FACT OR FICTION: BELIEVABILITY OF STATEMENTS MADE BY NEWS NETWORKS

By

Robin Blom

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Media and Information Studies – Doctor of Philosophy

2013

ABSTRACT

FACT OR FICTION: BELIEVABILITY OF STATEMENTS MADE BY NEWS NETWORKS

By

Robin Blom

For successful functioning of society it is important that people become informed about public affairs. The press plays an important role in disseminating factual information related to those issues, although there may be some distortions at times. News consumers, therefore, need to closely analyze news coverage, because there is a chance that news media organizations are presenting incorrect information—either intentional or not. News consumers can make those believability evaluations based on the news content and its news source. Yet, those are not two independent judgments. The messenger and the message, together, create a specific context that people can utilize to make decisions about the believability of news content.

Kelley (1972) proposed attribution analysis of persuasion to examine the role of expectancy violations on levels of believability. He contended that the message recipient cannot be sure that a source is being candid when a message confirms expectancies, but the receiver may conclude that a source has overcome his or her self-interest when expectancies are disconfirmed. Such act of perceived honesty would then lead to a higher believability. The scholarly literature that is based on Kelley's theory makes it appear that expectancy violation always leads to higher believability than expectancy confirmation, but this dissertation is challenging that notion. The argument is made that trusted news sources with expected news statements are actually highly believable, because trusted news sources are expected to provide a perspective that those news consumers agree with.

Therefore, this dissertation explores the possibility of an interaction effect between news source trust and news statement expectancy, in such that when news statement expectancy increases, the news statement believability increases with an increase in news source trust for trusted sources; and when news statement expectancy increases, the news statement believability decreases with a decrease in news source for distrusted sources.

This dissertation examines the believability of a news statement in the form of a headline about an alleged population increase of polar bears at the North Pole. A randomly-selected group of 1329 U.S. adults was asked during an online survey experiment to evaluate the believability of the news statement. It was unknown to the participants that the news source of the statement was manipulated. One-third was told that the headline was from CNN, another third was told it was taken from Fox News, and the remaining respondents did not receive source information.

A theoretical model is tested in which variation in news statement believability is predicted by news source trust, news statement expectancy, the interaction between news source trust and news statement expectancy, political ideology, party identification, value-relevant involvement, the interaction between value-relevant involvement and political ideology, and the interaction between value-relevant involvement and party identification. An ordinary least squares (OLS) regression analysis demonstrates that news source trust, news statement expectancy, and the interaction between those variables are important predictors of variation in news statement believability. News source trust and the interaction variable played a more dominant role in explaining variance in the Fox News condition; A Chow test indicates that the coefficients for news source trust are unequal between the two conditions. Moderate effect sizes were obtained in support of the model for both news organizations, but the Fox News condition predicted statistically significant more variance in news statement believability than for CNN.

ACKNOWLEDGEMENTS

To my great dissertation committee for all the hard work and support: Thank you!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PROLOGUE

THE CURRENCY OF CITIZENSHIP

No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty five Years, and been fourteen Years a Resident within the United States.

Section 1 of Article Two clearly explains in the U.S. Constitution the eligibility requirements for people with aspirations to serve as the nation's president. This was no news for Barack Hussein Obama II. Early 2007, when he announced his candidacy in Springfield, Illinois, he was well aware that he had to adhere to several rules to be a legitimate contender for the Commander-in-Chief position. At age 45, nothing could hold him from landing the White House job—other than his opponents, of course.

The junior senator was anticipating though election debates about numerous social and economic issues. First among Democratic contenders during the primary season and, eventually, against an opponent from the Grand Old Party. But he had not fully expected that a tiny biographical detail—his birthplace—would become a hot-button topic during his two-year run for office. Let alone, that his American citizenship would be contested well after being inaugurated as the 44th President of the United States.

About three years later, in April 2011, Obama provided a copy of his original long-form birth certificate to the public. It stated that he was born at Honolulu's Kapiolani Hospital on August 4, 1961. The issue was addressed at a White House press conference for one more time:

"We do not have time for this kind of silliness. We've got better stuff to do. I've got better stuff to do," the president said visibly irritated about the claim that he was born abroad and, conceivably even more, for the extensive press coverage the accusation received. Obama hoped that the release of the copy would put an end to the persistent rumors.

It did not.

Opponents immediately suggested on a bunch of websites that there was "evidence" of fraud. They argued that the document was fabricated and, thus, could not be a copy of an original birth certificate. These accusations quickly found their way around the country and the rest of the world through the Internet. Several public opinion polls indicated that about one-fifth of the population was still unconvinced that Obama was born in Honolulu, or any other place in the United States (Polling Report, 2012a). Even though this was a decrease from the 27 percent that did not believe him a year earlier, this dispute made one thing very clear: at least two out of ten Americans are wrong on the issue. That could be even higher—about 80 percent—but only when critics can prove Obama was born outside of Hawaii.

That was not all. Another issue received even more attention during and after the election campaign: the president's religious beliefs were questioned as well. About a quarter of the public assumed in 2010 that Obama was, actually, a Muslim (Polling Report, 2012b), while he repeatedly had stated that he affiliated himself with Christianity. Even toward the end of his first term, many survey respondents were still under the impression that the president was a devout follower of Islam, especially those living in the Southern region of the country (Public Policy Polling, 2011).

Several public opinion polls have indicated that Republican voters, generally, were more inclined to consider Obama a Muslim than independents and Democratic voters (Polling Report,

2012a). And because of a growing distrust of Islam within the United States (Polling Report, 2012c), it is feasible that some partisan groups have lower regard for the president because they think he is a Muslim than those people who consider him to be a Christian. Any news report stating the contrary will likely by refuted, regardless of the actual content. Thus, disagreement about facts indicates that people scrutinize new messages with their cognitive bias based on what they perceive as true *before* they actually receive a message with new information. Or, as Lippmann (1992) explained, "we do not first see and then define, we define first and then see" (p. 81).

Do we have a problem?

There have been many more examples in recent years of citizens being skeptical about important political facts. For instance, the invasions of Iraq and Afghanistan have led to much confusion about whether weapons of mass destruction have been found; the number of allied casualties during those wars; and the alleged role of the Saddam Hussein administration in plotting the 9/11 attacks (Kull, Ramsey & Lewis, 2003/2004; Prasad et al., 2009; Jacobson, 2010). In fact, a considerable amount of people around the globe is convinced that those attacks were orchestrated by U.S. government officials, rather than Osama Bin Laden and his al-Qaida affiliates (Norman, 2011). And, for that matter, some members of the public still do not believe that a small group of Navy Seals has killed Bin Laden during a raid of an obscure villa in Abbottabad, Pakistan (Rodriguez, 2011).

Similar knowledge discrepancies are noticeable on domestic affairs. For example, there is much confusion about the direction of important economic indicators, such as inflation and unemployment levels (Bartels, 2002). Additionally, many people are misinformed about the

proportion of the federal budget that has been spent on foreign aid (Gilens, 2001), the size of welfare payments (Kuklinski et al., 2000), roll-call voting of Members of Congress (Wilson & Gronke, 2000), and many other political issues (e.g., Jerit & Barabas, 2006; Hochschild, 2010; Liscio & Hayes, 2010).

Going further back in time, during the 1940s, many Americans even deemed the Holocaust nothing more than a rumor. Less than half the Lutherans and just over half of the Protestants in the United States believed that the genocide of Jews and other minority groups was truly happening at the other side of the Atlantic Ocean. Even seven percent of the Jewish population dubbed those stories as fabrications (Berinsky, 2009).

These examples indicate that people are not necessarily uninformed about important issues in their personal environment or somewhere else on the planet (i.e., they are *aware* that the issues exist), but it has become clear that many citizens are not accepting all vital details surrounding those matters of public concern to be true (Converse, 2000; Shapiro & Bloch-Elkon, 2008; Malka, Krosnick & Langer, 2009; Lewandowsky et al., 2012). Not only that, Kuklinski (2007) put in plain words, citizens "hold grossly inaccurate factual beliefs but confidently assume to know the facts" (p. 1). That is a problem when large groups of people are misinformed on important issues. As Delli Carpini and Keeter (1996) explained elegantly, "Political information is to democratic politics what money is to economics: it is the currency of citizenship" (p. 8). Citizens need access to factual information and, evenly important, must use it to make decisions about public policies: "They must absorb and apply the facts to overcome areas of ignorance or to correct mistaken conceptions. The more facts they bring to bear, the better, and some facts are always better than no facts. What is crucial is that preferences stem

from facts, objective data about the world" (Kuklinski et al., 2000, p. 791; see also: Kruglanski, 2007).

Yet, in reality, overall levels of political knowledge are low in the United States (e.g., Kinder & Sears, 1985; Neuman, 1986; Bennett, 1994; Barabas & Jerit, 2009*)*. In some sense, this should not be a surprise, because most vital social issues are so complex that it requires an advanced comprehension of large amounts of data from a variety of disciplines, as well as a well-rounded understanding of scientific inquiry. In general, such literacy is minimal among the U.S. population. Only a small minority grasps the basic vocabulary of scientific terms and research protocols (Miller, 2004). For instance, Stamm, Clark, and Eblacas (2000) surveyed adults in the Seattle metropolitan area about their knowledge of global warming. They found that misconceptions were widespread. Many participants knew little about causes, consequences, and potential solutions for global warming—even though they were very well aware that the problem existed as they had been exposed to a great deal of information discussing the subject for years. News consumption, in this case, did not lead to increased knowledge for all people.

Knowledge matters

Low levels of knowledge have implications for political processes within a democracy, because it becomes increasingly dysfunctional when there are growing discrepancies between groups about what they consider the true state of reality. It is challenging, if not impossible, to effectively discuss policy solutions when stakeholders cannot agree on the facts underlying the debate (Shapiro & Bloch-Elkon, 2008). This has been a long-term concern, because "widespread misinformation can lead to collective preferences that are far different from those that would exist if people were correctly informed" (Kuklinski et al., 2000, p. 790), which led Kahan and

colleagues (2007) to conclude that there is a culture war in America about "facts, not values" (p. 16; see also: Hetherington, 2005).

The public discussions about the existence of, and possible causes for, global warming serve as good examples of such struggle, because there are large differences among partisan groups on perceptions of what the facts are. Furthermore, those perceived knowledge differences usually translate into varying policy preferences as well.

To start with the different perceptions about the facts: 86 percent of "likely voters" for Barack Obama and 80 percent of all undecided voters, during the 2012 presidential election campaign, maintained that global warming is taking place. That was a stark contrast from the mere 45 percent of the "likely voters" for Mitt Romney that had the same stance. A survey sponsored by the Yale Project on Climate Change Communication and the George Mason University Center for Climate Change Communication found that knowledge differences between Democrats and Republicans were also noted on whether global warming could be the result of human activity and whether there is scientific consensus among climate scientists about the existence of global warming (Leiserowitz et al., 2012a).

So what are the consequences of these discrepancies regarding *the facts*? Belief positions—what one considers to be true—have a large influence on whether global warming is an important topic to guide voting choice; whether the president and/or Congress should do more or less to address global warming; and whether the United States should use less fossil fuels and increase use of renewable energy sources (ibid; see also: Ding et al., 2011; Zhao et al., 2011).

Thus, in that sense, knowledge matters.

The same is the case for many other scientific topics, including the alleged link that measles-mumps-rubella (MMR) vaccinations for young children increase the odds for them to

become autistic at later age. The unsubstantiated claims were made in a 1988 peer-reviewed journal article, which was later denounced by several co-authors of the manuscript and eventually retracted by the editorial board of *The Lancet*. Nonetheless, many parents decided not to immunize their children after the publication of the article and the subsequent press coverage that alerted people all around the world that there may have been a problem. This led to in an increase in vaccine-preventable disease and, in some cases, young children passing away. In addition, much money was needed for follow-up research and information campaigns to correct the misperceptions that existed among the public (Larson et al., 2011; Lewandowsky et al., 2012).

Again, this example makes it crystal clear: knowledge matters. That variation in believability could be trivial in some occasions as it may not make much of a difference, but it may be profound in other situations. The difference between being informed and being *mis*informed could be an ultimate decision between life and death. One or the other.

INTRODUCTION

> "And since my moral system rests on my accepted version of the facts, he who denies my version of the facts is to me perverse, alien, dangerous. How shall I account for him? The opponent has always to be explained, and the last explanation that we ever look for is that he sees a different set of facts."
>
> —Walter Lippmann (1922)

Distinguishing true from false

Many citizens cannot easily distinguish between correct and incorrect information about political issues despite ongoing cognitive processes to discriminate between true and false information. There is only limited understanding about the circumstances in which humans perceive one or the other as the truth, especially when incorrect information is not perceived as false. Therefore, according to O'Keefe (2003), "[o]ne enduring question in communication research is how and why persuasive messages have the effects they do" (p. 251).

The objective of this dissertation is to get a better understanding of variation in believability of news reports among U.S. adults, because they "do differ in their acceptance or tolerance for positions other than their own" and "with respect to the range of positions they regard as objectionable and obnoxious" (Sherif, Sherif & Nebergall, 1965, p. 19). More specifically, this dissertation investigates how news source differences may lead to discrepancies in believability of facts.

It is important to understand how perceptions about news organizations and alleged partisan news coverage play a role in what people consider true accounts of reality. After all, the press is considered the Fourth Estate and plays an important role in dissemination of factual information that citizens can use to make informed decisions (Fico, Zeldes, Carpenter & Diddi, 2008). Therefore, any process that hinders such effective and efficient diffusion needs to be

examined as the public, otherwise, may become misinformed about essential issues (Tsfati, 2003).

Ben Bradlee, former executive editor and current vice president of the *Washington Post*, acknowledged that the "credibility of a newspaper is its most precious asset …" (Maraniss, 1981, p. A1). Yet, the trust in news media has been declining in recent years (Gallup, 2012), which raises questions about the effectiveness of the press to disseminate factual information about politics to its audiences so that they become knowledgeable about the most pressing issues in society.

According to Kelley (1972), believability in a message (e.g., news coverage) depends, to a large extent, on an assessment of whether that message was expected to be coming from its source. He proposed attribution analysis of persuasion to examine the role of expectancy violations on levels of believability. Kelley contended that the message recipient cannot be sure that a source is being candid when a message confirms expectancies, but the receiver may conclude that a source has overcome his or her self-interest when expectancies are disconfirmed. Such act of perceived honesty would then lead to a higher believability of the message.

This framework was adopted to explain why news statements by distrusted news sources can be very believable and why statements by trusted news sources are not always considered very believable. As a result, this dissertation explores the possibility of an interaction effect between news source trust and news statement expectancy perceptions, in such that when news statement expectancy increases, the news statement believability increases with an increase in news source trust for trusted sources; when news statement expectancy increases, the news statement believability decreases with a decrease in news source trust for distrusted sources; and

regardless of the news statement expectancy level, the news statement believability remains the same for people who are neutral on news source trust.

To test those hypotheses, a news statement in the form of a headline about an alleged population increase of polar bears at the North Pole was presented to a randomly-selected group of 1329 U.S. adults, and they were requested during an online survey experiment to evaluate the believability of the news statement. In addition, the respondents were asked questions about news source trust, news statement expectancy, and their value-relevant involvement with climate change issues.

One-third of the participants was told that the headline was originally from CNN, another third was told it was originally from Fox News, and the remaining respondents did not receive any information about source attribution. The source manipulation provided an opportunity to test the news statement believability model, which is further explained in the next chapter, for two well-known news sources.

The results of the survey demonstrate that perceived news source trust, perceived news statement expectancy, and the interaction between those two variables are, indeed, statistically significant predictors of news statement believability, although the strengths of those variables differ between the CNN and Fox News conditions. The data also indicate that trusted sources become more believable when the news media expectancy increases and distrusted sources become less believable when the news media expectancy increases. This was an anticipated interaction effect in the Fox News condition, but the direction of the effect was, surprisingly, different for responses to the CNN headline. Additionally, value-relevant involvement also predicts changes in news statement believability for CNN, both as a main effect and as interaction effects with political ideology and party identification, whereas those relationships

are relatively weaker in predicting changes of news statement believability in the Fox News condition.

Contributions to society

This dissertation is an attempt to get a better understanding of how people become informed about global warming. This would allow stakeholders to recognize situations in which certain citizens will accept factual information to a higher degree than under other circumstances. This gives them the opportunity to identify venues to become more effective in educating the public about climate change and other weather-related occurrences.

The participants of this dissertation research were asked to evaluate a news headline that was focusing on an environmental issue that is related to the broader concern of global warming. This is an important news topic, because, if a changing climate is able to alter local environmental circumstances, this will have substantial economic and political ramifications for many populations around the world. For instance, climate scientists and evolutionary biologists are already noticing differences in occurrence and migration patterns among numerous species within recent years (Zhao, 2009).

Despite those alarming forecasts, U.S. citizens are, notably, much less concerned about global warming and possible greenhouse effects compared to their peers in many other countries. Kvaløy, Finseraas, and Listhaug (2012), comparing the data of the 2005–2009 World Values Survey, which included responses from people in 47 countries, found that citizens of only six nations cared less about global warming than in the United States: Indonesia, China, Malaysia, Thailand, Rwanda, and Zambia.

Nonetheless, a growing majority of Americans maintains that global warming is affecting weather in the United States and many of them consider it the main reason for causing more forest fires in the West, longer droughts in the Midwest and the Great Plains, as well as record temperatures in the summer of 2012 (Leiserowitz et al., 2012c). Recent weather-related catastrophes, such as hurricane Sandy and winter storm Nemo in the Northeast, have led to more attention to possible consequences of a changing climate as well (e.g., Kaplan, 2012; Vergano, 2012). Conversely, there is also a vocal opposition against the existence of climate change and the idea that human activity could be responsible for warming the earth, if that factually would be the case. For instance, Senator James Inhofe (2005), a Republican from Oklahoma, has described man-made global warming as "the greatest hoax ever perpetrated on the American people."

These opposing stances point out that the climate change issue is a polarizing political topic. Even though there is no balance between the amount of people that think global warming will continue for decades and the number of people that do not believe the earth is warming, this indicates that there are at least multiple positions on the issue (Boykoff & Boykoff, 2007). As those positions are discussed in many public venues around the United States and any other countries, this warrants further examination of how people assess the believability of claims regarding global warming, as certainly not all of them are true. Moreover, this is a particular issue for which citizens rely on a large amount of news media coverage to stay up-to-date about scholarly research and the political consequences, in addition to their own anecdotal experiences with weather phenomena (Nelkin, 1995, Oreskes, 2007).

Contribution to the literature

This study contributes to the scholarly literature of several fields and disciplines, primarily journalism and mass communication, political science, environmental studies, and social psychology. Research projects about aspects of news media psychology are interdisciplinary in nature, because any examination of social psychology theories involves a context that draws upon phenomena from other fields. For this dissertation, the attribution analysis of persuasion framework is tested for cable news networks communicating a statement about a political and scientific topic that has been on the forefront of recent public debates. Thus, the data that are presented in this dissertation may be of value for a variety of fields, but they cannot be sliced apart in such way that smaller pieces belong to individual disciplines exclusively. It is the overlap of the scholarly fields and literatures that emphasizes the interdisciplinary nature of this type of research.

