The Effect of Conflicting Information on Media Skepticism

Media skepticism is defined as the degree to which individuals tend to disbelieve or discount the picture of reality presented in the mass media. Media skepticism is caused in part by the process by which individuals are confronted with discrepancies between their personal experience of reality and the reality portrayed in the media. As a result, they discount the media portrayal. Given this conceptualization, it was hypothesized that exposure to nonmediated information that conflicts with information gained from a media source would cause an increase in media skepticism. The hypothesis was tested in a controlled experiment. Results support the hypothesis and suggest that media skepticism may be a useful construct for future research in communication processes and effects.

In 1964, Bauer asserted that audiences were substantially "impervious to influence." He used this assertion to build an argument for a more transactional view of communication processes and effects. He suggested that the transactional model was a better alternative to the hypodermic model of direct media effects (also see Klapper, 1960). The uses-and-gratifications approach to media effects is a tradition of research that has followed Bauer's recommendation to adopt a transactional view of the process (Katz, 1980). Nevertheless, a leading proponent of the uses-and-gratifications tradition (Blumler, 1979) has recently argued that several important aspects of the approach need to be investigated. He relates the
concept of an “active audience” to Bauer’s “imperviousness to influence” concept. Blumler argues that these critical concepts have been neglected and need further research.

In this article, we develop the concepts of media skepticism and show how it helps to clarify the relation between the concepts of an “active audience” and “imperviousness to influence.” We then present the results of an experimental study of the effect of conflicting information on media skepticism. In doing so we demonstrate the utility of this concept for understanding the processes that yield media effects.

**Media Skepticism**

*Media skepticism* is defined as the degree to which individuals are skeptical toward the reality presented in the mass media. Media skepticism is a property of individuals who are regularly exposed to mass media sources of information. The concept varies across individuals from those who are mildly skeptical and accept most of what they see and hear in the media to those who completely discount and disbelieve the facts, values, and portrayal of reality in the media.

Individuals become skeptical and discount the reality portrayed for several reasons. First, there is the maturation process, which includes the development of “adult discounting.” Communication scholars have long realized that very young children exposed to television assume that the characters and events shown are real. Young children have difficulty distinguishing between fantasy and reality. Gradually, they learn that television programs are primarily dramatic, the work of actors and actresses (*Roberts & Schramm, 1971; Hawkins, 1977*). In addition, children learn that with special effects the media can easily make fantasy appear real (also see *Wartella, 1980*). Thus as they become adults, children learn to discount many messages and images portrayed in the media. They learn to be skeptical because they recognize that media easily conflate fantasy and reality.

Along with maturation there is the learning theory phenomenon, “habituation,” when the individual ceases to respond to a frequently repeated stimulus that once elicited a reaction (*Reynolds, 1975*). The process of habituation is observed as desensitization effects in many studies of prolonged exposure to violence and sex in media (see for example, *Cline, Croft, & Courrier, 1973; Drabman & Thomas, 1974; Mann, Berkowitz, *
Cozzens, Contractor • Media Skepticism

Sidman, Starr, & West, 1974). Because individuals are accustomed to the ever present stimulus, they do not take it very seriously.

Second, individuals learn media skepticism because of the perceived political and economic motives operating within the media. This is related to source credibility. Persuasion studies have shown that when a speaker or message source is perceived as actively seeking to persuade the audience and has something to gain in doing so, audience attitudes are much more difficult to change (Hass, 1981; Hass & Grady, 1975). Advertising is recognized as an overt attempt at persuasion (Ward & Wackman, 1973 Wartella, 1984). In addition, almost all programming involves advertising money. This fact means that the major concern of media producers is to draw large audiences. Thus the major criteria is “will the audience be pleased?” Recognition of this fact may sensitize individuals to the economic motives in entertainment as well as news programming. In a similar but more subtle way, political motives may be attributed to media programs, producers, and networks.

