

Research!

Conducting Telephone Survey Research for the Student-Operated Radio Station

By Bruce C. Klopfenstein and Douglas A. Ferguson

Why Research?

College radio stations and their student operators have much to gain by being able to advise their advertising clients about the purchasing, entertainment, social and media use habits of their potential audience. Noncommercial stations would also benefit from this information for both programming and program underwriting purposes. These data may be gathered through a telephone survey completed through an appropriate course such as audience research, advertising, broadcast marketing or broadcast management.

From an educational perspective, the technical aspects of the survey research process can be actively taught via an actual project. Both station personnel and class members can directly see the benefits of custom research. This knowledge is critical for those wishing to pursue a career in broadcast or other media management (Adams, 1989). Experienced students will also be in a better position to both specify research needs and critically analyze research reports they will encounter in their media careers. This article describes by example how a survey can be developed, conducted, and its results applied to a campus radio station.

Information about the consumer behavior of radio listeners can be highly useful for marketing purposes. The telephone survey is the most effective means for gathering information quickly and inexpensively from a scientific sample (Lavrakas, 1987). Through a related class, the instructor can monitor the construction, pretesting and administration of the questionnaire. Where student residence halls (dormitories) make up the entire population of potential listeners (e.g., closed-circuit, carrier-current stations), sampling may be quite simple.¹ Student telephone directories are usually readily

available, and where different exchanges are used, on-campus numbers may be easily differentiated from off-campus numbers.

Telephone research guides

A number of sources are available for assistance in the broadcast survey research process. Adams (1989) offers an overview of survey research methods and reporting. Wimmer and Dominick (1987) include an overview of telephone survey research and data analysis, explain sampling techniques, and cite interviewing techniques suggested by two helpful NAB publications: Webster (1983) and Saxton (1983). Hiber (1987) provides a chapter on applying telephone research to radio. Fletcher (1987) gives examples of questionnaire items as well as insights into ties between program and audience types. Sample questionnaires and/or questionnaire items are also available in Fletcher (1981), Converse & Presser (1986), Wimmer and Dominick (1987), Hiber (1987), and Frey (1989). Frey (1989) presents detailed procedures and techniques for questionnaire construction, sample selection, training of interviewers, and data analysis. Williams (1988) concentrates on the utility of various statistics rather than their calculation.

Throughout this project, carried out at Bowling Green State University, the class

acted as a market research firm and the commercial student station, WFAL, was treated as a client. WFAL has a research department, and these students helped validate actual questionnaires. Class members (who were divided into competitive research groups of about seven students) were assigned to learn as much about WFAL and its research needs as possible, and station personnel were expected to point the class to the most needed information. This allowed both parties to learn even more about the commercial research process.

WFAL is an AM carrier-current station that may be received in most dormitories.² Dormitory cafeterias are also wired to play WFAL via their local public address sound systems, an important source of captive listeners for WFAL. Cable subscribers in the university community and several surrounding towns hear WFAL as the audio supplement to an electronic cable program guide (assigned to TV channel 14).³

WFAL's format is an amalgam of AOR (album oriented rock), CHR (contemporary hit radio), and classic rock formats, with frequent promotional contests and giveaways. Music requests are played as quickly as possible, a feature that is assumed to be one strong advantage WFAL enjoys over the competitive stations from a nearby, medium-sized metropolitan area located 20 miles away. The university also has a separate, student-run eclectic FM station that, according to previous research, has been confused with WFAL by campus residents.

Research areas

The survey generally focused on programming and sales-related issues uncovered through the interactions between the consultant (the class) and the client (radio staff). The six research areas are listed in the questionnaire order:

- Student Leisure Activities: Closed-ended questions were asked regarding the respondent's access to electronic media

*Actual survey
research projects
provide learning
opportunities for
student researchers
and station personnel*

including cable television, video rentals, CDs, albums, and cassettes. These data can be used to show advertisers how large the potential market is for these products as well as give WFAL ideas for possible promotional giveaways. Media usage questions were included so WFAL could get some idea about both competitive media outlets and hours listened to radio.