According to Pfau (2007), the study of media effects is the "oldest and most established quantitative research tradition in communication" (p. 455) and is an important contributor to a growing field of media psychology, which has been defined as the "scientific study of human behavior, thoughts and feelings experienced in the context of media use and creation" (Dill, 2013, p. 5). In the same way, Tuma (2013) noted that "the idea of media psychology emerges with the notion of mediation of reality by our senses in philosophy, the study of perception and cognition in early psychology" (p. 62).

The journalism and mass communication literature discussed in this dissertation is primarily focusing on news media bias perceptions by news consumers. Bias, for the purpose of this dissertation, is defined as "an unfair evaluative, emotional, cognitive, or behavioral response toward another group in ways that devalue or disadvantage the other group and its members

either directly or indirectly by valuing or privileging members of one's own group" (Dovidio & Gaertner, 1993, p. 1084).

The last decade there has been an increase in studies, in particular from the research area that is usually referred to as hostile media effects, that discusses cognitive perceptions of news media content. They are conducted to get a better understanding of why citizens consider press outlets prejudice toward certain partisan groups, even when such bias is not necessarily present. Thus, "it demonstrates the critical role of the audience in the mediated communication process" and such research "is important because it gives theoretical understanding to the myriad of reactions to these old and new, partisan and nonpartisan, forms of communication" (Hansen & Kim, 2011, p. 170).

Even though numeral hostile media effect manuscripts have provided an overview about the kinds of situations in which cognitive biased interpretations of reality take place, the literature is primarily comparing group means, or changes thereof, for certain partisan units. However, such group averages may obscure a complete interpretation of the extent to which individuals are demonstrating hostile media perceptions. For instance, it could be that two group means are virtually the same, which in the hostile media effect literature usually indicates that there are no perception differences among the tested subpopulations. However, it could be that within multiple groups there are units of people with extreme biased perceptions, but that their responses are averaged out by other units of people with the opposite perceptions. Consequently, the size of the population of most interest (those with cognitive bias toward the news media) remains disguised (Blom, 2010).

The theoretical model presented in this dissertation, therefore, primarily focuses on a micro-level analysis of news statement believability by individual respondents, rather than a

macro-level approach focusing on partisan groups as a whole. This leads to an advantage for researchers as they do not have to assume that all individuals in certain subgroup are all alike, for which the dissertation found evidence, ironically, which will be discussed more in-depth at a later point. Thus, this type of research warrants a model of selective effects based on individual differences (see: Harris, 1999). For example, by measuring news source trust for each individual, there is no prior assumption that all conservatives consider Fox News as highly trustworthy or that all liberals have much faith in CNN to report the truth. The theoretical model examines micro-level variables, except for political ideology and partisan identification.

This is not to say that macro-level analyses serve no purpose. The political science literature discussed in the literature review is primarily focusing on such macro-level differences between Democratic and Republican partisans. An abundance of research has demonstrated that Democrats and Republicans—on average—differ in knowledge and opinions on a variety of issues, although it is also pointed out that those groups are not homogeneous. The role of political ideology in the process is discussed as well. Therefore, this dissertation concentrates on individual and group differences of perceptions about coverage of climate change by the news media.

This dissertation contributes to the political science literature by adding data about the formation and modification of political knowledge, which is considered an important element of constructive democratic practices. Furthermore, the topic under discussion is related to climate change, which has become a more important public affairs topic because of its political and economic implications.

Hence, this dissertation would also be of interest of climate change scientists who study public perceptions and understanding of (polarizing) scientific issues, as Johnson and Levin

(2009) passionately emphasized the need for improving scientific literacy levels: "The severe environmental problems facing the planet raise challenges for natural and earth sciences, but even greater challenges for psychology and the social sciences: how do we overcome the individualism, misperceptions, and biases that hinder recognition and prevention of environmental degradation among global citizens?" (p. 1593).

The foundation of the news statement believability model is naturally based on descriptive findings and theoretical models in social psychology. Mass communication studies about perceptions of source credibility on persuasion and attribution theory rely predominantly on social psychology research. This dissertation will contribute to findings on a growing literature about the effects of news source trust on perceptions of knowledge. Arguably, the largest contribution is offered by exploring Kelley's (1972) attribution analysis of persuasion framework. As will be explained further in-depth below, several researchers have utilized that framework to ground their theoretical positions in manuscripts about the relation between source trust and statement expectancy (e.g., Eagly, Wood & Chaiken, 1978; Wood & Eagly, 1981; Priester & Petty, 1995; Petty, Fleming, Priester & Feinstein, 2001). However, those scholars have exposed participants of lab experiments with scenarios that involved non-existing sources addressing messages to a non-existing audience. None of the study participants had any (prior) knowledge about the sources at all. Hence, this dissertation contributes to the scholarly literature in this area by testing the attribution analysis of persuasion framework with existing news sources that are generally known to the public: CNN and Fox News. Furthermore, the previous studies were concerned with persuasive messages that were not related to factual information, whereas that is the case for this dissertation.

CHAPTER 1

THEORETICAL FRAMEWORK

1.1 The messenger and the message

In a way, the messenger was the message.

This was the main conclusion of newspaper commentators Barbara Slavin and John Diamond (2003) about Secretary of State Colin Powell's (2003) presentation at the U.N. Security Council when he argued about the necessity for more action—perhaps even by going to war—against Iraq's dictator at the time, Saddam Hussein (p. 10a).

The speech was set up to demonstrate to a world-wide audience that Iraq had been in material breach of its obligations under U.N. Resolution 1441 by not cooperating with weapon inspectors. Powell showed satellite imagery and held up a small vial with a white, fluid substance that represented the amount of anthrax Hussein needed to do endless destruction onto his own people and other nations, such as Israel and the United States.

The Bush administration had deliberately put forward the Secretary of State to present the case for a possible invasion—banking on the popularity of the former general (Thernstrom & Thernstrom, 1997; Kinder & McConnaughy, 2006) *and* his well-known views about the conflict (DeYoung, 2006). Both reasons were important to select Powell as the spokesperson at this high-profile U.N. Security Council meeting, but the latter was most essential. As Zarefsky (2007) noted: "his reputation as a skeptic on Iraq, if not an outright 'dove' within the administration, enhanced his credibility. This would be no hack presenting the party line; his remarks would be akin to reluctant testimony" (p. 279). As a result, "his words would carry extra weight" (p. 280).

The overall persuasive tactic of the Bush administration was clear: let someone advocate a position that is apparently against his self-interest, because this would be more convincing than

putting someone in front of the microphone who had a track-record of advocating for a military attack on Iraq. The goal was to sway people with an initial anti-war position to join the increasing number of proponents to authorize an intervention. To do so, they had to buy into the information presented by Powell. In other words, the audience needed to accept that the secretary's claims were *the facts*.

While trustworthiness is usually considered an important factor that determines the believability of an information source, this example with Colin Powell demonstrates that there is more than just the messenger: the message itself. In fact, the effectiveness of the persuasive attempt, as Slavin and Diamond (2003) emphasized, seemed to be an intricate combination of both.

There are other scenarios in which the combination of source credibility and message content could take important meaning in assessing the believability of information that is claimed to be factual. For instance, MSNBC commentator Chris Matthews is known as a staunch supporter of President Barack Obama. Now let us pretend that opponents of Barack Obama are flipping the channel to MSNBC and see Mr. Matthews. Now, let it be the case that Mr. Matthews claims that Obama is actually to blame for the faltering U.S. economy. That is quite unexpected for any Obama-opponent watching the show. Usually they disagree about everything this commentator claims and, as a result, usually do not believe anything that he says. But this time it is different—shockingly perhaps—because they fully agree! Their rational may be: "even Chris Matthews says it is true, thus it really must be true."

A similar scenario would be that Fox News commentator Sean Hannity would acknowledge that Barack Obama is to credit for a current economic recovery, which would be a surprise for any Obama supporter, knowing that Mr. Hannity is usually very critical about the

president's actions. Also here the rational may be, "even [the source that I usually highly distrust] says it is true, thus it really must be true."

In both examples, the messages would be considered highly believable for many people, even though the positions were presented by sources that are usually distrusted by some groups of citizens in the population. Thus, source credibility would not be the main factor in the believability of the stated "facts" by the commentators. It may be the opposite—the initial distrust of the source—that interacted with the advocated position.

Now let us consider that Mr. Matthews advocates that the president cannot be blamed for the faltering economy and that Mr. Hannity maintains that Obama cannot be credited for a current economic growth—as most people would be expecting from these anchors. For the liberal viewer in the former scenario and the conservative viewer for the latter one, this sounds like something they would normally agree with. In both cases, the statements would be highly believable for specific audiences.

Yet, because the positions are somewhat expected, some viewers could realize that the commentators are taking positions they have taken many times before. Some of the audience members may even wonder if Mr. Matthews and Mr. Hannity are putting forward an opinion based on the facts, or, perhaps, are making up some "facts" that go well with their typical narrative. So there may be some doubts—even maybe just a tiny bit—about the truthfulness of the information, because of a specific combination of source and message content (see also Smith's [2009] explanation of Baum & Groeling's [2009] results).

This leads to an important question: would a trusted source be more believable advocating an expected position than a distrusted source taking the same—but unexpected—position? In other words, would the level of expectancy for a certain issue position affect the

believability for facts put forward by sources that are perceived to vary in credibility? As Sherif and Jackman (1966) wondered how people "in collective controversy assess the truth of statements about the issue" (p. 177), this dissertation is intended to explore these possibilities.

1.2 Attribution analysis of persuasion

Kelley's (1973) attribution analysis of persuasion framework holds that people have more faith in the truthfulness of a message when the source violates the expectancy of what the message was anticipated to be. People are "more likely to scrutinize what the communicator actually said in order to remove questions concerning message validity" when someone takes a position that is in his or her self-interest (Eagly, Chaiken & Wood, 1981, p. 56). Only when the action is atypical, this expectancy violation can be considered a new piece of information, which leads to a reassessment of the situation by taking all circumstances (intentional and non-intentional) into account (Jones & McGilles, 1976; Hastie, 1980; Crawford, Jussim, Madon, Cain, & Stevens, 2011; Bergan, 2012). In that case, the observer needs to evaluate to what extent a departure from role expectations took place and whether this tells something about a unique personal characteristic of the individual that acted in such manner.

Several studies have tested the propositions of Kelley's model and found evidence that, indeed, people were more persuaded by a message when the content was unexpected (Eagly, Wood & Chaiken, 1978; Wood & Eagly, 1981, Priester & Petty, 1995; Petty, Fleming, Priester & Feinstein, 2001). A variety of other studies did not specifically test Kelley's model, but, nonetheless, the results are in line with his predictions (e.g., Sternthal, Dholakia & Leavitt, 1978; Ariyanto, Hornsey & Gallois, 2006; Baum & Gussin. 2007; Berinsky, 2011; Hayes, 2011; Reid,

2012) and there is some overlap with foundations of Osgood and Tannenbaum's (1955) congruity theory as well.

Those studies testing Kelley's assumptions, generally, indicated that overall believability of a message depends on message expectancy evaluations, but none of those studies focused on message expectancy attributed toward existing sources. Instead, several hypothetical scenarios were created. In one of them there was congruence or incongruence between the environmental attitudes of a fictitious source and its fictitious message, involving a fictitious audience that is "listening" to information about a fictitious company in a fictitious city (e.g., Eagly et al., 1978). This means that the study participants could not have prior attitudes toward the made-up source. Additionally, the study participants were not considered part of the message audience and did not necessarily base their message expectancy on their own attitudes and beliefs, but rather on the evaluations about whether the fictitious audience would be expecting the message by the source.

Altogether, this warrants a study in which message expectancy judgments are based on study participants' attitudes toward real sources (e.g., news networks to which they have been exposed to in the past or know about in other ways) and their own attitudes on current public issues. Additionally, such study is warranted, because, despite the studies cited above, it is still unknown in which situations message expectancy would be more important than prior source trust on the overall persuasive outcome.

Hypothetically, based on the those studies, a scenario could enfold that several sources make the same claim (i.e., keeping the message constant in a lab experiment with multiple source conditions) and that the persuasive effectiveness of those individual sources does not necessarily depend on the trustworthiness of the sources prior to statement exposure, but primarily on the largest expectancy disconfirmation evaluation (because of the rational that this enhances

persuasion). If true, that would also mean that distrusted sources (as measured prior to the message) are always able to overcome negative perceptions by providing extremely unexpected messages. And, if so, a distrusted source would usually be more persuasive than a trusted source—when they are advocating the same agreeable message—because the former presents an unexpected message but the latter an expected message.

However, it is doubtful that this always will be the case. In fact, Sherif and Jackman (1966) argued that the threshold for believability is raised for arguments put forward by oppositional voices. According to Osgood and Tannenbaum (1955), "In [the] simplest of states in which human thinking operates, sources we like should always sponsor ideas we like and denounce ideas we are against, and vice versa" (p. 44). Similarly, Fragale and Heath (2004) maintained that people usually assume that trusted sources make accurate statements and that distrusted sources make inaccurate statements. Thus, when a trusted source takes an expected position (the message recipient, most likely, largely or completely agrees that this message is true), it would be unexpected that a distrusted source takes the same position. But there is no guarantee that a distrusted source gets the same amount of credit than a trusted source when they have the same position on an issue.

For instance, Wilder and Shapiro (1984, 1989a, 1989b, 1991), who studied the conflict between issue position and source credibility in a series of experiments, explored the influence of anxiety on judgments of an out-group member who took an issue position similar to the in-group. They contended that in case of a high state of anxiety, participants of the experiment would fall back on their negative stereotypes of the out-group, even though the out-group member did not resemble the out-group stereotype in reality (see also: Wilder, 1993a, 1993b).

In one study, the non-stereotypical out-group member in the anxiety condition was perceived to have made arguments more similar to the other out-group members and that the individual included more harmful criticisms. In the control group, the out-group member was rated as slightly beyond the midpoint, on the positive side, of the answer scale. As Wilder explained in a 2008 essay with Simon (2008), "anxious subjects were more likely than nonanxious subjects to judge the deviant to be acting according to expectations about the group, based on the majority's behavior" (p. 162).

This means that an unexpected statement from a distrusted source may not necessarily lead to a higher believability of the statement just for the sake of it being unexpected. For this dissertation, it is anticipated that study participants will experience some sort of anxiety when trusted news sources provide information that the participants initially consider being false, or when distrusted news sources provide information that the participants consider being true. Participants have to negotiate whether such partisan-issue conflict leads to different statement believability levels in comparison to situations in which trusted news sources provide information that is considered being true or distrusted news sources provide a statement that is perceived to be false.

When people are provided with correct facts, ideally, the believability level should be high, regardless of the source. Yet, it is anticipated that the believability level for each statement is lower for distrusted sources compared to trusted sources. Based on the results of Wilder's work presented above, it is unlikely that a trusted source with an expected message is penalized by the message recipient just because he or she agrees with the trusted source. In fact, it is plausible that this leads to higher believability because a trusted source provides confirmation of the initial beliefs.

Contrary, it is possible that a trusted source gets the benefit of the doubt, or at least more so than a distrusted source, when they take the same position with which the message recipient disagrees (that is, prior to exposure to the news source statement). For instance, there is evidence that trusted sources are more likely to induce persuasion after providing a counterattitudinal message than distrusted sources (Aronson, Turner & Carlsmith, 1963; see also McGinnies [1973] for an example with Japanese college students). Thus, if that is the case, the trusted source would be regarded as more believable than the distrusted source, while the former has taken an unexpected position and the latter an expected position—contrary to the postulations from some of the studies mentioned above.

1.3 News statement believability model

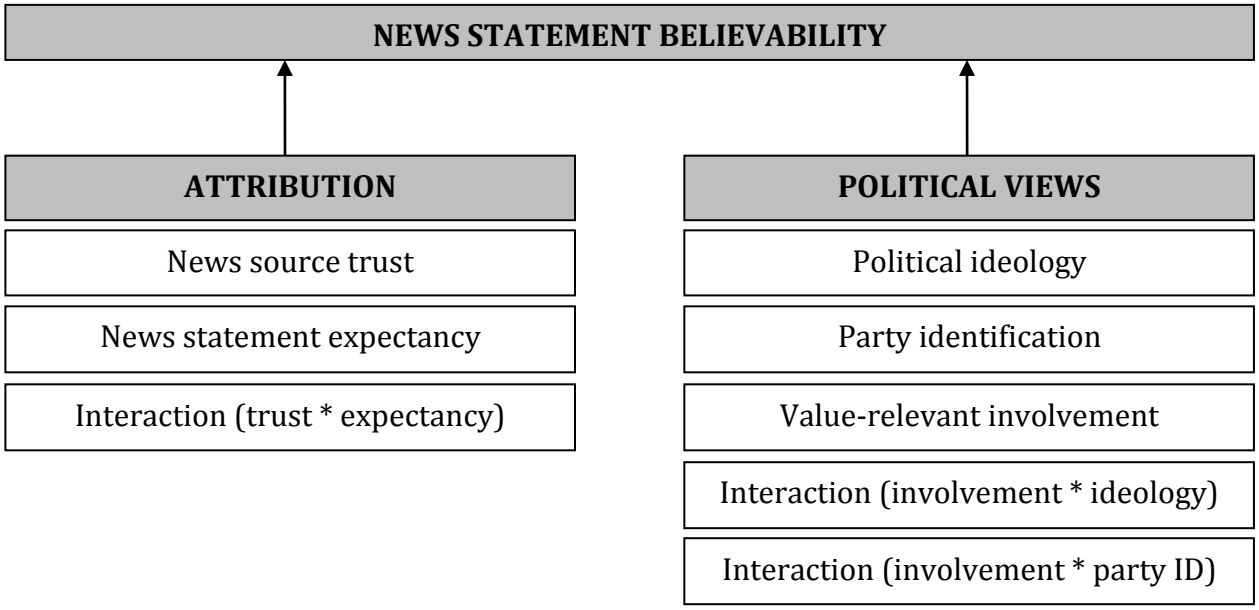
This dissertation is an attempt to explore what variables could explain low or high believability of a news statement. It is doing so by testing a new theoretical model that provides an opportunity to predict levels of believability for a news headline by individual news consumers. The model also contains eight independent variables that are hypothesized to influence the level of news statement believability. It is expected that the eight independent variables influence news statement believability to be higher or lower for each participant, but through different extents and, in some occasions, in opposite directions.

