

The Influence of Balanced, Representative, and Nonrepresentative Photographic Exemplars on Perceptions of Public Opinion about the Iraq War

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Abstract

This study provided partial evidence of an exemplification effect associated with the distribution of photographic exemplars in multimedia news. Participants who viewed photographic exemplars representative of the distribution of public opinion about Iraq War issues, relative to those who viewed balanced photographic exemplars, reported perceptions that were more consistent with the current actual distribution of opinion in the United States as indicated by Gallup Poll data. Because the most recent Gallup Poll data indicate that the majority of Americans are opposed to the war, higher estimates of opposition indicated more accurate perceptions of public opinion. Results for participants viewing nonrepresentative photographic exemplars are also presented.

This study examined the influence of news photographs on individuals' perceptions of public opinion about the Iraq War from an exemplification theoretical perspective. Photographs are a category of exemplars, with exemplars being defined as carefully chosen cases that are used in the news media to illustrate (or exemplify) a larger issue (Zillmann, 2002). In other words, exemplars are examples that share attributes with the larger population that they represent (Zillmann, 1998). The news media use photographic exemplars to help communicate abstract concepts and information. Exemplars provide concrete instances of abstract concepts. For example, a photograph of an Iraq War protester would serve as

a potentially useful exemplar of the abstract notion of anti-war sentiments among Americans. Three categories of exemplars are of particular relevance in this study—*balanced*, *representative*, and *nonrepresentative* (or exaggerated) exemplars (Gibson & Zillmann, 1994). The categorization of an exemplar as balanced, representative, or nonrepresentative depends on whether the exemplar accurately approximates measurable aspects of a population it purports to represent. The reality of a population is determined using the quantitative tools of scientific measurement. Extending the previous example, anti-Iraq War sentiment can be measured scientifically through a random-probability sample public opinion poll. Such information is referred to as *base-rate information*.

Balanced exemplification corresponds with the journalistic norm of objectivity. Exemplars from both sides of an issue are equally distributed (i.e., 50/50) in presentation. *Representative* exemplification corresponds with the observed base-rate information. *Nonrepresentative exemplars* do not correspond with observed base-rate information but exaggerate actual occurrences within the population. Previous studies (Broius & Bathelt, 1994; Zillmann et al., 1996) have demonstrated an exemplification effect. Specifically, the distribution of exemplars (e.g., attributed sources) in news significantly influences viewers'/readers' perceptions of reality. Representative exemplification corresponds with accurate estimates of population distributions, while nonrepresentative exemplification results in proportionally inaccurate perceptions. The effect of nonrepresentative exemplification has been consistently observed, even when accurate base-rate information is juxtaposed to the nonrepresentative exemplars (Zillmann, 2000).

The influence of exemplification in the news is especially relevant with respect to issues of public importance. Continuing with the Iraq War as an example: citizens rely on the media to convey representative information about issues of public importance (i.e., the Iraq War) in order to take informed democratic action (i.e., to support or oppose the Iraq War). An *issue* is defined as a “social problem, often conflictual, that has received mass media coverage” (Dearing & Rogers, 1996, p. 3). Issues contain *attributes*, that is, components or facets of the larger problem. An example of two attributes of the Iraq War would be public support and public opposition.

Decades of agenda-setting theory and research have demonstrated that the news media convey information about the importance of issues and their attributes through the frequency and distribution of news coverage (Rogers & Dearing, 1996). The number of stories and their position in a newspaper or newscast communicate the relative importance of an issue

or attribute (part of an issue) and influence perceptions of issue or attribute salience (Dearing & Rogers, 1999), that is, “the degree to which an issue [or attribute of an issue]... is perceived as important” (Dearing & Rogers, 1996, p. 8). Evidence of the exemplification effect (micro) and consideration of the agenda-setting (macro) process indicate that the distribution of photographic exemplars may similarly influence individuals’ perceptions of public opinion and attribute salience (Jensen, 2002).

