

Perceptions of Bias in a Changing Media Environment:  
The Hostile Media Effect for Objective and Ideological Media

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A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the School of Journalism and Mass Communication.

Chapel Hill  
2011

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## **Abstract**

Scott Wilson Dunn: Perceptions of Bias in a Changing Media Environment:  
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(Under the direction of Anne Johnston)

This dissertation broadens scholarly understanding of perceptions of media bias by examining the hostile media effect in the context of explicitly ideological media. The hostile media effect states that people who have strong attitudes on a given issue will perceive media coverage of that issue as hostile to their attitudes, even while people with the opposing attitude may see the same coverage as biased in the other direction. However, most previous research on the hostile media effect has been based on stimuli that ostensibly come from traditional mainstream media sources that profess to uphold a standard of objectivity. This study incorporated stimulus articles said to come from media sources with explicit conservative or liberal biases. The study found that, for an article about abortion, participants tended to base their perceptions of bias on the media outlet's explicit ideology. However, for an article about the economy, participants who supported government intervention to solve economic problems perceived the article as biased regardless of the media outlet's stated ideology, lending partial support to the traditional hostile media effect. In addition to testing the differences in perceived bias for ideological and neutral media, this study also tested a number of antecedents and consequences that have been identified in previous research on the hostile media effect. For both articles, perceptions of general media bias predicted perceptions that the articles and their media outlet were biased. Group

identification, attitude extremity, connection between attitudes and moral conviction, media cynicism, and political tolerance did not predict perceptions of bias. For the abortion article, perceived bias predicted perceptions of how credible and informative the media outlet was and perceptions of public opinion about abortion, but not how interesting the media outlet was or levels of general media indignation. For the economy article, perceived bias predicted all perceptions of how credible, informative, and interesting the media outlet was, but not media indignation or perceived public opinion. Implications of these findings and suggestions for future research are discussed.

## **Acknowledgements**

This dissertation would not have been possible without the support of many friends, colleagues, and family members. I was extremely blessed to have Dr. Anne Johnston as my dissertation chair and Drs. Janas Sinclair, Sri Kalyanaraman, Melanie Green, and John Tedesco as committee members. All of them provided invaluable assistance throughout the dissertation process. Additionally, they all served as outstanding mentors long before I started the dissertation.

I was also blessed to be surrounded by an excellent group of fellow graduate students at UNC-Chapel Hill. Many research ideas took shape while bouncing ideas off of my colleagues. I especially need to thank Jason Moldoff and Bart Woydynski (and their wives) for providing lodging during trips to Chapel Hill to collect data and defend the dissertation.

I am also grateful to the UNC School of Journalism and Mass Communication for providing funding for this research through the Roy Park Fellowship and the Margaret Blanchard Dissertation Completion Fellowship.

I've been very lucky to be a part of an excellent communication faculty at Radford University as I finished up the dissertation. Dr. Lynn Zoch and the rest of the faculty were extremely supportive and made the task of completing a doctorate while working in a tenure-track position relatively painless.

On a more personal note, I have to thank Jennifer Gray for unwavering support during my years in grad school, as well as Erin Lewis for her invaluable support during the later parts of the process.

Finally, I want to thank my parents, Jimmy and Jane Dunn, for their many decades of support and for instilling the value of education in me at a very early age.

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## **Chapter I: Introduction and Literature Review**

Accusations of media bias have been a major part of political discourse for, at least, decades. Politicians have accused the press of biases that swayed electoral outcomes or public perceptions. Following the 1932 United States presidential election, Franklin Roosevelt's campaign manager and political mastermind James Farley argued that newspapers treated Roosevelt unfairly (Farley, 1938). In his concession speech following the 1962 California gubernatorial election, Richard Nixon lambasted reporters whom he believed had failed to accurately report his statements during the campaign. In an infamously ironic statement, Nixon warned reporters, "Just think about how much you're going to be missing. You won't have Nixon to kick around anymore" (Nixon, 1962).

Several years later, Nixon's vice-president Spiro Agnew (1969) gave several speeches in which he argued that the television networks exerted undue influence on public opinion. Agnew presaged arguments made by subsequent media critics (from all sides of the political aisle) that television news blended facts and commentary, imposed limits on which issues audiences thought about, reflected the interests of an elitist segment of the American population, and exercised a monopoly of power. The list of other politicians who have explicitly leveled charges of bias includes Democrats such as Adlai Stevenson and Bill Clinton and Republicans such as Dwight Eisenhower, Dan Quayle, Bob Dole, and George W. Bush (see Alterman, 2003; Dalasi & Allen, 2000). In the most recent United States presidential election, various supporters of Republican candidate John McCain, Democratic

candidate Barack Obama, and Democratic hopeful Hillary Clinton argued that there was rampant media bias against their preferred candidates (Farhi, 2008; Wilson, 2008).

Accusations of media bias have also come from academics and from journalists themselves. A favorite topic among conservative commentators is the liberal bias of the media, the existence of which is seen as self-evident (see, e.g., Keeley, 1971; Bozell, 2004). At the same time, a number of liberal commentators have argued that the press exhibits a conservative, pro-business bias (e.g. Liebling, 1961/1975; Bagdikian, 1983; Lee & Solomon, 1990/1992; Alterman, 2003). Websites for media watchdog groups such as Media Matters for America (<http://mediamatters.org>) and Fairness and Accuracy in Reporting (<http://www.fair.org>) offer daily evidence of conservative news bias, while rival groups like Accuracy in Media (<http://www.aim.org>) and Media Research Center (<http://www.mediaresearch.org>) counter with evidence of liberal bias. Although the evidence offered by commentators may be convincing in isolation, it is purely anecdotal and does not necessarily indicate the existence of systematic ideological biases.

The purpose of the study proposed here is to develop scholarly understanding of media bias by examining the hostile media effect, a theory that focuses attention on audience members' perceptions of bias. The wealth of divergent arguments about media bias makes it difficult for media scholars to examine bias empirically. Some researchers have followed the lead of the popular literature, focusing on media content in an attempt to determine whether or not bias is present. Other researchers have focused on audience perceptions of bias. This approach to research recognizes that bias is often in the eye of the beholder rather than a characteristic of media content that can be objectively observed. The literature review of this proposal will briefly review several approaches to studying media bias and then focus on the

hostile media effect, the primary theory used to explain audience perceptions of bias.

Much of the research on media content lacks the kind of empirical reliability and precision that would be necessary to convincingly establish the widespread existence of media bias. Kuypers (2002) performed rhetorical analyses of several high-profile speeches and compared them to media coverage of those speeches. Kuypers argued that instead of accurately reporting what was said in these speeches, the media reinterpreted their themes to reflect an establishment-liberal point of view. As a result, conservative voices are kept out of media, as are the voices of non-establishment liberals, such as Louis Farrakhan. Unfortunately, Kuypers's analyses were based on a handful of case studies, so his work did not convincingly establish that liberal media bias is widespread.

Efron (1971) took a slightly more empirical approach to studying liberal bias in media. In addition to citing a wealth of anecdotal evidence, she analyzed hours of television network news during the 1968 United States presidential election. Her analysis indicated that the networks presented a balance of positive and negative information about Democratic candidate Hubert Humphrey while presenting overwhelmingly negative information about his Republican opponent, Nixon. She also found evidence that the networks presented overwhelmingly negative information about the Vietnam War and generally reflected liberal positions on most of the issues she studied. Although Efron's analysis was quantitative in nature, it did not meet the standards of empirical content analysis, as she appears to have performed the coding herself without using an independent coder in order to measure the reliability of her coding scheme. There is no assurance offered that her data were the result of anything but her own admitted conservative perspective shaping her perspective of the content she was studying.

Even the most empirically rigorous studies of media bias have struggled to find a way to objectively define bias. Some researchers have simply assessed the political leanings of journalists and deduced that these leanings would lead to biased news coverage. Survey data reported by Schneider and Lewis (1985) showed that on the vast majority of issues journalists were more liberal than the public at large (see also Lichter, Rothman, and Lichter, 1986). In fact, journalists were more liberal than other college-educated professionals, a group that tends to be more liberal than the general public. While the researchers did not use any statistical tests of significance, the magnitude of most of their findings was large enough to suggest that the differences were not due to random chance. More recently, a widely-cited survey by Povich (1996) found that nearly 90% of journalists covering Washington politics voted for Bill Clinton in the 1992 presidential election, which many conservatives have cited as evidence of liberal media bias. In contrast, a survey conducted by Croteau (1999) showed that on economic issues, such as taxes, health care policy, concentration of corporate power, and free trade, journalists were significantly more conservative than the general public. Although these studies may show that journalists tend to hold political positions that differ from those of the general public, such a finding cannot be considered evidence of media bias without demonstrating that actual media content reflects these leanings.

Several studies have used content analysis to examine whether systematic biases exist in media content. Dalton, Beck, and Huckfeldt (1998) studied the newspapers serving a stratified sample of counties during the 1992 United States presidential election. Their content analysis showed that the newspapers' coverage tended to be fairly balanced, but was slightly more negative toward George Bush and (to a lesser extent) Ross Perot while being somewhat more positive toward Bill Clinton. There was a negative correlation ( $r = -.68$ )

between the valence of the reporting on Bush and Clinton, suggesting that newspapers tended to favor one candidate over the other, but all of the newspapers presented a substantial amount of positive and negative information about all three candidates. These findings show that American newspapers are considerably less partisan than they were earlier in American history (and less partisan than the newspapers in many contemporary nations). Domke et al. (1997) found similar results in their content analysis of newspapers and television news covering the same election. Similarly, Waldman and Devitt (1998) analyzed photographs of Clinton and Dole that appeared in newspapers during the election and found that whichever candidate was leading in public opinion polls at the time tended to be portrayed more positively. Their results indicated that media bias tends to favor front-running candidates regardless of partisan affiliation.

Other studies have looked at biased coverage across multiple election contexts. Shah, Watts, Domke, and Fibison (1999) analyzed media coverage of the 1984, 1988, 1992, and 1996 United States presidential elections. They found that the candidates of each party received roughly the same amount of coverage during each election. The valence of that coverage was slightly more positive for Democratic candidates, but factors other than candidate partisanship had stronger influences on the valence of media coverage. Specifically, challengers tended to fare better than incumbents. When the data were analyzed separately for news coverage of economics the valence of the coverage was closely tied to the performance of the economy during that election. When the economy was doing well, economic coverage tended to be positive for the incumbent, but when the economy was in recession coverage tended to be negative toward the incumbent.

Niven (1999) analyzed newspaper coverage of governors during times when crime

and unemployment rates were either rising or falling. By comparing governors from opposing parties in the same states during similar conditions, he found that Republican and Democratic governors were treated similarly by the newspapers. These studies of bias in election contexts indicate that candidates from the two major American political parties tend to receive comparable coverage. This finding casts doubt on the existence of widespread partisan bias in mainstream American news media.

The many studies that have examined media bias during elections cannot all be reviewed here, but D'Alessio and Allen (2000) analyzed data from 59 studies of bias in United States presidential elections from 1948 through 1996. While some of these individual studies showed evidence of bias in specific media outlets during specific elections, the meta-analysis showed no evidence of bias in newspaper coverage and a very slight (but statistically significant) pro-Democrat bias in television coverage. These results suggest that the biases seen in very specific contexts do not reflect a sustained, high-magnitude, systematic bias across elections and across all media.

A recent study by Covert and Wasburn (2009) sought to study media bias beyond election contexts. These researchers analyzed coverage of four issues (crime, the environment, gender, and poverty) in four newsmagazines from 1975 to 2000. Two of the magazines, *Newsweek* and *Time* are usually seen as mainstream publications that should, presumably, aspire to objective coverage of issues. The other two magazines chosen for the study explicitly represent either a conservative (*National Review*) or liberal (*The Progressive*) perspective. Their methodology involved analyzing coverage of these issue based on the sources used for stories, the potential costs identified with each issue, causes identified for the issues, and solutions proposed for each issue. By examining each of these

four factors, the researchers hoped to evaluate bias in a more holistic and objective manner than previous studies.

Covert and Wasburn's (2009) study found that *Newsweek's* coverage of the environment, gender, and poverty was just slightly biased toward liberal positions, while the magazine's coverage of crime was slightly biased toward conservative positions. *Time's* coverage of all four issues was slightly left of center. Unsurprisingly, both mainstream news outlets were considerably more moderate than the two partisan publications, which were notably biased in the expected directions on each of the four issues. Although this study's methodology was more rigorous than many content analyses of media bias, it also illustrates that even with careful attention to methods it is difficult to evaluate bias. For example, the authors note that the bias scores for *National Review's* coverage of crime had a large standard deviation, complicating their statistical analyses. They attributed this large variance to the wide variety of conservative positions on drug crime. Some *National Review* articles advocated for the decriminalization of drugs on libertarian grounds, while others argued for tougher drug laws. Under the study's methodology articles in the former category would be coded as "liberal," but either of these positions could legitimately be considered conservative, depending on how the term is defined. Drug legislation is just one of several political issues that resist easy ideological labeling, making it difficult to put news coverage into tidy ideological categories.

Other studies have used less direct measures to examine media bias outside of election contexts. Groseclose and Milyo (2005) coded citations of think tanks and policy groups in news content. They compared the citations of these groups in media content to citations by members of Congress in the *Congressional Record*. Based on the ideological

leanings of the Representatives and Senators who cited them, these policy groups were placed on an ideological continuum that could be used to assess ideological leanings of media outlets. For example, if a media outlet quoted a think tank that was also quoted by a liberal member of Congress, the authors would see this citation as evidence of the media outlet's liberal bias. Using this measure, almost every media outlet the authors studied was determined to have a bias that was more liberal than the average member of Congress. However, just as striking was the fact that all of the media outlets fell fairly close to the center of the ideological spectrum, defined as the ideological perspective of the average member of Congress. In fact, of the 20 media outlets included in the analysis, only one was deemed to be more liberal than the average Congressional Democrat, and that one was only slightly more liberal. No media outlet was found to be more conservative than the average Congressional Republican. In summary, this study's results indicated that mainstream media outlets are more liberal than the average member of Congress, but more centrist than the average member of either party's Congressional delegation.

The previously cited studies suggest that media bias is extremely difficult to measure empirically. These studies relied either on very subjective judgments made by the authors (which were surely shaped by their own ideological leanings) or on operational definitions of bias that fail to account for all of the possible forms of bias that could emerge in news coverage. For example, Groseclose and Milyo's (2005) approach to studying media bias was based solely on media citations of think tanks and policy groups. Obviously, such groups constitute only a fraction of the sources that journalists quote in news stories. Although it was creative, the method used in this study relied on several assumptions, any of which could introduce error into the analysis if they are not met. The authors assumed that the ratings of



Representatives and Senators' ideological leanings (which came from another organization's analysis) are valid, that policy groups cited by a member of Congress should uniformly reflect that person's ideological leanings, and that citing a particular group in a news story reflects approval of that group's ideology.

Several of Groseclose and Milyo's (2005) counter-intuitive findings raise concerns about whether those assumptions are met or not. For example, the American Civil Liberties Union (ACLU) was labeled as a right-of-center organization, largely because it was frequently quoted by conservative Senator Mitch McConnell to support his opposition to campaign finance regulation. While the ACLU does not take liberal positions as consistently as its conservative critics (e.g., <http://www.stoptheaclu.com>) claim (as evidenced by the organization's agreement with McConnell on the campaign finance issue), the idea that it is, overall, a center-right organization lacks face validity. Similarly, the final analysis shows that the *Wall Street Journal* is the most liberal news outlet included in the study, the only news outlet that is more liberal than the average Democrat in Congress. This finding is based on the *Journal's* news coverage, rather than its editorial page, and it is not surprising that the news coverage would not necessarily reflect the editorial page's conservative perspective. However, the magnitude of the *Journal's* liberal bias found in this study is too great to accept without subjecting it to further scrutiny. As such, the Groseclose and Milyo (2005) study does not seem to provide a terribly precise accounting of media bias. The other content analyses cited above (Domke et al., 1997; Dalton et al., 1998; Waldman & Devitt, 1998; Shah et al., 1999; Niven, 1999; Covert & Wasburn, 2009) faced similar difficulties.

Despite the difficulty of studying media bias empirically, the findings of the studies cited above do have value for understanding the extent of media bias. Overall, they suggest

that media bias does not consistently or overwhelmingly favor liberal or conservative ideology, at least for ostensibly objective media outlets. Non-ideological factors such as candidate popularity and the state of the economy are more likely to bias coverage than partisanship or ideology. Additionally, those studies that do identify some bias (usually for the liberal side) show that the magnitude of this bias is small. Overall, the studies seem to indicate that, if anything, mainstream news media display a centrist (or, possibly, slightly liberal) bias.

The lack of consistent evidence of media bias suggests an important question for scholars of media: If the news media are not biased, why do so many people believe they are? One possibility is suggested in research by Domke, Watts, Shah, and Fan (1999) and Watts, Domke, Shah, and Fan (1999). In these two articles, the researchers compared content analyses of news coverage with public opinion polling during the 1988, 1992, and 1996 United States presidential elections. Over the course of these three elections, public perception that media were biased against conservative candidates consistently increased. However, the authors only found evidence of a pro-Democrat bias during the 1992 election. What they found instead was that news coverage increasingly included claims of liberal bias, usually coming from Republican candidates or party officials. The authors' analysis showed that public perceptions of media bias did not correspond to actual biased news content, but did correspond to the number of times claims of liberal media bias were included in news coverage.

In fact, Domke et al. (1999) found that elite allegations of media bias tended to actually increase following positive coverage of Republican candidates, suggesting that Republicans strategically used periods of positive coverage to make allegations at times

when they were most likely to be reported uncritically. Additionally, in the 1992 and 1996 elections allegations of media bias increased as the Republican candidates' poll numbers dropped. According to the authors, this finding indicates that Republican leaders use allegations of media bias as a rhetorical strategy to discourage citizens from taking news coverage seriously during times when the campaign is going well for the Democratic candidate. Such a strategy would probably be effective, as research by Duck, Terry, and Hogg (1998) indicates that members of a losing political party are more likely to perceive media as biased in order to explain their party's lack of success. This line of research suggests that perceptions of media bias among the public result, in part, from a concerted effort by conservative and Republican political elites to convince the public to be distrustful of the "liberal media."

The findings of Domke et al. (1999) and Watts et al. (1999) suggest one explanation for perceptions of media bias, but they do not necessarily account for all perceptions of bias. Their data suggest that it is rare for media outlets to give voice to those who claim that media have a conservative bias, yet some citizens still believe that media have such a bias. Additionally, their analyses do not account for all of the variation in public perceptions of liberal media bias, suggesting that other theoretical mechanisms are partially responsible for those perceptions. One mechanism that has received a great deal of empirical support is the hostile media effect, which states that partisans see media biased against their own perspective, even when non-partisans would see the coverage as neutral.

The purpose of this dissertation is to strengthen scholarly understanding of the hostile media effect. While previous research has convincingly established the existence of the hostile media effect, less is known about when and why this effect occurs. It is important to

strengthen scholarly understanding of this phenomenon because perceptions of media bias may have substantial effects on citizens' willingness to access and engage political information. Perceptions of bias may cause citizens to avoid certain news media, perhaps even avoiding political information in general. This study will use an experimental design to assess whether the hostile media effect functions differently in response to explicitly ideological as opposed to ostensibly neutral media. Additionally, a number of antecedent variables and consequences of perceived media bias will be examined. While these variables have been examined individually in previous studies, the present study will use multivariate methods to test these variables simultaneously.

### **Hostile Media Effect**

Researchers have long recognized that the effect of a communicative message is based more on how audiences perceive the message than on any objective characteristic of the message itself. For example, Berlo, Lemert, and Mertz (1969) argued that research on source credibility should focus on participant evaluations of credibility, not pseudo-objective traits of credible communicators manipulated by researchers. Stevenson and Greene (1980) extended this logic to the study of media bias, arguing that “*who* observes must be considered simultaneously with *what* is observed. We can understand news consumers' perceptions of bias better if we try to observe it from their perspective” (p. 116). They designed an experiment during the 1976 United States presidential election in which participants read positive and negative news articles about the candidates, Gerald Ford and Jimmy Carter. Although their research design produced results that were difficult to interpret, they did show that the participants processed articles they perceived as biased differently from articles they did not perceive as biased. This finding presaged later research on the hostile media

phenomenon. This section of the dissertation will review the literature establishing the existence of the hostile media effect and then review research on specific variables related to the theory that will be examined in this study.

The hostile media effect was established as a media theory by Vallone, Ross, and Lepper (1985) in their research on perceptions of media coverage of the 1982 civilian massacre in Lebanese refugee camps. This study is seen as the beginning of research on the hostile effect both because it clearly articulated and tested the theory and because it was the first study to use the term “hostile media phenomenon” (Vallone et al., 1985, p. 577). In their study, pro-Arab, pro-Israeli, and neutral viewers watched television news coverage of the Beirut massacre and reported their perceptions of it. Partisans differed from each other and from neutral viewers in their perceptions of the news stories’ overall treatment of Israel, the standards applied to Israel in relation to other countries, the degree of attention focused on Israel’s role in relation to that of other countries, and the perceived strength of the case for Israel minus the perceived strength of the case against Israel. Additionally, pro-Arab viewers differed from neutral and pro-Israel viewers (who did not differ with each other) on the percentage of perceived favorable and unfavorable references to Israel, estimated percentage of neutral viewers who would become more negative toward Israel after viewing the news coverage, and perceptions of the personal views of the editors of the programs. These findings demonstrated the hostile media effect by showing that pro-Israel participants viewed media coverage as biased in favor of the pro-Arab side while pro-Arab participants saw the same media coverage as biased toward the pro-Israel side. Thus, each side saw the content as “hostile” to its point of view.

A number of subsequent studies have further demonstrated hostile media perceptions

in both experimental and survey-based contexts. One of the most comprehensive field-based studies was performed by Dalton et al. (1998). As noted above, these researchers performed a content analysis on newspapers serving a stratified sample of counties in the United States during the 1996 presidential elections. Although they found scant evidence of systematic bias, the survey data showed that some respondents perceived a bias in their newspapers' coverage. While a plurality of respondents perceived no bias, most of those who did see a newspaper bias believed it favored Clinton (with Bush a distant second and Perot and even more distant third). When specific respondents were matched to their newspapers, there was only a very modest (but statistically significant) correlation between perceived bias and the bias found in actual newspaper coverage ( $r = .09$  for news reports,  $.11$  for editorials, and  $.13$  for editorial endorsements). This relationship was strongest for those newspapers that showed less variation in their coverage (presenting a relatively consistent partisan message) and was not present for newspapers with high variation in coverage.

In support of the hostile media effect, party identification had a negative effect on the ability to accurately identify the direction of newspapers' evaluative content ( $\beta = -.14, p < .05$ ) when included in a model with the newspapers' actual evaluative content. The effect of party identification was strongest for participants who reported paying little or no attention to the campaign, smaller but still significant for those who reported paying some attention, and not significant for those who reported paying a lot of attention. Additionally, significant relationships between perceived coverage and actual coverage were found only for those who paid some attention to the campaign, while those who either paid a lot of attention or who paid little or no attention showed no relationship. Although, as noted above, this study does not indicate that newspapers are overwhelmingly biased, it does provide convincing evidence

of the hostile media effect, since party identification is the only variable that had major effects throughout the analysis.

One interesting aspect of the hostile media effect is that it seems to be a reaction that occurs specifically in response to media content. In fact, the hostile media effect could be considered inconsistent with research showing that people tend to assume that other people share their views, a phenomenon sometimes called “biased assimilation” (Lord, Ross, & Lepper, 1979, p. 2098; see also Fields & Schuman, 1976). In light of the hostile media effect, these findings suggest that people perceive media messages as biased against their opinions while perceiving non-media messages as biased in favor of their own opinions. Gunther and Schmitt (2004) examined the difference between media and non-media content by manipulating a stimulus so that it appeared to be either an article from *USA Today* or a student-authored essay (see also Schmitt, Gunther, & Liebhart, 2004). The two versions of the stimulus contained identical text about the issue of genetically modified foods and the participants were recruited from organizations that advocate for each side of that issue. The authors hypothesized that responses to the newspaper article would demonstrate a hostile media perception while responses to the student essay would demonstrate biased assimilation.

The article stimulus was, indeed, perceived as biased against the participants’ views on each side for five out of six of the dependent variables, consistent with the hostile media hypothesis. Depending on the specific dependent variable, there was limited support for the biased assimilation pattern in the essay condition. When the dependent variable was measured in terms of the portrayals of genetically modified foods, opponents of GM foods, and supporters of GM foods, there was no significant difference between the two groups.