Overall, this leads to the following model in which variation in statement believability change is predicted by changes in news source trust (x_1), news statement expectancy (x_2), an interaction between those independent variables ($x_1 * x_2$), political ideology (x_3), party identification (x_4), value-relevant involvement (x_5), an interaction between value-relevant

involvement with political ideology ($x_3 * x_5$), and an interaction between value-relevant involvement with party identification ($x_4 * x_5$).

Figure 1

News statement believability model



1.4 Definitions of concepts

1.4.1 News statement believability

Definition: The extent to which a news consumer accepts a statement from a news media organization to be true.

Background: According to Ryan (2001), "The overarching value for the objective journalist (or scientist) is the collection and dissemination of information that describes reality as accurately as possible" (p.3). For the purpose of this dissertation, news statements are considered

pieces of information conveyed by a news organization with the intent to describe the true state of reality, even though, in practice, there are some journalists who deliberately convey incorrect information or mislead readers in other ways (see: Fico, Zeldes, Carpenter & Diddi, 2008).

News consumers, therefore, need to closely analyze news coverage, because there is a chance that news media organizations are presenting incorrect information—either intentional or not. As Fiedler (2000) noted, "At any point in social communication and information acquisition, the individual cannot evade the problem of discriminating between true and false information and figuring out the truth implications of communicative acts. This metacognitive or metacommunicative monitoring function is ubiquitous; it is always at work and never set off" (p. 13). Therefore, humans make numerous assessments about the extent to which they belief information messages, especially when "[c]ollective conflict typically includes sharp controversy over the truth of facts marshaled by each side in support of its claims" (Sherif & Jackman, 1966, p. 173).

Delli Carpini and Keeter (1996) defined political knowledge as "the range of factual information about politics that is stored in long-term memory" (p. 11). They distinguish political knowledge from attitudes, because an emphasis is put on information possession. Thus, believability is a judgment about the correctness of a proposition and is different from an attitude, which is a basic evaluative orientation toward an object.

When an individual's belief about the truth level of a factual news statement corresponds with the true state of reality, this can be considered factual knowledge. However, it is possible that someone thinks to be correct—even with a high conviction—while this perceived knowledge is, actually, incorrect. Consumers of that news statement could believe or denounce it

as false. Similarly, they could believe or denounce a true story. Thus, the believability of a news statement is an individual's evaluation of the perceived trust that the news statement is true.

1.4.2 News source trust

Definition: The extent to which a news consumer expects that statements by a news organization to be true before receiving an additional news statement.

Background: Prestige is a construct from early mass communication research in the 1930s and following decades, and is often nowadays described as source credibility. It has been considered a vital factor that can modify the beliefs and opinions of individuals when a message is directly attributed to a specific source (e.g., Annis & Meier, 1934; Saadi & Farnsworth, 1934; Sherif, 1935; Lorge, 1936). Many scholars have concluded that source identification matters when people are assessing the believability of a message (Lorge, 1936; Hovland & Mandell, 1952; Wiener & Mowen, 1986; see for literature overviews: Wilson & Sherrell, 1993; Metzger et al., 2003; Pornpitakphan, 2004), especially perceptions about the trustworthiness and expertise of the source (e.g., Hovland & Weiss, 1951).

Trustworthiness is the "degree to which an audience perceives the assertions made by a communicator to be ones that the speaker considers [true]" and expertise is the "extent to which a speaker is perceived to be capable of making [truthful] assertions" (Sternthal, Philips & Dholakia, 1978, pp. 286-287). Yet, scholars have considered trustworthiness much more influential in assessments of believability and persuasion than expertise (see also: Mills & Harvey, 1972; Dutton, 1973).

As this study focuses on different perceptions of news coverage of CNN and Fox News, it seems that an exploration of trust perceptions is more fruitful than an exploration of expertise

perceptions. Both networks have large resources to gather information with large reporting and editing staffs. Even though one network at times may dig up certain pieces of information sooner than the other, essentially they have access to the same information in almost all cases. Therefore, it seems that there is barely any difference in expertise, if at all, and that any bias perceptions are related to the apparent willingness to convey the truth. That leaves perceived news source trust as an important factor that could predict the believability level of factual statements by news organizations.

Proposition: Higher news source trust increases news statement believability, regardless of news statement expectancy level.

1.4.3 News statement expectancy

Definition: The extent to which a news consumer considers a news statement to be consistent or inconsistent with prior expectations.

Background: Humans explain statements by others with an evaluation of potential causes and reasons for such behavior, including assessments of whether the behavior was expected from those persons given a set of circumstances. "Expectancies are beliefs about a future state of affairs, subjective estimates of the likelihood of future events ranging from merely possible to virtually certain" (Roese & Sherman, 2007, p. 91).

People who trust certain sources expect those sources to provide information they believe. They also expect distrusted sources to provide information they do not believe (Fragale & Heath, 2004). The construction of those expectancies is only possible when people have knowledge about those sources. They either have been exposed to them or have received messages about the sources through other channels. That means that before they are exposed to a

new statement by certain sources, they already have pre-statement expectations about what the source will be stating in the upcoming statement, because it is anticipated that the information will be similar to the information provided before. After receiving the statement, those people can compare those pre-statement expectancies with the actual statement and conduct a post-statement analysis on the extent to which the statement was expected or unexpected.

Message expectancy is usually manipulated in a lab experiment and not measured by one or more items (e.g., Eagly, Wood & Chaiken, 1978; Priester & Petty, 1995). The one study that tested Kelley's framework and measured expectancy with a question did only so by analyzing this concept as a dependent variable (Petty, Fleming, Priester & Feinstein, 2001).

Propositions: The direction of a main effect for news statement expectancy on differences in news statement believability may depend on the average believability level of the news statement for a population under consideration. That is, to some extent, caused by an anticipated interaction between news source trust and news statement expectancy, because it is likely that news statement believability increases when news statement expectancy increases for trusted news sources and such increase in expectancy would lead to lower news statement believability for distrusted sources.

That would also mean that for any level of news statement expectancy, high news statement believability for a source that is trusted, to a certain extent, will average out the low news statement believability for a source that is distrusted to the same extent. That is only possible when the population average for news statement believability is exactly at the center of all possible responses of news statement believability, because, for instance, the average of a news statement believability of 100 percent for the trusted source and the news statement

believability of 0 percent for the distrusted source is 50 percent, which corresponds with center of a scale with all possible news statement believability responses.

Such average would not correspond to the center of all possible news statement believability responses when the average news statement believability is higher or lower than 50 percent. When, for instance, the average news statement believability is 25 percent, half the respondents indicated news statement believability between 0 percent and 25 percent. Those scores may not average to 50 percent with the other half of respondents that indicated a news statement believability between 25 and 100 percent, a much longer range in response possibilities. The earlier proposition stated that higher news source trust leads to higher news statement believability and because trusted news sources are assumed to provide agreeable statements, this longer range means that the evaluations of trusted sources increase the average news statement believability. In that situation, the main effect for news statement expectancy would indicate a positive correlation with news statement believability. Hence, this would be a negative relationship when the average news statement believability is high, because there is a longer range of possible responses for people that had a below average level of news statement believability.

Therefore, it is anticipated that there will be a main effect for news statement expectancy for explaining levels of news statement believability, with the direction depending on the average news statement believability, except when the average news statement believability is at the center of all possible news statement believability responses. In the latter case, there would be no main effect of news statement expectancy for variation in news statement believability.

1.4.4 News source trust and news statement expectancy interaction

Definition: The interaction between news source trust and news statement expectancy.

Background: *USA Today* could publish a news story explaining that "the earth is not flat." This news statement has two broad areas that can be evaluated: the content ("the earth is not flat") and the news source (*USA Today*). Audience members can compare the content with their knowledge about the morphological characteristics of the earth. And, the trustworthiness of *USA Today* can be assessed with attitudes toward the source and knowledge about the source based on third-person accounts about the newspaper (e.g., commentators on news networks who discuss their observations about the credibility of *USA Today*) and personal experiences after reading *USA Today* in the past. This overall analysis then leads to an extent to which the news statement "the earth is not flat" is to be believed.

This indicates a possible interaction effect of news source trust and news source expectancy, which has not been tested empirically in many of the studies that investigated the role of message expectancy on persuasion (i.e., believability of an opinion). As those studies usually did not measure source trust either (it was used as a manipulation check in some cases), it was not possible to investigate an interaction effect between those concepts for those particular study designs.

Propositions: Highly expected news statements from trusted news sources are likely to result in higher statement believability. Contrary, highly expected news statements from distrusted news sources are likely to result in lower statement believability. Therefore, when news statement expectancy increases it is anticipated that the news statement believability increases with an increase in news source trust for trusted sources. Similarly, when news statement expectancy increases it is anticipated that the news statement believability decreases

with a decrease in news source for distrusted sources. It is anticipated that there is one exception: regardless of the news statement expectancy level, the news statement believability remains the same for people who are neutral on news source trust.

This means that the extremity of the gaps for differences in news statement believability between all news source trust levels are anticipated to become smaller to the extent to which the statement is regarded as less expected. Hence, for a much trusted source, the news believability is lower when the statement is less expected, whereas for a much distrusted source, the news believability is higher when the statement is less expected.

1.4.5 Political ideology

Definition: The mental models that are utilized to interpret reality and that guide someone's thinking on how society should be structured in competitive political settings.

Background: Ideology has been described as "any set of beliefs about the proper order of society and how it can be achieved" (Erikson & Tedin, 2003, p. 72) and "the shared framework of mental models that groups of individuals possess that provide both an interpretation of the environment and a prescription as to how that environment should be structured" (Denzau & North, 2000, p. 24). Those are certainly not the only definitions that are available in the political science and social psychology literatures, but they are broad summaries of numerous descriptions that emphasize how "different ideologies represent socially shared but competing philosophies of life and how it should be lived (and how society should be governed)" (Jost, Federico & Napier, 2009, p. 309).

Humans feel affiliated to certain groups in society that are competing for resources and power. Political ideology serves as a social categorization within the U.S. population that fulfills

such description. Even though there are more ideologies than two, political engagement primarily takes places between representatives of the two dominant ideologies: liberals vs. conservatives. Such environment could lead to zero-sum competitions for issues that are considered vital for the success and delight of members of those groups.

In competitive political settings, the success of one ideological group is considered negative for the other ideological group, because evidence in support for one position frequently means evidence challenging the other position. In such political system, the natural state is to believe anything that is positive for members of the in-group and negative for members of the out-group. Contrary, it is the natural state to not believe anything that is negative for members of the in-group and positive for the members of the out-group.

Propositions: Political ideology influences the level of news statement believability to the degree that a news statement is regarded positive or negative for people receiving the statement, another member that also feels affiliated with the same political ideology, or the group as a whole. When it is positive it would translate in higher news statement believability, because people would like to believe things that are positive about them or people they feel affiliated with. Contrary, when the news statement is negative it would translate in lower news statement believability.

1.4.6 Party identification

Definition: The self-described identification of affiliation with a political party.

Background: U.S. politics has been dominated by two parties since the early 20th Century. Attachment to either the Democratic Party or the Republican Party functions as a fundamental social identification for millions of Americans. Party affiliation is comparable to the

importance of religion and ethnicity on the development of knowledge, attitudes, values, and beliefs. It is frequently acquired at a relative young age and usually becomes more persistent over time (Brady & Sniderman, 1985; Niemi & Jennings, 1991; Sears & Funk, 1999; Goren 2005). Party identification serves as another social categorization within the U.S. population, which often leads to a zero-sum game between Democrats and Republicans.

In competitive political settings, the success of one party is considered negative for the other party, because evidence in support for one position frequently means evidence challenging the other position. In such political system, the natural state is to believe anything that is positive for members of the in-group and negative for members of the out-group. Contrary, it is the natural state to not believe anything that is negative for members of the in-group and positive for the members of the out-group.

Propositions: Party identification influences the level of news statement believability to the degree that a news statement is regarded positive or negative about themselves, another member of the political party they feel affiliated with, or the group as a whole. When it is positive it would translate in higher news statement believability, because people would like to believe things that are positive about them or people they feel affiliated with. Contrary, when the news statement is negative it would translate in lower news statement believability.

1.4.7 Value-relevant involvement

Definition: Value-relevant involvement is a psychological state based on attitudes that are associated with important values about a certain issue.

Background: Partisan groups usually have different levels of believability for factual information and there are competing models in the field of political science for knowledge

updating when they are exposed to factual information. The first model holds that people are rational and are updating their knowledge according to the information they receive, even though there likely is some anxiety in giving credit to another partisan group to the full extent (Green, Palmquist & Schickler, 2002). The second model holds that partisanship leads to biased processing, in which partisans ignore or refute information that is challenging their prior knowledge (Bartels, 2002). Those two models correspond to accuracy and defense motivations that guide human behavior. In the former, people would like to be accurate in their knowledge and opinions about issues, whereas in the latter, people would like their initial thoughts to be accurate and are challenging messages that contradict them.

If the cognitive bias model of information updating is correct, people would use their prior knowledge and opinions to refute contradictory information. It may be that this is the default situation for humans (in this section also described as the natural state) to stick to their beliefs, but that modification of those beliefs is possible for people with different motivations, such as the goal to possess accurate knowledge and opinion. Those individuals would not have any problem acknowledging something that is negative for the in-group and positive for the out-group, for the simple fact that they regard it as true, based on their best assessment of the available information. If a majority of people within a society prefer accuracy over cognitive bias, this would be reflected in their news statement believability when people who a high value-relevant involvement in a political topic. That is the opposite situation from the natural state, in which people with high value-relevant involvement would have much reason to ignore information for preserving their initial ideas about the world and keeping them unaffected during information processing.

In the first scenario, when people learn from information about a topic, they need to actively expose themselves to such information and pay attention to the details. In such situation, it is more likely that people with high value-relevant involvement actively try to attend to such information than people with low value-relevant involvement. Therefore, people with high value-relevant involvement are more likely to evaluate the news statement believability with the information they have received through active attention. People with low value-relevant involvement have less information to base their decision on and are more likely to rely on heuristics or the natural state in a zero-sum environment: believing anything that is positive for them and negative for others, as well as not believing anything that is negative for them and positive for others.

In the second scenario, when people want to deliberately ignore information about a topic, they need to come up with a rationale to do so, for example, through extensive counterarguing to find reasons for why information may be perceived as possibly or completely wrong. In such situation, it is more likely that people with high value-relevant involvement actively try to refute such information than people with low value-relevant involvement. Therefore, in that case, people with high value-relevant involvement are less likely to evaluate information about a topic that is freely available and rely on their unchanged knowledge, which reflects the natural state: believing anything that is positive for them and negative for others, as well as not believing anything that is negative for them and positive for others. People with low value-relevant involvement have less salient counterarguments to refute a truthful news statement, even if it is negative for them and positive for others. And, therefore, are more likely to accept a truthful news statement.

This means that involvement is considered an important part of the puzzle to get a better understanding which model better explains information updating. Value-relevant involvement with a particular political issue, most likely, will lead to higher exposure to news coverage about that issue (Johnson & Arceneaux, 2010). It makes certain issues relatively more salient in comparison to other topics and the information is processed more thoroughly (Chaiken, 1980; Petty & Cacioppo, 1986). So it could be that people with higher value-relevant involvement have more access to news information and have the opportunity to learn about the facts—assuming that news media provide truthful accounts. Thus, it could be that people with high value-relevant involvement could become more informed about the issue. Yet, some people are defensive about information that is challenging themselves or other people they feel affiliated with (see: Garrett, 2009; Kim, 2011) and it is possible that people with involvement are more defensive about their beliefs and do not want to change those initial beliefs, especially in occasions when those beliefs are threatened by contrary evidence in news coverage (Andsager & White, 2007; Roese & Sherman, 2007).

Throughout the years, a variety of definitions have been proposed for the involvement construct. For instance, Petty and Cacioppo's (1979) considered involvement "the extent to which the attitudinal issue under consideration is of personal importance" (p. 1915), yet some scholars maintained that such description missed a nuance on the specific kinds of involvement that individuals can express (e.g., Salmon, 1986). Johnson and Eagly (1989) explained that political issues could be of special concern to citizens because of their enduring values, aptitude to attain desirable outcomes, or the kinds of impressions they want to make on others. They labeled these categories as value-relevant, outcome-relevant, and impression-relevant involvement.

This dissertation focuses on value-relevant involvement, which they defined as "the psychological state that is created by the activation of attitudes that are linked to important values" (p. 290). It is expected that most people have no out-come relevant involvement with polar bears as they most likely do not live in the polar bear natural habitat and also impression-relevant involvement seems less likely for that reason.

Proposition: If the information learning scenario is correct, lower value-relevant involvement leads to higher news statement believability. If the information bias scenario is correct, higher value-relevant involvement leads to higher news statement believability.

1.4.8 Value-relevant involvement and political ideology interaction

Definition: The interaction between value-relevant involvement and political ideology.

Background: As explained above, there are two competing scenarios that predict information updating: information learning and information bias. But this should not be seen as only a main effect that *all* people with higher value-relevant involvement have a different believability level than *all* people with lower value-relevant involvement, regardless of the information updating scenarios. The position of the statement plays an important role, because it is doubtful that all liberals (conservatives) will belief something to a high degree when it is negative about themselves or other people identifying with liberalism (conservatism), regardless of value-relevant involvement. Therefore, it may be that people with an opposing ideological stance do differ on the believability level depending on whether higher value-relevant involved people process news coverage in a biased fashion or not. This indicates a possible interaction between value-relevant involvement and political ideology.

Propositions: For the information learning scenario, when a statement that is more positive for liberals than conservatives, and is perceived as truthful by a majority of people, high value-relevant involved liberals would consider the news statement as highly believable. Liberals with lower value-relevant involvement would consider the news statement highly believable as well, because they would rely more on their natural state: believing anything that is positive for them and negative for others. The news statement believability for liberals is, therefore, high on every level of value-relevant involvement. That is not likely to be the case for low value-relevant involved conservatives, though. They have attended to less information than their high value-relevant involved conservative peers and, consequently, would have to rely more on their natural state: not believing anything that is negative for them and positive for others. As a result, the more conservative and the less value-relevant involved they are, the lower the news statement believability.

When a statement that is more positive for conservatives than liberals, and is perceived as truthful by a majority of people, high value-relevant involved people demonstrate high news statement believability, regardless of their political ideology. But in this case, Republicans with lower value-relevant involvement would consider the news statement highly believable as well, because they rely more on their natural state: believing anything that is positive for them and negative for others. Thus, news statement believability will be high for all Republicans, but not for all liberals, because liberals with low value-relevant involvement have less information to make a judgment and, thus, need to rely more on their natural state: not believing anything that is negative for them and positive for others.

The same assumptions hold when a news statement is considered false by a majority of the people. There are also two scenarios here. In the first one, liberals, regardless of value-

relevant involvement level, indicate low news statement believability, whereas as high value-relevant involved conservatives have the same opinion, but not their peers with lower value-relevant involvement that rely more on their natural state: not believing anything that is negative for them and positive for others. In this case, they do not want to accept that the news statement is false. Therefore, their news statement believability is higher when they are more conservative.

