CALL-OUT RESEARCH

CALL-OUT RESEARC
IN MANAGING
RADIO STATIONS

20.00
100K
Cost
CLB

399
4

Call-Out Research
in
Managing Radio Stations

by

James E. Fletcher, Ph.D.
University of Georgia

and

Roger D. Wimmer, Ph.D.
Cox Broadcasting Corporation

DISCARDED

national association
of broadcasters

WRH

Table of Contents

Chapter I

Call-Out Research....................1

Chapter II

Sampling..........................7

Chapter III

Music Studies.....................27

Chapter IV

Call-Out for Positioning..........65

Radio Audiences in Campusville........72

HE
8697
A8
C3
1982

Foreward

In 1981--with considerable help--we produced FOCUS Group Interviews in Radio Research for the Chicago Radio Programming Conference of the National Association of Broadcasters. The response was generally favorable.

With the encouragement of Larry Patrick and Wayne Cornils of the National Association of Broadcasters, we have undertaken this manual which deals with a kind of research unique to radio.

We are particularly grateful for the assistance of a number of progressive stations who shared their research procedures with us. And we must acknowledge the assistance of broadcast research students in the Henry W. Grady School of Journalism and Mass Communication at the University of Georgia. The students provided eager data gatherers for the illustrative studies included here.

338371

LIBRARY
MURRAY STATE UNIVERSITY

Chapter One

CALL-OUT RESEARCH

Anyone involved in radio is accustomed to change; radio has survived for well over 50 years by adapting to new situations. During the early years of broadcasting, for example, radio audiences were large, heterogeneous groups; radio was their primary source for information and entertainment. Few broadcasters could forsee any other type of mass media environment. Radio was the technological marvel of the 1920s and 1930s, and the horizon was imagined bright by broadcasters.

When television was publicly demonstrated in 1939, few observers predicted its eventual success. However, during the decade of the 1940s when the significance of television began to emerge, many pundits predicted the eventual demise of radio. Their question was: Why would anyone want merely to listen to information and entertainment when they could also see it on television? No doubt there were some radio broadcasters who believed the predictions, but the majority of radio owners

WRH

and operators shunned the doomsday advice. The beginnings of radio's first major change was evident.

Rather than concede to the pressures of television, radio owners, operators and programmers sensed the need to re-focus the position of radio in the mass media marketplace. The decade of the 1950s proved that radio would not become a mass media "has-been." Todd Storz and others developed short playlists, tighter programming, and began to isolate smaller target audiences. Each decade since has brought new challenges to radio, and subsequently, new answers and directions.

The decade of the 1960s, with the emphasis on youth, the counterculture and alternative lifestyles, witnessed the growth of underground radio, the increased popularity of top-40 stations, and a desire by the audience to have radio become a more personal medium. More and more, listeners began to claim that a particular station was "theirs." The 1970s were characterized by the first strong push toward significant fragmentation of the audience: narrowcasting became the buzz word in radio. Station managers realized that in order to survive in the marketplace, a station needed to have a specific target audience; managers sliced out a portion of the audience pie and focused on that segment to attract local and national advertisers.

The decade of the 1980s promises to bring about even more challenges to radio managers and programmers. Already visible is the significance of new media bearing down on radio audiences. Cable television, subscription television, stereo music channels on cable television, games and more are encroaching on the average consumer's time. How many choices can the average person have? Radio, especially AM radio, is under growing pressure to once again develop a new approach to capturing an audience. Some say that stereo AM will be the answer. Whatever the case, there is little doubt that AM radio station managers and programmers will band together to develop a new approach. AM radio will not die; AM radio must and will adapt.

Another development of the early 1980s is that television for the first time is beginning to feel the audience crunch that radio experienced during the 1940s and 1950s. Standard over-the-air television broadcasters are wondering what they can do in order to maintain historically high ratings numbers. Unfortunately, television managers have had little experience with severe competition; they must learn new rules from the successes and mistakes made in radio. On the other hand, radio managers view the current situation as nothing particularly unique; the current climate for radio is not much different than that during the past 30 years.

Radio Research

The competitive atmosphere in radio has helped create a management philosophy that stands behind research. This was not always true. During the early years of radio, managers and programmers generally felt that "gut reactions" were all that were necessary in decision making. Competition from other radio stations and other media changed this philosophy. The trend for a reliance on research developed quickly during the late 1970s and expanded at a phenomenal rate. It has become clear to management that, in order to increases the chances of success in any decision-making situation, there must be research data. The data may be either qualitative or quantitative, and the radio industry is seeing a greater use of focus groups, call-out research, station image studies and more. In addition, the majority of successful managers view research from the proper perspective--the data should be used as a guide for decision making, not as the sole determinant of a decision.

Qualitative and quantitative data in radio are now considered mandatory in stations in every market size; research is viewed as an essential management tool. The purpose of this manual is to discuss the use of call-out research in radio. Call-out has been used by some stations for several years but only recently has the method become widely accepted. It is hoped that this manual will provide useful information for those who currently do not use call-out research, and will serve as a refresher manual for those decision-makers who do use call-out on a regular basis. The remainder of this chapter presents a general discussion of call-out research.

Chapter 2 provides a discussion of sampling methods in call-out research. Chapters 3 and 4 provide explanations and further discussions of how the procedure can be used, and what information can be collected.

Call-Out Research

The music a radio station plays is the most important element of its programming. It stands to reason that program directors will want to have the most current (and reliable) information about their audience's likes and dislikes (Fletcher and Martin, 1981). Radio programmers have used a variety of methods to help construct their station's playlist. In the past, most program directors relied on three basic procedures: gut reactions to the likes and dislikes of the station's audience, record sales in local stores, and the charts from industry trade magazines. These procedures seemed to work fairly well when radio was just beginning to fragment the audience, but program directors quickly realized that relying on gut reactions and so forth did not provide enough information. What was needed was more information directly from the audience; either the station's audience or those people listening to other stations who might become new listeners.

Call-out research refers to a hybrid form of telephone interviewing designed to assess the popularity and durability (burnout) of music recordings and other program elements. The information gathered from call-out research, along with data from trade publications, local record sales, and program director judgment, are used to help a program director make more intelligent decisions in constructing the station's program.

The popularity of call-out research during the past five years, however, has given rise to new uses of the method. Call-out research is becoming a valuable research tool for radio stations in markets of all sizes. This manual describes the typical uses of call-out in playlist and format construction as well as some of the more recent developments in the method.

Call-Out Method

As with any type of scientific research, the results of one such test are to be considered only indications of what the audience perceives. In order to develop solid information, call-out research must be replicated many times. Fortunately, most program directors throughout the country understand this basic tenet of research and do repeat their music call-out research on a weekly basis.

The use of call-out research for testing new music releases has created some controversy among program directors and consulting agencies. Some people argue that call-out is inappropriate for testing new releases, because they believe few people can determine the likeability of a new recording with only a 15-25 second hook. Critics of the procedure advocate that music call-out should be used only for recordings currently on the air; that the hook should be used to provide a form of aided recall.

Call-out research methods are suitable for many problems other than playlist development. The method can be used to track the progress of a promotional campaign, to evaluate the appeal of competing personalities, as a part of the research work-up for repositioning a station, for public opinion polling as an adjunct to local news. In some case these additional uses of call-out may be as simple as adding a few questions to a continuing program of telephone music studies. In others, a special study may be undertaken. Later in this manual an example of an initial positioning study will be given.

Chapter Two

SAMPLING

Call-out research can be a valuable programming tool, but the validity and reliability of the method must be solid in order for the results to have any meaning. One of the most important facets of call-out research is the sample used to obtain the desired information. Even the most elaborately designed call-out study can be destroyed if the sample selection procedure is inappropriate. This chapter has two purposes: (1) to provide an explanation of basic sampling methods used in scientific research; and (2) to discuss several different sampling methods applicable to call-out research.

The discussion of basic sampling methods is included in this manual to provide information to those individuals who do not have a great deal of research experience. In order for anyone to select a call-out sampling method, it is necessary to understand the basics of sampling. Readers who understand sampling method may wish to skip to the second section of this chapter: sampling methods for call-out research.

BASIC SAMPLING TERMINOLOGY

The process of sampling from a population has become a highly technical area in research and consequently has developed a broad list of technical terms. The list below contains some of the basic terms used in sampling that a beginning researcher should understand.

Available sample: a sample selection on the basis of accessibility

Biased sample: a sample which is not representative of the population from which is was drawn

Cluster sample: a sample selected in groups or categories

Non-probability sample: a sample selected without regard to the laws of mathematical probability

Parameter: a characteristic or property of a population

Probability sample: a sample selected using the laws of mathematical probability

Population: a group or class of objects, subjects, or units

Purposive sample: a sample selected which is purposely chosen to be non-representative of the population

Quota sample: a sample selected to contain certain characteristics of interest

Random sample: a subgroup or subset of a population in which each unit in the population has an equal chance of being selected

Sample: a subgroup or subset of a population or universe

Sampling error: an estimate of the difference between statistics obtained from a sample and parameters of the sampled population

Stratified sample: a sample selected after the population has been divided into categories or strata

NON-PROBABILITY SAMPLES

Non-probability samples include errors attributable to method of sample selection; probability samples do not. Selecting either a probability or non-probability sample requires a consideration of several points:

1. Cost versus value. The sample should produce the greatest value for the least investment. If a probability sample is too expensive for the type and quality of information collected, then a non-probability sample is a possible alternative.

2. Time constraints. In many cases individuals collecting information operate under time constraints imposed by sponsoring agencies, management directives, or publication guidelines. Because probability sampling is usually more time consuming, a non-probability sample may provide temporary relief.

3. Purpose of the study. Some research studies are not designed for generalization to the population, but rather to collect basic information to design questionnaires or measurement instruments, or to investigate variable relationships. A non-probability sample is often appropriate in these situations.

4. Amount of error allowed. In preliminary studies where error control is not a prime concern, a non-probability sample is usually

adequate.

Probability sampling generally incorporates some type of systematic selection procedure, such as a table of random numbers to ensure that each unit or subject has an equal chance of being selected.

Non-probability sampling includes available samples, volunteer informants, and purposive samples. An available sample is a collection of readily accessible informants for study, such as a group of students in a classroom or radio listeners at a remote broadcast. Although available samples are useful in collecting preliminary information and may produce useful data in some instances, the samples create problems, because they contain unknown quantities of error. Available samples are useful in pretesting questionnaires or other preliminary work, because they often eliminate problems in research procedures, testing, and methodology before the final research study is attempted.

A sample of volunteer informants is also a non-probability sample since the individuals are not selected according to laws of mathematical probability. An example of a volunteer sample in radio research is to ask listeners to call in to vote for or judge a song or other item. There is a concern in all areas of research about persons who willingly participate in a research project. Volunteers differ greatly from non-volunteers and consequently may produce erroneous research results. Rosenthal and Rosnow in 1969 identified the characteristics of volunteer informants on the basis of several studies of such people. The researchers found that volunteers tend to exhibit: (1) higher educational levels; (2) higher occupational status; (3) higher need for approval; (4) higher intelligence; and (5) lower authoritarianism. In addition, Rosenthal and Rosnow claim that volunteers, as compared to non-volunteers, seem to be (6) more sociable; (7) more arousal seeking; (8) more unconventional; (9) more often first born; and (10) younger.

These characteristics mean that volunteer subjects may significantly bias the results of a research study and may lead to inaccurate estimates of various population parameters. Finally, available data indicate that volunteers may more often than non-volunteers provide data to support a researcher's hypothesis. In some cases volunteers are necessary, such as in testing new products or services where comparisons are made to other products or services. These samples may be the only way a research study can be conducted. However, volunteers should be used with caution, because, as with the available sample, there is an unknown quantity of error present in the data.

A purposive sample includes subjects who are selected on the basis of a specific characteristic or quality, thereby eliminating subjects who fail to meet these criteria. Purposive samples are often used in advertising studies where researchers select certain subjects who use a particular type of product and are asked to compare a new product to the one they currently use (automobiles, household products). A purposive sample is one chosen with the knowledge that it is not representative of the population, but possibly represents the population of those who use a particular product or service.

Another example of a non-probability sample is one which is selected haphazardly such as selecting subjects for a survey on the basis of the subject's appearance, or because they are convenient to find, or because they seem to meet certain requirements (the subject looks educated). Haphazard selection involves researcher subjectivity and introduces error. Some haphazard samples give the illusion of a probability sample and must be approached carefully. For example, interviewing every tenth person who walks by in a shopping center is a haphazard sample (it is not random) since not everyone in the population has an equal chance to walking by that particular location. Some people live across town, some may shop in other centers, and so on.

TYPES OF PROBABILITY SAMPLES

Simple Random Sample

The most basic type of probability sampling is the simple random sample, where each subject or unit in the population has an equal chance of being selected. Since the mathematical probability of being selected can be estimated for this procedure, it is classified as a probability sample.

Generating a simple random sample usually involves the use of a table of random numbers. To illustrate how such a table is used, suppose we want to analyze ten radio station formats from a population of 100 stations and determine the differences among the approaches in programming. A random sample from the 100 stations can be taken if each show is numbered from 00 to 99. A portion of a table of random numbers is included below to demonstrate how to select a sample (a complete random numbers table is included as an appendix).

26	45	74	77	74	55	92	43	37	80	76	31	03	48	40	25	11
73	39	44	06	59	48	48	99	72	90	88	96	49	09	57	45	07
34	36	64	17	21	39	09	97	33	34	40	99	36	12	12	53	77
26	32	06	40	37	02	11	83	79	28	38	49	44	84	97	62	51
33	93	35	91	24	92	47	57	23	06	33	56	07	94	98	39	27
16	29	97	86	31	45	96	33	83	77	28	14	40	43	59	04	79

The first step is to arbitrarily select a starting point. There is no specific way to select this starting point as long as it is done randomly. The remaining nine numbers are then selected by going up, down, left, or right on the table--or even randomly throughout the table. It could be decided, for example, to go right in the table from the randomly selected starting point (32), and select every two-digit number to the right until a sample of ten is drawn. The sample of ten television programs would then include those programs numbered 32, 06, 40, 37, 02, 11, 83, 79, 28 and 38.

If the table of random numbers is used to select a random sample of telephone numbers from a telephone directory, the numbers are drawn from the table to correspond to the page number, column number and column position for the listings to be included within the sample. The step-by-step procedure would be something like this:

1. Determine in the local directory the number of pages on which residential telephone listings appear. Assume that the directory includes residential listings on page three through fifty-five (it's a small town).

2. Draw from the table of random numbers two digit numbers which fall within the range 03 to 55. Draw enough numbers to accommodate the entire sample. Just to illustrate, consider the same start point in the short table of random numbers presented earlier. Continuing to the right as before ignore any two digit number encountered which is outside the range of numbers corresponding to the residential pages of the local directory. The first numbers drawn would thus be: 32, 06, 40, 37, 02, 11, (ignore 83 and 79), 28 and 38. These are the page numbers for the listings to be in the sample.

3. Draw from the table of random numbers the columns in which the sample telephone listings are to appear. In this local directory there are four columns; so the numbers to be drawn from the table of random numbers will be single digit numbers. Consider the same starting point, 32. Consider the right hand of each pair of numbers in the table--2 in the start point. This time move in another direction--up, for example. The numbers from 1 to four (ignore any other number encountered in the table) would then be 2, (ignore 6, 9, and 5), (shift to the next pair of digits to the right and read up from the bottom), (ignore 7, 5, and 6), 4, 4, 4, (ignore 6), 1, and so on. Continue to draw column numbers until one column number has been drawn for each page number drawn in step 2.

3. Draw from the table of random numbers the number of millimeters from the top of the column at which the sample telephone listings will appear. In this local directory the length of a column is 250 millimeters. Draw from the table of random numbers column positions which are three digit numbers between 001 and 250. Start

again from the same start point in the random table. This time move, for example, up and to the right. Thus the first numbers are 246, (ignore 419), 015, and so on. Draw a column position for each pair of page number and columm number.

4. Continue to draw telephone listings in this manner until enough telephone listings are drawn to provide a sample of the size needed plus an amount for out-of-date listings and phones that will not be answered. For out-of-date listings allow two per cent inaccuracy per month since issue of directory. If the directory was issued six months ago, allow twelve per cent of the listings drawn into a sample to be out-of-date. Allow at least twenty per cent as the number of phones which will not be answered. Experience with conducting surveys in the community will dictate whether that figure is too high or low.

The principal problems with random samples of telephone directories is that listings may be out-of-date as discussed above and that many telephones today are not listed at all in the directory. In some U.S. communities unlisted telephones amount to thirty per cent or more of all residential telephones in service. When the level of unlisted phones reaches this level, a random sample of telephone listings is no longer a satisfactory basis for survey work.

An alternative to telephone directory samples is the random digit dialing sample. In this case all possible telephone numbers are created as the sampling frame. Recall that a telephone number consists of a prefix and a suffix. The prefix appears before the dash in the telephone number. Larger communities have more of these prefixes; small communities have fewer. All of the possible telephone numbers for any prefix consist of all the possible combinations of numbers that are four digits in length. These suffixes can then be combined with the prefixes used in the community to comprise a total listing of all possible telephone numbers in the community. To create the random digit dialing sample a table of random numbers is assumed to represent all possible combinations of numbers arranged at random.

Assume that the prefixes 712 and 742 are used in a community. Draw at random four digit numbers from the table of random numbers. Beginning with the same start point the first number would be 3206. Moving down subsequent suffixes for the sample would be: 9335, 2997, 7774, 0659 and 1721. Now these suffixes are combined with the prefixes to comprise the telephones to be dialed in the survey:

712-3206	742-3206
712-9335	742-9335
712-2997	742-2997
712-7774	742-7774
712-0659	742-0659
712-1721	742-1721

Additional telephone numbers are generated until sample size is reached, and still more numbers are generated to account for the invalid numbers (most research firms have computer programs which control for disconnects, business, and unused numbers).

