In an effort to identify critical evaluation skills, interview information is analyzed looking at four types of differences: differences between age groups, differences between children who did and did not change their attitudes after viewing an entertainment program, differences among those who ascribed varying degrees of credibility to television content, and differences among white, black and Puerto Rican subjects. Disconfirmed hypotheses included the importance of the content decided about, the importance in itself of accurate knowledge of the television industry, the type of real/pretend decisions children make, and the adjudged accuracy of children's decisions. The five critical evaluation skills which are tentatively identified are (1) explicit and spontaneous reasoning, (2) readiness to compare television content to outside sources of information, (3) readiness to refer to industry knowledge in reasoning about television content, (4) tendency to find television content more fabricated or inaccurate, and (5) less positive evaluation of television content. (WBC)
Factors Which Predict the Credibility
Ascribed to Television
September 5, 1976

by

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FACTORS WHICH PREDICT THE CREDIBILITY
ASCRIBED TO TELEVISION

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The purpose of our work so far has been to identify attitudes, information, attentional processes, or reasoning processes which seem to lead to more critical evaluation of television content. To tentatively identify these things, which I'll call critical evaluation skills, we have analyzed interview information looking for four types of differences:

1. Differences between the three age groups in each of the two samples of subjects;

2. Differences between children who did and did not change their attitudes after viewing one entertainment program;

3. Differences between those who ascribed varying degrees of credibility to television content in the two samples of subjects; and

4. Differences between white, black and Puerto Rican adults and adults.

If we found these differences for any measure, we believed we could tentatively identify that measure as a critical evaluation skill.

I would like to take a few minutes now to describe each of these comparisons, including the rationale for it, the data base, and some cautions about its validity. The rationale and data base for the first source of information -- age differences -- have been amply explained already. So I will only urge caution in interpreting our findings because the instruments, coding systems, and analyses for the two samples were different -- though complementary -- and because developmental changes may not relate to differences in the effects of television at any one age.
Our second source of information was the comparison of children who did not change their attitudes. Obviously, we believed that the programs we showed the children were meant primarily to entertain not to influence. We liked the messages in half the programs and wanted our own children to accept them, but still the more prudent course for all children would be to reject them. Our sample included the 47 children Sherry Graves described at the beginning of the symposium. In selecting them, the raw attitude change scores of 99 children were adjusted on the basis of pretest scores and then rank ordered. Children from approximately the top and bottom octiles were designated as changers and children approximately in the middle quarter were designated as nonchangers. Then the sample of changers and nonchangers was matched, plus or minus one subject per group, for age, race, sex, and type of television program viewed. The legitimacy of our subsequent analyses depends, of course, on the validity of our identification of children as changers and nonchangers.

Our third source of information was the comparison of those who ascribed differing degrees of credibility to television. For each of our two samples, subjects were divided, on the basis of answers to a number of specific questions in the interviews, into roughly three equal groups -- high, medium, and low average credibility. We had assumed that average credibility would change with age. We found, however, that the dividing points could be the same for all three ages of children and the same for the adolescents and adults. Our major reservations about this source of information stem from this lack of age differences and from the fact that the average credibility score did not relate to children's statuses as changers and nonchangers.

Our fourth and final source of information was the comparison of the white, black, and Puerto Rican subjects in the adolescent and adult sample. Children were excluded because the changer-nonchanger sample included too few blacks. We argued that members of American minority groups are more likely than whites to be skeptical because television does not as often represent life as they know it. Blacks and Puerto Ricans were chosen to represent American minorities because they are numerically large both in the United States and in the Boston area where we worked. Despite our efforts, the Puerto Rican sample was distinctly different from the other two. Many were relatively new arrivals from Puerto Rico, spoke little English, and were of lower socioeconomic status. While this may be an accurate reflection of the Puerto Rican population in the Boston area, it also means that television viewing is a substantially different experience for them — and our data reflect this. So we will look mainly at black-white differences here.