In the fourth scenario, for when high value-relevant involved people pay more attention to information about a topic, the high and low value-relevant involved conservatives agree that a statement is false, whereas only the high value-relevant involved liberals agree and the low value-relevant involved liberals do not want to accept that the news statement is false.

There are also four scenarios for when high-value relevant involved people try to ignore information that may challenge their preconceptions. That means that they rely on their natural state to a higher degree than low value-relevant involved people. Thus, the high value-relevant involved people differ in news statement believability depending on their political ideology, whereas low value-relevant involved people have equivalent news statement believability, regardless of political ideology. Therefore, the predicted regression plots for these four scenario are similar as the four scenarios presented earlier, except that the value-relevant involvement levels are in the opposite directions for one partisan group.

1.4.9 Value-relevant involvement and party identification interaction

Definition: The interaction between value-relevant involvement and party identification

Background/Propositions: Political ideology and party identification are two different concepts, but are expected to be positively correlated with a moderate magnitude. This is because many self-identified Democrats also consider themselves as liberal and many self-identified

Republicans consider themselves as conservative. Therefore, the discussion above for the value-relevant involvement and political ideology interaction is anticipated to virtually similar for the value-relevant involvement and party identification interaction. Thus, party identification could replace political ideology when it was mentioned above to avoid a virtual copy of that discussion in this section. Also here there are questions whether this interaction variable will lead to evidence in support of the information learning scenario or the information bias scenario.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Even though news coverage is not necessarily meant as a persuasive tool but rather a descriptive account of reality, in essence, the reports still can be regarded as having certain persuasive intent, namely for the audience to accept the information as factual. Indeed, the overarching goal of the press is to enlighten people correctly about events and issues that take place in society by providing truthful information.

It, therefore, is appropriate to analyze effects of news media content on knowledge perceptions of its consumers in reference to an overwhelming amount of literature that has examined the persuasive effects of source credibility and message content on attitude change. Most of the persuasion literature has been dedicated to the study of attitude change—not necessarily a change of factual knowledge—for topics such as abortion, capital punishment, and prohibition based on manipulations of source credibility and message content. Fortunately, there are exceptions, such as the study of Sherif and Jackman (1966), who tested believability of non-opinionated statements for people that varied in their attitudes toward prohibition and the scholars argued that it is important to examine the social context in which partisans evaluate messages that are presented as being factual. Therefore, the persuasion literature, as a whole, can serve as an important referent to establish the foundation of this dissertation.

Retrievable knowledge and basic evaluative orientations are the result of prior information processing about the topic and the source. This is noteworthy, because this means that all that information has been stored in memory after a complex information-filtering process that consists of several stages of selection exposure, attention, perception, and retention, because

people cannot process and store all information received at any time (DeFleur & Ball-Rokeach, 1989).

Such selectivity is guided by general attitudes toward issues and judgments of the correctness of related propositions. Those values and beliefs serve as a prism to process all incoming information and help to form the pictures in our heads, as Lippmann (1922) has famously described the reasons for why every person sees the world in a different way. That prism, through which we gauge our environment, is continuously shaped through personal traits, perceptions, experiences, and socialization.

Political identification is one of the important influences on how citizens in the United States process information. Voters for the Democratic and Republican parties, generally, support different policy solutions, which can be attributed to disparities in shared attitudes, values, and beliefs between the members of those groups. For instance, Democrats usually support more liberal economic and social measures, while the Republicans prefer more conservative approaches (Bafumi & Shapiro, 2009). More important, as mentioned in the prologue, partisan groups can have different perceptions about the true state of reality: the facts. Such discrepancy is important, because that means that groups of people bring forth different sets of (perceived) evidence when they assess new pieces of information (e.g., Wilson & Gronke, 2000; Kuklinski et al., 2000; Gilens, 2001; Jerit & Barabas, 2006).

Therefore, the first section of the literature review describes how political identification influences information processing. This section explores the main ideological differences between partisan groups and the extent to which those differences are recognized as such, as well as the function of such knowledge to shape perceptions about the individual groups. This is followed by a discussion about opposing theoretical models on how citizens update their

knowledge after exposure to new information and the role of value-relevant involvement in information processing. Those competing models have been hotly debated in the field of political science as they differ on whether people process information with a cognitive bias or not. Yet, in this dissertation, the case is made that both models neglected a source evaluation component, because the believability of new information may not solely be an evaluation of the content without regard of the source.

The second section provides examples of the extent to which partisan groups differ in their knowledge and opinions on three issues that are of importance for the understanding of the study design and results of this dissertation: perception differences on climate change and global warming; news media bias; and news coverage of climate change and global warming. The parts about climate change are relevant because they provide evidence for potential differences in news statements believability that can be explained by partisan group affiliation. The overview of news media bias perceptions (also known as the hostile media effect) provides as an introduction in the importance of source credibility in the acceptance of news content as being factual.

After establishing a foundation about the importance of source credibility on news statement believability evaluations, the next three sections describe the theoretical framework that is adopted for the survey experiment that is presented in this dissertation. Source credibility is the main topic in the third section. It starts with an historic overview of studies dedicated to source credibility and how those investigations became more refined methodologically. Two elements of source credibility are discussed in more detail, trustworthiness and expertise, for which the former gets most attention. This is because it is hypothesized that news source trust

plays an important role in explaining why news organizations provide certain kinds of information in their news coverage.

The fourth section serves as an introduction of attribution theory, which is a collection of related approaches to examine how people explain behavior about themselves and others. After a short overview of the variety of frameworks under the attribution theory umbrella based on Heider's (1958) pioneering work on naïve psychology, there is a more in-depth discussion about how the attribution of behavior depends on an evaluation of the abilities and intentions of the individual performing the action. It will further emphasize how perceptions of the context, in which behavior takes place, serve as important pieces of information to evaluate competing hypotheses about the possible causes of the behavior by other people.

This discussion is continued in the fifth section, which transitions from the broader applications of Heider's (1958) work into a more refined approach by examining Kelley's (1972) attribution analysis of persuasion theory, which is adopted as the theoretical framework for this dissertation. He contended that change in believability or opinion is not just a matter of evaluating the content and source *after* exposure to a message, but that people create expectancies about the content even *before* they are exposed to the message. Thus, beyond the comparison between the content and (perceived) knowledge by the receiver and the knowledge of and attitudes to the source, there is an additional comparison of the content with the prior expectations of what the content could be from that specific source.

Several scholars, primarily in social psychology, have tested this framework. The results of their work are presented in the second part of the section. Additionally, several other related studies are reviewed as the results were not discussed in light of Kelley's attribution framework,

although the data seem to fit that paradigm. Connections with other research on expectancy confirmation and violation are made as well.

The sixth section serves as a short summary of findings of the literature review by focusing on the effect sizes of a selection of the studies presented earlier. The effect sizes are calculated for some manuscripts that lacked such analysis, although that was not possible for many relevant manuscripts, as they lacked essential information, such as group means, standard deviations, and *t*-tests. Overall, those findings will serve as a benchmark for comparison with the results and effect sizes that are obtained with the studies that are presented in this dissertation.

The seventh section describes the accuracy and defense motivations that people exhibit in their daily interactions, and how they serve as mechanisms for all kinds of information processing. It further explores how partisan groups assess factual information by relying on stereotypes about group members they are affiliated with and members of other (out-) groups, because of the competitive nature of politics and the perceived stakes involved in political debate. Additionally, this section discusses how this competitive environment may lead to stereotyping when anxiety for potential failure of the in-group or success of an out-group increases. This may serve as a mechanism that explains how people become more skeptical about information provided by an out-group source.

2.2 Party identification and political ideology

According to Neely (2010), "Group membership and identification is an integral part of understanding individuals' political attitudes and behavior" (p. 2). Green, Palmquist, and Schickler (2002) found a large array of evidence that party identification serves as such social identification for many U.S. citizens, focusing on both micro (personal characteristics) and

macro (group tendencies) indicators. For instance, (1) partisan attachments are mentioned repeatedly during the course of a survey interview about politics and public affairs, even when these attachments are at variance with voting choices; (2) people who use partisan labels to describe themselves also indicate their "identification with" and "identification as" members of these partisan groups; (3) people offer the same descriptions of their partisan attachments over long stretches of time, even when the political context has changed; (4) the distribution of partisan identification changes slowly over time; (5) the proportion of the public identifying with any party tends to be relatively unaffected by whether the survey takes place during an election campaign or at other times; (6) despite the marked differences between state and national voting patterns, the distribution of American partisanship does not change appreciably when attention is focused on state rather than national political parties; and (7) partisans find politics more engaging than independents (pp. 32-50).

Some scholars claim that partisanship has become less important in recent political and electoral processes (e.g., Fiorina, 2002), whereas others maintain that its role has become more prominent in recent years (Brewer, 2005). For instance, the number of individuals that consider themselves a "strong" supporter of one of the two dominant parties has increased and fewer people consider split-ticket voting—they overwhelming support candidates from the party they are affiliated with (Bartels, 2000; Stonecash, 2010).

The two parties often disagree on major policy issues. That is, on each subject, the majorities of both parties are frequently in disagreement—but that is certainly not the case for every member (Highton, 2010). As Garner and Palmer (2011) explained: there is considerable overlap between Democrats and Republicans on solutions for a large variety of social and economic issues (see also: Huckfeldt, Mondak, Craw & Mendez, 2005).

That is because citizens may not only differ on the political party they support, but also their political ideology. Researchers of political ideology has predominantly focused on the differences in values, attitudes, opinions, and behavior of liberals (a political philosophy founded on ideas of liberty and equality) and conservatives (a political philosophy founded on ideas of preserving traditional social institutions). A variety of studies have provided evidence that people who identify themselves belonging to one of the groups, generally, have different opinions about public affairs and other aspects of life (e.g., Jost et al., 2007; Carney, Jost, Gosling & Potter, 2008; Friese, Fishman, Beatson, Sauerwein, & Rip, 2009; Morgan, Mullen & Skitka, 2010). Advances in neuroscientific research have made it possible to even generate data that demonstrated neurocognitive differences between liberals and conservations on, for example, responses to conflicting information (Amodio, Jost, Master & Yee, 2007).

There is certainly no perfect correlation between party identification and ideology (see: Carsey & Laymen, 2006). In fact, the ratio of self-identified conservatives to self-identified liberals has been from 3:2 to 2:1 for the last four decades. This means that many Americans who consider themselves conservative still vote Democratic candidates into public office, because that ratio is not met when Democrats and Republicans compete for legislative positions (Cantril & Cantril 1999; Stimson, 2002; Devine, 2010). Therefore, it is not a surprise that there are also conservative Democratic and liberal Republican constituencies that play an important role in political and electoral processes (see: Huckfeldt, Levine, Morgan & Sprague, 1999).

Even for abortion, which currently is considered a highly-polarizing topic, there are voters whose beliefs differentiate from the majority opinion within their own party. Thus, not everyone who is against abortion rights belongs to the Republican Party and not everyone who is in support of abortion rights belongs to the Democratic Party. But it is important to point out that

the overlap has shrunk in the past three decades for abortion, partly because of party switching (Adams, 1997; Killian & Wilcox, 2008), as well as for other issues (see: Layman, Carsey & Horowitz, 2006). This means that the parties have become more homogeneous on abortion, as well as on many other issues. The number of topics for which the dominant positions have become more polarized has increased in recent decades, which means that more topics are contested for ideological reasons (Abramowitz, 2010).

This gradual transformation has not started incidentally. Hardliners within each party have made prolonged efforts to convince voters about the "appropriate" position on those topics and to remove moderates from key political positions. This allows the parties to become more polarized by moving the internal (average) issue position away from the midpoint of the ideological scale (Petrocik, 1996; Green, Palmquist & Schikler, 2002; Levendusky, 2010).

There is also evidence that partisans, consequently, take positions more consistent with their party's majority when receiving messages from party leaders about a political topic that polarizes the Republicans and Democrats (Hetherington, 2001; Sniderman & Bullock, 2004; Levendusky, 2009). This provides additional evidence that both parties have become more cohesive and "provide increasingly internally homogenous, but externally competitive issue frames" (Wagner, 2007, p. i).

A consequence of such polarization is that it becomes a little bit easier for individuals to distinguish the parties on their ideological stances (Layman & Carsey, 2002; Brewer, 2005; Marcus, 2008; Jacoby, Ciuk & Pyle, 2010; see also: Jochim, 2011). For instance, more voters recognize that the Democratic Party usually supports more liberal economic and social measures while the Republican Party has other priorities (Conover & Feldman, 1981; Bafumi & Shapiro, 2009). Additionally, Chambers and Melnyk (2006) point out that partisan groups "perceive the

most disagreement with their adversaries concerning the issues that are central to the partisan's own ideological stance" (p. 1296). Importantly, some scholars have pointed out that both liberals and conservatives, generally, "exaggerate how much their own opinions differ from those of their rivals" (Chambers & Melnyk, 2006, p 1295; see also: Graham, Haidt & Nosek, 2009).

2.2.1 Cognitive learning and cognitive bias

Even though some scholars have claimed that political identification influences ideological attitudes (e.g., Jacoby, 2006), it is still rather unclear how such partisanship affects information processing. Two lines of work are on the forefront of the debate about how individuals sort out and learn from political information they attend to. One group of scholars maintains that partisan groups update their evaluation of party representatives and policies based on the information they get exposed to. Although Democrats and Republicans may differ about the assessments of a Republican president (Democrats likely will display a lower approval rating than Republicans), *both* groups would lower their approval when the president gets negative attention. And, when there is good news regarding the president, the approval rate would increase for Democrats as well as for Republicans (but overall approval rating will still be higher for the latter group).

Green, Palmquist, and Schickler (2002) found that "although citizens often lack specific information about day-to-day political events, they do update their overall assessments of national conditions and the capacities of the parties to handle important problems" (p. 7). This means that partisanship does not necessarily interfere with learning new information about political events, even though people usually stay loyal to their party in grim times when high-profile representatives are involved in scandals. Thus, through rational updating, similar to

Achen's (1992) Bayesian model of political learning, the changes in political evaluations move parallel between the parties over time (e.g., Gerber & Green, 1998, 1999; Blais et al., 2010).

This model is challenged by other scholars. In the *American Voter*, Campbell, Converse, Miller, and Stokes (1960) wrote that party identification functions as a perceptual screen that causes individuals to overemphasize information in favor of their opinions. As the scholars contended, "The stronger the party bond, the more exaggerated the process of selection and perceptual distortion will be" (p. 133).

Bartels (2002) argued that such partisan biases can be noticed for straightforward factual questions about inflation and unemployment rates. For instance, when asked whether the inflation had declined or decreased during Ronald Reagan's tenure in the White House, many self-identified Democrats, erroneously, argued that the situation had gotten worse, while only a small majority thought it had gotten better. For self-identified Republicans, generally, the numbers were the other way around—which meant that most of them answered correctly.

More recent, after the 2003 invasion of Iraq, a large percentage of U.S. citizens—but mainly Republican voters—had misperceptions regarding the evidence of potential links between the Iraq government and al-Qaida, as well as Saddam Hussein's alleged stockpiles of weapons of mass destruction (Kull, Ramsey & Lewis, 2003/2004). Gaines and colleagues (2007) found that Republicans, to some degree, underestimated the number of U.S. casualties during the Iraq War, while Democrats slightly overestimated the true figure. In other words, those partisans adopted interpretations that fitted conveniently well with their views on the invasion of Iraq.

Moreover, when subjects—regardless of the political wings they represent—agreed that the weapons of mass destruction did not exist, they portrayed different rationales for doing so. Thus, sometimes, there is disagreement about what the facts *mean*, not necessarily about what

the facts are: “Whereas nearly all Democrats interpreted the failure to find WMD in Iraq as evidence that they never existed, many Republicans inferred that Iraq had moved, destroyed, or hidden the weapons” (p. 958).

The news media had covered the casualty figures in Iraq lavishly. Even though citizens who paid attention to the Iraq War coverage have been exposed to those statistics frequently, they did not necessarily update their knowledge (Nyhan & Reifler, 2010). However, Gaines and colleagues (2007) found that the perceptions of Republicans and independents, in general, moved toward the real casualty numbers in Iraq over time—those groups became somewhat less misinformed, but still were misinformed nonetheless (see also: Gelpi, 2009).

The issue has been raised that it is possible that some people deliberately distort the results of public opinion polls or scientific experiments by providing answers they certainly know are not true, but would put another disliked person or group in a bad light, if it was true. In those settings, there are usually no penalties for respondents when they lie about what they know or belief, or to put more effort in recalling political facts. However, several studies have demonstrated that there is even disagreement about the truthfulness of certain facts when partisans have monetary incentives to provide accurate responses. Those incentives raise the number of correctly recalled facts, but only by a small degree (Prior & Lupia, 2008; Bullock, Gerber & Huber, 2010).

Jerit and Barabas (2011) have argued that people learn more about political topics that do not have any partisan implications when they are exposed to greater amounts of news coverage, but that knowledge gain is not necessarily related to amounts of news coverage for topics that involves one or both parties. Parker-Stephen (2012) found that all partisan groups learn, to some degree, when a large amount of evidence points to one direction, but that partisans become

polarized when there is mixed evidence. Thus, partisan groups may differ in cognitive information update processes in specific—politically competitive—situations.

Notably, not everyone is able to rid misperceptions after being exposed to refuting information. For example, in a lab experiment, conservatives were more likely to believe that Iraq had weapons of mass destruction after exposure to a challenging (but in this case, correct) position. This was primarily the case for conservatives who considered the war in Iraq as the most important issue of the day. They had also more misperceptions on the effects of tax cuts on revenue when their stance was refuted by another piece of information, whereas liberals had more misperceptions about an alleged ban on stem cell research by President George W. Bush (Nyhan & Riefler, 2010).

This is similar to the findings of Sides (2011); strong partisans were much less likely to believe facts that made their partisan group look bad than facts that did not mean much for the standing of that group. Individuals with partisan ambivalence ("weak Republicans" and "weak Democrats") were more likely to know facts that made their partisan group look bad than fellow ("strong") partisans. However, the ambivalent group was less likely to know facts that did not mean much for the standing of that group than their "strong" counterparts. Thus, "strong" partisans may have better knowledge about facts that do not mean much for the standing of that group because of their heightened attention to politics, but do not want to acknowledge facts that make their partisan group look bad, or have stored incorrect predispositions in memory regarding inconvenient facts.

To summarize, the two models examined in this section disagree on how members of partisans groups change positions after receiving new information, but both models maintain that Democratic and Republican partisans have discrepant positions before and after assessing the

believability of a political fact—the models mainly disagree on the distance of the discrepancy between the groups and whether this gap enlarges or shrinks. Thus, political identification and ideological differences can lead to differences in perceptions about hot-button political topics and, consequently, partisan groups will have different "starting points" on issues when messages about those issues and their messenger need to be evaluated.

