percentage of responses according to the column variable.

The chi-square value, the value of the

$$x^2 = \sum \frac{(n_{ij} - e_{ij})^2}{e_{ij}}$$

appeared at the bottom of the tables. If the chi-square value were greater than the value taken from the chi-square table at

the .05 significance level according to the degrees of freedom indicated by the computer program, the variables were considered dependent variables and influencing upon one another and the hypothesis was accepted. Otherwise, the hypothesis was rejected and the proportion of the variables was considered independent.

CHAPTER IV

RESULTS AND DISCUSSION

The returns for both samples were higher than the 10 to 20 per cent expected for a mail questionnaire survey.⁸⁹ The employee returns, the majority of which were returned through the company mail, were higher than returns from previous surveys conducted by the company.⁹⁰

Of the 414 questionnaires sent to employees, 183 (42 per cent) were returned. One questionnaire was returned to the author marked "no longer employed." The questionnaire was not redistributed.

Of the 613 questionnaires mailed to residents, 126 (21 per cent) were returned. Of the 613, 25 had been returned, unopened because the receiver could not be located. These questionnaires were not redistributed.

Of the returned resident questionnaires 15 were rejected: 6 because the respondent was a Conoco employee, 4 because of inadequate completion of the questionnaire (the criterion was the first three sections of the questionnaire must be completed), and 5 because the respondent was no longer a Ponca City resident (returns came from former residents living in Seattle,

⁸⁹Parten, *op. cit.*, p. 93.

⁹⁰Lynn Smith, interview.

Washington; Denver, Colorado; Dallas, Texas; and Oklahoma City, Oklahoma).

The results of the chi-square test are presented for each hypothesis in the order that they were presented in Chapter I. Each category groups the related hypotheses, but each hypothesis was independent of the others and could be accepted or rejected separately.

Category 1

Category 1 tested the relationship between the employees' listening frequencies to "Conoco Time" and the employee subgroup characteristics of: employment capacity, age, sex, educational level, length of time employed, and whether or not the employee had another family or household member employed by the company.

Each hypothesis in Category 1 was tested by comparing the relationship between the question requesting the subgroup characteristic and the questions:

- a. "Have you ever listened to 'Conoco Time'?"
- b. "If so, indicate frequency . . .
 regularly
 frequently (2-3 times a week)
 occasionally (once a week)
 seldomly (less than once a week)"

Although chi-square contingency tables were tested for both questions "a" and "b", the criterion for acceptance or rejection of the hypothesis was the relationship found for question "b". The statistical testing of each hypothesis indicated the following.

Hypothesis 1. The chi-square test did not indicate a significant relationship between listening to "Conoco Time" either regularly, frequently, occasionally, or seldomly and the capacity (management, professional, technical, clerical, or other) of nonrefinery employment. This indicated the amount of listening was not dependent upon the employment capacity. Therefore, hypothesis 1 was rejected as indicating no significant relationship existed between listening frequency and employment capacity.

The percentage of each capacity in a particular listening frequency is indicated in the following table. From the table, it is observed that the total number of respondents in a capacity influenced the percentages of listeners in a particular listening category.

The listening percentage of each capacity is indicated in Table 2.

Although the amount of listening was not dependent upon the employment capacity, a dependency was indicated in the chi-square table comparing whether or not the subgroups had ever listened (question "a"). Of the 150 nonrefinery respondents, 134 (86 per cent) indicated they had listened to "Conoco Time." The percentage of the total respondents according to listening frequency categories were: 35 per cent regular listeners, 24 per cent frequent listeners, 15 per cent occasional listeners, and 24 per cent seldom listeners.

Hypothesis 2. The chi-square test indicated the proportions of employees who listen to "Conoco Time" either regularly,

TABLE 1

COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO NONREFINERY EMPLOYMENT CAPACITY

Listening Frequency	Nonrefinery Employment Capacity					
	Mgt. (%)	Prof. (%)	Tech. (%)	Clerical (%)	Other (%)	Total (%)
Regularly	10	26	12	43	8	100
Frequently	16	29	16	26	13	100
Occasionally	16	37	16	26	5	100
Seldomly	<u>19</u>	<u>38</u>	<u>16</u>	<u>25</u>	<u>3</u>	100
Number of Responses	19	41	19	42	10	131

TABLE 2

LISTENING FREQUENCIES OF NONREFINERY
EMPLOYMENT CAPACITIES

Listening Frequency	Nonrefinery Employment Capacity				
	Mgt. (%)	Prof. (%)	Tech. (%)	Clerical (%)	Other (%)
Regularly	26	32	32	50	40
Frequently	26	22	26	19	40
Occasionally	16	17	16	12	10
Seldomly	<u>32</u>	<u>29</u>	<u>26</u>	<u>19</u>	<u>10</u>
	100	100	100	100	100

frequently, occasionally, or seldomly was the same for all capacities (management, labor, professional, craftsman, technical, or other) of refinery employment. This indicated the amount of listening was not dependent upon the employment capacity. Therefore, the hypothesis was rejected as indicating that no significant relationship existed between listening frequency and refinery employment capacity.

There were 25 of the 30 refinery respondents who indicated they listened to "Conoco Time." Table 3 indicates the percentage of each group composing the various listening categories. The refinery sample was so small that some percentages may have given a false impression, but these were reviewed with a 95 per cent confidence interval.

The percentage of each capacity's listening frequency is indicated in Table 4.

The percentage of refinery employees who had listened (83 per cent) and the percentage of employees who listen regularly and frequently were higher than expected. It appeared from the study that the percentage of employees who had access to the program was higher than the company expected when it considered adding a program for the benefit of the refinery personnel unable to listen to the program because of the refinery shift hours.

Hypothesis 3. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were the same for all age groups of employees. This indicated the amount of

TABLE 3
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO REFINERY EMPLOYMENT CAPACITY

Listening Frequency	Refinery Employment Capacities						
	Mgt. (%)	Labor (%)	Prof. (%)	Crafts (%)	Tech. (%)	Other (%)	Total (%)
Regularly	40	0	0	40	0	20	100
Frequently	13	13	0	38	13	25	100
Occasionally	20	40	0	20	0	20	100
Seldomly	<u>33</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>17</u>	<u>50</u>	<u>100</u>
Number of Responses	6	3	0	6	2	7	24

TABLE 4
LISTENING FREQUENCIES OF REFINERY
EMPLOYMENT CAPACITIES

Listening Frequency	Refinery Employment Capacities					
	Mgt. (%)	Labor (%)	Prof. (%)	Crafts (%)	Tech. (%)	Other (%)
Regularly	33	0	0	33	0	14
Frequently	17	33	0	50	50	29
Occasionally	17	67	0	17	0	14
Seldomly	<u>33</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>50</u>	<u>43</u>
Total	100	100	100	100	100	100

listening was not dependent upon the employment capacity. Therefore, hypothesis 3 was rejected as indicating no significant relationship existed between the listening frequency and age.

A dependency was indicated in the chi-square test measuring listening to the program (not the amount) and the age groups. This was partially due to one respondent in the "below 18 age" group who indicated he had listened, but did not indicate the amount of listening, which was assumed to mean he was not a listener.

The 18 to 25-year-age category had a lower listening audience than the older groups. Of the total nonlisteners, 46 per cent were in the 18- to 25-year-age group.

The percentage of each age group composing the listening frequency categories as listed in Table 5, indicated there is not a significantly larger percentage of any one group influencing the relationship. There was no group which could be considered composing the majority of the listening audience.

Table 6 indicates there is no group attracted to the program more than another group (measured by percentage listening frequencies of each category).

Hypothesis 4. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were the same for males and females. This indicated that the amount of listening was not dependent upon the sex of the employee. Therefore, the hypothesis was rejected as indicating no significant relationship existed between the listening frequency and sex.

TABLE 5
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO AGE

Listening Frequency	Employee Age Groups (in Years)*					Total (%)
	18-25 (%)	26-35 (%)	36-45 (%)	46-55 (%)	56-65 (%)	
Regularly	15	24	22	29	11	100
Frequently	13	33	18	31	5	100
Occasionally	4	33	38	16	8	100
Seldomly	<u>18</u>	<u>42</u>	<u>13</u>	<u>18</u>	<u>8</u>	<u>100</u>
Number of Responses	21	50	33	39	13	156

*The categories of "below 18-year" category and "over-65" category have been deleted from the table because no responses were in the categories.