- **Social Activities of Respondents:** Respondents were asked how often they returned to their hometowns, frequency of "partying," attendance at the various campus events, and movie attendance. The respondents' source of information about these events was requested to see what role WFAL did or could play in publicizing campus events.

- **Student Consumer Habits:** Items about spending habits were created with potential WFAL advertising clients in mind: bars, restaurants, fast food outlets, pizza parlors, grocery stores, service stations, retail stores, and area shopping malls. Respondents were asked about shopping habits, coupon use, and weekly discretionary income, as well as possession and use of credit cards and automated-teller machines (ATMs).

- **Radio Attitudes and Listening Behaviors:** Respondents estimated hours listened to radio daily and ranked their two favorite stations. Specific attitudes toward those stations and their attributes were measured. Respondents were later asked to contrast actual stations with their imagined, "ideal" station on a scale of one (close to respondent ideal) to five (different from respondent ideal). Music preferences were measured on various music types. To help determine the most attractive contests and prizes, attitudes toward various premiums of equal value were measured.

- **Campus Station Awareness:** Respondents were asked to name the two campus stations. If WFAL was named, the respondent was asked about his/her listening. An open-ended question focused on the respondent's image of WFAL: "What do you think of when I say WFAL radio?"

- **Demographics:** Finally, gender, age, class rank, and number of paid hours per week spent working were recorded. This information was gathered, in part, to cross-tabulate demographics with listening preferences, consumer habits and social behavior.

Conducting the survey

Students were exposed to survey methods, sampling theory, questionnaire

development, and interviewing procedures in an audience measurement class. The client radio staff presented programming, sales, image, and promotional objectives to the consultant class. Project groups then developed appropriate research questions followed by design of a survey instrument to address those questions. Group questionnaires were reviewed in class and by station personnel before the questionnaires were reduced to one final survey instrument by the instructor. The final questionnaire was pre-tested by class members to correct any wording problems.⁴

Phone numbers were systematically selected from a list of all active residence numbers. Off-campus numbers were systematically drawn from the student directory. Because the station had traditionally operated via carrier-current, the assumption was made that most student listeners reside in the dormitories. About one-third of the sample was designed to measure off-campus students who could receive WFAL via cable channel 14.

The survey was conducted over one week from 5 PM to 10 PM. The questionnaire took about 10 minutes to administer. Faculty office telephones were used under the direct supervision of the instructor. Students signed a form indicating their assumption of responsibility for use of the office, and were required to log in and out of the office. Faculty were encouraged to secure their offices and report any problems immediately; none occurred.⁵

Up to three call-backs were used to reach the sampled numbers.⁶ There were 522 completed interviews, but 400 would have been enough to limit sampling error. Each student was asked to complete seven interviews with limited extra credit offered for additional completions. At least one randomly selected survey instrument from each interviewer was validated through a callback by a WFAL staff member not in the class. Students were advised that any attempt to falsify an interview would be treated as plagiarism with appropriate penalties.

Data entry was made by having students code the responses onto familiar optically-scanned "answer" sheets often used with objective exams; the data were then scanned with output available on either PC diskette or mainframe tape. The data were analyzed by the instructor using SPSSX V4.0. A number of cross-tabulations for marketing purposes were generated and are available from the authors.⁷

Although PC versions of statistical packages such as SAS and SPSSx can be employed, other PC packages are also available for the PC. StatView 512+ is a simple, yet very powerful program for the Macintosh. It has a spreadsheet-like interface with rows as cases and columns as variables. Descriptive statistics with graphs are simple to use, and more sophisticated comparative procedures are available.⁸

Applying the results: the potential audience

The sample generally reflected the overall makeup of the student body demographically. Advertisers could be impressed to learn that 42% of the respondents held paying jobs, and 44% of these worked 15 or more hours a week. Almost half (45%) had at least one major creditcard, and 44% of them used one at least three times a month. Some 53.4% of respondents had at least \$20 per week of spending money "after living expenses." Just under 54% of the respondents had an automobile in town, and fewer than half of them shopped at out-of-town malls (good news for local merchants). About 58% paid to see an off-campus movie at least once per month.