Importantly, Green and colleagues (2002) and Bartels (2002) did not consider whether the sources of that information would possibly influence the extent to which information updating takes place. There may be differences in cognitive information processing of information depending on the perceived trustworthiness of the source and whether parallel or polarizing knowledge updating takes place between partisan groups in such situation. This is because citizens are less tolerant of people that have different opinions (see: Simmons, 1965).

2.2.2 Value-relevant involvement

It is also important to note that people that identify themselves as belonging to the same group have not always the same attachments to the goals of that group or the same extremity of shared attitudes and beliefs about certain topics that are relatively important for the identification with the group. "[Individuals] do differ about the importance of an issue in their own scheme of things" (Sherif, Sherif & Nebergall, 1965, p. 19) and, according to Sherif and Cantril (1947), almost all attitudes "have the characteristic of belonging to me, as being part of me, as psychologically experienced" (p. 93) and "are not discrete and isolated entities in the psychological make-up of the individual" (p. 94). Therefore, "Once formed, they provide the major components of which the ego is built" (ibid). The authors also noted that attitudes are not fixed and unchangeable, but that it requires very compelling situations to do so.

The flexibility to change attitudes, beliefs, and (perceived) knowledge often depends on the level of interest in particular issues. Especially in the 1950s and 1960s, the role of so-called "ego-involvement" was studied in the context of communication and persuasion, mainly because of an influx of manuscripts discussing social judgment theories (e.g., Zimbardo, 1960; Atkins, 1966; Atkins, Deaux & Bieri, 1967; Whittaker, 1967). Much of the pioneering work in this field was done by C. W. Sherif, M. Sherif, and Hovland (e.g., Hovland, Harvey, & Sherif, 1957; Sherif, Taub & Hovland, 1958; Sherif & Hovland, 1961; Sherif, Sherif, & Nebergall, 1965; Sherif & Sherif. 1967), although some scholars have criticized the lack of specifications of the (ego-) involvement variable in their work (e.g., Insko, 1967; McGinnies, 1973; Kiesler, Collins & Miller, 1969). All that scholarly output was part of a larger effort to investigate whether individuals with high involvement in specific political topics possessed higher resistance to changing attitudes after exposure to persuasive-intended messages (e.g., Ewing, 1942; Freedman, 1964; Johnson & Scileppi, 1969; Rhine & Severance, 1970).

All types of involvement can affect persuasion, to some extent, because it influences the level of message processing *(*Chaiken, 1980; Petty & Cacioppo, 1986; see also: Pornpitakphan, 2004). In their meta-analysis, Johnson and Eagly (1989) found that greater persuasion takes place with low involvement than with high involvement. Thus, people with high involvement are harder to convince to change their mind when they are exposed to new or additional information, but more so for value-relevant involvement than outcome-relevant and impression-relevant involvement. Differences in attitude change based on levels of value-relevant involvement took place with a moderately strong magnitude ($d = 0.5$), although Wilson and Sherrell's (1993) meta-analysis of source credibility on persuasion found a much smaller effect size when involvement

was taken into account. Cho and Boster (2005) added that value-relevant involvement is related to attitude extremity.

Higher value-relevant involvement can lead to additional news consumption when individuals want to stay up-to-date about the things they are interested in, especially information they cannot gather from personal experience. For instance, a person with an interest in politics is more likely to pay attention paid to political talk shows (Johnson & Arceneaux, 2010), and such selection may have important consequences, because news consumers may get exposed to more misinformation for one political talk show than when they tune in for a program from a competitor (Hofsetter & Barker, 1999).

2.2.3 Perception differences on climate change

"What about global warming?"

It didn't take long for then presidential candidate Rick Santorum (2011) to answer that question from Fox News host Glenn Beck. Assertive he stated that there "is no such thing as global warming."

The response was not unexpected. The two-term senator from Pennsylvania had repeatedly rejected evidence that the earth is warming. Two years earlier, in an interview with talk radio commentator Rush Limbaugh, Santorum (2009) declared that it is "patently absurd" to blame humans for causing the climate to change and dubbed research claiming otherwise as "junk science."

He has not been the only politician with that position. Many of his competitors during the 2012 Republican primaries agreed. For example, Rick Perry said that "science is not settled on whether or not the climate change is being impacted by man" (Lehmann, 2011). Most of the

other candidates also settled on the idea that there is no apparent scientific consensus on the existence of global warming, but one of the them, Ron Paul (2009), conversely, had no doubt: "You know, the greatest hoax I think that has been around in many, many years if not hundreds of years has been this hoax on the environment and global warming."

That also resembled Herman Cain's (2012) position. After losing out on the nomination, he traveled to thirty universities for his College Truth Tour to talk about his professional career and his policy positions. During a stop in East Lansing, on the Michigan State University campus, Cain was cautioning his audience not to believe any climate change warning: "Did you know that is a lie?"

The speaker continued by stating that his position was structurally missing from the "six o'clock news," suggesting that the mainstream news media teamed up for a mass conspiracy to deny doubters a voice in a public debate about global warming. "That is why we are doing this truth tour," he added.

Yet, there was one outlier in the G.O.P. pool of presidential wannabes: John Huntsman was not persuaded by the continued skepticism among his peers. "When you make comments that fly in the face of 98 out of 100 climate scientists, to call into question the science of evolution, all I am saying is that in order for the Republican Party to win, we can't run from science" (Lehmann, 2011).

Huntsman was indirectly referring to the findings of the Intergovernmental Panel on Climate Change (IPCC), a body of the United Nations with almost 200 member nations. The organization, founded in 1988, is a collaboration between the United Nations Environment Programme (UNEP) and World Meteorological Organization (WMO) with the task to evaluate and synthesize climate change science. The IPCC presents an assessment report every five to

seven years, which all “undergo more scrutiny than any other documents in the history of science" (Edwards, 2010, p. 399). That may be an understatement: the latest report was filed in 2007 after input from about 450 lead authors, 800 contributors, and 2500 other scientists who reviewed parts of the report (Clark, 2011). This large panel of experts concluded that there “is very high confidence that the global average net effect of human activities since 1750 has been one of warming” (Intergovernmental Panel on Climate Change, 2007).

Those findings, and the ones from earlier IPCC reports, were not well-received by members of a network of predominantly conservative foundations and think tanks that has emerged in response to calls for measures to decrease human activity that could lead to global warming. Information that would prove that global warming is non-existing, or that the increase and dangers of warming are overblown, has been heavily promoted by this countermovement ever since (McCright & Dunlap, 2011a; Goldenberg, 2012).

About a decade ago, political strategist Frank Luntz told President George W. Bush in a memo that many voters did not believe that there was consensus about global warming in the scientific community. He maintained there was still an opportunity to discredit the climate change arguments. “Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue in the debate” (Burkemann, 2003).

The rationale behind that tactic was clear: “when people think scientists don't have a very clear understanding of global warming, then they become less concerned about the issue” (Wood & Vedlitz, 2007, p. 561). And this strategy has been seemingly successful: U.S. citizens have ranked global warming last among twenty domestic priorities. Only 30 percent of the population considered it a top priority (Pew Research Center for the People & the Press, 2009).

Corbett and Durfee (2004) found, during a lab experiment, that adding controversy and/or context to a news story about global warming influenced readers' perceptions of its certainty whether global warming, indeed, was taking place. According to McCright and Dunlap (2011a), the "cacophony of competing voices on this issue … creates the appearance of ambiguity" (p. 171). The scholars blame the emphasis on the alleged scientific uncertainty in political debates as the main reason for why there is an apparent lack of urgency by the American people and, in particular, U.S. government to adopt climate policies that reflect the warnings of the large majority of climate scientists regarding global warming and the role of human activity in this process. By raising doubt about the validity of the scientific research, it has been possible to stall legislative decision-making (see: Banning, 2009; McCright & Dunlap, 2010).

Based on the results of a national survey in 2010, reasons for opposing the idea that the earth is warming as the result of human activity can be divided in five broad categories: (1) conspiracy theories about the scientific community, (2) denials that global warming exists, (3) belief that global warming is only caused by natural occurrences, (4) charges against the news media for taking sides in the debate about global warming, and (5) doubts about the reliability of climate science (Smith & Leiserowitz, 2012).

One of the conspiracy theories got much public attention in November 2009, when email correspondence between University of East Anglia professor Phil Jones and his colleagues were published online. Climate change skeptics used those writings to argue that scientists were manipulating and withholding data that disproved the severity of global warming. The scandal was called 'climategate' by the news media and many political bloggers used the term to raise doubts about claims that global warming has been happening in recent years, even though the scientists were later cleared from all allegations that they committed data fraud (Hoffman, 2011;

Koteyko, Jaspal & Nerlich, 2012). According to Holliman (2011), regardless of the later vindication of the researchers, the initial charges became a "scientific and political news story that explored the validity and reliability of symbolically significant aspects of climate science, such as the assessment reports of the Intergovernmental Panel on Climate Change" (p. 833).

Despite "climategate" and other rebuttals of climate change science results, the percentage of U.S. citizens claiming there is solid evidence of global warming has steadily increased in the past few years (Pew Research Center for the People & the Press, 2012). But it is important to point out that this growth has taken place only after a sharp drop-off five years ago. In 2006 and 2007, about three-quarters of the population believed that there were data to substantiate that global warming is true. One year later, only little over half the people considered this to be the case—meaning that millions of people changed their mind within a twelve-month period.

Those percentages are based on the entire sample of U.S. citizens that were questioned in October 2012, but the dataset reveals large differences between Democrats (85%), independents (65%), and Republicans (48%) when it comes to saying there is solid evidence that the earth has been warming. All those percentages are still down from a Pew survey conducted six years earlier: Democrats (91%), independents (79%), and Republicans (59%). And, notably, in 2009, only one-third of the Republicans had this opinion—the lowest percentage of any partisan group within the last decade. Democrats (58%) and Republicans (30%) were then also divided about the question whether there was a scientific consensus on warming at that time.

Data from other national and regional surveys, such as Gallup's annual environment poll (see: McCright & Dunlap, 2011a); the Climate Change in the American Mind series, conducted by the Yale Project on Climate Change Communication and the George Mason University

Center for Climate Change Communication (see: Leiserowitz et al. 2012a, 2012b); and Hamilton's (2011) work, lead to similar conclusions. Other studies also found that many conservatives, in general, are less concerned about environmental issues than their liberal counterparts (Konisky, Milyo & Richardson, 2008), because they think that scientists do not have a developed understanding of what is causing climate change (Zia & Todd, 2010). They frequently emphasize that changes in the average temperature on earth may be natural and not anthropogenic (see also: McCright & Dunlap, 2011b).

But that does not mean that certain climate change skeptics cannot change their mind (Berkley Earth Surface Temperature, 2012). For instance, Richard A. Muller (2012), a physics professor at the University of California at Berkeley, had been critical of reports supporting global warming for years. But after he founded his own institute and studied changes in the earth's surface temperatures with about a dozen other scientists, Muller concluded that "global warming was real and that the prior estimates of the rate of warming were correct." Additionally, he maintained that humans are "almost entirely" responsible for the higher temperatures.

2.2.4 Perception differences on news media bias

Humans spread information when they try to make sense of ambiguous or uncertain situations that are frequently caused by exposure to alternative beliefs, attitudes, and opinions (Lopes, Vala & Garcia-Marquez, 2007). There have been rumors going around societies at any point in civilization. Some are correct, verifiable accounts of reality, but others can simply be regarded as misleading gossip (DiFonzo & Bordia, 2007). News can spread through personal interaction between all group members in densely knitted social networks, but within larger populations, such as in the United States, it becomes impossible to receive all intelligence and

hearsay during private conversations. Instead, a large structure of news media outlets has become the backbone of information distribution to the masses. Citizens depend on the press to be informed on a large variety of issues and events (Lippmann, 1922; DeFleur & Ball-Rokeach, 1989; Lowrey, 2004).

Even though journalists ought to inform their audiences with true news accounts, they also rapidly spread incorrect rumors—whether unintentionally or on purpose—to even the most remote places on earth through the ever-increasing sophistication of communication technology. With an untamed hunger for intelligence, which ironically is feeding the 24-hour news cycle, "the potential for the spread of false information through rumors is perhaps greater than at any time in history" (Berinsky, 2011, p. 1).

Make no mistake, people can learn from news reports (Zukin & Snyder, 1984; Graber, 1990; Casey et al., 2003; Barabas & Jerit, 2009; see also: Zaller, 1992) and even correct misperceptions (Gulotty & Neblo, 2010; Nyhan & Reifler, 2011). Still, factual information is not always assimilated into long-term memory (Graber, 1988) and in many cases is refuted for a variety of reasons (e.g., Vallone, Ross & Lepper, 1985).

Agenda setting scholars usually explain knowledge differences by the type and amount of news coverage that people consume (e.g., Davis, 1952; McCombs & Shaw, 1972; Palmgreen & Clarke, 1977). As Cohen (1963) maintained, "The world will look different to different people, depending … on the map that is drawn for them by writers, editors, and publishers of the papers they read" (p. 13). However, this ignores the notion that citizens have their own ideas about *the map* presented by the press; they may not believe the news reports at all—relying on their prior-acquired wisdom and personal experiences, instead. In effect, disagreement over the

interpretation of events and issues, as presented by news sources, is very common (e.g., Vallone, Ross & Lepper, 1985; Kiousis, 2001; Bennett, Rhine & Flickinger, 2001).

Yet, not all news media outlets are created equally. And, certainly, they are not perceived as such by many within the electorate. Therefore, the acceptance of news accounts not only depends on a comparison between the content and perceived knowledge; also the attitudes toward the news supplier play important roles. In other words, two news media organizations could report about the existence of Barack Obama's birth certificate, but there may a discrepancy in believability for those (similar) articles, depending on what one knows, or better said, perceives, about the sources' track record of reliable news reporting. In that case, the believability level of *the facts* may depend on which news source this person is getting exposed to and to the extent that this source is trusted.

Kaufman, Stasso, and Hart (1999) are troubled by that process. "As a result, people sometimes seem to decide whether they are willing to believe information based simply on the source, prior to ever receiving the communication. It is not hard then to imagine an individual sitting down to read the Sunday newspaper having already made the judgment that what is about to be read will be true, factual, accurate, and believable, even if it is not" (p. 1995).

People are often exposed to opinions they support *and* opinions they do not support in news media content, especially when journalists refer to multiple positions regarding issues they cover. But it certainly does not mean that all articles are balanced in such that all parties get the same amount of attention (e.g., Fico & Soffin, 1995; Carter, Fico & McCabe, 2002; Fico, Freedman, & Love, 2006; Zeldes, Fico, Carpenter & Diddi, 2008). Such imbalance is even the case in two-sided stories (Fico & Cote, 1999), which may be perceived as supporting one side over others (Fico, Richardson & Edwards, 2004).

Some news media organizations do a better job than other when it comes to balanced reporting (Lacy, Fico & Simon, 1991). Nonetheless, every journalist ought to avoid bias by providing all sides of a story without any favoritism toward any of those sides (Mindich, 2007). Reporters can do so by adhering to a set of practices that are considered "objective methods" to report impartially and reporters frequently point to those practices when they want to circumvent criticism that personal biases and beliefs have tainted the news coverage (Tuchman, 1972, Gans, 1980; Shoemaker & Reese, 1991; Stoker, 2005).

Even though editors acknowledge that it is practically impossible to be completely neutral and impartial in all news stories and for decisions regarding the overall news selection (Boyer, 1981), objectivity is still one of the imperatives of journalism practice and is regarded as the "cornerstone of the professional ideology of journalism" (Lichtenberg, 2000, p. i). Yet, perceptions of partisan bias are noticed in both opinionated and non-opinionated news media content (Dalton, Beck & Huckfeldt, 1998; Feldman, 2011).

Partisan bias is defined as news coverage that systematically provides special treatment to the liberal or conservative side in political conflicts, most likely because of the journalists' political orientations that lead to impartial reporting (Fico, Freedman & Love, 2006) and "the effects of such biases on coverage of conflict can be observed in the balance of attention given to conflict sides in individual stories and in the aggregate of stories produced over time" (Fico, Zeldes, Carpenter & Diddi, 2008, p. 324).

D'Alessio (2005) emphasized that perceptions of bias are negatively associated with the perceived accuracy of stories. Consequently, that could lead to perceptions "that journalists are not fair and objective in their reports, that they do not always tell the whole story, and that they

would sacrifice accuracy and precision for personal and commercial gains" (Tsfati & Cappella, 2003, p. 506).

Thus, it may be that specific news audiences object to certain types of news coverage. For instance, news consumers do not always agree with journalists about the extent to which sources quoted in news reports are considered biased (Rouner, Slater & Buddenbaum, 1999). And even though there may not be actual bias (e.g., Watts, Domke, Shah & Fan, 1999; D'Alessio & Allen, 2000; D'Alessio, 2003; D'Alessio & Allen, 2007), the press is frequently accused by groups of people for being hostile towards political positions or figures that those news consumers support. This distrust has been witnessed for decades and has further increased in recent years (Blom, 2011a).

Arpan and Raney (2003) explored with a lab experiment how partisanship influenced the perceptions of partiality in news coverage. They manipulated the location of a newspaper that printed a sports story by using the title of the hometown daily, the paper from the town of a rival athletics team, and a publication from another state with no teams that are considered rivals. The article attributed to both the rival-town and the neutral-town conditions were considered more sympathetic towards the rival team than the assessment of the home-town newspaper.

Many scholars have investigated to what extent and why people consider news media biased. Much of that scholarship is focused on *hostile media perceptions*, the notion that partisan groups maintain that the press is openly supporting another view, whether that is true or not. Hence, hypothetically, partisan group A argues that the press is supporting partisan group B with its coverage, but at the same time, partisan group B accuses the press of supporting partisan group A with the same coverage (Gunther, 1992).

The term "hostile media effect" was first coined by Vallone, Ross, and Lepper (1985) after they found that a sample of students at Stanford University, divided in self-identified pro-Israel and pro-Arab groups, on average, had opposite reactions to neutral news footage involving the political conflict between Israel and Arab countries. They concluded that "two partisan groups may perceive, or remember, very different stimuli; each partisan group may report that the media spent the most time and gave the most emphasis to the other side" (p. 579).

Along the same line, a replication by Perloff (1989) and comparable studies on the Israeli-Arab conflicts found further evidence that partisan groups maintain that press coverage is favoring the other side, or at least not their side (Giner-Sorolla & Chaiken, 1994; Tsfati & Cohen, 2005; Tsfati, 2007).

