

AN ANALYSIS OF Q-SORTS MEASURING ANNOUNCER SKILL
USEFULNESS AS PERCEIVED BY MANAGERS OF LIVE
AND AUTOMATED RADIO STATIONS

By

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PREFACE

As more college graduates choose broadcasting as a vocational field, educators and broadcasters must keep the lines of communication open. As new communication technologies become applicable to radio, educators must be aware of what skills are regarded by professionals as most useful to media practitioners. Thus the question, "What skills are most useful?"

I am grateful to many people who have contributed to this study: the radio managers who participated, Dr. William Rugg for his careful advisement as chairman of my committee, Dr. Walter Ward for invaluable training in research methods and communication theory, and Dr. Philip E. "Ed" Paulin for his encouragement and support when I was teaching his radio labs during the past year. I would also like to thank Dr. Mildred Vance back home in Arkansas for helping me to see the value of pursuing an advanced degree.

To my wife, Robyn, and my children, Libby and Daniel, I dedicate this thesis because of their untiring love and patience during this challenging year at Oklahoma State University.

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CHAPTER I

INTRODUCTION

Although the word "education" does not appear in the thesis title, managers' rankings of skills and knowledge areas have definite implications for university curricula. Broadcast education has several purposes, whether the courses are offered in a department of radio-television, a division of speech and drama, a school of journalism or a college of communications. The most prevalent purpose, however, still appears to be the vocational aspirations of most students who choose broadcasting as a major.¹

Despite a long-standing academic debate over the ratio of practical to theoretical course content, most departments favor a professional approach.² The emphasis is on development of basic communication skills and hands-on experiences with equipment representative of what the commercial broadcasting industry is utilizing. The student also studies the history and structure of broadcasting as well as the interaction of mass media and society.

Most university departments limit the number of semester hours in a student's major field to only one-fourth of the total degree hours.³ This often is necessary to meet accreditation requirements of the American Council of Education for

Journalism and Mass Communication (ACEJMC).⁴ The accrediting agency's "75-25 rule" prescribes that a four-year program should include 75 percent of the course hours in social sciences, humanities, and the liberal arts in general. Radio-television curriculum planners are challenged with fitting into the remaining 25 percent of coursework the necessary practical skills, theoretical concepts and historical and legal principles the student will need for a career in mass media.

As a result of this compressed curriculum structure, educators tend to generalize much course content. Relatively few courses tend to deal with one particular medium. Production training often is limited to one course in radio production and one course in television production as core requirements.⁵ Television directing and cable television usually are offered as electives. But most of the coursework is designed to impart concepts applicable to both radio and television in general. Such course titles as Radio-TV Announcing and Performance, Broadcast News Writing, Broadcast Management, and Writing for Broadcasting provide examples.⁶

Oliver and Haynes have interpreted this direction in curricula as a risky trend toward generalizing the needs of professional broadcasters.⁷ University departments purportedly serve students training for jobs and broadcast employers looking for qualified applicants. As these researchers observed, broadcasters are not as homogeneous a group as many suppose. There are regional differences in attitudes and

salaries.⁸ There are operational differences between different units of the same medium. The newer technologies of cable delivery and satellite distribution complicate the needs of an industry already split into numerous dichotomies: AM and FM radio, VHF and UHF television, network television affiliates and independent stations, music format radio and "news-talk" radio, to name a few.

One major dichotomy within the radio medium is "live" and "automated" modes of operation. This dichotomy is often downplayed by educators. A standard college announcing text devotes only two of its 512 pages to the subject.⁹ Another recent text on modern radio also included just two pages on automated radio.¹⁰ Yet by the mid-1970's it was estimated that at least a seventh of all FM stations were "substantially automated."¹¹ In the mid-1980's automated radio and two related practices - live assist and live by satellite - accounted for a substantially larger percentage of the average radio station's operational modes. These terms will be defined operationally later in this chapter.

Because of differences in technical operation within radio alone, it seemed plausible that employers' requirements would vary between these different modes. One respondent to a mail survey commented:

In our particular case we are an automated radio station. Automation production is not taught correctly in college and at times even down-graded by educators.¹²

This study does not endorse any mode of operation as superior. Because a large proportion of radio stations use

automation in one or more methods of programming, and because so little emphasis is placed upon it in college radio texts and courses of study, it seemed proper to investigate radio station managers' perceptions of the most useful skills for students to attain. These perceptions then could be compared for significant similarities and differences between modes.

Purpose of the Study

This study focused on the perceptions of commercial radio station managers, general managers, operations managers, and program managers, who had the authority to hire and supervise announcers. This research compared perceptions of those managers regarding the usefulness of certain skills and knowledge areas deemed most important by those managers. "Usefulness" referred to the likelihood of the skill or knowledge being used on a daily basis by the announcers at that respondent's operation.

Two basic modes of radio station operation comprised one independent variable. "Live" stations were compared to "automated" stations, which included live-assist and live-by-satellite stations. The dependent variable was the perception of the usefulness each respondent gave to 40 skills and knowledge areas. The 40 perceptual choices were divided into the second independent variable comprising four categories: communication skills, technical skills, supervisory skills, and knowledge areas.

Using mode of operation and perception of skill useful-

ness as variables, this study sought to answer two research questions:

1. What is the relationship between a radio station's mode of operation and the manager's perception of usefulness of announcer skills?

2. Will certain categories of skills perceived as most useful vary significantly between the two operational modes?

This study sought to determine which particular skills and knowledge areas were perceived by the managers as most useful to the announcer-employees working in their operations. From the analysis of those perceptions, educators might be able to make decisions regarding the content of courses and the direction of curricula. It was not this researcher's intention to gain managers' perceptions of a current course of radio-television study, not to determine their attitudes regarding broadcast education. Past studies which have measured such responses will be reviewed in the next chapter.

Limitations of the Study

The fact that it was necessary to find out in advance whether a station was basically live or automated precluded the drawing of a random sample. The methodology used is not well suited to testing hypothesis over large numbers of individuals. Consequently, the findings of this study should not be generalized to include all radio stations in the United States.

Market size (small, medium, or large) was not a variable

in this study. The manager's age, sex, education, and background were not considered. Geographic location also was not a factor.

Definition and Discussion of Terms

Terminology common to the broadcast industry was used throughout this research. For this study, the following terms were operationally defined:

Announcer

An employee of the local station who communicates on-air to the station audience. This may be a disc jockey at a live station or live-assist (automated) station who hosts a music program; one who reports news, either live or recorded; or one who is responsible for producing taped commercials. (Announcer is a term which varies among units of the radio industry, and its specific meaning depends on the local station's definition.)

Automated Radio

A station operation in which minute-by-minute flow of programming is automated. A live announcer is not directly responsible for each step in the sequence. This includes both live-assist and live-by-satellite operations in which the control room operator at the local station is not required to be at the controls minute-by-minute. Musical selections and recorded commercials are linked by high-

frequency tones allowing for automatic switching from one source to another.

Format

Type of programming offered by an individual station. Formats are either music-based (types of music may vary) or information-based (news, talk, news and talk). All stations cited in this study offered music formats, including country, contemporary, and beautiful music.