A second random digit dialing method tends to decrease the number of disconnects and unused numbers. This procedure involves adding one or two random digits to a telephone number selected from the directory. For example, if the number 546-9023 is randomly chosen from the directory, a table of random numbers is used to produce the add-on. Assume the add-on digit is 6 -- the telephone number included in the sample is then 546-9029. This procedure eliminates many invalid telephone numbers because telephone companies tend to distribute numbers in series. In the example, the 90-- series was all ready in use, and increases the probability that a phone number in that same series is in working order (see Fletcher, 1981; 57-60 for more information).

Random number generation is possible via a variety of methods, but there are always two guidelines to follow when using the procedure: (1) each unit or subject in the population must have an equal chance of being selected; and (2) the selection procedure must be free from subjective intervention by the researcher. The purpose of random sampling is to reduce sampling error; violating random sampling rules only increases the chance of introducing such error into a study.

Systematic Samples

Systematic sampling in some ways resembles a simple random sample. The procedure, mentioned briefly before, involves selecting every nth subject or unit from a population. For example, assume a sample of 20 is desired from a population of 100, producing a sampling rate of 1/5. One method is to randomly select a starting point and a sampling interval. In this case, assume the number 11 is chosen from a table of numbers as the starting point. The sample then includes the elements 11, 22, 33, 44, and so on to include the 20 subjects or items. To add further randomization to the process, another variation is to also randomly select the starting point and the interval. For example, the interval may be 11, with a starting point of 29 which would then include the numbers 40, 51, 62, 84, and so on.

The degree of accuracy in systematic sampling depends on how accurately the population called a sampling frame is defined. Telephone directories are inadequate in most cases since not all phone numbers are included, and not everyone has a telephone. However, lists that include all the members of a population such as all radio stations, have a high degree of precision.

A major problem with systematic sampling is that the procedure faces the problem of periodicity where the arrangement or order of the items in the population list may bias the selection process. For example, consider the problem mentioned earlier about analyzing radio station formats. It is possible that every tenth station listed may be owned by the same group, thereby producing an invalid and nonrepresentative sampling of all stations in the list. When periodicity is eliminated, systematic sampling provides an excellent sampling methodology. If the list used in systematic sampling is arranged in a biased way, it can be arranged in a random fashion by cutting the list into individual subjects or units and randomly arranging them in a new list.

Stratified Sampling

Stratified sampling is used when there is an interest in a particular characteristic, segment, or strata of the population. Instead of selecting a sample from the population at large, a significant variable or characteristic is identified, and subjects who have this trait are selected. A subsample from this group is then selected for study. The variable of interest might be a particular radio station's audience, or listeners identified by age, sex, religion, education, or income. However, as more variables are added to the stratification list, identification of subjects meeting the criteria becomes harder. This is known as incidence, or how often the desired subjects can be found in the population. When several variables are stratified, the incidence rate is low, and the time and expense of recruiting the sample increase.

Stratified sampling insures that the sample was drawn from a homogeneous subset of the population (i.e., from a population with similar characteristics). Homogeneous groups allow researchers to eliminate sampling error on the stratified variable(s). For example, consider a research study on the attitudes listeners have about stereo AM. The population can be stratified according to education level since it is known that listeners differ on this variable. Before randomly selecting informants, the population is stratified in three levels--grade school, high school, and college. A random sample proportional to the population is then selected; if 10 per cent of the population completed college, then the sample would contain 10 per cent who met this standard.

Sample Size

Unfortunately, determining an adequate sample size is a difficult problem. There is no simple answer as to how large a sample should be in order to be representative of the population, or to provide a certain level of confidence in the results. The fundamental problem is that no single sample size formula or method is available for every research method or statistical procedure.

There are a few general principles to guide researchers in determining an acceptable sample size.

1. Sample size is often related to the method of the study. In some cases, such as focus groups, a sample of six to twelve subjects is adequate if they are representative of the population under study (although more than one group must be used). Small samples are also adequate for pretesting questionnaires or for obtaining preliminary information about an idea or topic.

2. Sample size is controlled by cost. Although a sample of 1000 may be desired, the economics of such a sample are usually restrictive. The general rule in sample size is to use as large a sample as possible within the economic constraints of the study.

3. Multivariate studies always require larger samples than univariate studies, because they involve the analysis of multiple response data (several measurements on the same subject). One guideline recommended is: 50 - very poor; 100 - poor; 200 - fair; 300 - good; 500 - very good; 1000 - excellent.

4. Generally speaking, the larger the sample used, the better. However, a large unrepresentative sample is as meaningless as a small unrepresentative sample, so researchers cannot merely consider size in terms of number. Quality is always more important in sample selection than mere size.

Other Sampling Issues

Anyone involved in research needs to have a general understanding of the entire sampling process. This includes the areas of sampling error and sample weighting, concepts familiar to broadcasters who use Arbitron, Nielsen, and Birch ratings. A discussion of these two concepts is beyond the scope of this manual, but readers are encouraged to refer to the following references for more information:

Arbitron. *Description of Methodology*, 1982.

Wimmer, R., and Dominick, J. *Mass Media Research: An Introduction*. Belmont, CA: Wadsworth Publishing Co., 1983.

Fletcher, J. (ed) *Handbook of Radio and TV Broadcasting*. New York: Van Nostrand Reinhold, 1981.

SAMPLING METHODS FOR CALL-OUT RESEARCH

As with any research approach, a variety of sampling techniques can be used in call-out. This does not mean, however, that all of the methods are equivalent in the results they produce. Each technique has its own strengths and weaknesses. The choice of a sampling procedure depends on the purpose of the study and the funds available for the project. If the purpose of the research is mainly to collect preliminary information, then non-probability samples may be adequate. If the purpose of the research is to generalize the results of the study to the population, then greater attention must be given to sample selection, and a probability sample is required.

The luxury of time to experiment with a variety of research methods is for the most part absent from broadcasting. Research in radio is generally conducted to provide answers to current problems and questions; program directors and managers have little time (and money) to waste. For these reasons, any study that is conducted by a station should follow the basic tenets of scientific research, one of which is to use random samples for testing purposes. Even research restricted by a limited budget will have more reliability if a random sample is used.

Although the purpose of a study is the main consideration in sampling procedures used, programmers and other managers should recognize that all research is valuable and should use only the sampling technique that will provide the most reliable information. Using a non-probability sample for the sake of saving time or money will, in the long run, be a costly investment.

The remainder of the chapter discusses sampling techniques commonly used in call-out research.

Contest Winner/Audience Clubs

Most radio stations conduct giveaway contests where listeners are required to submit a post card or some type of entry form. A similar procedure is used for radio station discount cards, or other type of station club or organization where people must submit an entry form of some kind. A typical procedure by many program directors is to view these applications (listeners) as good candidates for call-out research. The method saves time in trying to locate names and telephone numbers. If the purpose of study is to question a station's listeners who volunteered their names, then a call-out study using the names is appropriate. But remember that the results of such a study cannot be generalized to the population at large.

Recall the discussion earlier in the chapter of the characteristics of volunteers: they are individuals unlike the remainder of the population. These individuals usually have a higher educational level, earn

338371
LIBRARY
MURRAY STATE UNIVERSITY

higher incomes, and more. Using such a sample will provide the program director with results which are applicable only to those individuals who volunteered their names by submitting a post card or club application. A volunteer sample is not random; the results cannot be generalized to another group.

Volunteers can be used effectively (to a limit) if the purpose of the call-out study is to ask questions of some of the station's loyal listeners. However, there will be many loyal listeners who do not submit post cards. Contest winners or club members should be used only when no other alternative exists, or possibly as a part of a call-out sample, keeping in mind that the volunteer sample must be kept separate for analysis purposes from the random sample.

Another type of sample closely resembling contest winners is a sample comprised of listeners who are asked to call the station to provide their comments about various recordings. The results generated from these "advisory boards" of listeners cannot be generalized to the population. The results are applicable only to the group of people who called the station and provided their comments. A program director needs to consider whether such research is valuable to the station.

Intercept Sampling

Many radio stations, as well as many research companies, use the intercept method to obtain a sample. Subjects may be intercepted at a shopping center, a street corner, a social gathering, or anywhere where people appear in groups. The idea is to selectively stop a certain number of subjects from the group as participants in the research. In some cases quotas are established (by sex or face, for example) and there may be included some type of screening procedure, such as questioning only individuals of a certain age.

Regardless of the location and the procedures used, intercept sampling is not a random sampling technique. Some researchers argue that the technique may provide for a random selection of shoppers at a mall. But even in this case, the technique fails the test of randomness--all shoppers in the mall do not have an equal chance of being selected. The only group to which the findings from such a study are generalizable is the group of people who happen to be at that particular part of the shopping mall when the survey was conducted.

A further problem in intercept sampling is interviewer bias. Interviewers may subjectively select and eliminate people on the basis of looks, dress, behavior, or other physical characteristics.

Systematic Sampling

One appropriate sampling technique for call-out research is through some type of systematic selection of subjects. Most statisticians agree that if adequate procedures are followed, the systematic sample so closely approximates the random sample that the two methods can be considered identical.

The procedures necessary include: (1) a complete sampling frame (a list of the population from which the sample is selected) must be available; (2) a random order of this list must be used; that is, the list cannot be in alphabetical order, listed by age, race, sex, or any other variable; (3) the first subject or element must be selected randomly; and (4) a systematic, or constant value should be used for the interval, such as selecting every tenth person (an alternative is to random select the interval in addition to randomly selecting the first subject).

A telephone directory can be a good sampling frame for call-out research if the problems with the directory are corrected and if the results are viewed from the correct perspective. First, the directory can be used as it stands if there is an interest in only those individuals whose names are listed. A random digit add-on (discussed earlier in the chapter) can correct the problem of unlisted and recently changed telephones.

The Best Sampling Methods for Call-Out Research

There are two methods that stand out from all others: random digit add-on from the telephone directory, and total random telephone number generation from a table of random numbers or computer program.

It is obvious that programmers throughout the country consider call-out research a valuable tool in programming decisions. Because the method is considered important, it makes sense to pay great attention to the sampling methods used to obtain the results. Call-out research can be made more valid and reliable if attention is paid to how the sample is selected; the time spent selecting the sample will always pay off at the conclusion of the study.

References--Sampling

Babbie, E. R. *The Practice of Social Research*. Belmont: Wadsworth, 1979.

Blalock, H. M. *Social Statistics*. New York: McGraw-Hill, 1972.

Cochran, W. G. *Sampling Techniques*. New York; Wiley, 1963.

Comrey, A. L. *A First Course in Factor Analysis*. New York: Academic Press, 1973.

Fletcher, J. E. (ed.) *Handbook of Radio and TV Broadcasting*. New York: Van Nostrand Reinhold, 1981.

Gorsuch, R. L. *Factor Analysis*. Philadelphia: W. B. Saunders, 1974.

Kish, L. *Survey Sampling*. New York: Wiley, 1965.

Nunnally, J. C. *Psychometric Theory*. New York: McGraw-Hill, 1978.

Raj, D. *The Design of Sample Surveys*. New York; McGraw-Hill, 1972.

Rosenthal, R., and Rosnow, R. L. *Artifact in Behavioral Research*. New York: Academic Press, 1969.

Walizer, M. H., and Wienir, P. L. *Research Methods and Analysis*. New York: Harper & Row, 1979.

Chapter Three

MUSIC STUDIES

Music in the Life of the Listener

In earlier centuries it was not possible for average people to have the close and dependent relationship many Americans now have with their favorite music. Before recordings and broadcasting Americans had to travel to their music--at church, the circus, concerts, opera, theater--or they had to make it themselves. Music boxes which could take music to nearly every home did so one tune at a time, and these were relatively uncommon until the middle of the nineteenth century. And, movie folklore notwithstanding, relatively few of our forebears were musical performers. It would probably be safe to estimate that, on the average, listening to musical performances had to be limited to a matter of minutes per week.

This is not to say that music was unpopular while relatively unavailable. To the contrary, music has always been attractive as an ingredient of ceremonies, both public and private. And music has always been identified with the pleasures of mind which it produces in the average listener. In the United States music was the principal element in such gatherings as the Sunday Sing, vaudeville, minstrel shows, burlesque and many other popular entertainments.

Today the level of music consumption by Americans is greater in the average week than their ancestors could have consumed annually before the introduction of recordings near the end of the last century.

Particularly among adolescents and young adults, hours of music listening today is approaching hours of waking.

The impact of all this listening is that music plays a different role in the life of the average listener than music could have played when its availability was as limited as in the distant past. For many, if not the majority of listeners, music functions to maintain a tolerable relationship between the individual and the world. That is, people are both aroused and relaxed by their exposure to music--aroused when their world is not interesting enough; relaxed when their world is too arousing.

Physiological research shows that a person's favorite music can diminish sensation of pain in dental procedures, can synchronize heart beat to the beat of music, can affect the efficiency of workers on an assembly line, control the speed of shopping in a supermarket and of waitresses in a cafe. Disturbances or interruptions in patterns of music listening are often early symptoms that young people are entering periods of emotional crisis.

While the role of popular music is still imperfectly understood by science, it is clear that music is an important part of the social and emotional life of many if not most listeners.

It is also true that, for the most part, only a person's favorite music has these beneficial effects. A music habit or preference is typically learned in adolescence and influences musical taste or preference for a lifetime. For the last thirty years at least, the principal influence on the musical environment of the average American has been local radio--local radio stations which selected and organized musical menues for listeners from among recordings prepared in distant studios of the recording industry.

As a consequence there are strong local tastes in music fostered for the most part by these local stations, inspite of the efforts, sometimes, of a relatively concentrated music industry to wield or homogenize these tastes.

Music Research

The problem of a radio music programmer is to accommodate the musical preferences of the local public while attracting a sizeable and loyal audience for the station. The problem is complicated by the fact that, once a professional begins to listen professionally to music, he/she acquires a professional taste in music which makes him/her more critical of the details of musical performance and--in the main--broadens musical tastes.

For these reasons many programmers are finding that music research is helpful in the development of playlists and format.

Music Research Procedures

Station music research is conducted on a continuing basis with weekly or semi-monthly reports to coincide with the station cycles for planning programming.

The process of planning music research can be divided into at least these steps:

1. Method of data collection
2. Sampling procedure
3. Questionnaire construction
4. Presentation of results

Methods of Data Collection

The principal methods for data collection in contemporary music research are (1) mailed questionnaire, (2) intercept and (3) telephone survey.

Mailed questionnaire. A sample of households in this method receive a questionnaire which solicits opinions of a list of music identified by title, most prominent line and/or performers. The questionnaire is then returned in a pre-stamped, pre-addressed return envelope. These questionnaires are then entered into analysis.

The advantages of the mail survey method are the relatively low cost per informant, the fact that reactions can be solicited to a relatively great number of musical selections without great investments of interviewer time, and the relatively detailed instructions that can be given when an informant can read or reread instructions.

There are also disadvantages to mail surveys in music--some well-known, others not so well known. Among the well-known problems in mail surveys is rate of return. In many kinds of mail survey research it is considered a very good return if fifty per cent of those receiving questionnaires return them with usable responses. Rate of return can be improved by a number of measures:

a. Sending a second wave of questionnaires to those in the sample who have not returned them in a reasonable period of time.

b. Providing such incentives to return questionnaires as discount coupons, small amounts of cash or novelties like pens and pocket calendars.

c. Telephoning informants to solicit their cooperation before the questionnaire is sent.

d. Telephoning informants with reminders to complete and return their questionnaires.

e. Collecting the answers to the mail questionnaire by telephone after the questionnaire has been delivered.

Another disadvantage of mail questionnaire technique is that the music described by the questionnaire is not being presented in its most distinctive form--as sound. Instead the music is being represented by a set of typed or printed symbols. For this reason the questionnaire must be designed to (a) ask the informant whether each musical selection named is familiar and (b) inquire as to station preferences and listening times to determine whether the informant could be expected to really know the selection. If the selection were from a recent rock album and had not been played by the stations listed by the informant as favorites (a talk station, let us say, and a station playing golden oldies) then the informant reporting familiarity with the music named in the questionnaire would be suspect.

A third difficulty in mail surveys proceeds from the foregoing--that informants cannot rate music with which they are not yet familiar. In some other data collection techniques ratings can be given to unfamiliar selections.

Intercept studies. In an intercept study potential informants are interrupted in their passage through a shopping mall or some other public place. They are then led to a tape recorder, presented with a variety of musical segments and complete a questionnaire.

The main advantages of intercept methods are that a large number of people can be interviewed in a very short period of time. In addition, the level of cooperation in intercept studies is relatively high, and the absolute cost per informant relatively low. Finally the musical segments can be presented in high fidelity stereo--if that is important.

The greatest single disadvantage of intercept studies is that passers-by in a mall or shopping district are not necessarily representative of the population at large. Particularly in metropolitan areas with many malls and shopping centers, the shoppers at any one of these locations will be more or less blue collar, elderly, single, college-educated and so forth. The extent to which a given intercept is like or unlike the community segment of interest to the station can be controlled by prudent scheduling of intercept hours and by mixing intercept locations.

Thus it may be possible to tailor the intercept procedure to the needs of music study.

Telephone survey. The telephone survey is probably the most popular data collection method today for music studies. Here the sample is telephoned and interviewed, with the interviewer playing short segments of some or all songs down the telephone line to the informant.

The greatest advantage of the telephone method is the opportunity for interaction between the interviewer and the informant, offering an incremental improvement in accuracy of recording the responses of the informants. In addition, of the three principal methods of data collection in music studies, the telephone method offers the benefit of the most likely means of exploiting random samples of the population of interest to the station. As pointed out earlier, to the extent the sample has been selected in a random fashion the chance that it will be representative of the target population involved is improved. In addition, since segments of music can be played down the phone line by the interviewer to the informant, it will be possible to study music that is not yet familiar in the market. Finally there is no wait to get the data from the informant as is the case with mail surveys.