TABLE 6
LISTENING FREQUENCIES OF AGE GROUPS

Listening Frequencies	Employee Age Groups (in Years)*				
	18-25 (%)	26-35 (%)	36-45 (%)	46-55 (%)	56-65 (%)
Regularly	38	26	36	41	46
Frequently	24	26	21	31	15
Occasionally	5	16	27	10	15
Seldomly	<u>33</u>	<u>32</u>	<u>15</u>	<u>18</u>	<u>23</u>
	100	100	100	100	100

*The categories of "less than 18" and "over 65" have been deleted from the table because of no responses in the categories.

Although the males indicated a higher percentage of the total regular listeners, the females indicated a higher percentage of respondents who listened regularly. The percentages were influenced by the ratio of the number of female respondents to male respondents, as indicated in Table 7. Table 8 indicates the listening frequency of the males and females.

TABLE 7
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO SEX

Listening Frequency	Sex		
	Female (%)	Male (%)	Total (%)
Regularly	27	72	100
Frequently	23	77	100
Occasionally	13	88	100
Seldomly	<u>24</u>	<u>76</u>	<u>100</u>
Number of Responses	36	118	154

Hypothesis 5. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were the same for all educational levels. This indicated the amount of listening was not dependent upon the educational level of the employee. Therefore, hypothesis 5 was rejected as indicating no significant relationship existed between listening frequency and education.

TABLE 8
LISTENING FREQUENCY OF FEMALES AND MALES

Listening Frequency	Sex	
	Female (%)	Male (%)
Regularly	42	33
Frequently	25	25
Occasionally	8	18
Seldomly	<u>25</u>	<u>23</u>
	100	100

The amount of listening in relation to the educational level is indicated in Table 9. Again, the percentage of the total listening in each group was influenced by the number of respondents in that category.

The profile of the groups in relation to the amount of listening in each group is indicated in Table 10.

Hypothesis 6. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldom were the same for all time lengths of employment with the company (less than one year, one to five years, six to ten years, eleven to fifteen years, sixteen to twenty years, twenty-one to twenty-five years, and more than twenty-six years). This indicated there was no dependency between listening frequency and educational level.

TABLE 9

COMPOSITION OF LISTENING FREQUENCY CATEGORIES ACCORDING TO EDUCATIONAL LEVEL

Listening Frequency	Educational Levels										Total (%)
	Junior High (%)	High School (%)	Bus. Tech. (%)	Junior Coll. (%)	1 Yr. Coll. (%)	2 Yr. Coll. (%)	3 Yr. Coll. (%)	Bach. Deg. (%)	Mast. Deg. (%)	Ph.D. (%)	
Regularly	0	24	23	2	0	11	4	27	7	2	100
Frequently	3	28	8	0	3	8	13	26	5	8	100
Occasionally	4	13	17	4	0	13	4	9	26	9	100
Seldomly	<u>0</u>	<u>26</u>	<u>11</u>	<u>2</u>	<u>0</u>	<u>11</u>	<u>5</u>	<u>18</u>	<u>21</u>	<u>5</u>	<u>100</u>
Number of Responses	2	37	24	3	1	16	10	34	20	8	155

Therefore, hypothesis 6 was rejected as indicating that no significant relationship existed between listening frequency and length of time employed.

Table 11 shows the relationship of the periods of employment with the company and the percentage of listening to "Conoco Time." Again, the percentage of the total listeners in each group was influenced by the number of respondents in that group.

Table 12 indicates the listening frequency of each category of time length employed.

TABLE 11
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO LENGTH OF EMPLOYMENT

Listening Frequency	Length of Time Employed (in Years)							Total (%)
	Less Than 1 Yr.	1-5	6-10	11-15	16-20	21-25	More Than 26 Yrs.	
Regularly	11	18	11	15	13	18	15	100
Frequently	10	28	8	26	15	8	5	100
Occasionally	8	8	17	25	4	25	13	100
Seldomly	<u>24</u>	<u>34</u>	<u>13</u>	<u>5</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>100</u>
Number of Responses	21	36	18	26	17	22	16	156

Hypothesis 7. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not the same whether or not an employee had another family member employed with the company. Therefore, hypothesis 7 was accepted as indicating that a significant relationship did exist between

TABLE 12
LISTENING FREQUENCIES OF SUBGROUPS ACCORDING
TO LENGTH OF EMPLOYMENT

Listening Frequency	Length of Time Employed (in Years)						
	Less Than 1 Year	1-5	6-10	11-15	16-20	21-26	More Than 26 Years
Regularly	29	28	33	31	41	45	50
Frequently	19	31	17	38	35	14	13
Occasionally	10	6	22	23	6	27	19
Seldomly	<u>43</u>	<u>36</u>	<u>28</u>	<u>8</u>	<u>18</u>	<u>14</u>	<u>19</u>
	100%	100%	100%	100%	100%	100%	100%

listening frequency and whether or not a family member was employed with the company.

This test did not indicate the direction of the listening and the relationship between having a family member employed, but it did indicate a relationship.

Table 13 indicates the composition of the listening frequency according to whether or not a family member is employed by the company.

From Table 14, it was inferred that having a family member employed with the company perhaps influenced the frequency of listening in that it increased the listening in the frequently category and decreased the amount in the occasionally category.

TABLE 13
 COMPOSITION OF LISTENING FREQUENCY CATEGORIES
 IF A FAMILY MEMBER WAS EMPLOYED

Listening Frequency	Family Member Employed		
	Yes (%)	No (%)	Total (%)
Regularly	11	89	100
Frequently	29	72	100
Occasionally	0	100	100
Seldomly	<u>20</u>	<u>80</u>	<u>100</u>
Number of Responses	24	129	153

TABLE 14
 LISTENING FREQUENCIES IF A FAMILY
 MEMBER WAS EMPLOYED

Listening Frequency	Family Member Employed	
	Yes (%)	No (%)
Regularly	25	38
Frequently	46	28
Occasionally	0	19
Seldomly	<u>29</u>	<u>28</u>
	100	100

Hypothesis 8. The chi-square test indicated the proportions of employees who listened to "Conoco Time" either regularly, frequently, occasionally, or seldomly was the same whether or not the employee had another household member employed with Conoco. This indicated a dependency did not exist between listening frequency and having a household member employed. Therefore, hypothesis 8 was accepted as indicating that no significant relationship existed between listening frequency and whether or not a household member was employed by the company.

The percentage of the composition of the audience according to whether or not an employee had a household member employed with Conoco is indicated in Table 15. Table 16 indicates the listening frequencies of the two categories being tested.

TABLE 15
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
IF A HOUSEHOLD MEMBER WAS EMPLOYED

Listening Frequency	Household Member Employed		
	Yes (%)	No (%)	Total (%)
Regularly	22	78	100
Frequently	21	79	100
Occasionally	13	87	100
Seldomly	<u>16</u>	<u>84</u>	<u>100</u>
Number of Responses	29	124	153

TABLE 16
LISTENING FREQUENCIES IF A HOUSEHOLD
MEMBER WAS EMPLOYED

Listening Frequency	Household Member Employed	
	Yes (%)	No (%)
Regularly	41	35
Frequently	28	24
Occasionally	10	16
Seldomly	<u>21</u>	<u>25</u>
	100	100

Category 2

Category 2 tested the relationships between the type of information considered most useful on "Conoco Time" and the subgroups of employment capacity, age, sex, education, and length of time employed with the company.

Each hypothesis in Category 2 was tested by comparing the question requesting the subgroup characteristic and the question: "What type of information on "Conoco Time" is of most interest to you?"

The question was an open-end question which allowed the respondent to answer without a structured response. After the questionnaires were returned, the responses were reviewed and categories assigned which would include each response. The categories were: future operations, current conditions, world-wide company and subsidiary news, local company news,

interviews, employee information, stock report, everything, nothing.

As can be observed, the open-end question resulted in categories closely related to the ones which the program proposal listed as program content areas.

The statistical testing revealed the following.

Hypothesis 1. The chi-square test indicated the proportions of the type of program content considered most useful were the same for all capacities of nonrefinery employment (management, professional, technical, clerical, other). This indicated there was not a dependency between information desired and nonrefinery employment capacity. Therefore, hypothesis 1 was rejected as indicating that no significant relationship existed between the type of information desired on "Conoco Time" and the employment capacity.

Table 17 presents the subgroups' preferences of the program content.

Of the total responses, local company news received the highest percentage (38 per cent) of the total responses. Employee information received the second highest (15 per cent) of the responses.

Of the total responses, the ranking of the information most useful was: local company news, 38 per cent; employee information, 15 per cent; current conditions, 11 per cent; future operations, 10 per cent; stock report, 10 per cent; worldwide company and subsidiary news, 8 per cent; interviews, 8 per cent; everything, 3 per cent; nothing, 1 per cent.