When the dependent variables were the percentage of the content that was favorable toward GM foods, percentage that was unfavorable, and the author's bias, the results were consistent with the biased assimilation hypothesis. Interpretation of these results was complicated by the fact that the groups on each side of the issue differed on a number of demographic variables. In order to test whether this difference was due to differences in perceived reach, as hypothesized, the researchers asked participants to assess the likelihood of the stimulus influencing (a) themselves and (b) other neutral people. The hypothesis was that participants would predict that the stimulus would influence themselves more in the direction of their previously held views and influence other people to support the opposing view. This hypothesis held up, as participants in the article condition predicted that the article would have virtually no influence on them and a negative (counter-attitudinal) influence on others, while participants in the essay condition predicted a highly positive (pro-attitudinal) influence on themselves and a less positive influence on others. Thus, the essay was seen as leading to more attitude-consistent persuasion on both the participants themselves and on others, but within each condition the influence on others was expected to be more counter-attitudinal than the influence on the participants themselves.

Gunther and Liebhart (2006) built on Gunther and Schmitt's (2004) study by separating the effects of source and reach on hostile media perceptions. The authors speculated that the hostile media effect might depend on audience members believing that the stimulus would be read by large numbers of people who could be swayed by biased coverage. If they were correct that the effect depended on the perceived reach of the message, then an essay ostensibly written by a journalist but not published in a far-reaching media source should not invoke hostile media perceptions. In order to test this possibility,



the stimulus was presented as either a class essay or an article in *USA Today* and the source was also manipulated by telling participants that the stimulus was written by either a student or a journalist. As the authors had hypothesized, participants in the journalist condition perceived the stimulus as more counter-attitudinal than did participants in the student condition and participants in the *USA Today* condition perceived it as more counter-attitudinal than did participants in the essay condition. In other words, the hostile media effect occurred if the stimulus was presented as a news article *or* if the author was said to be a professional journalist. There seems to be something about news media and journalists that causes partisans to perceive bias, even if the message is not published in a media outlet.

The conclusion that the hostile media phenomenon is specifically related to media content was further supported by Huge and Glynn (2010). These researchers found that supporters of candidates in a gubernatorial election perceived roughly the same magnitude of media bias against their preferred candidate whether the media outlet in question was a major metropolitan newspaper or a smaller-circulation newspaper. While previous research suggests that the hostile media effect is dependent on the perceived reach inherent in media content (as opposed to other types of communicative messages), Huge and Glynn's finding suggests that the media outlet does not need to have a particularly wide reach in order for it to invoke the hostile media effect.

By contrast, Gunther, Miller, and Liebhart (2009) found that an article was perceived as less counter-attitudinal when it was presented as being from a local newspaper as opposed to a national newspaper (and even less counter-attitudinal when it was presented as a student essay). However, this study's results are difficult to interpret, as the stimulus article was uniformly perceived as pro-attitudinal regardless of the ostensible source. Thus, it could be

said that the participants actually perceived the local newspapers (and, to an even greater extent, student essays) as being biased in a way that was consistent with their attitudes, while they saw the national newspapers as more neutral. Nevertheless, regardless of whether a specific media outlet's reach affects the extent to which its content is perceived as counter-attitudinal, these studies support the assertion that the hostile media phenomenon is triggered by media content, such that people view media content as biased but non-media messages as being consistent with their attitudes.

The research cited thus far has established that people tend to view media content as biased against their opinions, at least in regards to issues that are important to them. It has also established that this effect is specific to media content. Messages that are not presented as coming from media sources are perceived as either being unbiased or biased in a direction that supports the audience member's opinion. Based on this research, the following hypothesis is proposed:

**H1:** Participants with a non-neutral attitude on an issue will see media coverage of that issue as biased toward the other side.

**Influence of media outlet ideology.** One of the major goals of this study is to compare perceptions of media that take an explicit ideological perspective and perceptions of media that are ostensibly neutral. Previous experimental research on the hostile media effect has used stimuli that were (or appeared to be from) ostensibly neutral sources such as *USA Today* or network television news programs. This research approach reflects the ideal of objectivity that dominated most news media throughout the twentieth century. Recent decades have seen the emergence of many new media outlets that do not necessarily share that ideal. Cable news, blogs, talk radio, and other media outlets offer consumers content

that is often transparently ideological or partisan in nature. These new media options resemble earlier eras in American history, when media were highly partisan (Schudson, 1999). Considering these changes in the media landscape, it is necessary to reexamine the hostile media effect to see if people react to partisan news sources the same way they react to neutral news sources.

The most obvious expectation would be that audience members would see a liberal bias in a media outlet that labels itself “liberal” and a conservative bias in a media outlet that labels itself “conservative.” However, research has not supported this assumption consistently. While they did not examine the hostile media effect directly, Austin and Dong (1994) studied the effect of source credibility on judgments of news story believability. They presented their stimulus as an article from either the *New York Times* (high credibility), the *Star* (low credibility), or the fictional *Louisville Chronicle* (ambiguous credibility). They found that the content of the article influenced judgments of believability but news outlet did not. This finding suggests that perceptions of believability (and, perhaps, bias) are not strongly affected by factors related to the news outlet itself.

Coe et al. (2008) examined the effects of media outlet ideology more directly. They had self-identified liberal and conservative participants view comparable segments from CNN, Fox News, or *The Daily Show*. As hypothesized by the authors, conservatives saw the segments from *The Daily Show* as biased and also rated *The Daily Show* in general as a biased program. Liberals said they believed Fox News was generally biased, although they did not rate the specific segments used in the experiment as biased. Neither conservatives nor liberals saw CNN as biased. Counter to expectations, liberals also saw a high level of bias in *The Daily Show*. Although suggestive, the findings of this study are difficult to

generalize. *The Daily Show* is very different from CNN or Fox News. The former is a comedy show designed to entertain that generally makes no attempt to present a neutral or balanced portrayal of politics. By contrast, CNN and Fox News present themselves as objective (or, in Fox's case, "fair and balanced") news sources that only air opinionated programming during certain hours of the day. While critics may question whether either cable station is truly objective, their biases will tend to be more subtle than those of *The Daily Show*. This limitation is especially salient since the researchers used regular news clips from CNN and Fox News, rather than excerpts from their more opinion-oriented programming. Had the stimuli come from CNN's *Lou Dobbs Tonight* or Fox News's *The O'Reilly Factor*, the perceptions of bias might have been comparable to those of *The Daily Show*.

In another study that did not support the expectation that perceptions of media bias would be directly influenced by the stated bias of a media outlet, Arpan and Raney (2003) had participants read an article about misconduct involving football players from (in equal amounts) their own school and their rival school. The article was presented as being from (1) the participants' hometown newspaper, (2) the rival school's hometown newspaper, or (3) a third, presumably neutral, city's newspaper. Across conditions, participants perceived the article to be biased against the participants' school, as predicted by the hostile media effect. Although participants may have been expected to see their hometown newspaper as the least biased and rival school's newspaper as most biased, they actually saw the *neutral* newspaper as the most biased. The differences between the perceived biases of the hometown and rival newspapers were not generally significant. These surprising findings may have resulted from the participant's expectations. Participants may have evaluated the bias of the rival

newspaper's article relative to how biased they expected it to be. When it was not overwhelmingly biased, their surprise may have led them to reduce their reported perception of bias.

Gunther et al. (2009) manipulated the extent to which the stimulus article's source would be expected to support participants' positions. In their study, participants were recruited who opposed genetic research on wild rice. This position is largely associated with Native American activism, and the participants were all either members of Native American tribes or non-tribe members who supported Native American causes. The source of the article was manipulated so that it was either written by a Native American writer for a publication that catered to a Native American readership or by a non-native writer for a general-interest publication. The study showed that non-native participants perceived the article as more sympathetic to their cause when it was written by a Native American writer, while Native American participants were not affected by this source variable. This finding suggests that the relationship between expected source bias and actual perceived biases is complex. However, it supports the finding of other studies that at least some audience members will perceive a bias that is consistent with a media outlet's purported ideology or affiliation. The authors suggested that their activist participants may have generally interpreted the stimuli as attitude-consistent simply because the issue of genetic research on wild rice is rarely covered in the mass media. According to this interpretation of the data, the participants were pleasantly surprised to see an issue that is so important to them covered by the news media, so they were predisposed to interpret this coverage positively.

D'Alessio (2003) tested the effects of expectations of bias. Before exposing them to the stimulus article, he told some of his participants that the article was "potentially biased"

(p. 286). This manipulation only increased perceptions of bias when the article was about the performance of President George W. Bush. In fact, there was limited evidence that this potential bias cue reduced perceptions of bias when the article dealt with campus parking or campus housing. As with the Arpan and Raney (2003) findings reported above, D'Alessio's finding may have resulted from violated expectations. The cue that an article might be biased may have made participants expect an overwhelming bias. Even if participants saw the article as biased, this bias was more subtle than the participants expected, resulting in reduced perceptions of bias.

The present study will directly measure the effect of media outlet ideology on perceptions of bias. While some studies, particularly Coe et al. (2008) have offered some insight into this effect, these studies have not maintained the level of control that will be present in the current study. Coe et al. (2008) used actual media content from well-known media outlets. As a result, the effects they found could have been due to other factors besides the sources' ideological leanings, such as participants' existing attitudes toward the media outlets or the content of the individual news stories. The participants may have perceived biases because the content really was biased. The present study will hold content constant while only manipulating the media outlet's stated ideology. This design will make it possible to separate media ideology from other factors.

Even though the evidence is somewhat mixed, there is limited evidence that a media outlet that expresses an explicit ideological leaning will be perceived as more biased than a media outlet that does not express an explicit ideological bias. The following multi-part hypothesis is proposed:

**H2a:** Relative to a website with no ideological identification, a website that labels

itself “liberal” will elicit greater perceptions of bias from conservative participants and lower perceptions of bias from liberal participants.

**H2b:** Relative to a website with no ideological identification, a website that labels itself “conservative” will elicit greater perceptions of bias from liberal participants and lower perceptions of bias from conservative participants.

**H2c:** Moderate participants will perceive a website that labels itself “conservative” or “liberal” as more biased than a website with no ideological identification.

**Psychological causes of hostile media perceptions.** In their original hostile media study, Vallone et al. (1985) offered two possible explanations for this phenomenon, both of which were supported by the data. The cognitive explanation was that partisans have a set of assumptions supporting their viewpoints and they perceive bias when news coverage does not reflect that set of assumptions. This explanation is supported by the fact that, among partisans, higher levels of knowledge about the Middle East were associated with greater perceptions of bias (among neutrals, the opposite was true). The perceptual explanation is that partisans on each side actually “saw” the news coverage differently. This explanation was supported by questions that measured perceptions of the news coverage itself, such as the percentages of favorable and unfavorable references to Israel. Both knowledge of the Middle East situation and involvement in the issue correlated with hostile media perceptions. It was not possible to determine which variable had more effect, in part because they were highly correlated with each other.

Subsequent research has suggested a number of psychological explanations for the hostile media effect. Most research has identified three major mechanisms that could account for hostile media perceptions (Giner-Sorolla & Chaiken, 1994; Schmitt et al., 2004).

One is “selective recall” (p. 625), in which people simply remember more counter-attitudinal information than pro-attitudinal information from a news story, leading them to erroneously believe that the story contained more of the former than the latter. The second proposed mechanism is “selective categorization” (p. 625), in which people on each side of an issue remember the same content but actually evaluate the valence of the content differently, with each person interpreting the content in a way that supports a perception of counter-attitudinal bias. In other words, people on each side of an issue feel that certain story elements support the side opposite to theirs, and this selective characterization causes people to perceive that the story contains more counter-attitudinal than pro-attitudinal elements. These first two mechanisms are roughly equivalent to the perceptual explanation offered by Vallone et al. (1985). The third mechanism is the use of “different standards” (p. 626), and it is more consistent with the cognitive explanation suggested by Vallone et al. According to this explanation, people on each side of the issue remember the same content and interpret its valence in the same way, but they have different opinions about which pieces of information should have been included in the story. All of the elements of the story that support the audience member’s position, as well as neutral elements, are deemed legitimate but elements that do not support the preferred position are deemed to be unacceptable, inaccurate, or irrelevant. In this case, perceived bias is based on a belief that the author of the news story went out of his or her way to include irrelevant or inaccurate information in order to sway perceptions of the issue. In the first test of these psychological mechanisms, Giner-Sorolla and Chaiken (1994) found limited support for the selective categorization and different standards mechanisms, but their research design did not allow for separating the influence of the three mechanisms in an unambiguous way.



Schmitt et al. (2004) used the same research design reported by Gunther and Schmitt (2004) and measured all three of these mechanisms as possible explanations for the hostile media effect. The selective recall explanation was not supported, as participants on each side of the genetically modified foods (GMF) issue recalled the same number of positive and negative elements from the stimulus. The researchers also presented participants with specific excerpts from the article they had just read and asked them to categorize these excerpts as supporting or opposing GMF. In support of the selective categorization mechanism, participants who opposed GMF were more likely to see the excerpts as supporting GMF. This result was evident when the stimulus was presented as an article from *USA Today* but not when it was presented as a student essay, indicating that this mechanism specifically operates in regards to media content. Although this result was only marginally significant after controlling for age and education, it does offer some support for the selective categorization explanation. Finally, participants were also asked to assess the accuracy of the excerpts. Participants were less likely to label an excerpt as accurate when they believed that it contradicted their beliefs. However, this difference was consistent whether the stimulus was presented as a newspaper article or a student essay. This finding indicates that people have a general tendency to use different standards when evaluating pro-attitudinal and counter-attitudinal information, but the lack of a difference between the newspaper and essay conditions suggests that this tendency is not an important mechanism contributing to the hostile media effect. This study supports selective categorization as the psychological mechanism underlying the hostile media effect, although the researchers admit that they cannot prove that selective categorization leads to perceptions of bias rather than perceptions of bias leading to selective categorization.

Overall, current research seems to support selective categorization as the main psychological mechanism behind the hostile media effect. The comparison between the selective categorization and different standards mechanisms was replicated using more stringent tests by Gunther and Liebhart (2006). The selective categorization mechanism was also supported by Chia, Yong, Wong, and Koh (2007). While it is possible that other psychological mechanisms are at work in the hostile media effect, the case appears to be settled that, among the three mechanisms that have been proposed, selective categorization is the only one with clear empirical support. Based on this research, the following hypothesis is proposed:

**H3:** Perceptions of media bias will be mediated by the extent to which participants selectively categorize specific excerpts of the website's content as favoring the other side of the issue.

**Antecedents of the hostile media effect.** The literature is clear that the hostile media effect does not occur uniformly for all audience members at all times. Hostile media perceptions seem to depend on a variety of factors related to both the individual audience member and the nature of the issue under discussion. Research has shown that not all issues invoke hostile media perceptions to the same extent. For example, Giner-Sorolla and Chaiken (1994) found clear evidence of a hostile media effect for news coverage of the Israeli-Palestinian conflict but the same participants did not show a hostile media effect for news coverage of abortion. It would seem that the hostile media effect is more or less likely to occur based on characteristics of the issue under consideration, the individuals viewing the content, or a combination of the two. This section will summarize previous research that has identified specific antecedents of the hostile media effect. These antecedents will all be

measured in the present study.

In addition to the Middle East conflict (Vallone et al., 1985; Perloff, 1989; Giner-Sorolla & Chaiken, 1994; Tsfati & Cohen, 2005; Tsfati, 2007), the hostile media effect has been demonstrated in response to news coverage of the war in Iraq (Choi, Watt, & Lynch, 2006), the conflict between Bosnian Serbs and Muslims (Matheson & Dursun, 2001), environmental issues (Christen & Huberty, 2007), physician-assisted suicide (Gunther & Christen, 2002), labor disputes (Christen, Kannaovakun, & Gunther, 2002), radon gas (Gunther & Christen, 2002), use of animals in laboratory research (Gunther & Chia, 2001; Gunther, Christen, Liebhart, & Chia, 2001), genetically modified organisms (Gunther & Schmitt, 2004; Schmitt et al., 2004; Gunther & Liebhart, 2006), stem cell research (Hwang, Pan, & Sun, 2008), government surveillance of citizens (Hwang et al., 2008), social security (Hwang et al., 2008), gender issues in academia (Coe et al., 2008), student housing (D'Alessio, 2003), plans to build casinos in Singapore (Chia et al., 2007), and South Korea's National Security Law (Choi, Yang, & Wang, 2009). Hostile media perceptions have also been shown for news coverage of specific elections or politicians (Dalton et al., 1998; D'Alessio, 2003; Coe et al., 2008; Huge & Glynn, 2010) and social groups, such as political parties and ethnic groups (Gunther, 1992). In contrast, several studies have found limited support for a hostile media effect in regards to news coverage of abortion (Giner-Sorolla & Chaiken, 1994; Kim & Pasadeos, 2007; *cf.* Gunther & Lasorsa, 1986). Gunther and Lasorsa (1986) failed to find hostile media perceptions of coverage of hunger in the United States, school prayer, and nuclear arms and, as noted above, Gunther et al. (2009) failed to find true hostile media perceptions for the issue of genetic research on wild rice.

Two issues were chosen for the present study: abortion and government involvement

in the national economy. These issues were chosen because they are salient in contemporary political discourse. Although abortion was not a highly visible issue during the 2008 presidential campaign, it is always a salient issue for many citizens (see Miller, 2008). The economy has been a particularly salient issue since the global recession that began in late 2007 (see, e.g., Pew Research Project for the People & the Press, 2010).

These issues were also chosen because they would seem to have clear liberal and conservative sides. As such, it is possible to predict which direction each media outlet should favor if it is biased in the direction of its stated ideology. The conservative media outlet should be expected to show a bias against abortion and in favor of free-market economic solutions, while the liberal media outlet should be expected to show the opposing bias.

Based on the issues that have produced hostile media perceptions in the past, a number of possible antecedents are suggested. These issues are all likely to invoke strong attitudes on both sides, which is necessary since, by definition, the hostile media effect only comes into play for people who have at least a moderately strong opinion on the issue discussed in a news story. Many of these issues are also associated with strong group identifications, as people are likely to associate their opinions on these issues with their identities as “Republicans,” “Democrats,” “environmentalists,” “college students,” etc. Additionally, people are likely to associate their opinions on these issues with their values or morals. All of these factors could explain why these specific issues seem to lead to hostile media perceptions.

Strength of opinion is perhaps the most obvious potential antecedent to the hostile media effect. Since people with no opinion on an issue do not show a hostile media effect, and people with strong opinions have been shown to demonstrate hostile media effects, it

seems plausible that there is a correlation between attitude strength and the strength of perceived biases. Gunther (1988) found a relationship between attitude extremity on an issue and trust in newspaper coverage of that issue. Survey respondents who held somewhat strong views (higher or lower than the midpoint but not at either extreme) on the issues of abortion, United States policy toward Latin America, and welfare showed higher levels of trust in media coverage of those issues than did respondents who had moderate or extreme views on those issues. The author speculated that people with moderate views had little incentive to pay close attention to media coverage of these issues, so their trust in that coverage was based on a general sense of skepticism toward news media rather than actual media content. People with extreme views on the issues paid attention to media coverage, but, as the hostile media hypothesis predicts, they showed low levels of trust because the news coverage they saw did not reflect the way they perceived the issue. Those people whose views were somewhat strong paid attention to media coverage but did not see it as largely discrepant from their own views, resulting in higher levels of trust in the media coverage.

Hwang et al. (2007) examined attitude extremity as an antecedent of the hostile media effect and found support for this relationship only for the issue of government surveillance of American citizens. They did not find this relationship for the issues of stem cell research or social security reform. Interestingly, Hwang et al. found evidence that ideological extremity (operationalized as the average between an individual's identification with their political party and their identification as either a liberal or conservative) was positively related to perceptions of media bias for stem cell research and social security reform, but not domestic surveillance. Thus, for all three of the issues they examined, perceptions of media bias were

related to either attitude extremity or general ideological extremity, but never to both. It is not immediately clear what differences between these issues would cause this discrepancy, but it is clear that attitude and ideological discrepancy influence the hostile media effect only for some issues.

Another antecedent of the hostile media effect examined in some studies is group identification. Gunther (1992) found that levels of identification with various groups (Republicans, Democrats, Catholics, born-again Christians, African-Americans, Hispanics, and labor union members) were consistently correlated with perceptions of media bias against those groups. In fact, group identification was the only variable in the analysis that consistently predicted perceptions of bias. General skepticism, skepticism toward media, demographic variables, and objective measures of the respondents' hometown newspapers were related to perceptions of bias only in regards to a few of the groups included in the study.

Other studies have echoed Gunther's (1992) finding that group identification is an antecedent of the hostile media effect. Matheson and Dursun (2001) found similar results in their study of Serbs and Muslims who had recently emigrated to Canada. Participants' level of identification with their in-groups and the extent to which they perceived differences between their groups and out-groups were both positively related to perceptions of bias in general media coverage of the Bosnian conflict and perceived bias of news articles supplied by the researchers as an experimental stimulus. Duck et al. (1998) found that higher levels of identification with each of Australia's two major political parties lead to greater perceptions of media bias against that party. Gunther et al. (2009) found similar results for participants who felt higher levels of identification with Native American groups that opposed genetic

research on wild rice.

Eveland and Shah (2003) took a different approach to examining the effect of group identification on hostile media perceptions. Their survey data indicated that strength of party identification was one of several variables that predicted perceptions of media bias. In addition, they asked their survey respondents how often they engaged in political discussions with people who shared their views and found that this variable was correlated with perceptions of media bias. By contrast, frequency of political discussion in general was not related to perceptions of bias. Interestingly, an interaction was found indicating that this relationship was only present for Republicans. Democrats did not show a relationship between like-minded discussion and perceptions of media bias. These findings suggest that Americans who identify strongly with the Republican Party and engage in frequent discussions with other Republicans are more likely to believe that news media are biased. These relationships may reflect the findings of Domke et al. (1999) that accusations of liberal bias made by politicians and pundits convince conservative members of the general public that media have a liberal bias. Interpersonal discussions among conservative Republicans reinforce this belief and strengthen the perception of liberal media bias.

A third potential antecedent of hostile media perceptions is the extent to which an individual's position on an issue relates to his or her morals or values. For each of the three issues they examined (stem cell research, domestic surveillance, and social security reform), Hwang et al. (2007) asked participants how much their positions on those issues were based on their core values. They defined this measure as "value involvement" (p. 85). The authors found a positive relationship between value involvement and perceptions of biased media coverage of all three issues. This relationship was further supported by Choi et al. (2009).

This finding suggests that values need to be investigated more thoroughly in research on the hostile media effect. Previous research on political communication has shown that values have important effects on the processing of political messages. For example, people use different decision-making strategies for voting decisions involving issues that invoke values than those involving issues that do not (Shah, Domke, & Wackman, 1997; Domke, Shah, & Wackman, 1998). Personal values influence attitudes on issues, regardless of how the issue is framed by news coverage (Shen & Edwards, 2005).

Closely related to the concept of values is the variable of moral conviction, or “a strong and absolute belief that something is right or wrong, moral or immoral” (Skitka, Bauman, & Sargis, 2005, p. 896). Although morals and values are not the same thing (Langer & Cohen, 2005), it is plausible that both are relevant to hostile media perceptions. Skitka et al. found in both correlational and experimental studies that people tend to want to avoid contact with people who disagree with them on opinions that are held with a sense of moral conviction. People showed fewer tendencies to want to avoid contact with people who disagreed with them on issues on which they held strong attitudes but no moral mandate. Participants who felt a moral mandate on an issue showed an overall tendency to want to avoid people with whom they disagreed, but they especially showed a desire to avoid such people in their intimate personal relationships. There was no difference between personal and non-personal relationships when no moral mandate was present. Additionally, participants showed less ability to fruitfully discuss an issue on which they felt a moral mandate, even though the discussion only required deciding how the issue would be resolved, and did not even require expressing their opinions. The same result was not found for issues on which people felt strongly but did not feel a moral mandate. Additionally,



moral mandates were found to be issue-specific. Although some people show a stronger general tendency toward holding attitudes with moral conviction, all respondents felt moral mandates on some issues. The relationship between feeling a moral mandate on an issue and wanting to avoid close contact with people who felt differently on that issue was just as strong regardless of a respondent's general tendency to feel moral mandates. Just as values were found by Hwang et al. (2008) to contribute to hostile media perceptions, it is likely that moral convictions lead to hostile media perceptions. Since people generally want to avoid contact with people who hold views that contradict their moral convictions, they will probably also react negatively toward news content that does not exactly match their moral convictions.