Many other research projects found similar effects, whether the research was conducted in the United States (e.g., Gunther & Christen, 2002; Arpan & Raney, 2003) or abroad (e.g., Schmitt-Beck, 1994; Karlberg & Hackett, 1996; Duck, Terry & Hogg, 1998; Matheson & Dursun, 2001; Ariyanto, Hornsey & Gallois, 2006a; Yan et al., 2007). This includes a variety of studies in which the news media perceptions of distinct partisan groups were compared to each other (e.g., Gunther, Christen, Liebhart & Chia, 2002; Christen, Kannaovakun & Gunther, 2002; Liebhart & Gunther, 2006; Chia, Yong, Wong & Koh, 2007; Choi & Chang, 2007; Kim & Pasadeos, 2007; Kinnally, 2008; Jeon, 2009; Gunther, Edgerly, Akin, Broesch, 2012). Reid (2012) found that many partisans consider news media especially biased when their partisan identity is salient in the news coverage.

Some studies explored hostile media perceptions for partisans regarding environmental coverage. For instance, Kim (2011) conducted a lab experiment with two groups: one group included people who believed that global warming is natural-caused, the other group included

people who believed that global warming is caused anthropogenic. Both groups judged an article provided by the researchers as favorably slanted toward the existence and dangers of global warming, but the degree of perceived bias was much higher among those who initially argued that global warming is not caused by humans. The participants, who initially maintained that global warming is caused anthropogenic, considered the article more neutral than the other group.

Another study (Christen & Huberty, 2007) that focused on coverage of two other environmental topics indicated similar results. Self-identified Republican and Democratic partisans viewed an article slanted toward support for oil drilling in the Arctic National Wildlife Refuge as, undeniably, biased in favor of drilling, but Democrats deemed the story much more favorable for allowing drilling than did Republicans. Those groups also agreed that an article in support of the Kyoto Treaty ratification was, indeed, biased, but this time Republicans maintained that the story was much more slanted in favor of ratification than did Democrats. Comparable results were obtained for articles in favor of the Kyoto Treaty and negative for the ANWR (p. 321).

For all conditions of that study it was demonstrated that, even though there was agreement about the overall slant of the news stories, the partisan groups did not agree on the extent of the favoritism toward one side in each of those articles. Democrats perceived articles favoring environmental action (no oil drilling and ratification of the Kyoto agreement) less biased than Republicans, but Republicans perceived coverage without additional environmental action (oil drilling and no ratification) less biased than Democrats. Thus, unbalanced articles that supported a certain position on an environmental topic were considered less biased as long as the slant was in agreement with the issue position of the individual news consumers.

Similarly, Zanna and Del Vecchio (1973) found that self-identified liberals considered television news more credible when they perceived the content as liberal, whereas self-identified conservatives considered television news more credible when they perceived the content as conservative. But that does not mean that everyone thinks political news content is biased. A lot of U.S. citizens have considered political news to be virtually neutral, but for individuals for which that is not the case—Democrats and Republicans alike—it usually means that the perceived slant is considered hostile toward the own viewpoints (Valone, Ross & Lepper, 1985; Smith, 2009). For instance, Vallone, Lepper, and Ross (1981) found that one-third of 160 participants of a phone survey considered the news media biased on Democratic and Republican presidential candidates, Jimmy Carter and Ronald Reagan, respectively. Importantly, an overwhelming majority of those respondents—both Democrats and Republicans—argued that the news media was favoring the opposing electoral party instead of theirs.

Gunther (1992) found that self-identified Democrats considered newspapers and television news as too favorable to Republicans, whereas Republicans maintained that both were too favorable to Democrats. However, Republicans are commonly more skeptical about the news media than Democrats (Abel & Wirth, 1977; Gunther, 1988; Eveland & Shah, 2003; Jones, 2004; Lee, 2005; Hoffner & Tooney, 2007; Huge & Glynn, 2010; Lee, 2010; Arpan, Bae, Chen & Green, Jr., 2011). Those negative perceptions by self-identified Democrats and Republicans have been demonstrated with national probability samples (e.g., Beck, 1991; Dalton, Beck & Huckfeldt, 1998), as well as several lab experiments that utilized student samples to indicate that the assessment of the source influences responses to political news (e.g., Gunther & Schmitt, 2004).

In another example, moderator Jim Lehrer was perceived as slightly biased during the first presidential debate between George W. Bush and John Kerry. A considerable number of study participants with a preference for Bush argued that Lehrer was supporting Kerry, and vice versa. Meanwhile, Republicans considered Bush the debate winner, while Democrats deemed Kerry as the better speaker—emphasizing that the biased perceptions where solely directed to the role of Jim Lehrer, who acknowledged his affiliation with PBS during a brief introduction, but not for the performance of the debaters (Richardson, Huddy & Morgan, 2008).

A variety of studies has focused on perception differences for news coverage attributed to specific news outlets, including CNN and Fox News (Peng, 2005). Baum and Gussin (2007) used Vallone, Ross, and Lepper's (1985) study design by providing self-identified liberals and conservatives a neutral news article about George W. Bush, but additionally manipulated the news source by attributing the article to either CNN or Fox News. As expected, conservatives commonly considered CNN somewhat anti-Bush and liberals considered Fox News as somewhat pro-Bush, while moderates considered both networks virtually neutral.

Coe et al. (2008) added the Daily Show as an additional source condition, but the findings were very similar to Baum and Gussin (2007): "cable news viewers are more likely to perceive bias in programs and content that do not align with their own partisan perspective" (p. 215). Furthermore, news reports are considered more interesting and informational when it is attributed to news programs or networks that have a similar political leaning than to other sources with distinct ideological preferences.

2.2.5 Perception differences on climate change coverage

U.S. news media inform citizens by identifying important matters of public concern, including a variety of environmental issues (Schoenfeld, Meier & Griffin, 1979; Stamm, Clark, & Eblacas, 2000; Krosnick, Holbrook, Lowe, & Visser, 2006). Yet, the overall perception of trustworthiness of the news media, in general, and specific news outlets has changed over time regarding environmental coverage.

In the early 1970s, CBS News was considered a more credible source on the issue of air pollution than the White House, Stanford University students, and the official news service at that institution. CBS News was also considered more credible for air pollution coverage than for reports about unemployment and the U.S. military's invasion of Cambodia. According to Roberts and Leifer (1975), the differences in credibility could be explained by the amount of controversy regarding the news topics. Air pollution was not considered a polarizing topic four decades ago, there was less reason to be skeptical about news reports about that issue than the news reports about unemployment and the invasion of Cambodia. Thus, there was less reason to doubt the accuracy of the CBS reports on environmental issues.

Environmental topics have, however, become more controversial among partisan groups and, as a result, the contemporary American press has been increasingly criticized for its coverage for issues related to global warming. Nowadays, U.S. citizens trust climate scientists (76%), other scientists who do not specialize in climate studies (67%), and television weather reporters (60%) more than the mainstream news media (37%) as sources of information about global warming. The press was only a bit more trusted than Mitt Romney (29%), who was a presidential candidate at the time of the study, but less than President Barack Obama (51%). Notably, only two percent of the survey respondents "strongly" trusted the news media, the

lowest percentage of all, compared to Romney (4%), weather reporters (6%), non-climate scientists (10%), Obama (14%), and climate scientists (25%). Furthermore, the trust in the press as a source about climate change had declined with 9-percentage points within three years—indicating a steadily decrease unless sampling error is to blame (Leiserowitz et al., 2012b).

Scientists are not particularly satisfied with the quality of news media coverage either. A majority of scientists is positive about newspaper coverage (68%), but much less for broadcast television news (33%) and cable television news (27%) (Farnsworth & Lichter, 2012). Boykoff and Boykoff (2004, 2007), Antilla (2010), and Zehr (2000) explained this by pointing out that the news media have underplayed the scientific consensus on the existence and anthropogenic source of global warming. While an overwhelming majority of climate scientists agree that warming of the earth is caused by human activity, coverage in the press often puts their findings on the same level as the opinion of a small group of dissenters.

Providing opposite sides equal opportunity to reflect their positions is considered an imperative for journalists to appear impartial, but Boykoff (2007) maintained that this equilibrium is not adequately reflecting the true balance (or lack thereof) in scientists agreeing or disagreeing with scholarly findings regarding climate change. As a result, news media portray climate change science as more ambiguous and uncertain than what reflects an overwhelming amount of evidence in support of the existence of earth warming. In fact, Oreskes (2007) analyzed 928 abstracts of climate change studies that were published in refereed journals during the period from 1993 to 2003, and found that none of them refuted global warming.

The way news media outlets cover the amount of support for the global warming hypothesis influences how their consumers perceive the true state of the issue. For instance, as science and environmental news coverage of global warming predominantly depicts scientific

consensus on the issues and political news coverage of global warming usually depicts controversy on the issue, "attention to science and environmental news is associated with beliefs more consistent with the global warming science and higher risk perceptions, and that the opposite is true of attention to political news" (Zhao, Leiserowitz, Maibach & Roser-Renouf, 2011, p. 713).

Painter and Ashe (2012) found that U.S. newspapers (using the *New York Times* and the *Wall Street Journal* as surrogates) had relatively more news articles with climate change skeptics in their coverage of "climategate" than small samples of dailies from Brazil, China, France, and India. Coverage by British newspapers provided much more space for skeptics in comparison to those four countries, but still only half the amount compared to their American peers.

Cable news networks are important outlets for news about political issues, including global warming. In 2007, News Corporation announced that it would become carbon neutral and generally endorsed scientific warnings about global warming (McKnight, 2010), but that position has not been reflected in the ideas of a variety of journalists and commentators of the company's Fox News Channel. Feldman, Maibach, Roser-Renouf, and Leiserowitz (2012) analyzed cable network programming between 5:00 p.m. and 11:00 p.m. in 2007 and 2008, and found that there are large differences on the presentation of climate change. Overall, less than 20 percent of Fox News broadcasts acknowledged evidence that climate change is truly happening compared to more than 70 percent of CNN and MSNBC broadcasts. A majority of the news stories did not mention scientific agreement on this issue at all, but if it was discussed, there were large differences between Fox News and the other networks—in particular CNN. Only 10 percent of the climate change segments on Fox News affirmed scientific consensus, while this was the case for over half the segments on CNN. For MSNBC this happened for about three out of ten stories.

Rejection of scientific consensus has been rare for CNN and MSNBC (just a few percent of all stories), but it is mentioned in 38 percent of all the segments on Fox News.

Frequent viewers of Fox News also seem to reject claims that the earth is warming (Krosnick & MacInnis, 2010). On the contrary, viewers of CNN and MSNBC have a greater acceptance of global warming (Feldman et al., 2012). Yet, Krosnick and MacInnes (2010) warn that it is not possible to detect causal explanations with their findings, because it is possible "that exposure to frequent skeptical messages about global warming on Fox News caused viewers to adopt those opinions," but also "that viewers who hold those opinions a priori choose to watch Fox News, because it frequently expresses views that agree with their own" (p. 5).

Feldman and colleagues (2012), therefore, examined cross-viewership to investigate how news consumers respond to political reports from cable networks that are not aligned with their political predispositions, because a considerable amount of Democratic voters claim to watch Fox News sometimes or often (42%), while some Republican voters tune in to CNN and MSNBC (17%). They found that the relationship between acceptance of global warming and cable news viewership is more prevalent for Republicans than for Democrats. "That is, the views of Republicans are strongly linked with the news outlet they watch, regardless of how well that outlet aligns with their political predispositions. In contrast, Democrats don't vary much in their beliefs as a function of cable news use. This asymmetry suggests that some Republicans, who as a group tend to be predisposed toward global warming skepticism, are less skeptical when exposed to information on the reality and urgency of climate change" (p. 3).

The researchers also compared the strength of party identification for Republicans who watch Fox News instead of CNN and MSNBC, but did not find any statistical significant

differences that could provide an alternative explanation for the findings that Republicans who watch more Fox News have a lower acceptance that global warming takes place.

2.3 Information sources

Sherif (1935) explained that the "same statement made by two different people with whom an individual is in different affective relationships arouses quite different experiences and responses in that individual" (p. 371). Hovland and Weiss (1951) found that immediately after reading a persuasive-intended message, high credibility sources were considered more fair than low credibility sources and their conclusions were considered to be more justified as well. However, importantly, the initial position of the message recipient played a role too: individuals who were initially in agreement with the position of the source were also more positive than individuals who are initially in disagreement with the source (see for similar results: Kelman & Hovland, 1953).

Ward and McGinnies (1974) found that a highly credible source was more persuasive than a low credibility source, but only when identification preceded the message. Low and highly credible sources were equally persuasive when the source identification was presented after the message was received (see also: Briñol & Petty, 2009; Nan, 2009). O'Keefe (1987) synthesized the findings of a large number of papers that looked into the effects of source identification timing on persuasiveness. He concluded that "delaying communicator identification until after the message has been presented will tend to minimize the effects associated with variations in communicator credibility" (p. 68). Additionally, it was noted that "the fact that the effects of credibility depend in some measure on the timing of source identification means that—however

credibility has its effects in persuasive outcomes—those effects do not represent the result of a simple associating or linking of the source with a given position" (pp. 70-71).

Lewis (1941), Asch (1948), and Michael, Rosenthal, and De Camp (1949) have pointed to lacking experimental and statistical methods of early studies on prestige. Asch's (1948) critique mainly pertained to the (misguided) expectation that message *content* would not matter for the assessment of the message, and, consequently, only the credibility of the messenger would determine such evaluation. "The heart of the proposition is that *the material content of the object of judgment plays no role* in the process of change. The relation of the assertion its author is assumed to be—and, to be consistent, it must be—strictly indifferent to the content of the statement. The prestige of the author enforces—and must enforce—its effect equally upon *any* statement to which it is attached, including contradictory statements" (p. 256, italics in original).

Asch also pointed out that participants of those early studies were exposed to very vague and complex statements (e.g., "Only the willfully blind can fail to see that the old style capitalism of a primitive freebooting period is gone forever. The capitalism of complete laissez-faire, which thrived on low wages and maximum profits for minimum turnover, which rejected collective bargaining and fought against justified public regulation of the competitive process, is a thing of the past," p. 255). One of those studies he criticized, written by Lewis (1941), presented ten short statements, including "United we stand, divided we fall," "America for Americans," "Give me liberty or give me death," and "America first" (p. 231). Because the statements are ambiguous, participants of the lab experiments would artificially have to rely more on message source, rather than on the content to form opinions about them, Asch concluded.

In a lab experiment by Birch (1945), one group of college students was less convinced by a statement attributed to a communist than another group that read the same statement attributed to a liberal. This difference was small but statistically significant. Two groups that read the same statement without any source attribution rated the statements as more believable than the group with the communist source label, but less believable than the group with the liberal source label, but those differences were not statistically significant. The participants were able to provide optional comments about the statement. While almost no student in the neutral and liberal conditions had interest in providing comments, almost a quarter of the people in the communist condition did. Many of those participants agreed with the statement to some degree, but wanted to dissociate themselves from the communist source. Some even argued that the source could not be a communist. Thus, the students did not want to be associated with communists, even when they agreed with the statements. Based on those findings, it was maintained that "even though the numerical value of the status of agreement of the subjects may shift only slightly, the actual character of the responses maybe fundamentally altered" (p. 309).

This is why Asch (1948) contended that the context matters when such statement is attributed to a particular source, for instance, union leader Harry Bridges or U.S. Chamber of Commerce president Eric A. Johnston. As he explained, "When referred to Bridges the content of the passage turned into an expression of the accomplishments of labor in the face of opposition from capital …. On the other hand, when attributed to Johnston it was read as a perspective of policy in the interest of business …," leading to the conclusion, that "at least in certain cases, we are not dealing with the automatic effects of a factor of prestige on evaluation" (p. 257).

That is also what Lewis (1941) concluded: "The 'prestige' of a suggestion function[s] to provide context for the new material which confronts the individual. The same statement made by Roosevelt and Hoover obviously meant different things to our subjects, from what they knew of the philosophies and actions of both men" (p. 253).

This emphasizes that when people have been exposed to information sources in the past, or have knowledge about them in another way, it is possible that individuals have formed attitudes towards those sources and may remember certain issue positions taken by them previously (Lorge, 1936). Source evaluations are made with information about the source that is available at the time a message is received, including what individuals can remember from those past experiences with the source (Wyer & Radvansky, 1999) and prior affective responses to stimuli (Geers & Lassiter, 1999). Awareness of past accuracy of sources is helpful in that regard to make judgments about their validity and reliability as information providers (Gordon & Spears, 2011).

2.3.1 Trustworthiness and expertise

According to Gordon and Spears (2012), "Particularly in areas outside our own expertise, we need to know how well we can trust sources of new information. The credibility of a source informs the credibility of the information from that source, changing the weight we give it when forming a more complete model of the world and when acting on that model" (p. 132).

Credibility in information sources, therefore, plays an important role in social interactions. It implies a trust relationship between two entities, the trustor and the trustee. The trustee needs to make a prediction about the intentions of the trustor and the certainty that he or she, indeed, can be trusted. As Rotter (1967) explained, trust is "an expectancy held by an

individual or group that the word, promise, verbal or written statement of another individual can be relied upon" (p. 651). Therefore, according to Tsfati and Cappella (2003), "Given the uncertainty embedded in the situation, credibility is a central element in trust" (p. 651).

Wilson and Sherrell (1993) maintained, based on their meta-analysis, that a variety of source characteristics, such as trustworthiness and expertise, "can enhance or detract from the potential of a message to achieve attitude or belief changes" (p. 101). Evidence for this assertion was gathered by a wide variety of scholars during the early decades of empirical communication research—from the early 1930s until the early 1970s. Sources with high perceived trustworthiness and expertise were usually (but not always) able to stimulate more positive attitudes toward a message than sources that were considered less trustworthy or when they were perceived as possessing less expertise (e.g., Haiman, 1949; Hovland & Weiss, 1951; Kelman & Hovland, 1953; Warren, 1969; Johnson & Izzett, 1969; see also: Pornpitakphan, 2004). Expert sources were also capable of stimulating more behavioral compliance than sources with less expertise (e.g., Crisci & Kassinove, 1973; Ross, 1973; Woodside & Davenport, 1974), although there is some contradictory evidence available as well (e.g., Hovland & Mandell, 1952; Frankel & Kassinove, 1974; Wasserman & Kassinove, 1976).

Even though the persuasion literature provides much evidence that credible sources are generally more persuasive than sources with less credibility, Sternthal, Philips, and Dholakia (1978) warned that "this conclusion requires qualification" (p. 278). This is because a large array of studies has demonstrated that contextual factors can have mediating effects on the relationship between source credibility and persuasiveness (e.g., Wiener & Mowen, 1986; Wood & Kallgren, 1988; Austin & Dong, 1994; Priester, Fleming, Priester & Feinstein, 2001; Tormala, Briñol & Petty, 2006).

Attractiveness is another source characteristic that can influence persuasiveness of a message in certain circumstances. For instance, Eagly and Chaiken (1975) found that attractive sources were more persuasive than unattractive sources, but only for undesirable positions. Attractiveness did not matter for desirable positions (see also meta-analyses of Simons, Berkowitz & Moyer, 1970, Bock & Saine, 1975).

