A telephone survey was conducted in an attempt to test the veracity of some of the traditional questionnaire items commonly associated with the assessment of the Public Television image. The results of the survey indicated that items commonly used in these assessments (production competency, worthwhileness of minority programing, interest of the managers in community issues, and the amount of educational programing) did not scale when a Guttman Scalogram analysis and a varimax rotated factor analysis were applied to these items. Future research should be concerned with a more sophisticated assessment procedure. (Author)
THE IMAGE OF PUBLIC TELEVISION:
A PILOT STUDY

Dr. David J. LeRoy
Director

Wenmouth Williams, Jr.
Research Associate

Communication Research Center
College of Communication
The Florida State University
A telephone survey was conducted in an attempt to test the veracity of some of the traditional questionnaire items commonly associated with the assessment of PTV image. The results indicated that these items (production competency, worthwhileness of minority programming, interest of the managers in community issues, and the amount of educational programming) did not scale when a Guttman Scalogram analysis and a varimax rotated factor analysis were applied to these items. Future research should be concerned with a more sophisticated assessment procedure.
Public television, formerly ETV, has undergone a number of transformations in recent years. PTV has been through a number of organizational restructurings at all levels--federal, state and local. The crucial element in these transformations has been, and continues to be, television programming and audience size. These changes have in many ways sought to lift the noose of "educational" television because this image has often been posited as the reason for the low viewership of these stations. While the administrative schisms continue to the present, the questions asked in the earliest research on non-commercial television still remain. Namely, who watches public television, and, second, what does the general public think of PTV?

Describing the regular viewer of public television has been the focus of an incalculable number of studies. Public opinion surveys have established that the regular viewer is better educated than the average citizen; while, improved children's programming has attracted an increased number of households to PTV. The introduction of significant ethnic minority programming has attracted blacks and others to public television. In sum, these studies have demonstrated that the PTV viewer is quite selective in his viewing. Whereas commercial television has programmed for contiguous audience flow (viewers
watching one program after another on the same channel), public television has programmed for selected minority tastes or discontinuous audiences (e.g., a French cooking show followed by a program devoted to blacks news and opinion). There have been some efforts in the recent past to arrange PTV programs in clusters of common appeal (e.g., news and public affairs programming and newscasts on Friday night). However, this practice continues to be more the exception than the norm.

Programming procedures and viewing behavior suggest that the PTV viewer is selective; and, therefore an active rather than passive television viewer. A number of studies have sought to explain with little success such behavior.² The research issue has been what is the respondent's image of public television? Supposedly, a viewer's image of PTV somehow affects his viewing behavior, such that a person with a positive attitude toward public television should view more than a person with a negative "image." Yet, the social psychological research literature is glutted with observations rather than studies attempting to assess the relationship between attitudes and behavior.³ That people often engage in inconsistent behavior is a common sense observation. Still, one suspects that there should be some relationship between one's attitudes and subsequent behavior. But, the more germane question would seem to be: Do people have an image of public television at all? This issue is followed by another question: Does having or not having an "image" of public television bear any relationship with viewing behavior?
Prior research has sought to measure image by employing a variety of opinion or attitude questions. The answers to these questions have been assumed to constitute the individual's image of public television. A review of the previous studies in this area revealed four areas of concern. Respondents were asked to assess (1) the level of production competency of the local PTV station; (2) the level of educational programming on a given station; (3) the viability of ethnic minority programming; and, (4) the amount of interest in community affairs as demonstrated by the local PTV management. This potpourri of questions usually constitutes the standard repertoire of items often asked in public television questionnaires to measure image. Yet, it should be apparent that the questions do not seem to be very cognitively similar nor related. Some of the issues raised are behaviorally apparent. One can view a television program and, given the proper training, assess its production competency no doubt. Another question is in the area of quantitative estimate: How many educational programs of Type X are broadcast? Does this type of question seek to measure an attitude toward these programs or an actual estimate of the number of programs?

The last question in this cluster deals with the respondent's perception of the PTV management's involvement in community affairs. The rationale for this question argues that until the general public perceives the concern and interest of the PTV management in community affairs, the image of the station as a "university station" or an "educational channel" will persist.
and perhaps decrease the size of one's audience.

