5-31-2018

Clearcut Persuasion? Audience Cognition of Mediated Environmental Advertising through the Lens of the Elaboration Likelihood Model

Derek Moscato
Western Washington University, derek.moscato@wwu.edu

Recommended Citation

Clearcut Persuasion? Audience Cognition of Mediated Environmental Advertising through the Lens of the Elaboration Likelihood Model

Derek Moscato

Western Washington University

Article Information

Abstract

Through the theoretical lens of Petty and Cacioppo's Elaboration Likelihood Model (ELM) and using the case of Oregon Wild and its campaign against clear-cut logging on public lands, this study explores the impact of media coverage of contentious activist advertising on audiences. A survey with experimental conditions measures attitudes of audiences exposed to this interplay of advocacy communication. The study assesses partiality toward the sponsor organization, a willingness by the target audience to act on its behalf, and an understanding of the central environmental issue. Differences between gender in reception of the campaign and coverage also are examined. By examining the interplay of social advertising, news media, and audiences, this study highlights a dynamic, social psychological stream of public interest communications.

Introduction

The confluence of activism and advertising is not a new one, and advocates for social and environmental change have increasingly leveraged a medium once reserved for consumer goods companies and other institutions to win support on key issues (Cook, 1990; Pickerel, Jorgensen, & Bennett, 2002; Wymer, 2010). In doing so, advocates align the goal of influencing individuals' attitudes with positive behavioral change on public interest issues, underscoring the potential role of social psychological phenomena within public interest communications (Seyranian, 2017).

A case in point comes from the advertising domain of billboards—a medium highlighted for its activism potential in the 2017 film drama *Three Billboards Outside Ebbing, Missouri*.

This study examines audience cognition of one such billboard campaign—specifically the contentious environmental appeals created by the conservation group Oregon Wild— through the theoretical lens of the Elaboration Likelihood Model (ELM). Using an online experiment and exposing study participants to campaign materials and ensuing news media reports about the advertisements, this study assesses whether controversial messages and the media coverage emanating from them ultimately influence publics or fulfill other organizational communication objectives. Given the importance of gender in environmental debates, and the pronounced role of women in a number of ecological and climate-change focused campaigns, this study also assesses whether gender plays a role in audience reception to such mediation of advertising campaigns.

Environmentalists utilize strategic communication tactics to give salience to particular topics or to respond to the advertising and public relations messaging of political parties or corporations. According to an analysis by Kantar Media/CMAG, advertisements mentioning environment, energy, or climate change surged to over 125,000 during the 2014 U.S. congressional midterm election cycle, establishing a new record (Davenport & Parker, 2014). Furthermore, advertising continued to be a vehicle for environmental and climate change debate in the months after the 2016 U.S. presidential election (Beeler, 2017). The pressure for environmental communicators to sway audiences to ecologically friendly perspectives would therefore appear to be a permanent fixture in public life.

Clearcut Oregon: From billboard controversy to media debate

In August 2013, the environmental advocacy organization Oregon Wild and its environmental partners purchased highway and airport billboards in Oregon riffing on the U.S. state's iconic postcards of appealing mountain and forest scenery. With a sarcastic headline reading, "Welcome to Oregon: Home of the Clearcut," the advertisements depicted a close-up visual of a tract of logged timberland amid a pristine Pacific Northwest forest to draw attention to clear-cutting proposals by state legislators and existing logging rules in Oregon. Although the billboards were allowed to be shown on roadways and at least one airport in Eugene, the campaign was banned from Portland International Airport, the state's largest airport, by the managing Port of Portland authority—to the consternation of the American Civil Liberties Union and some high-profile media commentators. One example is an editorial in Portland's *Oregonian* newspaper titled "Port of Portland's Billboard Brouhaha" that takes umbrage with both parties:

> The beneficiary of the Port's intolerance, ironically, is the very group that sought the billboard, Oregon Wild. If not for a decision that placed the group at the sympathetic center of a very public free-speech debate, it would be discussed (if at all) as the party responsible for a notably shallow piece of political advertising. ("Port of Portland's Billboard Brouhaha," 2013, para. 5)

After much legal and media wrangling, the advertisement was eventually allowed to run. However, this scenario raises the question of whether such forms of strategic communication,

and the media coverage and debates they often instigate, serve to persuade their intended audiences to a point of view or instead to alienate them.

Drawing from persuasion theory and a social psychological perspective of public interest communications, this experimental study investigates the effectiveness of the Clearcut Oregon ads both with and without the benefit of media coverage to help organizations better understand the virtues and potential pitfalls of controversial advertising around environmental issues. This study has implications not only for advertisers and communicators in the not-for-profit and advocacy space, but also for environmentalists, social marketers, corporate and government communicators, journalists, scholars, and students.

Literature review

Activist communication and issues advertising

The amplification of a critical message through marketing and mass media can be key to informing publics, persuading political and business decision makers, recruiting new members, and raising funds. The domain of environmental advocacy is no exception, with even some radical environmental movements turning to the advertising arena for image management and the manipulation of media (DeLuca, 2005). By communicating with key audiences on major public policy topics, issues advertising can even widen public debate to audiences outside of academic, government, and business circles (Heath 1988). This widening is especially true for the environmental movement, which in spite of public opinion shifts has evolved into one of the most important social movements (Banerjee, Gulas, & Iyer, 1995). As a social issue, environmental problems, in particular, are daunting and require humanity's rebalancing of economic and technological growth with the capacity of the planet (Zelezny & Schultz, 2000). This challenge is reflected in the kind of approaches that have buoyed such advocacy organizations in tackling these problems.

Outreach tools such as traditional media relations, lobbying, and grassroots organizing functions are still omnipresent in contemporary activism and advocacy; but so too are expensive, advertising-based and heavily persuasive overtures in the printed pages or websites of influential global publications such as *The Guardian* or *The New York Times*. As a result, organizations are faced with a choice between either the purity of direct action or pragmatism that involves institutional measures and working with business (Conner & Epstein, 2007). Increasingly, and taking their cues from sophisticated consumer brands, such advertising campaigns also have made their appeals more emotional and abstract, while moving into new physical domains beyond print and electronic media, such as transit and airport billboards. Other advertisers, borrowing from the publicity-seeking approach used by some activists, have embraced low-cost, media friendly, and unconventional marketing stunts (Levinson, 1984). These include flash mobs and surprise encounters in public spaces that fuse persuasive messages with the physical

environment.