Third, individuals become skeptical because they have the opportunity to contrast personal experience in their social and physical worlds with the social and physical worlds portrayed in the mass media. The disparity between the two experiences of reality encourages media skepticism. Comparisons between personal experience and media portrayals play a part in the development of adult discounting. However, the comparison process does not end with maturation and may affect media skepticism throughout adulthood.

As a step toward understanding the concept, one aspect of media skepticism, the effect of conflicting information from mediated and interpersonal sources, was empirically tested. The test was designed to consider two different indicators of media skepticism. Media skepticism resides in the beliefs people hold about the truth or accuracy of “media reality.” It is also expressed in behavior, or intentions to behave, for example, intentions to do something about the media reality. Intended actions may also be taken as an indication of emotional impact.

In summary then, media skepticism is the tendency to discount media reality because of habituation, maturation, and adult discounting and any personal experiences that run counter to the reality portrayed in the media. For this study the last of these component causes of media skepticism, the influence of personal, nonmediated experience on the tendency to discount media reality was examined.
The central proposition for this research was that media skepticism would increase when individuals received information from personal sources that conflicted with information from the mass media. Information from personal experience that challenges, questions, or disconfirms the reality portrayed in the media should lead to an increase in media skepticism. Two hypotheses are tested in the current design.

**Hypothesis 1**

1a. An increase in information that conflicts with an example of media reality will lead to an increase in media skepticism as indicated in individual beliefs.

1b. An increase in information that conflicts with an example of media reality will lead to an increase in media skepticism as indicated in individual intended actions.

**Hypothesis 2**

2a. An increase in information that conflicts with an example of media reality will lead to an increase in media skepticism toward a different example of media reality. There will be a generalized effect evident in individual beliefs.

2b. An increase in information that conflicts with an example of media reality will lead to an increase in media skepticism toward a different example of media reality. There will be a generalized effect evident in individual intended actions.

Westley and Severin (1964) found differences between men and women in the proportion who classified TV as the most accurate mass medium. It is possible that media skepticism may occur differently in women than in men. To control for this possible source of confounding, sex of the respondents was noted and entered into the statistical analysis.

**Method**

**Design**

To manipulate the hypothesized cause of media skepticism it was necessary to create a research design that provided a way to compare media reality
with nonmediated personal experience. Segments of several television programs were used to define a small media reality. These segments were shown to an audience who were then exposed to a portion of the media reality. Disconfirming, nonmediated information was made available to some audience members. The effect of this added information was assessed by comparing the two groups within the audience on a media skepticism scale. The goal was to test how nonmediated, personal sources of information affected levels of media skepticism when the personal source challenges the media reality.

This design permitted a test of how a nonmediated personal source of information affected media skepticism. It did not, however, permit a test of how direct personal experience with the issues in the stories affected media skepticism. This limitation was imposed to avoid revealing the hypotheses to the subjects.

Groups of subjects were randomly assigned to either experimental or control conditions. There were nine experimental groups and nine control groups ranging in size from 5 to 15. Six teaching assistants carried out the appropriate procedures for each of their discussion sections. Both sets of groups were given the same instructions. All subjects were exposed to one of the two media stimuli. All subjects then were asked to fill out a questionnaire that assessed attitudes and beliefs about the stimulus. This same procedure was followed for a second stimulus. The experimental manipulations were administered after the first stimulus and before the first questionnaire. The only difference between the experimental and control groups was the introduction of conflicting information from a nonmass media source about the content of the first stimulus. This procedure cast doubt on the “reality” portrayed in the first story.

Possible confounding effects due to group leader were controlled by the pairwise random assignment of experimental and control groups. For 16 of the 18 groups, the design controls for effects due to group leader. Only one pair of experimental and control discussion sections did not share the same group leader.

Possible effects due to the particular stimulus content were controlled by reversing the order of stimulus presentation for half the groups. Thus the experiment was a simple 2 × 2 design, experimental condition (conflicting information/ no conflicting information) by stimulus order (AB/BA). Additionally, sex was statistically controlled in the analysis rather than by assignment in the design.
Hypothesis 2 was analyzed according to the same design with one difference. The test of Hypothesis 2 allowed for control variables representing baseline skepticism. These baseline skepticism scores were taken from subjects' scale scores on the first stimulus with respect to beliefs and intended actions.