Another possible antecedent to the hostile media effect is preconceptions of media bias. Giner-Sorolla and Chaiken (1994) found evidence that people were more likely to see media coverage of the Israeli-Palestinian conflict as biased if they entered the experiment already believing that media were generally biased. This relationship was fairly weak and only present for some of their dependent variables. Gunther (1992) found limited support for the effect of media skepticism on perceived bias in coverage of social groups. More recently, Hwang et al. (2008) found that general mistrust of media had a positive correlation with perceptions of media bias for all three issues they examined.

An additional possible antecedent is media cynicism. Political communication researchers generally discuss cynicism as a distrust of government and political institutions (e.g. Kaid, McKinney, & Tedesco, 2000; Kaid, Postelnicu, Landreville, Yun, & LeGrange, 2007). Cynical people are likely to feel a sense of political alienation, as if their interests and views are not represented by government (Levi & Stoker, 2000). This general sense of

political alienation could be transferred to media. If cynical citizens assume that their viewpoints are not adequately represented in the halls of government, they may also assume that their viewpoints are not going to get fair treatment by reporters. Consequently, cynical citizens may interpret media content as more biased than non-cynical citizens. Choi et al. (2009) supported this assertion in their research, which found that the related variable of media skepticism predicted hostile media perceptions. However, the cynicism variable, as traditionally operationalized, specifically measures cynicism toward the government, but there is no reason to believe that a cynical view towards the government is necessarily correlated with a cynical view toward media. Consequently, this variable will be adapted into a measure of media cynicism using a variation of the traditional government cynicism scale. Another political variable that could be related to perceptions of bias is political tolerance. This variable assesses the extent to which people are willing to allow people with whom they disagree to express their opinions without sanction (see Finkel, Sigelman, & Humphries, 1999, for a review). People who express low levels of political tolerance could be expected to perceive media content as hostile because they have a narrower sense of what is acceptable to say in political discourse. Thus, they may be more likely to selectively categorize content from the stimulus articles as biased against their points of view. A number of antecedents of the hostile media effect have been identified by previous research, but not many studies have compared these antecedents to each other in the same research design. The present study will include all of these factors in the analysis and also test the hostile media effect across several issues in order to determine whether different antecedents might be relevant for different political issues. It is possible that some of these antecedents will not be significant when they are all analyzed simultaneously, but since they have been supported by

past research, this study will proceed under the assumption that these antecedents will be found to influence the hostile media effect. The following multi-part hypothesis is proposed:

**H4a:** Attitude extremity will predict perceptions of a website's bias.

**H4b:** Group identification with political party and political ideology will predict perceptions of a website's bias.

**H4c:** The extent to which an individual's position on an issue connects with their moral conviction and values will predict perceptions of a website's bias.

**H4d:** Preconceptions of general media bias will predict perceptions of a website's bias.

**H4e:** Media cynicism will predict perceptions of counter-attitudinal bias in the stimuli articles.

**H4f:** Political tolerance will predict perceptions of counter-attitudinal bias in the stimuli articles. The variety of issues that has been addressed in the stimuli used in previous hostile media experiments suggests that different antecedents might be relevant to hostile media perceptions for different issues. Unfortunately, no theoretical rationale has been developed to explain which antecedents are likely to affect perceptions of media coverage of which issues. The present study offers the possibility of developing at least a preliminary theoretical rationale, through the following research question:

**RQ1:** Which political issues invoke each of the antecedents cited in Hypothesis 4?

**Consequences of the hostile media effect.** Perceptions of media bias could have profound implications for the ways in which citizens use news media to become more informed about politics. Some of these possible consequences have been examined empirically while others have only been assumed. For example, perceptions of bias would be

expected to lead to reduced perceived credibility of the news outlet. However, in some cases this relationship is only assumed, with the two variables not even being measured separately (e.g. Choi et al., 2006). Kim and Pasadeos (2007) measured perceived bias and perceived credibility separately but did not compare the two variables. Instead, they treated them both as dependent variables, examining how they were influenced by participant attitudes and actual article biases. More research is needed that will examine the relationship between perceived bias and perceived credibility more directly.

One reason that perceptions of media credibility could be an important consequence of the hostile media effect is that people who doubt the credibility of news media may engage in selective exposure or avoid keeping up with current affairs at all. Democracy relies on citizens having at least a base level of knowledge about current issues and how politicians feel about them. Ideally, citizens would get this information from either neutral sources or from a variety of partisan sources that represents a wide range of viewpoints.

Tsfati and Cohen (2005) identified much more serious consequences of reduced media credibility (or trust) due to hostile media perceptions. They surveyed Jewish settlers in the Gaza Strip about their perceptions of media coverage of their settlements. They found that perceptions of anti-settlement media bias led to less trust in media, which is consistent with the assumptions of other research. They also found that trust in media was positively correlated with trust in democracy, and trust in democracy was negatively correlated with willingness to violently resist government attempts to relocate the settlers. Thus, perceptions of media bias indirectly lead to a willingness to violently resist the government. While this effect was indirect and fairly small in magnitude, it is troubling that the hostile media effect could have such a potentially destabilizing influence. Such an extreme destabilizing effect is

not likely to occur in fairly stable democracies, but in an already volatile political context like the Gaza settlements perceptions of media bias could lead to dangerous results. Regardless of one's attitude toward the Gaza settlements, it is never encouraging to hear citizens express a willingness to violently resist the actions of their democratically elected government.

In addition to assessments of media credibility, Coe et al. (2008) found that perceptions of media bias can influence perceptions of how interesting and informative a program is. *The Daily Show*, which both liberal and conservative participants had rated as more biased than CNN or Fox News, was seen as less interesting and informative than the two cable news stations. Similarly, conservatives rated Fox News as more interesting than liberals, which corresponds to the different perceptions of bias found for liberals and conservatives. These findings indicate that people are more interested in and feel more informed by media content that they do not perceive as biased. The authors note that their findings have both positive and negative normative implications. The fact that liberals and conservatives both saw *The Daily Show* as biased suggests that people can look past their own predispositions to identify bias when it is clearly present. On the other hand, the finding that conservatives did not see Fox News as biased suggests that people may overlook actual biases when they support their predispositions. The different findings for *The Daily Show* and Fox News may reflect the format of the programming. Fox News's traditional television news format might allow conservative viewers to convince themselves that the programming is unbiased while *The Daily Show's* satirical format does not allow liberals to make the same kind of rationalization. The finding that perceptions of bias affected perceptions of the programs' abilities to inform and interest participants suggests that these implications are important, as they are likely to affect news consumption behaviors.

Research by Hwang et al. (2008) found that perceptions of media bias led to “media indignation” (p. 83), which they defined as the extent to which participants reported that media coverage made them feel contemptuous, angry, disgusted, and resentful. Interestingly, increased media indignation could be positive, as it lead to an increased “willingness to engage in discursive activities” (p. 83), ranging from signing a petition to meeting with an elected official to discuss the issue. This finding suggests that hostile media perceptions may have normative benefits.

Reader and Riffe (2006) identified a possible negative consequence of hostile media perceptions, but did not find empirical support for it. They cited anecdotal evidence that people who perceive media bias in a newspaper’s Letters to the Editor section would support the idea that editors should refuse to publish letters that take controversial positions. Such an effect would be negative, as it would indicate increased support for media self-censorship. However, their survey data showed that this attitude was not widespread. In fact, people who held strong opinions on the issues of gay rights and the war in Iraq showed strong support for the publishing of letters on those topics even when the letters opposed their positions. Support for publishing these letters was weaker among those with moderate beliefs, but was still generally high across all respondents. These findings are encouraging, as they suggest that hostile media perceptions do not necessarily lead to support for media self-censorship.

Perhaps the best documented consequence of the hostile media phenomenon is its influence on perceptions of public opinion. A number of studies have investigated this possible consequent under the assumption that people either assume that media content reflects majority opinion or they assume that media will sway the opinions of others. As a result, people who perceive media as biased against their opinions should expect the general

public to also hold an opinion that is counter to their own. Contrary to this expectation, there is considerable evidence that even people who perceive media bias on a particular issue believe that public opinion matches their own opinion (Christen et al., 2002). However, more rigorous studies have used structural equation modeling or mediational analysis to separate the influences of this general projection effect and the hostile media effect (Gunther & Chia, 2001; Gunther et al., 2001; Gunther & Christen, 2002; Choi et al., 2009; cf. Huge & Glynn, 2010). These studies show that there are actually two competing processes taking place. The projection effect leads people to generally assume that the general public agrees with them on issues. However, viewing news content that they perceive as biased causes people to shift their estimation of public opinion away from their own opinions. This latter effect is not as strong as the projection effect, so the net result is that people still show a tendency to assume that the public agrees with them, but this projection effect is weaker than it would have been without the effect of the “biased” media. Christen and Huberty (2007) found mixed evidence that the effect of hostile media perceptions on perceived public opinion might be related to the perceived reach of the medium.

In some cases, effects of perceived media bias on perceived public opinion can have additional consequences. Tsfati (2007) found that hostile media perceptions can lead to social alienation. As noted above, much research on the hostile media effect has focused on perceived bias against social groups. Members of these groups who believe that the media are biased against them may consequently believe that public opinion is biased against them. Tsfati found that Arabs living in Israel perceive that the media there are biased against them. This perception of bias has a positive correlation with perceptions that Israeli public opinion is biased against Arabs, which in turn leads to feelings of social alienation.

The research reviewed in this section suggests a number of possible consequences of the hostile media effect. These consequences include decreased media credibility and trust (which may lead to decreased trust in government), perceptions of how interesting and informative a news program is, media indignation, and perceptions that public opinion differs from your own opinion. As with the antecedents of the hostile media perception discussed above, these consequences have generally been studied in isolation from each other. The present study will examine these potential consequences together in the same research design. The following multi-part hypothesis is proposed:

**H5a:** Perceptions of bias will lead to decreased perceptions of a website's credibility.

**H5b:** Perceptions of bias will lead to decreased ratings of how interesting a website is.

**H5c:** Perceptions of media bias will lead to decreased ratings of how informative a website is.

**H5d:** Perceptions of bias will lead to greater media indignation, which will lead to greater willingness to engage in discursive activities supporting the participant's position.

**H5e:** Perceptions of bias will lead to perceptions that public opinion matches the media outlet's bias.

As with the antecedents of the hostile media effect that were cited above, it is likely that the consequences of hostile media perceptions vary by issue. For this reason, the following research question is asked:

**RQ2:** Which political issues invoke each of the consequences cited in Hypothesis 5?



## Summary and Review of Hypotheses

While allegations of media bias have become a common element of political discourse, empirical research has failed to provide evidence of consistent systematic ideological biases. Of course, many media do contain ideological biases, but research indicates that these biases vary across media and contexts. Research suggests that people perceive bias in media content whether it is actually there or not. The hostile media hypothesis says that people with strong feelings about an issue perceive media coverage of that issue as biased against their opinions. A number of psychological mechanisms have been suggested to explain the hostile media effect, but the only mechanism that has received consistent support is selective categorization. The hostile media effect does not occur for all people and for all issues, and a number of antecedent conditions have been suggested to account for the contexts in which this effect is likely to occur. One important question to consider in the current media landscape is how media that profess a specific ideological leaning are perceived differently from media that maintain ostensive neutrality. Finally, a number of consequences of the hostile media effect have been identified.

Five hypotheses and two research questions have been proposed for examination in this study. As a review, these hypotheses and research questions are the following:

**H1:** Participants with a non-neutral attitude on an issue will see media coverage of that issue as biased toward the other side.

**H2a:** Relative to a website with no ideological identification, a website that labels itself “liberal” will elicit greater perceptions of bias from conservative participants and lower perceptions of bias from liberal participants.

**H2b:** Relative to a website with no ideological identification, a website that labels

itself “conservative” will elicit greater perceptions of bias from liberal participants and lower perceptions of bias from conservative participants.

**H2c:** Moderate participants will perceive a website that labels itself “conservative” or “liberal” as more biased than a website with no ideological identification.

**H3:** Perceptions of media bias will be mediated by the extent to which participants selectively categorize specific excerpts of the media content as favoring the other side of the issue.

**H4a:** Attitude extremity will predict perceptions of a media outlet’s bias.

**H4b:** Group identification with political party and political ideology will predict perceptions of a website’s bias.

**H4c:** The extent to which an individual’s position on an issue connects with their moral conviction and values will predict perceptions of a website’s bias.

**H4d:** Preconceptions of general media bias will predict perceptions of a website’s bias.

**H4e:** Media cynicism and will predict perceptions of counter-attitudinal bias in the stimuli articles.

**H4f:** Political tolerance will predict perceptions of counter-attitudinal bias in the stimuli articles.

**RQ1:** Which political issues invoke each of the antecedents cited in Hypothesis 4?

**H5a:** Perceptions of bias will lead to decreased perceptions of a website’s credibility.

**H5b:** Perceptions of bias will lead to decreased ratings of how interesting a website is.

**H5c:** Perceptions of media bias will lead to decreased ratings of how informative a

website is.

**H5d:** Perceptions of bias will lead to greater media indignation, which will lead to greater willingness to engage in discursive activities supporting the participant's position.

**H5e:** Perceptions of bias will lead to perceptions that public opinion matches the media outlet's bias.

**RQ2:** Which political issues invoke each of the consequences cited in Hypothesis 5?

## **Chapter II: Methods**

This study used an experimental design to test the hypotheses and answer the research questions. All stimuli and questionnaires were administered on computers using the Qualtrics online survey software. After giving informed consent, participants answered questions measuring the hypothesized antecedent variables and then viewed news articles on two different issues. They were told that the articles were from a new online news site that was being tested. Participants were randomly assigned to one of three conditions in which the purported nature of the website was manipulated. It was either described as a news website designed for college students (the neutral condition), conservative college students (the conservative condition), or liberal college students (the liberal condition). After reading each news story participants answered additional questions.

### **Participants**

Participants for this experiment were students and staff at the University of North Carolina at Chapel Hill and Radford University in Radford, VA. Data were collected between July 2009 and April 2010. Participants, most of whom were students at the two universities, were recruited through flyers posted on the two campuses, classroom visits by the researcher, and a campus-wide email. Additionally, a few participants were recruited from student organizations that are involved in political issues, such as the Young Democrats and College Republicans. Participants were recruited from these various groups in an attempt to ensure that there was significant variance in the participants' preexisting opinions

on the issues addressed by the stimuli. Previous experimental studies have been most successful at identifying hostile media effects when the researchers recruited participants that were expected to hold divergent views on the issues under investigation. Some studies have recruited from groups that were specifically involved with the issues discussed by the stimuli (e.g. Schmitt et al., 2004; Gunther & Liebhart, 2006; Chia et al., 2007) while others have simply recruited from politically-involved groups, such as local Republican and Democratic committees (Christen & Huberty, 2007). This study followed the latter approach. No assumption was made that all Republicans, all Democrats, or all students from the subject pool would hold identical views on the issues addressed by the stimuli. The assumption was only that recruiting from these three groups would result in a sample that includes participants on each side of each issue, as well as participants who are neutral on the issues.

### **Stimuli**

Participants read articles that were purported to be from a fictional online news source which was either presented as being conservative, liberal, or neutral. These articles were drawn from mainstream news sources and adapted so that they presented a neutral, even-handed view of each issue. As discussed previously, the two issues discussed in the articles were abortion and government involvement in the national economy (see Appendices A and B for full text of the stimulus articles.) The primary reason for using multiple articles is to answer Research Question 1, regarding which issues are likely to invoke different antecedents to the hostile media effect. The issues chosen for this study may invoke different antecedents. Both issues should demonstrate the influence of attitude extremity and preconceptions about media bias. By contrast, these issues may differ in the extent to which they invoke attitudes held with moral conviction. Previous research has shown that people

tend to feel a sense of moral conviction about their positions on abortion (Skitka et al., 2005). People may feel less sense of moral conviction about their position on economic issues.

### **Measures and Data Analysis**

A number of measures and statistic methods were used to test the hypotheses and answer the research questions.

**Hypotheses 1 and 2.** Hypothesis 1 said that participants with a clear opinion in favor of one side of an issue would see media coverage of that issue as biased toward the other side. Hypothesis 2 said that a media outlet that was labeled “liberal” would elicit greater perceptions of bias from conservative participants and lower perceptions of bias from liberal participants. The hypothesis further said that a media outlet that was labeled “conservative” would elicit the opposite effect, while neutral participants would perceive greater bias for websites labeled “conservative” or “liberal.”

Since both of these hypotheses involve categorical independent variables and continuous dependant variables, they were tested together using a series of 3 (website ideology: conservative, neutral, liberal) x 3 (participant position: conservative, moderate, liberal) Multivariate Analyses of Variance (MANOVA). The website ideology variable was manipulated as previously described, telling participants that the site was designed for college students in general, conservative college students, or liberal college students. This information was communicated to participants before they clicked on the link for the article with the following statement:

The link below will take you to a test version of a news website that is designed to appeal to (college students/liberal college students/conservative college students). Please take a few minutes to read the article carefully, as we are going to ask you to evaluate it when you are done. Please note that we are interested in what you think of the content of the article. The website itself is still being developed, so its appearance is much simpler than it will be in its finished form and all of the links on the page

have been deactivated. We just want to know what you think of the content of the article, not the design of the website.

Additionally, the articles themselves were laid out on a web page that was ostensibly part of a website called Collegiatenewsservice.com. This website was subtitled “The Voice of Today’s (College Student/Liberal College Student/Conservative College Student).”

The participant position variable was determined by measurements of participants’ positions on each issue discussed in the articles. This group assignment was made for each participant separately for each issue because of the probability that individual participants could have different positions on different issues. For example, a participant who was pro-life but supported government intervention to solve economic problems would be in the conservative group for the abortion issue but the liberal group for the economy issue.

Group assignments for the abortion issue were made based on responses to the question, “Do you generally support or oppose allowing abortion to remain a legal option in the United States?” (adapted from Skitka et al., 2005, p. 907). Participants answered this question on a seven-point scale consisting of the options *strongly support*, *moderately support*, *slightly support*, *neutral or neither*, *slightly oppose*, *moderately oppose*, and *strongly oppose*. Previous research suggests that people who express slight support for a position can be classified as nonpartisans, as they are not likely to exhibit hostile media perceptions (Christen & Huberty, 2007). Consequently, those who chose *slightly support*, *neutral or neither*, or *slightly oppose* in response to the abortion question were labeled as neutral, those who chose *strongly support* or *moderately support* were labeled as “pro-choice,” and those who chose *moderately oppose* or *strongly oppose* were labeled as “pro-life.” It is important to note that this grouping scheme does not assume that everyone who opposes legalized abortion is generally conservative or that everyone who supports legalized abortion is

generally liberal. The variable was not intended to reflect participants' general political ideologies. The variable was only intended to reflect presumed expectations of pro- or counter-attitudinal information. Pro-life participants should have expected a conservative news source to support their perspective and a liberal news source to oppose it, and the opposite should have been true for pro-choice participants.

As with the abortion issue, group assignments for the economy issue were based on responses to an interval scale. The question for the economy issue was, "When it comes to fixing economic problems, do you generally think it's better to have more government intervention or more freedom for corporations to do as they please in order to make more money?" Participants responded to that question using a seven-point scale anchored by *Strongly support government intervention* and *Strongly support freedom for corporations*. The categorical groups were formed using the same method as was used for the abortion issue.

It is important to acknowledge that the participant position variables were based on participant responses rather than random assignment. The use of measured independent variables in an experimental design presents several challenges. First, there is a high likelihood that the groups will not be of equal size. This is particularly a problem if the groups do not have equal variances along the dependent variable(s). Although Keppel and Wickens (2004) argue that heterogeneity of variance is a problem even when the groups are of equivalent size, it is more of a problem when group sizes are not equivalent. Consequently, it was very important for the researcher to use tests of homogeneity of variance and to be very careful in interpreting the results in cases in which this assumption was not met. Additionally, the researcher used the General Linear Model approach to



performing ANOVAs. This approach (especially using Type III Sum of Squares, the default in SPSS) is better equipped to handle different sample sizes than other approaches to ANOVA.

An additional problem with independent variables that are not based on random assignment is that there could be other differences among groups besides the attitudinal variables used to make group assignments. For example, the liberal condition on the abortion issue might be disproportionately female. As a result, any effects that are found for that group could be due to gender differences rather than attitudinal differences. In order to account for this possibility, participants were asked for their gender and a  $\chi^2$  analysis was used to determine whether there were gender differences across the groups. When gender differences were found, the MANOVA procedure was repeated using gender as an additional factor to determine whether there are any gender effects in addition to other effects. The same steps were taken to make sure there were not any differences based on participant's age or year in school (freshman, sophomore, junior, senior, graduate student, or non-student).

Any study of the hostile media effect requires making decisions about how to operationalize the dependent variable of perceived media bias. The research cited so far indicated that this dependent variable has been conceptualized in a number of ways, but these conceptualizations can be reduced to two general categories. The first can be labeled *Directional bias*. This category of variables assesses participants' perceptions that an article or media source has a bias supporting one side of an issue or the other. For example, if a stimulus article dealt with the 2008 United States presidential election and the researchers asked participants whether the article had a bias in favor of Barack Obama (or in favor of John McCain) this question would be assessing directional bias. The second category of

dependent measures that can be used in hostile media research can be labeled “*source bias*.”

This group of variables assesses whether participants viewed the article or the media outlet as biased, regardless of the direction of that perceived bias. If a researcher simply asks participants, “Does this article seem to be biased?,” that question would represent an attempt to measure perceived *source bias*.

After reading each article participants were asked questions measuring the dependent variables in the study. The first set of items was used to measure *directional bias*, or the perception that the website was biased in a specific direction. These measures were drawn from previous research on the hostile media effect (especially Vallone et al., 1985). All responses were measured on seven-point scales with appropriate anchors unless otherwise noted (e.g., questions that ask for percentages). Before they were used in any analyses, all of these dependent measures were reverse-coded, if necessary, so that a higher value represented a perceived liberal bias. Participants were asked the following questions:

Did you feel that the article you just read was biased in favor of either (side of the abortion issue/government intervention or free market approaches to solving economic problems)? (Anchored by “Strongly biased in favor of [the pro-life side/government intervention]” and “Strongly biased in favor of [the pro-choice side/free market approaches]”)

This article presented a strong case in favor of (legalized abortion/using government intervention to solve economic problems). (Anchored by “Strongly agree” and “Strongly disagree”)

This article presented a strong case (against legalized abortion/in favor of using free market approaches to solving economic problems). (Anchored by “Strongly agree” and “Strongly disagree”)

What percentage of the article do you believe supported (legalized abortion/using government intervention to solve economic problems)? (Open ended)

What percentage of the article do you believe (opposed legalized abortion/supported using free market approaches to solving economic problems)? (Open ended)

What percentage of neutral readers do you think would become more supportive of

(legalized abortion/using government intervention to solve economic problems) after reading this article? (Open ended)

How would you guess the author of this article feels about (legalized abortion/the best way to solve economic problems)? (Anchored by “Strongly [opposes legalized abortion/supports government intervention]” and “Strongly supports [legalized abortion/free market approaches]”)

How would you guess the editor of this website feels about (legalized abortion/ the best way to solve economic problems)? (Anchored by “Strongly [opposes legalized abortion/supports government intervention]” and “Strongly supports [legalized abortion/free market approaches]”)

Additionally, participants’ perceptions of the articles’ and website’s non-directional *source bias* were measured using two semantic differential batteries used by Coe et al. (2008). The first set of questions asked participants to rate whether the article was *fair/unfair, told the whole story/told part of the story, unbiased/biased, complete/incomplete, could be trusted/could not be trusted, accurate/inaccurate, represents reality/does not represent reality, and factual/false*. A similar semantic differential scale measured perceptions of the website, using the anchoring terms *unbiased/biased, can be trusted/cannot be trusted, competent/incompetent, fair/unfair, believable/not believable, and neutral/favors one side*. These measures all used seven-point scales.

