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Awareness

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AWARENESS

Which comes first — awareness of a public radio station or listening to that station? Many public broadcasters believe that awareness engenders listening. How often have we heard promotion managers and other developers lament, “If people only knew about us — they would tune in and love us.”

Fortunately for public radio, this “developer’s lament” is based on an incorrect assumption. As this analysis demonstrates:

Awareness does not cause listening; listening causes awareness.

This study examines the measures of public radio awareness reported by the Roper Organization, and compares them with the listening estimates reported by Arbitron’s Nationwide Reports. The major findings are:

- ☞ **Listening to public radio precedes awareness of public radio.** It appears to take a year or two of use before a listener can correctly identify the call letters of his public radio station.
- ☞ **Of the four awareness measures reported by Roper, the correct and unaided recall of a local member station’s call letters is clearly the most valid.** This measure of awareness has more than tripled as a percentage of the U.S. population since 1977.

- ☞ **The statistic which public radio uses to report awareness — aided recall — is the least valid of available measures.**
- ☞ **The true level of public radio awareness is somewhere over 12%, but probably less than one-quarter, of all persons in America.**

1. Defining Awareness

Before we can talk about awareness, we need to know exactly what it is. CPB, NPR, and Roper worked out the following four measures of awareness back in 1977, and have used them each year since in surveying random samples of Americans over the age of 18.

| <u>Measure</u> | <u>Operational Definition</u> |
|----------------|--|
| UNAIDED | The respondent can correctly recite the call letters of at least one locally available public radio station. |
| AIDED | When given the correct call letters of a locally available public radio station, the respondent claims to know about it. |
| LOCAL | The respondent claims to be aware of a local public radio station, with no verification of call letters. |

Table 1
Public Radio's Awareness Measures
1977-1985

| PERCENT OF ADULTS 18+ | | | | | |
|-----------------------|-----------------------|---------------|--|----|-------|
| YEAR | CLAIMING AWARENESS OF | | IDENTIFYING CALL LETTERS OF LOCAL STATIONS | | |
| | NPR | LOCAL STATION | UNAIDED + AIDED | = | TOTAL |
| 1977 | 23 | 13 | 4 | 25 | 29 |
| 1978 | 28 | 14 | 3 | 27 | 30 |
| 1979 | 27 | 17 | 6 | 25 | 31 |
| 1980 | 27 | 19 | 7 | 25 | 32 |
| 1981 | 23 | 17 | 7 | 24 | 31 |
| 1982 | 25 | 16 | 8 | 22 | 30 |
| 1983 | 30 | 21 | 11 | 23 | 34 |
| 1984 | 34 | 23 | 12 | 25 | 37 |
| 1985 | 32 | 24 | 12 | 23 | 35 |

SOURCE: Tee Roper Organization Base: Adults 18+

The first two columns show the percent of adults who claim to know about NPR (NPR) or of some local available NPR member station (LOCAL).

The respondents are asked to name the call letters of a local station. The UNAIDED column shows that the percent of adults who can do so, correctly and without help from the interviewer, has tripled since 1977. Cross-validating checks show this to be believable.

The percent of adults who claim to recognize the call letters after hearing them from the interviewer (AIDED) has fluctuated around 25%; cross-validating checks show this to be an unbelievable, invalid measure.

NPR The respondent claims to have heard of NPR.

A fifth reporting statistic, TOTAL awareness, is simply the sum of AIDED and UNAIDED recall. Table 1 compares these five awareness measures.

In 1985, 12% of all Americans over the age of 18 were able to correctly identify the call letters of at least one locally available public radio station (UNAIDED recall). An additional 23% claimed to be aware of at least one locally available public station once the interviewer provided the call letters (AIDED recall).

When combined, AIDED and UNAIDED recall sum to 35%. This number, TOTAL recall, is always the largest awareness number; since it makes public radio look better than does any other reported statistic, it is the measure of awareness that is typically reported. It leads us to believe that one in three Americans is aware of at least one local public radio station. This is almost certainly an over-estimate.

Let's look at the other two measures. In 1985, 24% of Roper's sample claimed to "be aware" of a locally available public station (LOCAL). This does not jibe with the 35% TOTAL recall just discussed; nor does it come close to the 32% of the sample who claim awareness of NPR. There is clearly something amiss in these measures.

1. 1. ASCERTAINING VALIDITY

Roper bases its public radio awareness estimates on approximately 2,000 phone interviews each year. While this sample size is sufficient for most purposes, it is still a sample, and, therefore, is subject to random sampling error.