The current study was the first to examine the influence of balanced, representative, and nonrepresentative photographic exemplars on perceptions of public opinion. In particular, this study examined the influence of balanced, representative, and nonrepresentative proportional distributions of news photographs in support of and in opposition to the Iraq War on perceptions of public opinion.

Base-rate information related to Americans’ opinions about the Iraq War issue were obtained via Gallup Poll data. Based on that data, photographic exemplars were presented proportionally as balanced, representative, or nonrepresentative in mock multimedia news medium formats. Multimedia news was chosen as the context of this study because previous studies have examined the exemplification effect only in print news formats (Zillmann, 2000). Also, because of media convergence and the widespread availability of the Internet, more and more people are getting their news on the web in a multimedia format (Dimmick, Chen, & Zhan, 2004).

The exemplars were expected to influence perceptions of public opinion, as follows:

Research Hypothesis: When compared with representative exemplification, balanced and nonrepresentative photographic exemplification in multimedia news about the Iraq War will lead to less accurate perceptions of the distribution of public opinion about the war.

Method

Design

A between-subjects experiment was conducted which had a single factor, Exemplification (3: Balanced, Representative, Nonrepresentative). One-way analysis of variance (ANOVA) was employed to test the hypothesis by comparing mean differences between the groups at a $p < .05$ level.

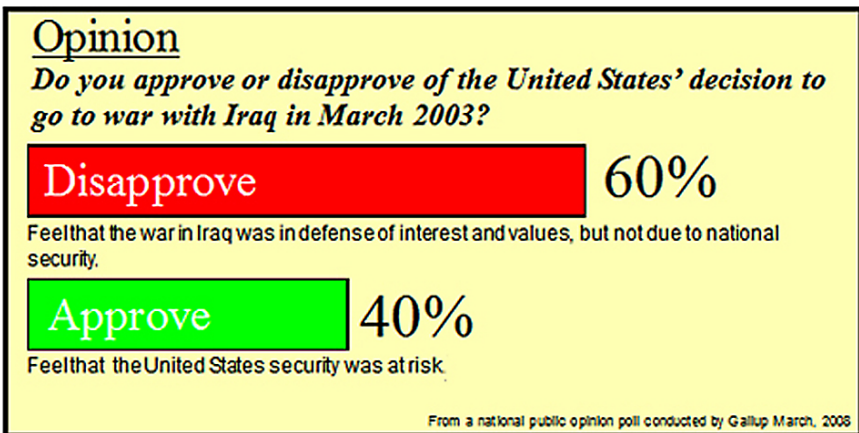
Participants

Student participants ($N = 59$, Female = 33, Male = 26) were recruited from summer Communications courses at The University of Alabama. Students received extra course credit for participation, as approved by the research compliance board and the UA Office of Research.

Stimuli

Three mock multimedia news packages were constructed for each treatment group. A balanced news story that neither favored nor opposed the Iraq War was selected from a mainstream online news web site (i.e., *The New York Times*). A graphic with the base-rate information about public opinion regarding the Iraq War was presented within the body of the story, as shown in Figure 1.