All of the dependent measures were coded from -3 to 3, with 0 as the midpoint in an effort to simplify interpretation of the results. A factor analysis was performed on the dependent measures for each article. This procedure was undertaken in order to determine how many latent variables these measures represented and whether they accurately reflected the distinction the researcher made between *source bias* and *directional bias*. A MANOVA was performed on the data for each article in order to demonstrate which variables were influenced by the independent variables. Table 1 shows the expected results for the *directional bias* variable. It is important to remember that higher values represent perceived

biases toward the liberal side of each issue and lower values represent perceived biases toward the conservative side. The *Neutral Website* row shows the traditional hostile media effect; it was predicted that liberal participants would perceive the website as conservative while conservative participants will perceived the website as liberal and neutral participants will perceive little or no bias. If Hypothesis 1 was correct, a simple main effect should be present supporting this relationship. However, if Hypothesis 2 is supported, there should be an interaction showing the relationship seen in Table 1. This interaction would indicate that the stated ideology of the website moderates the general tendency to perceive hostile biases in media content.

**Hypothesis 3.** Hypothesis 3 predicted that perceptions of media bias would be mediated by the extent to which participants selectively categorized specific excerpts of the media content as favoring the other side of the issue. Following the design used by Gunther and Liebhart (2006), participants were asked to read short excerpts from each article and then asked, on a seven-point scale, how strongly each excerpt supported legalized abortion or government intervention. These answers were recoded as necessary so that support for the liberal position was represented by higher values. These values were tested for reliability to see if the three values for each article could be treated as on variable.

These measures of perceived excerpt bias were compared with overall perceptions of bias for each article. These comparisons were made using regression analyses with perceived excerpt bias as the independent variable(s) and the *directional bias* variable used to test Hypotheses 1 and 2 as the dependent variable. This test was run for both articles. If the hypothesis is correct, all of these regression coefficients should be positive and significant.

The excerpts used from each article are shown in Appendices C and D.

**Hypothesis 4 and Research Question 1.** Hypothesis 4 predicted that attitude extremity, group identification, moral convictions, and general perceptions of media bias would predict perceptions of counter-attitudinal media bias. All of these antecedent variables were measured before participants read each online news article. Attitude extremity was measured using the same questions that were initially used to assess attitudes on the three issues. Responses to this measure were converted to a measure of attitude extremity by taking the absolute values of responses, so that the original scale of -3 to 3 was converted to a scale of 0 (a neutral attitude) to 3 (an extreme attitude).

The second antecedent to the hostile media effect included in the analysis was group identification. This variable was measured with self-identified partisan and ideological identification. Many scales have been proposed to measure ideology and partisanship that go beyond simple self-report (Knight, 1999; Weisberg, 1999). However, the variable of interest in this study was not whether participants met some objective definition of liberal or conservative, but how they identify themselves. For that reason, participants' group identification was based on a variation of the basic partisan identification variable used by National Election Studies over many election cycles (Weisberg, 1999, p. 684). For partisan identification, participants were asked, "Generally speaking, do you consider yourself more of a Democrat or a Republican?" and responded on a seven-point scale. Similarly, in order to assess ideological identification, the same question was asked but with "liberal" and "conservative" replacing "Democrat" and "Republican," respectively. As with the attitude extremity measure, these items were converted from a -3 to 3 scale to a 0 to 3 scale, with 0 representing the neutral position and 3 representing the most extremely held position. The correlation between the party identification and ideological identification measures was

calculated in order to see if they could be combined into one variable or if they had to be treated as distinct variables.

The third antecedent variable included in this study was the extent to which participants' opinions were held with moral conviction. This variable was assessed with an item used by Skitka et al. (2005). Participants were asked, "How closely is your attitude toward (abortion/fixing economic problems) connected to your core moral beliefs and convictions?" Another question came from Skitka and Bauman (2008) and asked participants, "How closely is your attitude toward (abortion/fixing economic problems) connected to your fundamental beliefs about right and wrong?" Responses to both of these questions were measured on a seven-point scale anchored by "Not at all connected" and "Very closely connected." Additionally, participants were asked three questions used by Hwang et al. (2008) and one used by Skitka and Bauman (2008) that required them to indicate their level of agreement with each of the following statements on scales anchored by "Strongly disagree" and "Strongly agree." These questions were the following:

The arguments for or against (abortion/greater government intervention in economic matters) involve the core values that guide my life.

The values that are most important to me are what determine my stand on (abortion/the best way to fix economic problems).

My position on (abortion/fixing economic problems) is based on the principles central to my value system.

My feelings about (abortion/fixing economic problems) are a reflection of my core moral beliefs and convictions.

These items were tested for reliability in order to see whether they could be averaged to form one scale.

Finally, preconceptions of general media bias were measured with items adapted from several previous studies. A semantic differential scale was adapted from Hwang et al. (2008)

asking for participants' perceptions of news in general as *Fair/Unfair*, *Biased/Unbiased*, *Accurate/Inaccurate*, *Doesn't tell the whole story/Tells the whole story*, *Cannot be trusted/Can be trusted*, and *Imbalanced/Balanced*. Additionally, two questions were adapted from Gunther (1992, p. 154). Participants were asked to indicate their level of agreement with the statements "News reporters try to be objective" and "Most media separate fact from opinion."

These four antecedent variables were used as independent variables in a multiple regression with non-directional *source bias* as the dependent variable. The multiple regression analysis was designed to show which of these antecedent variables contributed to hostile media perceptions for each of the two political issues. These results offered an answer to the first research question. If some antecedents contribute to hostile media perceptions for one issue but not for the other it would be possible to look at the nature of those issues and assess what characteristics of issues are likely to be relevant to each of the antecedents.

In addition, Research Question 2 asked about several political variables that might act as additional antecedents to perceived media bias. Media cynicism was measured using an three-item scale adapted from the government cynicism scale used in previous studies, such as Kaid et al. (2007). Participants were asked to express their level of agreement with the following statements on seven-point scales:

One can be confident that journalists will always do the right thing.

Journalists are more interested in making money than in what the people think.

One cannot always trust what journalists say.

Another possible antecedent variable included in this study was political tolerance,

which was measured using a modified version of a scale developed by Sullivan, Piereson, and Marcus (1982, reported in Finkel et al, 1999). The original scale asked participants to pick the political group they like the least, with suggestions offered such as the Ku Klux Klan, John Birch Society, atheists, socialists, and communists. The items in the scale then ask participants how much freedom members of that group should have to express their views freely. This scale was used differently in this study. It would be logistically challenging using an online survey tool to have participants pick their least-liked group and insert that group's name into each question. Instead, all questions asked about a group that is almost universally disliked, the Ku Klux Klan. Many other groups would elicit different levels of dislike for participants with different political views. For example, conservative participants may have more negative views of socialists than liberal participants do, so liberals may score higher on the tolerance scale simply because they do not need to show as much tolerance to advocate for freedom of expression for socialists. However, Reader and Riffe (2006) found that participants across the political spectrum had negative views of people who advocate for racism or segregation. Gibson (1992) used this approach and found that the results were highly correlated with the least-liked groups approach. The modified version of the scale used the following questions, with agreement recorded on a seven-point scale:

Members of the Ku Klux Klan should be banned from being President of the United States.

Members of the Ku Klux Klan should be allowed to teach in public schools.

The Ku Klux Klan should be outlawed.

Members of the Ku Klux Klan should be allowed to make speeches in public places.

The Ku Klux Klan should have their phones tapped by our government.



The Ku Klux Klan should be allowed to hold public rallies in Chapel Hill.

**Hypothesis 5 and Research Question 2.** Hypothesis 5 predicted that perceptions of hostile media bias would lead to a number of different consequences. These consequences include decreased perceptions of the news outlet's credibility, decreased perceptions of how interesting a news outlet is, decreased ratings of how informative a news program is, greater media indignation (which will lead to greater willingness to engage in discursive activities supporting the participant's position), and increased perceptions that public opinion differs from the participant's position. All of these variables except the last one should be influenced by the *source bias* variable, since they do not depend on participants perceiving a bias in either specific direction. In contrast, perceptions of public opinion should be influenced by *directional bias*. Participants' perception that a media outlet is biased in a specific direction should lead them to believe that public opinion will be correlated with that bias. Consequently, this variable was analyzed separately from the other four hypothesized consequences.

The influence of perceived bias on the first four consequences involved one independent variable and several dependent variables, so it could not be evaluated using the multiple regression technique used for the previous hypothesis. Instead, the first four parts of the hypothesis were tested using a structural equation model with perceived *source bias* for each issue as exogenous variables. Among other uses, structural equation modeling allows researchers "to estimate simultaneously a system of hypothesized relationships" (Stephenson, Holbert, & Zimmerman, 2006, p. 160). If all of the hypotheses were supported then all of the paths should have significant regression coefficients. Ideally, the model should have strong overall fit as well, but for hypothesis testing the hypothesized regression coefficients are more important.

Hypothesis 5e was tested by regressing *directional bias* on perceived public opinion. The various antecedent variables were measured at the very end of the study and used to assess perceptions of the website as a whole. This approach allowed the researcher to determine how much influence perceived bias for each issue had on each outcome variable.

The first consequence investigated was credibility. Previous research on the hostile media effect has not directly measured the credibility of specific media outlets, and research on credibility in general has failed to result in a consistent method of measurement (Choi et al., 2006). This study measured credibility based on participants' level of agreement with the statement "I believe this website is a credible news source" and a semantic differential scale anchored by *credible/not credible*.

The second consequence under study was interest in the media outlet. This variable was adapted from Coe et al. (2008) and used a semantic differential scale anchored by *not concerned/concerned* and *interested/not interested*. The third consequence, perceptions of how informative the news outlet was, also came from Coe et al. Participants were asked to respond, using a seven-point scale, to the questions, "How informative were the articles on the website" and "How informed do you feel as a result of having read the story?"

The fourth consequence variable in this study was media indignation. The measures were adapted from Hwang et al. (2008). This measure asked participants how often media (in general) make them feel contemptuous, angry, disgusted, and resentful. Participants respond to each question on a seven-point scale anchored with "Rarely" and "Very often." Media indignation was also hypothesized to lead to willingness to engage in discursive activities. Again following Hwang et al., this variable was measured by asking participants how willing they would be to advocate for their position on each issue by (a) signing a

petition, (b) attending a public forum, (c) posting their opinion on a website, (d) meeting with an elected official, (e) volunteering, (f) looking for more information on the issue, (g) talking about the issue with people who have a different view, (h) talking about the issue with people who share their view. All of these questions were answered on seven-point scales anchored by “Not willing” and “Extremely willing.”

All of these measures were tested for reliability as necessary. Structural equation modeling software was used to test the influence of perceptions of media bias on these four consequences for each of the issues.

Finally, perceptions of public opinion were measured using items from previous studies (Christen et al., 2002; Gunter & Chia, 2001; Gunther et al., 2001; Gunther & Christen, 2002). These questions were the following:

On average, do you believe most Americans (generally support or oppose allowing abortion to remain a legal option in the United States/prefer government intervention or free market approaches to solving economic problems)? (Anchored by “Overwhelmingly [support legalized abortion/conservative]” and “Overwhelmingly [oppose legalized abortion/liberal]”)

What percentage of Americans would you estimate support (keeping abortion legal in the United States/government intervention to solve economic problems)? (Open ended)

On average, do you believe most Americans consider themselves to be (pro-life or pro-choice/more conservative or liberal on economic issues)? (Anchored by “Overwhelmingly [pro-life/conservative]” and “Overwhelmingly [pro-choice/liberal]”)

These three items were tested to see if they constituted a reliable measure of perceived public opinion. Then a simple linear regression was run using perceived *directional bias* as the independent variable and perceived public opinion as the dependent variable. In addition to testing each part of Hypothesis 5, comparing the structural equation analysis and the simple linear regression between the two issues allowed the researcher to

answer Research Question 2, concerning which issues were likely to lead to each of the hypothesized consequences.

### **Chapter III: Results**

A total of 167 subjects participated in this study, with 93 coming from the University of North Carolina at Chapel Hill and 74 from Radford University. Of this sample, 53 participants were male and 114 were female. The participants' average age was 21.66 ( $SD = 4.617$ ). The sample was slightly liberal on the abortion issue. For the question, "Do you generally support or oppose allowing abortion to remain a legal option in the United States?," the average response was 0.96 ( $SD = 2.165$ ) on a seven-point scale coded so that "Strongly oppose" equaled -3 and "Strongly support" equaled 3. This mean response differed significantly from the midpoint of the scale ( $t(166) = 5.756, p < .001$ ). When participants' attitudes toward abortion were used to put them into pro-life, pro-choice, and neutral groups, it was shown that attitudes on abortion were consistent across genders ( $\chi^2(2) = 2.385, p = .303$ ), class in school ( $\chi^2(8) = 5.453, p = .708$ ), and university ( $\chi^2(2) = 3.162, p = .206$ ).

By contrast, the participants were fairly moderate on the economic issue. For the question, "When it comes to fixing economic problems, do you generally think it's better to have more government intervention or more freedom for corporations to do as they please in order to make more money?," the average response was 0.82 ( $SD = 1.719$ ) on a seven-point scale with "Strongly support government intervention" as -3 and "Strongly support freedom

for corporations” as 3. This average did not differ significantly from the midpoint of the scale ( $t(167) = -1.350, p = .179$ ). When participants’ economic attitudes were reduced to a categorical variable, they did not differ based on class in school ( $\chi^2(8) = 13.058, p = .110$ ), but there were significant differences based on gender ( $\chi^2(2) = 8.774, p = .012$ ) and university ( $\chi^2(2) = 7.736, p = .021$ ). Specifically, female participants were more likely to characterize themselves as supportive of government intervention in the economy (34 females, as opposed to 16 males) or moderate (61 females, 18 males), while 19 participants of each gender identified themselves as economic conservatives. This gender difference was evidently a product of converting the attitude variable to a categorical variable, as the original continuous variable’s mean did not differ significantly for male and female participants ( $t(119.19) = .564, p = .574$ , equal variance not assumed).

Meanwhile, 36 participants at the University of North Carolina at Chapel Hill identified themselves as economic liberals while only 14 participants at Radford University identified themselves that way. Roughly the same number of participants at each university identified themselves as economic moderates (39 at UNC, 40 at Radford) and economic conservatives (18 at UNC, 20 at Radford). The difference between the students at the two universities was statistically significant ( $\chi^2(2) = 7.736, p = .021$ ). The difference based on university was also statistically significant when compared based on the continuous variable, with Radford students showing more support for free market economic policies ( $M = 4.24, SD = 1.662$ ) than UNC students ( $M = 3.48, SD = 1.698, t(165) = -2.898, p = .004$ ). since the experimental method employed in this study dictates using the categorical variable, all analysis of responses to the economic article will be interpreted cautiously, with every attempt made to separate the influence of participants’ attitudes from possible effects of their

gender or university affiliation.

## **Hypotheses 1 and 2**

Hypothesis 1 predicted that participants with a clear opinion in favor of one side of an issue will see media coverage of that issue as biased toward the other side. Hypothesis 2 predicted that, relative to a media outlet with no ideological identification, a media outlet that is labeled “liberal” will elicit greater perceptions of bias from conservative participants and lower perceptions of bias from liberal participants and that the opposite pattern would be demonstrated for a website labeled “conservative.” For each article, a MANOVA was performed in order to test Hypotheses 1 and 2, as described in Chapter 2.

**Results for the abortion article.** An exploratory factor analysis of the items used to measure participants’ perceptions of the abortion article’s bias was conducted. This analysis suggested that the semantic differential items that were designed to assess non-directional *source bias* constituted a strong factor (*eigenvalue* = 8.872, *% variance explained* = 40.326). These fourteen items formed a highly reliable scale (*Cronbach’s  $\alpha$*  = .951). These items were averaged into a new variable, hereafter referred to as *source bias*.

A second factor (*eigenvalue* = 3.603, *% variance explained* = 16.378) included the items “Did you feel that the article you just read was biased in favor of either side of the abortion issue?,” “What percentage of this article do you believe supported legalized abortion?,” “What percentage of the article do you believe supported abolishing legalized abortion?,” “How would you guess the author of this article feels about legalized abortion?,” and “How would you guess the editor of this website feels about legalized abortion?” These items also formed a reliable scale (*Cronbach’s  $\alpha$*  = .856).<sup>1</sup> The items making up this second

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<sup>1</sup> All percentage items were converted to a scale of -3 to 3 by dividing the values by 14.285714 and subtracting 3 in order to simplify comparisons with other variables.

factor were averaged into a new variable, hereafter referred to as *directional bias*, since these items all measure specific perceptions of pro-abortion rights bias rather than just general, non-directional bias.

A third factor (*eigenvalue* = 1.601, % *variance explained* = 7.279) included the items “This article presented a strong case in favor of legalized abortion,” “This article presented a strong case against legalized abortion,” and “What percentage of readers do you believe would become more supportive of legalized abortion after reading this article?” Of course, all of these items were included with the intention that they would be part of the *directional bias* scale, but their lack of reliability with that scale meant that they had to be treated separately. However, these items did not form a reliable scale with each other (*Cronbach’s  $\alpha$*  = -.050),<sup>2</sup> so they were treated as separate variables for this analysis.

The overall MANOVA showed that the dependent variables were affected by the stated ideology of the website (*Pillai’s Trace* = 0.222,  $F(10, 306) = 3.827, p < .001$ ; *Wilks’  $\lambda$*  = 0.786,  $F(10, 304) = 3.896, p < .001$ ), the participant’s attitude toward abortion (*Pillai’s Trace* = 0.177,  $F(10, 306) = 2.972, p = .001$ ; *Wilks’  $\lambda$*  = 0.828,  $F(10, 304) = 3.008, p = .001$ ), and the interaction between the two independent variables (*Pillai’s Trace* = 0.213,  $F(20, 620) = 1.745, p = .023$ ; *Wilks’  $\lambda$*  = 0.799,  $F(20, 505.08) = 1.768, p = .021$ ). The following sections will discuss the specific differences observed for each dependent variable included in the analysis.

***Results for the source bias variable.*** The means for the *source bias* variable are shown in Table 2. A Levene’s test showed that the variance of this variable did not differ

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<sup>2</sup> Counter to expectations, the items “This article presented a strong case in favor of legalized abortion” and “This article presented a strong case against legalized abortion” were positively correlated (although the correlation was not statistically significant). As a result, when the second item was reverse-coded, the resulting correlation was negative, making the overall reliability measure negative as well.



significantly between groups ( $F(8, 156) = 1.318, p = .238$ ), indicating that the results for this variable were not invalidated by differences in variance. *Source bias* was not directly affected the website's stated ideology ( $F(2, 165) = 2.933, p = .056$ ) but was affected by the participant's attitude toward abortion ( $F(2, 165) = 4.816, p < .01$ ) and the interaction between the two variables ( $F(4, 165) = 2.430, p = .050$ ). A *post hoc* Tukey's honestly significant difference (HSD) test showed that, regardless of website condition, pro-life and pro-choice participants differed on this dependent variable ( $p < .04$ ), while neither the pro-life group ( $p = .994$ ) nor the pro-choice group ( $p = .081$ ) differed significantly from the neutral group. However, the overall effect of ostensible website ideology was not considered meaningful in light of the interaction between the independent variables.

In order to determine the nature of the interaction between the independent variables, a series of one-way Analyses of Variance (ANOVA) were performed. In order to reduce the likelihood of Type 1 error, modified criteria for establishing statistical significance were employed. The criteria were determined based on the False Discovery Rate (FDR) procedure outlined by Benjamini and Hochberg (1995). This procedure allows concurrent tests to be run with progressively larger critical p-values. Once concurrent tests are run, the test with the lowest p-values is tested against a very low critical p-value. If this test is found to be statistically significant, the other tests are compared to progressively larger p-values. The critical p-value is determined using the formula  $p_i = .05i/q$ , where  $q$  is the number of concurrent tests being run (in this case, 3) and  $i$  is number of the test (in this case, 1 for the test with the lowest p-value, 2 for the test with the second lowest p-value, and 3 for the test with the largest p-value). Using this formula, in order for each of three concurrent ANOVAs to be deemed statistically significant, the lowest p-value must be less than .017 (or  $(.05*1)/3$ ),

the second lowest p-value must be less than .033 (or  $(.05*2)/3$ ), and the highest p-value must be lower than .05 (or  $(.05*3)/3$ ).

First, a one-way ANOVA was run on the participants in each treatment group to test whether, within each group, the participants' attitudes toward abortion influenced their perceptions of *source bias*. The FDR procedure indicated that participant's attitude had no effects on perceptions of *source bias* within each condition. The F-values did not reach the modified critical p-values of the FDR procedure for participants who saw the ostensibly liberal website ( $F(2, 53) = 3.862, p = .027$ ), the ostensibly conservative website ( $F(2, 53) = 3.877, p = .27$ ), or the ostensibly neutral website ( $F(2, 52) = 1.776, p = .494$ ).

Secondly, a one-way ANOVA was run on participants in each attitudinal group to test whether the website treatment influenced the *source bias* variable within the pro-life, pro-choice, and neutral groups. The website's stated bias influenced the dependent variable for neutral participants ( $F(2, 26) = 6.231, p = .006$ ), but not for pro-life ( $F(2, 35) = 1.667, p = .203$ ) or pro-choice participants ( $F(2, 97) = .497, p = .610$ ). Within the neutral group, the ostensibly neutral website was perceived as less biased than the ostensibly conservative website ( $p = .007$ ) and the ostensibly liberal website ( $p = .034$ ). The ostensibly liberal and ostensibly conservative websites were not perceived differently ( $p = .426$ ).

In summary, participants who identified themselves as neutral on the abortion issue perceived the websites that were labeled as "liberal" or "conservative" as being more biased than an unlabeled website after reading the abortion article. Participants who identified as pro-life or pro-choice did not perceive a difference in the *source bias* based on the ostensible ideology of the website. Although the initial analysis suggested a difference in perceived *source bias* between pro-choice and pro-life participants, this overall effect was not strong

enough to meet the more rigorous FDR criteria used when analyzing the results in light of the observed interaction between the two independent variables. These results did not support Hypothesis 1, since there was no evidence that pro-life or pro-choice participants perceived the article as more biased than neutral participants did. Similarly, there was no support for Hypotheses 2a or 2b, since the website's stated ideology did not affect perceptions of bias for pro-life or pro-choice participants. However, Hypothesis 2c was supported, as neutral participants perceived the website as more biased when it was labeled as "conservative" or "liberal" than when it lacked an ideological label.

**Results for the directional bias variable.** Table 3 shows the means within each group for the *directional bias* variable. All directional items were coded such that a higher value indicates support for abortion rights. Levene's test showed that the variance of this variable was consistent among the groups ( $F(8, 156) = 0.601, p = .776$ ). This variable did not show a main effect for the participant's attitude toward abortion ( $F(2, 156) = 1.676, p = .191$ ), but it did show a main effect for the website's stated ideology ( $F(2, 156) = 15.567, p < .001$ ) and an effect for the interaction between the two independent variables ( $F(4, 156) = 3.021, p = .016$ ). A *post hoc* Tukey HSD test showed that, regardless of the participants' attitudes toward abortion, the ostensibly conservative website was perceived as less supportive of abortion rights than the ostensibly neutral website ( $p < .001$ ) or the ostensibly liberal website ( $p < .002$ ). Perceptions of the liberal and neutral website did not differ ( $p = .761$ ). However, the overall effect of ostensible website ideology was not considered meaningful in light of the interaction between the independent variables.

In order to determine the nature of the interaction, first, a one-way ANOVA was run on participants in each treatment group to test whether, within each group, the participants'

attitudes toward abortion influence their perceptions of *directional bias*. The FDR procedure indicated that participant's attitude had no effects on the *directional bias* within each condition. The F-values did not reach the modified critical p-values of the FDR procedure for participants who saw the ostensibly conservative website ( $F(2, 53) = 3.948, p = .025$ ), the ostensibly liberal website ( $F(2, 53) = 1.404, p = .255$ ), or the ostensibly neutral website ( $F(2, 53) = .715, p = .494$ ).

Secondly, a one-way ANOVA was run on participants in each attitudinal group to test whether the website treatment influenced the *directional bias* variable within the pro-life, pro-choice, and neutral groups. The website's stated bias influenced the dependent variable for pro-life ( $F(2, 35) = 7.675, p = .002$ ) and moderate participants ( $F(2, 26) = 6.413, p = .005$ ), but not for pro-choice participants ( $F(2, 97) = 2.056, p = .134$ ). Within each of the former two groups, the ostensibly conservative website was perceived as less biased toward the pro-choice position than the ostensibly neutral website ( $p = .004$  for pro-life participants;  $p = .013$  for neutral participants) and the ostensibly liberal website ( $p = .006$  for pro-life participants;  $p = .006$  for neutral participants). Neither group perceived the ostensibly neutral website differently from the ostensibly liberal website ( $p = .992$  for pro-life participants;  $p = .997$  for neutral participants).