Live Radio

A station operation in which a live, local announcer is responsible for the minute-by-minute flow of programming content, without the direct use of automation. While computers may be used to supplement his work (such as to generate music play lists), the on-air sequence of music and commercials is not preprogrammed electronically to play automatically.

Manager

A station executive responsible for hiring announcers at the local station. This may be a general manager, a program director, or an operations manager.

Market

Stations are considered small-, medium-, or large-market, as determined by their area population and defined by

Standard Rating and Data Service. All stations cited in this study were small-market (located in a town of 100,000 or less) or medium-market (100,000 to one million).

"Live" radio has an entirely different meaning in 1985 than it did in 1935. In the "Golden Age" of radio generally regarded as the 1920s, 30s, and 40s, almost all programming was truly live, including big bands and small musical groups, comedies, and dramatic serials, all interpreted with live introductions, commercials and closings.¹³

With the mass availability of television receiver sets in the 1950s, radio programming changed dramatically. The majority of broadcast music was recorded. Rather than offering diverse types of music, each station began to specialize in a particular format.¹⁴ Programming philosophies changed and commercials came to be preproduced or recorded on tape using background music and special effects rather than being read live in many instances. By the late 1960s the only truly live element of most radio programming was the announcer-personality, traditionally called the disc jockey, who introduced records and read some live commercials along with brief news and weather segments.

In the 1970s computer technology became commonplace at many radio stations; not only for billing, accounting, and traffic, but also for programming.¹⁵ With a computer and a package of sophisticated equipment, an automated station easily could broadcast taped music, switching from one source (reel-to-reel or cartridge tape machine) to another automa-

tically. The automation unit also could play recorded commercials, jingles, and promotional announcements. Even newscasts and weather forecasts, which necessarily are recorded shortly before air-time, could be inserted automatically.

Many automated stations used the music services of an outside consultant; a library of "oldies" was purchased and current reels of hits were updated weekly, by mail. Some automated stations used their own disc jockeys' introductions and comments recorded on an "announce" tape or voice-track" and interspersed it with a predetermined sequence of automated music playbacks.¹⁶ Others preferred to use announced versions of syndicated tapes from the tapes from the outside consultant. The disc jockey lines were recorded by another professional announcer in the city where the consulting service was located (Dallas, Los Angeles, or Chicago), thus allowing a small-market station to achieve a "large-market" sound.¹⁷

Automation has certain economic advantages for station owners. Automated stations often can be operated with fewer employees than live stations. At a fully automated station using announced consultant tapes, for example, a secretary can change the tapes at regularly scheduled times, and a manager can take time from office duties to record a newscast or a weather forecast every couple of hours. Thus, two people can actually operate the station during normal business hours. The other major personnel are the advertising sales people, who often perform commercial production after

business hours. Sometimes a news director is employed to gather and report news during early morning and late afternoon hours. Much of the news is taped.

Opponents of automated radio cite the lack of spontaneity so prevalent in live radio, the lack of personality, and a "canned" sound.¹⁸ Certain technical foul-ups are unique to automation; a time-announce tape can get behind and give an embarrassing time-check perhaps two or three hours "off." If the weather is not updated soon enough, a recorded forecast can give a "current" temperature that is 10 degrees or more deviant from the actual condition. Another criticism, particularly from broadcast educators, is that automation generally means fewer jobs in broadcasting.¹⁹

Largely because of such damages to station credibility, two newer variations of automated radio have come into use. The most prevalent is live-assist. In this method the broadcast music is on tape (not disc) and alternates between three or four reel-to-reel playback machines. The sequence of rotation is preprogrammed with a computer, and the automation unit plays the selections automatically along with the recorded commercials and other announcements. But the automation is assisted by a live announcer who makes the necessary song introductions, comments, weather reports, and newscasts. The announcer is live, but the music and commercials are automated. This frees the announcer from some chores which are more routine at live stations, such as selecting records and preparing them for air (known as cue-

ing) and finding and loading recorded commercials (often referred to as pulling carts).

The other variation in automated radio is more sophisticated: live-by-satellite. In this interesting throwback to the network dominance of "Golden Age Radio" an extremely capable, often veteran, announcer hosts a live disc jockey show delivering introductions, comments, quips, and jokes, all from a central location, usually one of the major cities. The announcer's show is beamed live via satellite to stations which subscribe to this syndicated format. Because the program crosses time zones and covers a large area, the disc jockey makes no reference to the weather and gives generic time checks, such as "It's twenty past the hour." The local station plays recorded commercials from an automation unit at prearranged cutaway times. All such break times must be very precise to keep the live-by-satellite program on time. The subscribing station may opt to use a local disc jockey in certain prime times such as 6 a.m. to 9 a.m. and then join the satellite syndication later.

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CHAPTER II

REVIEW OF THE RELATED LITERATURE

Since the first radio course was offered in 1929, broadcast education generally has attempted to follow trends and needs of the industry.¹ Television courses began as part of the curricula in the late 1940s.² About that time broadcast educators at the nation's colleges and universities began to show an increasing concern for some type of standardization of course offerings.³

The Federal Radio Education Committee published minimum standards for instructors, equipment and courses. These first standards appeared in the Quarterly Journal of Speech in September, 1947.⁴ The administrative head or committee of each radio department was charged with "maintaining professional standards as defined by the broadcasting industry."⁵

Station Manager George C. Biggar advocated more interplay between the industry and educators in his 1947 article "What the Radio Station Manager Expects of the College."⁶ Biggar called for strengthening of friendship between radio stations and colleges through mutual invitations to visit each other's facilities. In an endorsement of an educational philosophy which often has been unpopular with broadcasters, Biggar quoted another manager, Clair Hull:

The fundamental ideas of radio are not based on stop-watches, microphones, turntables, studios and transmitters, or on production for production's sake, but on the fundamentals of human relations.⁷

Those words, cited nearly 40 years ago, express a theoretical approach favored by many educators today; an emphasis on the process and effects of all kinds of communication, not only mass communication, but interpersonal, intrapersonal, and intercultural communication.

Although relations between professionals and teachers have not always been sour, most broadcast managers have favored an educational approach that emphasizes not only production practices and skills, but also examines the economic side of broadcasting. This has been a recurrent criticism of broadcast education in responses to academic surveys of the broadcasting field. And there have been many such studies.