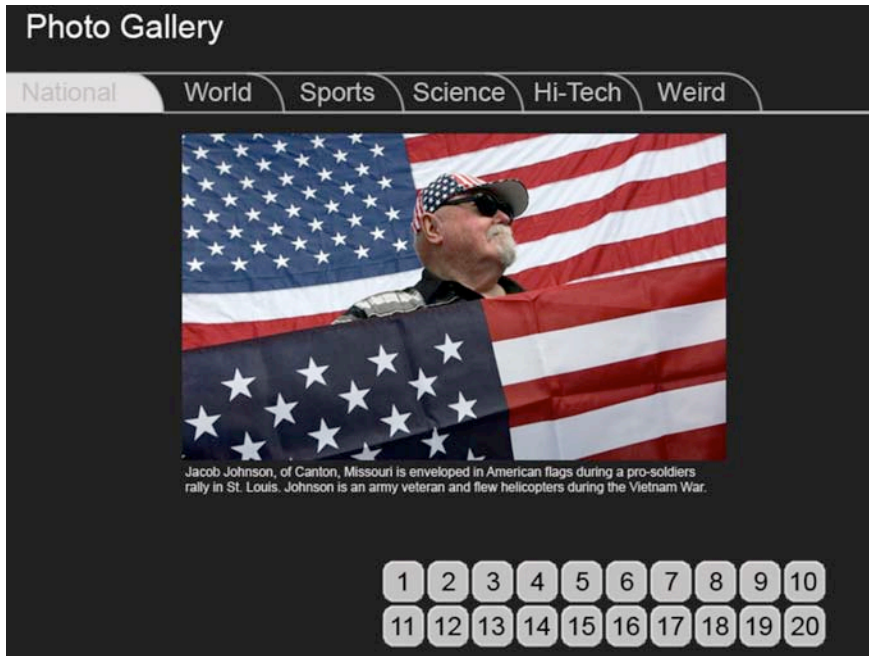
Figure 1. Base rate distribution of public opinion



Participants in the balanced, representative, and nonrepresentative groups read the same news story. The experimenter instructed the participants to read the story carefully because they would be asked to complete a memory test following the reading of the story and viewing of photographs and reading photograph captions.

Twenty-seven news photographs were selected for presentation following the news story. Photographic captions were written for each photograph. The presentation of the photographs and captions simulated an online-multimedia picture viewer, as shown in Figure 2.

Figure 2. Simulated online-multimedia picture viewer.



Participants were instructed to view all photographs and read all captions carefully, in preparation for the memory test that followed their reading and viewing.

Participants in the balanced group viewed 20 total photographs with 50 percent (10 photos) exemplifying opposition and 50 percent (10 photos) exemplifying support for the Iraq War. Participants in the representative group viewed 20 total photographs with 60 percent (12 photos) exemplifying opposition and 40 percent (8 photos) exemplifying support for the Iraq War. Participants in the nonrepresentative group viewed 20 total photographs with 60 percent (12 photos) exemplifying support and 40 percent (8 photos) exemplifying opposition to the Iraq War.

Measures

In order to measure the dependent variable, perceived public opinion, the researcher asked participants to complete an instrument that included 36 items used to measure participants' opinions and perceptions of the distribution of public opinion regarding the war. (See Appendix.) The questions and response options were taken directly from Gallup's Iraq War Surveys from 2003 to 2008. The Gallup questions were used to construct scales that are indicative of perceptions of distributions of public opinion

of support and opposition to the war. For this study, responses for 2 of the 36 items were used. The key items asked, “Do you believe that most Americans supported or opposed President Bush’s decision to go to war in Iraq in March 2003?” and “Do you believe that most Americans currently support or oppose the Iraq War?” Participants responded dichotomously to these items using “yes” versus “no” response options.

Procedure

The experiment was conducted in the Institute for Communication and Information Research Media Lab on the campus of The University of Alabama. Up to 15 participants completed the experiment as a group, during approximately 1-hour sessions. The experiment was completed at individual personal computer workstations which were located in 15 separate cubicles. After the experimenter obtained informed consent, participants were asked to read a news story and to click “continue” when they had finished reading the story. Twenty news photographs were randomly presented for 6 seconds each following the news story. As previously indicated, participants assigned to the representative group saw 12 photographs depicting individuals demonstrating opposition to the Iraq War and 8 photographs of individuals demonstrating support for the Iraq War. Those in the nonrepresentative group saw 8 photographs depicting individuals demonstrating opposition to the Iraq War and 12 photographs of individuals demonstrating support for the Iraq War. Participants assigned to the balanced group saw 10 photographs depicting individuals demonstrating opposition to the Iraq War and 10 photographs of individuals demonstrating support for the Iraq War. After reading the news stories and viewing all photographs with captions, participants completed the instrument that measured their memory of information in the stories and photographs, as well as their perceptions of public opinion.