These prior studies are a good indicator that there is not always a straight-forward relation between source credibility and persuasiveness. This dissertation contains lab experiments in which the identification of news organizations is manipulated (CNN and Fox News). Attractiveness is not expected to play a role in believability levels for statements from those networks. The next section, therefore, discusses some other variables that are more related to the credibility of news networks: trustworthiness and expertise.

According to Priester and Petty (1995), "honest and trustworthy sources would presumably convey the truth if only they know what it was, and knowledgeable and expert sources presumably know the truth but may or may not be willing to convey it. For confidence that a communicator is accurate, the communicator should be both motivated (honest) and able (knowledgeable) to provide accurate information" (p. 639). Both are subjective evaluations and, therefore, may differ among evaluators. Kaufman, Stasson, and Hart (1999) explained that "true expertness and trustworthiness are not independent entities that exist in and of themselves, but may be a matter of perception. Therefore, it seems that a source's perceived levels of trustworthiness and expertise are more important than his or her objective or true level of credibility" (p. 1985). Similarly, O'Keefe (1987) maintained that "[it] may be worth underscoring that 'high credibility' and 'low credibility' are comparative terms here; … the

communicators involved are relatively higher or lower in credibility, not necessarily high or low in absolute terms" (p. 65).

Examining potential mediating factors for the source trust and persuasiveness relationship, Aronson and Golden (1962) maintained that expertise should be a more important factor than race when someone evaluates a persuasive message. For instance, when listening to a lecture on physics, the fact that the speaker has been a Nobel Prize winner should be more relevant than his or her race on the assessment of the speech. In their study, for a sample of 113 Caucasian sixth-grade students, an engineer was more persuasive than a dishwasher when talking about arithmetics, but a white engineer was more persuasive than a black engineer. Similarly, the white dishwasher was slightly more persuasive than the black dishwasher. The researchers also concluded that the more negative attitudes a subject had toward African Americans, the less the objectively relevant credibility of the source (e.g., being an engineer talking about arithmetics) determined the attitude toward the message of an African-American source.

Many early persuasion studies manipulated trustworthiness and expertise to some degree, but not necessarily took those aspects into consideration for the (statistical) analysis. Wiener and Mowen (1986) maintained that early research on the influence of source credibility on attitude change frequently attributed persuasive-intended messages to much respected or much disrespected sources. For instance, Kelman and Hovland (1953) described the high-credibility source as a judge who was an expert on delinquency and a "sincere, honest, and public-spirited individual" and the low-credibility source as an "obnoxious self-centered individual with a shady past and present" (p. 330). Johnson, Torcivia, and Poprick (1969) described their low credibility source as a "medical quack who had served a prison term for medical fraud" in comparison to a "medical authority" (p. 180). And, Miller and Baseheart (1969) used President Dwight D.

Eisenhower and George L. Rockwell (Head of the American Nazi Party) for his source manipulation. As a consequence, Wiener and Mowen (1986) argued, such large disparity in source credibility would make it hard to attribute attitude change on trustworthiness and/or expertise as those factors blend together with such intense descriptions.

Hovland and Mandell (1952) took a slightly different approach, and manipulated the motive of the sources in such way that in one condition the speaker could personally gain from implementing his recommendations about economic measures. Such motive was not mentioned in the other condition. The study participants were slightly less persuaded by the source with an apparent self-interest, but this difference was not statistically significant. (There was no information available to calculate effect sizes.) However, the speaker without the self-interest motive was judged to have done a better job in providing the facts about the issue, and was considered more honest than the source with the self-interest motive. Those differences were statistically significant and provided some indications that self-interest perceptions may influence the persuasiveness of a source, although additional evidence still was necessary.

Wiener and Mowen (1986) were still not satisfied with that study design, because Hovland and Mandell (1952) had manipulated trustworthiness (as explained above) but also had added an expertise difference between those two sources. The source with a self-interest motive was attributed to be the head of a large importing firm, whereas the source without a self-interest motive was described as an economist from a prestigious university. This expertise difference was unaccounted for in the statistical analysis.

In their own experiment, Wiener and Mowen (1986) manipulated both expertise (2 levels) and trustworthiness (3 levels) in a lab experiment with a sample of college students. Subjects were exposed to a message from a mechanic about the value and condition of an

automobile. Some participants were told that the mechanic had no relation to a nearby automobile dealership, but others were told that the mechanic was part-owner of that dealership. In contrast to other studies, such as McGinnies and Ward (1980) and Priester and Petty (1995), there were no normative descriptions about the trustworthiness, honesty, and sincerity of the source. Expertise was manipulated with background information about the mechanical's training, work experience, and certification. In all conditions, the mechanic concluded that the car was in excellent mechanical condition and that it is worth about ten percent more than the similar automobiles of its year. Main effects were noted for both trustworthiness and expertise when subjects assessed the message about the mechanical quality. When subjects assessed the message about the automobile value, there was only a main effect for trustworthiness. There was no interaction effect for either analysis.

Although the study results demonstrated that both expertise and trustworthiness could influence how a persuasive message is received, other scholars found a more limited role for expertise on a hypothetical basis. They found that sources may be perceived as having a similar level of expertise, but still can vary for their trustworthiness level. This difference in trustworthiness, then, affected the persuasiveness of the sources to some extent. For instance, Hunt (1972) found that the expertise level of four different advertisers was considered virtually similar, but there were differences on sincerity and trustfulness. A government agency and a consumer protection organization were considered more sincere and trustful than two commercial businesses before study participants were exposed to an advertisement to counter a previously published Chevron advertisement.

Aronson and Golden (1962) hinted that expertise level not necessarily determines an issue position, because those experts can be biased in interpreting information, or that they may

have a self-interest in advocating for a position that is contrary to their knowledge. According to Eagly, Wood, and Chaiken (1978), "knowing that a communicator is expert (or inexpert) does not ordinarily lead observers to form an expectancy concerning what position the communicator will advocate" (p. 426). Therefore, honesty is regarded to be the most important personal characteristic for providing an accurate message.

Priester and Petty (1995) explained that "if one can be reasonably confident that the source has the requisite knowledge to be accurate, then it makes more sense for a cognitive miser to engage in greater message scrutiny when the source's honesty is in question than when it is not. If a source can be assumed to be both honest and knowledgeable, a cognitive miser will have little need to scrutinize the message in order to ascertain its merits. If the source is presumably knowledgeable but of questionable honesty, however, message scrutiny will be needed" (p. 639).

Those perspectives are contrary to what Andersen and Clevenger (1963) and McGuire (1985) had argued before. They maintained that trustworthiness should not be regarded as an important factor in the persuasion process, yet considerable amount of evidence has been created emphasizing that trustworthiness can play an important role in assessing statement believability or opinion change. In fact, trustworthiness—and not expertise—may be the most important characteristic that is used to assess the believability of a claim attributed to a source (Mills & Harvey, 1972; Dutton, 1973; Lui & Standing, 1989), even though Wilson and Sherrell (1973) found in a meta-analysis that the effect size for manipulation of expertise is slightly higher than manipulation of trust in persuasion studies.

2.3.2 Trustworthiness and authenticity

The previous section has provided a broad overview of the role of trustworthiness in the persuasion process. It should be emphasized that those studies only looked at trustworthiness on two different levels, even though this is often unacknowledged or discussed. First, there is the evaluation of whether the source can be trusted or not (or that the trustworthiness is ambiguous when there is no prior information available from the source). Trustworthiness, in that case, is established before a particular statement is received from that source. But as will be discussed more in-depth below, the level of trust can also increase or decrease *after* exposure to that specific message content (even though those changes are rarely measured as such). This second level of trustworthiness can be regarded as an assessment of the authenticity of the source.

As trustworthiness earlier was defined as the "degree to which an audience perceives the assertions made by a communicator to be ones that the speaker considers valid" (Sternthal, Philips & Dholakia, 1978, pp. 286-287), more fundamental it is an evaluation of unbiased processing of information that may be in the best interest of the source. In the persuasion literature this also has been labeled *authenticity*, which involves intentional and conscious behavior without "denying, distorting, or exaggerating externally based evaluative information" and which "reflects the relative absence of interpretive distortions [e.g., defensiveness and self-aggrandizement] in the processing of self-relevant information" (Kernis & Goldman, 2006, pp. 296-297).

Such honest disclosures could have some drawbacks for individuals providing negative information about them self, because it may consequently lead to outcomes that are not in their self-interest. In such situations, honest revelations may increase "the risk of prompting others' scorn or ridicule, costs which can be very powerful inhibitors" (ibid, p. 340). Yet, this also

emphasizes the opportunity of the message recipients to recognize that the source provides authentic information that potentially could even have negative consequences for that source—and, therefore, can trust that the information is true. (Who would publicly reveal *false* and *hurtful* information about oneself?)

Bem (1963) also had argued that individuals are considered more trustworthy by others when their true attitudes and behaviors are perceived as such, rather than that actions and opinions are being attributed to external factors. For example, it is possible that an actor who advertises a product on television is perceived as not fully trustworthy anymore, because this person has received money to tape the commercial. The money may be the foremost reason to participate in the advertisement production, while the actor may not even agree with the content and is willing to withhold another opinion in order to receive the lucrative gig. It would be a different situation when the actor voluntarily taped the commercial without financial compensation, because that would leave out money as a possible external factor that could raise doubt on the trustworthiness (although other, unnamed, external factors still could play a role in such scenario as well).

Dutton (1973) found empirical evidence for these perspectives. Fictitious persons who had left fictitious organizations because of an internal opinion difference were considered more trustworthy than members of those organizations and who delivered messages in line with the "official position" of the organizations, because, speculative, the former characters were "giving up their careers" for not changing their issue positions. Yet, participants did not differentiate in the expertise level of those sources about the issue. This apparent increased trustworthiness, caused by speaking out against former employers, led to relative more persuasion toward the position of the messages about two different topics (environmental pollution and the existence of

UFOs) than the amount of persuasion caused by people that were still members of the organizations. In other words, also here, it seems that arguing against self-interest provides a trustworthiness boost that leads to increased persuasion.

2.4 Attribution theory

In the previous section it was described that message recipients "may believe that some aspect of a communicator's personal characteristics or current situation is likely to influence the communicator's position on a particular issue through affecting his or her issue-relevant knowledge or willingness to report his or her own position" (Eagly, Wood & Chaiken, 1978, p. 425). The message recipients, therefore, have to evaluate to what degree the source introduces biases to suit their self-interest. Skepticism about a source's trustworthiness increases when there seems to be a self-interest motive for the source to take a particular issue position. In other words, to gain trustworthiness, the "merits of the message must have overcome the source's desire to act in his or her own personal best interest" (Petty, Fleming, Priester & Feinstein, 2001, p. 419).

Walster, Aronson, and Abrahams (1966) argued that there are scenarios in which even low-trusted sources, such as gossip magazines, could be considered very believable for specific stories: "the gossip column, although generally untrustworthy, may have been far more effective than *Fortune* magazine when she was arguing that the movie industry was rapidly declining. In this situation, she was arguing against her own best interests" (p. 362). In other words, this example indicates that information about the source's background leads message recipients to anticipate what position the source is going to take. This message expectancy may allow

sources—even those that are initially low or moderately trusted—to become more trusted when the message is unexpected for arguing against their self-interest (Wood & Eagly, 1981).

Such causal inference is the foundation of attribution theory, which is the "explanation of effects via the identification of their cause" (Kruglanski, 1975, p. 378) based on "the individual's subjective impression of a causal connection between two or more objects or events" (Eiser, 1983, p. 94). This enables people to give meaning to another person's behavior "to understand, predict, and control events that concern them" (Ross & Fletcher, 1985, p. 43). Attribution theory reflects the desire to explain the origins of social perceptions, because "causal knowledge carries with it a wide scope of connotations regarding an event and makes possible a more or less stable, predictable, and controllable world" (McArthur, 1972, p. 171).

The origin of the theory can be found in the works of Kelly (1955) and Heider (1958). They were emphasizing that it would be important to study the mechanisms of naïve psychology for a better understanding of human behavior and the formation of attitudes and value judgments, because people act on their beliefs—even when those are invalid.

Both scholars, as did others, noted that there is a similarity between the objectives of people and scientists to explain phenomena, but people's method to reach those goals are a "poor replica of the scientific one—incomplete, subject to bias, ready to proceed on incomplete evidence, and so on" (Kelley, 1973, p. 109). Therefore, the methods used by individuals are usually less vigorous to reach conclusions. Although some have criticized the people-scientist comparison (e.g., Newcombe & Rutter, 1982a), the main idea behind it seems to be that ordinary citizens, in many occasions, can only rely on a few experiences rather than being able to systematically analyze a particular situation with a large sample of similar events with the ability to control for confounding variables, while possessing an understanding of advanced statistics to

determine statistical and practical significance of certain events or actions. And, in fact, scientists are sometimes ordinarily human by evaluating information in biased fashion (Mahoney, 1977; Koehler, 1993).

Heider (1958) explained that humans rely on causal attribution to understand their social environment. "It makes a real difference, for example, whether a person discovers that the stick that struck him fell from a rotting tree or was hurled by an enemy. Attribution in terms of impersonal and personal causes, and with the latter, in terms of intent, are everyday occurrences that determine much of our understanding of and reaction to our surroundings" (p. 16). Therefore, when people are looking for an explanation for another person's rhetoric, they are actively testing a causal hypothesis about what a source claims with "(a) premessage expectancies about the kinds of effects that personal or situational factors will have on communicators' advocated positions and (b) postmessage inferences concerning whether the expected effects occurred" (Eagly, Wood & Chaiken, 1978, p. 425).

Importantly, according to Corbett and Durfee (2004), "assessments of certainty and scientific fact originate in the social world and that representations of certainty do not reflect a given reality or state of objective knowledge but are constructed in particular situations and with certain effects" (p. 134).

This means that there is an objective reality that is independent of social perception (Jussim, 2005) and humans monitor this objective reality—what Ichheiser (1949) calls the "raw material" of social perception—and (mis)interpret this data ("symbols or signs of personalities—their characteristics, motives, attitudes—and as signs and symbols of certain social relations," p. 12) to reach a conclusion on reality how they see it and what plausible causal theories could explain the behavior of others.

Humans, therefore, cannot be passive observers of events in their environments. Their mind needs to actively interpret what is happening after making instant decisions on which information pieces to process cognitively and which to ignore (Schwarz, 2008). To do so, humans construct one or more hypotheses during this process to test their ideas with the clues that are available in the environment and retrieved from memory. The attributional judgment consists of an evaluation of relevant pieces of evidence in relation to the possible theories. Consistent evidence increases confidence in the validity of a particular hypothesis, whereas inconsistent evidence reduces this confidence. All proposed hypotheses are tested in such manner to determine which one is most substantiated (Ajzen & Fishbein, 1983; Hastie, 1984).

Problematic is that the evidence is usually incomplete. People often test their hypotheses without having access to each and every detail. "When all the information is not available, which is most of the time, people make inferences. Metaphorically, they 'fill in the blanks'" (Kuklinski et al., 2000, p. 794). For instance, individuals make judgments about the difficulty level of exams without even reading the assignments. If every test taker succeeds for a particular exam, it is usually regarded as a very easy test, while it could be that very bright pupils had all studied very hard. Or that the test is very hard if only one person succeeds, while it could be that the other pupils just had not studied (Heider, 1958).

Thus, people are able to come up with those causal inferences with very limited information, as they already have preconceived notions of how certain outcomes (behaviors) are caused. This is because they possess causal representations in memory, because they have observed and remembered comparable cause and effect relationships before. As a result, the individual then has only a limited number of other plausible causes to consider that are specific to that particular cause-and-effect relationship after eliminating those other possibilities. This is

usually an instant process, because humans rely on causal schemata to avoid dedicating large amount of time and energy on continuous elaborative information processing (Kelley, 1973).

2.4.1 Responsibility and self-interest

There is a vast amount of literature based on Heider's premises, although there is not a monolithic attribution theory. Instead, there is a collection of related approaches and models that are closely related but still distinct in their scope and application (Newcombe & Rutter, 1982a). For instance, Weiner (1979) has considered locus, stability, and controllability the most important causal properties for people to explain success and failure. Kelley (1972), instead, focused on how humans explain behavior of others. He maintained that people evaluate actions of a particular individual by taking into account the degree of *consistency* (how did the individual behave in comparison to all other individuals at the scene?), *consensus* (how did the individual respond in the past to the stimulus that caused the behavior?), and *distinctiveness* (how did the individual usually respond to similar stimuli in the past?).

Kruglanski (1975), on his part, suggested replacing Kelly's internal-external partition with an endogenous-exogenous distinction. And, Jones and Nisbett (1972) focused on actor-observer differences in causal attributions and found evidence that people explain their own behavior in light of situational circumstances, while the behavior of others is judged to be the result of their personal traits. Even other models, such as Bem's (1967) theory of self-perception and Schachter's (1964) theory of emotion, are nowadays considered to be part of the broad domain of attribution, even though they were not specifically developed as such theories.

Some scholars have tried—but failed—to integrate all these different approaches to bring order "into the somewhat untidy, if extremely imaginative attributional supermarket of ideas"

(Kruglanski, 1977, p. 592). And all approaches have endured a large stream of criticism for their theoretical looseness and lack of specification (e.g., Zuckerman, 1977; Buss, 1978; Sabini & Silver, 1980; Semin, 1980; Newcombe & Rutter, 1982b; Spitzberg, 2001; Manusov & Spitzberg, 2008) and some have labeled them as phenomenology (Fischhoff, 1976; Calder, 1977). Many of those critiques are focusing on conceptual and methodological flaws of Kelley's (1972) covariation (ANOVA) explanation. For instance, Newcombe and Rutter (1982a) concluded that the "I-E distinction is vague, ambiguous and conceptually inappropriate for theorizing about the explanation of sequences of events" (p. 99). This dissertation is focusing on the work of Kelley, but not on his ANOVA-model. A detailed criticism of that framework is, therefore, omitted from this literature review.

To advance the literature in this area with more precise empirical studies, Buss (1978) pleaded attribution scholars for greater precision in the use of the terms *cause* and *reason* within their work. He maintained that many researchers until that point had not defined those variables and other terms with enough detail, and sometimes had not distinguished them from each other at all. He argued that (1) causes and reasons are important categories to explain all kinds of behaviors; (2) causes are that which brings about a change; (3) reasons are that for which a change is brought about (e.g., personal goals); (4) behavior that happens to a person accidentally is an occurrence explained with causes; and (5) behavior that is done by a person intentionally is an action and is explained by the observer as causes and/or reasons.

This description also illuminates that the attribution of behavior depends on an evaluation of the abilities and intentions of the individual performing the action. The first judgment focuses on what a person is capable of doing to perform such behavior, both physically and mentally. The second judgment focuses on what a person is trying to accomplish with such behavior. This

would make intention the most important factor for explaining personal causality, because "that often determines what the person really is doing, or what really is happening" (Heider, 1958, p. 117). Someone who has not the ability to conduct an action, cannot conduct such action—even if so desired. But a person, who has such ability, could still refrain from doing so out of certain intent.