One of the first large-scale efforts to assess the needs of commercial broadcasters was published as "Broadcasting in the Midwest: A Vocational Survey."⁸ Bruce Linton and Victor Hyden, Jr. conducted a mail survey of 268 radio stations to determine attitudes toward broadcast degree programs. The authors found that managers stressed the importance of experience over education.⁹ This was largely a criticism of the communication theory courses (referred to above) which had begun to appear in broadcast curricula. It was during the 1950's that the "theory versus practice" dilemma began to accelerate.¹⁰

In the early 1960's the Association for Professional Broadcasting Education (APBE) and the National Association

of Broadcasters (NAB) conducted a joint employment study. The results were published in the winter 1963 issue of Journal of Broadcasting, titled "Problems in Finding Qualified Employees."¹¹ Radio and television managers noted problems in filling positions in news, engineering, and particularly in sales. The lack of trained sales personnel reflected a criticism of broadcast education made 16 years earlier by radio station manager John Tinnea that too little attention was given by educators to the economic phases of the broadcast industry.¹²

For the past 20 years the debate has continued over how and even whether to structure a radio-television curriculum to meet industry needs. John D. Abel and Frederick N. Jacobs in 1974 surveyed 1,168 radio managers in an attempt to find what entry-level salaries graduates could expect and if those wages differed significantly by geographic area.¹³ The Michigan State University researchers also sought to measure attitudes of radio managers toward college graduates of broadcasting departments.¹⁴

The general response was less than favorable to educators: approximately one-third of the respondents were neutral toward broadcast education, about one-half were unfavorable, and almost 14 percent were very unfavorable. Responding to the open-ended question, "How can college broadcasting students better prepare for radio careers?" the managers called for greater commercial experience, a better knowledge of the commercial industry, and to have a strong desire and healthy

attitude. One Wisconsin manager gave a typical response:

Students must realize this is a commercial business and we are in it to make a profit. We have approximately eight people on our staff with degrees in broadcasting and it took each one almost six months to realize this is a business and not a cause.¹⁵

The Abel and Jacobs Report is one of the larger studies of employer attitudes completed in broadcast research in recent years.

In 1977, William J. Oliver and Richard B. Haynes used an instrument of 40 Likert scale items (1 to 5 scale of agree-disagree questions) to measure attitudes of commercial broadcast managers toward the program of study in colleges.¹⁶ Variables included the medium (radio or television), the market size (small, medium, large), geographic location (North, South, East, West), and the manager's educational attainment. The data from their national mail survey were factor analyzed to see if general types of managers emerged.

The largest factor to emerge was the type said to be of commercial orientation, which called for a greater awareness of the industry's economic realities. The second largest type shared an attitude calling for industry involvement in curriculum planning. The third type wanted schools to emphasize teaching of communicative competence and production training.¹⁷

Oliver and Haynes made three recommendations to instructors and professors of radio-television:

1. Place much emphasis on the practical, especially in production, sales, and the business aspects of broadcasting;

2. Establish and maintain strong ties with commercial broadcasting; and
3. Analyze broadcasters in the educators' own regions in order to ascertain employer needs and preferences toward curriculum.¹⁸

Both the Abel-Jacobs and Oliver-Haynes studies had used such attitudinal statements as the following:

"Most college graduates with degrees in broadcasting do not understand my medium."¹⁹

"Curricula in broadcasting departments do not reflect a realistic approach to training broadcasters."²⁰

"Broadcasting trade school graduates are often better qualified than college graduates."²¹

In short, attitudes were measured. Findings pointed to attitudes concerning certain aspects of the curricula. No attempt was made to elicit a ranking of skills, concepts, or knowledge in order of priority to the individual manager.

In 1981, two notable efforts were made to allow industry professionals to select or identify the most useful skills in broadcasting.

Laurence Jankowski of Bowling Green State University surveyed members of the Radio-Television News Directors Association (RTNDA) who were asked to rank 39 skills, evaluating each on a continuum from 1 (least important) to 5 (most important).²² The preselected skills included such technical crafts as editing videotape, and such communication skills as enunciating properly and writing in a conversational style. The mean scores were ranked in order.

The results of Jankowski's survey placed many communi-

cative skills slightly ahead of most technical skills: the top-ranked item was "keeping up with current events" which is basically a reading skill. Beyond the findings, this was one of the first efforts to allow media professionals the opportunity to evaluate directly the importance of specific items of the broadcast curricula.

Also in 1981 Frank E. Parcels and Kenneth E. Hadwiger of Eastern Illinois University surveyed commercial radio managers in five Midwest states for identification of entry-level skills and characteristics of long-term success for employees in sales, news, and announcing. The variables of market size and manager's education-background were considered, and like earlier studies this one asked for managers' perceptions of broadcast education.²³

Parcels and Hadwiger found weak support for two conclusions regarding radio news employees: (1) entry-level reporters must be skilled in writing, announcing, and gathering news, as well as typing and interviewing; (2) to survive over a long-term, skills received less emphasis than such qualities as responsibility, initiative, and dedication.²⁴

For announcers, on-air communication skills were essential with secondary emphasis placed on such items as FCC regulations.²⁵ Small-market managers placed greater importance on technical skills and familiarity with equipment than did medium- or large-market managers.²⁶

Parcels and Hadwiger reported the clearest profile produced by their study was for radio sales. Entry-level

employees were expected to possess sound marketing techniques, copy writing ability, and general knowledge of FCC-FTC regulations.²⁷

Summary of the Literature

In all the research reviewed, the most common variables were the medium (radio and television), the market size (small, medium, large), geographic area (North, South, East, West), and the manager's education and background. Most studies solicited attitudes toward broadcast education and curricular content, with some attempts to obtain specific recommendations about coursework. The dominant instrument was the mail survey method, with Likert scale statements measuring the response along a 5-point continuum: strongly agree, agree, neutral, disagree, and strongly disagree.

From this review, the following ideas for the author's original research surfaced, in keeping with the purpose of the study:

1. Give broadcast managers the opportunity to rank a list of skills, concepts, and knowledge areas in terms of "usefulness" at their respective stations, by employees already on the job. This would avoid a direct invitation to criticize broadcast education, which would seem to be a possible disadvantage of attitude-type measurement;

2. Narrow the field to radio, and take mode of operation (discussed earlier) into account as a variable. A search of Journalism Abstracts revealed that one master's thesis

reported since 1963 had dealt with automated commercial radio;²⁸

3. Rather than using a mail-out survey form, visit as many stations as feasible for a personal interview. This would be in keeping with the many recommendations from researchers to maintain close ties with the broadcast industry; and

4. Use a Q-sort as the instrument for measuring perceptions of most useful skills, concepts, and knowledge areas. Q-methodology, described in the following chapter, allows the researcher and subject to interact directly, and is a relatively fast way to rank-order a fairly large assortment of items.

In reviewing the most recent scholarly journals in broadcast research, this writer found no reports of manager perception surveys. In all the literature reviewed there were no instances of Q-methodology being utilized for the purpose at hand. And in the Oklahoma-Arkansas area, no university research of this kind had been reported. The research effort described in the following chapters was unique in its application to commercial radio station managers.