TABLE 17
PROGRAM CONTENT PREFERENCE OF NONREFINERY
EMPLOYMENT CAPACITIES

Program Content	Nonrefinery Employment Capacity				
	Mgt. (%)	Prof. (%)	Tech. (%)	Clerical (%)	Other (%)
Future Operations	15	13	8	7	0
Current Conditions	15	9	8	13	0
World-wide Company, subsidiary News	8	4	17	6	0
Local Company News	5	26	42	33	50
Interviews	7	13	8	3	0
Employee Information	0	22	0	20	25
Stock Report	8	9	8	13	0
Everything	0	4	8	0	25
Nothing	<u>0</u>	<u>0</u>	<u>0</u>	<u>33</u>	<u>0</u>
Total	100	100	100	100	100

Hypothesis 2. The chi-square test indicated the proportions of the type of program content considered most useful were the same for all capacities of refinery employment (management, labor, professional, craftsman, technical, or other). This indicated no dependency existed between the type of information desired and refinery employment capacity. Therefore, hypothesis 2 was rejected as indicating that no significant relationship existed between information most desired on "Conoco Time" and refinery employment capacity.

Table 18 indicates the percentage preference of each employment capacity. Again, it should be noted that the small

refinery sample may give false implications, but the tables were reviewed for the 95 per cent confidence level.

TABLE 18
PROGRAM CONTENT PREFERENCE OF REFINERY
EMPLOYMENT CAPACITIES

Program Content	Nonrefinery Employment Capacity					
	Mgt. (%)	Labor (%)	Prof. (%)	Crafts (%)	Tech. (%)	Other (%)
Future Operations	50	0	0	25	0	40
Current Conditions	0	0	100	0	0	20
World-wide Company, Subsidiary News	0	0	0	0	0	0
Local Company News	0	0	0	25	50	40
Interviews	0	0	0	0	0	0
Employee Information	0	100	0	25	0	0
Stock Report	0	0	0	25	0	0
Everything	50	0	0	0	50	0
Nothing	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	100	100	100	100	100

Of the total responses, the refinery, as the nonrefinery, expressed a preference for local company news (27 per cent). The refinery ranked future operations equally with local company news.

The ranking of the type of information preferred by refinery personnel was: local company news, 27 per cent; future operations, 27 per cent; current conditions, 13 per cent;

employee information, 13 per cent; everything, 13 per cent; stock report, 6 per cent.

Hypothesis 3. The proportions of the type of program content desired on "Conoco Time" were the same for all age groups. This indicated that no dependency existed between age and program content considered most useful. Therefore, hypothesis 3 was rejected as indicating that no significant relationship existed between age and program content desired for "Conoco Time."

Table 19 indicates the program content preference according to the age groups.

TABLE 19
PROGRAM CONTENT PREFERENCE ACCORDING TO AGE

Program Content	Employee Age Groups (in Years)*			
	18-25 (%)	26-35 (%)	36-45 (%)	56-65 (%)
Future Operations	13	7	9	25
Current Conditions	6	11	14	13
World-wide Company, Subsidiary News	13	4	14	0
Local Company News	31	37	32	25
Interviews	0	15	9	0
Employee Information	19	19	18	0
Stock Report	13	7	5	13
Everything	0	0	0	25
Nothing	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	100	100	100

*Age categories "below 18" or "over 65" were deleted because of no responses.

Hypothesis 4. The chi-square test indicated the proportions of the type of program content desired on "Conoco Time" were the same for males and females. This indicated that a dependency did not exist between the type of program content desired and the sex of the employee. Therefore, hypothesis 4 was rejected as indicating that no significant relationship existed between the type of program content desired and the sex of the employee.

Table 20 indicates the preferences, according to sex, of the program content considered most useful.

TABLE 20
PROGRAM CONTENT PREFERENCE ACCORDING TO SEX

Program Content	Sex of Employee	
	Females (%)	Males (%)
Future Operations	4	15
Current Conditions	8	11
World-wide Company, Subsidiary News	8	6
Local Company News	33	34
Interview	4	7
Employee Information	21	13
Stock Report	8	10
Everything	8	4
Nothing	<u>4</u>	<u>0</u>
Total	100	100

Hypothesis 5. The chi-square test indicated the proportions of the type of program content considered most useful on "Conoco Time" were the same for all educational levels. This indicated no dependency existed between the type of information desired and the educational level. Therefore, hypothesis 5 was rejected as indicating no significant relationship existed between the program content desired and education.

Table 21 indicates the percentage preferences of each educational level in relationship to the type of information considered most useful.

Hypothesis 6. The chi-square test indicated the proportions of the type of program content considered most useful on "Conoco Time" were the same for all lengths of time of employment with Conoco. This indicated there was not a significant relationship between the program content desired and the length of time employed. Therefore, the hypothesis was rejected.

Table 22 indicates the preferences of the subgroups according to length of time employed.

Category 3

Category 3 tested the relationships between the type of informational tool favored and the employee subgroups of employment capacity, age, sex, educational level, and length of time employed.

Each hypothesis was tested by using the chi-square contingency test for comparing the relationships between the question requesting the subgroup characteristic and the question:

TABLE 21

PROGRAM CONTENT PREFERENCE ACCORDING TO EDUCATIONAL LEVEL

Program Content	Educational Levels										
	Junior High School (%)	High School (%)	Bus., Tech. (%)	Junior Coll. (%)	1 Yr. Coll. (%)	2 Yr. Coll. (%)	3 Yr. Coll. (%)	Bach. Deg. (%)	Mast. Deg. (%)	Ph.D. (%)	
Future Operations	0	9	18	0	0	0	10	33	11	16	0
Current Conditions	50	14	6	0	0	0	0	0	5	23	25
World-wide Company, Subsidiary News	0	9	0	50	100	0	0	0	5	0	25
Local Company News	0	27	47	50	0	50	67	37	8	25	25
Interviews	0	9	0	0	0	0	0	11	8	0	0
Employee Information	0	5	18	0	0	40	0	11	31	0	0
Stock Report	0	14	6	0	0	0	0	21	8	0	0
Everything	50	9	6	0	0	0	0	0	8	0	0
Nothing	0	5	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100

TABLE 22
PROGRAM CONTENT PREFERENCE ACCORDING
TO LENGTH OF EMPLOYMENT

Program Content	Length of Employment (in Years)						More Than 26 Yrs. (%)
	Less Than 1 Yr. (%)	1-5 (%)	6-10 (%)	11-15 (%)	16-20 (%)	21-25 (%)	
Future Operations	25	4	0	0	14	31	18
Current Conditions	17	8	10	13	14	6	9
World-wide Company, Subsidiary News	0	13	0	13	0	6	0
Local Company News	33	25	60	38	29	38	27
Interviews	0	13	0	6	14	6	0
Employee Information	0	38	10	13	14	0	9
Stock Report	17	0	20	13	0	0	27
Everything	0	0	0	6	14	13	9
Nothing	<u>8</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	100	100	100	100	100	100	100

"From which informational source do you prefer to hear company information?" (The list of sources appeared in the preceding question.)

In reviewing the returned questionnaires, the response of "no preference" was added to the list of sources of: "Conoco Time," The CONOCOan, The Flash, The PONOCOan, The Grapevine, word of mouth, newspapers, other sources, no preference.

The statistical testing indicated the following for each hypothesis.

Hypothesis 1. The chi-square test indicated the proportions of employees preferring each of the nine categories of informational tools were the same for all capacities of non-refinery employment. Therefore, hypothesis 1 was rejected as indicating that no significant relationship existed between the informational tools desired and the nonrefinery capacities of employment.

Table 23 indicates the employment capacity subgroups' preferences for each tool.

TABLE 23
INFORMATIONAL TOOL PREFERENCE ACCORDING TO
NONREFINERY EMPLOYMENT CAPACITIES

Informational Tool	Employment Capacity				
	Mgt. (%)	Prof. (%)	Tech. (%)	Clerical (%)	Other (%)
Conoco Time	12	12	33	32	7
CONOCOan	0	8	13	5	0
The Flash	41	43	20	34	31
PONOCOan	12	10	33	22	23
Grapevine	0	0	0	0	0
Word of Mouth	12	12	0	2	15
Newspapers	0	2	0	0	0
Other Sources	6	6	0	4	15
No Preference	<u>18</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	100	100	100	100

Hypothesis 2. The chi-square test indicated the proportions of employees preferring each of the nine categories of informational tools were the same for all capacities of refinery employment. Therefore, hypothesis 2 was rejected as indicating no significant relationship existed between the informational tools desired and the refinery capacities of employment.