Subjects

Undergraduate students from 18 discussion sections drawn from two communication classes at a large western university served as subjects. There were 173 subjects in the experiment, 82 male and 91 female.

Measurement

Media skepticism was measured with two scales. A belief scale was composed of questionnaire items relating to accuracy, bias, distortion, and so on. A behavioral intention scale was composed of items relating to perceived importance and intended action. Individual items were scored on a 5-point scale with values from 0 to 4; higher scores represented greater skepticism. The two scales are provided in the appendix.

Procedure

Subjects arrived at the normal time for their weekly class meeting. The instructor informed them that the class would be participating in a communication research project, then read the instructions. In order to minimize confounding effects due to knowledge of the hypothesis, subjects were told that the research goal was to understand how attitudes toward TV programs affected recall ability.

All groups followed the same order of events with the exception of the order of the two stimuli. After instructions were given, subjects recorded answers to demographic questions. Next, a 12-min segment from either the NBC news magazine “First Camera” (stimulus A) or the ABC news magazine “20/20” (stimulus B) was shown, followed by a 5-min class discussion of the content that contained the experimental manipulation. After the discussion, subjects completed the first questionnaire. A 12-min segment from the alternative NBC or ABC program was then shown, followed by a 5-min discussion and another questionnaire. Upon completion
of the second questionnaire subjects were asked to take home a short quiz, fill it out, and return it the following week.²

The “First Camera” segment told of the perils of chemical warfare and how the United States is ill prepared. Administrative and technical blunders were emphasized. The “20/20” story concerned the problem of missing children and how typical police departments are slow to respond. The segment emphasized how frequently children are hurt or killed in these situations.

The experimental manipulation consisted of a comment by the teaching assistant during the discussion of the first stimulus. The teaching assistant asked a set of general discussion questions oriented toward recalling content, for example, “What was the main point of the story?” and “What details do you remember?” In the midst of the discussion the teaching assistant said one of two things depending on the nature of the first stimulus. For the experimental groups that saw the “First Camera” chemical warfare story first, the teaching assistant said, “I was talking to a friend of mine who told me that his cousin is in the military and involved with some of these things and he said that the problem is really not that serious.” The verbal manipulation was followed by a comment suggesting that the teaching assistant ought to be getting back to the discussion questions. For the experimental groups that saw the “20/20” missing children story first, the teaching assistant said, “I was talking to a friend of mine who told me that his cousin is in law enforcement and involved with some of these things and he said that the problem is really not that serious.” Using subjects’ regular teaching assistant as the source of the disconfirmatory information was a potential threat to the internal validity of the manipulation, because the TAS represented a presumably highly credible source. However, the teaching assistants were carefully instructed not to argue for or defend the information purported to come from a friend. On the contrary, they were instructed to make the comments brief and quickly return to the discussion of the content of the stories.

Thus personal (nonmass media) disconfirmatory information was introduced into the discussion of the first stimulus in a somewhat unobtrusive manner. Introduction of this information during the discussion of the first stimulus allows an opportunity to discover if the hypothesized skeptical response to the first stimulus generalizes to the second stimulus where no disconfirmatory information was added.
Data Analysis

Multiple regression analysis was used to assess the effect of the experimental condition. Four separate regressions were run, one for each subhypothesis. Experimental condition (conflicting information/no conflicting information) was entered as a dummy variable, as were the two control variables, stimulus (AB/BA) and sex (M/F). Hypothesis 1a and 1b were both tested by one regression model employing the appropriate “belief” or “action” scale as the Dependent variable. Thus the two indicators representing skepticism toward the first stimulus were tested separately. Hypothesis 2, the generalized effect, was also tested with two regressions, one on belief about the second stimulus, and one on action toward the second stimulus. This procedure was done by entering the independent variables (experimental condition, stimulus, sex) plus both initial skepticism scale scores from the first stimulus into the two equations predicting skepticism toward the second stimulus. In this way, the test of Hypothesis 2 could be carried out controlling for baseline skepticism. Finally, the four skepticism scale means were also broken down by experimental condition, order of stimulus presentation, and sex. All computations were performed by the statistical computing package SPSS-X, release 2.1.

