

Brendan R. Watson
Seminar in Advertising Research
Oct. 25, 2010

JOUR 8501: Survey Sketch Assignment

Due: _____

Total experimental sketch should be no more than five pages (excluding bibliography and appendices); your experimental sketch should include the following:

1. Statement of research problem (less than 1 page)
2. Brief literature review (1-2 pages)
3. Hypothesis/research question with at least two measures
4. Description of experimental design, including stimulus and relevant independent and dependent measures, as well as study sample and administration procedures – laboratory, online, etc. (1-2 pages)
5. Bibliography

Can the Military Close the Partisan Gap in Environmental Attitudes?

There is a significant ideological rift between political liberals and laissez-faire conservatives over environmental policies in the U.S. (Dunlap et al., 2010). According to Dunlap et al. (2010), those who identify as conservative are less likely to agree with the goals of the environmental movement, believe the environmental movement has a positive effect, or trust environmental organizations. There is also a liberal/conservative divide in this country in regards to perceptions of the military. Though the American public generally holds the country's military in high regard, there's a 12-percentage point gap between Republicans rating of the military's performance as excellent/good (86%) and Democrats (74%) (Pew, 2010). The experiment I am proposing aims to examine what happens when political rifts over the environment and the military interact in evaluations of climate change advocacy messages.

In 2007 The CNA Corporation, an off-shoot of the federally-funded Center for Naval Analyses — which aims to enhanced the performance of the military — released the influential report, “National Security and the Threat of Climate Change,” which concluded that climate change poses a destabilizing threat to many areas of the world, and that “The national security consequences of climate change should be fully integrated into national security and national defense strategies” (The CNA Corporation, 2007). Seven high-ranking, albeit retired, military officers authored the report.

Since that report was released, climate change has been of increasing importance to military planning. In October 2010, the defense department’s top brass announced a new initiative to reduce reliance on fossil fuels, while the Air Force’s entire fleet is scheduled to fly on biofuels by 2011 (Rosenthal, 2010). Climate change legislation has also started to get — what before this report, would have been surprising — bi-partisan support from people like conservative Senator John Warner (R-Virginia), who said, “I have focused above all on issues of national security. I see the problem of global climate change fitting squarely within that focus” (Walsh, 2008). Clearly, the military is an important new ally in the battle to lessen America’s dependence on fossil fuels, which are one of the largest contributors to green house gases, the driving force of climate change.

I am proposing a between-subjects experiment that will pre-screen participants and classify them as either politically liberal or politically conservative. Half of the conservatives and half of the liberals will be randomly assigned to two different treatments: One group will read a message — likely an informational brochure — sponsored by the Sierra Club, and the other a message sponsored by the U.S. military. The messages will be identical other than the logos and IDs of the organization

sponsoring the message. While source credibility is not being externally manipulated, based on the survey data described at the beginning of this proposal, it is presumed — and will be verified in a pre-test — that those who are politically conservative will rate the military sponsor as being more credible, while the liberals will rate the Sierra Club as being a more credible sponsor.

Based Pornpitakpan's (2004) review of the literature, it is hypothesized that source credibility will be positively correlated with persuasion — attitude towards the message and attitudes towards global warming as an important issue. However, there are two primary interactions: Individuals' existing predispositions on the issue of global warming and individuals' level of involvement with the issue.

Based on Petty and Cacioppo's (1981) elaboration likelihood model (ELM) it is assumed that those who are highly involved with environmental causes, including global warming, will engage in central route processing, and will evaluate the ad based on the strength of its arguments, not the credibility of the source. Thus, for these individuals, source credibility will have no effect. In regards to individuals' predisposition, based on Sternthal et al.'s (1978) theory of cognitive response, it is hypothesized that when the source is identified at the beginning of the ad — as it will be in this experiment — that those participants with preexisting negative thoughts towards global warming (e.g., that it is a hoax) will be more persuaded by the high-credibility source — because it suppresses counter-arguing — whereas those with positive predispositions will be more persuaded by a low-credibility source — because it generates more support arguments in response to the source cue.

That said, in this study it is likely that those who have high involvement also have

positive pre-existing attitudes towards global warming (e.g, that it's an important issue). Thus, the effect of source credibility for these individuals should be small, or non-existent, whereas it is expected to be significant based on the ELM and cognitive response models for conservatives, with negative preexisting attitudes towards global warming. Thus, it is hypothesized that exposing conservatives with negative attitudes towards global warming to an advocacy message sponsored by the military will significantly narrow the partisan gaps in attitudes towards global warming.

Hypotheses & Research Questions

H_{1a}: Conservatism will be positively correlated with perceptions of the military sponsor as being credible.

H_{1b}: Liberalism will be positively correlated with perceptions of the environmental sponsor as being credible.

H₂: Source credibility will be positively correlated with persuasion – attitudes towards global warming as an important issue.

There are also two interactions hypothesized:

H₃: Source credibility and persuasion will be moderated by issue involvement; source credibility will have no persuasive effect for those highly engaged in environmental issues.

H₄: Source credibility and persuasion will be moderated by pre-existing attitudes: Those with negative pre-existing attitudes will be more persuaded by the high-credibility source; those with positive pre-existing attitudes will be more persuaded by the low-credibility source.

R₁: Can the military sponsorship of an environmental message decrease the partisan gap in attitudes towards the environment?