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CHAPTER III

METHODS AND PROCEDURES

Design of the Study

The measurement tool for this study was Q-methodology. Fred Kerlinger has described this technique as "a sophisticated way of rank-ordering objects (items, stimuli, etc.) and then assigning numerals to subsets of the objects for statistical purposes."¹

In Q-methodology, the respondent is asked to sort a deck of cards, called a Q-sort, into piles. In social science research, Q-sort cards often have attitudinal statements typed on them. The words, phrases or sentences deal with political or sociological issues. The respondent usually is asked to sort the cards along a continuum of approval to disapproval of the statements on them.²

In mass communication research, Q-sort cards have offered pictures to be evaluated by newspaper editors who rated them in terms of most probable use in their newspapers.³ Other Q-sorts have been constructed to determine editors' news values by the way they ranked stories.⁴ As Kerlinger has noted, there are many possibilities for Q-sort research.⁵

Q-methodology's advantage over other rank-ordering methods is the relatively short amount of time required to

rank a fairly large number of items. This is accomplished by putting several cards in each pile. For statistical purposes, the most valid method is to have the respondent place varying numbers of cards in 9 to 11 or more piles (depending upon the number of cards) with the whole distribution simulating a normal curve.⁶

For this study, the writer used a Q-sort of 40 cards containing broadcast skills and knowledge areas subdivided into four categories. The selection of skills will be discussed more fully later in this chapter.

The number of piles was set at nine, to be arranged on a desk from left to right, with pile nine containing the "most useful" skills and pile one reserved for "least useful" skills, as perceived by the respondent. Figure 1 shows the arrangement of cards in the nine piles.

Most Useful							Least Useful		
Pile 9	8	7	6	5	4	3	2	Pile 1	
<hr/>									
	2	3	5	6	8	6	5	3	2 cards

Figure 1. Distribution of 40 Q-sort Cards

The rank-order continuum ranged from "most useful" to "least useful" with varying degrees of perceived usefulness between the extremes. The numbers on the top row in Figure 1 were the values assigned to each card the respondent placed in that particular pile. For example, the respondent selected two of the 40 skills as most useful and they were placed in pile nine. In scoring, each of those skills would receive a value of nine. Three skills were then selected as next most useful and placed in pile eight; each skill in that pile would receive a value of eight. This scoring procedure would continue for each pile, with the least useful skills receiving a value of one. The distribution of cards simulated a normal statistical curve, with the largest number of cards in pile five (eight cards).

Construction of the Q-sort

Each manager was asked to rank the skills and knowledge areas in order of usefulness to a radio announcer whose immediate career goal was to become program director of that station. The skills considered most essential to the announcer's day-to-day work were placed first, with lower priority given to the skills and concepts the announcer would need to acquire in order to qualify for promotion.

To determine if attitudes of managers of live radio stations differed significantly from the attitudes of the managers of automated stations regarding their perceptions of useful skills, each card was coded on the back for use in

later data analysis. There were four codes, each representing a different category of skill or knowledge area, with ten coded cards in each category.

In selecting skills and knowledge area statements, the writer drew upon college broadcasting texts, course outlines, his own college training, and his work experiences at several live and automated commercial radio stations. The skill categories and codes were (1) communication skills, coded CS, (2) technical skills, coded TS, (3) supervisory skills, coded SS, and (4) knowledge of law and ethics, coded LE.

Communication skills referred to broadcast application of the five verbal communication skills listed by Berlo: writing, speaking, reading, listening and thought.⁷ Technical skills were defined as the handling of equipment necessary for programming and production of on-air material. Supervisory skills included (1) particular areas related to the business-advertising side of radio broadcasting and (2) jobs within the programming and production departments that called for decision-making. Many of those duties often fall to a supervisory announcer known as a program director. But in many small-market stations, an announcer has certain supervisory responsibilities, some of them business-oriented. The fourth category - knowledge of law and ethics - were special considerations of broadcasters. These subjects would be dealt with in general broadcasting courses of a non-production nature. The ten knowledge areas were included because of their potential interrelationship

with communication, technical and supervisory skills. The 40 skills and knowledge areas are listed by category in Appendix A. This then comprised the measuring instrument: the Q-sort of 40 cards with 10 items in each category.

Target Population: Selection of Stations

The writer's local base was Stillwater, Oklahoma. Broadcasting/Cablecasting Yearbook 1984 was used to locate radio stations within a reasonable driving distance of Stillwater. Telephone calls were made to a number of area stations; preliminary interviews revealed facts about each station's mode of operation. The decision of which stations to visit were governed primarily by the need to have a sample comprising an equal number of live and automated stations. A sample of 20 radio stations was selected.⁸ This sample included 10 stations located in Oklahoma, 8 stations in Arkansas and 2 stations in Missouri.

Managers who took part in the study were interviewed personally at their respective radio stations between May 20th and May 31st, 1985. After interviewing the 20 managers, the writer removed two from the study because their particular operations did not fit into either the live or automated mode as defined in Chapter I. The writer felt that tabulation and analysis of those managers' perceptual data would interfere with clear interpretation of results. Appendix B lists the 18 participating stations by location, call letters, mode of operation and name of manager who Q-sorted

the 40 items.

Data Processing and Analysis

Procedures employed in Q-sort data analysis are analysis of variance and factor analysis. A Type 1 analysis of variance was used to extract the variance between the two groups of managers, between the individual managers, and between the four skill categories. Pearson product-moment correlation coefficients were computed for each possible pair of managers (153). The intercorrelations were depicted on an R-matrix, and McQuitty's ELEMENTARY Linkage and Factor Analysis was employed to extract types, or clusters of managers who shared similar perceptual patterns. Reciprocal pairs and typical representatives were determined for each cluster. Factor loadings were then weighted, and from the weighted mean scores, a 40-item array was computed for each cluster of managers.⁹

In the Type 1 analysis of variance method, measures are repeated on one variable. Those repeated measures in this study were the perceptual items on the 40 Q-sort cards. The other factor, or variable, in this design was the bi-level independent variable, the responses of managers from live radio stations compared to the responses of managers from automated radio stations. Figure 2 is a paradigm of the analysis, showing a two-factor, or two-variable mixed design with repeated measures on one factor.

	CS	TS	SS	LE
Managers of nine live stations				
Managers of nine automated stations				

Figure 2. Analysis of Variance Paradigm

The analysis of variance determined the total variance in each of the manager's perceptions of skill usefulness. The analysis also indicated the amount of interaction between type of station and skill category. F-ratios, measures of observed variance pitted against error variance, determined statistical significance at the .05 level.¹⁰

Factor Analysis

Whereas an analysis of variance is an index of differences, factor analysis is an index of similarities. The process begins with a correlation matrix (called an R-matrix), showing the strength of the relationship between two variables. Degrees of agreement run from -1.0 (perfect negative relationship) to +1.0 (perfect positive relationship). For this study, Pearson product-moment correlation coefficients were computed for each possible pair of responses and were rounded to the fourth decimal place. It was predicted that some correlations would be so close numerically that a fourth decimal place would be necessary to distinguish the differences.

With correlations arranged in an 18-by-18 matrix (number of managers), the highest correlation coefficient in each column was located, and the highest correlation coefficient in the entire matrix determined the correlation of the reciprocal pair, i.e., the two managers most like each other in their perceptions of useful skills. Then the rows for each manager in the reciprocal pair were scanned for possible linkages, that is, for managers whose perceptions correlated highest with the pair leader. These linkages pointed out two types (sometimes referred to as factors or clusters) of managers.¹¹

After types of managers were identified, intercorrelation matrices were constructed for each type. The columns in each matrix were then totalled, and the column which had the highest total became the representative column for all in that type. The manager represented by that column then became the reference manager for that type. Factor loadings were then computed to create a correlation coefficient for each manager with the representative or reference manager.