If sampling error were great, Roper's estimates of public radio awareness would jump around a lot. In a statistical (and practical) sense, they would be "unreliable." Yet in the nine years that Roper has been ascertaining awareness, significant trends and relationships among the measures have emerged which indicate that for the most part, they are reliable. Unfortunately, a few are invalid.

"Validity" means that the questions we use and the percentages they report are actually measuring what we think they are. For instance, while we believe ourselves to be measuring awareness, we may really be measuring respondents' willingness to agree with the interviewer.

AIDED recall is certainly an example of this. It has ranged from 22% to 27% between 1977 and 1985. Samples only estimate the "true" population percentage, which can actually be a few percentage points around these sample estimates. Given this seemingly indeterminate and directionless "bounce" in the AIDED recall estimates, we are fairly certain that the percent of people claiming awareness, when AIDED with correct call letters, has remained virtually constant since 1977.

But common sense tells us this cannot be true. The number of NPR member stations has increased from 200 to 300 in this time; the national weekly audience has increased from 4 million to 9 million. **Clearly, AIDED recall is not a valid measure of awareness. And since TOTAL awareness has as a major component AIDED awareness, it too becomes an invalid measure.**

There is a reason why AIDED recall appears not to measure what we thought it did. It is a phenomenon known well and feared by professional survey researchers, called (among other things) "response bias." Here's how it works: once given the call letters, many respon-

Table 2
Public Radio Audience and Awareness Measures Compared
1977-1985

| YEAR | NPR MEMBER STATION NATIONAL AUDIENCE | | AWARENESS MEASURE (PERCENT OF PERSONS 18+) | | | |
|------|---|-------|---|-------|---------|-------|
| | RATING | SHARE | NPR | LOCAL | UNAIDED | AIDED |
| 1977 | 2.3 | .65 | 23 | 13 | 4 | 25 |
| 1978 | 2.4 | .70 | 28 | 14 | 3 | 27 |
| 1979 | 2.6 | .81 | 27 | 17 | 6 | 25 |
| 1980 | 2.8 | .89 | 27 | 19 | 7 | 25 |
| 1981 | 3.5 | 1.10 | 23 | 17 | 7 | 24 |
| 1982 | 4.1 | 1.37 | 25 | 16 | 8 | 22 |
| 1983 | 4.4 | 1.45 | 30 | 21 | 11 | 23 |
| 1984 | 4.2 | 1.44 | 30 | 21 | 11 | 23 |
| 1985 | 4.6 | 1.57 | 32 | 24 | 12 | 23 |

SOURCE: Roper for Awareness, Arbitron for Audience
BASE: Persons 18+ for Awareness, Persons 12+ for Audience

During the past eight years, the cume rating and share of NPR member stations have at least doubled; concurrently, different measures of station awareness have increased also.

But the two patterns differ in that listening increases before awareness does. Particularly in the case of UNAIDED awareness of a local station, there appears to be a lag of a year or two between audience growth and awareness growth.

dents say that they are aware of the station — just to be agreeable and not to appear ignorant. Either consciously or subconsciously, they figure that the interviewer apparently wants them to know about this station, so why not humor him. And by saying that they are aware of it, they are hiding the fact that they really are not.

Much the same holds true for the claimed awareness of NPR and the claimed awareness of a local public radio station (LOCAL). In each of these cases, the respondent has nothing to lose by agreeing with the interviewer, especially since he is not tested on the accuracy of his response.

UNAIDED recall is a test, however, where there is a right answer and a wrong answer. Since it demands that the respondent correctly provide the call letters of a public radio station, with no help from the interviewer, it is a true “cross-validating” test of awareness.

Unfortunately for public radio’s public relations endeavors, UNAIDED recall — the most valid measure of awareness we have — is also the smallest awareness number we have.

That’s the bad news. Now the good news. Since the test for UNAIDED recall is so stringent, it must certainly be a minimum. In other words, since 12% of all Americans 18+ can correctly cite the call letters of at least one locally available public radio station, and since there must be others who know about their public radio stations but who cannot correctly cite call letters, at least this many are aware of public radio.

At this point we have no idea of the maximum. Both the 24% claiming LOCAL station awareness and the 32% who claim awareness of NPR contain be-nice-to-the-interviewer-and-don’t-sound-stupid response bias, and are certainly over-reported.

2. Awareness And Audience

What is the relationship between awareness of public radio and actual use of public radio? Table 2 displays both awareness data and national audience data.