There are disadvantages to phone methods. One is the relative cost of conducting the interviews. If the number of musical selections being studied is large as in the case of stations with large playlists or those which feel it important to study each new release, then the number of selections studied per week may go as high as one hundred.

Interviewer time is involved in getting reactions to each of them, in spite of the fact that the one hundred may include the most familiar music in the market. In such cases, it may be desirable to combine the mail and telephone methods, including in a mail questionnaire the most familiar musical selections that are being tracked from week to week, and reserving for telephone interview the short segments of music that is not yet familiar in the market.

Sampling procedure. Sampling has been discussed in an earlier chapter of this manual. It is important to note that in mail and telephone surveys the sampling unit--the thing actually being sampled--is typically a household. The target informant--the individual whose views should be included in the study--may be only one of the individuals who live within the sampled household. In telephone surveys the target individual is usually selected with a set of qualifying questions:

> May I speak to the man of the house?
>
> Do you listen to the radio at least two hours per week?
>
> Do you listen to country music on the radio?

The interviewer will usually be instructed to ask for informants in the household from each of the demographics to be reported in the study--male 12-17, female 12-17, male 18-24, female 18-24--in a random order. When the adequate number of informants in any demographic category have been interviewed, then the interviewer will stop looking for that sort of informant in the households contacted.

The same sort of considerations apply to mail and intercept method. Mail questionnaires will be addressed to the category of informant sought in the household; and in intercept studies careful track will be kept of the number of informants intercepted in each of the demographic categories sought.

Questionnaire Construction

The principal differences in questionnaires in other studies and those in music studies has to do with the way music responses are solicited. In general, two different response modes are sought in music studies in the U.S. today. One will be referred to here as scaled alternatives, the other as scaled response.

Scaled Alternatives. The typical scaled alternative response item consists of seven (or some other number) of phrases arranged along a numerical scale in an order thought to represent a dimension of feeling that a listener might have about music. The following sets of scaled alternatives illustrate :

EXAMPLE 1:

1. My favorite
2. Like it a lot
3. Like it, but getting tired of it
4. It's okay
5. Don't like it
6. Really hate it
7. Never really heard it[1]

EXAMPLE 2:

1. Never heard of it
2. Dislike it strongly
3. Dislike it moderately
4. Don't care
5. Tired of it
6. Like it
7. My favorite record[2]

EXAMPLE 3:

1. Like it very much
2. Like it okay
3. No opinion or not sure
4. Don't really care for it
5. Absolutely hate it
6. Like it but tired of hearing it
7. Never heard of it at all[3]

EXAMPLE 4:

1. A favorite
2. Like it
3. Don't care one way or another
4. Tired of hearing it on the radio
5. Don't care for it
6. Can't tolerate it
7. Unfamiliar[4]

EXAMPLE 5:

1. A favorite
2. Like it
3. Have no opinion one way or another
4. Tired of hearing it on the radio
5. Don't care for it
6. Can't tolerate it[5]

In a recent study of informant perceptions Charles Warner found that the meaning of such alternatives are not the same in informants of different ages. Working from the list of alternatives from Example 5 above Warner's informants over thirty arranged them as at left, while those under thirty organized them as at right.

1. A favorite	1. A favorite
2. Like it	2. Like it
3. Have no opinion one way or another	3. Have no opinion one way or another
4. Tired of hearing it on the radio	4. Don't care for it
5. Don't care for it	5. Tired of hearing it on the radio
6. Can't tolerate it	6. Can't tolerate it[6]

The responses to these items for each of the musical selections is the data the music research will use. In addition, indices can be constructed from these responses. Some illustrations have been provided by Edd Routt based on the scaled alternatives in Example 2 above.

Positive acceptance = number of informants who check off "like it" or "my favorite record" divided by the number of informants in the study

Tolerance = number of informants who check off "like it" or "my favorite record" divided by the number of informants who check off "dislike it strongly" and "dislike it moderately"[7]

Of course, other indices can be construced as well.

Scaled Response. In a scaled response item the informant checks off the degree of his feeling along some dimension of feeling marked in numbers. The two most common in radio music studies are these:

DISLIKE LIKE

1 2 3 4 5 6 7 8 9

UNFAMILIAR FAMILIAR[8]

1 2 3 4 5 6 7 8 9

The principal advantage of the scaled response items is that they are simpler for both interviewer and informant. In addition, with relatively small samples, this sort of scale gives good statistical discrimination among the responses to various records. That is, a difference of average scale value--let us say 4.5 for record A and 5.3 for record B is more likely to reach statistical significance with this sort of scale. There are also some simplifications possible in presenting the resulting data as will be seen in a later example.

Figure 1 represents a mail questionnaire which incorporates scaled alternative items. The length of the questionnaire can be increased to include whatever number of musical selections are desired. It is prudent, however, to make the questionnaire short. If more than about thirty selections are to be studied, rate of return will probably suffer without a system of incentives for informants. With longer lists of selections the list may also be spread across several questionnaires

WRH

sent either to different samples or sent in mailings separated by two days or so to the same sample of informants. Where the questionnaire in Figure 1 shows a letter representing a musical selection, the name of the selection is substituted in one of these styles:

> "Abracadabra" by the Steve Miller Band
>
> The Steve Miller Band, "Abracadabra"
>
> "Abracadabra"
>
> "I'm gonna reach out and grab ya"
> (also known as "Abracadabra")
> by the Steve Miller Band

In other words, in a questionnaire like this one it is possible to identify the music by performer, title, by a phrase which occurs frequently in the selection or by any combination of these. The choice that is best for any particular mail study will depend on the musical format involved and the nature of audience appealed to by that format. Generally speaking, the younger the audience, the more attention is being paid to words. On the other hand, some kinds of music use in titles words found in the song lyrics, while other song titles do not appear frequently in the song lyrics. When song titles do appear in lyrics, then song title may be the best way to identify a musical selection.

Figure 2 represents an interview schedule that might be used either by a telephone interviewer in a telephone music study or by the interviewer in an intercept music study. The screening questions at the beginning of Figure 2 would not be used in an intercept study. Probably a question about age would be used to verify the interviewer's judgment in this regard. Then the intercept interview would begin

Figure 1. Example of a Mail Questionnaire

Midwest Research
110 Main St.
Yourtown

Dear Ms. Brown;

I enjoyed very much meeting you on the phone today. And I am very pleased that you will be helping us with our study of radio music in Yourtown. As I explained to you on the telephone, your telephone number was selected scientifically in order to give us a group of people who would ideally represent the city. That means that you and each of the others in our study are very important.

The questionnaire attached should explain itself, but if you do have some questions, please call me at _______ any evening of the week.

You should receive my letter and the questionnaire by Wednesday. Fill it out sometime Wednesday or Thursday. I will call you on Thursday evening, as we agreed to get your answers to the questionnaire. I'll just have you read me the blanks you fill in. Thank you so much for helping us to try to bring better music listening to Yourtown.

Sincerely,

Judy Smith

Figure 1 (continued)

QUESTIONNAIRE--MUSIC STUDY OF YOURTOWN--Date CIRCLE ANSWERS

To which of the following age categories do you belong?
(1) 12-17
(2) 18-34
(3) 35-49
(4) 49-64
(5) 65+

At which of these times are you most likely to be listening to the radio?
(1) 6-10 am weekdays
(2) 10 am - 3 pm weekdays
(3) 3 pm - 7 pm weekdays
(4) 7 pm - midnight weeknights

Which are your favorite stations for listening to music?

(1) AAAA

(2) BBBB

(3) CCCC

(4) DDDD

(5) EEEE

CHECK OFF HOW YOU FEEL ABOUT EACH OF THE PIECES OF MUSIC NAMED BELOW BY PUTTING YOUR CHECK MARK ( ) IN ONE OF THE BOXES FOLLOWING EACH PIECE.

SELECTION	1) Never really heard of it	2) Dislike it strongly	3) Dislike it moderately	4) Don't care	5) Tired of it	6) Like it	7) My favorite record
A	( )	( )	( )	( )	( )	( )	( )
B	( )	( )	( )	( )	( )	( )	( )
C	( )	( )	( )	( )	( )	( )	( )
D	( )	( )	( )	( )	( )	( )	( )
E	( )	( )	( )	( )	( )	( )	( )
F	( )	( )	( )	( )	( )	( )	( )
X	( )	( )	( )	( )	( )	( )	( )
Y	( )	( )	( )	( )	( )	( )	( )

Thanks for your help!!!

Figure 2. An Interview Schedule

XXXX Radio Music Survey - Week of ____________

Telephone Number______________

Time of first attempt__________

Time of second attempt_________

Time of third attempt__________

Good evening. This is ________ of Midwest Research in Yourtown. We are conducting a study of radio listening. Is there a young man between the ages of twelve and seventeen in your home who listens to the radio?
Yes____
No____

IF NO Is there a young woman in your home between the ages of twelve and seventeen who listens to the radio?
Yes____
No____

IF NO TERMINATE.

May I speak to him/her?
Yes____
No____

IF NO, Is there a time I can call again to reach him/her? Time____
No____

IF NO GET REASON AND TERMINATE.

Do you listen to the radio most days?
Yes____
No____

IF NO TERMINATE.

What are your favorite radio stations? A__ B__ C__ D__ (ONLY FOUR)

Which station are you most likely tuned to during these times?

M-F 6-10 am	___	___	___	___
M-F 10-3 am	___	___	___	___
M-F 3-7 pm	___	___	___	___
M-F 7-Midni	___	___	___	___
Saturdays	___	___	___	___
Sundays	___	___	___	___

Give me some examples of your favorite musical performers:

Now I want to play some short pieces of music for you. After each

Figure 2 (continued)

piece I would like you to tell me how familiar the music is on a scale of one to five with one being the least familiar and five being the most familiar. Then I will ask you to tell me how much you like the music also on a scale of one to five with one being least liked and five being most liked. All right, here is the first musical selection. (PROMPT ON SCALES IF NEEDED).

	Familiar					Liked				
	Least				Most	Least				Most
SELECTION	1	2	3	4	5	1	2	3	4	5
A										
B										
C										
D										
E										
F										
G										
Only a few more now.										
H										
I										
J										

That's the last selection I have to play for you. By the way, I wonder if you know any of the slogans of the radio stations here in town. Can you tell me the slogan and the station?

SLOGAN	STATION

Thank you very much for helping. HANG UP.

with the question, "Do you listen to radio most days?"

Since the musical selections in either the intercept or telephone study will be played for the informant, at least in part, the selection is identified in the interview schedule by a letter corresponding to the selection played.

Hooks

When a part of a musical selection is played for an informant that part is called a "hook." The "hook" is taken to be a representative excerpt of a recording for which it is to stand, so far as the research is concerned. Ideally the "hook" should feature the same combination of voices or instruments typical for the recording. It should also include the most frequently appearing phrase from the lyrics. In the typical ballad, the opening line of the chorus would be a good candidate for "hook." The programmer should feel confident that the "hook" chosen adequately represents the music to the informants. And the same hook should be used every time music research involving that particular recording is conducted. The usual length of a "hook" in music research is 15 to 25 seconds, although some stations use "hooks" as short as 10 seconds with satisfactory results.[9]

Compiling and Analyzing Results

After the interviews have been completed or the questionnaires returned, the process of data analysis begins. The first step is tabulation. This is simply the process of transferring the data to summary sheets. In the case of telephone or intercept studies this work is usually done by interviewers. An example of a tabulation sheet on which responses to scaled alternative items of an interview schedule is shown at Figure 3. This sort of tabulation sheet would be used when the principal analysis of the data is to be by manual means. The columns and rows are then added together so that there is a composite figure for each row and column. It is from these composite figures that the report will be constructed. Of course, the same process can be handled by computer with procedures that are specific to the kind of system being used.

A partial summary of the results of a study based on a scaled alternative questionnaire is shown at Figure 4. In some cases these results are printed out by a small computer located at the station. Typically the indices for each recording are presented, computed from the entire sample. Then a demographic breakout is provided.

Figure 3. Tabulation Sheet for Scaled Alternative Items from a Music Study

SELECTION	1) Never really heard of it	2) Dislike it strongly	3) Dislike it moderately	4) Don't care	5) Tired of it	6) Like it	7) My favorite record
A	𝍸 5	|| 2	𝍸𝍸 10	|| 2	| 1	0	||| 3
B	𝍸𝍸𝍸 15	𝍸 5	0	0	0	0	0
C	||| 3	𝍸 5	𝍸 5	0	0	0	0
D	0	0	0	𝍸𝍸𝍸 15	0	0	0
E							
F							
G							
H							
I							
J							
K							
L							
M							
N							
O							
P							
Q							
R							
S							

Figure 3 (continued)

SELECTION	1) Never really heard of it	2) Dislike it strongly	3) Dislike it moderately	4) Don't care	5) Tired of it	6) Like it	7) My favorite record
T							
U							
V							
W							
X							
Y							

Figure 4. Excerpts from a Music Study based on Scaled Alternative Items

Mean Familiarity (sum responses for 2 through 7)

5.67	Selection A
5.59	Selection F
5.41	Selection X
5.34	Selection M
5.30	Section T

ETC.

Mean Positive Acceptance (6+7)

1.98	Section F
1.95	Section A
1.87	Section M
1.85	Section X
1.5	Selection T

ETC.

OTHER TABLES FOR EACH COMPOSITE INDEX

Summary by Demographics

CODE:

1. Never really heard of it
2. Dislike it strongly
3. Dislike it moderately
4. Don't care
5. Tired of it
6. Like it
7. My favorite record

Figure 4 (continued)

Group	Number of Responses 1	2	3	4	5	6	7
"Abracadabra"							
Males 12-17	3	13	5	1	1	0	0
Females 12-17	7	9	2	3	3	2	1
Males 18-24	6	10	3	1	3	2	0
Females 18-24	4	9	3	1	3	6	0

Summaries for other songs would be organized in the same way.

At Figure 5 appear graphs representing the results of an intercept study into the familiarity and liking for twelve musical selections. The informants in this case were 227 college students who listened to radio. The client for the study was an album oriented station targetting college students in a community where a significant proportion of the population are college students. The station management wanted to know in what direction to broaden the station playlist. Selections studied were from performers not typically heard on the station as well as some heard quite often on the station.

The form of the graphs deserves some explanation. Each dot on the graph represents the average liking score for that musical selection among those who were at each level of familiarity. The vertical line through each dot is the sampling error associated with that mean score for liking among those with the level of familiarity indicated. The shorter the vertical line the more the informants were in agreement about their liking of the selection. The longer the vertical line, the less agreement among those informants at the stated level of familiarity with the music.

Look at the graph in Figure 5 which summarizes responses to the Billy Cobham album. This is a pattern very favorable with this target audience. Liking of the recording appears to increase with familiarity, and familiarity with the selection is apparently not yet high.

On the other hand, the Paul McCartney selection may require less emphasis in the playlist, because familiarity is high, and appears to decline at the highest level of familiarity.