Now that I have described our four sources of information, let me tell you what do not seem to be critical evaluation skills. All four types of measures I will discuss now are ones we thought would be critical evaluation skills, but did not turn out that way in our data.
The first disconfirmed hypothesis was the importance of the content kindergarteners through adults decided about. As Sherry Graves has shown, there are clear age changes in what people attend to, but these differences do not show up in the other three types of comparisons. These differences will guide the selection of content to use as a vehicle in teaching critical evaluation skills, but in themselves they do not seem to be important as skills.

The second disconfirmed hypothesis was the importance in itself of accurate knowledge of the television industry. As Erin Phillips demonstrated, there are clear increases from kindergarten to adulthood in people's industry knowledge. Similar differences do not, however, appear in the other three types of comparisons. Thus, we have little reason -- other than the age changes -- to believe that accurate knowledge of the industry would lead to more critical use of television. As Erin noted, all of our subjects could learn much more about the industry, and, as I will indicate later, application of industry knowledge to reasoning about television content does seem to be important. Hence, the industry knowledge analyses will indicate what information to teach children to apply in their reasoning.

The third disconfirmed hypothesis is that the type of real/pretend decisions children made would matter. While measures of children's real/pretend decisions may seem to be quite similar to the average credibility score, let me assure you they are not. The average credibility score was derived from about six very general questions about television's believability, while the decisions measure is based on the total number of real/pretend decisions made throughout the interview, with the average number of decisions per subject being 41. We had assumed that the decisions of less sophisticated viewers would more often be real -- rather than pretend or both real and pretend. We did find the predicted age differences, which were not significant, and predicted and significant average credibility group differences (F=18.10; df=2,38; p < .001 for real decisions and F=20.32; df=2,38; p < .001 for pretend decisions), but similar differences were not found for changers and nonchangers. We did not have a similar measure for the adolescent and adult sample.

Finally, we did not find that the adjudged accuracy of children's decisions mattered, and once again we do not have a similar measure for the adolescents and adults. We had assumed that more critical viewers would make more accurate judgments about television content -- at least accurate in our eyes. We did find clear increases with age in the adjudged accuracy of children's decisions (F=8.75; df=2,41; p < .001), but similar differences were not found in the other two analyses.
Now that we have disposed of some of the things that do not appear to be critical evaluation skills -- even though we thought they might be -- let me tell you some of the critical evaluation skills we believe we have identified. I should note that none of these tentatively identified critical evaluation skills is supported by significant Fs, chi-squares, or other means tests for all relevant comparisons in both samples. Still there seems to be enough support to discuss them as possible critical evaluation skills and then to test them in more rigorous experiments.

The five critical evaluation skills we have tentatively identified are:

1. Explicit and spontaneous reasoning;
2. Readiness to compare television content to outside sources of information;
3. Readiness to refer to industry knowledge in reasoning about television content;
4. Tendency to find television content more fabricated or inaccurate and
5. Less positive evaluation of television content.

I will explain the specific measures subsumed under a critical evaluation skill when I discuss that skill. In each discussion I will label differences as significant when they were significant and simply state the direction of differences when they were not.

The first critical evaluation skill seems to be explicit and spontaneous reasoning about the reality of television content (see Figure 1). For the children, we found over the entire interview that the use of Mental Process reasons like "I just figured it out" decreased as children got older (F=2.37; df=2,41; p<.10) and significantly as we moved from changers to nonchangers (F=6.62; df=1,41; p<.05). It decreased too from high to moderate credibility groups and then increased somewhat for the low credibility group.

Insert Figure 1 about here

We also found age differences in the percentage of responses which could be coded as reasons in the entire interview (F=10.05; df=2,41; p<.001), with the percent increasing with age, and the percent significantly higher for nonchangers than changers, in the section of the interview where they talked about programs they liked to watch (F=4.27; df=1,41; p<.05). The average credibility group comparison also supported this finding. We do not have the same
FIGURE 1
Explicit and Spontaneous Reasoning

Mental Process

REASONS FOUND

PROCESSES

UNGELICITED
measure for the adolescents and adults, but there is one that's similar. That is the percent of all coded responses which were reasoning processes. This percent increased slightly as subjects got older, somewhat more as they ascribed less credibility to television, and very slightly as we moved from whites to blacks.