In summary, the independent variables influenced the *directional bias* variable such that participants who held pro-life or neutral positions on abortion perceived the ostensibly conservative website to be less supportive of abortion rights than the ostensibly liberal website. The ostensible ideology of the website did not affect pro-choice participant's perceptions of bias. Thus, the overall effect of website ideology observed in the initial analysis proved to apply only to pro-life and neutral participants. These findings do not

support Hypothesis 1, as the participants' attitudes toward abortion had no direct influence on perceptions of pro-abortion bias. The data also did not support Hypothesis 2a, as pro-life participants did not perceive the pro-abortion bias differently based on the website's ostensible ideology. However, Hypotheses 2b and 2c were supported in that pro-choice and neutral participants perceived the website as having less of a pro-abortion bias when it was labeled "conservative" than when it was labeled "liberal" or not labeled at all.

***Results for the article's perceived case in support of abortion rights.*** Table 4 shows the mean responses to the Likert-type item "This article presented a strong case in favor of legalized abortion," coded so that a value of -3 indicates "Strongly disagree" and a value of 3 indicates "Strongly agree." Levene's test showed that this variable did not vary consistently among the groups ( $F(8, 156) = 3.140, p = .003$ ). Since the assumption of homogeneity of variances was not met for this variable, the results should be interpreted cautiously, especially considering the unequal sizes of the groups in this study. Temporarily putting aside the problem with the variances, this single-item variable appeared to be influenced by the website's stated ideology ( $F(2, 156) = 4.694, p = .010$ ), participants' attitudes on abortion ( $F(2, 156) = 3.381, p = .037$ ), and the interaction between the two independent variables ( $F(4, 156) = 4.354, p = .002$ ). However, the *post hoc* Tukey HSD test did not find any significant contrasts among the treatment groups (p-values ranged from .567 to .977) or among the attitude groups (p-values ranged from .258 to .991), indicating that the relevant differences would emerge only in analysis of the interaction.

As with the previous two dependent variables, a one-way ANOVA was run on the participants in each treatment group to test whether, within each group, the participants' attitudes toward abortion influence their perceptions of the article's case in favor of legalized

abortion. The FDR procedure indicated that participant's attitude affected this variable for participants who viewed the ostensibly conservative website ( $F(2, 53) = 14.100, p < .001$ ), but not for participants who viewed the neutral website ( $F(2, 52) = .921, p = .404$ ) or the ostensibly liberal website ( $F(2, 52) = .333, p = .718$ ). A *post hoc* Tukey's HSD test showed that, among those participants who viewed the ostensibly conservative website, the article was perceived as offering significantly less support for abortion rights by neutral participants as compared to pro-life ( $p = .011$ ) or pro-choice ( $p < .001$ ) participants. There was no difference between pro-life and pro-choice participants ( $p = .069$ ).

Secondly, a one-way ANOVA was run on participants in each attitudinal group to test whether the website treatment influenced the perception that the article made a strong case in favor of legalized abortion within the pro-life, pro-choice, and neutral groups. The website's stated bias influenced the dependent variable for neutral participants ( $F(2, 26) = 6.697, p = .005$ ), but not for pro-life ( $F(2, 35) = 1.217, p = .308$ ) or pro-choice participants ( $F(2, 96) = 1.281, p = .282$ ). Neutral participants perceived the ostensibly liberal website as making a stronger case in favor of legalized abortion than the ostensibly conservative website ( $p = .003$ ). Perceptions of the ostensibly neutral website did not differ significantly with either the ostensibly conservative website ( $p = .079$ ) or the ostensibly liberal website ( $p = .366$ ).

In summary, neutral participants perceived the ostensibly conservative website as making less of a case in support of abortion rights than pro-life or pro-choice participants did, and neutral participants also perceived the ostensibly conservative website as making less of a case in support of abortion rights than the liberal website. As with the previous two dependent variables, these results do not support Hypothesis 1, as there was no direct influence of the participants' attitudes toward abortion on this variable. These results did

offer some support for Hypothesis 2c, as neutral participants were much less likely to perceive the article as having a pro-abortion bias when it appeared on an ostensibly conservative website than when it appeared on an ostensibly neutral or liberal website. As noted before, however, this variable did not have a consistent variance among the experimental conditions, casting doubt on the legitimacy of the findings. Also, this variable was based on a single item, meaning that its reliability is impossible to determine. Despite these limitations, the findings for this variable was essentially consistent with the findings for the first two dependent variables, lending some additional support to the findings reported for those variables.

***Results for the article's perceived case in opposition to abortion rights.*** Table 5 shows the mean responses to the Likert-type item "This article presented a strong case against legalized abortion," with a value of -3 indicating "Strongly disagree" and a value of 3 indicating "Strongly agree." Levene's test indicated that the variances within the groups were sufficiently homogeneous for this variable ( $F(8, 156) = 3.140, p = .083$ ). This single-item variable was influenced by the website's stated ideology ( $F(2, 156) = 5.096, p = .007$ ), but not the participants' attitudes on abortion ( $F(2, 156) = 3.035, p = .051$ ) or the interaction between the two independent variables ( $F(4, 156) = .925, p = .451$ ). The *post hoc* Tukey's HSD test showed that, regardless of their attitudes toward abortion, participants viewed the ostensibly neutral website as making less of a case against legalized abortion than the ostensibly conservative version of the website ( $p = .029$ ). On this variable, there was no perceived difference between the liberal website and the neutral website ( $p = .316$ ) or the conservative website ( $p = .501$ ).

Again, this variable does not support Hypothesis 1, as there was no difference in the

perceived case against abortion rights based on participants' attitudes toward abortion. There was, however, support for the prediction that the article would be perceived as presenting more of a case against legalized abortion when presented on an ostensibly conservative website than when presented on a neutral website, although this effect was not exactly consistent with the predictions of Hypothesis 2, since this perception was not tied to participant attitudes. Also, as with the previous variable, this variable was based on a single item and is, therefore, of unknown reliability.

***Results for perceived effect on public opinion.*** The final dependent variable included in the MANOVA was the percentage of readers that participants believed would be swayed to support abortion rights as a result of reading this article. This variable was not affected by the stated ideology of the website, the participants' attitudes on abortion, or the interaction between the two variables. Notably, participants across all conditions tended to offer very low percentages in response to this item, with a few outliers offering much larger percentages, resulting in an unacceptably skewed distribution. Unlike the other dependent variables, this variable's distribution did not approximate normality, meaning that the results would be suspect even if significant differences had been found among the groups. Consequently, neither Hypothesis 1 nor Hypothesis 2 was supported in regards to this variable.

***Summary of results for the abortion article.*** The results for the abortion article did not support Hypothesis 1, as the participants' attitudes toward abortion did not affect their perceptions of the article's bias. For this particular article, the basic hostile media effect was not supported. However, the results offered support for the various parts of Hypothesis 2. When the dependent variable was general (non-directional) bias, neutral participants



perceived an ostensibly liberal or conservative website as more biased than an unlabeled website. When the dependent variable was *directional bias* (in support of abortion rights), pro-life and neutral participants perceived the ostensibly conservative website as being less supportive of abortion rights. The results for two of the single-item variables also supported the general conclusion that the website's ostensible ideology, rather than the participants' attitudes, influenced perceptions of bias, although questions about reliability and homogeneity of variance suggest that the specific results for the single-item variables should not be taken as conclusive.

**Results for the economy article.** An exploratory factor analysis of the items used to measure participants' perceptions of the economy article's bias was conducted. The results of the factor analysis were substantively similar to the results of the factor analysis conducted on the results for the abortion article. This analysis suggested that the semantic differential items intended to measure *source bias* constituted a strong factor (*eigenvalue* = 9.041, % *variance explained* = 41.095). These fourteen items formed a highly reliable scale (*Cronbach's*  $\alpha$  = .949). Just as for the abortion article, these items were averaged into a new variable, hereafter referred to as "*source bias*."

A second factor (*eigenvalue* = 3.376, % *variance explained* = 15.345) included the items "Did you feel that the article you just read was biased in favor of either government intervention or free market approaches to solving economic problems?," "What percentage of this article do you believe supported using government intervention to solve economic problems?," "What percentage of the article do you believe supported using free market approaches to solving economic problems?," "How would you guess the author of this article feels about the best way to solve economic problems?," "How would you guess the editor of

this website feels about the best way to solve economic problems?,” and “This article presented a strong case in favor of using government intervention to solve economic problems.” These were most of the items that were supposed to measure *directional bias*, and they formed a reliable scale (*Cronbach’s*  $\alpha = .868$ ).<sup>3</sup> The items making up this second factor were averaged into a new variable, hereafter referred to as “*directional bias*.”

A third factor (*eigenvalue* = 1.604, % *variance explained* = 7.289) did not have any components that loaded on it better than on other factors. Of the two remaining items, “What percentage of readers do you believe would become more supportive of using government intervention to solve economic problems after reading this article?” loaded best on a fourth factor (*eigenvalue* = 1.291, % *variance explained* = 5.870) and the item “This article presented a strong case in favor of using free market approaches to solve economic problems” loaded best on a fifth factor (*eigenvalue* = 1.091, % *variance explained* = 4.959). Consequently, these two items were treated as single item measures for the MANOVA.

The overall MANOVA using participant attitude and website condition as the independent variables showed that the dependent variables were affected by the participant’s attitude toward the economy (*Pillai’s Trace* = 0.115,  $F(8, 308) = 2.346$ ,  $p = .018$ ; *Wilks’*  $\lambda = 0.885$ ,  $F(8, 306) = 2.405$ ,  $p = .016$ ), but not the stated ideology of the website (*Pillai’s Trace* = 0.085,  $F(8, 308) = 1.702$ ,  $p = .097$ ; *Wilks’*  $\lambda = 0.916$ ,  $F(8, 306) = 1.705$ ,  $p = .097$ ) or the interaction between the two independent variables (*Pillai’s Trace* = 0.134,  $F(16, 624) = 1.351$ ,  $p = .160$ ; *Wilks’*  $\lambda = 0.872$ ,  $F(16, 468.06) = 1.345$ ,  $p = .165$ ).

As noted above, there was a statistically significant gender difference, such that female participants were more likely to identify as economic liberals than male participants

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<sup>3</sup> All directional items were coded such that a higher value indicates perceived bias in support of free market economic policies.

were. Consequently, an additional MANOVA was run with gender as a third independent variable in order to determine if the dependent variables were influenced by participant gender. The results show that there was no main effect for gender (*Pillai's Trace* = 0.038,  $F(4, 144) = 1.405, p = .235$ ; *Wilks'  $\lambda$*  = 0.962,  $F(4, 144) = 1.405, p = .235$ ). There was also no effect for the interaction between gender and experimental condition (*Pillai's Trace* = 0.016,  $F(8, 290) = 0.300, p = .966$ ), the interaction between gender and economic attitudes (*Pillai's Trace* = 0.051,  $F(8, 290) = 0.954, p = .472$ ; *Wilks'  $\lambda$*  = 0.949,  $F(8, 288) = 0.950, p = .476$ ), or the three-way interaction among the variables (*Pillai's Trace* = 0.086,  $F(16, 588) = 0.808, p = .678$ ). These results indicate that participant gender did not influence the dependent variables, suggesting that the observed differences were the result of the participants' attitudes toward the economy, independent of their genders.

Since the initial MANOVA showed no influence of the experimental condition (or the interaction between the independent variables) it is safe to say that, for the economy article, none of the three parts of Hypothesis 2 were supported, as the website's ostensible ideology had no influence on participants' perceptions of bias. However, Hypothesis 1 was supported for some of the dependent variables. No effect of participant attitude was found for the *source bias* variable ( $F(2, 156) = 0.136, p = .873$ ; Levene's test:  $F(8, 156) = 0.547, p = .820$ ). This variable's means are shown in Table 7. Similarly, no effect was found for the single-item variable based on participants' agreement with the statement, "This article presented a strong case in favor of using free market approaches to solving economic problems" ( $F(2, 156) = 0.136, p = .873$ ). This variable's means are shown in Table 8. Levene's test indicated that this variable was not distributed homogeneously across cells ( $F(8, 156) = 2.804, p = .006$ ), suggesting that even if a significant difference was found the inconsistent variances

would make the finding somewhat problematic. Table 8 shows the means for this variable.

Table 9 shows the means for the *directional bias* variable. This variable was affected by the participant's attitude on economic issues ( $F(2, 156) = 4.489, p = .013$ ). Levene's test showed that this variable had homogeneous distributions within each cell ( $F(8, 156) = 0.388, p = .926$ ). Specifically, participants who supported liberal economic policies were more likely to perceive the article as supporting free market economic policies than neutral participants were ( $p = .029$ ). Participants who supported conservative economic policies did not differ from those who support liberal policies ( $p = .990$ ) or those who are neutral on economic issues ( $p = .067$ ). This finding supports the prediction that liberal participants would perceive a conservative bias, although it does not support the prediction that conservative participants would perceive a liberal bias.

Table 10 shows the mean values for participant's responses to the item "What percentage of readers do you believe would become more supportive of using government intervention to solve economic problems after reading this article?" (with values standardized to a scale of -4 to 3). This variable was affected by participants' attitudes on economic issues ( $F(2, 156) = 4.285, p = .015$ ). As with the *directional bias* variable, participants who supported liberal economic policies were more likely to perceive a bias than were neutral participants ( $p = .020$ ). There was no difference between conservative and liberal participants ( $p = .909$ ), nor was there a difference between conservative and neutral participants ( $p = .100$ ). However, these results are somewhat suspect as, according to Levene's test, the variables did not have a homogeneous variance among the different groups ( $F(8, 156) = 4.204, p < .001$ ).

In summary, the results for the economy article offered some support for Hypothesis

1 by showing that economic liberals were more likely to see the economy article as biased, although this result was not consistent across all of the dependent variables. No support was found for Hypothesis 2 in regards to the economy article.

### **Hypothesis 3**

The third hypothesis predicted that perceptions of media bias would be mediated by the extent to which participants selectively categorize specific excerpts of the media content as favoring the other side of the issue. This hypothesis was designed to test the selective categorization mechanism supported by previous research, which suggests that the hostile media effect occurs because people interpret specific pieces of information from news stories as biased. This proposed mechanism is distinct from other possible explanations for the hostile media effect that have not been supported by previous research, such as the selective recall mechanism. This hypothesis was tested by having participants evaluate three excerpts from each article in order to assess whether they perceived these excerpts as biased to the same extent that they perceived the overall articles as biased.

Although the original plan was to average responses for the three excerpts from each article, these responses demonstrated only a moderate level of reliability (*Cronbach's*  $\alpha = .534$  for the excerpts from the abortion article; *Cronbach's*  $\alpha = .432$  for the excerpts from the economy article). Since these responses did not seem to constitute an acceptably reliable scale, the responses for each excerpt were treated as separate independent variables for the regression analyses used to test Hypothesis 3. The dependent variable for each of these analyses was the *directional bias* variable identified by the factor analyses discussed in the results for Hypotheses 1 and 2. This variable was chosen because it conceptually matched the question used to assess perceptions of each excerpts' bias, "This excerpt supports

(legalized abortion/using government intervention to solve economic problems),” which is directional in nature.

For the abortion article, participants were more likely to perceive Excerpt 1 as supporting abortion rights ( $M = 0.37$  on a -3 to 3 scale,  $SD = 1.503$ ) than Excerpt 2 ( $M = 0.16$ ,  $SD = 1.206$ ) or Excerpt 3 ( $M = -0.93$ ,  $SD = 1.560$ ; see Appendix C for the text of the excerpts). A series of paired-sample t-tests showed that Excerpt 3 was perceived as significantly less supportive of abortion rights than Excerpt 2 ( $t(163) = 8.207$ ,  $p < .001$ ) or Excerpt 1 ( $t(163) = 8.397$ ,  $p < .001$ ), but there was no significant difference between perceptions of Excerpts 1 and 2 ( $t(163) = 1.664$ ,  $p = .098$ ). A multiple regression analysis using all three independent variables showed that, taken together, these variables explained 70% of the variance in the dependent variable. However, the multiple regression analysis showed that the response to Excerpt 1 predicted the dependent variable (*Standardized  $\beta$*  = .249,  $p = .003$ ), but responses to Excerpt 2 (*Standardized  $\beta$*  = -.002,  $p = .979$ ) and Excerpt 3 (*Standardized  $\beta$*  = .059,  $p = .464$ ) did not.

For the economy article, Excerpt 1 was seen as the most supportive of government intervention ( $M = 0.63$ ,  $SD = 1.491$ ), followed by Excerpt 3 ( $M = -0.32$ ,  $SD = 1.358$ ) and Excerpt 2 ( $M = -1.05$ ,  $SD = 1.476$ ; see Appendix 4 for the text of the excerpts). A series of paired-sample t-tests indicated that all of these differences were statistically significant, with Excerpt 1 perceived as more supportive of government intervention than Excerpt 2 ( $t(165) = 10.443$ ,  $p < .001$ ) or Excerpt 3 ( $t(165) = 6.788$ ,  $p < .001$ ) and Excerpt 3 perceived as more supportive of government intervention than Excerpt 2 ( $t(165) = -6.075$ ,  $p < .001$ ). A regression analysis showed that these three variables accounted for 22.9% of the variance in the *directional bias* variable. Specifically, the dependent variable was significantly affected

by the first (*Standardized  $\beta$*  = -.306,  $p$  < .001) and third excerpts (*Standardized  $\beta$*  = -.277,  $p$  < .001), but not the second excerpt (*Standardized  $\beta$*  = -.076,  $p$  = .315).

Overall, these results offer limited support for Hypothesis 3. Participants' perceptions of the articles' biases corresponded to perceptions of bias for one of the abortion excerpts and two of the economy excerpts. This finding lends support to the selective categorization mechanism's role in the hostile media effect.

#### **Hypothesis 4 and Research Question 1**

Hypothesis 4 predicted that attitude extremity, ideological group identification, connection between the participant's attitude and his or her moral values, general perceptions of media bias, political cynicism, and political tolerance would influence participants' perceptions of the articles' biases. Research Question 1 asked whether these antecedents would differently predict perceptions of bias for each issue. The *source bias* variable identified in the earlier factor analyses was used as the dependent variable to test this hypothesis. This variable was used because the hypothesis speaks to general perceptions of bias rather than a specific *directional bias*. Regression analyses were conducted using the *source bias* variables for each article as the dependent variables.

The extremity of the participants' party identification and ideological identification were found to be significantly correlated ( $r$  = .557,  $p$  < .001). Although the magnitude of the correlation was only moderate, the fact that the correlation was clearly significant indicates that it is strong enough to average the items into one variable for the purposes of this analysis. The items used to assess general perceptions of media bias were found to form a reliable scale (*Cronbach's  $\alpha$*  = .874) and were, therefore, combined into one variable. The items used to measure political tolerance also constituted a reliable scale (*Cronbach's  $\alpha$*  =

.824) and were combined. The items used to measure media cynicism formed a scale that was not as reliable as the others (*Cronbach's*  $\alpha = .555$ ). However, this reliability was deemed acceptable for the present analysis because the measures used closely parallel measures that have been used in previous studies of political cynicism. Consequently, the items were combined. Additionally, the items used to assess the connection between attitudes and moral values formed reliable scales for abortion (*Cronbach's*  $\alpha = .890$ ) and the economy (*Cronbach's*  $\alpha = .864$ ).

A regression analysis was performed using perceptions of *source bias* for the abortion article as the dependent variable and the six predicted antecedents from Hypothesis 4 as independent variables. These six variables accounted for 18.4% of the variance in the dependent variable. Only the participants' general perception of media bias was a significant predictor of the dependent variable (*Standardized*  $\beta = .372, p < .001$ ). Attitude extremity (*Standardized*  $\beta = -.140, p = .072$ ), group identification (*Standardized*  $\beta = .094, p = .215$ ), the connection between attitudes toward abortion and moral values (*Standardized*  $\beta = -.030, p = .689$ ), political tolerance (*Standardized*  $\beta = .104, p = .154$ ), and media cynicism (*Standardized*  $\beta = .001, p = .989$ ) failed to predict the dependent variable. Thus, for the abortion article, Hypothesis 4d was supported but the other parts of Hypothesis 4 were not.

A comparable regression analysis was run for the economy article, and it was found that the six hypothesized antecedents of perceived media bias accounted for only 5.4% of the variance in the *source bias* variable. As with the abortion article, general perception of media bias predicted the dependent variable (*Standardized*  $\beta = .159, p = .045$ ), while attitude extremity (*Standardized*  $\beta = .017, p = .835$ ), connection with values (*Standardized*  $\beta = -.086, p = .274$ ), group identification (*Standardized*  $\beta = -.023, p = .771$ ), political tolerance



(*Standardized  $\beta$*  = .116, *p* = .146), and media cynicism (*Standardized  $\beta$*  = .122, *p* = .172) did not predict the dependent variable. Thus, the results for the economy article were the same as for the abortion article: General perceptions of media bias functioned as an antecedent of perceived bias for the stimulus articles, but none of the other hypothesized antecedents were found to predict the dependent variables.

In summary, Hypotheses 4a, 4b, 4c, 4e, and 4e were not supported for either article, but Hypothesis 4d was supported for both articles. The answer to Research Question 1 is that the one antecedent that affected perceptions of article bias did so for both the abortion issue and the economy issue.

### **Hypothesis 5 and Research Question 2**

The fifth hypothesis predicted that perceived media bias would lead to decreased perceptions of the media outlet's credibility, ratings of how interesting a news outlet is, decreased ratings of how informative a news program is, greater media indignation (which would, in turn, lead to greater willingness to engage in discursive activities supporting the participant's position), and perceptions that public opinion differs from the participant's position. Research Question 2 asked which political issues would invoke these consequences.

All of the hypothesized consequences except perceptions of public opinion were hypothesized to be linked to general (non-directional) perceptions of bias. In other words, they should be influenced by the perceptions that the website is biased, regardless of which position the website is perceived as favoring. In contrast, the public opinion variable should be tied to perceived *directional bias*; for example, participants who perceived the abortion article as biased in favor of the pro-life position should be more likely to estimate that the

public generally supports the pro-life position. As such, Hypotheses 5a through 5d were tested using a structural equation model with the *source bias* variable as the lone exogenous variable and the hypothesized consequences as endogenous variables. A simplified version of this hypothesized model (showing just the latent variables) is shown in Figure 1. Hypothesis 5e was tested by calculating the correlation between the *directional bias* variable and perceived public opinion on each issue.

Since the AMOS structural equation modeling software requires that there be no missing data, linear interpolation was used to estimate values for a handful of cases that were missing a response for a given item. The very low number of missing values suggested that they were the result of random oversight on the part of the participants rather than any kind of systematic non-response that might bias the results. No item was missing values for more than two cases and no individual participant was missing a value for more than two items used in any of the models discussed in this section (very few participants were missing more than one value). The seemingly random nature of the missing data suggested that linear interpolation was a simple but effective way to assign values to those cases so as to allow the analysis to proceed without having to delete cases.

Among the 14 items used to measure *source bias*, a total of seven values had to be interpolated for the abortion article and 11 values had to be interpolated for the economy article. Three values had to be interpolated for the website credibility variable (a four-item scale), three for the interestingness variable (a five-item scale), one for the variable measuring how informative the website was perceived as being (a three-item scale), four for willingness to engage in discursive activity on the abortion issue (an eight-item scale), five for willingness to engage in discursive activity on the economy issue (an eight-item scale),

and one for the media indignation variable (a four-item scale).

**Results for the abortion article.** All observed variables showed strong relationships with their respective latent variables (all *Standardized  $\beta$ s* > .500, all *ps* < .001). Perceptions of the abortion article's bias led to decreased perceptions of the website's credibility (*Standardized  $\beta$*  = -.442, *p* < .001) and decreased perceptions of how informative the website is (*Standardized  $\beta$*  = -.233, *p* = .011). Perceptions of bias did not, however, influence perceptions of how interesting the website is (*Standardized  $\beta$*  = -.133, *p* = .107) or media indignation (*Standardized  $\beta$*  = .136, *p* = .117), and media indignation did not influence the participants' willingness to engage in discursive action on the abortion issues (*Standardized  $\beta$*  = -.024, *p* = .788). These results supported Hypotheses 5a and 5c but not Hypotheses 5b and 5d. The initial model did not fit the data particularly well ( $\chi^2(577) = 1044.2$ , *p* < .001; *GFI* = .766; *CFI* = .898; *NFI* = .802; *TLI* = .875; *RMSEA* = .070, *Standardized RMR* = 1.077).