Figure 5a

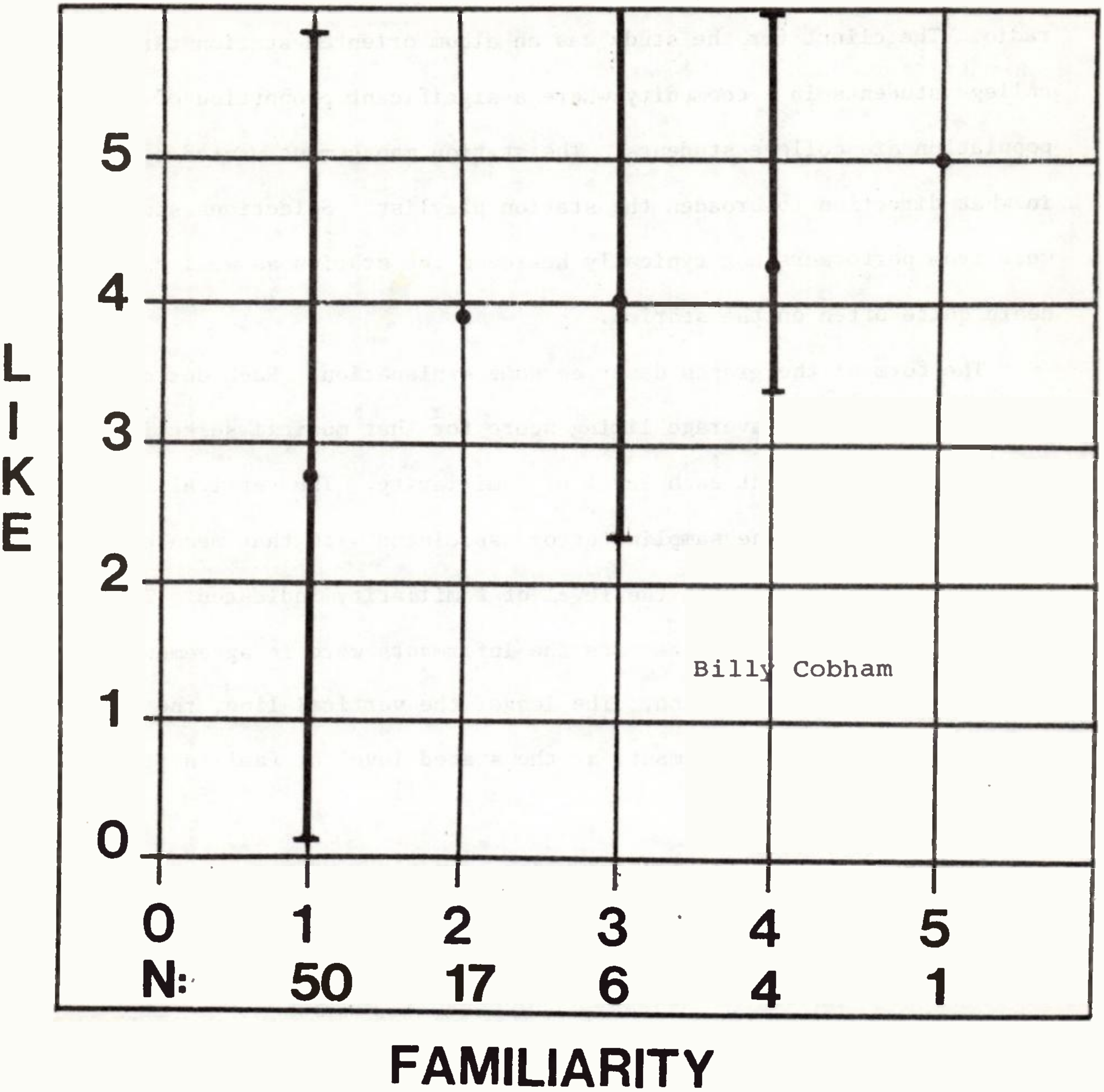


Figure 5b

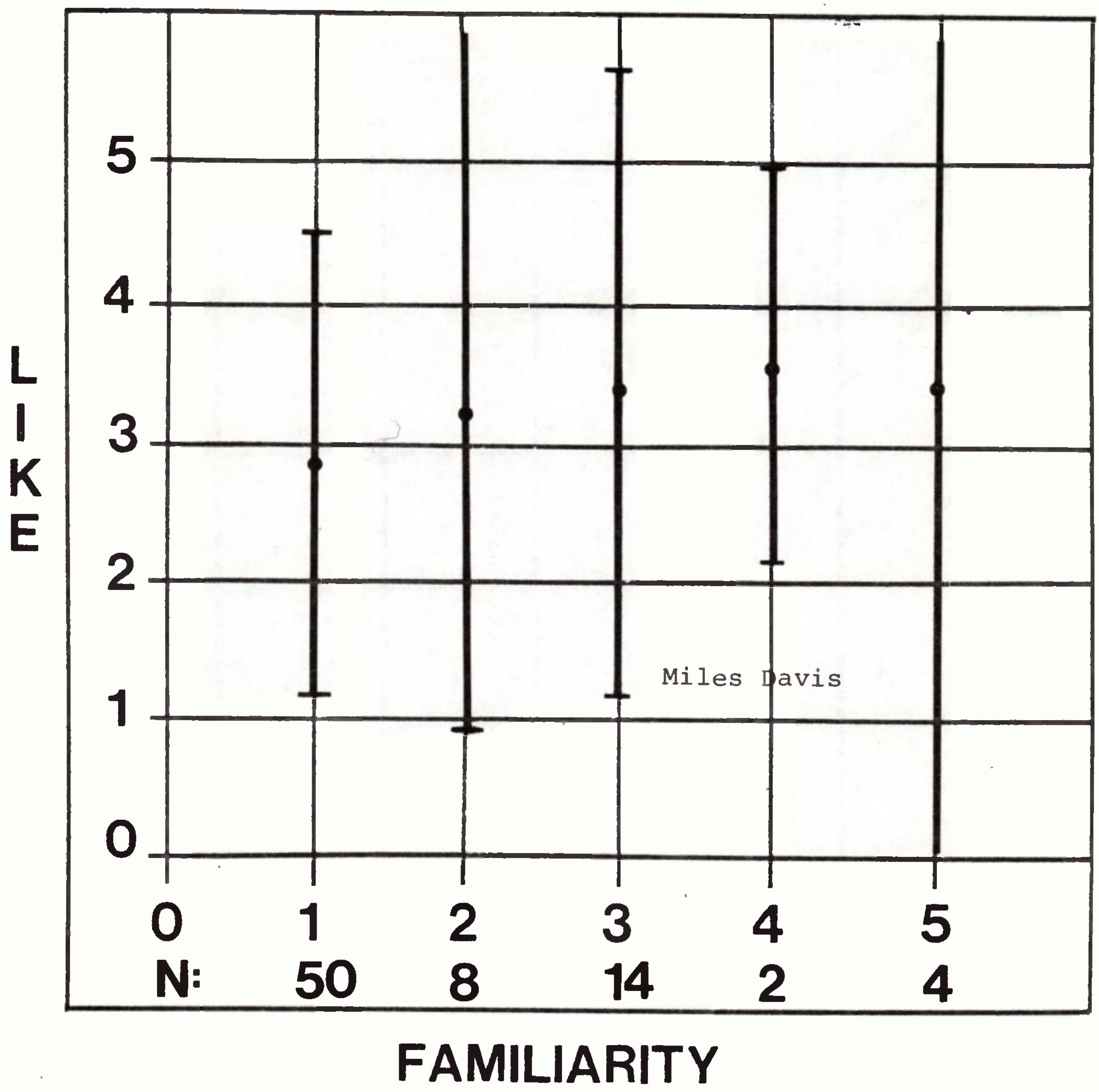


Figure 5c

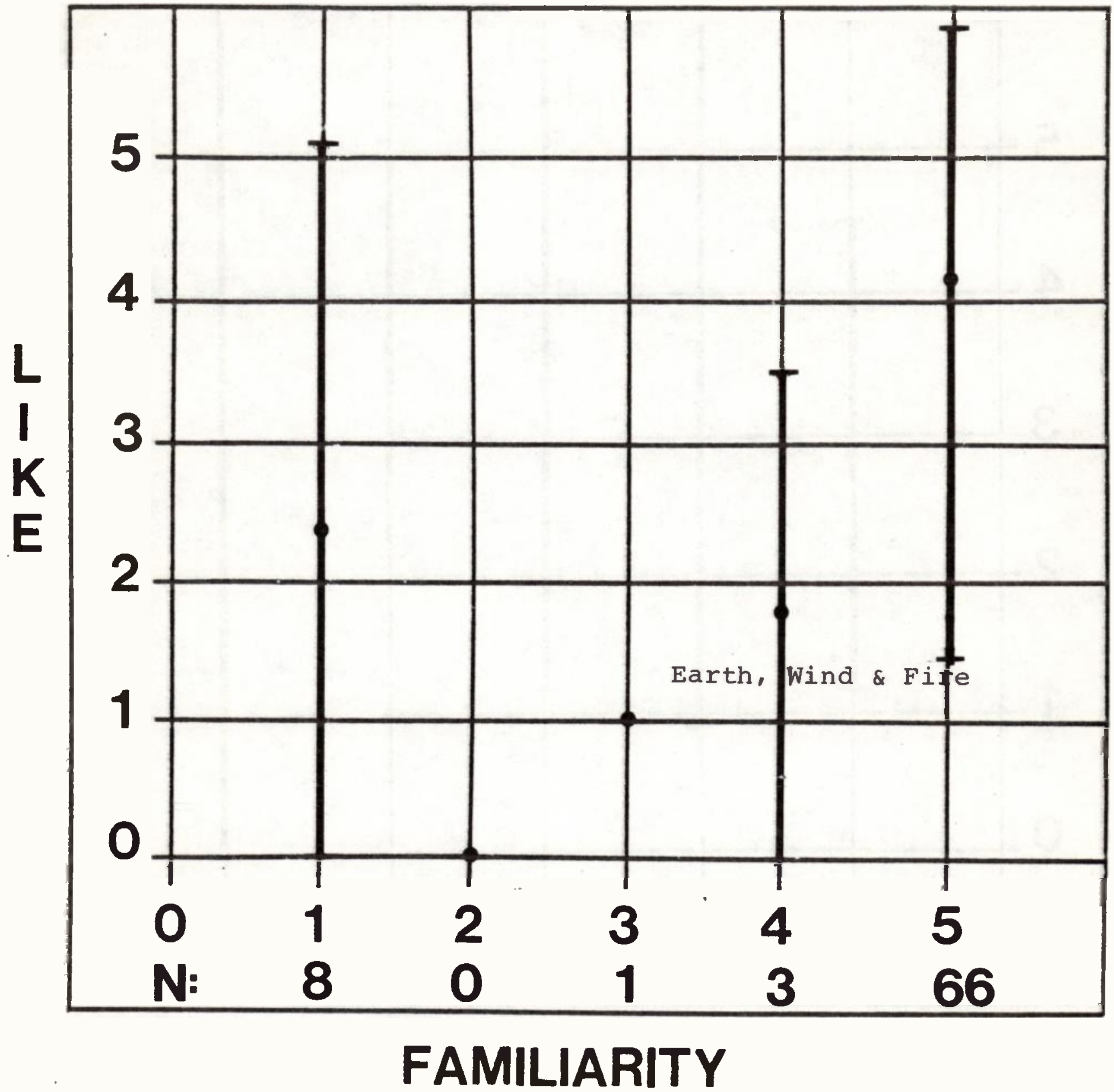


Figure 5d

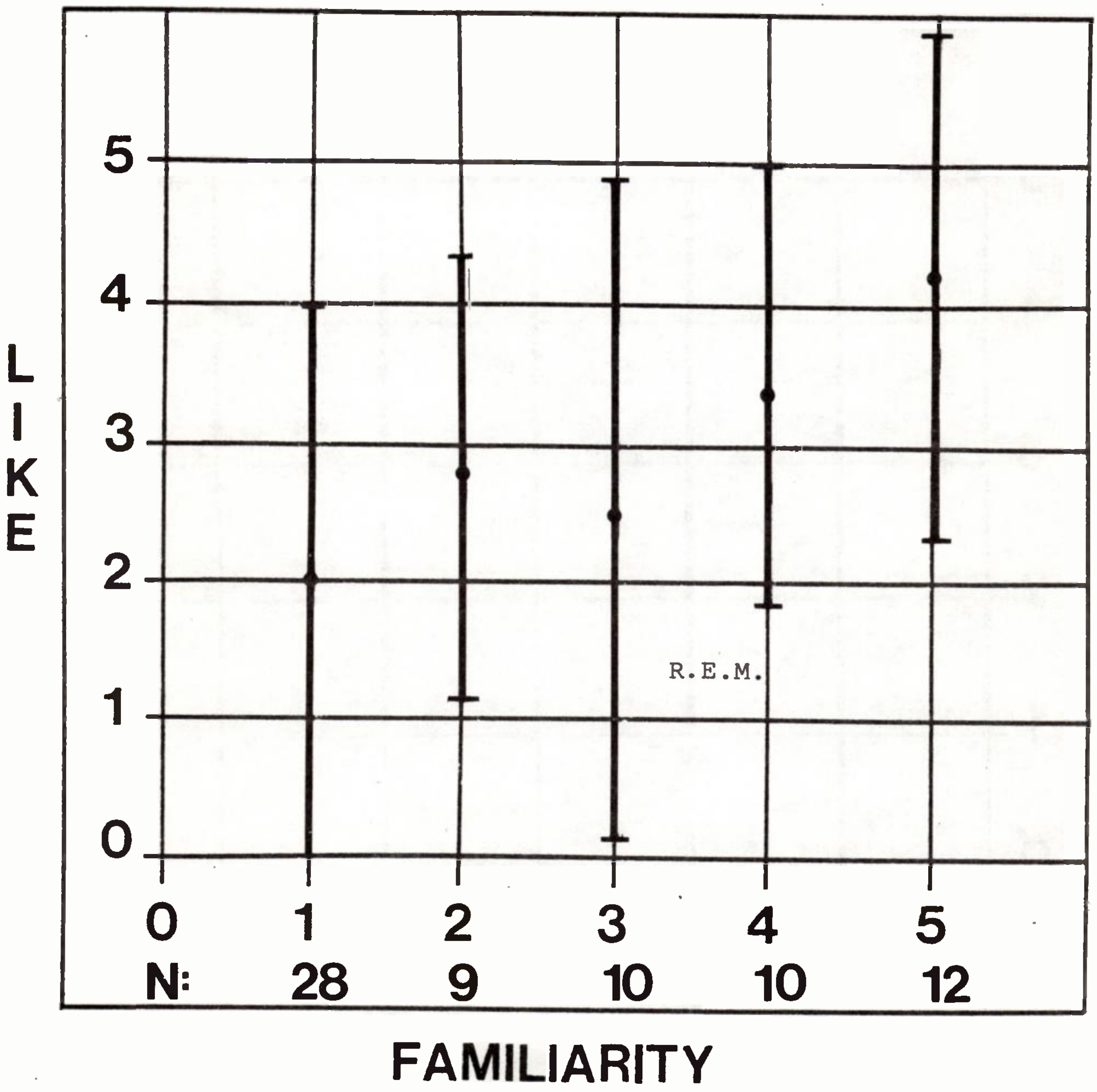


Figure 5e

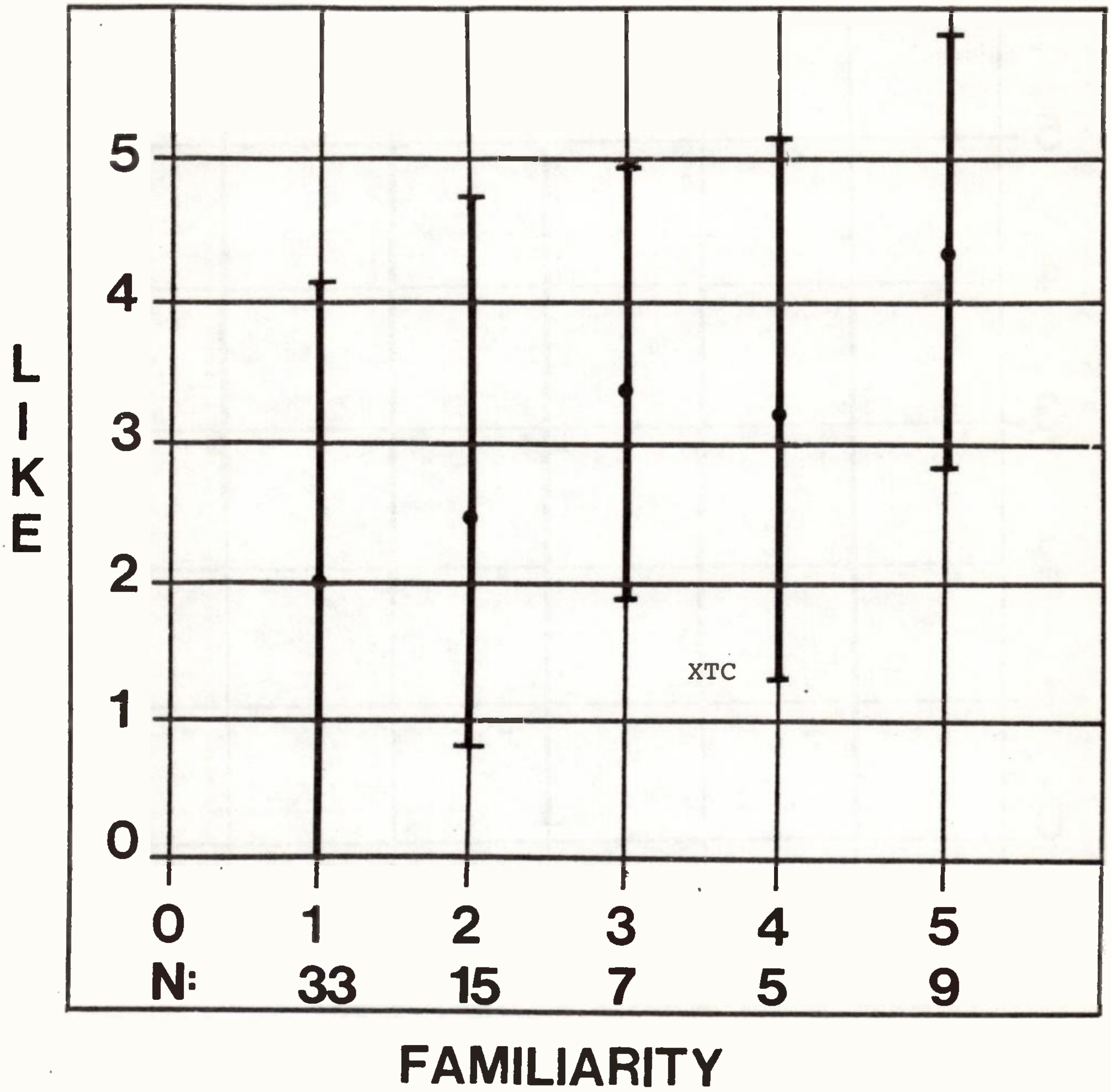


Figure 5f

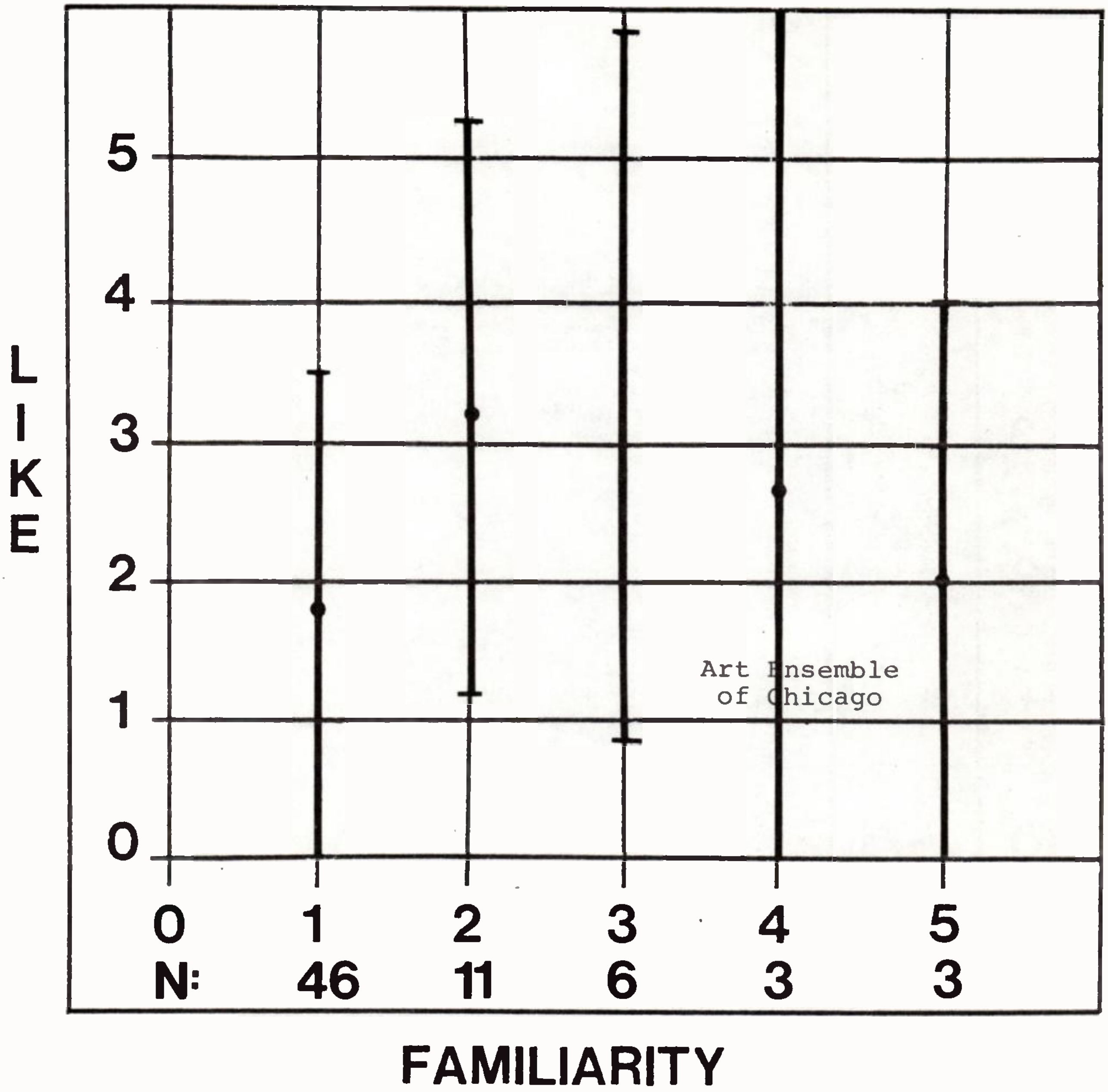

LIKE
5
4
3
2
1
0
0
1
2
3
4
5
N:
46
11
6
3
3
Art Ensemble of Chicago
FAMILIARITY

Figure 5g

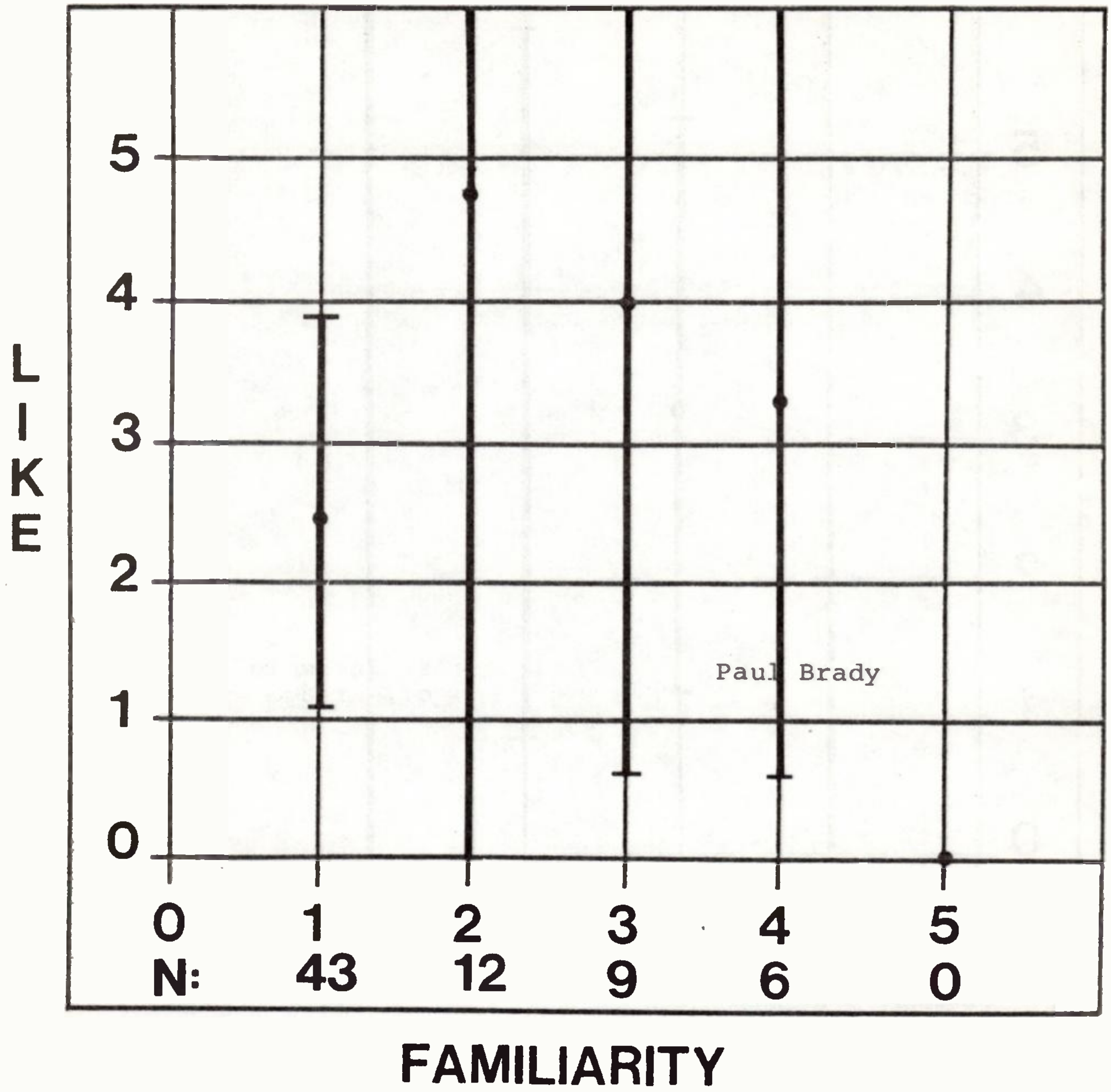


Figure 5h

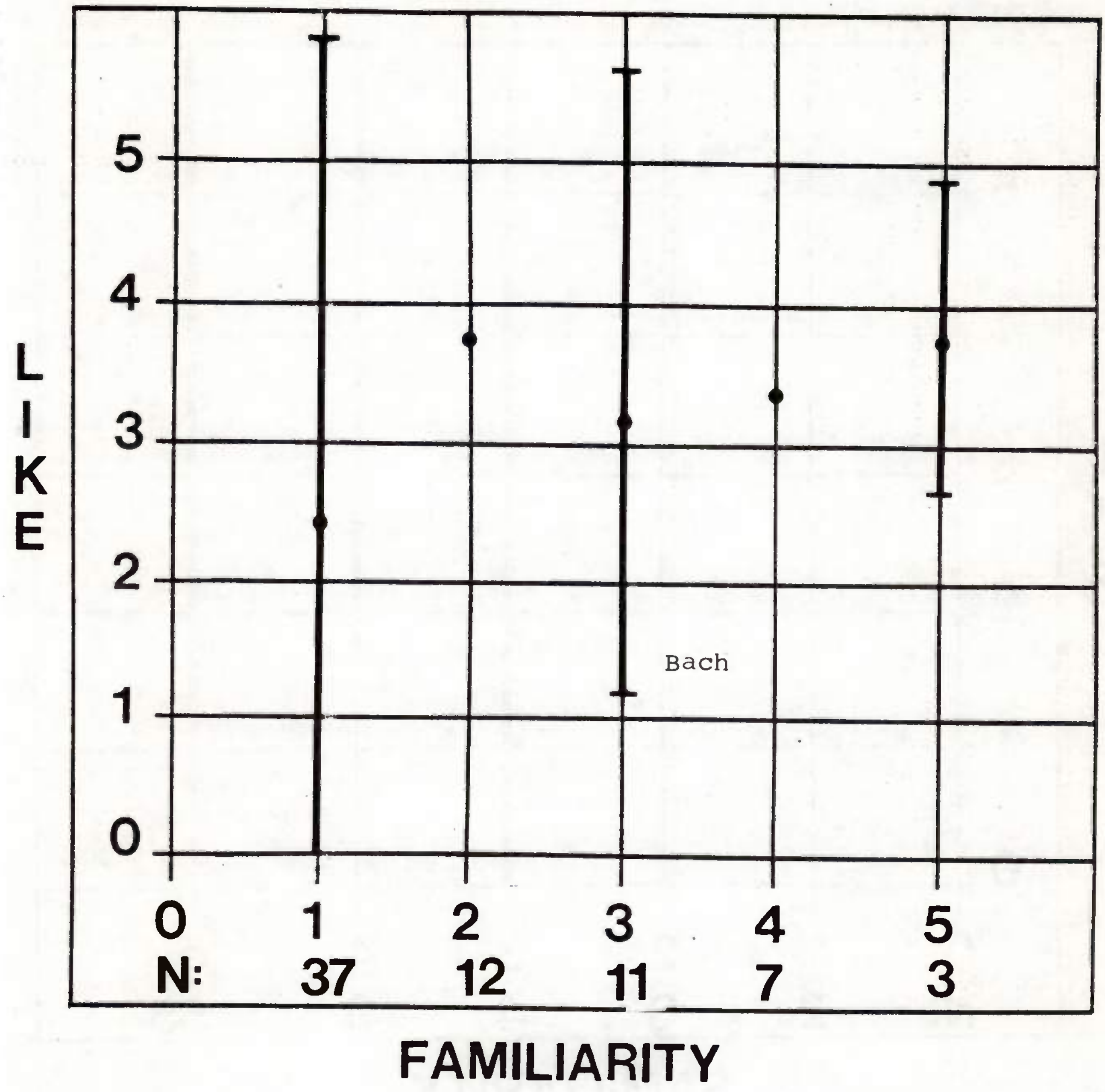


Figure 5i

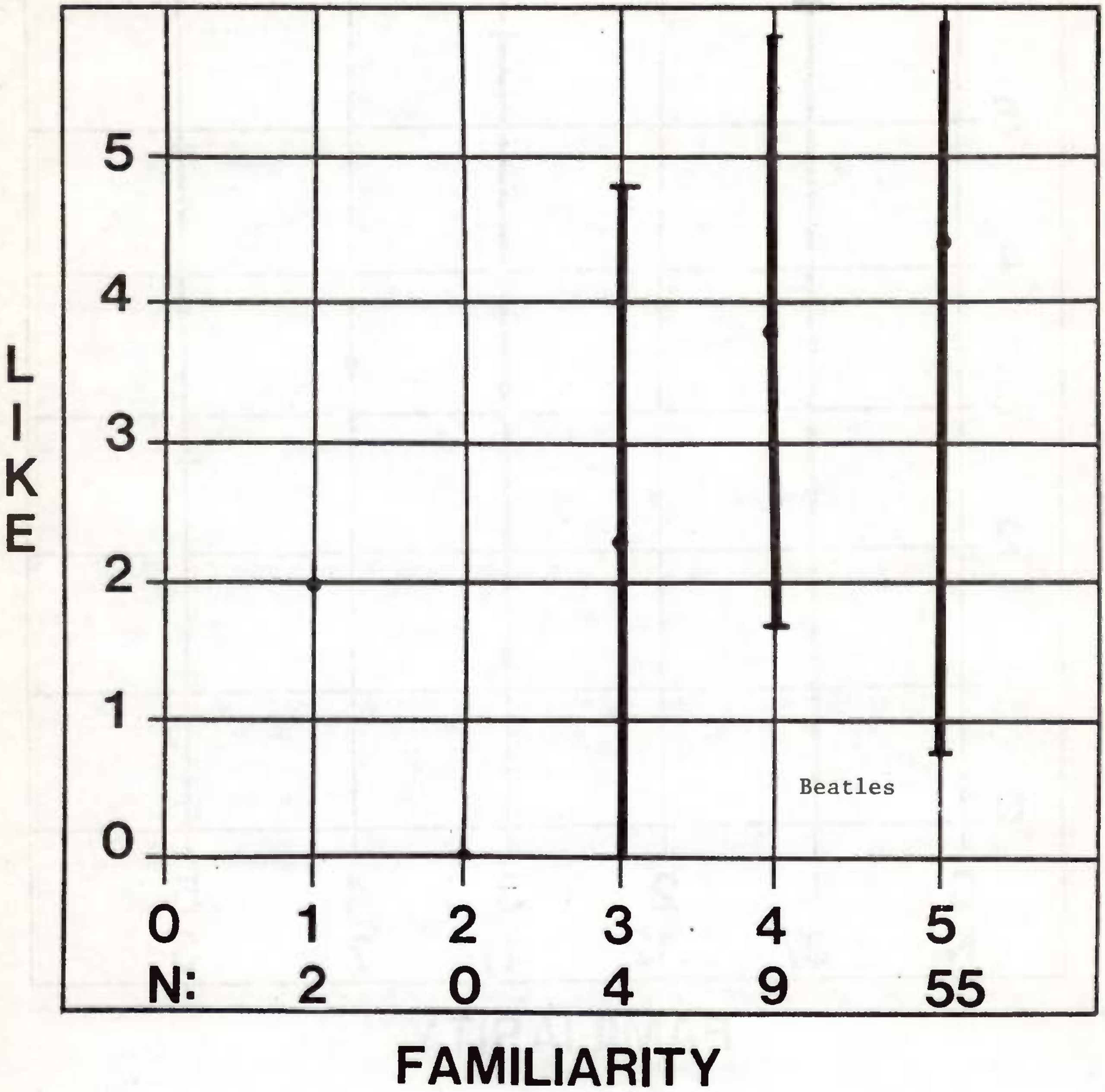


Figure 5j

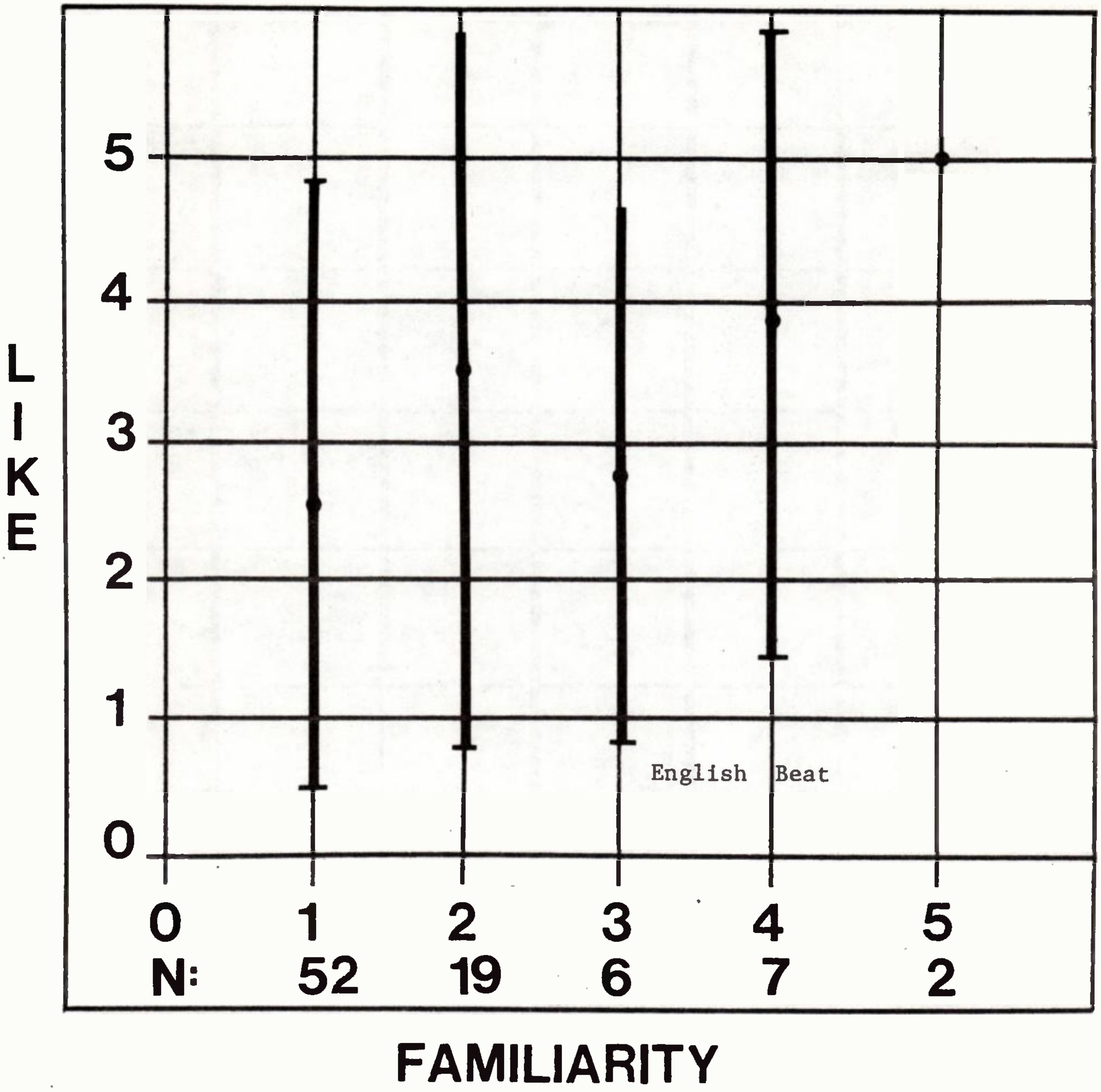


Figure 5k

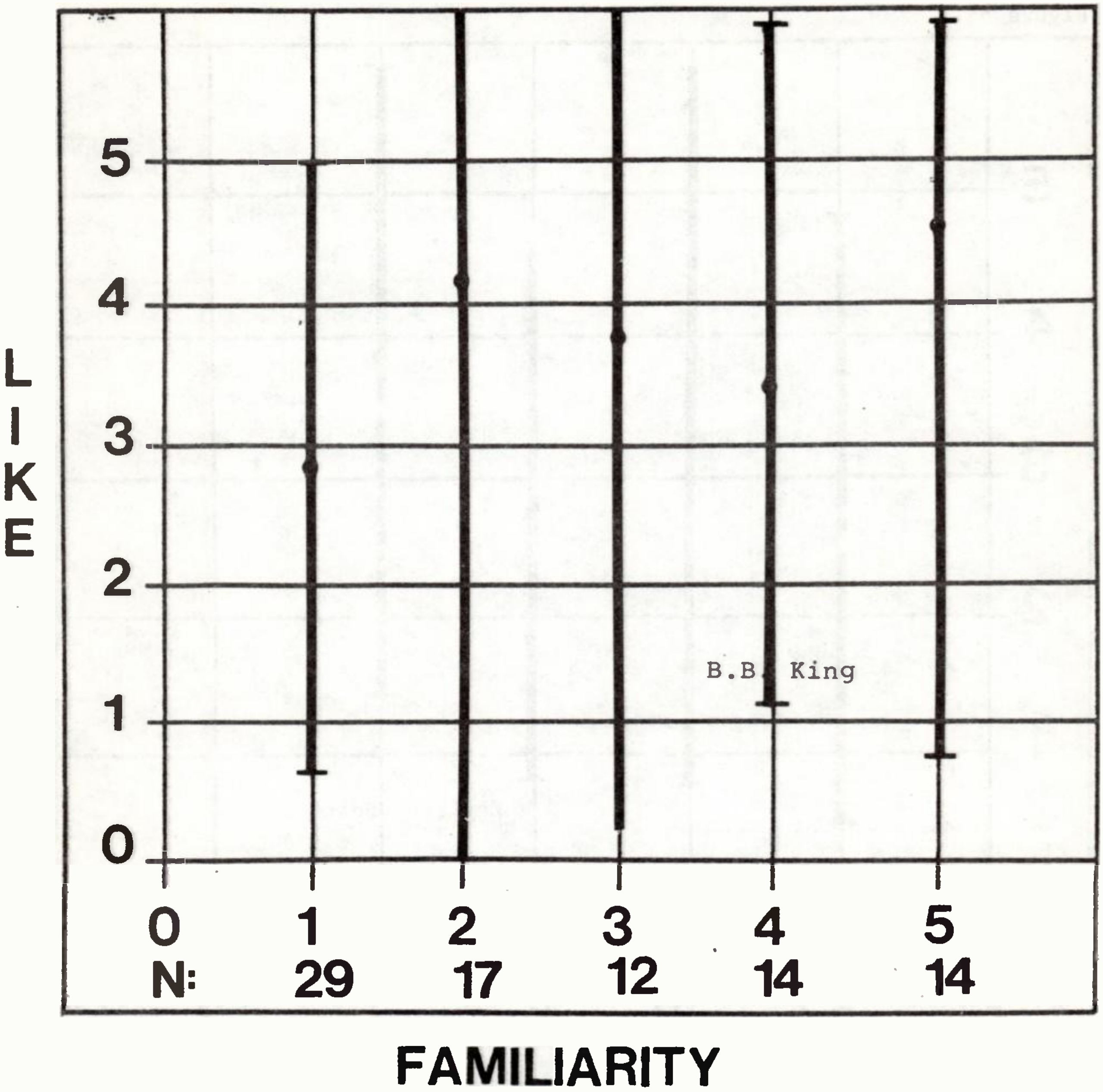
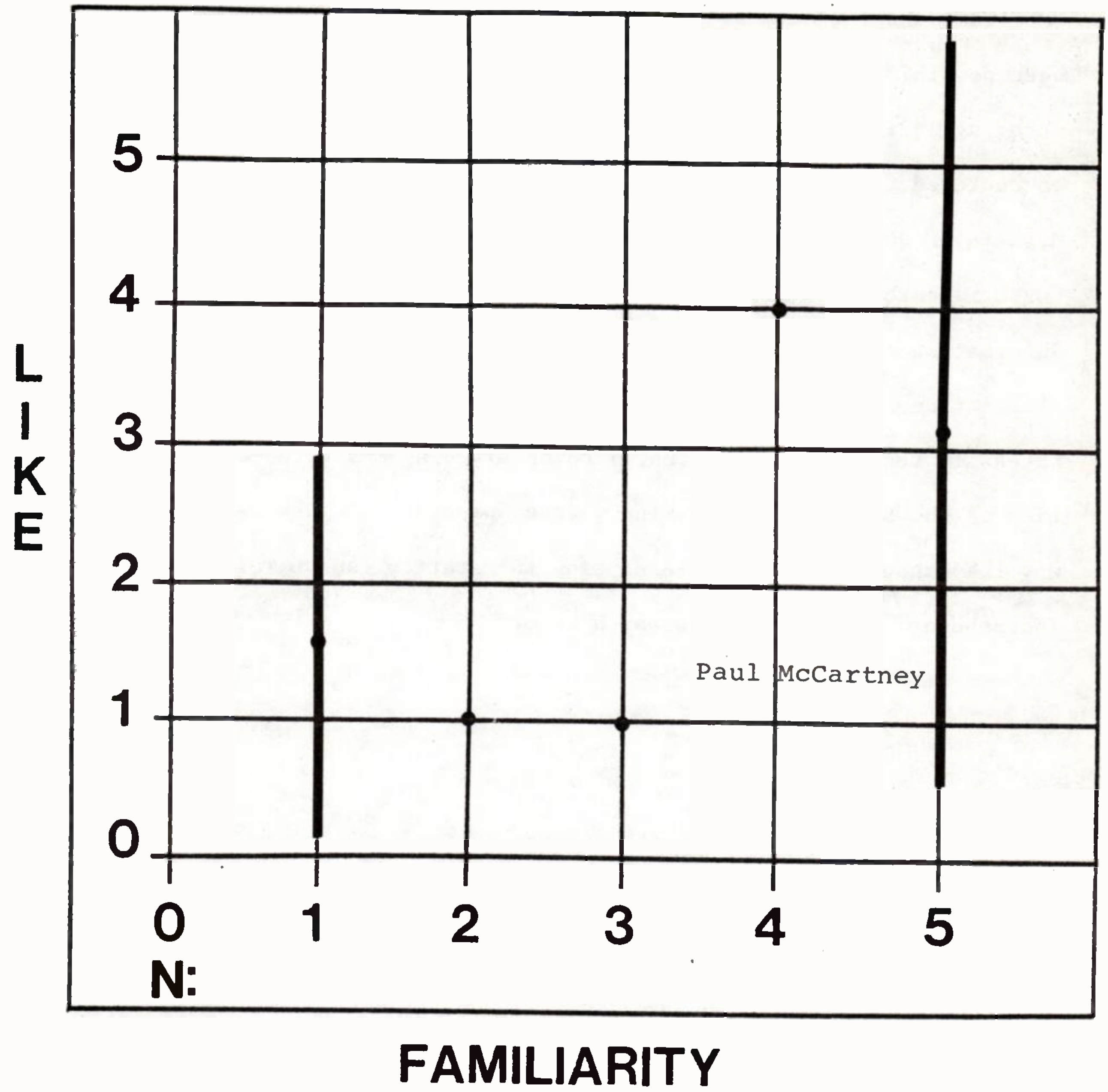


Figure 1



Conclusion

This chapter on music research is relatively brief. It has not been possible to present all of the variations in procedure which are occuring in the radio industry. Nevertheless some of the most frequently encountered features of this research have been presented, as well as details of questionnaire construction and data analysis. In most cases music research is conducted by stations themselves where the resulting information will be used to fine tune a playlist or format. Occasionally the station will find it worthwhile to have an outsider (with the necessary training or experience) to observe the music research activities of the station to determine whether procedures are working in the way they should. With this exception the station can be relatively independent in this music research effort.

References--Music Research

Edd Routt, James B. McGrath and Fredic A. Weiss, *The Radio Format Conundrum*. New York: Hastings House, 1978.

Edd Routt, "Music Programming" in Susan Tyler Eastman, Sydney W. Head and Lewis Klein (eds.), *Broadcast Programming: Strategies for Winning Television and Radio Audiences*. Belmont, California: Wadsworth, 1981. Page 276.

Robert Balon, "Measuring Station Audiences by Telephone," in James E. Fletcher (ed.), *Handbook of Radio and TV Broadcasting: Research Procedures in Audience, Program and Revenues*. New York: Van Nostrand Reinhold, 1981. Page 70.

Bob Pittman quoted in Charles Warner, "Perceived Scale Values for Testing Songs in Call-Out Music Research," unpublished manuscript, July 1982.

Warner, "Perceived Scale Values for Testing Songs in Call-Out Music Research."

Warner, page. 8

Edd Routt, page 227.

See James E. Fletcher and Ernest Martin Jr., "Message and Program Testing," in Fletcher (ed.), *Handbook of Radio and TV Broadcasting*. Pages 140-144.

Fletcher and Martin, pages 140-141.

Chapter Four

CALL-OUT FOR POSITIONING

Few ideas have received greater attention from the radio industry than that of "positioning." Positioning in the case of radio refers to the competitive relationships of the various stations in the market.[1] In particular, station operators need to know:

(1) the reputation of each station with its audiences and

(2) the character and composition of the unique audiences devoted to each station.

Call-out (telephone) surveys are frequently useful in checking the nature and strength of a radio station's position in the market. In addition, call-out can be used to track--to evaluate the progress of--a promotional campaign. Call-out can rarely be the first research technique employed in solving a positioning problem. The reason is that call-out is most efficient when the interviewer's questions are the same to all respondents and when other research has suggested which questions are important to the issues involved. The preliminary research to positioning call-out surveys may well be a series of focus groups during which the terms used by the public to describe stations can be determined. By their nature focus group interviews are likely to produce the language in which radio formats and personalities are described. In addition, the relatively loose structure of group interviews makes it possible to uncover motivations and behavior which explain audience perception of a station and that may not have occured to the researcher in advance. On the other hand, it is not possible for focus group interviews to estimate the number of people in the market who feel one way or another.

Establishing the size of groups in the market as a whole is a task well suited to call-out research techniques.

In the design of call-out research for positioning purposes it is important to have a sampling procedure that delivers respondents representative of the audiences important to the station. For purposes of discussion here station audiences will be categorized by time spent listening (TSL) and by listener loyalty. The loyalty of listeners in this case has been conceptualized in three levels--exclusive audience, turnover audience and non-audience.

Exclusives are those who listen to one station only. The turnover audience are those who regularly (4-7 times per week) tune to the station in question. Because the turnover listener joins the station audience, he/she can be said to enjoy a "window" on the station format. Station self-promotion through this window provides the least expensive way to recruit exclusives to the station.