We also found for the children that there were significant age differences in the percentage of coded responses which were given spontaneously, without interviewer elicitation, with means increasing with age (F=15.24; df=2,41; p<.001). There was, however, a decrease as we moved from changers to nonchangers and no support in the credibility group comparisons. The data for the adolescents and adults are better. The percentage of unelicited responses was significantly greater for adults than adolescents (Newman-Keuls Test: Adult vs 16, p<.05; Adult vs 13, p<.05). This percentage also increased as people ascribed less credibility to television. Whites and blacks did not differ.

Thus, we have some evidence that people who can talk more readily and explicitly about their reasoning may be more critical consumers of television. We assume that this means that they had thought and talked more about these issues before we interviewed them.

Insert Figure 2 about here

The second critical evaluation skill we have tentatively identified is the readiness to compare television content to outside sources of information (see Figure 2). For the children, we found that references to parents as sources for real/pretend decisions were nearly significantly higher for nonchangers than changers over the entire interview (F=3.02; df=1,41; p<.10) and significantly higher in the section of the interview where they talked about the program we had shown them (F=6.69, df=1,41; p<.05). In this latter section, references to parents also differed significantly for the ascribed credibility groups (F=13.82; df=2,38; p<.001), with references increasing as credibility decreased. Over age, as Michael Force showed, references to parents remained relatively constant. But this should not obscure the finding that information from parents seems to be useful. For the children, we also found significant age differences in references to others (F=3.53; df=2,41; p<.05), with references increasing with age, and a slight increase as we moved from changers to nonchangers. There was no support for this measure in the average credibility group comparison. A similar finding occurs with the adolescent and adult sample. Here, the measure is references to other authorities, including parents. There are no age or ethnicity differences in the use of this but there are significant ascribed credibility group differences (F=2.68; df=2,43; p<.05), with use increasing as credibility decreases.
Figure 2
Comparison to Outside Sources

Parents

Age, Total
Credibility, Block 5
Change, Block 6

Others

Age
Change
Credibility

Authorities

Ethnicity
Age
Credibility

High Changer
Medium Nonchanger
Low Changer
There are two other measures in both the child and adolescent and adult samples which relate to this finding. Michael Forte described these as personal experience, which should increase to support the second critical evaluation skill, and conceivable experience, which should decrease. The results for both measures are complicated unfortunately. For the adolescents and adults the percent of references to personal experience was a U-shaped function of age and it increased as people ascribed less credibility to television, and slightly as we moved from whites to blacks. The percent of references to conceivable experience decreased slightly as people got older, didn’t change as they ascribed less credibility to television, and was somewhat lower for blacks than for whites.

The findings for these two measures are more complicated for the children. For references to personal experience in the entire interview we found a U-shaped curve with age and significant ascribed credibility group differences \( (F=5.93; \ df=2,38; \ p<.05) \), with use highest for the low credibility group. There was support for this measure in the changer-nonchanger comparison. References to conceivable experience, we found significant age differences \( (F=10.54; \ df=2,43; \ p<.001) \), with use increasing, rather than decreasing, with age, significant ascribed credibility group differences \( (F=4.31, \ df=2,38; \ p<.05) \), with an inverted U-shaped curve, and a decrease as we moved from changers to nonchangers. It may be that the use of conceivable experience increases with age, it is certainly very frequent in our adolescent and adult data, but that it is not as useful a reasoning process as it might be. It is clearer in our data that the use of personal experience is important at all ages.

Thus, we have fairly consistent evidence that the readiness to compare television content explicitly to one’s own experience and to use sources of information outside of television such as parents and other authorities may be a critical evaluation skill.