Table 24 indicates the employment subgroups' preference for each informational tool.

TABLE 24
INFORMATIONAL TOOL PREFERENCE ACCORDING TO
REFINERY EMPLOYMENT CAPACITIES

Informational Tool	Employment Capacity					
	Mgt. (%)	Labor (%)	Prof. (%)	Crafts (%)	Tech. (%)	Other (%)
Conoco Time	50	0	0	17	0	13
CONOCOan	0	25	0	0	0	0
Flash	25	0	100	17	100	0
PONOGOan	0	0	0	0	0	38
Grapevine	25	75	0	67	0	50
Word of Mouth	0	0	0	0	0	0
Newspapers	0	0	0	0	0	0
Other Sources	0	0	0	0	0	0
No Preference	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	100	100	100	100	100	100

Hypothesis 3. The chi-square test indicated the proportions of employees preferring each of the nine informational tools were the same for all age groups. This indicated that no dependency existed between the informational tools desired and the age groups. Therefore, hypothesis 3 was rejected as indicating that no significant relationship existed between the informational tools desired and age.

Table 25 indicates the preference of the age groups for informational tools.

TABLE 25
INFORMATIONAL TOOL PREFERENCE ACCORDING TO AGE

Informational Tool	Age (in Years)*					
	Less Than 18 (%)	18-25 (%)	26-35 (%)	36-45 (%)	46-55 (%)	56-65 (%)
Conoco Time	0	27	17	3	26	40
CONOCOan	0	0	6	10	9	0
Flash	100**	27	40	41	19	27
PONOCOan	0	23	19	17	10	13
Grapevine	0	3	0	10	23	6
Word of Mouth	0	10	9	7	3	0
Newspapers	0	0	2	0	0	0
Other Sources	0	7	8	3	0	7
No Preference	<u>0</u>	<u>33</u>	<u>0</u>	<u>7</u>	<u>10</u>	<u>7</u>
Total	100	100	100	100	100	100

*Age group "over 65" was deleted because of no responses.

**Only respondent in "below 18" category.

Hypothesis 4. The chi-square test indicated the proportions of employees preferring each of the nine categories of informational tools were the same for males and females. This indicated a significant relationship did not exist between the informational tool preferred and the sex of the employee; therefore, the hypothesis 4 was rejected.

Table 26 indicates the preference of males and females for the informational tools.

TABLE 26
INFORMATIONAL TOOL PREFERENCE ACCORDING TO SEX

Informational Tool	Sex	
	Female (%)	Male (%)
Conoco Time	27	17
CONOCOan	6	6
Flash	21	37
PONOCOan	30	14
Grapevine	0	10
Word of Mouth	3	7
Newspapers	0	1
Other Sources	9	4
No Preference	<u>3</u>	<u>5</u>
Total	100	100

Hypothesis 5. The chi-square test indicated the proportions of employees preferring each of the nine categories of informational tools were the same for all educational levels. Therefore, hypothesis 5 was rejected as indicating that no significant relationship existed between preference for informational tools and education.

Table 27 indicates the preference of each educational level category for the nine categories of informational tools.

Hypothesis 6. The chi-square test indicated the proportions of employees preferring each of the nine categories of informational tools were the same for all lengths of employment. Therefore, hypothesis 6 was accepted, indicating that a significant relationship existed between preference for informational tools and length of time employed.

Table 28 indicates the percentage preference of each subgroup for informational tools.

Category 4

Category 4 tested the relationship between the employees' radio listening habits and their habits of listening to "Conoco Time." Each hypothesis was tested by finding the relationship between the question concerning the employees' listening frequency and the questions concerning the radio listening habits.

The statistical testing of each hypothesis indicated the following.

Hypothesis 1. The chi-square test indicated a significant relationship between employees who listen to "Conoco Time"

TABLE 27

INFORMATIONAL TOOL PREFERENCE ACCORDING TO EDUCATIONAL LEVEL

Informational Tool	Educational Level									
	Junior High (%)	High School (%)	Bus., Tech. (%)	Junior Coll. (%)	1 Yr. Coll. (%)	2 Yr. Coll. (%)	3 Yr. Coll. (%)	Bach. Deg. (%)	Mast. Deg. (%)	Ph.D. (%)
Conoco Time	0	18	26	50	0	29	43	19	10	11
CONOCOan	0	0	13	0	0	12	0	6	10	0
Flesh	33	26	30	50	100	29	14	44	33	33
PONOCOan	33	23	22	0	0	6	43	11	14	11
Grapevine	33	23	0	0	0	6	0	0	0	0
Word of Mouth	0	5	0	0	0	6	0	3	24	22
Newspaper	0	0	0	0	0	0	0	3	0	0
Other Sources	0	5	9	0	0	0	0	0	10	22
No Preference	0	0	0	0	0	12	0	14	0	0
Total	100	100	100	100	100	100	100	100	100	100

TABLE 28
 INFORMATIONAL TOOL PREFERENCE ACCORDING
 TO LENGTH OF EMPLOYMENT

Informational Tool	Length of Employment (in Years)						More Than 26 Yrs. (%)
	Less Than 1 Yr. (%)	1-5 (%)	6-10 (%)	11-15 (%)	16-20 (%)	21-25 (%)	
Conoco Time	4	28	21	4	27	22	35
CONOCOan	4	5	5	17	0	0	6
Flash	25	33	42	39	33	22	35
PONOCOan	50	9	16	13	7	17	6
Grapevine	4	2	0	4	20	28	6
Word of Mouth	4	12	16	0	7	6	0
Newspapers	0	2	0	0	0	0	0
Other Sources	4	9	0	9	0	0	6
No Preference	<u>4</u>	<u>0</u>	<u>0</u>	<u>13</u>	<u>7</u>	<u>6</u>	<u>6</u>
Total	100	100	100	100	100	100	100

either regularly, frequently, occasionally, or seldomly and the employees who listen to the local radio station WBBZ. This indicated a dependency existed between the radio station most frequently used and the listening of "Conoco Time." Therefore, the hypothesis was accepted, indicating that a significant relationship existed between the listening frequency and listening to the local radio station.

Table 29 indicates the listening frequency of "Conoco Time" as compared with the listeners and nonlisteners of WBBZ.

TABLE 29
LISTENING FREQUENCIES OF WBBZ LISTENERS

Listening Frequency	Listen to WBBZ	
	Yes (%)	No (%)
Regularly	36	14
Frequently	26	0
Occasionally	15	14
Seldomly	<u>22</u>	<u>71</u>
Total	100	100

Hypothesis 2. The chi-square test indicated a significant relationship between the amount of listening and the favorite radio listening times of the respondents. Therefore, hypothesis 2 was accepted as indicating that a significant relationship existed between the frequency of listening and the employees' favorite radio listening times.

This hypothesis was tested from the open-end question which requested the employee to indicate his favorite radio listening times. After reviewing the questionnaires, the responses were placed into categories of: 6-7 A.M., 7-8 A.M., 12-1 P.M., 4-5 P.M., 5-6 P.M., 6-7 P.M., 8-10 P.M., 10-12 P.M., Varies, Evenings.

As indicated by Table 30, the highest percentage of regular listeners indicate the time of the program corresponds with their favorite listening time.

TABLE 30

COMPOSITION OF LISTENING FREQUENCY CATEGORIES ACCORDING
TO FAVORITE RADIO LISTENING TIMES

Listening Frequency	Favorite Radio Listening Hours											Total (%)
	6-7AM (%)	7-8AM (%)	12-1PM (%)	4-5PM (%)	5-6PM (%)	6-7PM (%)	8-10PM (%)	10-12PM (%)	Varies (%)	Even- ing (%)	Total (%)	
Regularly	63	2	2	2	0	2	4	4	16	8	100	
Frequently	46	0	0	8	11	5	5	8	11	5	100	
Occasionally	25	5	5	0	0	0	5	15	20	25	100	
Seldomly	<u>19</u>	<u>16</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>13</u>	<u>3</u>	<u>16</u>	<u>26</u>	<u>100</u>	
Number of Responses	60	7	2	4	5	4	9	9	20	19	139	

Hypothesis 3. The chi-square test indicated there is a significant relationship between the convenience of the program and the frequency of the listening. Therefore, the hypothesis was accepted as indicating that a dependency existed between the amount of listening and the convenience of the program.

The hypothesis was tested using the question: "Is 'Conoco Time' convenient for you?"

Table 31 shows the percentage of each listening category compared with convenience of the program.

Not measuring frequency of listening, 67 per cent of listeners indicated it is convenient. Of those indicating it is convenient, 94 per cent have listened.