Non-audience include radio listeners who never or rarely tune in the station. Their image of the station is based upon (a) their experience with similarly formatted stations, (b) their experience with the station sometime in the past (often a long time ago), or (c) the reputation of the station from conversations with friends and associates. The non-audience is by far the most expensive to recruit into a station audience. In order to join the turnover audience, then the exclusives of a new station, they must first be reached through another medium--advertising on another radio station, television, newspapers, magazines, billboards, or novelty. In addition, the messages reaching the non-audience--even though very persuasive--will have to be received many times before long-time listening habits are broken.

Each of these audiences is more or less difficult to identify at the start, due to their relative incidence. Incidence is the part of the population which belongs to some specified group. Suppose the average quarter hour rating for adults in the Metro area listening to radio station X, Monday through Friday, 6 a.m. to 9 a.m., is 2.1. In terms of position study respondents, this figure means that, if one thousand adults were telephoned at random between the hours of 6 and 9 a.m., we could expect about 21 (plus or minus about nine persons) who listen to station X during morning drive time. If we want to have one hundred persons in the sample representing this part of the audience we will need a sample size of about 5000 persons.

Prescreening may be a way of reducing the problems introduced by this low incidence. To continue the illustration above, if a single interviewer were conducting the survey and could place fifty completed calls per hour, we could expect only one interview per hour. At this rate, if calls are to be made only during 6 to 9 a.m. daily, Monday through Friday, nearly seven weeks would be required to complete the survey.

Typically we would like the interviews to be conducted in as short a time as possible in order that the station images we are studying will be as much alike as possible through the research period.

To accomplish this we organize the survey into two parts--a prescreening survey and a data collection survey.

During the prescreening survey about 6000 calls will be placed to identify adults (if that is the target audience) who listen to Station X during morning drive time Monday through Friday. These adults will then be asked if they would be willing to be interviewed during the later collection period--several weeks later. The interviewer also determines the best time to call to reach the desired respondent,

The questionnaire used in the data collection phase of a positioning survey will typically feature questions developed from earlier focus group interview studies. These questions reflect the reputation of the station and of the station format in the eyes of the audience. The form of the questions is typically that of the scaled response as illustrated below:

> Report the number between 1 and 10 that represents how much you agree with each of these statements: Assume that 10 means you very much agree but that one means you do not agree at all. How do you feel about these statements:
>
> 1=do not at all agree   10=agree very much
>
> FM 100 carries fewer commercials than other FMs in this city. ______
>
> Traffic reports on FM 100 are easy to understand. ______
>
> The personalities on FM 100 make few mistakes. ______
>
> FM 100 will interrupt its programs for important news. ______
>
> During the FM 100 programs which put telephone callers on the air, the station seems to respect the callers. ______
>
> Consumer features on FM 100 are accurate and useful. ______

Another approach is to scale adjectives applied to the station by its heaviest listeners:

> Indicate with a number between 1 and 10 how well you think each of these words describe FM 100. A ten would mean you think the word describes the station very well; a one that the word does not describe the station at all--at least as you see it.
>
> happy _____
> calm _____
> accurate _____
> friendly _____
> energetic _____
> pessimistic _____
> boring _____
> progressive _____
> reliable _____
> clear _____

Similar items--of course--should be devoted to informant evaluation of major competing stations.

In addition to these questions, a diary of listening times should be collected, as well as a rough record of exposure to other media. Frequently a pattern of media use is one of the most stable predictors of the appeal of a station format and position. For example, if "Your Sports Station in Oakville" captures the attention of those who spend the most time with sports magazines, sports sections of newspapers as well as radio and television coverage of sporting events, then the station postition in the market could be said to be well established (and probably justified).