Once interestingness, media indignation, and willingness to engage in discursive activity were removed from the model, perceived bias still influenced perceived credibility (*Standardized  $\beta$*  = -.435, *p* < .001) and perceptions of how informative the website was (*Standardized  $\beta$*  = -.228, *p* = .012). The new model showed much better fit ( $\chi^2(104) = 197.5$ , *p* < .001; *GFI* = .907; *CFI* = .969; *NFI* = .938; *TLI* = .936; *RMSEA* = .074, *Standardized RMR* = 0.084). The modification indices for this model suggested that the model fit would be improved by adding a regression line showing that the perception of how informative the website was influenced the website's perceived credibility. When this relationship was added to the model it was found to be significant (*Standardized  $\beta$*  = .375, *p* < .001) and the influence of perceived bias on credibility (*Standardized  $\beta$*  = -.348, *p* < .001) and how informative the website was (*Standardized  $\beta$*  = -.218, *p* = .015) remained significant. Adding

the relationship between the two endogenous variables further increased model fit ( $\chi^2(103) = 173.9, p < .001$ ;  $GFI = .915$ ;  $CFI = .976$ ;  $NFI = .945$ ;  $TLI = .951$ ;  $RMSEA = .064$ , *Standardized RMR* = 0.058). The modified model, excluding the observed indicator variables, is shown in Figure 2.

In order to test Hypothesis 5e, a simple linear regression was run with *directional bias* and the participants' attitudes toward abortion as independent variables and perceived public opinion on the abortion issue as the dependent variable. If Hypothesis 5e is correct, the article's perceived support for abortion rights should lead to perceived public support for abortion rights, even when the participants' own attitudes are included in the model. The three items used to measure perceived public opinion formed a reliable scale (*Cronbach's  $\alpha$*  = .767). The regression analysis showed that participants who perceived the article as having a pro-choice bias were also more likely to believe that the public was more pro-choice (*Standardized  $\beta$*  = .188,  $p = .016$ ). However, perceptions of public opinion were not influenced by participants' own attitudes toward abortion (*Standardized  $\beta$*  = .023,  $p = .770$ ). Thus, the result did not lend support to the finding of much previous research that people tend to estimate that the public agrees with their attitudes. However, more to the point of the present study, participants' perception of the article's bias did influence their perception of public opinion, so Hypothesis 5e was supported for the abortion article.

**Results for the economy article.** All observed variables showed strong relationships with their respective latent variables (all *standardized  $\beta$ s* > .500, all  $ps < .001$ ). Perceptions of the economy article's bias led to decreased perceptions of the website's credibility (*Standardized  $\beta$*  = -.755,  $p < .001$ ), decreased perceptions of how informative the website is (*Standardized  $\beta$*  = -.351,  $p < .001$ ), and decreased perceptions of how interesting the website

is (*Standardized  $\beta$*  = -.386,  $p < .001$ ). Perceptions of bias did not influence media indignation (*Standardized  $\beta$*  = -.062,  $p = .467$ ), but media indignation did influence the participants' willingness to engage in discursive action on the economy issue (*Standardized  $\beta$*  = .292,  $p = .001$ ). Again, the initial model did not fit the data particularly well ( $\chi^2(577) = 1276.6$ ,  $p < .001$ ; *GFI* = .720; *CFI* = .859; *NFI* = .775; *TLI* = .828; *RMSEA* = .085, *Standardized RMR* = 0.122).

Since they were not affected by the exogenous variable, media indignation and willingness to engage in discursive activity were removed from the model. Perceived bias still influenced perceived credibility (*Standardized  $\beta$*  = -.753,  $p < .001$ ), perceptions of how informative the website was (*Standardized  $\beta$*  = -.349,  $p < .001$ ), and perceived interestingness (*Standardized  $\beta$*  = -.384,  $p < .001$ ). The new model showed slightly better fit based on most fit criteria ( $\chi^2(213) = 585.0$ ,  $p < .001$ ; *GFI* = .797; *CFI* = .899; *NFI* = .854; *TLI* = .846; *RMSEA* = 0.108, *Standardized RMR* = .084), but the improvement was not drastic.

The modification indices for this model suggested that the model fit would be improved by adding regression lines showing that the perception of how interesting the website was influenced perceptions of how credible and informative the website was. When these relationships were added to the model it was found that interestingness did, in fact, influence credibility (*Standardized  $\beta$*  = .208,  $p = .002$ ) and perceptions of how informative the website was (*Standardized  $\beta$*  = .331,  $p < .001$ ). Meanwhile, perceived bias still influenced credibility (*Standardized  $\beta$*  = -.645,  $p < .001$ ), how informative the website was perceived as being (*Standardized  $\beta$*  = -.212,  $p = .012$ ), and how interesting the website was perceived as being (*Standardized  $\beta$*  = -.375,  $p < .001$ ). Adding the two relationships among the endogenous variables further increased model fit ( $\chi^2(211) = 562.4$ ,  $p < .001$ ; *GFI* = .806;

$CFI = .905$ ;  $NFI = .860$ ;  $TLI = .853$ ;  $RMSEA = .100$ , *Standardized RMR* = 0.100).

Although the model still did not display an ideal level of fit, the modification indices provided by AMOS did not offer any suggestions that would increase our understanding of the relationships among the variable. For example, model fit could have been improved by adding correlations among the error terms for the observed variables, but since there was no practical reason to add correlations among the error terms, such a modification would artificially increase model fit. Additionally, the lack of fit was deemed to be a minor problem, since structural equation modeling was used in this case to test the influence of perceived bias on various hypothesized consequences, and this goal was adequately achieved. The modified model, excluding the observed indicator variables, is shown in Figure 3.

In order to test Hypothesis 5e, a simple linear regression was run with *directional bias* and the participants' attitudes toward the economy as independent variables and perceived public opinion on the economy issue as the dependent variable. The three items used to measure perceived public opinion did not form a reliable scale (*Cronbach's*  $\alpha = .479$ ). This lack of reliability occurred because the item "On average, do you believe most Americans consider themselves to be more conservative or liberal on economic issues?" was not highly correlated with the items "On average, do you believe most Americans prefer government intervention or free market approaches to solving economic problems" ( $r = .173$ ,  $p < .05$ ) or "What percentage of Americans would you estimate support government intervention to solve economic problems?" ( $r = .132$ ,  $p > .05$ ). Consequently, only the latter two items were combined to form the dependent variable. These two items were fairly well correlated with each other ( $r = .425$ ,  $p < .001$ ). The regression analysis showed that

participants' perceptions of public opinion on the economic issue was not affected by the participants' attitudes (*Standardized  $\beta$*  = .133, *p* = .087) or their perceptions of the article's bias (*Standardized  $\beta$*  = -.035, *p* = .649). Unlike with the abortion article, Hypothesis 5e was not supported. As with the abortion article, the results also did not lend support to the finding of much previous research that people tend to estimate that the public agrees with their attitudes.

**Summary of results for Hypothesis 5 and Research Question 2.** Overall, the answer to Research Question 2 is that two of the hypothesized consequences were present for both issues, one was present only for the abortion issue, one only for the economy issue, and one for neither issue. Hypotheses 5a and 5c were supported for both articles, as participants' perceptions of both article's biases led them to perceive the website as less credible and informative. Hypothesis 5b was only supported in the context of the economy article, as perceptions of that article's bias led participants to see the website as less interesting. Hypothesis 5d was not supported for either article. Hypothesis 5e was supported for the abortion issue but not for the economy issue.

## **Chapter IV: Discussion**

The results of this study offered support for some of the hypotheses but also offered some surprises and suggested some issues to be addressed by future research. At its most basic level, this study was designed to test how a media outlet's stated ideology would affect perceptions of its bias. Research on the hostile media phenomenon suggests the people who have strong attitudes on an issue will perceive coverage of that issue as biased against their attitudes, but that research has typically used stimuli that were ostensibly objective. This study sought to examine how media outlets that stated a particular ideological bias upfront would be perceived.

The results for the abortion article and the results for the economy article were not consistent with each other. For the abortion article, participants who perceived the article as biased did so based on the website's ostensible ideology. The classical hostile media effect was not evident for this article. By contrast, the results for the economy article were more consistent with the hostile media effect, as participants who supported liberal economic policies perceived the article as biased in favor of conservative economic policies, regardless of whether the website was presented as being liberal, conservative, or neutral.

The difference in how the two articles were perceived is not entirely surprising in light of previous research. As noted in the literature review, research has shown mixed results when articles about abortion are used as stimuli in studies of the hostile media phenomenon. While previous studies have not shown such a striking absence of a hostile



media effect in response to abortion articles, any hostile media effect shown in these studies has been less pronounced than in studies of the hostile media effect using other issues in their stimulus articles. Several factors might account for the lack of a clear hostile media effect for the abortion issue seen in this study and elsewhere.

One possibility was suggested by Gunther et al. (2009) in their study of hostile media perceptions of articles about genetic research on wild rice. Their results did not match the traditional hostile media hypothesis, as participants generally found the stimulus articles to be favorable to their attitudes. The authors speculated that their participants, most of whom were highly involved with the issue, may have been influenced by the fact that the issue under question is very rarely covered in the mass media. The participants may have been so pleasantly surprised to see news coverage of this under-covered issue that they were predisposed to evaluate the coverage positively. While abortion certainly receives more media coverage than wild rice does, studies of agenda setting show that abortion does not tend to be one of the top issues covered in American media coverage of politics (see, e.g., Tedesco, 2005). Perhaps pro-life and pro-choice participants in the present study were simply excited to see the abortion issue receiving coverage on a website geared toward college students. By contrast, the economy is consistently shown in agenda setting research to receive a great deal of coverage from the mainstream media, so the same level of excitement would not have been present when participants read the economy article.

However, while it may have some merits, the totality of the research on the hostile media effect casts doubt on this interpretation. While abortion may not receive as much media coverage as wars or the economy, it almost certainly receives more coverage than some of the other issues that have been used in hostile media research, such as genetically

modified foods or physician-assisted suicide, both of which have been shown to invoke hostile media responses in previous studies. Being pleasantly surprised to see coverage of an issue that is important to you could plausibly mitigate a hostile media reaction that might otherwise occur, but, based on the existing research, this mechanism does not seem likely to offer a full explanation for why certain issues do not invoke a hostile media perception.

Another possibility is that the issues of abortion and the economy differ in how clearly the terms “liberal” and “conservative” apply to them. These issues were chosen for this study because they appeared to have clear-cut ideological positions. Presumably, a media outlet that is labeled as “conservative” should be expected to support the pro-life position on abortion and free market economic positions, while a media outlet labeled “liberal” should support the pro-choice position on abortion and interventionist economic positions. However, it is possible that the association between issue positions and ideologies was clearer to the participants in regards to the abortion issue than it was in regards to the economy issue. The words “conservative” and “liberal” might have triggered very clear associations with the pro-life and pro-choice positions on abortion without triggering such clear associations with economic positions.

If this explanation is accurate, it suggests interesting implications relevant to the questions investigated by this study. Specifically, this interpretation suggests that ideological media may, indeed, be perceived differently than the classical hostile media effect would predict. It is plausible that participants who were told that the website was either liberal or conservative used that information to interpret each article’s bias to the extent that is was convenient to do so. When reading the abortion article, the website’s ostensible ideological identification served as a useful cue for interpreting the article’s bias. Since the abortion

article itself did not display an overwhelming bias for or against legalized abortion, participants may have simply assumed that a conservative website would have a pro-life bias and a liberal website a pro-choice bias. If the ideological continuum was not as clear for economic issues, then participants would not have been able to use this cue in interpreting that article's bias. If this interpretation is correct, it suggests that ideological labeling on media essentially overrides the traditional hostile media effect, but only when there is an obvious position that a given ideological media outlet should be expected to take.

To illustrate, suppose a pro-life, free-market supporting conservative stumbles on to an article about abortion on a news website with which she or he is not familiar, and suppose the article itself does not have a clear bias for or against legalized abortion. In isolation, the hostile media effect would predict that this individual would perceive this article as having a pro-choice bias. However, suppose the news website has a heading identifying it as a conservative website. The findings of this study suggest that the "conservative" label will override the hostile media effect because the website will be assumed to oppose abortion rights. However, if the same situation played out and the article focused on the economy, the hypothetical web surfer might not be as clear on the website's assumed bias. A "conservative" website could conceivably represent any of a number of perspectives on the economy, ranging from an extreme anti-government libertarianism to a populist support for a welfare state. Since the ideological labeling provides an ambiguous cue, the traditional hostile media effect kicks in, and the reader interprets the article as having a counter-attitudinal, anti-free market bias.

This interpretation complicates the hostile media effect. Since many contemporary media outlets do not shy away from expressing an ideological point of view, researchers

must recognize that audience members will react to explicitly ideological media differently from ostensibly objective media, but this difference is complex. Intuitively, researchers may expect conservatives' hostile media perception to essentially disappear when watching Fox News or listening to Rush Limbaugh's radio show and for the same thing to happen when liberals watch MSNBC or read the Huffington Post. However, the results of this study suggest that this "shut down" of the hostile media phenomenon is not likely to happen except in cases in which the audience member has a clear sense of where a given media outlet stands on the particular issue under discussion. This understanding of a given media outlet's expected bias is likely to be highly variable based on individual interpretations of terms like "conservative" and "liberal" and familiarity with the media outlet. For example, someone who watches Fox News frequently is likely to have a pretty clear sense of where the station's various commentators stand on many different issues, but someone watching for the first time might not have much of a framework for interpreting potential biases, even if he or she knows that the network is usually considered to fit within the broad category of "conservative." The findings of this study suggest that the former person, who is familiar with the idiosyncratic biases of the journalists and commentators, will interpret their work as matching those biases, while the latter individual will be more likely to interpret potential biases as being counter-attitudinal, as predicted by the hostile media effect.

While this interpretation of the study's results has interesting implications for understanding audience responses in the current media landscape, more research is needed to determine whether it accurately reflects the way in which the participants interpreted the stimuli. One way to test this interpretation would be to design a study in which the ambiguity of the source's ideological leaning is manipulated. For example, the portion of

this study using the article about the economy could be replicated with an additional condition in which the website is described either in straight ideological terms (“liberal” versus “conservative”) or in terms that are more specific to the economy issue (such as “a website that promotes free-market policies” versus “a website that promotes economic regulation”). Such a study would allow for comparisons between participants who have only the website’s general ideology to use as a cue to participants who have more specific information. If the explanation offered here is correct, participants with more specific information should perceive the stimulus as being biased in a way that is consistent with that information, regardless of their own attitudes on economic policy.

Another issue raised by these findings is the relationship between the hostile media phenomenon and the concept of involvement. As noted in the literature review, previous research shows that the hostile media phenomenon applies to people who have strong attitudes on the issue being covered. Although the hostile media effect applies to presumably objective news coverage rather than persuasive messages, recent research (Choi et al., 2009) suggests that the phenomenon can be better understood by borrowing the concept of involvement from research on persuasion, especially the often-cited elaboration likelihood model (Petty and Cacioppo, 1986). Choi et al. showed that the more involved participants were with the issue covered in the stimulus, the more likely they were to perceive the media content as hostile. While many researchers (particularly Albert Gunther and his colleagues) have acknowledged the role of involvement by recruiting participants that they expected would be highly involved with the issues under investigation, Choi et al. actually used involvement as a predictor variable and found that it had a linear relationship with perceptions of hostile media bias. Future research needs to investigate this relationship

further.

However, it is important to note that research on the role of involvement in the hostile media effect cannot simply import the hostile media effect's theoretical perspective into the elaboration likelihood research paradigm. In addition to the obvious differences between the types of stimuli used in these two research traditions (persuasive messages for the elaboration likelihood model versus balanced journalistic reporting for the hostile media effect), it appears that the conception of involvement that is relevant to each of these theories is different. According to Choi et al., the type of involvement that is studied in persuasion research can be described as "outcome-relevant involvement" (2009, p. 61), as it is based on how the issue's possible outcomes could affect the audience member. For example, in many persuasion studies, student participants are asked to read stimulus essays arguing for the implementation of senior comprehensive examinations as a graduation requirement. In these studies, involvement is typically manipulated by telling the participants either that the decision to implement the exams will affect them (the exam requirement could be implemented by their university before they graduate) or that it will not affect them (it will not be implemented before they graduate or it is only being considered by other universities).

By contrast, Choi et al. argue that the hostile media effect is dependent on "value-relevant involvement," (2009, p. 61), defined as how likely participants are to "consider is the issue in terms of their personal values" (p. 70). Their research confirmed that value-relevant involvement and outcome-relevant involvement were separate concepts and that only value-relevant involvement influenced the hostile media effect. These findings suggest implications for the line of research represented in the present study. It is conceivable that participants' level of value-relevant involvement with an issue will influence whether they

evaluate potential biases of coverage of that issue on their own attitudes or on a media outlet's stated ideology. Similar to what has been found by persuasion researchers, it is possible that highly involved individuals may focus on the content itself (perhaps invoking the classic hostile media effect) while less involved individuals might rely on heuristics such as the website's stated ideology (which may function as a sort of peripheral cue). The possibility that there could be a sort of dual-process model of perceived media bias should be investigated by future research.

While it makes intuitive sense to speculate that involvement would lead people to ignore ideological labels and base their interpretations on an article's bias on the content itself, the data collected for this study actually suggest that the effect of value-relevant involvement could be more complex. Value-relevant involvement, as defined by Choi et al. (2009), is conceptually very similar to the variable of moral conviction that was hypothesized to predict perceptions of media bias in this study. As noted in the previous chapter, this moral conviction variable did not predict perceptions of either article's bias. This finding contradicts the findings of Choi et al., although this difference may simply be a function of how the variables were operationalized.

However, even if moral conviction had been a significant predictor of perceived media bias, this variable suggests a different pattern of influence for the value-relevant involvement variable. A *post hoc* paired-sample t-test showed that the participants felt a stronger sense of moral conviction in regard to their positions on abortion ( $M = 4.87$ ) than their positions on the economy ( $M = 4.37$ ,  $t(166) = 4.098$ ,  $p < .001$ ). This difference is not surprising, as abortion would seem to be an issue that invokes moral conviction more than the economy does. But in light of the results for Hypotheses 1 and 2, this difference suggests

that value-relevant involvement may not function the way that outcome-relevant involvement functions in persuasion. For the participants in the present study, abortion attitudes were held with more moral conviction (which, presumably, meant they felt more value-relevant involvement) than the economy issue, yet it was the abortion issue that led to perceptions of bias based on the website's stated ideology rather than the hostile media effect. The website's ideology would seem to be a sort of peripheral cue, yet it affected the participants when they were reading articles about the issue with which they were more involved. These results suggest that much more research needs to be done before it will be clear how involvement affects perceptions of media bias.

Attitude extremity does not seem to account for the differences between the two articles any more than the moral conviction variable does. In the literature review, the author speculated that people were more likely to perceive counter-attitudinal biases for issues on which they held very strong attitudes. However, attitude strength did not contribute to perceptions of bias for either article in this study. Furthermore, the participants showed more polarization for the abortion issue (less than 20% were in the neutral category) than for the economy issue (close to half of the participants were in the neutral category). If polarization led to hostile media perceptions, we would expect to see more evidence of the hostile media phenomenon for the abortion article than for the economy article, yet the results were just the opposite.

The same conclusion applies to group identification, which was hypothesized to influence perceptions of bias but did not do so for either article in this study. The fact that group identification, along with the other hypothesized antecedents of perceived bias (except pre-existing perceptions of general media bias) did not end up predicting the dependent



variables suggests that these variables only predict the hostile media effect when they are directly relevant to the issue covered by the stimulus articles. For example, group identification has been found to affect the hostile media phenomenon when the articles in question actually cover the groups that participants identify with (Gunther, 1992; Duck et al., 1998) or a conflict involving those groups (Matheson & Dursun, 2001). In the only study that found general support for group identification (Eveland & Shah, 2003), this effect was only found for Republican participants. This dissertation suggests that variables such as group identification should not be assumed to influence hostile media perceptions all the time, but only when they are relevant to the issues being studied. This study indicates that abortion and the economy are not issues for which general partisan group identification is relevant, although the results might have been different if the researcher had measured group identification in a more specific way, such as the extent to which participants identified with pro-life or pro-choice groups.

Another question about the hostile media effect suggested by this study is the extent to which different media can be expected to invoke hostile media responses. As noted in the literature review, previous research has shown mixed results in regards to whether a media outlet with a greater reach invokes more of a hostile media response than one with less reach (Gunter et al., 2009; Huge & Glynn, 2010). However, these studies examined reach by comparing local newspapers (low reach) with national newspapers (high reach). Participants should certainly be aware that a national newspaper will have a greater reach than a local newspaper, but they should also recognize both as traditional media outlets. Indeed, virtually all research on the hostile media effect has used stimuli that were ostensibly drawn from traditional media outlets such as newspapers or television news.

The fact that the participants in this study did not display a hostile media effect for the abortion article and only displayed limited support for the hostile media effect for the economy article suggests that new media such as websites might not fit the participants' definition of "media" closely enough to invoke a clear-cut hostile media effect. This study grew out of an interest in how the hostile media effect would apply to new media that were more explicitly ideological than old media, but future research is needed in order to examine what other aspects of new media might complicate traditional understandings of the hostile media effect. For example, the media landscape is much more fragmented as less oriented toward a "mass" audience than it was several decades ago. This shift was reflected in the design of this study, in which the stimuli were said to come from a website that would be marketed to college students. It is possible that a media outlet geared toward such a specific demographic group was perceived differently than an outlet intended for a more general audience would have been. Future research should investigate this possibility by manipulating the presumed reach of newer media sources the same way previous hostile media research has manipulated the presumed reach of newspapers.

One other aspect of this study that has implications for future research is Hypothesis 3, which tested the selective categorization mechanism that has been supported in previous hostile media research. The results of this study partially supported this mechanism, as three of the excerpts taken from the stimuli predicted perceived bias for their respective articles. A review of the excerpts suggests that the excerpts that predicted perceived biases were the ones that were, on their own, the most neutral on their respective issues. Future researchers who seek to test this mechanism need to be careful to use excerpts that do not favor one side or the other, so that participants can interpret the excerpts biases using the same criteria with

which they interpret the articles' biases.

The goal of this study was to examine how explicit labeling of media sources influenced hostile media perceptions, but it is important to acknowledge that there is a certain amount of artificiality in presenting participants with either a liberal, conservative, or neutral website without allowing them to choose which website they prefer. The current media landscape is not only characterized by increased ideological identification, but also increased media choices. While there is still controversy over the extent to which people engage in partisan selective exposure and selective avoidance (see Holbert, Garrett, & Gleason, 2010, for a brief overview), much research suggests that if people can choose only one media source they will tend to choose the source that is most likely to support their attitudes (Iyengar & Hahn, 2009). Holbert et al. speculate that increased choice will change the way people process political messages. Although their argument focuses on processing of persuasive messages, it is likely that increased choice will affect how people access media bias as well. Future research should investigate this possibility by manipulating whether or not participants are able to choose the media source that provides the stimulus article.

### **Limitations**

As with all research, this study has several limitations that must be acknowledged. First, all experimental research raises questions about external validity and generalizability. It is possible that the results would be entirely different if the study was conducted using a sample not drawn primarily from among college students, who may have less developed political attitudes than older participants would. More specifically, research on the hostile media effect is problematic when the sample is not explicitly drawn from groups that are likely to have strong attitudes on the issues discussed in the stimuli. For this study, the

researcher attempted to recruit participants from student organization that are heavily involved with political causes, under the assumptions that members of such organizations would be more likely to hold strong attitudes on political issues. Unfortunately, it was difficult to identify gatekeepers who were willing to distribute recruitment materials to members of these organizations. Consequently, participants were drawn from the general student populations of the two universities where the research was conducted. This failure to recruit highly ideological participants probably resulted in a less striking demonstration of the hostile media effect than has been shown in previous studies. At the same time, the hostile media phenomenon seems to only explain how people with strong attitudes perceive media coverage of a given issue. Including non-partisans in hostile media studies could results in a more complete sense of how perceptions of media bias occur.