Results

The research hypothesis predicted that perceptions of the distribution of public opinion about the war would be less accurate for participants in the balanced and nonrepresentative groups, when compared with the representative treatment group. Two one-way analyses of variance (ANOVA) were used to test the hypotheses by comparing mean differences between the control group (representative) and the two treatment groups (balanced, nonrepresentative) at a $p < .05$ level. Perception of public opinion related to the Iraq War was more accurate as indicated by greater perceived opposition to the war in the representative ($M = 1.91$, $SD = .20$), when compared

with the balanced ($M = 1.59$, $SD = .32$), group, $F(1, 31) = 11.60$, $p < .01$. The difference between the representative ($M = 1.91$, $SD = .20$) and non-representative ($M = 1.75$, $SD = .32$) groups was in the predicted direction, but only approached significance, $F(1, 41) = 2.99$, $p = .09$.

Discussion

The results of this study provide evidence of an exemplification effect associated with the distribution of photographic exemplars in multimedia news. Participants in the representative group, relative to the balanced group, perceived greater opposition among the American public toward the war in Iraq. Because the most recent Gallup Poll data indicated that the majority of Americans are opposed to the war, higher estimates of opposition indicated more accurate perceptions of public opinion. The statistically significant difference between the mean perceptions of the representative and balanced groups may be of great social significance. The journalistic norm of objectivity calls for balanced treatment of issues of public importance. However, balance resulted in less accurate perceptions of public opinion, following the logic of this study. The nonrepresentative group had a higher average score than the balanced group, which would not be expected.

The results of this study were limited by the use of dichotomous response options for the key items. Further, only two items were used to arrive at the means for each experimental group. To improve upon these particular weaknesses, a follow-up study by the authors of this study is ongoing. In that study, 10 Likert-Scale items are being used to examine individuals' perceptions of public opinion related to the Iraq War issue.

References

- Aust, C. F., & Zillmann, D. (1997). Effects of victim exemplification in television news on viewer perceptions of social issues. *Journalism & Mass Communication Quarterly*, 73, 4, 787-803.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3, 265-299.
- Boster, F. J., Cameron, K. A., Campo, S., Liu, W., et al. (2000). The persuasive effects of statistical evidence in the presence of exemplars. *Communication Studies*, 51, 3.
- Bowles, D. A., & Borden, D. L. (1999). *Creative editing* (3rd ed.). Belmont, CA: Wadsworth.

- Busselle, R. W. (2001). Television exposure, perceived realism, and exemplar accessibility in social judgment process. *Media Psychology*, 3, 43-67.
- Daschmann, G., & Brosius, H. B. (1999). Can a single incident create an issue? Exemplars in German television magazine shows. *Journalism & Mass Communication Quarterly*, 76(1), 35-51.
- Dimmick, J., Chen, Y. & Li, Z. (2004). Competition between the Internet and traditional news media: The gratification-opportunities niche dimension. *Journal of Media Economics*, 17, 1, 19-33.
- Gibson, R., & Zillmann, D. (1994). Exaggerated versus representative exemplification in news reports: Perceptions of issues and personal consequences. *Communication Research*, 2, 5, 603-624.
- Gibson, R., & Zillmann, D. (1998). Effects of citation in exemplifying testimony on issue perception. *Journalism & Mass Communication Quarterly*, 75, 1, 167-176.
- Gibson, R., & Zillmann, D. (2000). Reading between the photographs: The influence of incidental pictorial information on issue perception. *Journalism & Mass Communication Quarterly*, 77, 2, 355-366.
- Gunther, A. C., & Christen, C. T. (1999). Effects of news slant and base rate information on perceived public opinion. *Journalism & Mass Communication Quarterly*, 76, 2, 277-292.
- Halbfinger, D. M., & Fountain, J. W. (2002, April 13). Across the U.S., elation wrestles with anxiety. *New York Times*, pp. A1, B11.
- Jensen, K. B. (2002), *A Handbook of Media and Communication Research*. Routledge: New York, New York.
- McCombs, M. E., & Reynolds, A. (2002). News influences on our pictures of the world. In J. Bryant, and D. Zillmann (Eds). *Media Effects: Advances in theory and research (2nd ed.)*. Mahwah, NJ: Lawrence Erlbaum.
- McDonald, D. G., Glynn, C. J., Kim, S., & Ostman, R. E. (2001). The spiral of silence in the 1948 presidential election. *Journal of Communication*, 28, 2, 139-155.