Over 92% of the sample had a television set, and 76% had color TV. About 87% of the respondents had a stereo and/or cassette player, 30% a VCR, 30% a CD player, 20% a computer, and 15% video games. Individual cable penetration was 47%, although all on-campus students have "free" access to cable in their floor's television lounge. Almost 60% of the sample said they watched music channels (e.g., MTV) at least once per week.

Radio listening

Radio use compared very favorably to TV use. Nearly 60% of the respondents listened to the radio while studying (compared to 44% watching TV while studying), and 35% estimated radio listening at over three hours a day. Almost 84% never listen to AM radio over a week's time, however. About 20% of the sample called in song requests and played radio contests. Many respondents said they never tuned in radio news (50%), weather (over 52%) or sports scores (66%).

Overall music preferences ("most favorite") were equally split (24% each) between current popular hit songs and music from the 1960s and 1970s. The "least favorite" or "not favorite" music categories were heavy metal (60%), progressive (55%), reggae (50%), and jazz (48%). Older re-

spondents liked 60s/70s and jazz/new age music more but popular music less than younger respondents. Men ranked 60s/70s music and heavy metal higher than women, and women ranked soft rock and, especially, popular hits higher than men.

When asked to identify their favorite and second favorite stations, three metro FM stations accounted for nearly 84% of the responses. The album-oriented rock station, WIOT, features a long-standing, successful, nationally-consulted AOR format. WIOT had the largest segment of self-described daily listeners (35%). Only about 22% felt that the music on WIOT was repetitive, and most (82%) of the respondents liked the disk jockeys on WIOT.

The two other top stations are both high energy contemporary hit radio stations—WRQN and WVKS. The most important difference is that WVKS ("Kiss-FM"), several months before the survey, had changed its format from a more adult contemporary sound due to WRQN's ("93-Q") great success. WRQN had the second largest group of daily listeners (31%), with WVKS in third place. In contrast to the beliefs about WIOT, respondents agreed that

music on WRQN and WVKS was repetitive (73% and 70% of respondents respectively). Nearly 74% of those surveyed liked the disk jockeys on WRQN, but only 65% liked WVKS's jocks.

There is evidence that while these stations are acceptable to the listeners, they may be vulnerable. Respondents were asked to rank how close these stations came to their perceived "ideal" radio station using a five-point scale where 1 represented "closest to your ideal" and 5 represented "very different from your ideal." Including both values 1 and 2, only 40% of the respondents rated WIOT as being close to their ideal, lowering to 31% for WRQN, and 25% for WVKS (n=503).

WIOT was most often ranked as favorite station (41%), while WRQN and WVKS tied for second-place (31% each). WFAL was ranked first and second place by only about 1% and 3%, respectively. Using an unaided recall item, WFAL was named by nearly 35% of the respondents. Of the 19% who listened to WFAL, most (56%) estimated their listening at one hour per week. All respondents were asked about their image of WFAL whether they listened

or not. Aside from the 29% who responded that they had no image of the station, 17% said they liked it.

Exposure to the station may be greater than respondents realized. Nearly 43% of all respondents said they tuned to cable channel 14 occasionally, with about 22% citing daily use. This compares to only 4% who said they use TV Guide. Among cable subscribers only, the percentage of daily users was an impressive 42%, with over 67% using cable channel 14 at least once per week.

Half of the respondents said they eat on campus every day (non-commuting freshman and sophomores are required to be housed on campus). Because WFAL can be played in the dining halls to this captive audience, this is more good news for WFAL. Over half of those eating in the cafeterias (53%) did not know what radio station was being played most often there. WFAL can use "table tents" to promote its name when it is being played.

More implications for WFAL

Potential audience members might become listeners if they are made aware of the station and its programming. WFAL can build upon the overall popularity of radio

University Station Audience Surveys: Learning Research Methods

By Marilyn L. Boemer

Persuading students to learn about broadcast research (how to understand it and how to do it) is a problem in most departments offering broadcast education. Some students do their best to avoid having anything to do with "all those numbers," and others labor under the impression that they will never have to deal with research or research methods once they graduate. Another problem for departments which have a university radio station and/or a cable access channel is the lack of funding available to conduct audience research studies, which provide the necessary feedback for programming decisions and other planning. Student-designed and implemented research can help to solve both problems.