More generally, the study suffered from a difficulty in recruiting participants that resulted in a slightly lower sample size than would have been ideal. In terms of the total number of participants, the sample size was not insufficient for the analyses done in this study.<sup>4</sup> Unfortunately, the participants were not even distributed throughout the cells of the factorial design. As noted previously, participants were disproportionately pro-choice, and the neutral position on the economy was somewhat over-represented. As a result, some cells in the design were underrepresented. However, every cell had at least 11 participants in it with the exception of neutrals on the abortion issue who were in the conservative and neutral website conditions. Since the hostile media effect is generally conceived of as a phenomenon that applies to people who have strong attitudes, the theoretically interesting

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<sup>4</sup> A *post hoc* power analysis using the software GPower version 2.1.2 showed that, if the participants were evenly distributed throughout the six cells of the factorial design, the sample would have a power of 0.95 to detect main effects with a moderate effect size ( $f^2 = .15$ ) and a power of 0.87 to detect interactions in the MANOVA with a moderate effect size ( $f^2 = .15$ ).

groups are really the pro-life and pro-choice participants, so the lack of participants with neutral attitudes toward abortion does not invalidate the results. At the same time, this shortfall limits the strength of the analysis, especially since it would be interesting to see, specifically, how people who were neutral on the abortion issue would respond to the stimuli. It is plausible that neutrals would be more affected by ostensible labeling since they should not be affected by the hostile media effect, although this supposition is called into question by the fact that the results for the economy article, which included a disproportionate number of neutrals, did not show an effect of the website's ideological labeling.

Additionally, the design of this experiment could have potentially struck some participants as artificial. Participants could have been suspicious that the website they were asked to evaluate was constructed solely for the experiment and was not really being evaluated for actual use. However, none of the participants expressed skepticism about the website either verbally to the researcher or in an open-ended comment field that was provided at the end of the survey instrument. In fact, several participants' comments seemed to imply a belief that the website was real, with one participant even expressing a desire to bookmark the site for future reference, so it would seem that the study design provided a fairly realistic context for the stimulus.

An additional limitation was related to the stimuli articles themselves. Each article was designed to offer a balanced perspective on its respective issue. However, articles that simply present different perspectives on an issue may not represent typical news stories. Often news coverage of an issue occurs in response to a specific event (e.g., a protest or march either for or against abortion rights, the murder of an abortion doctor, the release of a government report showing economic growth or stagnation). Since the stimuli articles were

not written in response to any type of event, they may have seemed artificial and may not have invoked the kind of involvement necessary to cause a classical hostile media effect. In fact, the specific focus on common ground between people on opposite sides of the issues may have tempered any hostile media effects that the participants would have exhibited when exposed to more typical media coverage of these issues.

Additionally, there is the possibility that the results could have been affected by order effects. All participants viewed the abortion article and responded to the dependent measures for that article before reading the economy article. The fact that the articles were not counter-balanced is a flaw in the design of this experiment. It is possible that participants' views of the economy article could have been influenced by the attitudes they had already formed when reading the abortion article. This possibility makes it a little more difficult to confidently draw conclusions about the results for the economy article. However, the fact that the results differed for the two articles suggests that there was likely no such order effect. If participants' attitudes toward the abortion article influenced their attitudes toward the economy article the results would likely be fairly similar. Although it is conceivable that the results would have been even more different for the two articles if any possible order effects had been eliminated from the study, the notably different results for the two articles indicate a lack of an order effect.

One final potential limitation of this study is that the data were collected over a wide time range using students from two different universities. Participants were recruited at the University of North Carolina in the summer and fall of 2009 and at Radford University in the fall of 2010. It is possible that the results could be different for participants at each school both because of inherent differences between the students and because the issues of abortion

and the economy could have changed in salience over the time lag between data collection at each institution. It is not really possible to quantify these differences, however. As noted in the Results section, the students at Radford were more supportive of free market economic solutions than students at the University of North Carolina, although that difference was due entirely to a higher number of University of North Carolina students in the economically liberal category. Furthermore, University of North Carolina students ( $M = 4.94$ ) identified more with the Democratic Party than Radford students ( $M = 3.93$ ,  $t(142.14) = 3.855$ ,  $p < .001$ , equal variances not assumed). Likewise, Radford students ( $M = 3.65$ ) identified more strongly as conservatives than University of North Carolina students ( $M = 3.10$ ,  $t(144.21) = -2.139$ ,  $p = .034$ , equal variances not assumed). As a result of these differences, it would not be possible to identify which differences on the dependent variables were due to trait differences and which were due to geography or time.

## **Conclusion**

This study shows that, at least in some cases, the stated ideology of a media source can dictate perceptions of media bias, essentially overriding the traditional hostile media effect. However, the study's results also illustrate that there is still a lot that researchers do not know about what leads to media bias. The study also suggests that a great deal more work needs to be done to understand how the increased ideological nature of media has changed the way that audiences consume media. As Bennett and Iyengar argued,

The great thinkers who influenced the contemporary field of political communication were preoccupied with understanding the political, social, psychological, and economic transformations in modern industrial society. But societies have changed so dramatically since the time of these landmark contributions that one must question the continuing relevance of paradigms drawn from them ... Information channels have proliferated and simultaneously become more individualized. Is it still relevant to conceive of "mass media" or has that concept been made obsolete by audience fragmentation and isolation from the public sphere? (2009, p. 707)

The hostile media effect is one of many theoretical perspectives that are rooted in assumptions about media that are no longer accurate. As noted throughout this dissertation, previous research on the hostile media effect has focused on traditional media such as newspapers and network television news that project an assumption of objectivity. Moreover, this line of research began in an era when media choices were considerably more limited than they are now. As a result, the possibilities that media would express ideological affiliations and that audience members would be able to choose media outlets with specific ideological leanings have largely been ignored in the literature.

Bennett and Iyengar argue that the changes in the media landscape “suggest the need for theory building” (2009, p. 725), but Holbert et al. contend that this need for theory building does not mean “that political communication scholarship needs to start from scratch theoretically” (2010, p. 25). Rather, existing theories need to be adapted in order to understand how they apply in the evolving media reality. This process of theory adaptation will happen slowly over the course of many studies. The study reported here is one of a handful of studies starting the task of adapting the hostile media effect. Although it leaves many questions unanswered, its results suggest that ideologically-identified media are perceived differently than other media, opening up other potential lines of research that will help researchers better understand how perceptions of media bias develop in the contemporary media landscape.



Table 1.

*Expected Results of MANOVA for the Directional Bias Variable*

	<u>Liberal Participant</u>	<u>Neutral Participant</u>	<u>Conservative Participant</u>
<u>Liberal Website</u>	High	High	High
<u>Neutral Website</u>	Low	Moderate	High
<u>Conservative Website</u>	Low	Low	Low

*Note: Higher values indicate great perceived support for the liberal position on each issue.*

Table 2

*Perceptions of the Abortion Article's Source Bias*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Pro-Life</u>	-0.83(.972) <sup>a</sup> n = 12	-0.35(1.598) <sup>a, b</sup> n = 15	0.21(1.358) <sup>a</sup> n = 11
<u>Neutral</u>	0.32(.835) <sup>a</sup> n = 6	-1.10(.960) <sup>b</sup> n = 9	-0.18(.687) <sup>a</sup> n = 14
<u>Pro-Choice</u>	-0.77(.908) <sup>a</sup> n = 38	-0.99(1.001) <sup>a, b</sup> n = 31	-0.84(1.189) <sup>a</sup> n = 31

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Higher means indicate greater perceived bias. Means that do not share a superscript are significantly different from each other.*

Table 3

*Perceptions of the Abortion Article's Directional Bias*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Pro-Life</u>	-0.75(1.084) <sup>a</sup> n = 12	0.53(.921) <sup>b</sup> n = 15	0.57(.828) <sup>b</sup> n = 11
<u>Neutral</u>	-1.53(1.591) <sup>a</sup> n = 6	0.24(.970) <sup>b</sup> n = 9	0.27(.913) <sup>b</sup> n = 14
<u>Pro-Choice</u>	-0.26(1.001) <sup>a,b</sup> n = 38	0.20(.854) <sup>b</sup> n = 31	-0.04(1.015) <sup>b</sup> n = 31

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived support for the pro-choice position.*

Table 4

*Perceptions of the Abortion Article's Argument for Legalized Abortion*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Pro-Life</u>	-0.83(1.403) <sup>a</sup> n = 12	0.07(1.668) <sup>a</sup> n = 15	-0.18(1.401) <sup>a</sup> n = 11
<u>Neutral</u>	-2.50(.837) <sup>b</sup> n = 6	-0.78(1.787) <sup>a,b</sup> n = 9	0.07(1.385) <sup>a</sup> n = 14
<u>Pro-Choice</u>	0.00(1.054) <sup>a</sup> n = 38	-0.52(1.589) <sup>a</sup> n = 31	-0.30(1.418) <sup>a</sup> n = 31

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived support for the pro-choice position.*

Table 5

*Perceptions of the Abortion Article's Argument against Legalized Abortion*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Pro-Life</u>	0.08(1.564) <sup>a</sup>	-0.60(1.765) <sup>b</sup>	-0.64(1.120) <sup>a,b</sup>
	n = 12	n = 15	n = 11
<u>Neutral</u>	1.33(2.338) <sup>a</sup>	-0.67(1.500) <sup>b</sup>	0.29(1.326) <sup>a,b</sup>
	n = 6	n = 9	n = 14
<u>Pro-Choice</u>	-0.22(1.109) <sup>a</sup>	-0.74(1.527) <sup>b</sup>	-0.43(1.431) <sup>a,b</sup>
	n = 38	n = 31	n = 31

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived support for the pro-life position.*

Table 6

*Perceptions of the Number of Readers Who Would be Influenced to Support Abortion Rights after Reading the Abortion Article*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Pro-Life</u>	1.53(1.438) <sup>a</sup>	1.42(1.596) <sup>b</sup>	1.32(1.625) <sup>a,b</sup>
	n = 12	n = 15	n = 11
<u>Neutral</u>	1.21(2.00) <sup>a</sup>	1.26(1.771) <sup>b</sup>	1.51(1.237) <sup>a,b</sup>
	n = 6	n = 9	n = 14
<u>Pro-Choice</u>	1.45(1.491) <sup>a</sup>	1.02(1.397) <sup>b</sup>	.75(1.029) <sup>a,b</sup>
	n = 38	n = 31	n = 31

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived likelihood of the article changing readers' attitudes to be more supportive of the pro-choice position. Percentages were converted to a scale of -3 to 3 for ease of comparison with other variables.*

Table 7

*Perceptions of the Economy Article's Source Bias*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Conservative</u>	-0.93(.961) <sup>a</sup> n = 12	-0.55(1.006) <sup>a</sup> n = 27	-0.38(1.057) <sup>a</sup> n = 13
<u>Neutral</u>	-0.64(.933) <sup>a</sup> n = 27	-0.77(.986) <sup>a</sup> n = 27	-0.63(0.876) <sup>a</sup> n = 25
<u>Liberal</u>	-0.66(.965) <sup>a</sup> n = 17	-0.62(1.185) <sup>a</sup> n = 15	-0.48(1.316) <sup>a</sup> n = 18

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Higher means indicate greater perceived bias. Means that do not share a superscript are significantly different from each other.*

Table 8

*Perceptions of the Economy Article's Argument for Free Market Economic Solutions*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Conservative</u>	0.58(0.900) <sup>a</sup>	0.62(0.870) <sup>a</sup>	-0.31(1.109) <sup>a</sup>
	n = 12	n = 27	n = 13
<u>Neutral</u>	0.59(0.888) <sup>a</sup>	0.19(1.331) <sup>a</sup>	0.44(1.474) <sup>a</sup>
	n = 27	n = 27	n = 25
<u>Liberal</u>	0.81(1.276) <sup>a</sup>	-0.07(1.580) <sup>a</sup>	0.18(1.590) <sup>a</sup>
	n = 17	n = 15	n = 18

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived support for the free market position.*



Table 9

*Perceptions of the Economy Article's Directional Bias*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Conservative</u>	0.40(1.019) <sup>a,b</sup> n = 12	0.23(1.095) <sup>a</sup> n = 27	-0.14(1.150) <sup>b</sup> n = 13
<u>Neutral</u>	-0.23(0.979) <sup>a,b</sup> n = 27	-0.39(0.899) <sup>a</sup> n = 27	-0.09(0.960) <sup>b</sup> n = 25
<u>Liberal</u>	0.25(0.878) <sup>a,b</sup> n = 17	0.59(0.886) <sup>a</sup> n = 15	-0.14(1.150) <sup>b</sup> n = 18

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived support for the free market position.*

Table 10

*Perceptions of the Number of Readers Who Would be Influenced to Support Abortion Rights after Reading the Abortion Article*

<u>Participant Attitude</u>	<u>Stated Website Bias – Mean(Standard Deviation)</u>		
	<u>Conservative</u>	<u>Neutral</u>	<u>Liberal</u>
<u>Conservative</u>	1.78(1.217) <sup>a,b</sup> n = 12	1.41(1.931) <sup>a</sup> n = 27	2.36(0.446) <sup>b</sup> n = 13
<u>Neutral</u>	0.93(1.475) <sup>a,b</sup> n = 27	1.18(1.642) <sup>a</sup> n = 27	1.80(1.461) <sup>b</sup> n = 25
<u>Liberal</u>	2.23(0.758) <sup>a,b</sup> n = 17	2.01(1.049) <sup>a</sup> n = 15	1.70(1.377) <sup>b</sup> n = 18

*Notes: The superscripts a and b are arbitrary values used to identify statistically different means. Means that do not share a superscript are significantly different from each other. Higher values indicate great perceived likelihood of the article changing readers' attitudes to be more supportive of the free market position. Percentages were converted to a scale of -3 to 3 for ease of comparison with other variables.*

Figure 1. Structural equation model used to test Hypotheses 5a, 5b, 5c, and 5d.

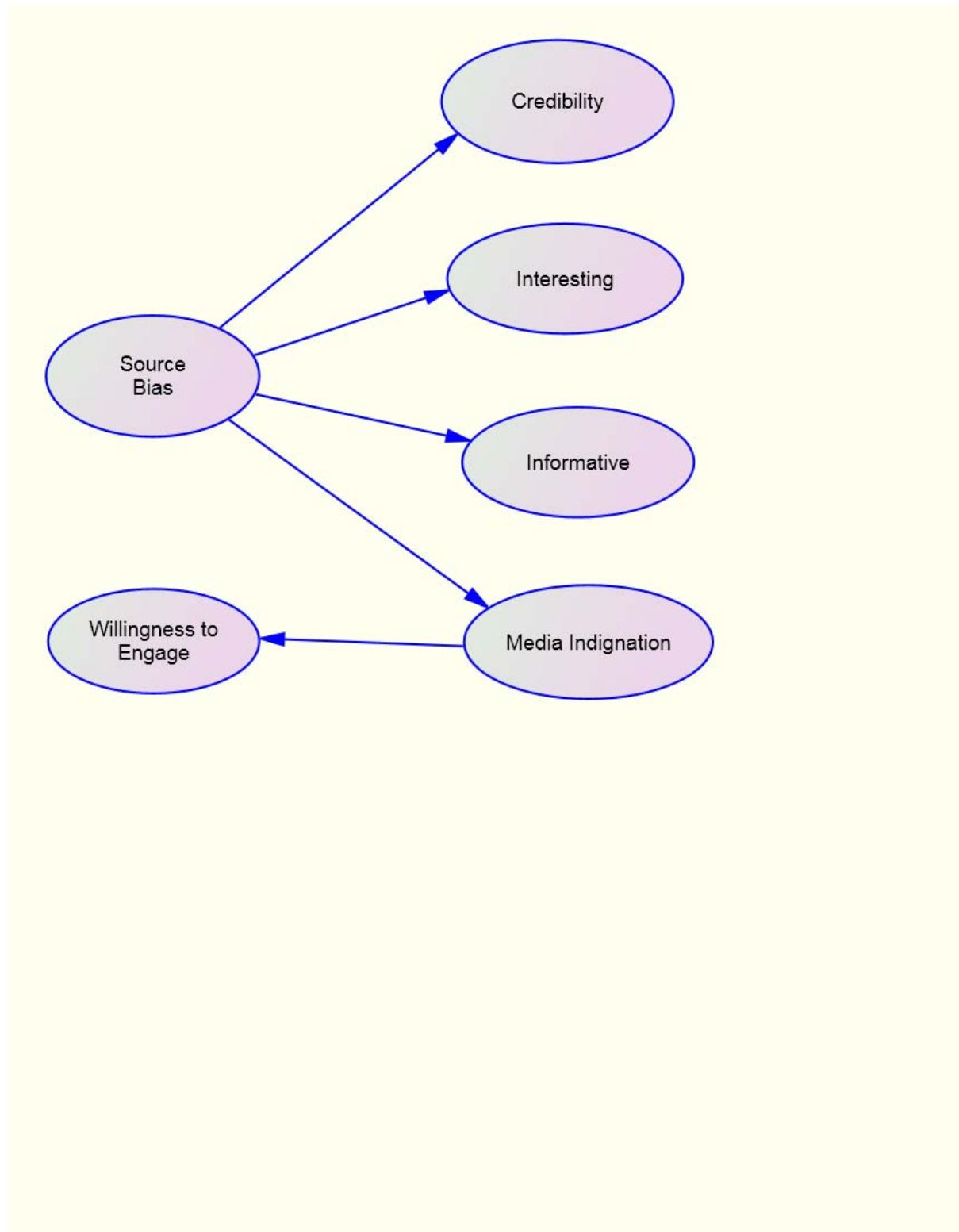


Figure 2. Modified model for consequences of perceiving the abortion article as biased.

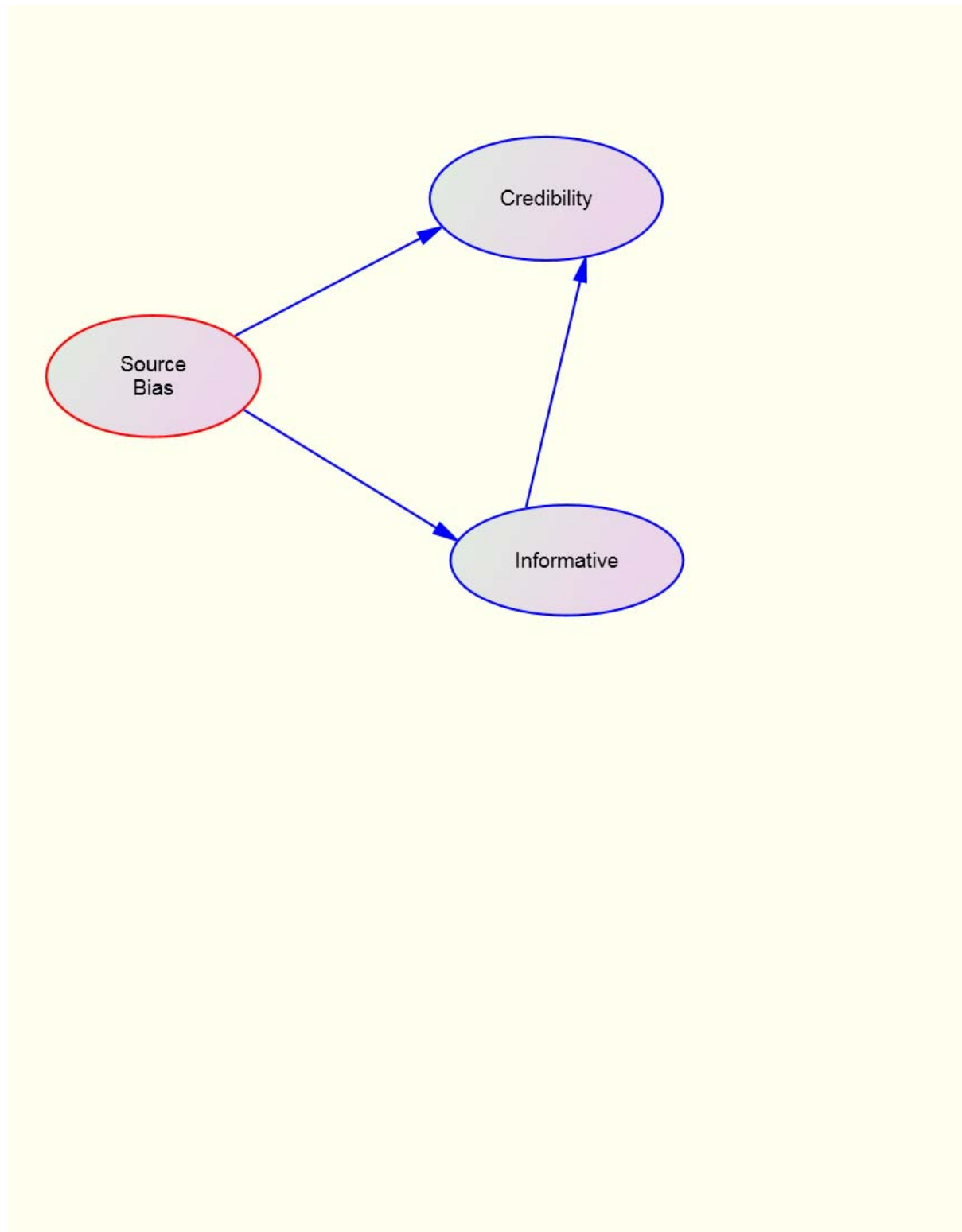
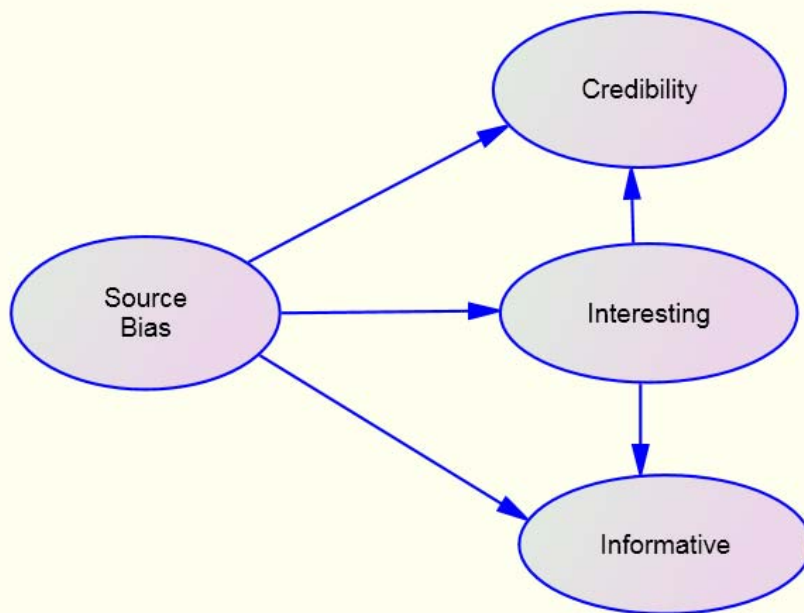


Figure 3. Modified model for consequences of perceiving the economy article as biased.



## **Appendix A**

### **Abortion Stimulus Article**

Abortion Issue Still Stirs Passions

Jason Smith, Union College

Friday, March 13; 12:00 AM

Abortion hasn't been a central debate in the last few political campaigns, but that doesn't mean that its opponents and supporters feel any less strongly about it. Union students and faculty on both sides of the debate say that the issue is always important to them.

"I really wanted to vote for Barack Obama because I agreed with him on the environment and the economy," said Brooke Schafer, a member of the College Republicans who has participated in pro-life protests. "But I ended up voting for McCain because I couldn't vote for someone who supports abortion."

Supporters of abortion rights also say that the issue never leaves their radar screens.

"The Iraq war and the economy seemed to be the most important issues in the last election," said Emily Moore, a member of Students for Reproductive Choice. "But what got a lot of us motivated to campaign for Obama was the fact that McCain was so anti-choice. A McCain presidency would have meant undoing decades of work for women."

More than 35 years after *Roe v. Wade*, the Supreme Court ruling that legalized abortion, the armies that have fought for so many decades over this intimate and often agonizing issue are mobilizing once again to protest and carry on their unrelenting war.

While abortion still has the power to influence votes and inspire activism, some observers say that abortion supporters and opponents would benefit if they would pause long enough to notice what can be changed and what cannot.

“The most basic truth is that three decades of debate have done virtually nothing to change public opinion on the central issue,” said George McAllister, a political science professor who has researched the public debate over abortion.

“Abortion is legal, and most Americans want to keep it so,” McAllister said. “Much as in 1975, less than 20 percent of Americans would make abortion illegal in all circumstances. Moreover, no matter how sincere and heartfelt the beliefs of abortion opponents, banning it or curtailing access still imposes one group’s religious beliefs on other individuals.”