The final step in the analysis was a follow-up to the linkage and factor analysis. The different types of managers were described in terms of their responses to the Q-items. It would not have been adequate simply to arrange the items for each type from highest to lowest, because some of the respondents were more closely correlated to the representative of that type than others. These responses needed to be weighted more heavily. To accomplish this, a weighting

procedure was established which determined the relative weights of the raw scores. The weighted mean totals for each type were then converted to the original factor array, the quasi-normal distribution represented by Figure 1 (page 26). This gave the clearest picture of how each type of supervisors ranked the skills and knowledge areas of the Q-sort.

By following these analytical procedures, it was possible to answer, statistically, the research questions of this study. The analysis of variance was used to identify any interplay between type of manager and perceptual patterns; linkage and factor analysis were used to identify distinct types of managers. The results of this analysis were discussed in Chapter IV.

ENDNOTES

- 1 Fred Kerlinger, Foundations of Behavioral Research (2nd ed., New York, 1973), p. 582.
- 2 Ibid., p. 583.
- 3 Barbara A.W. Smith, "The Nature of News Photographs in Four Dimensions: Dynamism, Prominence, Complexity, Universality" (unpub. master's thesis, Oklahoma State University, 1977).
- 4 Walter J. Ward, "News Values, News Situations and News Selections: An Intensive Study of Ten City Editors" (unpub. Ph.D. dissertation, University of Iowa, 1967).
- 5 Kerlinger, p. 584.
- 6 Ibid., p. 583.
- 7 David K. Berlo, The Process of Communication (New York, 1960), pp. 41-42.
- 8 The Director of the Bureau of Media Research at Oklahoma State University, Dr. Walter Ward (who is also a member of this writer's thesis committee), recommended a sample of 20 stations, enhancing the probability of extracting more than one manager type.
- 9 See especially L. McQuitty, "Elementary Linkage Analysis for Isolating Orthogonal and Oblique Types and Typal Relevancies," Educational and Psychological Measurement, 17 (1959), pp. 207-229. Also, William Stephenson, The Study of Behavior: Q-Technique and Its Methodology (Chicago, 1953), pp. 174-178.

10

Richard P. Runyon and Audrey Haber, Fundamentals of Behavioral Statistics (Reading, Mass., 1967), pp. 133-135.

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L. McQuitty.

CHAPTER IV

FINDINGS

Three basic analyses of data comprised the base for interpretation of 18 radio station managers' perceptions of the relative importance of announcer skills. The 40 skill items, or statements, were divided into 4 categories of 10 items each: Technical, Communication, Supervisory and Knowledge of Law and Ethics skills.

The first analysis comprised two factors: Station Manager Mode (Live and Automated) and Skill Categories. A two-factor analysis of variance with repeated measures on one factor (Station Mode) was used to determine any main and/or interactive effects of Station Mode and Announcer Skill categories.¹ In other words, were some categories of skills deemed significantly more important than others? And, if so, did the greater importance depend on Station Mode or type of manager involved?

Secondly, the author intercorrelated the 18 station managers' Q-sorts of announcer skills and factor analyzed the intercorrelation matrix using the McQuitty procedure.² Two factors, or types, of managers were extracted: 15 in Type I and 3 in Type II. These types, then, replaced the Live- and Automated-Station Modes used as the repeatable measure factor

in the first analysis. The data then were variance analyzed as before.

The third analysis was similar to the second, except the announcer skills were weighted in terms of relative importance for each of the two statistical manager types.³ The weighting of factor arrays essentially gives "credit where credit is due." In other words, the more a manager agreed with other managers who fell into his type (through factor analysis), the more weight his decisions carried.

Following weighting of managers' perceptions, the two-factor analysis was carried out as in the first and second analyses.

Similarities and Differences:

Manager Types (Unweighted)

The investigator's division of respondents into Live- and Automated-Station managers was pitted against any division that emerged through correlation of managers' relative perceptions of importance of the 40 skills as stated in the Q-items.

Each manager's rank-order of the 40 skill items was correlated with that of every other manager, yielding an 18-by-18 matrix of correlations. Through McQuitty's Elementary Linkage and Factor Analysis, two types of managers were extracted. In McQuitty's procedure, managers in one type are more correlated with each other on relative importance of announcer skills than they are with any manager in another type.

After the two types had been extracted, intercorrelations within each type were analyzed to determine the typical representative: the manager whose perceptions of skill usefulness were most representative of the other managers in the type. Table I shows the stations in Types I and II, the representative for each type, and the factor loadings of each station--its correlation with the typical representative.

The objectives, at this point, were to determine: (1) how well the "statistical" types compared with the investigator's arbitrary Live- and Automated-Station types, (2) how the two statistical types differed in perceived importance of the four categories of announcer skills. Tables II and III show the mean perceived importance of various skills held by each of the two operational types and by each of the two statistical types of managers.

Mean perceived importance of skill categories in Table III differed beyond chance expectations ($F = 16.99$, $df = 3/36$, $p < .01$), and explained 25.5 percent of the variation in perceived importance of various announcer skills.

Superscripts in the "mean totals" row of Table III indicate Technical and Communication Skills as most highly valued by managers on the average (5.88 and 5.45, respectively). Supervisory skills (3.84) were deemed less important than any other skills, except, perhaps, knowledge of Law and Ethics (4.86). Importance of law and ethics knowledge actually did not differ significantly from that of Technical and Communication skills, but the tendency suggested it was considered a

TABLE I
 PERCEPTUAL RELATIONSHIPS OF TYPE I AND TYPE II RADIO STATION MANAGERS
 TO TYPAL REPRESENTATIVES

Type I			Type II		
Typal Representative: KDXY			Typal Representative: KBOA		
Station	Mode	Correlation	Station	Mode	Correlation
KDXY	Live	1.00	KBOA	Live	1.00
KSPI	Automated	.63	KYFM	Automated	.74
KSAR	Automated	.62	KTEI	Automated	.52
KPOC	Live	.62			
KNID	Live	.61			
KJBR	Automated	.55			
KRLQ	Automated	.55			
KBEZ	Automated	.54			
KRLW	Live	.51			
KXVQ	Live	.48			
KFIN	Automated	.44			
KLOR	Live	.44			
KMAL	Live	.42			
KSRB	Live	.37			
KLQZ	Automated	.25			

TABLE II
 MEAN USEFULNESS OF FOUR AREAS OF ANNOUNCER
 SKILLS AS PERCEIVED BY LIVE AND
 AUTOMATED STATION MANAGERS

<u>Station Mode</u>	<u>Announcer Skills</u>				Mean Totals
	Technical	Supervisory	Communication	Ethics	
Live	5.73	4.73	5.43	4.47	5.00
Automated	6.04	4.00	5.32	4.63	5.00
Mean Totals	5.89 ^a	4.37 ^b	5.38 ^a	4.56 ^b	5.00

* Differences between columns with different superscripts could occur by chance less than once in similar studies.