The problems related with utilizing such questions can be reviewed briefly. First, the issue is whether or not a respondent can validly answer such questions. Can the general public accurately assess production techniques? Second, what is an educational program. For example, are instructional programs, such as beginning typing, any different from Sesame Street? Both programs seek to instruct and both are education in a broad sense. However, one program seeks to both entertain and instruct. Does this mean that the respondent should perceive educational programming as boring?

Given that the viewer of public television is selective, how can he or she accurately assess the "worthwhileness" of ethnic minority programming if they rarely view such program types? Further, what would be the effect of a negative evaluation in terms of viewing behavior? One may not like the minority programs and not watch them. However, the same person can still argue in good faith that there should be a place for minority programs on public television.

In the study reported here the questions that are commonly used in public television surveys were taken at face value. The purpose of this pilot study was to begin an assessment of such items viable to measure PTV "image." The questions were embedded in a larger audience survey performed for a public television station. In this report, the items are examined in terms of response profile distributions; their relationship with viewing public television; and, finally, the crucial issue, their scalability in a traditional psychometric analysis.
METHOD

A telephone survey was conducted in February, 1973, utilizing the appropriate field survey techniques. Telephone numbers were randomly drawn from a special telephone directory that arranged telephone numbers by exchange and street location. The sampling frame was stratified so that the probability of selection was due to city location and the proportion of telephones in a given exchange. In addition, a special random sample of telephone numbers from the black community was drawn. Of the 512 attempts, there were 349 completions. Deleting those numbers not in service and respondents with no television sets, the completion percentage was 74 percent.

RESULTS

Taking each question in turn, the following are the frequency distributions for the four PTV questions.

First, to the question dealing with educational programming three percent replied there was too much educational programming on the PTV station, 48 percent said there was about the right amount, 12 percent said there was too little, while 37 percent were not sure (i.e., they had no opinion). The second question dealing with the level of production competency of the PTV staff resulted in 15 percent evaluating the production quality as very competent; 49 percent as competent; nine percent as incompetent; and the remainder of the sample, 33 percent, responded with no opinion. Third, when asked to assess the worthwhileness of the station's minority programming, 29 percent said it was worthwhile, 23 percent replied that it was
somewhat worthwhile, seven percent said it was not worthwhile, and 41 percent had no opinion. Fourth, the evaluation of the management's interest in serving local issues resulted in 59 percent responding that the managers were interested; five percent said they were disinterested; and the remainder, 35 percent, said they had no opinion.

Since the number of individuals having no opinion ranged from 33 percent to 46 percent, perhaps the assessment of PTV's image should be limited to regular viewers of public television. The assumption was that those holding no opinion were, in fact, not viewers. Table 1 demonstrates that this phenomenon is true but to a limited extent. Approximately one-half of the non-viewers reported no opinion for the four items. However, between a fifth to a fourth of the PTV viewers reported having no opinion. Thus, three of four regular PTV viewers were willing to offer an opinion; while, only one out of two of the non-viewers did likewise. This finding suggests that although viewership of public television increases, the probability of a respondent having an opinion, regular PTV viewing in itself was not an adequate predictor.

The principal issue of this analysis was concerned with the scalability of the four questionnaire items. The assumption is that the four items should in some way scale to measure something called PTV image, and a Guttman Scaglogram analysis could be a conservative test of the existence of such a uni-dimensional domain. The four items were analyzed by employing the usual criteria of .90 coefficient of reproducibility and
.60 for the coefficient of scalability. Admittedly, this is a typical test of these four questionnaire items, each of which was assumed to measure a component part of the PTV image domain. As a check upon the Guttman route, a factor analysis was also performed (principle components with Varimax rotation).

From the beginning, the four items did not scale. This finding continued even when the division point was moved to the outlier. The analysis then focused upon only those individuals who expressed an opinion, i.e., the no opinion subjects were eliminated. The key difficulty experienced was that the educational programming question was negatively related to the other three questions. In the factor analysis, the education item had low loadings on all the factors and did not load on any one factor, thus failing to meet Thurstone's criteria for simple structure.