Category 5

Category 5 tested the relationship between the residents' listening frequencies and the resident subgroup characteristics of occupation, age, sex, if a family or household member was employed by the company, and the length of residency.

Each hypothesis was tested by comparing the relationship between the question requesting the subgroup characteristic and the questions:

- a. "Have you ever listened to 'Conoco Time'?"
- b. "If so, indicate frequency . . .
regularly
frequently
occasionally
seldomly."

Although the chi-square contingency tables were used to test both questions, the criterion for acceptance or rejection rested on the relationship found for question "b".

TABLE 31
LISTENING FREQUENCY CATEGORIES ACCORDING
TO CONVENIENCE OF PROGRAM

Listening Frequency	Program Convenience		
	Yes (%)	No (%)	Total (%)
Regularly	98	2	100
Frequently	76	24	100
Occasionally	43	57	100
Seldomly	<u>28</u>	<u>72</u>	<u>100</u>
Number of Responses	102	49	151

The chi-square tests indicated the following.

Hypothesis 1. The chi-square test indicated the proportions of residents who listen to "Conoco Time" regularly, frequently, occasionally, or seldomly are the same for all occupations. This indicated there was no dependency between the listening frequency and occupation. Therefore, hypothesis 1 was rejected as indicating no significant relationship existed between listening frequency and occupation.

Table 32 indicates the listening audience according to occupation. Table 33 indicates the listening percentages of each occupation category.

Hypothesis 2. The chi-square test indicated the proportions of residents who listen to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not dependent upon

TABLE 32
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO OCCUPATION

Listening Frequency	Occupations										
	Profes- sional (%)	Self Emp. (%)	Labor (%)	Manage- ment (%)	Cler- ical (%)	Teach- er (%)	Civil Serv. (%)	Sales (%)	House- wife, Re- tired (%)	Other (%)	Total (%)
Regularly	16	9	3	0	19	13	9	3	25	3	100
Frequently	11	11	18	14	11	7	4	4	21	0	100
Occasionally	0	0	0	33	22	11	0	11	22	0	100
Seldomly	<u>16</u>	<u>8</u>	<u>8</u>	<u>15</u>	<u>8</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>23</u>	<u>23</u>	<u>100</u>
Number of Responses	10	7	7	9	12	7	4	3	19	4	82

length of residency. This indicated the proportions were the same, and therefore hypothesis 2 was rejected as indicating that no significant relationship existed between listening frequency and length of residency.

The composition of the listening audience according to length of residency is indicated in Table 34, while Table 35 indicates the percentages of each category of length of residency.

TABLE 34
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO LENGTH OF RESIDENCY

Listening Frequency	Length of Residency (in Years)*					Total (%)
	1-5 (%)	6-10 (%)	11-15 (%)	16-20 (%)	Over 20 (%)	
Regularly	9	3	15	12	60	100
Frequently	10	14	17	17	41	100
Occasionally	18	18	9	9	45	100
Seldomly	<u>20</u>	<u>7</u>	<u>0</u>	<u>13</u>	<u>60</u>	<u>100</u>
Number of Responses	11	8	11	12	46	88

*The category "less than 1 year" was deleted from this table because of no respondents in that category.

Hypothesis 3. The chi-square test indicated the proportions of residents who listen to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not dependent upon a family member being employed by Conoco. Therefore, hypothesis 3 was rejected as indicating that no significant

TABLE 35
LISTENING FREQUENCIES OF RESIDENTS ACCORDING
TO LENGTH OF RESIDENCY

Listening Frequency	Length of Residency (in Years)				
	1-5 (%)	6-10 (%)	11-15 (%)	16-20 (%)	Over 20 (%)
Regularly	27	13	45	33	43
Frequently	27	50	45	42	26
Occasionally	18	25	9	8	11
Seldomly	<u>27</u>	<u>13</u>	<u>0</u>	<u>17</u>	<u>20</u>
Total	100	100	100	100	100

relationship existed between the listening frequency of the residents and having a family member employed by Conoco.

The composition of the listening audience according to whether or not a family member was employed by Conoco is indicated in Table 36. Table 37 shows the percentages of each category's listening.

Hypothesis 4. The chi-square test indicated the proportions of residents who listen to "Conoco Time" either regularly, frequently, occasionally, or seldomly were not dependent upon a household member being employed by Conoco. Therefore, hypothesis 4 was rejected as indicating that no significant relationship existed between the listening frequency of the residents and having a household member employed by Conoco.

TABLE 36

COMPOSITION OF LISTENING FREQUENCY CATEGORIES
IF A FAMILY MEMBER WAS EMPLOYED

Listening Frequency	Family Member Employed with Conoco		
	Yes (%)	No (%)	Total (%)
Regularly	28	71	100
Frequently	18	82	100
Occasionally	20	80	100
Seldomly	<u>35</u>	<u>64</u>	<u>100</u>
Number of Responses	21	63	84

TABLE 37

LISTENING FREQUENCIES OF RESIDENTS
IF A FAMILY MEMBER WAS EMPLOYED

Listening Frequency	Family Member Employed with Conoco	
	Yes (%)	No (%)
Regularly	43	37
Frequently	24	37
Occasionally	10	13
Seldomly	<u>24</u>	<u>14</u>
Total	100	100

Table 38 indicates the composition of the listening audience according to whether or not a household member is employed by Conoco. The listening percentages of the two categories are indicated in Table 39.

TABLE 38

COMPOSITION OF LISTENING FREQUENCY CATEGORIES IF A
HOUSEHOLD MEMBER WAS EMPLOYED WITH CONOCO

Listening Frequency	Household Member Employed with Conoco		
	Yes (%)	No (%)	Total (%)
Regularly	15	85	100
Frequently	11	90	100
Occasionally	20	80	100
Seldomly	<u>19</u>	<u>81</u>	<u>100</u>
Number of Responses	13	74	87

Hypothesis 5. The chi-square test indicated the proportions of residents who listen to "Conoco Time" either regularly, frequently, occasionally, or seldomly were the same for all age groups. This indicated no dependency existed between the categories. Therefore, hypothesis 5 was rejected as indicating that no significant relationship existed between the listening frequency and the age of the residents.

TABLE 39
 LISTENING FREQUENCIES OF RESIDENTS IF A
 HOUSEHOLD MEMBER WAS EMPLOYED

Listening Frequency	Household Member Employed with Conoco	
	Yes (%)	No (%)
Regularly	38	38
Frequently	23	34
Occasionally	15	11
Seldomly	<u>23</u>	<u>18</u>
Total	100	100

The composition of the listening audience according to age is indicated in Table 40. The distribution of the listening frequencies of the age categories is listed in Table 41.

TABLE 40
COMPOSITION OF LISTENING FREQUENCY CATEGORIES
ACCORDING TO AGE

Listening Frequency	Age (in Years)*						Total (%)
	18-25 (%)	26-35 (%)	36-45 (%)	46-55 (%)	56-65 (%)	Over 65 (%)	
Regularly	0	3	21	27	27	21	100
Frequently	3	14	24	17	28	14	100
Occasionally	9	18	9	18	36	9	100
Seldomly	<u>13</u>	<u>13</u>	<u>20</u>	<u>33</u>	<u>7</u>	<u>13</u>	<u>100</u>
Number of Responses	4	9	18	21	22	14	88

*Category "below 18" was deleted from table because of no responses in that category.

TABLE 41
LISTENING FREQUENCIES OF RESIDENTS
ACCORDING TO AGE

Listening Frequency	Age (in Years)*					
	18-25 (%)	26-35 (%)	36-45 (%)	46-55 (%)	56-65 (%)	Over 65 (%)
Regularly	0	11	39	43	41	50
Frequently	25	44	39	24	36	29
Occasionally	25	22	6	10	18	7
Seldomly	<u>50</u>	<u>22</u>	<u>17</u>	<u>24</u>	<u>5</u>	<u>14</u>
Total	100	100	100	100	100	100

*Category "below 18" was deleted from table because of no responses in that category.

TABLE 42
SUMMARY OF INVESTIGATED RELATIONSHIPS

Employees' listening frequencies of "Conoco Time" and . . .	
nonrefinery employment	NS
refinery employment capacity	NS
age	NS
sex	NS
educational level	NS
length of employment	NS
family member employed	*
household member employed	NS
Type of information desired on "Conoco Time" and . . .	
nonrefinery employment capacity	NS
refinery employment capacity	NS
age	NS
sex	NS
educational level	NS
length of employment	NS
Type of informational tool preferred and . . .	
nonrefinery employment capacity	NS
refinery employment capacity	NS
age	NS
sex	NS
educational level	NS
length of employment	*
Listening frequencies of "Conoco Time" and . . .	
favorite radio station	*
favorite listening time	*
convenience of program time	*
Residents' listening frequencies to "Conoco Time" and . . .	
occupation	NS
length of residency	NS
age	NS
family member employed	NS
household member employed	NS

NS indicates the relationship is not significant.