Some activists have decided to take a more moderate position on the issue.

“I don’t support banning abortion, but that doesn’t mean the number of abortions can’t be reduced through other approaches, and that’s something we should all work toward,” said John Walker, a professor of sociology and the faculty advisor for Students for Reproductive Choice.

In fact, McAllister pointed out that, while public opinion has changed remarkably little, the abortion rate has steadily declined since 1990. Additionally, studies show that women are increasingly aborting earlier in their pregnancies, which should allay some of the qualms about late-term abortions.

“Those of us who oppose abortion have to be realistic,” said Kevin Jones, a senior in political science who interned last summer with the organization National Right to Life.

“Barack Obama won the election, and the House and Senate are overwhelmingly controlled by Democrats. Even conservative states like Colorado and South Dakota have rejected pro-life initiatives. The sad truth is that we’re not going to get a complete ban on abortion any time soon.

Jones said anti-abortion activists should be willing to support policies that would reduce the number of abortions by increasing funding for sexual education, making birth control more accessible and providing more financial support for women who want to keep their children but cannot afford it.

“We will always maintain that abortion is murder, and we will always hope for the day when it will be illegal in the United States,” Jones said, “but in the meantime the most effective way to protect life is to minimize the number of abortions that occur.”

While many on both sides of the debate cite a desire to reduce the number of abortions as common ground between the two sides of the debate, some worry that this approach obscures unresolved issues with access to abortion.

“To the extent that the decline in abortions results from more use of contraception and fewer unwanted pregnancies, it is worth celebrating,” said Walker. “Even so, I don’t know whether those are the reasons or whether the decline is due to lack of access.”

McAllister agreed that abortions are more difficult to procure than in earlier decades.

“Protests, harassment, stigma, and burdensome state laws have chipped away at the number of abortion providers,” McAllister said. “In 2005, there were 25 percent fewer than in 1992. Back-door methods to limit access to abortion mean the right guaranteed in 1973 to all women is marginalized for women in states such as Mississippi, South Dakota and Wyoming, where there are only one or two abortion providers.”

While many observers may be encouraged to see pro-choice and anti-abortion activists finding moderate common ground, some supporters of each side feel that compromise has weakened the chances of achieving their goals.

“We have a President and Congress that support using taxpayer money to pay



for abortions,” said Michael Tarver, a member of the College Republicans. “Obama opposed legislation in Illinois to ban partial-birth abortion and even to protect children after they’ve been born alive. Now is not the time to water down the pro-life message with rhetoric that sounds pro-abortion.”

Neil O’Connell, a member of the Young Democrats, expressed a similar sentiment from the pro-choice side.

“These pro-choicers who want compromise never explain why, exactly, they find abortion so morally offensive,” Connell said. “It seems to me they want to make women to feel guilty, even when they’ve taken every possible precaution and got pregnant anyway.”

While it is unlikely that any major changes in abortion policy will occur any time soon, it is clear that the issue still inspires impassioned debate from all sides.

## **Appendix B**

### **Economy Stimulus Article**

Economic Woes Force Some to Rethink Solutions

Jason Smith, Union College

Wednesday, March 13; 12:00 AM

Recent worldwide economic woes have revived centuries-old ideological divisions about the role government should play in regulating and stimulating the economy. While many conservatives still support limited government involvement and allowing free markets to regulate themselves, some Union faculty and students argue that pure free market solutions are not feasible during extreme economic downturns.

“For nearly a generation, the United States has driven growth by deregulating markets, lowering tax rates and promoting trade,” said Arthur Stephens, a professor of political science. “Whether it was airlines or banks or energy or telecommunications, Washington stood aside, believing less regulation would produce prosperity, even at the cost of greater income inequality.”

While many Republicans, including presidential nominee John McCain, have accused Democrats such as President Barack Obama of favoring socialist policies during recent elections, some observers say that even many Republican politicians are embracing government intervention in the face of economic crisis.

“The U.S. government has already, under a supposedly conservative Republican administration, effectively nationalized the banking and mortgage industries,” said Neil Schmidt, president of the College Libertarians. “And it was a Republican administration that pushed for prescription drugs for the elderly, the largest expansion of the welfare state in 30

years. Whether we want to admit it or not, America is moving toward a modern, socialist European state.”

“If we fail to acknowledge the reality of the growing role of government in the economy, then we’re fighting 21st-century wars with 20th-century terms and tactics,” Stephens said. “I think that the sooner we understand where we truly stand, the sooner we can think more clearly about how to use government in today’s world.”

“As much as I’d like to blame Obama for the pro-government movement that seems to be going on, I think we passed the point of no return before he got into office,” said John Jenkins, a senior management major and a member of the College Republicans. “We had the irony of a free-market administration doing things that the most liberal Democratic administration wouldn’t have done in its wildest dreams.”

Cheryl Newman, a professor of political science, said that both political parties have begun to rethink their traditional positions on the best ways to solve economic problems.

“Republicans are embracing more government-based solutions, but Democrats are also becoming more tolerant of free-market approaches,” Newman said. “For example, Barack Obama praises the power of free markets while still arguing that a free market was never meant to be a free license to take whatever you can get, however you can get it.” But other experts on our campus believe that free-market approaches to fixing economic problems are still viable.

“Eventually the facts will intercede,” said Joyce McDaniel, a professor of economics. “The fact that liberalized markets work better than tightly regulated ones will emerge again. American politicians will have to recognize that high taxes and stifling regulations slow economic growth and kill jobs.”

“It was not the failure of the free market that caused the economic crisis,” said John Richards, a professor of marketing. “The market was already distorted and manipulated by the state. Whether it was Freddie (Mac) and Fannie (Mae) or laws requiring banks to make loans to poor borrowers who could not repay them, lawmakers repeatedly played politics with markets, and we are suffering the consequences now.”

“For people who support European-style socialism, this is a wonderful opportunity to use us as an example,” said Juan Martinez, a professor of international relations. “They will say that even the standard-bearer of the market economy, the United States, negates its fundamental principles in its behavior.”

Other observers note that the American people have not unanimously embraced the government’s increased reliance on regulation.

“I talked to members of Congress who said they received more calls and emails about the bailout legislation than they have on any other issue in years,” said Joan McKinley, a communication professor and freelance writer who covers national politics.

“America is still a center-right country in many ways,” Stephens said. “Regardless of how necessary it may seem now, Americans are not generally comfortable with a lot of government regulation. Once the crisis passes, our instinct will be to revert to a more free-market style of capitalism.”

Not surprisingly, these different interpretations of the causes of the current crisis lead experts to disagree about what should be done to help the economy rebound.

“If people believe that it was a pure free market that collapsed,” Richards said, “we are bound to see a wave of state controls and regulations that will deepen the recession and likely send the great American economy into permanent decline.”

“The Obama administration is caught in a paradox,” said Sylvia Smith, a professor of economics. “It is forced to borrow and spend to fix a crisis created by too much borrowing and spending. Obama talks about the need for small government, but it will be hard to balance the costs of all of these stimulus packages with long-term growth.”

Smith said that, interestingly, members of her own academic field have been among the most resistant to rejecting free-market approaches.

“For years economists who have challenged free market theory have been ignored or belittled because they questioned the orthodoxy,” Smith said. “They have been shut out of many economics departments and the most prestigious economics journals.”

Smith said that the economic downturn seems to suggest that there are flaws in the free-market mathematical models favored by many economists.

“But despite all of the current evidence to the contrary, the belief that people make rational economic decisions and the market automatically adjusts to respond to them still prevails,” Smith said. “The financial crash happened very quickly while things in academia change very, very slowly. This kind of blind allegiance to free markets has a lot to do with economists’ failure to see the crash coming”

However, some economists are happy about the slow-moving nature of the economics field.

“Academia typically moves slowly and carefully and thoughtfully,” McDaniel said. “There is a lot of speculation in the press as to why the financial system collapsed, but a lot of work needs to be done to figure out what really happened, which dominoes are in front and caused others to fall. The responsible thing to do is to wait until we have some understanding of what went on here.”

## **Appendix C**

### **Excerpts from the Abortion Article Used to Test Hypothesis 3**

#### **Excerpt 1**

More than 35 years after Roe v. Wade, the Supreme Court ruling that legalized abortion, the armies that have fought for so many decades over this intimate and often agonizing issue are mobilizing once again to protest and carry on their unrelenting war.

While abortion still has the power to influence votes and inspire activism, some observers say that abortion supporters and opponents would benefit if they would pause long enough to notice what can be changed and what cannot.

#### **Excerpt 2**

While many on both sides of the debate cite a desire to reduce the number of abortions as common ground between the two sides of the debate, some worry that this approach obscures unresolved issues with access to abortion.

“To the extent that the decline in abortions results from more use of contraception and fewer unwanted pregnancies, it is worth celebrating,” said Walker. “Even so, I don’t know whether those are the reasons or whether the decline is due to lack of access.”

#### **Excerpt 3**

While many observers may be encouraged to see pro-choice and anti-abortion activists finding moderate common ground, some supporters of each side feel that compromise has weakened the chances of achieving their goals.

“We have a President and Congress that support using taxpayer money to pay for abortions,” said Michael Tarver, a member of the College Republicans. “Obama opposed legislation in Illinois to ban partial-birth abortion and even to protect children after they’ve

been born alive. Now is not the time to water down the pro-life message with rhetoric that sounds pro-abortion.”

## **Appendix D**

### **Excerpts from the Abortion Article Used to Test Hypothesis 3**

#### **Excerpt 1**

While many Republicans, including presidential nominee John McCain, have accused Democrats such as President Barack Obama of favoring socialist policies during recent elections, some observers say that even many Republican politicians are embracing government intervention in the face of economic crisis.

“The U.S. government has already, under a supposedly conservative Republican administration, effectively nationalized the banking and mortgage industries,” said Neil Schmidt, president of the College Libertarians. “And it was a Republican administration that pushed for prescription drugs for the elderly, the largest expansion of the welfare state in 30 years. Whether we want to admit it or not, America is moving toward a modern, socialist European state.”

#### **Excerpt 2**

But other experts on our campus believe that free-market approaches to fixing economic problems are still viable.

“Eventually the facts will intercede,” said Joyce McDaniel, a professor of economics. “The fact that liberalized markets work better than tightly regulated ones will emerge again. American politicians will have to recognize that high taxes and stifling regulations slow economic growth and kill jobs.”

“It was not the failure of the free market that caused the economic crisis,” said John Richards, a professor of marketing. “The market was already distorted and manipulated by the state. Whether it was Freddie (Mac) and Fannie (Mae) or laws requiring banks to make



loans to poor borrowers who could not repay them, lawmakers repeatedly played politics with markets, and we are suffering the consequences now.”

### **Excerpt 3**

Not surprisingly, these different interpretations of the causes of the current crisis lead experts to disagree about what should be done to help the economy rebound.

“If people believe that it was a pure free market that collapsed,” Richards said, “we are bound to see a wave of state controls and regulations that will deepen the recession and likely send the great American economy into permanent decline.”

“The Obama administration is caught in a paradox,” said Sylvia Smith, a professor of economics. “It is forced to borrow and spend to fix a crisis created by too much borrowing and spending. Obama talks about the need for small government, but it will be hard to balance the costs of all of these stimulus packages with long-term growth.”

## References

- Alterman, E. (2003). *What liberal media?: The truth about bias and the news*. New York, NY: Basic Books.
- Arpan, L. M., & Raney, A. A. (2003). An experimental investigation of news source and the hostile media effects. *Journalism and Mass Communication Quarterly*, 80(2), 265-281.
- Austin, E. W., & Dong, Q. (1994). Source vs. content effects on judgments of news believability. *Journalism Quarterly*, 71(4), 973-983.
- Bagdikian, B. (1983). *The media monopoly*. Boston, MA: Beacon Press.
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B (Methodological)*, 57(1), 289-300.
- Bennett, W. L., & Iyengar, S. (2009). A new era of minimal effects?: The changing foundations of political communication. *Journal of Communication*, 58, 707-731.
- Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33(4), 563-576.
- Bozell, L. B. (2004). *Weapons of mass distortion: The coming meltdown of the liberal media*. New York, NY: Crown Forum.
- Chia, S. C., Yong, S. Y. J., Wong, Z. W. D., & Koh, W. L. (2007). Personal bias or government bias?: Testing the hostile media bias in a regulated press system. *International Journal of Public Opinion Research*, 19(3), 313-330.
- Choi, J. H., Watt, J. H., & Lynch, M. (2006). Perceptions of news credibility about the war in Iraq: Why war opponents perceived the Internet as the most credible medium. *Journal of Computer-Mediated Communication*, 12, 209-229.
- Choi, J., Yang, M., & Chang, J. J. (2009). Elaboration of the hostile media phenomenon: The roles of involvement, media skepticism, congruency of perceived media influence, and perceived opinion climate. *Communication Research*, 36(1), 54-75.
- Christen, C. T., & Huberty, K. E. (2007). Media reach, media influence?: The effects of local, national, and Internet news on public opinion inferences. *Journalism and Mass Communication Quarterly*, 84(2), 315-334.
- Christen, C. T., Kannaovakun, P., & Gunther, A. C. (2002). Hostile media perceptions: Partisan assessments of press and public during the 1997 United Parcel Service strike. *Political Communication*, 19, 423-436.

- Coe, K., Tewksbury, D., Bond, B. J., Drogo, K. L., Porter, R. W., Yahn, A., & Zhang, Y. (2008). Hostile news: Partisan use and perceptions of cable news programming. *Journal of Communication*, 58, 201-219.
- Covert, T. J. A., & Wasburn, P. C. (2009). *Media bias?: A comparative student of Time, Newsweek, the National Review, and The Progressive coverage of domestic social issues, 1975-2000*. Lanham, MD: Lexington Books.
- Croteau, D. (1999). Examining the “liberal media” claim: Journalists’ views on politics, economics and social policy (including health care), and media coverage. *International Journal of Health Services*, 29(3), 627-655.
- D’Alessio, D. (2003). An experimental examination of readers’ perceptions of media bias. *Journalism and Mass Communication Quarterly*, 80(2), 282-294.
- D’Alessio, D., & Allen, M. (2000). Media bias in presidential elections: A meta-analysis. *Journal of Communication*, 50(4), 133-156.
- Dalton, R. J., Beck, P. A., & Huckfeldt, R. (1998). Partisan cues and the media: Information flows in the 1992 presidential election. *The American Political Science Review*, 92(1), 111-126.
- Domke, D., Fan, D. P., Fibison, M., Shah, D. V., Smith, S. S., & Watts, M. D. (1997). News media, candidates and issues, and public opinion in the 1996 presidential campaign. *Journalism and Mass Communication Quarterly*, 74(4), 718-737.
- Domke, D., Shah, D. V., & Wackman, D. B. (1998). “Moral referendums”: Values, news media, and the process of candidate choice. *Political Communication*, 15, 301-321.
- Domke, D., Watts, M. D., Shah, D. V., & Fan, D. P. (1999). The politics of conservative elites and the “liberal media” argument. *Journal of Communication*, 49(4), 35-58.
- Duck, J. M., Terry, D. J., & Hogg, M. A. (1998). Perceptions of a media campaign: The role of social identity and the changing intergroup context. *Personality and Social Psychology Bulletin*, 24(1), 3-16.
- Efron, E. (1971). *The news twisters*. Los Angeles, CA: Nash Publishing.
- Eveland, W. P., Jr., & Shah, D. V. (2003). The impact of individual and interpersonal factors on perceived news media bias. *Political Psychology*, 24(1), 101-117.
- Farhi, P. (2008). In the tank? *American Journalism Review*, 30(3), 28-33.
- Farley, J. A. (1938). *Behind the ballots: The personal history of a politician*. New York, NY: Harcourt, Brace, and Co.
- Fields, J. M., Schuman, H. (1976). Public beliefs about the beliefs of the public. *Public Opinion Quarterly*, 40(4), 427-448.

- Finkel, S. E., Sigelman, L., & Humphries, S. (1999). Democratic values and political tolerance. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of political tolerance* (pp. 203-296). San Diego, CA: Academic Press.
- Gibson, J. L. (1992). Alternative measures of political tolerance: Must tolerance be 'least-liked'? *American Journal of Political Science*, 36(2), 560-77.
- Giner-Sorolla, R., & Chaiken, S. (1994). The causes of hostile media judgments. *Journal of Experimental Social Psychology*, 30(2), 165-180.
- Groseclose, T., & Milyo, J. (2005). A measure of media bias. *The Quarterly Journal of Economics*, 120(4), 1191-1237.
- Gunther, A. (1988). Attitude extremity and trust in media. *Journalism Quarterly*, 65(2/3), 279-287.
- Gunther, A., & Lasorsa, D. L. (1986). Issue importance and trust in mass media. *Journalism Quarterly*, 64(4), 844-848.
- Gunther, A. C. (1992). Biased press or biased public?: Attitudes toward media coverage of social groups. *Public Opinion Quarterly*, 56(2), 147-167.
- Gunther, A. C., & Chia, S. C. (2001). Predicting pluralistic ignorance: The hostile media perception and its consequences. *Journalism and Mass Communication Quarterly*, 78(4), 688-701.
- Gunther, A. C., & Christen, C. T. (2002). Projection or persuasive press?: Contrary effects of personal opinion and perceived news coverage on estimates of public opinion. *Journal of Communication*, 52(1), 177-195.
- Gunther, A. C., Christen, C. T., Liebhart, J. L., & Chia, S. C. (2001). Congenial public, contrary press, and biased estimates of the climate of opinion. *Public Opinion Quarterly*, 65(3), 295-320.
- Gunther, A. C., & Liebhart, J. L. (2006) Broad reach or biased source?: Decomposing the hostile media effect. *Journal of Communication*, 56(3), 449-466.
- Gunther, A. C., Miller, N., & Liebhart, J. L. (2009). Assimilation and contrast in a test of the hostile media effect. *Communication Research*, 36(6), 747-764.
- Gunther, A. C., & Schmitt, K. (2004). Mapping boundaries of the hostile media effect. *Journal of Communication*, 54(1), 55-70.
- Holbert, R. L., Garrett, R. K., & Gleason, L. S. (2010). A new era of minimal effects?: A response to Bennett and Iyengar. *Journal of Communication*, 60, 15-34.
- Huge, M., & Glynn, C. J. (2010). Hostile media and the campaign trail: Perceived media bias in the race for governor. *Journal of Communication*, 60, 165-181.

- Hwang, H., Pan, Z., & Sun, Y. (2008). Influence of hostile media perception on willingness to engage in discursive activities: An examination of mediating role of media indignation. *Media Psychology, 11*(1), 76-97.
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication, 59*, 19-39.
- Kaid, L. L., McKinney, M. S., & Tedesco, J. C. (2000). *Civic dialogue in the 1996 presidential campaign: Candidate, media, and public voices*. Cresskill, NJ: Hampton.
- Kaid, L. L., Postelnicu, M., Landreville, K., Yun, H. J., & LeGrange, A. G. (2007). The effects of political advertising on young voters. *American Behavioral Scientist, 50*(9), 1137-1151.
- Keppel, G., & Wickens, T. D. (2004). *Design and analysis: A researcher's handbook*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kim, K. S., & Pasadeos, Y. (2007). Study of partisan news readers reveals hostile media perceptions of balanced stories. *Newspaper Research Journal, 28*(2), 99-106.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.
- Knight, K. (1999). Liberalism and conservatism. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of political attitudes* (pp. 59-158). San Diego, CA: Academic Press.
- Kuypers, J. A. (2002). *Press bias and politics: How the media frame controversial issues*. Westport, CT: Praeger.
- Langer, G., & Cohen, J. (2005). Voters and values in the 2004 election. *Public Opinion Quarterly, 69*(5), 744-759.
- Lee, M. A., & Solomon, N. (1992). *Unreliable sources: A guide to detecting bias in news media*. New York, NY: Carol Publishing Group. (Original work published in 1990).
- Levi, M., & Stoker, L. (2000). Political trust and trustworthiness. *Annual Review of Political Science, 3*, 475-507.
- Lichter, S. R., Rothman, S., & Lichter, L. S. (1986). *The media elite*. Bethesda, MD: Adler & Adler.
- Liebling, A. J. (1975). *The press*. New York, NY: Pantheon Books. (Original work published in 1961).

- Lord, C. G., Ross, L., & Lepper, M. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098-2109.
- Matheson, K., & Dursun, S. (2001). Social identity precursors to the hostile media phenomenon: Partisan perceptions of coverage of the Bosnian conflict. *Group Processes and Intergroup Relations*, 4(2), 116-125.
- Miller, L. (2008 November 3). The silent issue. *Newsweek*. Retrieved from <http://www.newsweek.com/id/167211>
- Niven, D. (1999). Partisan bias in the media?: A new test. *Social Science Quarterly*, 80(4), 847-857.
- Nixon, R. M. (1962 November). *1962 California GOP concession speech*. Retrieved from <http://www.americanrhetoric.com/mp3clips/politicalspeeches/richardnixonconcession3242343432.mp3>
- Perloff, R. M. (1989). Ego-involvement and the third person effect of televised news coverage. *Communication Research*, 16(2), 236-262.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York, NY: Springer-Verlag.
- Pew Research Center for the People & the Press. (2010). *News interest index*. Retrieved from <http://people-press.org/news-interest/>
- Povich, E. S. (1996). *Partners and adversaries: The contentious connection between Congress and the media*. Arlington, VA: Freedom Forum.
- Pronin, E., Gilovich, T., & Ross, L. (2004). Objectivity in the eye of the beholder: Divergent perceptions of bias in self versus others. *Psychological Review*, 111(3), 781-799.
- Reader, B., & Riffe, D. (2006). Survey supports publication of controversial letters. *Newspaper Research Journal*, 27(1), 74-90.
- Schmitt, K. M., Gunther, A. C., & Liebhart, J. L. (2004). Why partisans see mass media as biased. *Communication Research*, 31(6), 623-641.
- Schneider, W., & Lewis, I. A. (1985). View of the news. *Public Opinion*, 8(4), 6-11, 58-59.
- Schudson, M. (1999). *The good citizen: A history of American civic life*. Cambridge, MA: Harvard University Press.
- Shah, D. V., Domke, D., & Wackman, D. B. (1997). Values and the vote: Linking issue interpretations to the process of candidate choice. *Journalism and Mass Communication Quarterly*, 74(2), 357-387.

- Shah, D. V., Watts, M. D., Domke, D., Fan, D. P., & Fibison, M. (1999). News coverage, economic cues, and the public's presidential preferences, 1984-1996. *The Journal of Politics*, 61(4), 914-943.
- Shen, F., & Edwards, H. H. (2005). Economic individualism, humanitarianism, and welfare reform: A value-based account of framing effects. *Journal of Communication*, 55(4), 795-809.
- Skitka, L. J., & Bauman, C. W. (2008). Moral conviction and political engagement. *Political Psychology*, 29(1), 29-54
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895-917.
- Stephenson, M. T., Holbert, R. L., Zimmerman, R. S. (2006). On the use of structural equation modeling in health communication research. *Health Communication*, 20(2), 159-167.
- Stevenson, R. L., & Greene, M. T. (1980). A reconsideration of bias in the news. *Journalism Quarterly*, 57(1), 115-121.
- Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The hostile media phenomenon: Biased perception and perceptions of media bias in coverage of the Beirut Massacre. *Journal of Personality and Social Psychology*, 49(3), 577-585.
- Tedesco, J. C. (2005). Issue and strategy agenda setting in the 2004 presidential election: Exploring the candidate-journalist relationship. *Journalism Studies*, 6, 187-201.
- Tsfati, Y. (2007). Hostile media perceptions, presumed media influence, and minority alienation: The case of Arabs in Israel. *Journal of Communication*, 57(4), 632-651.
- Tsfati, Y., & Cohen, J. (2005). Democratic consequences of hostile media perceptions: The case of Gaza settlers. *The International Journal of Press/Politics*, 10(4), 28-51.
- Waldman, P., & Devitt, J. (1998). Newspaper photographs and the 1996 presidential election: The question of bias. *Journalism and Mass Communication Quarterly*, 75(2), 302-311.
- Watts, M. D., Domke, D., Shah, D. V., & Fan, D. P. (1999). Elite cues and media bias in presidential campaigns: Explaining public perceptions of a liberal press. *Communication Research*, 26(2), 144-175.
- Weisberg, H. F. (1999). Political partisanship. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of political attitudes* (pp. 681-736). San Diego, CA: Academic Press.
- Wilson, J. K. (2008). The myth of pro-Obama media bias. *Extra*, 21(5), 8-11.