Although such activities are known for being risky—especially for larger institutions—they also have a reputation for generating disproportionate amounts of so-called buzz. In an example from 2005 in Sweden, *The Economist* had its logo and URL washed out—with a power washer and stencil-like template—from dirty streets in an effort to target sleepy commuters marching to their Stockholm offices every morning. Stockholm's city hall called the act vandalism, but the tactic's success with sleepy bankers and the ensuing friendly media coverage helped mitigate any negative outcomes from the minor ruckus. Such an approach has become widely adopted by not-for-profit organizations and agents of social change, dubbed as "carnivalesque activism" (Weaver, 2010, p. 35) or "pranking rhetoric" (Harold, 2004, p. 189). Similarly, the term *culture jamming* has come to define social movement action that subverts mainstream media and cultural institutions (Dery, 1993; Klein, 2000; Lasn, 1999). Such critiquing of consumer culture, societal practices, or institutions with satirical or subversive messages can lead to controversy, which can in turn lead to further publicity. In 2010, for example, an outdoor campaign endorsing atheism and responding to evangelical Christian advertising, proclaimed that "there's probably no god. Now stop worrying and enjoy your life" (Atheist Bus Campaign, 2018, para. 2). After angering religious groups, the campaign was banned in several North American cities and subsequently enjoyed a windfall of free publicity in international news media. This interplay of advertising and news editorial recognizes the dynamic mediated environments in which citizens engage with issues as audiences and participants. As Demetrious (2017) noted in highlighting the rise of social media conversations about societal issues as a manifestation of public interest communications, contemporary publics increasingly move in and between various media platforms and spaces, and they are more likely to influence corporate and institutional agendas.

Such publicity can be a double-edged sword, however. Although edgy advertisements such as Apple's memorable, often revered 1984 Super Bowl advertisement remain in the public consciousness for the right reasons, other contentious advertisements have dragged down the organizations they were supposed to serve (White, 2012). For example, a 2012 campaign from the Lung Cancer Alliance in the United Kingdom featured tongue-in-cheek billboard headlines such as "Hipsters Deserve to Die" and "Cat Lovers Deserve to Die"— highlighting the absurdity of the notion that lung cancer victims are to blame for their fates. Both camps were understandably offended (and may not have understood the attempted humor of the advertisements in the first place) (White, 2012). Another anti-smoking campaign, also from the United Kingdom, is alleged to have caused "fear and distress" in children after showing smokers' faces and lips ensnared by fish hooks (Sweney, 2007, para. 9). Although Ireland's Advertising Standards Authority cited hundreds of complaints, the government health agency sponsoring the advertisements referred to them as highly effective, and smokers themselves were more likely to quit after seeing the advertisements (Veer, Tutty, & Willemse, 2008). Given the relative success of such campaigns in setting consumer or institutional agendas, it is not surprising to see the growing use of these campaigns in health advocacy but also green issues

such as climate change, wilderness protection, and ecological sustainability.

Environmental advocacy and persuasion

At the heart of environmental advocacy is outreach to others in a bid to effect change. Although environmental advocacy is sometimes aimed at organizations or governments, the changes that are required to solve environmental problems need to happen at the personal level (Zelezny & Schultz, 2000). Thus, an understanding of individual-level attitudes, motives, and intentions is particularly relevant in assessing the effectiveness of environmental programs. Previous studies have attempted to do this. For example, an assessment of individual support for environmental issues using narrative technique found that such an approach may allow for a more realistic assessment of environmental cognition and called for further attention to this type of measurement (Shanahan, Pelstring, & McComas, 1999). Appeals to individuals for support in environmental advocacy raises a variety of issues, such as understanding the norms and attitudes interpreting the content, as well as the disposition of the content itself. Communicators must be cautious not only of exaggerating their cases or positions with an environmental message, but even stating it at face value when it is perfectly factual. To successfully persuade in the context of environmental or social issues requires an understanding and aligning of descriptive norms (what people typically do) with injunctive norms (what people typically approve or disapprove of) (Cialdini, 2003).

Gender differences also help to explain varying degrees of message effectiveness in environmental communication, as surveys historically demonstrate a consistent gap between women and men in environmental attitudes (Davidson & Freudenburg, 1996). One explanation may be that women perceive a greater vulnerability to specific environmental risks (Bord & O'Connor, 1997). More recent analysis finds that women report greater pro-environmental views and express greater concern about environmental problems than do men (Xiao & McCright, 2015). These behaviors translate into real ecological action as women report stronger environmental behaviors than men (Zelezny, Chua, & Aldrich, 2000). Female activists have been a driving force in key environmental battles during recent decades, ranging from the Love Canal (Blum, 2008) to the World Park Antarctica Campaign of the 1980s (Shortis, 2018). What is less clear is women's degree of engagement with controversial environmental messages. Thus, understanding the role of women and gender differences becomes important to understanding the outcomes of public environmental debates and the ecological messaging that underpins them.

The effectiveness of persuasive environmental messages hinges in part upon audience demographics; but it also counts upon the moving parts of the messages themselves. In their study of pro-environmental public service announcements, Bator and Cialdini (2000) note the most important criterion in a campaign's success is a credible spokesperson. Among other attributes, such representatives can afford to be funny—as humor too can play a role in persuasive messaging, with ironic wisecracks enhancing persuasion by distracting audiences from counter-arguments (Lyttle, 2001). This finding is notable in light of some environmental

and health campaigns injecting wit, wisecracks, or tongue-in-cheek approaches for their creative content (such as the aforementioned campaigns by Oregon Wild or the Lung Cancer Alliance). It is also helpful to assess the effectiveness of such persuasive messaging in the context of structure of the advertising's content. From the perspective of organizations and communicators, a study by Banerjee, Gulas, and Iyer (1995) explains the structure of green advertising in three groupings: sponsor type (for-profit vs. non-profit), focus of the advertising (on the audience or the advertiser), and depth of the advertising (shallow, moderate, or deep). They also define green advertising objectives in four categories: product promotion, company image or reputation promotion, the influence of consumers' behaviors in relation to environmental or green issues, and enlistment of member or donor support for sponsoring organizations. Bator and Cialdini (2000) also emphasize the importance of both specific message content and precise explanations for how a behavior should occur, with such explanations being vivid without being distracting. This emphasis suggests an advocacy or social persuasion that is especially explicit, direct, or attention-getting in describing green solutions or systemic ecological problems.