*indicates the relationship is significant at the .05 level.

CHAPTER V

CONCLUSIONS AND ADDITIONAL FINDINGS

From the chi-square tests conducted, it appeared that an employee's listening frequency of "Conoco Time" depended for the most part on whether or not the time of the program were convenient for the employees and whether or not the employees were accustomed to listening to the radio station which broadcast the program.

Several tests were conducted to test for the relationship between the time of the broadcast of "Conoco Time" and the employees' listening frequency.

As stated in the findings, a significant relationship was found where the employees indicated their favorite radio listening times corresponded with the time of the program.

A test was also conducted for the relationship of the favorite listening times of the employees and the listening frequency. This also was significant.

The test revealing that the convenience of the program was significant also indicated no other time was significantly more convenient, as did the relationship between suggested "other times" and listening and nonlistening.

Surprisingly, no significant relationship was found in the refinery employment personnel and the time tests. The author assumed from this that no other time would be more

convenient for the refinery personnel, as had been considered before the study was conducted. But it should be noted that no employee in the labor subgroup was a regular listener.

Of the total refinery respondents, 83 per cent indicated they had listened. Of these respondents, 20 per cent indicated they were regular listeners, 33 per cent frequent listeners, 20 per cent occasional listeners, and 25 per cent seldom listeners.

Although the program did not appear significantly better received by any one group of employees, the listening frequencies seemed to indicate the employees utilized the program. Of the 150 respondents, 134 (86 per cent) indicated they had listened to the program. The percentage of listening in the nonrefinery according to the frequency categories were: 35 per cent regular listeners, 24 per cent frequent listeners, 15 per cent occasional listeners, and 24 per cent seldom listeners.

The radio station also appeared to be a significant factor in the frequency of listening. Those who listened to WBBZ or listed WBBZ as their favorite radio station, had the highest listening percentages.

Only two other hypotheses were found to have relationships of significance. A significant relationship was indicated between having a family member employed by the company and the amount of listening, and between length of time with Conoco and the type of informational tool preferred.

Although a significant relationship was not indicated between listening frequency and age, 46 per cent of the

nonlisteners of "Conoco Time" were in the 18 to 25-year-age group.

The other characteristics did not appear to have appreciable differences in percentages of listening. Although the listening audience appeared to have more males, more persons with high school education, and more persons who had worked for the company from one to five years, the outcome of the tests were partially influenced by the number of respondents in those categories.

The hypotheses testing the type of information considered most useful and the subgroup characteristics found no significant relationships. In percentage of the total responses, most employees preferred local company news and employee information. World-wide company and subsidiary news and information of future operations ranked high also. Interviews and public service announcements ranked low in being considered most useful or the most preferred type of information.

Length of time employed was the only significant factor found in relation to the type of information tool desired.

In the nonrefinery section, Flash received the highest number of responses as being the tool most preferred. The percentage relationships of total responses of tools most preferred were: The Flash, 37 per cent; "Conoco Time," 20 per cent; The CONOCOan, 18 per cent; "word of mouth," 8 per cent; The CONOCOan, 6 per cent; "other sources," 6 per cent; no preference, 6 per cent; local newspaper, .09 per cent.

In the refinery, the sources ranked according to total responses: The Grapevine, 50 per cent; "Conoco Time," 16 per

cent; The Flash, 16 per cent; The PONOCOan, 12 per cent; The CONOCOan, 4 per cent; the remaining tools did not receive any responses.

Tests of the residents' characteristics and the listening frequencies did not indicate a significance in any of the relationship tests.

Of the residents responding, 73 per cent indicated they listened to "Conoco Time." The listening frequencies of the total responses were: 37 per cent listened regularly, 34 per cent listened frequently, 11 per cent listened occasionally, and 16 per cent listened seldomly.

Assuming that education was related to occupation, the relationship of education and listening frequencies was tested to verify the hypothesis concerning occupation and listening frequency. It was found no dependency existed.

Although 60 per cent of the regular listeners were in the 20-year residency category, the 11- to 15-year residency group indicated that 90 per cent of that group listened regularly or frequently.

Along with the tests showing no significant relationships between having a family or household member employed, no significant relationship was found between listening frequency and being a former Conoco employee.

The former employees indicated their listening frequency as: 31 per cent regular listeners, 23 per cent frequent listeners, 15 per cent occasional listeners, and 31 per cent seldom listeners.

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CONSULTED SOURCES

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APPENDICES

APPENDIX A

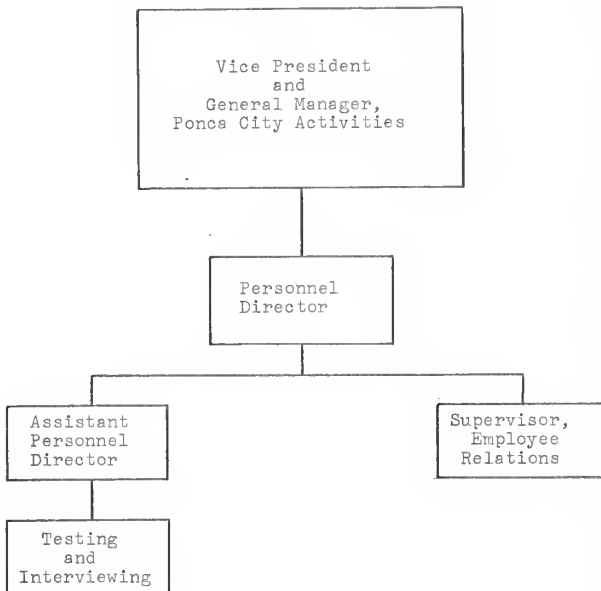
Background Information
for
Continental Oil Company,
"Gonoco Time,"
and
WBBZ

A-1. The Conoco Brand.



A-2. The WBBZ Coverage Map.

A-3. The Continental Oil Company
(Ponca City) Nonrefinery
Personnel Organizational Chart



A-4. Job Description for the
Regional Communications Advisor,
Continental Oil Company,
Ponca City, Oklahoma.

JOB DESCRIPTIONREGIONAL COMMUNICATIONS ADVISORBASIC FUNCTIONS

The regional communications advisor has the responsibility of planning, organizing, writing, and publishing communications media for the Northern Region and Ponca City operations and to develop a long-range educational communications program.

ORGANIZATIONAL RELATIONSHIP

The regional communications advisor reports to the regional manager of personnel relations.

SPECIFIC RESPONSIBILITIES AND OBJECTIVES

1. Develop a long-range educational communications program encompassing management philosophy and practices, automation, economics, employee benefits, cost control, employee relations, community relations, union relations, and communications matters the regional manager of personnel relations may assign.
2. Assist managers and supervisors with their communications problems.
3. Study and seek to improve the distribution procedure for all communications media.
4. Advise regional management on the techniques of effective communications.
5. Establish regular and professional communications media such as publications, radio, newsletters, bulletin boards, etc.
6. Stimulate and co-ordinate upward communications from employees to regional management.
7. Initiate and co-ordinate employee opinion surveys, suggestion systems, and "letters to management" columns.

JOB DESCRIPTIONREGIONAL COMMUNICATIONS ADVISORSPECIFIC RESPONSIBILITIES AND OBJECTIVES (Continued)

8. Write speeches and management newsletters, develop brochures, and assist regional management in other areas of communications.
9. Co-ordinate the participation of employees in community and civic activities.
10. Co-ordinate and prepare all press releases and organization bulletins.
11. Develop special projects that may be assigned by the regional manager of personnel relations.

APPENDIX B

Methodology Information

B-1. Employee Cover Letter
and Questionnaire.



CONTINENTAL OIL COMPANY

P. O. DRAWER 1267
PONCA CITY, OKLAHOMA 74601

Dear Employee:

Conoco, with the assistance of a Kansas State University graduate student, is conducting a survey concerning our radio program CONOCO TIME, which is broadcast daily at 6:45 a.m., Monday through Friday, on WBBZ. We are enclosing a questionnaire to obtain your opinion of the program.

Your returning of the completed form by August 16 would be greatly appreciated. A self-addressed envelope has been enclosed for your convenience.

A high percentage of returns is necessary for a successful study, and only with your cooperation can the study be completed. Your name has been selected at random, and you do not have to sign the questionnaire.