Results

Reliability Analysis

Reliability of the skepticism scales was assessed by Cronbach’s alpha. The reliability of the belief scale with respect to stimulus A was $\alpha = .792 (n = 170)$; the reliability score for the belief scale with respect to stimulus B was similar, $\alpha = .791 (n = 169)$. Reliabilities for the action scale on stimulus A and stimulus B were $\alpha = .779 (n = 170)$ and $\alpha = .783 (n = 169)$, respectively.

Tests of Hypotheses

Results indicate that experimental groups were indeed more skeptical than control groups with respect to the belief scales. Hypothesis 1a was supported by the regression analysis. The coefficient associated with the experimental treatment, conflicting information was significant ($b = 1.68,$
The model including the control variables explained 9% of the variance in skepticism belief scores, $R^2 = .089, F(3, 169) = 5.53, p < .01$. The coefficients for both control variables, stimulus ($b = 1.08$) and sex ($b = 1.23$), were significant, $p < .05$. Subjects who viewed the chemical warfare story first were more skeptical than those who viewed the missing children story first. Male subjects were more skeptical than female subjects.

The regression model testing Hypothesis 1b (behavioral intention scale) did not support the hypothesis because the coefficient for conflicting information was not significant ($b = .43$, $p > .05$). However, the model did explain 21% of the variance, $F(3, 170) = 15.10, p < .01$. The control variables, stimulus ($b = 2.25, p < .01$) and sex ($b = 1.28, p < .01$), proved to be the important factors. As in the test of Hypothesis 1a, subjects who viewed the chemical warfare story first were more skeptical than those who viewed the missing children story first. Male subjects were more skeptical than female subjects.

The analysis of Hypothesis 2 revealed a similar pattern, despite the additional controls for baseline media skepticism. Regression of the belief scale on the experimental treatment and control variables provided support for Hypothesis 2a. The coefficient for the conflicting information condition was $b = 1.37$, significant at $p < .03$; the generalized skepticism effect was observed. The overall regression model of skepticism toward the second stimulus was significant, $F(5, 162) = 9.01, p < .01$. The effect of stimulus was also present in the belief scale ($b = -2.03, p < .01$); subjects who viewed the missing children story second were far less skeptical than those who viewed the chemical warfare story second. The effect of baseline skepticism indicated by responses to the first stimulus was quite strong. The coefficients for belief ($b = .33, p < .01$) and action ($b = .34, p < .01$) were significant predictors of the belief score on the second stimulus. Those who were more skeptical toward the first stimulus were predictably more skeptical toward the second stimulus. With the inclusion of baseline skepticism, however, the model increased substantially in its predictive power, $R^2 = .22$. For this test, as well as for the tests of Hypothesis 1a and Hypothesis 1b, the regressions were estimated with terms representing the interactions between sex and experimental condition, sex and stimulus, and stimulus and experimental condition. In each case, the interaction terms were not significant.

In the test of Hypothesis 2b, the control variables were the critical factors and the overall model was significant, $R^2 = .38, F(6, 165) = 16.72, p <
However, in this case, although the basic pattern of effects observed in the test of Hypothesis 1b was similar, the effect of sex ($b = .50, p > .10$) dropped out when the interaction term for stimulus content by sex was added. This term was significant ($b = 1.77, p < .01$) as was the separate coefficient for stimulus content ($b = -4.21, p < .01$). Thus all subjects were less skeptical toward the story of the missing children when it was shown in the second position. In addition, the female subjects were significantly less skeptical than the male subjects when the missing children story appeared in the second position. The impact of previous baseline media skepticism, however, was only evident in the coefficient associated with the action score on the first stimulus. This measure of baseline media skepticism significantly predicted the action score on the second stimulus ($b = .35, p < .01$).