Background

The University of North Texas is located in Denton, approximately 40 miles north of Dallas-Fort Worth Metroplex. The university radio station, KNTU, is a 100,000-watt FM station; although its coverage includes the Dallas-Fort Worth market, Den-

ton and the university community are of primary importance. The station is student-operated. The university cable access channel is Channel 36, and is limited to homes subscribing to the Denton cable system.

Research studies were conducted for the radio station and the cable channel by students enrolled in Broadcast Advertising. The course emphasizes all aspects of research used in broadcast advertising; projects cover audience research and copy testing. However, some "hands-on" experience was provided by students' participation in these research projects.

The first time the project was assigned, the students conducted the KNTU survey at the request of the station manager. He made a list of possible questions about listening habits in Denton, and from that list the students designed the questionnaire in a group session. See Page 16 for an example of the survey form. A two-stage sample was drawn by the class; the first stage was a systematic sample of 19 pages (the number

of students in the class) from the Denton telephone directory. The second stage involved using random numbers to pick 10 listings from the chosen pages, using only residential listings. Each student was assigned one page with 10 calls to be made. The class was trained in proper telephone interviewing techniques and each student given the forms for the interview.

The second time the project was assigned, the students conducted the Channel 36 survey at the request of the cable channel director. Because very little was known about viewership levels or what kinds of programming the viewers would support, the survey focused on these issues. The University Community was the population studied, and the sampling frame was the Student Directory (which also has listings of Faculty and Staff). The sample was drawn by the same method as the KNTU survey sample. (Although a systematic sample could have been used to select names from the directory pages, the students learned something about

listening by competing for a significant share of the large radio listening pie. Because the respondent's favorite station was often not close to a perceived "ideal" station, WFAL programmers can attempt to position the station closer to that ideal, and promote that position to existing radio advertisers.

A perceived weakness of the top three metro stations is that they are repetitive (especially the CHR stations). The campus station can thus promote its more varied musical offerings, which are made possible by both a less restricted format and its ability to play requests. This must be balanced against the different audience music appeals uncovered in the survey. The surprising popularity of music from the 1960s and 1970s also led to some changes in WFAL's program planning. The music director stepped up efforts to retrieve this older music, now available on compact disks, from various record labels.

AM radio barely exists in the minds of college students, and this does not bode well for carrier-current stations like WFAL. The low awareness of WFAL is a key problem, and the association with AM is a perceptual liability. Ironically, student operators of

WFAL are reluctant to give up the AM signal that, in their view, at least makes the station available to all dorm rooms. Evidence from this survey suggests that a switch to the only apparent alternative, cable FM stereo carriage, should be pursued.⁹

The carriage of WFAL on the cable program guide, meanwhile, appears to be a substantial asset to the station's reach. WFAL is in a position to take advantage of this exposure by introducing students to the station's programming and promotional activities. The station is experimenting with exclusive NBA basketball as one way to attract new listeners. If the station becomes known as *the* source for important campus information, it will have another unique advantage over the metropolitan stations located 20 miles away.

The station's sales staff can use survey results to report on the profile of its potential audience and their consumer habits. Some advertisers may find these data to be as valuable as the help provided by the station through advertising and other promotional activities. These data are not readily available especially in the smaller college town.

"Proprietary" research conducted for

the campus station gives that station more ammunition for its marketing arsenal. Management can get ideas about what needs to be done to increase listening. Class members and station staff can experience, firsthand, the utility and validity of custom telephone research. Students can discover that there is more to radio than the highly visible on-air positions. Finally, students will be encouraged to find their own answers, a skill that should serve them well in their professional careers.

Notes

¹Written permission was required from our university's residence life director to conduct this survey, and this was readily given to us. The main concerns were that the survey was for research purposes, responses would be kept anonymous, and residents were not being sold any product or service.