Methods

The experiment will be an online survey. Since college students do not have well-established ideological positions, tend to be liberal, and tend to have positive attitudes toward the environment, participants will be recruited from local political groups that identify themselves as being either liberal/Democrat or conservative/Republican. Emails

will be collected from 180 willing participants, 90 each who are identified with liberal or conservative groups. The experiment will be conducted online. The experiment will be under the guise of helping assess political messages.

Pre-tests will include ideology and a list of topics that are currently part of the political discourse, including global warming. Participants will be asked to rate their concern with these topics on a seven-point scale. The other topics are foil topics. Then participants will be asked to read and evaluate copy for flyers that are expressing concern over the issue of global warming and its effect on national security. But in one condition (N=60) the message will be sponsored by the Sierra Club and the other condition (N=60) the message will be sponsored by Department of Defense. The control group (N=60) will see the message copy with no sponsor identified. Participants will be divided by ideological affiliation (liberal and conservative) and then each group will be randomly assigned to treatment and control conditions.

After exposure to the stimuli, participants will be asked to rate the credibility of the message sponsor (manipulation check), their attitudes toward global warming, and their level of involvement with the issue of global warming.

Measures

Attitudes Toward Global Warming

Items are from Gallup (2013)

(Pretest) One a scale of 1-7, how much do you personally worry about global warming?

Don't worry 1 2 3 4 5 6 7 Worry a lot

On a scale of 1-7, what is your opinion about how exaggerated the coverage is on the news?

Accurate 1 2 3 4 5 6 7 Exaggerated

On a scale of 1 to 7, what is your perception of scientists' consensus concerning whether global warming is occurring?

It is not occurring 1 2 3 4 5 6 7 *It is* occurring

On a scale of 1 to 7, what is your perception of the relative causes of global warming?

Natural 1 2 3 4 5 6 7 Man made

Political conservatism

(Pre-test) On a scale of 1-7, where 1 is very politically liberal and 7 is very politically conservative, I consider myself

1. Very liberal 1 2 3 4 5 6 7 Very conservative

Source credibility

Items are from McCroskey and Teven (1999).

On a scale of 1 to 7, the sponsor of the climate change brochure (the Sierra Club/the U.S. Department of Defense) is:

1) Intelligent 1 2 3 4 5 6 7 Unintelligent

4) Honest 1 2 3 4 5 6 7 Dishonest

5) Has my interests at heart 1 2 3 4 5 6 7 Doesn't have my interests at heart

6) Untrustworthy 1 2 3 4 5 6 7 Trustworthy

7) Inexpert 1 2 3 4 5 6 7 Expert

8) Self-centered 1 2 3 4 5 6 7 Not self-centered

10) Honorable 1 2 3 4 5 6 7 Dishonorable

11) Informed 1 2 3 4 5 6 7 Uninformed

12) Moral 1 2 3 4 5 6 7 Immoral

13) Incompetent 1 2 3 4 5 6 7 Competent

14) Unethical 1 2 3 4 5 6 7 Ethical

Issue involvement

1.) I have thought a lot about the issue of global warming

Little 1 2 3 4 5 6 7 Lot

2.) I have talked to my friends/family about my concern over global warming

Never 1 2 3 4 5 6 7 Frequently

3.) I try to purchase products from companies that are concerned with reducing their carbon footprint to reduce their impact on global warming.

Never 1 2 3 4 5 6 7 Frequently

4.) I am pay more for products/services that have a smaller carbon footprint and less impact on global warming.

Never 1 2 3 4 5 6 7 Frequently

5.) I have contacted leaders in government to express my concern over the issue of global warming.

Never 1 2 3 4 5 6 7 Frequently

6.) I have encouraged others around me to take more concern in the issue of global warming.

Never 1 2 3 4 5 6 7 Frequently

References Cited

- Dunlap, R.E., Xiao, C., and McCright, A.M. (2010). "Politics and Environment in America: Partisan and Ideological Cleavages in Public Support for Environmentalism." *Environmental Politics*, 10(4), 23-48.
- The CNA Corporation. (2007). *National Security and the Threat of Climate Change*. Washington, D.C.: Author.
- Gallup (2013). Americans' concern about global warming on the rise. [Website]. Retrieved from <http://www.gallup.com/poll/161645/americans-concerns-global-warming-rise.aspx>
- McCroskey, J.C., & Teven, J.J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communication Monographs*, 66, 90-103
- Petty, R., Cacioppo, J., and Goldman, R. (1981). "Personal Involvement as a Determinant of Argument-Based Persuasion." *Journal of Personality and Social Psychology*, 41(5), 847-855.
- Pew Research Center (2010, April 18). *Distrust, Discontent, Anger and Partisan Rancor*. Washington, D.C.: Author.
- Pornpitakpan, C. (2004). "The Persuasiveness of Source Credibility: A Critical Review of Five Decades of Evidence." *Journal of Applied Social Psychology*, 34(2), 243-281.
- Rosenthal, E. (2010, October 4) "U.S. Military Orders Less Dependence of Fossil Fuels." *The New York Times*. Retrieved October 24, 2010, from

<http://www.nytimes.com/2010/10/05/science/earth/05fossil.html>

Sternthal, B., Dholkia, R., and Leavitt, C. (1978). "The Persuasive Effect of Source Credibility: Tests of the Cognitive Response." *Journal of Consumer Research*, 4(4), 252-260.

Walsh, B. (2008, April 17). "Does Global Warming Compromised National Security?" *Time*. Retrieved October 24, 2010, from http://www.time.com/time/specials/2007/article/0,28804,1730759_1731383_1731632,00.html.