Means of the media skepticism scales broken down by the experimental condition and the two control categories provide a useful picture of the relationship between the variables. Group means of experimental condition, sex, and stimulus order appear in Table 1.

**Summary of Results**

The model accounts for a fair amount of the variance in media skepticism scores with $R^2$ ranging from 9% to 36%. The experimental condition of conflicting information was significantly related to the skepticism belief scale scores. Those who received the disconfirming, personal, nonmediated information were more skeptical with respect to the measures of belief applied to the first and second stimuli. Intended action scores were unrelated to the addition of the conflicting information. In addition, male students were significantly more skeptical with regard to the first stimulus belief scale and both action scales. However, the effect due to sex was not observed in the second stimulus belief scale (the generalized effect). The particular stimulus content affected three of the four scales. Those who observed the story about chemical warfare first were more skeptical toward that story on the belief and action scale and toward the second story (missing children) on the action scale only.

**Discussion**

The present research demonstrated that introducing conflicting nonmass media information increased media skepticism along the belief dimension.
This is in accordance with the overall hypothesis. Skepticism toward the first stimulus program measured on the belief scale may not seem surprising; however, the skeptical response also generalized to responses toward the second stimulus, which provides support for Hypothesis 2. The fact of a generalized effect suggests that the skeptical response is not specific to a particular program. Subjects did not seem simply to evaluate the portrayal of the story they saw first and compare it with the information the instructor reported as coming from a friend. Rather, subjects became more skeptical toward a different program shown on a different network, when no information was given by the instructor. This finding supports the conceptualization of media skepticism as a general response to mass media because of the discrepancy between interpersonal messages and the media.

The hypothesized effect supporting media skepticism was not observed in either action scale. This finding suggests that either the effect was too small to detect or that behavioral intentions are not affected by unsubstantiated secondhand information. The anticipated effect due to sex on the missing children story was found and it was quite pronounced. The "20/20" story on missing and kidnapped children probably elicited more female sympathy and concern. What was not anticipated was that the sex effect would be observed, although to a lesser degree on the chemical warfare story. This result is consistent with Westley and Severin’s finding (1964) that females tend to be more trusting of television than males. Although unexpected, the effect of sex on skepticism toward the first stimulus was clear. However, with respect to the second stimulus, we found that sex only made a difference when the second story was about the missing children, in which case female subjects were less skeptical.

The main findings of this study suggest that those who are regularly exposed to media are not inclined to accept the reality portrayed in them when presented with conflicting information from a personal source. They are more skeptical of the media source than of the interpersonal source. This interpretation is reinforced by the fact that the objective credibility of the source of the information was not better than the media program. The information used to cast doubt on the media story was said to derive from the relative of an unknown friend of the teaching assistant, secondhand information. In addition, the secondhand source was said to be part of the U.S. military or law enforcement, groups that would have good reason to assert that their problems are not very serious. There was no rational reason to disregard the media rather than the secondhand report of an
interested party, the soldier or police worker. Information from a highly questionable interpersonal source increased media skepticism. This finding should be expected if there is a readiness on the part of those who are “experienced” with media to disregard and disbelieve what they see and hear in the media. This “readiness” is evidence for media skepticism.

The effect of initial skepticism on the skepticism toward the second stimulus suggests that some individuals are more skeptical toward media than others and that level of skepticism toward one program may be used to predict skepticism toward a different program. Despite the stability of skepticism toward the media the effect of the experimental manipulation was observed in individuals with quite different baseline levels of skepticism.

Our results provide an illustration of the active audience. Subjects considered the conflicting information and in the aggregate became more skeptical. Audiences are responsive to inconsistencies between media sources and interpersonal sources. In this experiment, skeptical responses were elicited. Although these results are not definitive, they are informative. We began by considering the concept of the active audience and its imperviousness to influence. We report findings that shed light on the concept. Finally, we conclude by observing a number of questions yet to be answered.