- Noelle-Neumann, E. (1974). *The spiral of silence: A theory of public opinion*. *Journal of Communication*, 24 (2), 43-51.
- Paivio, A., Walsh, M., & Bons, T. (1994). Concreteness effects on memory: When and why? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20, 3, 1196- 1204.
- Perry, S. D., & Gonzenbach, W. J. (1997). Effects of news exemplification extended: Considerations of controversiality and perceived future opinion. *Journal of Broadcasting & Electronic Media*, 41, 2, 229-245.
- Petty, R. E., Wegener, D. T., Fabrigar, L. R., Priester, J. R., & Cacioppo, J. T. (1993). Specifying the Elaboration Likelihood Model. Conceptual and methodological issues in the Elaboration Likelihood Model of Persuasion: A reply to the Michigan State critics. *Communication Theory*, 3, 4, 336-362.
- Price, V. (1992). *Communication Concepts Four: Public opinion*. Newbury Park, CA: Sage.
- Shapiro, M., & Lang, A. (1991). Making television reality: Unconscious processes in the construction of social reality. *Communication Research*, 18, 5, 685-705.
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49, 103-122.
- Schrum, L. J. (1995). Assessing the social influence of television: A social cognition perspective on Cultivation Effects. *Communication Research*, 22, 4, 402-429.
- Zillmann, D. (2000). Exemplification theory: Judging the whole by the sum of its parts. *MediaPsychology*, 1, 69-94.
- Zillmann, D. (2002). Exemplification theory of media influence. In J. Bryant and D. Zillmann (Eds.). *Media Effects: Advances in Theory and Research* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Zillmann, D., Gibson, R., & Sargent, S. L. (2000). Effects of photographs in news-magazine reports on issue perception. *Media Psychology*, 1, 207-228.

Appendix

Study Questions

In view of the developments since we first sent our troops to Iraq, do you think the United States made a mistake in sending troops to Iraq, or not?

If you had to choose, which do you think is better for the U.S. -- [to keep a significant number of troops in Iraq until the situation there gets better, even if that takes many years, (or) to set a time-table for removing troops from Iraq and to stick to that timetable regardless of what is going on in Iraq at the time]?

Just your best guess, for how many more years do you think the United States will have a significant number of troops in Iraq?

Do you think the United States does -- or does not -- have an obligation to establish a reasonable level of stability and security in Iraq before withdrawing all of its troops?

Do you think the Bush administration deliberately misled the American public about whether Iraq has weapons of mass destruction, or not?

In your opinion, in the long run, will Iraq be -- [much better off, somewhat better off, somewhat worse off, (or) much worse off] -- than before the U.S. and British invasion?

Do you favor or oppose President Bush's plan to spend an additional one billion dollars on economic aid for Iraq? Do you [favor/oppose] this strongly, or only moderately?

Would you favor or oppose the Democrats in Congress taking active steps to block the deployment of more U.S. troops to Iraq, such as denying the funding needed to send the additional troops? Would you [favor/oppose] this strongly, or only moderately?

Now, thinking about the benefits to the U.S. of succeeding in Iraq versus the costs the U.S. would have to bear to achieve them, do you think -- [the benefits outweigh the costs, (or) the costs outweigh the benefits]?

Just your best guess, do you think the war in Iraq has gone -- [much better than the Bush administration expected, a little better, about as well as it expected, a little worse, (or) much worse than the Bush administration expected]?