The Illustrative Study

The study which concludes this chapter examines the potential positions of radio stations in the Campusville market. From examination of the various tables we might be able to infer the image station Station B has for its audience. In Table 14, for example, we see that more of Station B's audience responded that "working around the house and in the garden" was a leisure activity. In Table 13 more than one in three who listed Station B as their favorite station disagreed with liking the music as a reason for listening to the station. From Table 5 we learn that Station B listeners are the most frequent newspaper readers, the heaviest TV viewers and the lightest radio listeners. Table 2 shows that the majority of Station B fans fall in ages 35+ and that one in four have only "some high school." The station seems to be used by old-timers in the community--by those who are not primarily music listeners (hence short listening periods and devotion to other media).

References - Call-Out for Positioning

[1] George A. Burns of Burns Media Consultants, Inc. has provided this definition, "Positioning = attributes of a product or service which is the result of communication about the product or service."

Radio Audiences in Campusville

May 1982

WRH

Purpose

In May 1982 a sample of adults were interviewed by telephone in Campusville. The purposes of the survey were (1) to identify major differences among audiences for Campusville radio stations and (2) to suggest unique features of the advertising audience of each station.

Method

A random sample of residences in Campusville were contacted by telephone. Interviewers were students in a class in broadcast audience measurement at the University of Campusville. Each had received special instruction in interviewing methods. Calls were made from a telephone center which permitted monitoring by a supervisor.

A copy of the questionnaire used appears at Appendix A. (It was adopted from Joseph C. Philport, "Identifying Special, Saleable Characteristics of Station Audiences," in James E. Fletcher, editor, Handbook of Radio and TV Broadcasting, New York, Van Nostrand Reinhold, 1981, Chapter 10),

Nature of the Sample

One adult was interviewed in each household contacted. Characteristics of the resulting sample appear at Appendix B. Campusville is a university town. The largest age group was "18-24;" the largest educational category was "some college." The largest occupation category was "other" which included university students. The largest category in income was $20,000+.

The majority of the sample listened to radio more than two hours per day, watched television two hours or more per day and read the newspaper daily. The only section of the newspaper read regularly by the majority of the sample was "national news."

The majority of the sample reported listening to the radio was due to news, music and personalities. Most frequent leisure activities were books/magazines, work in house and garden, travel/vacations, theater or films, live performance of music and sports.

During the past year the majority of the sample had purchased tires, batteries or other auto accessories, as well as home improvement supplies.

Results

Table 1 shows the relative frequency with which various stations were listed as favorites of sample respondents. Station A is named with significantly greater frequency than other stations; Station G with significantly lower frequency. The other stations are so close on this variable that, if sample error could be removed, their order of listing might be different. The number of respondents listing Station G as favorite is so small (only two) that no further analysis of its audience is possible. Station D and Station E seem about even in the male/female division of their audiences (see Table 2); other stations are predominantly female.

So far as age is concerned, the majority of the Station B audience is over 50. Station C and Station F are strongest in audiences 25-50. Stations A, D, E have audiences predominantly under 35.

Station C--a country station--is the only Campusville station for which college educated listeners were not the great majority of listeners.

Table 3 indicates that all stations were preferred by respondents with family incomes above $20,000. The exception was Station C--the country station which was strong in all income groups.

In terms of occupation (Table 4) all stations were preferred by notable percentages of respondents with professional/executive positions. Only one station--Station C, a country station--had a strong following among labor.

Table 5 shows media use by favorite station. The majority of respondents for Station A and Station E used radio two or more than two hours per day. A majority of respondents for other stations listen fewer than two hours.