TABLE III
 MEAN IMPORTANCE OF FOUR AREAS OF ANNOUNCER
 SKILLS AS PERCEIVED BY TWO MANAGER TYPES
 (UNWEIGHTED)

<u>Manager Types</u>	<u>Announcer Skills</u>			
	Technical	Supervisory	Communication	Law/Ethics
Type I	5.89 ^a	4.40 ^b	5.33 ^a	4.41 ^b
Type II	5.87 ^a	3.27 ^b	5.57 ^{ac}	5.30 ^c
Mean Totals	5.88 ^a	3.84 ^b	5.45 ^a	4.86 ^{ab}

NOTE: Differences in row entries which carry different superscripts probably would not occur by chance. Critical difference for types = .55; for mean totals, 1.08, $p < .05$.

somewhat moderately important announcer skill, overall.

Technical and Communication skills were held "equally" important by both manager types, as shown by the superscripts in the Types I and II rows of Table III. However, there were interactive effects of Supervisory and Law and Ethics categories on manager type ($F = 19.20$, $df = 1/36$, $p < .01$), which explained 11.9 percent of the total variation in managers' perceptions.

Type I managers, who comprised 15 of the 18 respondents, valued Supervisory skills and Law and Ethics knowledge "equally," but less important than Technical and Communication skills. Type II, on the other hand, saw knowledge of Law and Ethics as significantly more important than Supervisory skills. In fact, these three managers saw such knowledge as important as Communication Skills.

In brief, both types of managers were Technical and Communication skills "enthusiasts." Distinction was on relative importance placed on Supervisory skills and knowledge of Law and Ethics areas.

To distinguish further where Types I and II differed on the Supervisory and Law and Ethics areas, the researcher compared the relative importance of particular skills in each of the two categories by manager type, as shown in Table IV.

The higher perceived importance of supervisory skills by Type I Managers, as shown in the "difference" column of Table IV, referred to major areas of supervision, direction and selling activities. Largest differences in skill percep-

tion dealt with overseeing programming, production, and announcing.

TABLE IV
MEAN PERCEIVED IMPORTANCE OF SUPERVISORY
AND LAW AND ETHICS KNOWLEDGE SKILLS:
BY MANAGER TYPES (UNWEIGHTED)

Skill Category	Skill Item	Type I Mean	Type II Mean	Mean Difference
Supervisory	Direct Programming	4.80	2.33	-2.47
	Supervise Production	5.40	3.00	-2.40
	Supervise Announcers	5.00	3.00	-2.00
	Interpret Ratings	3.73	2.00	-1.73
	Promotion Ideas	5.60	4.00	-1.60
	Direct Music	5.00	3.67	-1.33
	Adv. Campaigns	3.47	2.67	- .80
	Research	3.13	3.33	+ .20
	Public Relations	4.73	5.00	+ .27
	Rate Cards, Contracts	3.13	2.67	+ .54
Law and Ethics	Shield Laws	2.80	5.33	+2.53
	Business Law	2.60	5.00	+2.40
	Section 315	3.60	5.33	+1.73
	NAB Code	3.67	4.67	+1.00
	Copyright	4.13	5.00	+ .87
	Libel Laws	5.53	6.33	+ .87
	Fairness Doctrine	4.40	5.00	+ .80
	Awareness: Payola, etc.	5.73	5.33	+ .60
	FCC Rules	6.80	5.33	- .40
	FTC Restrictions	4.80	5.67	-1.47

Type II's higher value on Law and Ethics knowledge centered on government laws and regulations and the intra-

industry code. A knowledge of state shield laws and business laws topped the list for Type II, yielding the biggest mean differences from Type I. Type II's highest rated area was libel laws.

Although both types of managers were "equally" high on the announcer's needs for Technical and Communication skills, overall, there were some noteworthy differences in their evaluations of specific skills in these areas.

Type II managers not only were stronger proponents of Law and Ethics knowledge, but also of news writing, news gathering, copy writing and tape editing skills.

Type I managers, who placed higher importance than did Type II on Supervisory skills, also placed higher priority on letter writing, equipment maintenance, dubbing and calibration of VU levels.

Consensus Skills

From the array of weighted skills by both manager Types I and II, the author derived a hierarchy of so-called consensus skills. These were skills on which the two types of managers differed no more than one scale point in degrees of importance assigned to them. For example, if "operating studio equipment" was assigned an importance score of 8.0 by Type I managers and a 9.0 by Type II, it would qualify as a consensus skill with a mean importance of 8.50.

Table V lists the qualifying consensus skills, their degree of importance (as judged by the author), and their

weighted mean importance scores.

TABLE V
MEAN WEIGHTED IMPORTANCE SCORES BY MANAGER
TYPES I AND II ON CONSENSUS
ANNOUNCER SKILLS

<u>Consensus Skills</u>	Degree of Importance	Weighted Mean Importance
Announcing	Very	9.00*
Operating studio equipment	Very	8.50
Operating portable equipment	Very	8.00*
Minor equipment maintenance	Very	7.50
Backtiming, deadrolling	Very	7.50
Making public appearances	Very	6.50
Copy writing	Very	6.50
On-air interviewing	Very	6.50
Routine tape splicing	Very	6.50
Splice-editing tape	Quite	6.00
Libel laws	Quite	6.00*
Promotional ideas	Quite	5.00*
Hosting talk shows	Moderate	4.50
Computer knowledge	Moderate	4.50
Supervise announcers	Moderate	4.50
Direct music operation	Moderate	4.50
Supervise public relations	Moderate	4.50
Fairness Doctrine	Moderate	4.50
Design audience research	Slight-to-low	3.50
NAB Code	Slight-to-low	3.50
Calibrating VU levels	Slight-to-low	3.50
Write editorials	Slight-to-low	2.50
Interpret rate cards, etc.	Slight-to-low	2.50
Develop adv. campaigns	Slight-to-low	1.50

NOTE: Asterisked entries received identical scores by both types of managers.

Non-consensus Skills

As a follow-up to the discussion of consensus skills, the author hastens to add that eight announcer skills showed widely disparate degrees of importance assigned by one manager type compared with the other.

Widest divergence of opinion was on "music dubbing" and shield law knowledge skills, for which the manager types differed a full five scale points. Type I placed higher importance on music dubbing than did Type II, while the latter placed more value on knowledge of shield laws.

Other non-consensus skills which Type I valued at least three scale points higher were: program directing, production supervision, and awareness of payola and plugola. Type II managers placed noticeably higher values on knowledge of business law, and news writing and news gathering skills.

One obvious question to ask about distribution of consensus skills in Table V concerns the relative positioning of entries representing the different skill categories. Were different skill entries randomly dispersed on the "importance continuum?" Or, were some skill categories followed or preceded by "long runs" of skills pertaining to other categories?

One-sample runs tests showed none of the announcer skill categories was evenly dispersed above and below the mean of 5.31 for all the consensus skills in Table V.⁴ The number of Communication and Technical skills falling above the mean probably could not have occurred by chance. The same is true for the number of Supervisory and Law and Ethics knowledge

skills falling below the mean. In fact, all the consensus Supervisory skills fell below the mean. Of the 24 consensus skills, 10 of the 11 which fell above the mean were either Communication or Technical skills. The other was a Law and Ethics skill pertaining to the need for knowledge of libel laws.