There does seem to be a definite relationship between LOCAL, NPR, and UNAIDED awareness and both audience measures. A correlation analysis (Table 3) confirms our suspicions: as judged by its direct correlation with actual audience estimates, UNAIDED recall is by far the most valid measure of awareness, and AIDED recall is about as meaningless as they come. Claimed awareness of LOCAL station(s) and NPR are only moderately correlated with audience.

But wait. Look closely at the numbers on Table 2. The growth rate for public radio’s audience was at its highest between 1980 and 1982; yet the fastest rate of growth in public awareness was between 1982 and 1984. It appears as if **awareness lags audience** growth by a couple of years. The correlation analysis on Table 3 confirms this observation.

This means that **public radio’s audience at any point in time actually predicts what public radio awareness will be a year or two from that time**. If audience increases substantially, a substantial increase in awareness will follow a couple years later.

This is an extraordinarily significant finding; it strongly indicates that listening leads awareness. This temporal sequence means that **awareness of public radio does not cause listening to public radio; indeed, just the reverse is true. People listen to public radio first; only after they are listening do they become aware of what it is.**

This knowledge does not support the developer’s lament. It contradicts the idea that

Table 3
Correlations (Pearson's R)
Of National Public Radio Audience
With National Awareness Estimates

(Adjusted for the Number of Years Audience Leads Awareness)

| AWARE- NESS MEASURE | C U M E | | | | A Q H | | | |
|---------------------------|--------------------|------|------|------|--------------------|------|------|------|
| | (# YEARS ADJUSTED) | | | | (# YEARS ADJUSTED) | | | |
| | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 |
| UNAIDED | .94 | .96 | .97 | .91 | .93 | .97 | .95 | .87 |
| LOCAL | .82 | .88 | .93 | .90 | .81 | .90 | .92 | .87 |
| NPR | .60 | .77 | .77 | .76 | .62 | .79 | .78 | .73 |
| AIDED | -.75 | -.58 | -.54 | -.50 | -.74 | -.55 | -.49 | -.51 |

SOURCE: Roper for awareness, Arbitron for audience
BASE: Persons 18+ for awareness,
Persons 12+ M-S 6a-12m for audience

(Note: Pearson's R is a correlation statistic which reports the strength and direction of the relationship between two sets of numbers—in this case, awareness and audience measures. It ranges from positive to negative one. The closer the statistic is to positive or negative one, the stronger the relationship; the closer it is to zero, the weaker the relationship.)

The table shows the correlation between the four awareness measures and the two basic audience measures. The correlations are adjusted at one-year intervals, so that the awareness measures lag the audience measures from one to three years.

The lack of significant correlation between audience and AIDED recall demonstrates AIDED recall's severe lack of validity as an awareness measure.

The correlations of the three remaining awareness measures peak when given a one- or two-year lag – in other words, the audience estimates of one or two years ago better predict the current level of public radio awareness than do this year's audience estimates.

This is a strong indication that listening to public radio leads awareness of public radio; people listen because they like what they hear; through the messages delivered over the air, they become aware of the "public" nature of the station.

a person's "unawareness" of public radio is the reason he does not listen. This new knowledge does indicate, however, the importance of on-air presentation to awareness. It gives rise to what might be called the "programmer's directive" — "Give me a person's ears, and I'll make him aware of public radio."

3. Upper Limit Of Awareness

Section 1 demonstrated that the stringent test of UNAIDED recall produced a minimum estimate of awareness. The analyses in Table 3 confirm the very tight correlation between this measure and audience — especially given a two-year lag.

The correlation analysis also shows that claimed awareness of the LOCAL station is probably a much more valid measure than claimed awareness of NPR — again, this is especially true given a two-year lag.

Given this information, we may assume — and it is just an assumption — that the claimed LOCAL station awareness is probably a close maximum estimate of true public radio awareness.

This means that in 1985, about one in eight Americans can correctly give the call letters of a locally available public radio station. Probably another one in eight knows a local public station is available, but can not correctly give the call letters without assistance.

4. Rethinking Awareness

We point out here that our most valid operational definitions of awareness are based on demonstrated and claimed knowledge that a public radio station is locally available. This is an important point, as it warns us of the limitations of the "awareness" concept as we now think of and measure it.

A person's knowledge that a public station exists does not necessarily mean that he correctly understands what public radio is, why it exists, how it operates, how it differs from commercial radio, or anything; nor does it infer that the person values the medium.

Many public broadcasters have always assumed awareness to be a positive attribute which we should take pains to increase. But is this really true? Awareness of the station does not confer understanding of public broadcasting, nor does it demand appreciation of the medium. Indeed, a person can be well aware of his public radio station and be quite sure that he does not like its programming.