First, the differential effects we found in the content of the media stories, suggests that careful examination of various categories of content is warranted. How do different kinds of content affect or perhaps moderate media skepticism? Second, the importance of the control variable for sex suggests that differences between the responses men and women have with respect to skepticism is worth further research. Third, the concept of primary interest in this study, mediaskepticism, must be analyzed in other settings, for example, outside of the classroom, and with different kinds of subjects, for example, adults. We report a generalized effect as evidence of media skepticism. However, this effect is measured immediately after the disconfirmatory information is given to the subjects. Future research should ask, How long do such effects persist in time? Finally, our findings may reflect the impact of disconfirmatory information from any alternative source, not simply a nonmedia source. Future research should investigate the impact of disconfirmatory information from an alternative media source, as in some experimental studies of persuasion.
Media skepticism is a concept that has potential utility in understanding the active audience and its resistance to direct influence. As more information becomes electronically mediated the implications of the “skepticism effect” become potentially quite serious. If the factors that lead to increasing skepticism continue, then the potential for people to become highly cynical toward the media becomes very real. Precisely how, when, and where the process of increasing media skepticism may be occurring seems an appropriate topic for future mass media research.

Appendix

**Belief Scale**

1. The program was *not* very accurate in its portrayal of the problem.
2. Most of the story was “staged” for entertainment purposes.
3. The presentation was slanted and unfair.
4. I think the story was fair and unbiased.
5. I think important facts were purposely left out of the story.

**Behavioral Intention Scale**

6. I think the problem shown in the story is very important.
7. I think something should be done about the problem shown in the story.
8. I wish I could do something about the problem shown in the story.
9. If I had the opportunity to do something about the problem, I definitely would (e.g., write a letter, vote, volunteer, etc.).
10. It is likely that I will do something about this problem or a similar problem in the next few years.

Notes

1. Examination of the mean skepticism scores for the one unmatched pair revealed the same pattern observed in the matched pairs.
2. Complete questionnaire available upon request by writing the first author.
3. In the case of control group a student voluntarily made several strongly emotional comments about a personal experience with a missing child situation. Although not as explicit as the experimental manipulation statement, the student
added somewhat disconfirmatory information during the discussion of the first stimulus (stimulus B, missing children). Because of the random assignment of groups and balancing according to group leader, this group was analyzed as a control group. However, comparisons were made between this group and the remaining control groups that observed stimulus B first. Examination of mean skepticism scores showed differences in the direction to be expected by the subject's unexpected comments. However, t-tests revealed statistically significant differences at the p < .05 level only for the first belief scale (missing children story). The generalized effect was not statistically detectable, although means for the undisturbed groups and the disrupted group were 1.0 and 5.4, respectively. Both action scales revealed a similar pattern; the differences were not statistically different.

4. The experiment was carried out with subjects from two different undergraduate courses occurring roughly 6 months apart. As a test for difference due to class or the temporal difference in trial, a control variable was entered to test for any difference due to different trial groups. The trial variable was not significant on three of the four skepticism scales. The beliefscale for the second stimulus, however, was significantly different for the earlier trial. Students from class A were more skeptical toward the second stimulus (in the case of class A the second stimulus was the missing children story). This result may be due to differences in the classes or professors; or, because class A was held during the spring term there were very few students beginning their first semester of college. Class B (less skeptical on belief about the second stimulus) was held in the fall with many students in their first year of college. However, despite the effect due to trial, all other reported findings remained significant at p < .05.

5. Each item asked for a response ranging from strongly disagree (0) to strongly agree (4) on the 5-point scale. Items 4, 6, 7, 8, 9, and 10 were reverse-scored before constructing the scale, so that higher scores imply a higher degree of skepticism.

References


Author’s Note: We wish to acknowledge the helpful advice provided by Peter R. Monge and Elihu Katz as well as the comments of two anonymous reviewers.