Understanding advertising controversy

Controversy embedded into consumer or social advertising is not a new phenomenon. Sugden (2012), examining the catapulting of Benetton into international fame thanks to a 1980s wave of provocative advertisements, notes that company art director Oliviero Toscani revolutionized the use of provocative imagery to garner attention and open up public dialogue around issues such as race and religion. Following Benetton's rise, an increasing number of deliberately shocking advertisements appeared on the scene in the early 1990s with the goals of selling consumer goods and advancing social causes (Hubbard, 1993). In the years following, scholars claimed a rise of more edgy images (Waller, 2005).

The advertising literature suggests that specific perceptions of advertising controversies relate to more fundamental ideological dimensions, such as relativism or idealism (Treise, Weigold, Conna, & Garrison, 1994). In the use of fear appeals (in health-oriented public service announcements, for example), it was high relativists who were more likely to raise objections—though this was not the case for contentious advertising to children or the use of sex appeals in advertising. An investigation of the effectiveness of shocking content in the context of a public service message for HIV/AIDS prevention suggests that shock advertising boosts attention significantly—positively impacting memory recall and behavioral change among university students (Dahl, Frankenberger, & Manchanda, 2003). But the reviews for controversy are not always so glowing. Waller (2005), in proposing a response model for controversial advertising, shows that such an approach can both offend and create a negative reaction. Drawing from persuasion theory, ELM provides a productive way to examine this dynamic and sometimes contradictory approach to advertising and advocacy appeals.

Elaboration likelihood model

As part of the larger persuasion theory ecosystem, ELM has been employed in diverse advertising and advocacy domains, from public service announcements to environmental, political, and health advertising (Schumann, Kotowski, Ahn, & Haugtvedt, 2012). ELM demonstrates that people can be persuaded by messages through either a central or peripheral pathway (Brown, Ham, & Hughes, 2010; Petty & Cacioppo, 1986), positing that different underlying processes could create attitudes or attitude changes that appear equal (Schumann et al., 2012). Central route processing requires a greater investment of mental effort or elaboration in considering the worthiness of a message and relevance—and attitudinal impacts from this route are shown in many studies to be stronger, more enduring, and more predictive of future behavior (Brown et al., 2010). Peripheral route processing, meanwhile, provides a short-cut of sorts for individuals to make quick assessments of a situation without much elaboration—relying instead on cues that are external from the message such as source credibility or the reaction of others. A shortcoming of the theory, however, is a lack of clear delineation between the central and peripheral routes (Bitner & Obermiller, 1985). Billboard advertisements, for example, provide much less information than other advertising messages and therefore require less involvement (Cole, Ettenson, Reinke, & Schrader, 1990). As vehicles for raising brand awareness, billboards have a unique message format, relying to a greater degree on short messages and visual cues. This uniqueness situates billboards closer to the peripheral route. Larson's (2013) differentiation of the two pathways provides further guidance here, explaining central route reasoning as slower, more careful, and requiring higher processing effort—thus situating peripheral route elaboration as faster and hastier. This differentiation builds on Griffin's (2012) argument that the central route involves critical thinking.

In the environmental space, a successful persuasive message is argued to incorporate the central route to persuasion (Bator & Cialdini, 2000)—with communicators advised to consider attitude persistence, memory, and social norms when crafting their message content and presentation style. Drawing from the finding by Petty, Haugtvedt, and Smith (1995) that deeper engagement with an issue is more closely associated with behavioral change, research in public interest communications highlights the importance of audiences' engaging in high message elaboration (Seyranian, 2017). This perspective links audience deliberation of persuasive messaging to both attitudinal and behavioral change. Although ELM has traditionally been considered in the context of advertising media, more recent studies have considered the theory within entertainment narratives (Slater & Rouner, 2002), as well as the news media due to the prominence of informational and visual persuasive appeals appearing in the latter.

Public interest communications such as news stories about the prevention of infectious diseases is consumed by audiences with an existing interest in the topic, situating journalists as producers of high-elaboration conditions for persuasion (Berry, Wharf-Higgins, & Naylor, 2007). Aligned with this perspective is Choi's (2011) study highlighting the emergence of televised political news as a venue for central online processing for people with a strong interest

in politics. Furthermore, the degree to which news media focus on a particular political topic and establish its salience with an audience should also determine the centrality of an issue in elaborating upon political candidates (Petty, Brinol, & Priester, 2009). Extending central route processing to journalistic practices, Coleman (2006) finds that the use of informative and emotional visuals results in higher quality ethical reasoning on the part of news media professionals. These studies suggest an important role for news media to play as a venue for central route processing within persuasion.

This study seeks to assess whether media stories about controversial activist advertising dispose audiences to be more partial to an organization's message or point of view. It also examines differences in perception and understanding of an issue, differences in perception of reputational impact to place brand (in this case the state of Oregon), and finally differences in audience elaboration based on gender.

RQ1: Are audiences more inclined to support an organization's message after being exposed to media coverage of the organization's controversial advertising?

RQ2: Are audiences more likely to perceive having greater knowledge about an organization's central cause or issue—such as the environmental issue of clearcut logging—through exposure to media coverage of controversial advertising?

RQ3: Are audiences more likely to perceive a harmful reputation to the region or jurisdiction being portrayed in controversial environmental advertising after being exposed to media coverage about the advertisements?

RQ4: Is there a gender difference in the support for controversial environmental advertisements?