So far as TV viewing is concerned, half or more of those who preferred Station A, Station E and Station F also watched two or more hours of television daily.

Half or more of those listing every station but Station A as favorite read a newspaper daily. The majority of respondents for each station except Station A and Station C report reading national news regularly. The most frequent readers of local news were those who listed Station F, Station C and Station E as favorite. Station E and Station A included the greatest proportion of those who read entertainment stories regularly. Station C includes the greatest number of regular readers of sports sections with Station D and Station F also high. (See Table 6)

So far as reasons for listening are concerned, "helping me to find out about things that are happening in my town and surrounding communities" is frequently given as a reason for listening by those who listed any station as favorite. On the other hand, a significant number of those who listed Stations A, B, D, and E as favorites disagreed that "news of the day" was an important consideration in listening to a favorite station (see Table 8).

Friendliness of personalities was an important reason for listening for all groups, but those who preferred Stations C, D, and F most agreed (see Table 9). A personality's sense of humor was most important to those who listed the same stations as favorite. The professionalism of personalities was important to those who listed any station as favorite (see Table 11), although those who preferred Station D were about evenly divided on this reason for listening. The credibility of personalities (see Table 12) was an important reason for listening, although those who preferred Station E seemed divided on this reason for listening.

Music (see Table 13) was an important reason for listening for all respondents, although those who listed Station B as favorite were least likely to agree. Those listing the various stations as favorites did differ in the leisure activities participated in (see Table 14). Attendance at theater and films was heaviest among those who listed Station E as their favorite station, lowest among those who listed Station C as favorite. Sports activities were listed most often by those who listed Stations A, E and D as favorite--least by those who listed Station B and Station C as favorites. Reading books and magazines were important to all. Recreational travel was listed most often by those who preferred Stations D and A. Working around the house and garden was listed most frequently by those who listed Stations B, C and F as favorites. Social organizations and clubs were listed most often by those who considered Stations E, B and F as favorites. Attending live musical presentations were most frequently listed by respondents whose favorite stations were Staions D, A and E, listed least frequently by those who considered Stations C, F and B as their favorites.

Table 15 displays purchase profiles of respondents by station listed as favorite. Automobile purchases were most likely among those who listed Stations D, F, A and E as favorite, least likely among those with B as favorite. Auto accessory purchases were mostly among those who considered F and E as favorite. Furniture/carpet/bedding were most frequently purchased by those listing Stations E and C as favorite. Major applicances were purchased most frequently by those who listed Station E as favorite, least frequently by those who listed Station D and Station B as favorite. Home improvement supplies were purchased most frequently by those who listed Stations E and F as favorite, least frequently by those who found Station D to be favorite. Lawn and garden supplies were purchased most frequently by those who listed Station D and C as favorite, least often by those who listed Station A as favorite. Camera purchases were most frequent among those who listed Stations F and A as favorite, least frequently by those listing Stations B and D as favorite. New bank accounts were most common among those listing Stations F and E as favorite; least often among those who listed Station B and C as favorites.

Limitations

No suggestions for format development or change should be based on this report due to the small number of respondents listing any station as favorite. Format studies should include a minimum of 300 respondents who regularly listen to the station involved.

This study may be used to distinguish categories of people who list each of the stations as favorite and may be useful in promoting stations to their audiences and in promoting sales of station time to advertisers interested in reaching various audience segments.

TABLE 1

FAVORITE STATION (N=236)

	%
STATION A	27.1*
STATION B	13.6
STATION C	12.3
STATION D	11.9
STATION E	11.0
STATION F	10.2
STATION G	.8*
OUT-OF-MARKET STATIONS	12.7

Significantly different from other values in the table at the .05 level.

TABLE 2

PERCENT SEX, AGE, EDUCATION BY FAVORITE STATION

		AGE								
	Male	18-24	25-34	35-49	50-64	65+	Some High School	High School Diploma	Some College	N
STATION A	37.5	65.6	17.2	12.5	1.6	--	9.4	12.5	76.6	64
STATION B	31.3	6.3	9.4	25.0	21.9	37.5	25.0	15.6	59.4	32
STATION C	31.0	13.8	20.7	37.9	10.3	17.2	17.2	37.9	37.9	29
STATION D	57.1	53.6	35.7	10.7	--	--	3.6	10.7	85.7	28
STATION E	46.2	50.0	34.6	15.4	--	--	3.8	--	88.5	26
STATION F	33.3	20.8	25.0	37.5	16.7	--	8.3	12.5	70.8	24
STATION G	50.0	--	--	50.0	50.0	--	100.0	--	--	2
OUT-OF-MARKET	40.0	43.3	23.3	16.7	10.0	6.7	23.3	3.3	73.3	30

TABLE 3

PERCENT INCOME GROUP BY FAVORITE STATION

STATION A	6.3	20.3	7.8	15.6	37.5	64
STATION B	21.9	12.5	6.3	6.3	31.3	32
STATION C	13.8	17.2	10.3	20.7	17.2	29
STATION D	14.3	7.1	10.7	7.1	53.6	28
STATION E	3.8	3.8	15.4	11.5	61.5	26
STATION F	4.2	16.7	12.5	12.5	33.3	24
STATION G	50.0	--	50.0	--	--	2
OUT-OF-MARKET	3.3	20.0	16.7	13.3	30.0	30
	TO $5K	$5K to $9,999	$10K to $14,999	$15K to $19,999	$20K & OVER	N

TABLE 4

PERCENT OCCUPATIONAL GROUP BY FAVORITE STATION

	Professional/ Executive	Clerical/ Sales	Labor	Other	N
STATION A	40.6	9.4	14.1	34.4	64
STATION B	34.4	6.3	9.4	46.9	32
STATION C	31.0	10.3	31.0	27.6	29
STATION D	39.3	10.7	3.6	46.4	28
STATION E	34.6	3.8	15.4	46.2	26
STATION F	37.5	20.8	8.3	33.3	24
STATION G	50.0	--	--	50.0	2
OUT-OF-MARKET	26.7	20.0	13.3	40.0	30

TABLE 5

PERCENT MEDIA USE BY FAVORITE STATION

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
TIME W/RADIO Typical Yesterday								
NEVER	--	--	--	--	—	4.2	50.0	3.3
	7.8	9.4	6.9	3.6	3.8	8.3	50.0	13.3
LESS THAN 2 HRS.	37.5	56.3	41.4	32.1	38.5	54.2	--	40.0
	42.2	53.1	51.7	53.6	34.6	58.3	--	43.3
2-3 HRS.	25.0	15.6	20.7	39.3	26.9	25.0	50.0	26.7
	23.4	9.4	17.2	17.9	34.6	20.8	50.0	20.0
3+ HRS.	37.5	28.1	37.9	28.6	34.6	16.7	--	30.0
	26.6	28.1	24.1	25.0	26.9	12.5	--	23.3
TIME w/TV Typical Yesterday								
NEVER	7.8	9.4	3.4	7.1	15.4	12.5	--	3.3
	18.8	18.8	31.0	17.9	23.1	20.8	50.0	23.3
LESS THAN 2 HRS.	32.8	25.0	31.0	50.0	26.9	20.8	--	40.0
	28.1	34.4	34.5	42.9	26.9	29.2	--	43.3
2-3 HRS.	34.4	15.6	44.8	32.1	30.8	37.5	50.0	30.0
	32.8	12.5	24.1	28.9	30.8	29.2	--	16.7
3+ HRS.	25.0	50.0	20.7	10.7	26.9	29.2	50.0	26.7
	20.3	34.4	10.3	10.7	19.2	20.8	50.0	16.7
TIMES WK. W/NEWSPAPER Usual Last Wk.								
LESS THAN ONCE/WK	10.7	--	6.9	10.7	3.8	4.2	--	10.0
	9.4	3.1	6.9	3.6	7.7	—	--	10.0
ONCE/WK	12.5	--	10.3	3.6	11.5	20.8	50.0	10.0
	14.1	3.1	6.9	3.6	3.8	12.5	--	6.7
SEVERAL TIMES/WK	31.3	25.0	17.2	39.3	19.2	4.2	--	26.7
	39.1	18.8	13.8	42.9	38.5	25.0	--	40.0
DAILY	45.3	75.0	65.5	46.4	65.4	70.8	50.0	53.3
	37.5	75.0	69.0	50.0	50.0	62.5	100.0	43.3
N	64	32	29	28	26	24	2	30

TABLE 6

NEWSPAPER SECTIONS READ REGULARLY

Percent of Sample (N-236)

	NATIONAL NEWS	LOCAL NEWS	BUSINESS	EDITORIAL	ENTER-TAINMENT	RADIO-TV	SPORTS	N
STATION A	46.9	18.8	1.6	1.6	18.8	--	9.4	64
STATION B	59.4	12.5	9.4	6.3	3.1	3.1	--	32
STATION C	34.5	27.6	6.9	3.4	3.4	--	20.7	29
STATION D	71.4	3.6	--	--	7.1	--	14.7	28
STATION E	53.8	23.1	--	--	19.2	--	3.8	26
STATION F	50.0	29.2	8.3	--	--	--	12.5	24
STATION G	100.0	--	--	--	--	--	--	2
OUT-OF-MARKET	70.0	13.3	--	3.3	3.3	3.3	6.7	30

TABLE 7

Q. Why do I listen to my favorite station?

A. It helps me to find out about things that are happening in my town and in the surrounding communities.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	14.1	12.5	3.4	10.7	11.3	--	50.0	10.0
Disagree	21.9	21.9	6.9	7.1	23.1	20.8	--	30.0
Don't Know, Refused	1.6	6.3	6.9	7.1	7.7	8.3	50.0	10.0
Agree	50.0	34.4	58.6	57.1	50.0	45.8	--	43.3
Strongly Agree	12.5	25.0	24.1	17.9	7.7	25.0	--	6.7
N	64	32	29	28	26	24	2	30

TABLE 8

Q. Why do I listen to my favorite radio station?

A. It informs me of the news of the day.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	18.8	21.9	--	17.9	15.4	--	50.0	3.3
Disagree	20.3	12.5	6.9	17.9	26.9	12.5	--	16.7
Don't Know, Refused	1.6	--	--	--	3.8	4.2	--	6.7
Agree	45.3	43.8	79.3	53.6	38.5	54.2	50.0	50.0
Strongly Agree	14.1	21.9	13.8	10.7	15.4	29.2	--	23.3
N	64	32	29	28	26	24	2	30

TABLE 9

Q. Why do I listen to my favorite radio station

A. The people on the station sound friendly

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	20.3	15.6	--	17.9	11.5	--	50.0	3.3
Disagree	21.9	15.6	10.3	3.6	23.1	4.2	--	10.0
Don't Know, Refused	--	6.3	--	--	3.8	8.3	--	6.7
Agree	37.5	34.4	58.6	57.1	38.5	62.5	50.0	43.3
Strongly Agree	20.3	28.1	31.0	21.4	23.1	25.0	--	36.7
N	64	32	29	28	26	24	2	30

TABLE 10

Q. Why do I listen to my favorite station?

A. The people on the station have a good sense of humor.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	14.1	6.3	--	14.3	15.4	--	50.0	--
Disagree	25.0	18.8	13.8	14.3	26.9	20.8	--	13.3
Don't Know, Refused	3.1	6.3	--	--	3.8	4.2	--	6.7
Agree	43.8	40.6	65.5	60.7	50.0	62.5	50.0	46.7
Strongly Agree	14.1	28.1	20.7	10.7	3.8	12.5	--	33.3
N	64	32	29	28	26	24	2	30

TABLE 11

Q. Why do I listen to my favorite station?

A. The poeple on the station sound like professionals.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	10.9	12.5	--	3.6	11.5	--	50.0	6.7
Disagree	28.1	15.6	13.8	42.9	23.1	12.5	--	10.0
Don't Know, Refused	--	--	--	3.6	3.8	4.2	--	6.7
Agree	53.1	59.4	72.4	46.4	53.8	66.7	50.0	53.3
Strongly Agree	7.8	12.5	13.8	3.6	7.7	16.7	--	23.3
N	64	32	29	28	26	24	2	30

TABLE 12

Q. Why do I listen to my favorite station?

A. I trust/believe the people I hear on the station.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	17.2	9.4	--	14.3	7.7	--	50.0	--
Disagree	20.3	21.9	20.7	--	34.6	12.5	--	16.7
Don't Know, Refused	1.6	3.1	3.4	3.6	11.5	12.5	--	6.7
Agree	54.7	46.9	62.1	64.3	38.5	62.5	50.0	60.0
Strongly Agree	6.3	18.8	13.8	17.9	7.7	12.5	--	16.7
N	64	32	29	28	26	24	2	30

TABLE 13

Q. Why do I listen to my favorite radio station?

A. I like the music played by the station.

	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Strongly Disagree	15.6	21.9	3.4	10.7	19.2	4.2	50.0	--
Disagree	9.4	18.8	--	--	11.5	25.0	--	10.0
Don't Know, Refused	7.8	3.1	3.4	10.7	7.7	4.2	--	13.3
Agree	42.2	25.0	51.7	21.7	30.8	66.7	50.0	30.0
Strongly Agree	23.4	31.3	41.4	57.1	30.8	--	--	43.3
N	64	32	29	28	26	24	2	30

TABLE 14

LEISURE ACTIVITIES BY FAVORITE STATION

Leisure time activities in which I frequently participate	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
Going to theatre or films	68.8	37.5	27.6	64.3	80.8	54.2	50.0	63.3
Sports such as bowling, tennis, golf	60.9	25.0	34.5	57.1	57.7	54.2	50.0	63.3
Reading books/magazines	84.4	87.5	75.9	100.0	88.5	87.5	50.0	93.3
Recreational travel/vacations	71.9	50.0	51.7	82.1	53.8	75.0	50.0	66.7
Working around house and in the garden	60.9	81.3	79.3	71.4	61.5	75.0	100.0	60.0
Social organizations and clubs	45.3	56.3	41.4	46.4	57.7	50.0	50.0	26.7
Attending live music presentations-concerts, clubs, discos	65.6	40.6	34.5	82.1	61.5	37.5	--	53.3
N	64	32	29	28	26	24	2	30

TABLE 15

PURCHASES IN THE LAST YEAR BY FAVORITE RADIO STATION

PURCHASE	STATION A	STATION B	STATION C	STATION D	STATION E	STATION F	STATION G	OUT-OF-MARKET
An automobile	28.1	12.5	24.1	32.1	26.9	29.2	50.0	30.0
Auto tires, batteries or accessories	57.8	62.5	58.6	60.7	69.2	75.0	50.0	53.3
Furniture/ carpet/ bedding	39.1	40.6	44.8	39.3	46.2	41.7	50.0	50.00
Major appliances	28.1	12.5	31.0	10.7	38.5	29.2	50.0	23.3
Home improvement supplies	59.4	50.0	34.5	57.1	61.5	62.5	50.0	46.7
Lawn & garden supplies	25.0	46.9	51.7	53.6	42.3	50.0	50.0	36.7
A camera or other photo equipment	43.8	21.9	31.0	21.4	30.8	45.8	50.0	36.7
A new savings or checking account	39.1	28.1	31.0	42.9	53.8	58.3	50.0	33.3
N	64	32	29	28	26	24	2	30

APPENDIX A - Questionnaire

Respondent Name______________________________Phone Number______________

Date__________Time of Day: 1st Attempt__________2nd__________3rd_______

Interviewer____________________________

Hello. I'm _______ calling for a local radio station. We are conducting a survey of radio listeners in this area. If it's all right, I would like to ask you a few questions. (If necessary, add: We are not selling anything, and all information will be kept strictly confidential.)

1. a. On the average day, about how many hours do you personally spend listening to radio at home, in your car, and at work? Would you say:

Less than 2 hrs.______
2-3 hrs.______
Over 3 hrs.______
Doesn't listen ______

(If R doesn't listen, then thanks and good-bye.)

b. Yesterday how much time did you personally spend listening to your radio at home, in your car, and at work? Would you say:

Less than 2 hrs._______
2-3 hrs._______
Over 3 hrs._______
Doesn't listen _______

2. a. On the average day about how many hours do you personally spend watching television? Would you say:

Less than 2 hrs._______
2-3 hrs._______
Over 3 hrs._______
Never watch_______

b. Yesterday how much time did you personally spend watching television? Would you say?

Less than 2 hrs._______
2-3 hrs._______
Over 3 hrs._______
Didn't watch _______

3. a. About how many times per week do you read any newspaper?

Daily_______
Several Times a Week_______
Once a Week_______
Less than Once a Week_______

b. How many times did you read any newspaper last week?

Daily_______
Several Times a Week_______
Once a Week_______
Less Than Once a Week_______

4. Which of the following sections of the newspaper do you read regularly?

National News_______
Local News_______
Business_______
Editorial_______
Entertainment Section _______
(Radio-Television)_______
Sports________

5. What is your favorite radio station in this area?___________________

6. Do you listen to your favorite station at least fifteen minutes in the average week?

Yes________
No________

7. We are interested in knowing why you listen to your favorite radio station,_______. Please indicate whether you strongly agree, agree, disagree, or strongly disagree with the following reasons for listening to ____.

a. It helps me to find out about the things that are happening in my town and in the surrounding communities.

Strongly Agree_________
Agree_________
Disagree_________
Strongly Disagree_________

b. It informs me of the news events of the day.

Strongly Agree_________
Agree_________
Disagree_________
Strongly Disagree_________

c. The people on the station sound friendly.

Strongly Agree_________
Agree_________
Disagree_________
Strongly Disagree_________

d. The people on the station have good senses of humor.

Strongly Agree_________
Agree_________
Disagree_________
Strongly Disagree_________

e. The people on the station sound like professionals.

Strongly Agree________
Agree________
Disagree________
Strongly Disagree________

f. I trust/believe the people I hear on the station.

Strongly Agree________
Agree________
Disagree________
Strongly Disagree________

g. I like the music played by the station.