The third critical evaluation skill which we have tentatively identified is the readiness to refer to knowledge of the industry in reasoning about television reality (see Figure 3). For the adolescents and adults we found an increase in the use of this category as people got older, with the differences between adults and each adolescent group significant \( (p<.05 \ by \ Newman-Keuls \ Test) \), an increase and leveling off as they ascribed less credibility to television, and a significant increase as we moved from whites to blacks \( (t=3.5; \ df=43; \ p<.001 \ for \ planned \ comparison) \). From our measures of understanding industry economics we must conclude that it is not accurate understanding per se which matters, although it was such knowledge used in reasoning about television content which was coded for adolescents and adults. What does seem to matter, however, is the readiness to use this knowledge in evaluating content.

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Insert Figure 3 about here

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FIGURE 3
REFERENCE TO INDUSTRY KNOWLEDGE

INDUSTRY

% Use
10
8
6
4
2
0
Ethnicity
Age
Credibility

13
16
Low
High
Medium
White
Black

PRODUCTION GENERAL

Credibility
Age
Change

K
2
Low
High
Medium
Nonchanger
Changer

13
None of the children ever referred to industry economics in reasoning about television content. The closest measure we have for children, which they did use, was rather general statements about the fact that entertainment programming is made up. Here we find that nonchangers use this category significantly more than do changers when talking about the program we showed them (F=6.08; df=1,41; p<.05) and that the use of it increases very slightly as children ascribed less credibility to television. There was no support for this measure in the age comparison; in fact, use decreased with age and age differences were significant (F=3.34; df=2,41; p<.05).

The fourth critical evaluation skill which we have tentatively identified is the tendency to find television content more fabricated or inaccurate (see Figure 4). One measure for the children which related to this is that television content is made up, which I have just discussed. For the adolescents and adults, this same category was used less frequently. Still we found nearly significant age differences (F=2.47; df=2,43; p<.10), with use increasing with age when scores were transformed to equalize variance, but with an inverted U-shape for the raw means (which are graphed) and some increases as people ascribed less credibility to television. Black-white differences were also nearly significant (t=1.4; df=43; p<.10 for planned comparisons) when we transformed scores to equalize group variances, with the transformed means showing blacks higher than whites but the reverse for the raw means (which are graphed).

A second measure which relates to this skill is the extent to which people found the portrayals of their own sex and ethnicity group to be largely inaccurate. For the adolescents and adults, viewing portrayals as accurate decreased significantly with age ($X^2=19.16; df=10; p<.05$) and as people ascribed less credibility to television ($X^2=37.98; df=10; p<.001$). Blacks and Puerto Ricans were also significantly more likely than whites to find their portrayals inaccurate ($X^2=25.36; df=10; p<.005$). We couldn't test this measure with children because only sixteen of them answered the question when it was asked correctly.

The fifth, and final, critical evaluation skill which we believe we have identified is the general evaluation people have of television (see Figure 5). Support for this comes only from the adolescents and adults, as we unfortunately neglected to obtain relevant data from children. For the adolescents and adults, we found increases in negative evaluations of television content as people got older, increases as they ascribed less credibility to television, with the group differences significant ($F=4.92; df=2,42$...
p<.05), and some increase as we moved from whites to blacks.

Thus we have tentatively identified five critical evaluation skills:

1. Explicit and spontaneous reasoning;
2. Readiness to compare television content to outside sources of information;
3. Readiness to refer to industry knowledge in reasoning about television content;
4. Tendency to find television content more fabricated or inaccurate; and
5. Less positive evaluation of television content.

The teaching experiments which Judith Lemon will describe next should help us understand the extent to which these skills can be learned and do actually make a difference in how one reacts to television.

Let me end by reiterating that more critical evaluation, if it should be learned, should not lead to wholehearted rejection of all of television's messages. Rather it should help children differentiate between content which is meant primarily to inform and content which is meant primarily to entertain. Further, it should help children identify content which accurately represents normative or usual behavior and content which conforms to their family's values.
FIGURE 5
EVALUATION OF TELEVISION

NEGATIVE EVALUATION

Rating

Ethnicity

13 High White

16 Medium Black

A Low

Credibility

Age