Method

This study situates news media treatments of environmental advertisement messages as a central route to attitudinal change. An online experiment, embedded within a larger survey, was used to assess differences between those exposed to media coverage of controversial advertising (central route processing) and those who were only exposed to the advertising but not the subsequent media coverage (peripheral route processing.) A random sample of 3,000 undergraduate students from a flagship public university in the Western United States was invited, by personally addressed e-mail, to participate in a web-based experimental survey. A drawing for an iTunes card provided an incentive to participate. Of the 317 students who accepted the invitation and started the survey, a total of 242 participants (or 8% of the 3,000 students originally invited) completed it; 34% of respondents were male, compared to 66% female. The gender difference in

part can be explained by the university's enrollment, as more women than men attend the institution. The author also suggests that women's partiality for social responsibility topics (Zelezny, Chua, & Aldrich, 2000) compared to men may have extended this gap.

Although the average age of the college respondents skews younger than the general population, situating age as a variable highly related to environmental beliefs (Buttel, 1979), other research suggests that concern for environmental protection holds steady across age groups (Mohai & Twight, 1987) and that age as a predictor of environmental concern is superseded by other variables such as marital status (Chen, Peterson, Hull, Lu, Lee, Hong, & Liu, 2011) or degree of pro-regulatory ideology (Samdahl & Robertson, 1989). Furthermore, millennials have overtaken baby boomers as the largest generation in the United States (Fry, 2016) and are therefore poised to play an outsized role in environmental debates. The difference between millennials and the general adult population also may be less dramatic than previously thought in terms of media consumption. Despite the popularity of social networking sites, younger adults cite traditional online news (websites for newspapers and broadcast outlets) as their dominant source of news for both now and the future (Lewis, 2008). Thus, the inclusion of traditional online news is appropriate given the media consumption habits of this demographic.

Design and procedure

Participants initially visited a website that provided general study information. Informed consent was obtained, with participants clicking an "agree to participate" button at the bottom of the site. All participants then were introduced to the Oregon Wild campaign and shown the same advertisement—the billboard— that was originally banned from Portland's airport.

From here, participants were randomly directed to two versions of the survey corresponding with two experimental conditions (one with news media exposure about the advertising controversy and another without). Participants in the treatment group were directed to read two mainstream media articles about the controversial nature of the campaign and the banning of the Clearcut Oregon advertisement from Portland International Airport. It is important to note that, unless they dropped out of the study at this point, participants were not allowed to bypass or otherwise ignore the news articles. As a mediating variable within this study, measurement of the news articles served as the manipulation check (Thorson, Wicks, & Leshner, 2012).

These articles were drawn from the websites of the *Oregonian* and *KGW-TV*—both based in Portland. *The Oregonian* is Portland's only general-interest daily newspaper, while *KGW* is the city's NBC-affiliated television station. The first article, "Portland Airport Rejects Anti-Clearcutting Ad from Environmental Groups," was authored by *Oregonian* reporter Jeff Mapes. The second, titled "PDX Nixes Clearcutting Ads, ACLU Protests," was authored for KGW by Associated Press reporter Jeff Barnard. Both articles explained the content of the advertisement, its rejection by Portland's airport authority, and the subsequent controversy over free speech. Because the coverage tended to oscillate between the topics of clearcut logging and constitutionally protected speech (along with politicking at the state and federal levels), for

clarity and focus the articles were shortened to five paragraphs each. Both articles were presented to participants in website format, just as they would have been delivered to readers outside of this study.

Image 1. "Oregon, Home of the Clearcut" billboard advertisement produced by Oregon Wild and its partners.

The second group, for control, was not exposed to any news articles. All participants completed a scaled questionnaire about the advertisement, asking for their opinions about the following: the importance of the cause, the participant's personal views and knowledge about the topic, and his or her willingness to act based on the advertisement's message. All participants also responded to a questionnaire about their demographic background as well as affiliations with Oregon Wild, other environmental organizations, and/or the forestry industry.

Pretest feedback

Pretesting was conducted to garner feedback on optimal articulation for the questions and ensure maximum reliability and validity of responses. Feedback indicated that language specific to the issue but not known to the general public—so-called environmental jargon—should be avoided. It also showed that some more complex questions should be simplified whenever possible, even if this meant creating a larger number of simpler questions. Based on this information, revisions were made to the set of questions.

Key measures

The perceived salience of the issue of ceasing clearcut logging activity was measured by asking participants how important it is for government and industry to end the practice of clearcut logging in the United States. Responses were indicated on a 1 (not at all important) to 5 (very

important) Likert-type scale. The motivation of participants to foster change personally was measured by asking how likely they would be to sign a petition expressing concerns over clearcut logging. Responses were again indicated on a 5-point scale. Participants also were asked about their likeliness to donate to an environmental organization such as Oregon Wild or contact a politician to express their concerns over the clearcutting issue.

Survey takers then were asked follow-up questions to measure further elaboration-induced support of the clearcut logging issue. They were: "Are you troubled by the environmental impacts of clearcut logging?" and "Is the issue of clearcut logging adequately and fairly represented by the Oregon Wild advertisement?" To measure audience members' perceptions of their knowledge of the issue as a result of the media coverage, the following question was asked: "Is clearcut logging as an industry practice something that you are more knowledgeable of because of this campaign?"

Results

General findings

Respondents to the survey from both the experiment and control groups were sympathetic to Oregon Wild's anti-clearcut logging message. Nearly half of all respondents (46%, $n = 110$) indicated that it was very important for the government and industry to reduce the practice of clearcut logging in the United States. Another 32% ($n = 77$) reported it was somewhat important.

Both control and treatment groups were reluctant to take personal action to address the issue, however. Only 2% ($n = 6$) of all respondents indicated they were very likely to donate to an environmental group such as Oregon Wild to express their concerns over clearcut logging (20%, $n = 47$ indicated they were somewhat likely). Only 5% ($n = 12$) indicated they were very likely to write to a politician to express their concern over clearcut logging (19%, $n = 46$ indicated they were somewhat likely). Personal concern over the issue was also weak. Asked if they were troubled by the environmental impacts of clearcut logging, only 8% ($n = 19$) indicated that they were all of the time, with a majority of respondents answering never, not often, or occasionally.

RQ1: Are audiences more inclined to support an organization after being exposed to media coverage of the organization's controversial advertising?