Even using the most conservative UNAIDED measure, there are at least three times as many people who know about public radio than who listen to it in an average week. The ratio may be as high as six to one.

This is a believable ratio. Indeed, it provides us with new insight into audience building.

5. Rethinking Audience Building

Besides causing us to rethink our concept of awareness, these findings force us to rethink our audience building assumptions.

Certainly most important is the finding that listening leads awareness. If this is true, then we have the rudiments of a very interesting model.¹

¹ Components of this model not addressed in this analysis are based on research and analyses available to all public radio professionals. Refer to *Public Radio Listeners: Supporters and Non-Supporters*, by David Giovannoni, for the Corporation for Public Broadcasting (June 1985). If you can not find your station's copy, another can be purchased from The Development Exchange.

1. Seeking radio fare — something “better” or more “gratifying” — a person tunes across the dial and comes across a public radio station.
2. If he likes what he hears or hears what he likes, he stays tuned.

(Up to this point there has been no overt tip-off informing the listener that he is listening to a public radio station. He may notice the lack of commercials, but no “NPR light” blinks on his receiver. He may think he is listening to an “educational” or a “PBS” radio station.)

3. If the station is accessible (refer to Vol. 1 No. 1 in this series), listening is encouraged, and he becomes a regular listener. Programming accessibility breeds familiarity, and accessibility and familiarity breed more use.
4. During the course of his use, the listener becomes exposed to positioning statements, which include words such as “public”, “listener-supported”, “non-commercial”, “NPR”, etc.
5. Exposure to these messages causes realization that this radio station is inherently different, and that this difference has something to do with the word “public.”

(This may be a good operational definition of “awareness.”)

6. After he is aware of the “public” nature of public radio, the listener at some point considers his reliance on the medium and assesses its importance to him.
7. If it is important to him, then he is susceptible to appeals for support.

A simplified version of this model might be:

SIGNAL ==> USE OF ==> AWARENESS
SEEKING P.R. OF P.R.

==> REALIZATION OF ==> SUPPORT
P.R.IMPORTANCE OF P.R.

Notice that when we talk of public radio’s “importance,” we do not mean it in the institutional, altruistic, abstract sense; we mean it is important to the listener because he uses it. **In other words, importance is derived from a person’s use of the medium’s services — not necessarily from the person’s sense that public radio as an institution, or as a concept, is important.**

Recent research² demonstrates that a person’s use of public radio is the single most important factor associated with his financial support of the medium. Just because a person is aware of public radio does not necessarily mean that he listens to it; and if he doesn’t listen to it, he doesn’t pay for it.

6. Conclusion, Comments

Public radio’s researchers have long been skeptical of Roper’s awareness measures; response bias and lack of validity of some of the measures, as discussed in this analysis, have been the two major reasons for this.

Yet despite these limitations, Roper’s awareness measurements are valuable assets in the understanding of public radio. They have been consistently measured since 1977, and there is enough reliability in the UNAIDED measure for us to pull some very important lessons from it, as this report has demonstrated.

² Ibid.

This analysis has endeavored to ascertain the extent to which these estimates can be trusted, and has used them — within these limits — to generate conclusions which we believe are quite useful and relevant to public radio professionals.

For instance, when doing local research, a station should use a measure akin to UNAIDED awareness; other measures appear quite susceptible to a significant amount of over-reporting, or response bias.

Another finding is that “awareness” may not be as high as we thought —but it is still respectable. Perhaps one in four Americans knows about his local public radio station(s). One in eight can correctly cite the call letters — this is not bad, especially given that most of this awareness comes from use of the medium at some time in these person’s lives.

This means two things. First, there are many more people “aware” of public radio than Arbitron captures in its weekly cume. These people have sampled public radio, and remember it. Second, since they have used public radio in the past, there must be some reason why they are not using it now. Perhaps the programming they used to like is no longer available; but much more likely, they have scheduling or lifestyle conflicts, problems receiving the signal, minimal commitment, decreased their use of radio, or switched to another preferred station.³

Additionally, this has important ramifications for understanding the true nature of public radio’s weekly and multi-week audiences — a topic we hope to address in a subsequent *Research and Evaluation* report.

Certainly most important is the finding that listening leads awareness.

Each research endeavor brings us closer to understanding public radio’s audience. As we take each step, we increasingly realize the important role programming plays in what have traditionally been defined as tasks for developers. Making the service accessible and important, and carefully crafting and delivering positioning messages to the listener, now appear to be of the utmost importance to the development of public radio’s membership.

³ These reasons are taken from Appendix D of Public Radio Supporters and Non-Supporters.