²The station will not be able to depend upon its carrier current transmission much longer. The vacuum tube-based transmitters are not expected to be replaced. Instead, the station will be upgraded to full stereo transmission capability over the cable television system's cable FM service. Should cable systems choose to both deliver and promote

using random numbers by doing it this way.) This survey was somewhat more complicated than the previous survey, due to the fact that the university's dorms are not wired for cable; thus most dorm residents had no opportunity to view Channel 36. Two separate questionnaires were designed by the class, one to be administered to all faculty, staff and students living off-campus; the other to be answered by students listed in the directory as dorm residents.

While the KNTU survey sample used only residential telephone listings, the cable survey sample eliminated those students who live outside the Denton cable service area. Again, the class was trained in interviewing techniques and each was given the questionnaires to be completed. The students had two weeks to complete the interviews.

The latest survey, for KNTU, is being done as this was written. The plan is to alternate between Channel 36 and KNTU each time the course is offered. The KNTU station manager requested that this survey cover the University community, so the sampling frame was the Student-Faculty directory. The sample was drawn somewhat differently, using 42 pages (21 students in the class) with five listings per page. This

time, the station manager came to the class to simulate a client-research group meeting and the students designed the questionnaire in accordance with his research needs. Again, each student was assigned 10 calls.

Results

Of 190 listings drawn for the first KNTU survey, 954 were completed (a 50% response rate); this response rate was smaller than hoped for, even though the interviewers were instructed to try numbers several times before eliminating them from the sample. However, the responses in terms of stations listened to was not out of line with the Arbitron ratings for the Dallas-Fort Worth market.

Of 200 names drawn for the cable survey sample, 159 calls were completed for a 79.5% response rate. Interviewers were again asked to try several times before "giving up" on a number that didn't answer. The sample of numbers selected appeared to be easier to reach by the student interviewers, possibly because of similarity in schedules, or more interest in participating in a survey about television viewing. The survey results indicated student support for cable in the dorms and interest in watching the university channel. Off-campus respondents were

in the majority (136 to 23 for the dorm students), and 40% of those who subscribed to cable reported viewing Channel 36. The questionnaires on possible program offerings showed strong interest in sports and campus news, as well as classic movies. The interviewers reported that those who asked for the classic movies appeared to feel strongly about this choice.

Results for the current survey are not yet complete, but the sample totals 210, and we hope for response rate comparable to the cable survey.

Conclusions

The purpose of these research projects was to give students first-hand experience in survey methodology, including sample selection, questionnaire design, and interviewing. This project could be easily adapted by any college or university with a campus radio station or cable access channel, aiding in programming decisions while teaching broadcasting students first-hand about survey research methods.

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new "digital" audio services, this untapped medium may become a viable medium for distribution of campus radio programming.

³Although relations between the campus station and the local cable operator have been excellent, the distribution of WFAL on channel 14 was included in the contract that allowed the cable operator to offer service to dormitory residents along with fraternity and sorority houses on campus.

⁴Interestingly, students were originally quite skeptical of the respondents' willingness to endure a 10-15 minute survey. Because survey terminations were not a problem, students learned that telephone surveys are more valid than they thought.

⁵This survey was so successful that another survey using the same procedure was conducted in spring 1990. Only one faculty member refused use of an office.

⁶An oversight in the design of this instrument was the exclusion of a question

concerning respondent use of a telephone answering machine. The proliferation of these devices along with their utility as a screening device is having serious implications for telephone survey research. Strategies must be created to encourage participation by those who choose not to take calls until they know who is calling.

⁷More detailed results and statistical analyses are available in our manuscript presented to the 1990 NAB Radio Only conference (Klopfenstein and Ferguson, 1990).

⁸A summary of 80 statistical packages for the IBM PC are summarized in Goldstein (1989). Macintosh users should consult Seiter (1989) for details on StatView 512+ and similar programs.

⁹The availability of "digital radio stations" on cable FM may make this neglected medium more appealing to cable subscribers (e.g., Carter and Kobb, 1990). Harmon

(1989) detailed the problems of cable FM from both the subscriber and cable operator's point of view.