Exposure to media coverage of the billboards did not affect support of the Clearcut Oregon campaign. Independent samples t-tests were calculated comparing support for Oregon Wild's campaign between exposure and control groups. In comparing the means of responses to questions in the organizational persuasion category between the two groups, p values were higher than 0.05 in all instances, thus rendering any differences as non-significant, $t(170) = 1.86$, $p = 0.09$. Worth noting, however, is that on a percentage basis, those exposed to the ensuing

media coverage (treatment group) were consistently *less* inclined than the group with no news exposure (control) group to support Oregon Wild through taking positive action on its behalf. Of those who had not been exposed to news media coverage, 34% indicated they were very likely to sign a petition against clearcut logging, compared to 24% by the exposure group given the media reports. The response scale means, indicating willingness to sign a petition, was higher for the control group (3.6) than for the exposure group (3.3). This finding suggests a possible dampening or even backlash effect induced by the media coverage (see discussion).

RQ2: Are audiences more likely to perceive greater knowledge about an organization's central cause or issue—such as the environmental issue of clearcut logging—through exposure to media coverage of controversial advertising?

In response to the question of whether clearcut logging as an industry practice was something participants were more knowledgeable of because of this campaign, over 24% of exposure group participants indicated yes, absolutely, or for the most part. This finding compares to 15% for the control group. The mean response on the 5-point scale was 3.33 for exposure group versus 3.06 for the control group. The difference is statistically significant ($t(165) = 1.56$, $p = 0.03$). Through exposure to the media coverage of the controversial advertising campaign, audiences *believed* themselves to be more knowledgeable of the issue of clearcut logging, regardless of whether they actually were or not.

RQ3: Are audiences more likely to perceive a harmful reputation to the region or jurisdiction being portrayed in controversial environmental advertising after being exposed to media about the advertisements?

In response to the question asking if the advertisement's image of the forest clearcut hurt the reputation of the state of Oregon as a tourist destination, there was a discernible difference between those who had viewed the media coverage and those who did not. From the treatment group, 25% felt the state's reputation had been negatively impacted for tourists, as opposed to 15% of the control group. An independent samples t-test comparing the two means found the difference is significant, $t(221) = 2.79$, $p = 0.01$. For a second question, asking if the same clearcut image hurt the reputation of the state of Oregon as an investment destination or a place to do business, only 20% of the exposure group agreed this would be the case, compared with 23% from the control group. The difference is not significant, $t(227) = 1.10$, $p > 0.05$. Therefore, although Oregon's tourist reputation was perceived as being negatively impacted by the media treatment group, this was not demonstrably the case for Oregon's reputation as an investment or business destination.

RQ4: Is there a gender difference in the support of controversial environmental advertising campaigns?

When respondents were asked whether they would sign a petition about clearcut logging, 31% of female respondents indicated they were very likely to do so compared to 25% of males. The female response mean on the five-point scale was 3.7 compared to the response mean for males of 3.14. The difference is statistically significant, $t(93) = 2.41$, $p = 0.01$). Females also were more likely to answer yes, all of the time, or quite often to the question, Are you troubled by the environmental impacts of clearcut logging—(27%) versus males (21%). The difference is significant, $t(107) = 2.43$, $p = 0.02$. Finally, more women than men (48% versus 35%) agreed absolutely or for the most part that the issue of clearcut logging was adequately and fairly represented. The mean difference between men and women (3.17 versus 2.79) is significant, $t(103) = 2.04$, $p = 0.04$).

Discussion and conclusion

This study's primary goal was to understand the impacts upon audiences of media coverage emanating from contentious environmental advertising, using the case of Oregon Wild's campaign against clearcut logging practices. The results suggest that media coverage following such advertising fosters a belief on the part of individuals that they are more knowledgeable of an environmental issue. In this sense, it might be argued that the combination of provocative advertising with ensuing media coverage created something approaching a public information service, providing a forum for much wider discussion on a weighty political topic that ultimately gave way to the perception of greater understanding. Media coverage of the advertisement activated a central processing route for grappling with the issue of clearcut logging.

However, although survey participants who were exposed to such media coverage felt better informed, this study did not establish a significant linkage between news media consumption and support for the sponsoring organization. On a percentage basis, at least, participants exposed to media about the advertisements were slightly *less* inclined to involve themselves in the cause of forestry conservation. Although not found to be statistically significant, the result cautiously raises an outcome of ELM that is sometimes downplayed: Although a central processing route can lead to a potential persuasion effect, the literature also has established that it also can activate a negative or even boomerang effect whereby the mediated message is ultimately rejected based on the audience's perceived cogency of an argument (Booth-Butterfield & Welbourne, 2002). In the particular case of Clearcut Oregon, a primarily environmentally themed subject during the advertising or paid-media phase was transformed into a topic far more political, divisive, and ultimately complex when it became an editorial or earned media issue—a storyline that included politicians at the state and federal levels, representatives of the Portland Airport and Port of Portland authority, and free speech defenders such as ACLU litigators. One could speculate that organizations run the risk of backlash or simply confusion from potential supporters when new elements (politics, free speech advocacy, litigation) are layered onto an existing activist cause.

Future research should explore the potential negative impacts of central route persuasion within ELM as well as media coverage of activist advertising as a discouragement to engagement with environmental causes.

It is also worth considering these findings in light of research into shock advertising. Hubbard (1993) notes that since the 1920s, with the introduction of visual images to complement words in advertising, verbal text has become subordinate to visual text. Comparing the visually intensive Clearcut Oregon advertisement with text-heavy media reports offers an interesting contrast between contemporary advertising messages and information-rich print newspaper articles. Another consideration is the venue for the campaign banishment, the airport itself, the involvement of which could sway readers to worry more about tourism implications. Ultimately, in light of the results, state leaders and tourism boosters alike might pay greater attention to mediated communication—both within the spheres of advertising and journalism—that has the ability to alter public opinion about a place. This attention is one of the primary thrusts of the field of place branding, which seeks to assess how some cities, regions, or even nations garner more favorable public opinion and press coverage than others. How jurisdictions deal with major environmental issues in the future is bound to be a factor when individuals and organizations make choices about where to visit, relocate, invest in, or engage with in other ways.