How important is it that the United States succeeds in Iraq -- [extremely important, very important, somewhat important, or not that important]?

How long do you think the United States troops will have to remain in Iraq--[for less than a year, one to two years, two to five years, or will U.S. troops have to stay in Iraq for longer than five years]?

Do you think the United States' action in Iraq is morally justified, or not?

Do you think Saddam Hussein was personally involved in the September 11th terrorist attacks, or not?

Which of the following statements best describes your view of whether Iraq had weapons of mass destruction or programs to develop them just before the war began -- [you are certain that Iraq had weapons of mass destruction, you think that Iraq had these weapons but you have some doubt, you think that Iraq might have had these weapons but you have a lot of doubt, (or) you are certain that Iraq did not have weapons of mass destruction]?

Do you think that U.S. involvement in the war against Iraq has had [a positive effect on life in the United States generally, a negative effect on life in the United States, (or) hasn't had much effect on life in the United States generally]?

In your opinion, is Iraq -- [much better off, somewhat better off, somewhat worse off, (or) much worse off] -- than before the U.S. and British invasion?

Since the war in Iraq began in 2003, have you, personally, done any of the following, or not? How about -- ?

Prayed for those affected by the war.

Displayed a yellow ribbon on your car or property to show support for the troops.

Cried because of something related to the war.

Sent letters, e-mails or care packages to any U.S. troops in Iraq.

Voted for or against a political candidate mainly because of your views on the war.

Attended a funeral or memorial service for Americans who died in Iraq.

Publicly opposed the war by participating in a demonstration or writing to a public official.

Publicly supported the war by participating in a demonstration or writing to a public official.

Do you think the United States will -- or will not -- be able to establish a stable democratic government in Iraq?

Do you feel that you have a clear idea of what the war in Iraq is all about--that is, what we are fighting for?

Please tell me whether you think each of the following is very likely, somewhat likely, somewhat unlikely, or very unlikely to happen in Iraq in the next year.

- A. Peace and internal security will be established.
- B. A democratic form of government will be established.
- C. The Iraqi government will be friendly to the United States.
- D. U.S. military casualties in Iraq will continue at the same rate or a higher rate than now.

Please tell me whether you think each of the following is very likely, somewhat likely, somewhat unlikely, or very unlikely to happen in Iraq in the long run.

- A. Peace and internal security will be established.
- B. A democratic form of government will be established.
- C. The Iraqi government will be friendly to the United States.

If you could talk with President Bush for fifteen minutes about the situation in Iraq, what would you, personally, advise him to do?

Pull the troops out and come home/end it.

Finish what was started/be more aggressive.

Doing a good job/continue with your actions.

Come up with and execute a well thought out exit strategy.

Get them trained and let them run their own country.

Build up the military/send more troops.

Keep the public informed/be honest/explain actions.

Join in and work with the United Nations.

Admit to past mistakes/apologize.

Take care of our own problems.

Work with and improve advisory board.

Improve the homeland security.

Other

Nothing

No Opinion

How important is it for the United States that Iraq has a stable government that is not an enemy of the U.S.? Would you say it is -- [extremely important, very important, somewhat important, (or) not important]?

Do you approve or disapprove of the United States' decision to go to war with Iraq in March 2003?

Do you approve or disapprove of the way the U.S. has handled the situation in Iraq in the past few months?

Do you approve or disapprove of the way the U.S. has handled the situation with Iraq since the major fighting ended in April 2003?

Do you approve or disapprove of the way the U.S. has handled the situation with Iraq since the major fighting ended?

How important do you feel the Iraq War issue is to your fellow Americans? Would you say it is -- [extremely important, very important, somewhat important, (or) not important]?

How important will the Iraq War issue be in the upcoming presidential election? Would you say it will be -- [extremely important, very important, somewhat important, (or) not important]?

Do you believe that most Americans supported or opposed President Bush's decision to go to war in Iraq in March 2003?

Do you believe that most Americans currently support or oppose the Iraq War?