If you have never listened to the program, please complete sections I, II, III and IV and return the form. If you have listened to CONOCO TIME, please complete sections I through V.

In case you have questions, contact me at extension 8307.

Sincerely,

A handwritten signature in cursive script that reads "Lynn Smith".

Lynn Smith
Supervisor
Employee Communications

LS/cm

CONOCO TIME SURVEY

Please indicate by an X the appropriate responses to the following questions.

Section I

1. Indicate your capacity of employment with Conoco.

Nonrefinery

_____ Management
 _____ Professional
 _____ Technical
 _____ Clerical
 _____ Other (Name Position)

Refinery

_____ Management
 _____ Labor
 _____ Professional
 _____ Craftsman
 _____ Technical
 _____ Other (Name Position)

2. Marital status: Married _____ Single _____
 Divorced _____ Widowed _____
3. Number of children _____
4. Are you the head of your household? Yes _____ No _____
5. Is any other member of your household (those living at your residence) employed by Conoco? Yes _____ No _____
6. Please indicate employment capacity of household members (those living at your residence) employed with Conoco. (Use classification from question 1 to fill in blanks.)

NonrefineryRefinery

Wife	_____	_____
Husband	_____	_____
Daughter	_____	_____
Son	_____	_____
Father	_____	_____
Mother	_____	_____
Sister	_____	_____
Brother	_____	_____
Other Household Members Employed by Conoco	_____	_____
_____	_____	_____
_____	_____	_____

7. Is any member of your family not living at your residence employed by Conoco?
 Yes _____ No _____

8. Please indicate employment capacity of family members not living at your residence employed by Conoco. (Use classification from question 1 to fill in blanks.)

	<u>Nonrefinery</u>	<u>Refinery</u>
Daughter	_____	_____
Son	_____	_____
Daughter-in-law	_____	_____
Son-in-law	_____	_____
Sister	_____	_____
Brother	_____	_____
Sister-in-law	_____	_____
Brother-in-law	_____	_____
Mother	_____	_____
Father	_____	_____
Mother-in-law	_____	_____
Father-in-law	_____	_____
Other Family Members Not Living at Your Residence Employed by Conoco	_____	_____

Section II

9. Please indicate your age in the appropriate space.

Below 18	18-25	26-35	36-45	46-55	56-65	Over 65
_____	_____	_____	_____	_____	_____	_____

10. Sex: Female _____ Male _____

11. Please indicate the number of years you have been with Conoco.

Less Than 1 Year	1-5 Years	6-10 Years	11-15 Years	16-20 Years	21-25 Years	Over 26
_____	_____	_____	_____	_____	_____	_____

12. Please indicate the highest educational level you have completed.

- _____ Junior High School (through 8th grade)
- _____ High School
- _____ Business or Technical School
- _____ Junior College Degree
- _____ 2 Years of College Work
- _____ 3 Years of College Work
- _____ Bachelor's Degree
- _____ Master's Degree
- _____ Doctoral Degree
- _____ Other (Name Degree or Level)

13. Do you live in Ponca City? Yes _____ No _____
 If not, where do you live? _____

Section III

4. Do you listen to radio station WBBZ in Ponca City? Yes _____ No _____
5. What radio station do you listen to most often? _____
6. What hours during the day and evening are your favorite radio listening times?

7. Have you ever listened to CONOCO TIME which is broadcast daily Monday through Friday at 6:45 a.m. on WBBZ? Yes _____ No _____

If yes, do you listen (please check one).....

- _____ Regularly
_____ Frequently (2-3 times a week)
_____ Occasionally (Once a week)
_____ Seldom (Less than once a week)

8. Do any other members of your household (those living at your residence) listen to CONOCO TIME? Yes _____ No _____
9. Please indicate the frequency of the household members' listening to CONOCO TIME. (Use classification from question 15.)

<u>Listen</u>	<u>Frequency</u>
_____ Wife	_____
_____ Husband	_____
_____ Daughter	_____
_____ Son	_____
_____ Father	_____
_____ Mother	_____
_____ Sister	_____
_____ Brother	_____
_____ Other Household Members	_____
_____	_____
_____	_____
_____	_____

10. Is the time of the program (6:45 a.m.) convenient for you? Yes _____ No _____
11. Would another time be more convenient? Yes _____ No _____
If so, please indicate the time.

- | | | |
|----------------------|----------------------|------------------|
| _____ 7:00-7:15 a.m. | _____ 3:30-3:45 p.m. | _____ Other Time |
| _____ 7:15-7:30 a.m. | _____ 3:45-4:00 p.m. | |
| _____ 7:30-7:45 a.m. | _____ 4:00-4:15 p.m. | |
| | _____ 4:15-4:30 p.m. | |

Section IV

2. Please rank in order the sources you most frequently use to obtain Conoco information. (Put a number in the blank with the number 1 being the most frequently used source. If a source is not used, mark it 0.)

_____ CONOCO TIME
_____ The CONOCOan (corporate magazine)
_____ The FLASH
_____ The PONOCOan
_____ The Grapevine (refinery publication)
_____ Word of Mouth
_____ Local Newspapers
_____ Other Sources (please name and rank) _____

3. From which of the above sources do you usually first hear company information?

4. From which of the above sources do you prefer to hear company information? (List as many as you want in order of preference,) _____
5. If you dislike all of the sources presently used by Conoco, what would you suggest as the best means of communication between the company and yourself?

6. Do you feel it is necessary for the company to communicate to employees?
Yes _____ No _____
Why? _____
7. Do you feel you can communicate with management? Yes _____ No _____ Why? _____

- If not, what form of communication do you feel would best enable you to communicate with management? _____

SECTION V (If you have never listened to CONOCO TIME, stop here and return the form to the company. Otherwise, please continue.)

28. Does CONOCO TIME communicate company news and events of interest to you?
Yes _____ No _____
29. Do you feel the program keeps you informed of company activities pertaining to you?
Yes _____ No _____

0. Is most of the information on CONOCO TIME of interest to you? Yes _____ No _____

1. What type of information on the program is of the most interest to you? _____

2. Please indicate your opinions in the appropriate columns concerning the program content of CONOCO TIME.

	<u>Need More</u>	<u>Need Less</u>	<u>About Right</u>	<u>Indifferent</u>
Management Philosophy	_____	_____	_____	_____
Local Company News	_____	_____	_____	_____
Employee Hobbies	_____	_____	_____	_____
Employee Vacations	_____	_____	_____	_____
Information About New Employees	_____	_____	_____	_____
Information About Transfer	_____	_____	_____	_____
Information About Retirement Awards	_____	_____	_____	_____
Information About Service Awards	_____	_____	_____	_____
Information About Promotions	_____	_____	_____	_____
Information About Employee Deaths	_____	_____	_____	_____
Information About Employee Marriages	_____	_____	_____	_____
Continental Employee Association (CEA) News	_____	_____	_____	_____
Top Management Interviews	_____	_____	_____	_____
Middle Management Interviews	_____	_____	_____	_____
Employee Interviews	_____	_____	_____	_____
Public Service Announcements	_____	_____	_____	_____
Special Interviews with Nonemployees	_____	_____	_____	_____
Worldwide Company News	_____	_____	_____	_____
Subsidiary News	_____	_____	_____	_____
Music	_____	_____	_____	_____
Local, State, and National News	_____	_____	_____	_____
Local, State, and National Sports	_____	_____	_____	_____

3. From the above list choose the five items you most prefer to hear on CONOCO TIME. Rank these five in order of your preference.

1. _____ 3. _____ 5. _____
2. _____ 4. _____

4. Is CONOCO TIME useful to you? Yes _____ No _____ Indifferent _____ Why? _____

5. Should Conoco continue the program? Yes _____ No _____ Indifferent _____

6. Please give comments concerning the program and suggestions for improvements. _____

B-2. Resident Cover Letter
and Questionnaire.



CONTINENTAL OIL COMPANY

P. O. DRAWER 1267
PONCA CITY, OKLAHOMA 74601

Dear Resident:

Continental Oil Company, with the assistance of a Kansas State University graduate student, is conducting a survey concerning our radio program CONOCO TIME, which is broadcast daily at 6:45 a.m., Monday through Friday, on WBBZ. We are enclosing a questionnaire to obtain your opinion of the program.

Your returning of the completed form by August 16 would be greatly appreciated. A self-addressed stamped envelope has been enclosed for your convenience.

A high percentage of returns is necessary for a successful study, and only with your cooperation can the study be completed. Your name has been selected at random, and the returned forms are not to be signed.