The findings of this study also raise significant differences by gender in terms of an inclination to support a contentious environmental advertising campaign, irrespective of exposure to further media coverage. A growing branch of environmental communication concerns itself with gender-specific interpretations and perceptions of environmental issues. This focus on gender builds upon a longstanding tradition of female engagement in shaping environmental activism, ideology, and social movements (Carson, 1962; Klein, 2014; Merchant, 1980). Studies have maintained that women are more inclined to fight global warming and climate change than men (Joireman, 2014; McCright, 2010). Women have led some of the most impactful environmental social movements in U.S. history, including the citizens uprising at Love Canal in Niagara Falls, New York (Blum 2008). A previous *Los Angeles Times* op-ed drew from the Institute for Women's Policy Research in noting that "women are less likely than men to support environmental spending cuts and are less sympathetic to business when it comes to environmental regulation" (Polakovic, 2012, para. 3).

At the same time, women increasingly have taken up leadership roles with environmental organizations. For example, female executives now lead Greenpeace USA, Greenpeace Canada, and Greenpeace International. In turn, these senior leaders are ushering in new organizational cultures and communication philosophies (Budgen, 2017). In the realm of forest protection and environmentalism, female activism—particularly when transplanted from urban areas—has provided a welcome voice to those rural dwellers who are compelled to remain quiet but still sympathize with the cause of conservation (Fortmann & Kusel, 1990). This study reinforces the need for organizations to be aware of potential and emerging gender differences within environmental communications and possibly to attune themselves to such a gender gap when trying to persuade publics with paid advertising. For example, environmental organizations may

choose to strategically pursue or forego opportunities in media publications with an especially high male readership, given the greater inclination of men to be cautious in supporting environmental causes. On the other hand, targeting a more supportive female demographic through paid and earned media channels could result in more volunteer support, fundraising, or political action for an organization. Ultimately, further research is needed for this important topic.

Finally, this study raises key questions about the mediating effects of journalism and how news differs from strategic communication arenas such as advertising in terms of audience engagement and message interpretation. The traditional media (such as newspaper articles) in the case of the Clearcut Oregon campaign did not serve as a clear persuasive extension of the organization's billboard advertisements. That the control (non-media exposure) group in this study was more disposed to the Clearcut Oregon message, at least in absolute numbers, hints at a mediating effect from journalists that is less congruent with a strategic communications campaign than an advocate or public relations practitioner might hope for. This finding thus underscores the complexity of societal and public interest communications and advertising. For practitioners, this finding raises new questions about the effectiveness of mainstream media amplification of strategic campaigns. Media coverage can reinforce a message, but it also can confuse audiences or even create a backlash effect. Further research is needed to determine whether news media either tempers or even reverses any persuasive effects from environmental advertising messages.

This study does have limitations. By focusing on environmental communications, the findings may not be as generalizable to, for example, mainstream consumer product campaigns featuring a mix of advertising and editorial coverage. Additionally, the online nature of the experiment—with the billboard advertising and media coverage viewed on computer or mobile device—may not have as pronounced an impact as viewing such materials in a dynamic physical space (such as the arrivals area of an airport in the case of billboard advertising). Additionally, the experiment assumes that people are exposed to journalism in their everyday lives—which does not account for the many who tune out—either intentionally or by lifestyle choice— newspapers, online news, or other mainstream news coverage. Both economic challenges for traditional media outlets and the advent of fake news arguments from across the political spectrum translate into increasingly fragmented and suspicious media audiences. Finally, it is important to note that the central and peripheral routes articulated within ELM are not always medium-specific, as this study assumed, although aforementioned scholarship has situated specific media within the framework. It is possible that, even after consuming significant news coverage about a particular topic, some individuals will not elaborate through a central route. Ultimately, individuals process information in ways that reflect their personalities, cognitive abilities, world views, and life experiences.

In summary, this study showed some marked differences between individuals exposed to media coverage of advertising controversy and individuals who were not. It found that when an especially contentious advertising campaign garners media coverage, audiences are more likely

to perceive a greater understanding and knowledge of an environmental issue such as clearcut logging. The same audiences are also more likely to be cognizant of the negative impacts of such advertising on the tourism brand of the geographic jurisdiction being criticized. However, it is important to note that the same media coverage does not predispose audience members to be more supportive of the sponsoring organization. Such a phenomenon could be attributed to a potential negative or boomerang effect of central route processing in ELM. Previous research, however, posits that such a predicted boomerang effect experiences significant variation between studies (Johnson & Eagly, 1989.) Gender, meanwhile, provides some marked contrasts in terms of support for environmental advertising and willingness to act upon an issue—continuing a trajectory of gender demarcation in the environmental arena. Future exploration of demographics such as gender within the sphere of environmental advertising might shed more light on the effectiveness of paid (advertising) and earned (editorial coverage) media campaigns. In summary, this line of study warrants further attention, given the growing importance that activist organizations are placing on strategic communications and public advocacy approaches, and the growing prominence of the environment as a focal point for public interest discourse, media attention, and government policy.

References

Atheist bus campaign. (2018). *Humanists UK.* Retrieved from
https://humanism.org.uk/campaigns/successful-campaigns/atheist-bus-campaign/

Banerjee, S., Gulas, C. S., & Iyer, E. (1995). Shades of green: A multidimensional analysis of environmental advertising. *Journal of Advertising*, *24*(2), 21–31. doi:10.1080/00913367.1995.10673473

Bator, R. J., & Cialdini, R. B. (2000). New ways to promote proenvironmental behavior: The application of persuasion theory to the development of effective proenvironmental public service announcements. *Journal of Social Issues*, *56*(3), 527–541. doi:10.1111/0022-4537.00182

Beeler, C. (2017). How to get the conservative climate message to Trump? Put it on TV. *Public Radio International.* Retrieved from https://www.pri.org/stories/2017-05-01/how-get-conservative-climate-message-trump-put-it-tv

Berry, T. R., Wharf-Higgins, J., & Naylor, P. J. (2007). SARS wars: an examination of the quantity and construction of health information in the news media. *Health communication*, *21*(1), 35-44. doi:10.1080/10410230701283322

Bitner, M. J., & Obermiller, C. (1985). The elaboration likelihood model: Limitations and extensions in marketing. *Advances in consumer research, 12, 420-425.*

Blum, E. D. (2008). *Love canal revisited: race, class, and gender in environmental activism.* Lawrence, KS: University Press of Kansas.