Another runs test determined the "balance" of Communication and Technical skill distribution. The investigator sought to determine if the different skill entries followed or preceded one another in a sufficiently random order. This was confirmed by the fact that six Communication and eight Technical skills were entered in the Table V hierarchy of consensus skills, and that their alternating positions comprised seven runs. Somewhere between 3 and 12 runs were required for random distribution. Since the observed number of runs (seven) fell within this range, it can be stated that the skills were evenly distributed.

Stated another way, there were six Communication and eight Technical skills, each of whose relative degrees of importance was agreed upon by both types of managers. Furthermore, the priority placed upon consensus Communication skills was not significantly different from that placed upon Technical skills. And both these categories of skills held priority over Supervisory and Law and Ethics knowledge skills.

ENDNOTES

¹Fred Kerlinger, Foundations of Behavioral Research (2nd ed., New York, 1973), pp. 271-284.

²L. McQuitty, "Elementary Linkage Analysis for Isolating Orthogonal and Oblique Types and Typal Relevancies," Educational and Psychological Measurement, 17 (1959), pp. 207-229.

³William Stephenson, The Study of Behavior (Chicago, 1953), pp. 174-178.

⁴Sidney Seigel, Nonparametric Statistics for the Behavioral Sciences (New York, 1956), pp. 52-58.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The first research question addressed by this study was, "What is the relationship between a radio station's mode of operation and the manager's perception regarding usefulness of announcer skills?" The analysis of variance showed no statistically significant interaction between those variables. The factor analysis showed that although two separate types did emerge, those types included about the same number of live and automated stations. The answer to research question number one was: there is no significant relationship. A radio station's mode of operation (live or automated) has little, if any, relevance to the duties the station manager requires an announcer to perform.

The second research question was, "Will certain categories of skills perceived as most useful vary significantly between the two operational modes?" The answer to that question, based upon this study, was also "no." Live and automated modes were represented almost equally in both types. Thus, operational mode did not affect perception of category usefulness.

The fact that two statistical types were identified

raised new questions: how are they alike, and how are they different? Further analyses showed that both types favored technical and communication skills as general categories but differed in perception of the importance of specific skills. And Types I and II held reversed positions on the other two categories, with Type I favoring Supervisory skills generally, while Type II gave higher priority to Law and Ethics.

Conclusions

The below-average perceived usefulness of most of the 10 Supervisory items (involving decision-making and business concepts) tended to negate many of the past complaints of commercial broadcasters. These responses to earlier studies, cited in Chapter II, had called for the inclusion of more business and management concepts in the college curriculum.

Both Types I and II ranked interpretation of audience ratings data in the bottom half of the factor array. The ability to develop an advertising campaign for a client, and the skill to design audience research methods, were perceived to be of "slight to low" importance for an announcer. It must be kept in mind that this study did not involve perceptions of skills for account executives or managers.

The pivotal difference in the operational definitions of "live" and "automated" (Chapter I) was the application of computers to minute-by-minute on-air programming. Since half the stations in the sample were defined as automated, it was expected that Technical Skill-7, operating and programming

computers, would receive an above-the-mean importance rating. The fact that both statistical types of managers perceived computer skills as "moderately" important was somewhat of an "Information Age" surprise.

One of the respondents, interviewed informally after Q-sorting the cards, may have expressed the general perception of computer skill relevance by managers:

Fifteen years ago when the automation systems were new, learning how to program a computer was a real challenge to many broadcasters. Now, with home computers so commonplace, it's no big deal anymore. Just about everybody knows something about computers, and when a new employee comes to work for us, learning our automation system is relatively easy.¹

That particular manager oversees a live-assist operation which clustered in Type I of this study. At that station, an announcer goes on the air six times each hour between automated segments of music that allow him to leave the control room for ten to twelve minutes at a time. This writer asked the station manager, "What do the announcers do during those uninterrupted music sweeps?" His reply: they prepare newscasts, which involve calling news sources, re-writing wire copy, and writing local news. They also produce commercials.²

The manager's comments about computers being commonplace in today's society may offer one explanation for the findings of this study. Complaints such as the one from Taylor's study of a decade ago appear to be outdated:

In our particular case, we are an automated station. Automation production is not taught correctly in college and at times even down-graded by educators.³

The earliest generation of automated systems, vulnerable to

criticisms of a "canned" sound and embarrassing on-air foul-ups may have been down-graded to some extent by educators and even skeptical radio industry people. But the fact that automation systems of today are more sophisticated than those of the late 1960s and early 1970s may be another reason that TS-7 received a moderate importance rating. The live-assist and live-satellite variations of automated practice are more closely related to live radio than those early automation systems.

Perhaps the most significant findings of this study would be the specific skills within the general categories that received highest priority from those who hire announcers. Although the findings should not be generalized to the entire radio industry, this study does suggest that two perceptual types of managers oversee the operations of small-to-medium commercial radio stations, at least in the South-central part of the United States. These types apparently differ in the priorities given to radio announcers' skills.

The largest group of managers, represented by Type I of this study, seems to require announcers who possess, in addition to the necessary technical skills, a penchant for promoting the image of the station. Announcers who work for Type I management are more likely to make frequent public appearances at grand openings of stores, county fairs, sports events, concerts and other events attended by large numbers of people. Communication skills are most useful for an announcer whose most essential role is that of high-profile "salesman" for his station and the clients who advertise their products and

services.

Type II managers, smaller in number, require announcers to acquire necessary technical skills and on-air abilities valued by Type I managers, but accompanied by the skill to construct message content. Announcers at Type II stations are expected to gather and write news and write commercial copy, perhaps more than their Type I counterparts. These particular skills necessitate observance of legal and ethical guidelines required by the government agencies and valued by the industry.

The most important skills which an announcer can master are the communication and technical skills exemplified by those used in the Q-sort for this study. These will serve the announcer well regardless of which type of station is his place of employment. All participating managers in this study perceived most supervisory skills as moderately useful, especially those relating directly to programming and production.

Skills relating to business, such as interpretation of rate cards and audience ratings data, are least essential for the on-air representative of the station and its clients. However, in personal interviews with participating managers, most agreed that such areas of competency would be useful to the announcer who wished to move into sales or management.

Among Law and Ethics knowledge areas, the most relevant items were identified as libel laws and the Fairness Doctrine, based upon the consensus figures. In spite of recent FCC deregulations of radio practices, most managers gave operating rules and regulations a rating of moderately useful; some

rated government regulation knowledge as quite useful.

Recommendations

The recommendations of this investigator are directed toward those who teach broadcasting courses and those who would conduct further research into perceptions of broadcast skill usefulness. Implications for students of broadcasting who seek entry-level radio jobs are contained in directives to teachers.

Educators should stress the basic functional skills of announcing, interviewing, writing, and production. Class assignments should be as realistic as possible, simulating the requirements of stations. Students who wish to specialize in news, sales, or management should be given challenging opportunities in those areas of study.