If you have never listened to the program, please complete sections I, II, III. If you have listened to CONOCO TIME, please complete all the sections and return the questionnaire.

In case you have questions, contact me at RO 2-3456, extension 8307.

Sincerely,

A handwritten signature in cursive script that reads "Lynn Smith".

Lynn Smith
Supervisor
Employee Communications

LS/cm

CONOCO TIME SURVEY

Please indicate with an X the appropriate responses to the following questions.

Section I

Are you now an employee of Continental Oil Company? Yes _____ No _____

Have you ever been employed by Conoco? Yes _____ No _____

If yes, in what capacity?

Nonrefinery

_____ Management
 _____ Professional
 _____ Technical
 _____ Clerical
 _____ Other (Name Position)

Refinery

_____ Management
 _____ Labor
 _____ Professional
 _____ Craftsman
 _____ Technical
 _____ Other (Name Position)

Are you the head of your household? Yes _____ No _____

Is any member of your household (those living at your residence) employed by Conoco?
 Yes _____ No _____

Please indicate employment of household members (those living at your residence) if employed by Conoco. (Use classification from question 2 to fill in the blank.)

	<u>Nonrefinery</u>	<u>Refinery</u>
Wife	_____	_____
Husband	_____	_____
Daughter	_____	_____
Son	_____	_____
Father	_____	_____
Mother	_____	_____
Sister	_____	_____
Brother	_____	_____
List Relationship of Other Household	_____	_____
Members Employed by Conoco	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Is any member of your family not living at your residence employed by Conoco?
 Yes _____ No _____

7. Please indicate employment capacity of family members (not living at your residence) employed by Conoco. (Use classification from question 2 to fill in the blank.)

	<u>Nonrefinery</u>	<u>Refinery</u>
Daughter	_____	_____
Son	_____	_____
Daughter-in-law	_____	_____
Son-in-law	_____	_____
Sister	_____	_____
Brother	_____	_____
Sister-in-law	_____	_____
Brother-in-law	_____	_____
Mother	_____	_____
Father	_____	_____
Mother-in-law	_____	_____
Father-in-law	_____	_____
List Relationship of Other Family Members Employed by Conoco	_____	_____

Section II

8. If you are not a Conoco employee, please indicate your occupation. _____

9. Marital status: Married _____ Divorced _____
Single _____ Widowed _____

10. Sex: Female _____ Male _____

11. Please indicate your age in the appropriate space.

Below 18	18-25	26-35	36-45	46-55	56-65	Over 65

12. How long have you lived in Ponca City? Check appropriate space.

Less Than 1 Year	1-5 Years	6-10 Years	11-15 Years	16-20 Years	Over 20

13. Please check the highest educational level you have completed.

- _____ Junior High School (through 8th grade)
 _____ High School
 _____ Business or Technical School
 _____ Junior College Degree
 _____ 2 Years of College Work
 _____ 3 Years of College Work
 _____ Bachelor's Degree
 _____ Master's Degree
 _____ Doctoral Degree
 _____ Other (Name Level)

Section III

4. Do you listen to radio station WBBZ in Ponca City? Yes _____ No _____
5. What radio station do you listen to most often? _____
6. Do you listen to the radio throughout the day? Yes _____ No _____
7. What hours during the day and evening are your favorite radio listening times?

8. Have you ever listened to CONOCO TIME which is broadcast daily Monday through Friday at 6:45 a.m. on WBBZ? Yes _____ No _____
9. If so, do you listen ... (please check one)
- _____ Regularly
_____ Frequently (2-3 times a week)
_____ Occasionally (Once a week)
_____ Seldom (Less than once a week)

10. Do any other members of your household listen to CONOCO TIME? Yes _____ No _____
11. Please indicate the frequency of household members' listening to CONOCO TIME. (Use classification from question 18.)

<u>Listen</u>	<u>Frequency</u>
_____ Wife	_____
_____ Husband	_____
_____ Daughter	_____
_____ Son	_____
_____ Father	_____
_____ Mother	_____
_____ Sister	_____
_____ Brother	_____
_____ Other Household Members	_____
_____	_____

Section IV (If you have never listened to CONOCO TIME, stop here and return form in self-addressed envelope. Otherwise, please continue the questionnaire.)

22. Is the time of the program (6:45 a.m.) convenient for you? Yes _____ No _____
23. Would another time be more convenient? Yes _____ No _____
If so, please indicate the time.

_____ 7:00-7:15 a.m. _____ 3:30-3:45 p.m. _____ Other Time
_____ 7:15-7:30 a.m. _____ 3:45-4:00 p.m.
_____ 7:30-7:45 a.m. _____ 4:00-4:15 p.m.
_____ _____ 4:15-4:30 p.m.

4. Please indicate your opinions in the appropriate columns concerning the program content of CONOCO TIME.

	<u>Need More</u>	<u>Need Less</u>	<u>About Right</u>	<u>Indifferent</u>
Management Philosophy	_____	_____	_____	_____
Local Company News	_____	_____	_____	_____
Employee Hobbies	_____	_____	_____	_____
Employee Vacations	_____	_____	_____	_____
Information About New Employees	_____	_____	_____	_____
Information About Transfer	_____	_____	_____	_____
Information About Retirement Awards	_____	_____	_____	_____
Information About Service Awards	_____	_____	_____	_____
Information About Promotions	_____	_____	_____	_____
Information About Employee Deaths	_____	_____	_____	_____
Information About Employee Marriages	_____	_____	_____	_____
Continental Employee Association (CEA) News	_____	_____	_____	_____
Top Management Interviews	_____	_____	_____	_____
Middle Management Interviews	_____	_____	_____	_____
Employee Interviews	_____	_____	_____	_____
Public Service Announcements	_____	_____	_____	_____
Special Interviews with Nonemployees	_____	_____	_____	_____
Worldwide Company News	_____	_____	_____	_____
Subsidiary News	_____	_____	_____	_____
Music	_____	_____	_____	_____
Local, State, and National News	_____	_____	_____	_____
Local, State, and National Sports	_____	_____	_____	_____

5. From the above list choose the five items you most prefer to hear on CONOCO TIME. Rank these five in order of your preference.

1. _____ 3. _____ 5. _____
2. _____ 4. _____

6. Is CONOCO TIME useful to you? Yes _____ No _____ Indifferent _____
Why? _____

7. Should Conoco continue the program? Yes _____ No _____ Indifferent _____

8. Please give comments concerning the program and suggestions for improvements.

AN ANALYSIS OF A RADIO PROGRAM USED BY THE PONCA
CITY, OKLAHOMA, BRANCH OF CONTINENTAL
OIL COMPANY AS AN EMPLOYEE AND
PUBLIC RELATIONS TOOL

by

LAURALEA TAYLOR

B. S., Kansas State University, 1967

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the
requirements for the degree

MASTER OF SCIENCE

Department of Technical Journalism

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1969

This study was designed to analyze a company-sponsored, company-information program. The program selected was "Conoco Time" sponsored by Continental Oil Company, Ponca City, Oklahoma.

The major emphasis of the study was to analyze the employee listening audience of the program, the program's ranking among other employee communication tools, and the type of information desired on the program. A part of the study was the audience composed of Ponca City residents who were inherently a part of the audience of the program which was broadcast over a local radio station. Therefore, two populations were studied.

Through systematic sampling using every k^{th} unit, 414 names were selected for the employee sample and 613 names for the resident sample. Separate, but similar questionnaires were designed for each sample.

A thirty-six item mail questionnaire was designed to obtain responses from the employees. The resident questionnaire consisted of twenty-eight items.

The employees returned 42 per cent of the questionnaires and the residents returned 21 per cent of the questionnaires.

The data collected was tested statistically using the chi-square contingency program provided by the Department of Statistics at Kansas State University. The program required use of the IBM 360 computer.

The hypotheses of the study were accepted or rejected at the .05 level of significance using a chi-square statistical table.

The conclusions drawn from the study were:

No significant relationship exists between the employees' listening frequencies of "Conoco Time" and the employee subgroups of employment capacity, age, sex, educational level, and length of time employed with the company. No significant relationship existed between the type of information desired and the employee subgroups of employment capacity, age, sex, educational level, and whether or not a family or household member were employed by the company.

A significant relationship existed between the type of informational tool preferred and the employee subgroup of length of time employed with the company. No significant relationship was found between the informational tools preferred and the other employee subgroups of employment capacity, age, sex, and educational level.

A significance was found in relation to the employees' listening frequency and the convenience of the program time and the employees' radio listening habits.

No significant relationships were found between the residents' listening frequencies and the resident subgroups of occupation, age, length of residency, and whether or not a family or household member were employed by the company.