Booth-Butterfield, S., & Welbourne, J. (2002). The elaboration likelihood model: Its impact on persuasion theory and research. In S. Booth-Butterfield & J.Welbourne (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 155-173). Thousand Oaks, CA: Sage.

Bord, R. J., & O'Connor, R. E. (1997). The gender gap in environmental attitudes: The case of perceived vulnerability to risk. *Social Science Quarterly*, *78*(4), 830-840.

Brown, T. J., Ham, S. H., and Hughes, M. (2010). Picking up litter: An application of theory-based communication to influence tourist behaviour in protected areas. *Journal of Sustainable Tourism*, *18*(7), 879–900. doi:10.1080/09669581003721281

Budgen, M. (2017, November 16). Greenpeace's Jennifer Morgan. We need to hold politicians who put fossil fuels before people accountable. *Lifegate.* Retrieved from https://www.lifegate.com/people/news/jennifer-morgan-greenpeace-cop23-interview

Buttel, F. H. (1979). Age and environmental concern: A multivariate analysis. *Youth & Society*, *10*(3), 237-256. doi:10.1177/0044118X7901000302

Carson, R. (1962). *Silent spring*. New York, NY: Houghton Mifflin Harcourt.

Chen, X., Peterson, M. N., Hull, V., Lu, C., Lee, G. D., Hong, D., & Liu, J. (2011). Effects of attitudinal and sociodemographic factors on pro-environmental behaviour in urban China. *Environmental Conservation*, *38*(1), 45-52.

Cialdini, R. B. (2003). Crafting normative messages to protect the environment. *Current Directions in Psychological Science*, *12*(4), 105–109. doi:10.1111/1467-8721.01242

Choi, Y. J. (2011). Do central processing and online processing always concur? Analysis of scene order and proportion effects in broadcast news. *Applied Cognitive Psychology*, *25*(4), 567-575. doi:10.1002/acp.1721

Cole, C., Ettenson, R., Reinke, S., & Schrader, T. (1990). The Elaboration Likelihood Model (ELM): Replications, extensions and some conflicting findings. *Advances in Consumer Research*. *17*(1), 231-236.

Coleman, R. (2006). The effects of visuals on ethical reasoning: What's a photograph worth to journalists making moral decisions?. *Journalism & Mass Communication Quarterly*, *83*(4), 835-850. doi:10.1177/107769900608300407

Conner, A., & Epstein, K. (2007). Harnessing purity and pragmatism. *Stanford Social Innovation Review, 5(4)*, 61-65.

Cook, E. (1990). Global environmental advocacy: Citizen activism in protecting the ozone layer. *Ambio*, *19*(6/7), 334-338.

Dahl, D. W., Frankenberger, K. D., & Manchanda, R. V. (2003). Does it pay to shock? Reactions to shocking and nonshocking advertising content among university students. *Journal of Advertising Research*, *43*(03), 268–280. doi:10.1017/S0021849903030332

Davenport, C., & Parker, A. (2014, October 21). Environment is grabbing big role in ads for campaigns. *The New York Times*. Retrieved from http://www.nytimes.com/2014/10/22/us/politics/environmental-issues-become-a-force-in-political-advertising.html

Davidson, D. J., & Freudenburg, W. R. (1996). Gender and environmental risk concerns: A review and analysis of available research. *Environment and Behavior*, *28*(3), 302-339. doi:10.1177/0013916596283003

DeLuca, K. M. (2005). Thinking with Heidegger: Rethinking environmental theory and practice. *Ethics and the Environment*, *10*(1), 67-87. doi:10.1353/een.2005.0013

Demetrious, K. (2017). Contemporary publics, Twitter and the story of PR: Exploring corporate interventions to promote "clean coal" in Australia. *The Journal of Public Interest Communications*, *1*(1), 94-114.

Dery, M. (1993). *Culture jamming: Hacking, slashing and sniping in the empire of signs*. Westfield, NJ: Open Media.

Donahue, S. (2004). How clean are green ads? Evaluating environmental advertising in contemporary media. *Booth Prize Essays 2004/2005.* Retrieved from https://web.stanford.edu/group/boothe/0405/PWR-Donahue.pdf

Fortmann, L., and Kusel, J. (1990). New voices, old beliefs: Forest environmentalism among new and long-standing rural residents. *Rural Sociology*, *55*(2), 214-232. doi:10.1111/j.1549-0831.1990.tb00681.x

Friestad, M., and Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, *21*(1), 1–31. doi:10.1086/209380

Fry, R. (2016, April 25). Millennials overtake Baby Boomers as America's largest generation. *Pew Research Center.* Retrieved from: http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/

Griffin, E. M. (2012). *A first look at communication theory* (8th ed.). New York, NY: McGraw Hill.

Harold, C. (2004). Pranking rhetoric: "Culture jamming" as media activism. *Critical Studies in Media Communication*, *21*(3), 189-211. doi:10.1080/0739318042000212693

Heath, R. L. (1988). The rhetoric of issue advertising: A rationale, a case study, a critical perspective—and more. *Central States Speech Journal*, *39*(2), 99–109. doi:10.1080/10510978809363241

Hubbard, R. C. (1993). Shock advertising: The Benetton case. *Studies in Popular Culture*, *16*(1), 39–51.

Johnson, B. T., & Eagly, A. H. (1989). Effects of involvement on persuasion: A meta-analysis. *Psychological bulletin*, *106*(2), 290. doi:10.1037/0033-2909.106.2.290

Joireman, J., & Liu, R. L. (2014). Future-oriented women will pay to reduce global warming: Mediation via political orientation, environmental values, and belief in global warming. *Journal of Environmental Psychology*, *40*, 391-400. doi:10.1016/j.jenvp.2014.09.005

Klein, N. (2000). "Culture jamming: Ads under attack." *Brandweek 41*(28), 28-35.

Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. New York, NY: Simon & Schuster.

Larson, C. U. (2013). *Persuasion: Reception and responsibility* (13th ed.). Boston, MA: Wadsworth, Cengage Learning.

Lasn, H. *(1993). Culture jam: The uncooling of America*. New York, NY: Eagle Brook.