Eliminating the educational programming item from the analysis resulted in only a modest improvement in an attempt to scale the remaining three items. Moving the division point to the outlier resulted in a coefficient of reproducibility of .80 and .51 for the coefficient of scalability with a percent improvement of 20 percent. The easiest item to pass was the minority program; followed by the management's interest in the community issues; and last, the item dealing with production competency. Heuristically, the scale, moving from the easiest to the hardest item, did move in the right direction. That is, the most difficult item to assess, production competency, was the hardest item to pass in the Guttman Analysis.
One last series of analyses were performed that need only to be noted in passing. Index scores were assigned to each respondent by his answers to the three items on the Guttman scale. Then, using demographic information, index scores and viewing of PTV, a number of cross tabular analyses were performed. A number of observations could be drawn from these tables. First, the scale was a poor predictor of viewing behavior. Second, males did not differ from females in their scores. Third, there was a curvilinear relationship between education and the Guttman score. That is, those with a college degree and those without a high school diploma were likely to receive equal scores on the scale; while, the high school graduates had a flat distribution. As would be expected, some of the effect due to education was in fact the effects of age and some unique configurations of the market.

DISCUSSION

Before turning to a discussion of the scale items, a brief summary of the unique characteristics of the Tallahassee market in terms of public television is in order. Besides being the state capital, the city houses two universities, one being the chief black university in the state. The city's median education is a college degree and the mean income is above $10,000.00 per year. Further, there are only two over-the-air stations, of which one is the university station. There is some spill in from nearby markets, but the quality of reception is from good to poor. The Tallahassee area is commonly labeled as
a signal starved market.\(^5\) Cable television penetration is about 28 percent of the households. Tallahassee, then, is an ideal market for public television. Consequently, over half of the sample in this study reported viewing once a week or more.

Under these conditions, the four PTV image items were tested in a better than average public television market. Put another way, if the items were ever to scale, it probably would be in this market. Yet, one half of those who have never watched PTV expressed no opinion about the items, while one quarter of the regular PTV viewers held no opinion. Further, given that one had an opinion, it was not a very good predictor of viewing behavior.

The reasons for this are, of course, the items themselves. Vague and imprecise wording could be one cause. What is an educational program? How does one evaluate production competency? How do you perceive a manager's interest in the community? How do you evaluate the worthiness of minority programming if you have never watched them? (One suspects that most people granted the worthiness of such programs due to a philosophical commitment rather than actual viewing.) It should be restressed that these questions are quite common in many surveys of the PTV audience. This modest survey should raise doubts for those whose responsibility it is to interpret these polls for management.

Still, one should not despair about measuring the image of public television. The results of this study indicate that
questions which may have worked in the past are no longer viable today. If anything, it is a heartening finding that the educational item did not scale (putting aside, of course, questions due to wording). If the management of public television has sought to escape any one single stereotype it is that of being identified as the "educational station." However, in future research the production competency question should be recast. What the question may have initially sought to measure was that PTV programs appear to the general public as boring and obtuse. While this may seem the reason for lower viewing among certain groups, it is only true to a limited extent. Blacks from a wide variety of socioeconomic categories view black programming on PTV. Racial and other intellectual minorities will view programs of interest regardless of production adroitness.

The last question dealing with PTV management interest in local issues reflects a concern for eliminating the educational stereotype image long associated with public television. Still, changing the stereotype, which for the sake of argument will be assumed to exist, will require a more direct approach. It must be granted that telecasting programs which deal with a wide variety of local issues may be perceived by the PTV management as being concerned with local issues. The problem is that the public does not perceive the connection between programming and concern. The failure of this question to measure PTV image may be due, in part, to a poor communication campaign by local PTV management. More to point, the concern should be for
devolving, in the public's mind, the idea that the "station" is interested in the community and its interests and problems and not some invisible management team.

In summary, this study was an attempt to test the veracity of some traditional questionnaire items commonly associated with image research in the area of public television. Future research in this area should focus upon a search for more salient indicators of what constitutes the public's image of PTV. This task will require extensive pre-testing of questionnaires and group discussions before a new instrument can be designed and put into the field.
FOOTNOTES

Dr. LeRoy is an Assistant Professor in the Department of Mass Communication and Director of the Communication Research Center at Florida State University. Wenmouth Williams is a Research Associate at the same institution.

The Impact of Educational Television (Urbana, 1960); Wilbur Schramm, Educational Television: The Next Ten Years (Stanford, 1962).


6 Harris, Viewing Public.

7 Lyle, General Analysis.