Strongly Agree________
Agree________
Disagree________
Strongly Disagree________

8. We are interested in knowing some of the leisure time activities of the people who live in our community. Please indicate whether you frequently participate in the following activities.

	Yes	No	Refused
a. Going to theater or films			
b. Sports such as bowling, tennis, golf			
c. Reading books/magazines			
d. Recreational travel/vacations			
e. Working around the house and in the garden			
f. Social organizations and clubs			
g. Attending live music presentations, concerts, clubs, discos			

9. In order to know more about the popularity of certain types of products in our community, we would like to know whether you purchased any of the following items during the past year. Please indicate by saying yes or no.

	Yes	No	Refused
a. An automobile			
b. Auto tires, batteries or accessories			
c. Furniture/carpet/bedding			
d. Major appliances			
e. Home improvement supplies			
f. Lawn and garden supplies			
g. A camera or other photo equipment			

h. Have you opened a savings or checking account in the past year? ________ ________ ________

Just a couple more questions. We would appreciate it if you would tell us the following information about yourself.

10. Sex

Male________
Female________

11. Please stop me when I mention the age grouping to which you belong.

18-24________
25-34________
35-49________
50-64________
65+________
Refused________

12. What was the highest grade of school or degree that you have completed?

High School or less________
High School Diploma________
Some college________
Refused________

13. What is the occupation of the head of the house?

Professional and Executive________
Clerical/Sales________
Labor (skilled and unskilled)________
Other (specify) ________
Refused ________

14. Please stop me when I mention the income bracket to which your family belongs.

Under $5,000 ________
$5,000-$9,999 ________
$10,000-$14,999 ________
$15,000-$19,999 ________
$20,000+ ________
Refused ________

Thank you for your cooperation. Good-bye.

APPENDIX B - Nature of Sample (N=236)

Note: On items where responses do not sum to 100.0 percent the difference is due to refusals.

Sample Demographics		%
Sex	Male	39.0
	Female	58.5
Age	18-24	39.8
	25-34	22.0
	35-49	20.8
	50-64	8.1
	65+	8.1
Education	High School of Less	13.6
	High School Diploma	13.1
	Some College	69.9
Occupation	Professional /Executive	35.6
	Clerical/Sales	11.0
	Labor (Skilled & Unskilled)	13.6
	Other	38.6
Income	Under $5,000	9.7
	$5,000-$9,999	14.8
	$10,000-$14,999	11.0
	$15,000-$19,999	12.7
	$20,000+	36.9

Time Spent w/Radio	Typical %	Yesterday %
Never	1.3	8.1
Less than 2 hours	41.5	46.6
2 or 3 hours	25.4	20.8
Over 3 hours	31.4	24.2

Time Spent w/TV	Typical %	Yesterday %
Never	8.1	21.6
Less than 2 hours	32.2	33.1
2 or 3 hours	32.2	25.4
Over 3 hours	27.1	19.5

Times/Week w/Newspaper	Typical %	Yesterday %
Daily	57.6	53.0
Several/Wk	24.6	31.8
Once/Wk	10.2	8.1
Less	7.2	6.4

Newspaper Sections Read Regularly	%
National News	54.2
Local News	17.8
Business	3.4
Editorial	2.1
Entertainment	9.7
Radio-TV	0.8
Sports	9.3

REASONS FOR LISTENING	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Local News	6.4	10.2	19.1	47.9	16.1
Information on News of the Day	2.1	12.7	16.5	50.8	17.4
People sound friendly	3.0	11.9	14.0	45.3	25.4
People have good sense of humor	3.4	8.5	19.5	50.8	17.4
People sound like professionals	2.1	7.6	21.6	56.8	11.4
I trust the people I hear	5.1	8.9	18.2	55.1	12.3
I like the music	7.2	11.9	10.2	38.1	31.4

Frequently Participate in -	% Yes	% No
Theater or Films	57.6	40.7
Sports	51.3	48.3
Books/Magazines	86.9	12.7
Travel/Vacations	64.8	34.3
House/Garden Work	68.6	30.1
Clubs	45.8	53.4
Live Music	54.7	44.9

WRH

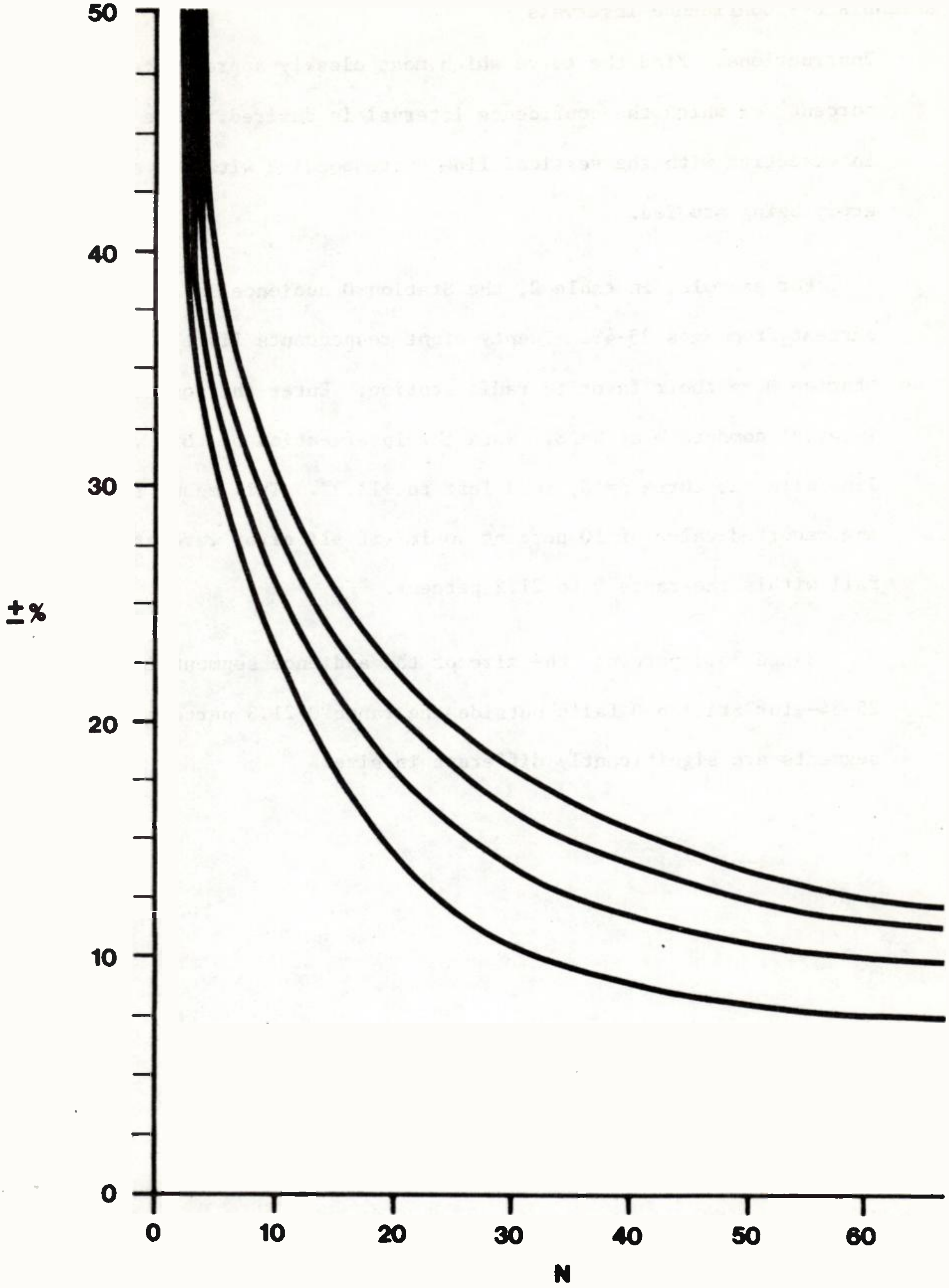
PURCHASES DURING PAST YEAR	% Yes	% No
Automobile	26.3	73.3
Tires, Batteries, Accessories	61.0	38.6
Furniture/Carpet/Bedding	42.4	57.2
Major Appliances	25.0	74.6
Home Improvement Supplies	53.4	46.2
Lawn & Garden Supplies	40.7	58.5
Camera	34.3	65.3
Savings/Checking Account	39.8	58.5

APPENDIX C - Confidence Intervals

Instructions. Find the curve which most closely approximates the percent for which the confidence interval is desired. Note its intersection with the vertical line corresponding with the size group being studied.

For example, in table 2, the Station D audience is 10.7 percent from ages 35-49. Twenty-eight respondents listed Station D as their favorite radio station. Enter the confidence interval nomograph at N=28. Note the intersection of this vertical line with the curve p=10, read left to ±11.2%. This means that any reported value of 10 percent would (if all error were excluded) fall within the range 0 to 21.2 percent.

Since 35.7 percent, the size of the audience segment in ages 25-34--for Station D falls outside the range 0-21.3 percent, the two segments are significantly different in size.



Confidence Interval Nomograph

Table of Random Numbers

18459	96347	72924	80676	63352	96813	36959	01681	40545	60311
79678	01789	76545	73942	36135	59706	18600	46939	93153	51274
11938	43608	02955	17565	46640	86916	78970	66511	94014	64843
54522	45550	28819	39903	54627	84139	06426	76612	25706	27588
19697	80823	46322	81338	08001	22594	27825	61070	08101	81942
27484	74992	18566	28906	56360	78307	09119	76914	17256	43365
87631	22545	94494	41389	66153	66498	04287	11857	30528	22708
78431	60337	99875	88183	89678	94222	43655	78908	28466	45958
81902	59122	48800	56601	42696	66857	23352	66739	95140	71380
85535	11696	93918	45952	49069	53138	47213	90258	14655	14658
76090	38076	24313	66308	10149	17114	73111	40901	31662	45520
86727	23189	00608	84279	19273	24441	13751	33083	58079	41202
35552	96456	84832	08903	24301	92617	24508	30386	63523	37531
32764	70037	03529	94900	72351	35740	23289	84570	58426	54369
76613	52112	57683	89276	15396	80887	19161	33944	78845	88433
64810	82340	14344	81552	41217	63660	05369	42533	47239	41280
99341	25034	66911	85829	08737	53979	59761	49702	73823	51779
12754	09139	72372	81002	81467	50930	10251	15418	17793	39153
82454	29525	32038	13549	10178	19768	23651	45187	42347	68909
79940	94899	40874	52269	27857	60234	49648	32367	93945	61077
37555	03677	56903	91681	75540	83494	85031	87514	82547	46278
05863	67967	73550	79660	02532	58861	63355	33788	49774	27974
97179	74710	29175	52833	35333	01715	14848	15093	55722	51337
30317	36561	13097	00054	89211	80538	18894	86468	86365	56259
07286	46971	16001	24829	17271	67794	17131	82975	16693	75525
70864	52782	78138	48488	00723	81926	08344	19632	22866	46818
59617	93951	24824	67471	48899	81408	32480	71015	86959	01181
19924	88669	45697	68431	86891	51114	19789	49400	15965	85723
82992	86451	50767	03350	81258	74006	26410	57268	13156	03712
18639	20685	93324	04216	05528	84008	80362	99004	35254	50762
64904	46047	03049	95151	01842	37997	44483	78615	93117	71166
21674	90122	78367	32967	61294	71903	43638	80649	41423	70142
45907	26309	42772	41440	51195	89450	61482	76356	10478	80359
80380	46751	51324	51936	55522	89570	76154	32296	90060	50870
69123	43730	22994	38654	72380	32367	03590	06564	46062	81990
91315	41619	76045	64501	34582	88070	36143	48721	65832	34108
25781	56140	49331	39118	56068	37120	84555	33258	80334	66736
32844	62271	11577	54198	25171	30090	82044	61055	90116	93447
65039	68364	25480	73125	46413	46455	31269	67011	16787	60064
94638	49750	48691	50970	51943	07923	49212	52575	89676	19355
82476	83220	62824	47696	93942	29441	13851	12349	86976	75553
43118	51567	38726	27441	96167	05342	40193	00916	14770	79128
16418	60423	66938	35383	31524	67083	16506	94356	05837	94791
10445	98436	53094	65332	23633	54426	37294	57903	02089	56595
14906	46809	16121	73543	58083	22809	75213	98205	60003	86444
95433	94921	18879	53274	35808	47017	15640	68105	41225	09314

38453	48250	68186	57757	92093	76828	16918	24783	07319	77875
71813	35206	39211	67074	30294	37812	60747	35753	72893	83434
84804	76990	21590	82628	52922	35417	12226	91471	71491	99726
62502	45084	76644	92102	44883	72195	26626	27053	72906	47448
11777	77596	65555	08959	93002	14423	49730	39079	94014	87152
08141	59817	03535	24828	54064	36777	58745	90994	07932	95884
42858	60540	31211	68339	87365	90856	04901	94257	01458	90934
83881	24885	55495	86588	37618	14149	00699	46594	37366	82646
17566	04448	51855	14476	39419	67185	60081	31247	11075	77465
50461	02727	11995	47562	97954	75778	54203	68132	30158	20974
44671	76227	05274	45087	32951	50001	84486	27575	81271	28655
13882	33429	23691	42466	16130	18000	19092	52260	16210	83158
81247	13627	94684	49012	00198	57987	54178	65383	65819	41063
62550	80898	54889	11884	56022	85925	53241	21957	49030	97946
44073	62746	77170	30191	34354	93675	31844	43297	01807	18117
01491	48399	69020	74193	01923	88719	11898	62170	69563	27179
12289	25675	19589	73444	02353	89339	84793	83346	01125	00029
25157	55557	25060	87265	01241	37931	95592	47723	30198	40660
67954	33086	92107	64923	25772	59945	37318	05068	15132	31463
81314	98503	27107	04154	43462	18290	63573	00899	19013	22833
76295	93247	33673	40614	28826	70234	45582	59783	77891	53835
25942	72959	58076	06300	81797	56798	01331	59618	96230	17515
68989	98526	45404	72271	31358	08686	97744	65658	76366	20572
80463	34523	49741	76930	51968	40928	74492	38382	92121	65796
61875	20401	89809	11140	29589	67397	67255	39375	65431	09629
47085	11692	91183	75568	09820	36032	33098	90808	63489	65608
25634	86550	38817	46551	92622	09620	53290	90476	92056	06991
30037	14073	12255	09096	67353	33426	61863	25583	80939	51468
49511	05484	24174	35616	70520	13984	31564	39207	57126	45892
26742	06250	34756	31833	16941	83067	32615	05003	14309	12142
14847	88142	90972	70452	66962	72552	11616	77151	71713	59823
48407	72609	33028	36218	49309	87703	76164	17883	01501	49663
56821	42373	79413	83241	93195	73250	52447	12935	63587	59569
05263	00756	79234	73489	15386	50174	29201	16663	68018	10450
20186	23175	60687	91759	53557	41790	03181	83567	35820	26572
73751	32246	51009	89153	82873	99177	56284	51439	02758	65386
60831	84907	59871	09089	15224	18954	09066	56523	94162	53175
01228	19226	00149	52153	45485	21123	47836	76189	40164	30573
59887	51193	62053	31119	35896	56150	05425	48425	93516	04863
	34124	70975	17342	06014	46799	02025	04848	99627	54018
	44007	67379	23975	13014	75441	63326	93262	56111	80349
	56926	65495	87778	23963	31453	61742	15947	40021	95933
	45493	86558	10897	26654	09750	00512	56322	35130	52457
	51342	60627	29892	75376	44252	75418	47394	94408	50588
	54328	00331	54182	25630	64766	79759	59554	87362	35946
	80320	32951	46711	55512	09829	52007	07645	68884	53592
	92971	94737	92626	02404	76078	94208	09881	27043	90842
	34947	71860	35359	14812	68007	97183	90485	42294	05923
	72940	78530	78516	67242	23343	35232	53986	10382	53153
	23121	24438	52866	70143	27989	36734	09545	81641	65613
	82260	39851	10556	15682	57852	03320	71393	96416	15306

85481	19167	87534	62801	95215	89314	42454	43727	01315
72542	56337	30210	35673	50622	06010	12187	94610	70140
65922	65522	93445	48824	46792	32221	91030	74123	09008
42647	86103	88785	71890	25152	39245	36504	93248	22783
62588	26917	91706	19124	29780	45477	99747	92375	55631
91705	86569	51172	04535	52313	19662	69955	15021	28744
86936	77167	81675	99892	45858	08677	22004	58744	71783
96266	83880	29502	58543	04332	75106	02422	17275	71998
95173	08772	41934	52225	13268	72544	16497	74953	85943
04648	17711	86082	86463	40618	59310	77185	94249	67679
71317	07322	39091	48756	24297	02963	14639	90910	32582
86081	64528	59804	14362	80223	83989	93167	97222	86378
74628	21274	07010	47367	62670	77270	27261	65138	25031
73040	46886	03820	54944	54011	17717	25053	15829	72781
66584	89856	59833	03368	60036	50869	04970	08727	11414
42144	17163	24621	25707	74110	35766	04347	09898	13449
53607	94263	09223	23933	04341	56769	81354	80859	77969
42348	11119	33750	12231	59050	18725	49002	96018	46784
71628	18345	19596	57989	15241	01423	61829	48469	78978
48634	10000	13226	37862	59989	40013	29955	52813	26623
47151	94895	03896	05269	22768	27276	23267	23554	06074
45198	79374	04341	90857	96706	03534	70004	01720	61126
46828	22184	90985	07727	75329	75721	10627	98331	12091
74185	18734	06847	68649	81611	22530	33719	74515	22415
23658	12749	22210	32350	11707	53681	06678	62105	25670
74277	07883	71635	76252	35739	19324	96595	01992	52286
32746	32563	29931	66326	09076	32808	59469	53007	82691
27983	24431	34864	11907	32804	22940	27464	00112	25574
73185	53519	39806	74182	15138	42363	29562	23611	09221

WRH