Levinson, J. C. (1984). *Guerilla marketing: How to make big profits in your small business.* Boston, MA: Houghton Mifflin.

Lewis, S. C. (2008). Where young adults intend to get news in five years. *Newspaper Research Journal*, *29*(4), 36-52. doi:10.1177/073953290802900404

Lyttle, J. (2001). The effectiveness of humor in persuasion: The case of business ethics training. *The Journal of General Psychology*, *128*(2), 206–216. doi:10.1080/00221300109598908

McCright, A. M. (2010). The effects of gender on climate change knowledge and concern in the American public. *Population and Environment*, *32*(1), 66-87. doi:10.1007/s11111-010-0113-1

McCright, A. M., and Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming, 2001–2010. *Sociological Quarterly*, *52*(2), 155–194. doi:10.1111/j.1533-8525.2011.01198.x

Merchant, C. (1980). *The death of nature: Women, ecology, and the scientific revolution*. New York, NY: HarperCollins.

Mohai, P., & Twight, B. W. (1987). Age and environmentalism: An elaboration of the Buttel model using national survey evidence. *Social Science Quarterly*, *68*(4), 798.

Port of Portland's Billboard Brouhaha: Editorial. (2013, September 22). *The Oregonian.* Retrieved from http://www.oregonlive.com/opinion/index.ssf/2013/09/port_of_portlands_billboard_br.html

Petty, R. E., Brinol, P. & Priester, J.R. (2009). Mass media attitude change: Implications of the elaboration likelihood model of persuasion. In J. Bryant & M.B. Oliver. *Media Effects: Advances in theory and research* (3rd ed.) (pp. 141-180). London: Routledge.

Pettry, R. E. & Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion*. Cambridge, MA: Academic Press.

Petty, R. E., Haugtvedt, C. P., & Smith, S. M. (1995). Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behavior. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude Strength: Antecedents and Consequences* (pp. 93-130). New York, NY: Psychology Press.

Pickerel, W., Jorgensen, H., & Bennett, L. (2002). Culture jams and meme warfare: Kalle Lasn, Adbusters, and media activism. *Center for Communication and Civic Engagement*. Retrieved from: http://depts.washington.edu/ccce/research/WendiResearch.htm

Polakovic, G. (2012, June 13). Are women greener than men? *Los Angeles Times*. Retrieved from http://articles.latimes.com/2012/jun/13/opinion/la-oe-polakovic-gender-and-the-environment-20120613

Samdahl, D. M., & Robertson, R. (1989). Social determinants of environmental concern: Specification and test of the model. *Environment and Behavior*, *21*(1), 57-81. doi:10.1177/0013916589211004

Schumann, D. W., Kotowski, M. R., Ahn, H. Y., & Haugtvedt, C. P. (2012). The Elaboration Likelihood Model: A 30-year review. In S. Rodgers 7 E. Thorson (Eds.), *Advertising Theory* (pp. 51–68). New York, NY: Routledge.

Seyranian, V. (2017). Public Interest Communications: A social psychological perspective. *Journal of Public Interest Communications,* 1(1), 57-77.

Shanahan, J., Pelstring, L., and McComas, K. (1999). Using narratives to think about environmental attitude and behavior: An exploratory study. *Society and Natural Resources*, *12*(5), 405-419. doi:10.1080/089419299279506

Shortis, E. (2018). 'In the interest of all mankind': Women and the environmental protection of Antarctica. In L. Stevens, P. Tait, & D. Varney (Eds.), *Feminist Ecologies* (pp. 247-261). Cham, Switzerland: Palgrave Macmillan.

Slater, M. D., & Rouner, D. (2002). Entertainment—education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, *12*(2), 173-191. doi:10.1111/j.1468-2885.2002.tb00265.x

Sugden, K. (2012). Benetton backlash: Does controversy sell sweaters? *Advertising and Society Review*, *13*(1). Retrieved from http://muse.jhu.edu/journals/advertising_and_society_review/v013/13.1.sugden.html

Sweney, M. (2007, May 16). Anti-smoking ads hooked off air. *The Guardian.* Retrieved from: https://www.theguardian.com/media/2007/may/16/advertising.uknews

Thorson, E., Wicks, R., & Leshner, G. (2012). Experimental methodology in journalism and mass communication research. *Journalism & Mass Communication Quarterly*, *89*(1), 112-124. doi:10.1177/1077699011430066

Treise, D., Weigold, M. F., Conna, J., and Garrison, H. (1994). Ethics in advertising: Ideological correlates of consumer perceptions. *Journal of Advertising*, *23*(3), 59–69. doi:10.1080/00913367.1994.10673450

Veer, E., Tutty, M., and Willemse, J. (2008). It's time to quit: Using advertising to encourage smoking cessation. *Journal of Strategic Marketing*, *16*(4), 315–325. doi:10.1080/09652540802264090

Waller, D. S. (2005). A proposed response model for controversial advertising. *Journal of Promotion Management*, *11*(2-3), 3–15. doi:10.1300/J057v11n02_02

Weaver, C. K. (2010). Carnivalesque activism as a public relations genre: A case study of the New Zealand group Mothers Against Genetic Engineering. *Public Relations Review*, *36*, 35-41. doi:10.1016/j.pubrev.2009.09.001

White, M. (2012). Advertising misfires. *Time Magazine.* Retrieved from: http://business.time.com/2012/07/05/what-were-they-thinking-10-ads-that-sparked-controversy/

Wymer, W. (2010). Rethinking the boundaries of social marketing: Activism or advertising? *Journal of Business Research*, *63*(2), 99-103. doi:10.1016/j.jbusres.2009.02.003

Xiao, C., & McCright, A. M. (2015). Gender differences in environmental concern: Revisiting the institutional trust hypothesis in the USA. *Environment and Behavior*, *47*(1), 17-37.

Zelezny, L. C., Chua, P. P., & Aldrich, C. (2000). New ways of thinking about environmentalism: Elaborating on gender differences in environmentalism. *Journal of Social Issues*, *56*(3), 443-457. doi:10.1111/0022-4537.00177

Zelezny, L. C., & Schultz, P. W. (2000). Promoting environmentalism. *Journal of Social Issues*, *56*(3), 365–371. doi:10.1111/0022-4537.00172