In preparing students for successful careers as radio announcers (disc jockey is still a prevalent term), the concept of serving as a "salesman" for the station and clients needs to be presented in the classroom. And to train announcers who contribute to responsible broadcast practice, law and ethics issues should be included in every sequence of study.

Further research into how colleges can best serve the broadcast industry could be built upon this study. There is a need to consider such variables as the manager's age and educational background. While these have been considered in mail survey research, the unique advantages of Q-methodology

could be tailored for consideration of these facts.

The Q-sort items could be constructed in such a way as to provide more insight into the manager's psychological make-up, by measuring his attitudes and values. Q-methodology has been successfully used in social science research since William Stephenson's early work.

Many operational modes make up the radio stations of the 1980s. It might be possible to ascertain what social "type" of manager make the decision to use a live-satellite format, or switch from live- to live-assist. Are such decisions strictly economic, or do certain attitudes interact with business practices? (Another factor is whether the manager is also the owner.)

Managers were chosen for this study because they hire announcers. Most of the respondents, though not all, had worked as announcers themselves. A Q-study could measure announcer's perceptions of skill usefulness. Other studies could focus on different employees in radio, such as account executives.

These methods could be applied to employers and employees of the television industry as well as other media practitioners. And within the realm of broadcast education, comparisons of students' perceptions might prove useful.

There are many possibilities for ascertaining perceptions of skill usefulness held by those who study, teach, and practice broadcasting, a mass communication process that affects millions of lives.

ENDNOTES

¹Tim Van Maren, Operations Manager, KBEZ, Tulsa. Personal interview, May 24, 1985.

²Ibid.

³James S. Taylor, "Broadcast Education as Career Preparation: How Good Is It?" Central States Speech Journal 27 (1976), pp. 59-69.

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APPENDIXES

APPENDIX A

LIST OF ITEMS USED IN Q-SORT

LIST OF ITEMS USED IN Q-SORT

COMMUNICATION SKILLS

- CS-1 HOST COMMERCIAL REMOTES
- CS-2 MAKE PERSONAL APPEARANCES
- CS-3 WRITE PROGRAM CONTINUITY
- CS-4 WRITE BROADCAST EDITORIALS
- CS-5 WRITE LETTERS
- CS-6 BASIC ANNOUNCING
- CS-7 NEWS WRITING AND GATHERING
- CS-8 COPY WRITING
- CS-9 ON-AIR NEWS INTERVIEWING
- CS-10 HOST TALK-PERSONALITY SHOW

TECHNICAL SKILLS

- TS-1 OPERATING CONTROL ROOM AND STUDIO EQUIPMENT
- TS-2 MINOR MAINTENANCE OF AUDIO EQUIPMENT
- TS-3 SPLICE-EDITING AUDIO TAPE
- TS-4 ELECTRONICALLY EDITING AUDIO TAPE
- TS-5 DUBBING MUSIC
- TS-6 OPERATING PORTABLE AND REMOTE EQUIPMENT
- TS-7 COMPUTER KNOWLEDGE AND LITERACY
- TS-8 BACKTIMING AND DEADROLLING
- TS-9 ROUTINE TAPE SPLICING

TS-10 CALIBRATING VU LEVELS

SUPERVISORY SKILLS

SS-1 INTERPRET RATE CARDS AND ADVERTISING CONTRACTS
SS-2 INTERPRET RATINGS
SS-3 DESIGN AND IMPLEMENT AUDIENCE RESEARCH
SS-4 DEVELOP ADVERTISING CAMPAIGN FOR CLIENT(S)
SS-5 DEVELOP PROMOTIONAL IDEAS FOR STATION
SS-6 SUPERVISE ANNOUNCERS
SS-7 DIRECT PROGRAMMING
SS-8 DIRECT MUSIC OPERATION
SS-9 SUPERVISE PRODUCTION
SS-10 SUPERVISE PUBLIC RELATIONS FOR STATION

LAW AND ETHICS AREAS

LE-1 F.C.C. RULES AND REGULATIONS
LE-2 F.T.C. RESTRICTIONS ON ADVERTISING
LE-3 FAMILIARITY WITH NAB RADIO CODE
LE-4 SECTION 315, COMMUNICATIONS ACT
LE-5 KNOWLEDGE OF THE FAIRNESS DOCTRINE
LE-6 FAMILIARITY WITH STATE SHIELD LAWS
LE-7 KNOWLEDGE OF LIBEL LAWS
LE-8 KNOWLEDGE OF BUSINESS LAWS
LE-9 FAMILIARITY WITH MUSIC LICENSING AND
COPYRIGHT RESTRICTIONS
LE-10 AWARENESS OF PAYOLA AND PLUGOLA

APPENDIX B

PARTICIPATING STATIONS AND MANAGERS

PARTICIPATING STATIONS AND MANAGERS

LIVE

Enid, Oklahoma	KNID (FM)	Mike Weeks Program Director
Hardy, Arkansas	KSRB (AM)	Sam Vance General Manager
Kennett, Missouri	KBOA (FM)	Jeff Wheeler Program Director
Malden, Missouri	KMAL (FM)	Perry Jones General Manager
Paragould, Arkansas	KDXY (FM)	Bill Little Owner-Manager
Pawhuska, Oklahoma	KXVQ (AM)	Max Hurt General Manager
Pocahontas, Arkansas	.KPOC (FM)	Tim Scott Owner-Manager
Ponca City, Oklahoma	KLOR (FM)	Steve Leonard Operations Manager
Walnut Ridge, Arkansas	KRLW (AM)	Tim Taylor Program Director

AUTOMATED

Bartlesville, Oklahoma	KYFM (FM)	Dave Solmonson Owner-Manager
Jonesboro, Arkansas	KFIN (FM)	Larry Duke Owner-Manager
Jonesboro, Arkansas	KJBR (FM)	Alan Patteson Owner-Manager

Muskogee, Oklahoma	KRLQ (FM)	Jerry Floyd Program Director
Paragould, Arkansas	KLQZ (FM)	Wilma Wheelis Station Manager
Piggott, Arkansas	KTEI (FM)	Charles Isbell Station Manager
Salem, Arkansas	KSAR (FM)	Mel Coleman General Manager
Stillwater, Oklahoma	KSPI (FM)	Bill Platt General Manager
Tulsa, Oklahoma	KBEZ (FM)	Tim Van Maren Operations Director

VITA 2

Michael Belk Doyle
Candidate for the Degree of
Master of Science

Thesis: AN ANALYSIS OF Q-SORTS MEASURING ANNOUNCER SKILL
USEFULNESS AS PERCEIVED BY MANAGERS OF LIVE AND
AUTOMATED RADIO STATIONS

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Biographical:

Personal Data: Born in Walnut Ridge, Arkansas, February
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Professional Experience: Announcer-Farm News Director,
KASU Radio, Jonesboro, Arkansas, 1972 to 1974;
Announcer-Copywriter, KBTM Radio, Jonesboro,
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Manager, KRLW-KCAZ Radio, Walnut Ridge, Arkansas,
1978 to 1984; Interim News Director, KDRS-KLQZ
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tant, School of Journalism and Broadcasting, Okla-
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