References

- Adams, R. C. (1989). *Social survey methods for mass media research*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Converse, J., and Presser, S. (1986). *Survey questions: Handcrafting the standardized questionnaire*. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-063). Newbury Park, CA: Sage Publications.
- Fletcher, J. E. (Ed.). (1981). *Handbook of radio and TV broadcasting*. New York: Van Nostrand Reinhold Company.
- Fletcher, J. E. (1987). *Music & program research*. Washington, D.C.: National Association of Broadcasters.
- Frey, J. H. (1989). *Survey research by telephone* (2nd ed.). Newbury Park, CA: Sage Publications.
- Goldstein, R. (1989, March 14). Understanding numerical analysis: working with the odds, *PC Magazine*, pp. 94-110.
- Hiber, J. (1987). *Winning radio research*. Washington, D.C.: The National Association of Broadcasters.
- Harmon, J. (1989). *A study of diffusion theory and cable audio*. Unpublished masters thesis, Bowling Green State University, Bowling Green, OH.
- Klopfenstein, B.C., and Ferguson, D. A. (1990, September). *Conducting telephone survey research for the student-operated college radio station*. Paper presented at the Radio Only Conference of the Broadcast Education Association and the National Association of Broadcasters, Boston, MA.
- Lavrakas, P. J. (1987). *Telephone survey methods: Sampling, selection, and supervision*. Newbury Park, CA: Sage Publications.
- Saxton, J. (1983). *Audience research workbook*. Washington, D.C.: National Association of Broadcasters.
- Seiter, C. (1989, April). *Picturing statistics*, *Macworld*, pp. 138-143.
- Williams, F. (1986). *Reasoning with statistics: How to read quantitative research*. New York: CBS College Publishing.
- Webster, J. (1983). *Audience research*. Washington, D.C.: National Association of Broadcasters.
- Wimmer, R.D., & Dominick, J.R. (1987). *Mass Media Research*. Belmont, CA: Wadsworth.

Questionnaire Used in North Texas Audience Research Class

KNTU Survey

I'm _____ from the University of North Texas, and I'm conducting a survey of the radio listening habits of those in the University community. All answers will be completely confidential, and participation is voluntary. Would you give me just a few minutes of your time to answer some questions? (IF THEY REFUSE, THANK THEM AND GO ON TO THE NEXT SUBJECT).

1. Approximately how many hours each day do you listen to the radio? _____
 2. What times of the day do you listen? From 6 to 9 AM _____ 9 AM to 3 PM _____
3 PM to 6 PM _____ 6 PM to midnight _____
 3. What types of radio stations do you listen to? (CHECK THE CATEGORIES THAT BEST FIT THE RESPONDENT'S ANSWERS. IF THEY ONLY GIVE ONE, PROBE OTHERS)
 All news Top Forty Album rock Jazz Country New age
 Classical Heavy metal Religious Oldies Spanish language
 Easy listening Adult contemporary Soul or rhythm & blues other
 (IF OTHER CHECKED, DESCRIBE) _____
 4. What radio station do you listen to the most? _____
 5. What in particular do you like most about (the station the subject just named) _____
 6. Have you ever listened to KNTU, 88.1 FM, the University of North Texas station?
 Yes _____ (IF ANSWER IS YES, SKIP TO QUESTION #9) No _____
 7. Have you ever heard of KNTU?
 _____ Yes (IF ANSWER IS YES, ASK QUESTION #8)
 _____ No (IF ANSWER IS NO, SKIP TO QUESTION #13)
 8. Why don't you listen to KNTU? _____
 (SKIP YO WURDYION #12)
 9. How often do you listen to KNTU? _____
 10. What times of the day do you listen to KNTU? From 6 AM to 9 AM _____
 9 AM to 3 PM _____ 3 PM to 6 PM _____ 6PM to midnight _____
 11. What programs on KNTU do you listen to? (RECORD RESPONSE ON LIST OF PROGRAMS)
 12. What kinds of programs might you listen to on KNTU if they were offered?
 13. Approximately how old are you? Under 18 _____ 18-24 _____ 25-34 _____
 35-44 _____ 45-54 _____ 55 or over _____
- (THANK YOU FOR PARTICIPATING)
14. RECORD SEX OF RESPONDENT: Male _____ Female _____ Unable to code _____

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