Generally speaking, an individual is not held responsible for a behavior's consequence when situational factors have led the individual to perform that action, but he or she is held responsible when the person's motivation can explain behavior (Heider, 1958; Green & Donahue, 2011). In the latter situations, the individual will be blamed when the action is perceived as negative or praised when the outcome is positive, although Shaw and Sulzer (1964) concluded that people are more inclined to blame someone else more extensively than to applaud for positive behavior (see also: Peeters & Czapinski, 1990). Moreover, the inferred relationship between the behavior and underlying disposition becomes greater when the consequences of the act are less socially desirable (Ross & Fletcher, 1985).

The attribution of an observed behavior, therefore, is considered the joint product of a person's dispositions and the situational context in which the behavior takes place (Behavior = Disposition + Situation). Lieberman, Gaunt, Gilbert, and Trope (2002) explained this with an example of a smiling clerk. The observer has to verify the actor's disposition ("Is he a friendly person?") and place it in the context of the situation. The clerk would be considered a friendly, smiling person—unless there may be another motive that would explain the behavior. For instance, clerks are paid to smile at customers and then the action may not be considered genuine: it does not explain everything about the true friendliness of the clerk. "If the situation

somehow provoked, demanded, aided, or abetted the behavior, then the behavior may say little or nothing about the unique and enduring qualities of the person who performed it" (p. 200).

Bem (1967) conducted a lab experiment in which subjects watched how someone told another person that a very dull task was actually enjoyable to perform. Half the participants were told that the first person was paid $1 for making the statement, while the other half of the participants were told that they received $20 for the statement. As expected, subjects assumed that people in the low-incentive condition enjoyed the task more than the people in the high-incentive condition. The rational is that a very low amount of money would not be worth it for someone to tell a lie, but some people would be tempted to lie when they get a considerable amount. Also here, the inference about the behavior depended on an assessment about possible ulterior motives (intentions) that could explain the action (stating that the task is enjoyable) while the observations were aware that the task is boring.

Thus, as the study results of Hovland and Mandell (1952) and Weiner and Mowen (1986), presented above, already had suggested, perceived motivation has become an important antecedent for making causal inferences about behavior as it affects attribution (see also: Jones & Davis, 1965; Fein, Hilton & Miller, 1990; Schul & Bernstein, 2008). As Kelley and Michela (1980) explained, "If the action affects the perceiver's welfare, there is greater likelihood a disposition will be inferred from it. This occurs because the impact on the perceiver's welfare becomes a focal effect to which the other effects are assimilated, and thereby the number of unrelated (noncommon) effects is reduced" (p. 461).

2.5 Attribution analysis of persuasion theory

According to Jones, Davis, and Gergen (1961), "The most probable inference from role departures of this type is that the person reveals something of his 'true self' through his failure to perform the expected role" (p. 303). For example, people usually expect that a salesperson formulates a biased, overly positive message to promote the product or service. But when that does not happen (e.g., with a two-sided message describing positive and negatives aspects about the product) this may lead people to conclude that the salesperson demonstrates a sincere assessment (Smith & Hunt, 1987).

Several studies provide empirical evidence for that postulation. For instance, a hippie advocating against marijuana use and a seminarian advocating in favor (which was unexpected for participants of a lab experiment with college students) were more persuasive than when the participants were exposed to an expected message (pro-marijuana hippie and anti-marijuana seminarian), although only the anti-marijuana hippie led to greater attitude change. Also in this study, the messengers who advocated a position that was unexpected were considered more sincere and honest than when they advocated expected positions (McPeek & Edwards, 1975).

In a different study, Walster, Aronson, and Abrahams (1966) found that junior high school subjects considered a criminal to be a more effective communicator than a prosecutor when they argued that the courts should get more power. However, when the sources were advocating that the courts should have less power, they were almost equally persuasive. In the first scenario, the criminal is making an argument against his or her interest, while in the second scenario, it is the prosecutor arguing against his or her own interest. In a second experiment, also with junior high school subjects, it was found that the criminal and the prosecutor were almost equally persuasive when they were arguing against their own interest.

These findings can be explained with attribution analysis of persuasion theory, which predicts that people make inferences about the trustworthiness of a source based on whether the source either confirms or disconfirms the receiver's expectancy about the message position being taken (Kelley, 1973). When a message confirms expectancies, the receiver cannot be sure that the source is being candid (e.g., an attorney taking a position that favors his or her client to win the case), but when a source disconfirms expectancies, the receiver may conclude that the source has overcome his/her self-interest (e.g., an attorney providing a negative picture of his or her client). Such act of integrity means that disconfirmation of expectancies could lead to more positive assessments by observers about the personal characteristics (e.g., honesty and reliability) of the individual performing the behavior.

Eagly, Wood, and Chaiken (1978) found that sources are considered more biased, insincere, and manipulative when their message was expected. The scholars reached this conclusion after studying the results from a lab experiment in which participants read one of several scenarios about a fictitious lawyer giving a speech about industrial pollution in a fictitious city. The lawyer was providing a pro-environmental message, but his background was manipulated by the researchers. The man was either introduced as being pro-environmental or pro-business. The college student subjects of the experiment were more persuaded when the speaker was characterized as being pro-business than when he was characterized as having pro-environmental interests, because of the expectancy violation in former scenario, as the subjects exposed were more confident that the source presented his true opinion than subjects exposed to the latter scenario. Additionally, the source's background information was considered more important in the expectancy confirming than disconfirming situation for making judgments about the message.

In a follow-up study, Wood and Eagly (1981) noticed that people, based on the background information they received about a fictitious source, were expecting that the source would advocate a position that is consistent with the background information. Also here, a lab experiment with hundreds of college students provided evidence that a source is more persuasive when disconfirming the expectation, rather than taking a position consistent with his background. Subjects in the expectancy confirming condition explained their decision by predominantly focusing on the communicator's background, while the subjects in the disconfirmation condition did less so.

Whereas Eagly, Wood, and Chaiken (1978) found greater message comprehension in the expectancy disconfirming condition than the confirming condition, Wood and Eagly (1981) found the opposite: participants in the expectancy confirmation condition scrutinized the message more in detail because they considered the source biased, which led to heightened comprehension of the message. Opinion change only occurred when strong arguments were presented. Subjects that considered the source as unbiased paid less attention to the message details, and opinion change was somewhat hindered by the lack of message comprehension. However, that opinion change in the direction of the source position still occurred in the expectancy disconfirmation condition after trustworthiness of the messenger had increased for being perceived as unbiased. Thus, the message content played less of a role in persuading participants in the expectancy disconfirmation group.

Priester and Petty's (1995) results were more in line with the findings of Eagly and Wood (1981), and they found with two new experiments (one with a thought-listing measure and the other with manipulation of argument strength) and a replication of Eagly, Wood, and Chaiken's (1978) study that exposure to sources perceived as untrustworthy or biased led to additional

scrutiny of the source's message arguments. But that was mainly the case for people that did not prefer to put much cognitive effort in message analysis.

In Experiment 1, they provided college students a made-up transcript of a fictional source ("Dr. John McCarthy"), who advocated for implementing senior comprehensive exams. Subjects were also presented a manipulated biography about the source. In one condition he was described as "a man of great trustworthiness, honesty and sincerity," among other praises, while in the second condition he was presented as having the opposite characteristics. After the participants read the message, they were asked to provide their message-relevant thoughts and post-message attitudes. The data indicated that the post-message attitudes from participants with low need for cognition and who read the statement of the "trustworthy" source were based less on their thoughts about the message than individuals with low need for cognition in the other ("no trust") condition. There was a significant correlation between the message-relevant thoughts and the post-message attitudes for the latter group. The same was the case for the two higher cognition groups. Thus, in those cases, source trust did not matter. Overall, this experiment indicated that participants with low need of cognition may not fully process information that they receive from trusted sources.

In Experiment 2, the scholars tested a similar interaction, but now also varied argument strength (source honesty * need for cognition * communication strength). High need for cognition subjects were persuaded only based on argument strength (strong arguments were more persuasive than weak arguments), but the persuasion level for low need for cognition subjects was based on an interaction between source trust and argument strength. In such, argument strength was a significant factor in predicting attitude change when the source was distrusted, but this was not the case when the source was judged to be honest. Similar to the

findings of the first experiment, this indicates that people with a low need for cognition are only more attentive to the message content when those statements are attributed to a source that is not considered truthful.

For both experiments the participants received background information in which it explicitly was mentioned whether the source was trustworthy or not. The authors, therefore, replicated the study of Eagly, Wood, and Chaiken (1978) with the addition of an argument strength variable to let the audience create their own attribution about trustworthiness, yet still about a fictitious source (Experiment 3). As hypothesized, expectancy disconfirmation led to lower message scrutiny for participants with low need for cognition. Consequently, a message can be considered highly persuasive even when it contains weak arguments. However, low need for cognition participants scrutinized the message content for expectancy-confirming sources. In that case, persuasiveness of the message depended on the perceived strength of the information. Participants with high need for cognition scrutinized the message regardless of expectancy.

Based on the evidence provided by most of the studies, Petty, Fleming, Priester, and Feinstein (2001) argued that the "conceptual rationale and the empirical evidence for reduced message processing resulting from disconfirmation of source-position expectancies are clear" (p. 420). But they also noticed that there were contradictions between findings such as Wood and Eagly's (1981) and the findings of many other studies in which expectancy disconfirmation led to *more* thorough information processing, as many individuals were surprised by the expectancy violations in the latter studies. In those cases, people would rely on existing causal theories when expectancies were confirmed, but needed additional attributional analyses to explain discrepant messages. In the latter situation, message recipients pay more attention to the actual content and perform better on recall tasks (Hunt & Kernan, 1984; Smith & Hunt, 1987; Maheswaran &

Chaiken, 1991; Maheswaran, Mackie & Chaiken, 1992). Evidence for such process has been gathered in persuasion (e.g., Heesacker, Petty & Cacioppo, 1983; Baker & Petty, 1994; Ziegler, Diehl, & Ruther, 2002) and non-persuasion studies (e.g., Pyszczynski & Greenberg, 1981; Wong & Weiner, 1981).

Petty and colleagues (2001) tried to clarify this apparent contradiction in the literature with a lab experiment in which they manipulated expectancy confirmation/disconfirmation related to self-interest and group interest. The results from two experiments indicated that expectancy violation could lead to increased trustworthiness, but that this is to a higher extent when a communicator argued against his or her self-interest—verifying the foundation of attribution analysis of persuasion theory and the arguments made in several studies described above. As they observed, "It is somewhat ironic that the earliest work on expectancies in persuasion [Eagly& Chaiken, 1975; Eagly, Wood & Chaiken, 1978; Walster, Aronson & Abrahams, 1966; Wood & Eagly, 1981] focused on the one type of expectation [i.e., source-position expectancy based on personal self-interest] that produced an apparent *exception* to the subsequently emergent general rule that disconfirmation of expectancies enhances processing" (p. 439, italics in original).

In summary, many of the studies mentioned above are focusing on message expectancy for which a position about a social issue is advocated with arguments that have been manipulated in strength. These issues are usually not about being right or wrong, but about a preferred issue position (which may or may not be perceived as superior). This dissertation is not centered on issue positions, but about the perceived correctness of a factual statement in the form of a headline. Therefore, argument strength is not manipulated in this study. But the studies above have much value for the development of this dissertation because they demonstrated that

message expectancy interacts with source trust when the validity of the message is assessed and that the evaluation of trustworthiness is vital in this process, especially when message recipients analyzed whether self-interest is a relevant indicator for explaining why a statement was made by a particular source. Thus, attribution of persuasion theory can be used as a framework to develop hypotheses about the influence of news source trust and news statement expectancy on news statement believability.

2.5.1 Alternative explanations for findings of prior studies

Other related studies were not explicitly conducted to test attribution analysis of persuasion, but their findings are, nonetheless, in line with Kelley's (1973) expectations. For instance, Berinsky's (2011) experiment exposed participants to either a statement of a Republican senator or a Democratic senator, who both tried to debunk an incorrect rumor that discredited the 2010 Affordable Care Act, a piece of legislation that a majority of Republican voters have publicly disliked. The statement by the Republican senator was more effective in correcting the false belief than the Democratic senator for both Republican and Democratic voters. The latter group was even more persuaded by the Republican representative than the senator representing their own party. Moreover, the Democratic correction created a backlash to support health care legislation, while this was the opposite for the Republican correction. Thus, also for this type of experiment, in a political context, a source was most effective when arguing against perceived self-interest (see also: Hayes, 2011, for a discussion about how information that challenges traditional partisan images influences perceptions about electoral candidates).

In the same way, Ariyanto, Hornsey, and Gallois (2006b) found that Indonesian Muslims considered critical comments about the group more appropriate when the source was a Muslim

and not a Christian. This effect was most visible for people who strongly identified with the group. Thus, that shows that in-group members faced less resistance than out-group members who said the same thing, although there are situations in which also in-group members get severely criticized (see: Ariyanto, Hornsey & Gallois, 2010).

Reid (2012) exposed participants to a review of Christopher Hitchens about Michael Moore's Fahrenheit 9/11 documentary. The article is portraying the movie as unfair. Study participants were either told that Hitchens was a member of either a liberal or conservative think tank. Thus, in one condition it was alleged that a liberal person (Moore) was criticized by a fellow "liberal" (Hitchens), whereas Moore in the other condition was criticized by a "conservative." The results indicate that self-identified Democrats perceived the review less biased when the attack was attributed to the liberal version of Hitchens than when it was attributed to the conservative source.

Baum and Gussin (2007) manipulated content of a story that was either favorable or unfavorable to President George W. Bush, and either attributed to CNN, Fox News, or a fictional news station (KNWZ). In general, the believability of the networks was low when Fox News was reporting positive news about the president and CNN was reporting negative news about him. However, believability was higher when Fox News was reporting negative news about Bush and CNN was reporting positive news about him. This was according to expectations of the researchers, because George W. Bush is a well-known conservative and has represented the Republican Party in the White House. Thus, it was expected that a right-leaning new source (in this case Fox News) would be more positive about actions from the Bush administration, which made criticism about the actions of the Bush administration the more surprising (see also: Smith, 2009).

The attribution analysis of persuasion framework may also be used to provide alternative explanations for the findings from other studies that looked into the effects of source trustworthiness on persuasiveness. For instance, Sternthal, Dholakia, and Leavitt (1978) found in an experiment involving undergraduate students that when source identification preceded a persuasive-intended statement (in this case about the Consumer Protection Agency Bill, COPA) a moderate source was able to induce more positive attitude change than a highly trusted source. Moreover, a moderate source also stimulated subjects to develop more supportive arguments and fewer counterarguments than a high credibility source. (This was reversed when the source was presented after the message, but because this is not applicable to this dissertation's research design those findings will not be explained in-depth.) The high credibility source was described as a Harvard-trained lawyer with extensive experience in consumer issues. The other source was described as someone with interest in consumer protection because of a job opportunity to become a consumer lobbyist.

That experiment only contained subjects who were on the supportive side of COPA before they read the statement. A second experiment contained individuals that were either initially supporting or initially opposing the bill. (Also different, the source was introduced before the message for all participants. All other procedures were the same for both experiments.) The data indicate that the moderate source was able to induce more positive attitude change than a highly trusted source for subjects who had a positive initial opinion. In this condition, the moderate source also stimulated more supportive arguments, while there was no significant difference for source credibility in the number of counterarguments. The high credibility source was much more persuasive than a moderate source for subjects that had a negative initial opinion.

The researchers explained these results in terms of cognitive response, arguing that in situations in which individuals receive a message for which they have a negative initial predisposition, credible sources are more likely to inhibit counterargumentation than less trusted sources. Because, of less counterarguing, there would be less reasons to avoid persuasion toward the message in comparison to situations in which less trusted sources would make the same claim, instead. In the other situation, "those favoring the advocacy will feel a greater need to insure that a position with which they agree is being adequately represented when the source's credibility is low than when the source's credibility is high. Therefore, it would be expected that these individuals will generate more support arguments and will be more persuaded by a source lacking in credibility" (p. 253). When they would be exposed to a credible source with whom they agree, people are less inclined to put much effort in generating supportive arguments (See also: Sternthal, Philips & Dholakia, 1978).

There may be another way to explain some of the results with attribution analysis of persuasion theory. In the first experiment, all participants initially agreed with the position advocated in the message. As Fragale and Heath (2004) maintained, people usually assume that trusted sources make accurate statements and that distrusted sources make inaccurate statements. Thus, in this case of Sternthal, Dholakia, and Leavitt's (1978) first experiment (source-before-message condition only), it would be expected that the credible source takes the position the subjects agree with, and this would be unexpected for the source with lower credibility. This expectation disconfirmation should raise this latter person's trustworthiness, because the argument goes against the interest of the source. And as a result, even the moderate source was able to largely sway the subjects.

The same process took place during the second experiment for participants who had a positive initial position. In that same experiment, however, there are also subjects with a negative initial opinion who are either exposed to a trusted source with whom they disagree or a less trusted source who also advocates a position they disagree with. Hence, the position of the highly trusted source is unexpected and the position of the low credibility source is expected. The former is able to successfully persuade those participants, whereas the latter only is able to a much lower degree. (Of course, it should be noted that even the distrusted source is able to move attitudes in the direction of the source position, but this may be the case because the study used a cover story that included fictitious figures about a bill for which the subjects may have lacked familiarity with—as acknowledged by the authors—and, perhaps, low levels of interest and involvement. Thus, there were no real restraints for the participants to change their attitude position.) This indicates that also the results for the second experiment are consistent with would be expected with attribution analysis of persuasion theory.

The same could be argued for studies that have adopted congruity theory, which holds that individuals become more negative about a favorable concept when a favorable source makes a negative statement about that concept. In contrast, a negative comment about a favorable concept from an unfavorable source does not change the favorability of the concept (Osgood & Tannenbaum, 1955). There may be occasions that those findings can be explained with Kelley's (1972) theorem. In the first scenario, the favorable source did something unexpected (disagreeing with the person that observed the action) and, therefore, would be persuasive as the favorability for the concept declines. In the second scenario, the unfavorable source did something expected (again, disagreeing with the person that observes the action). Therefore, the expected action of an

unfavorable source would not lead to persuasion—in line with the expectations of attribution analysis of persuasion theory.

2.6 Effect sizes

According to Allen and Preiss (2007), "The most pressing problem plaguing the social sciences remains the inconsistency of findings among empirical investigations" (p. 15). Many have blamed this apparent "inconsistency" on an artificial enemy: the adoption of null-hypothesis significance testing to examine whether there is an expected effect—often by looking whether the means of two groups are statistically different to a particular probability. Even though there are certainly positive aspect of null-hypothesis significance testing to examine data (Cortina & Landis, 2010), many others blame academics for misinterpreting their statistical analyses. Consequently, this often has led to conclusions that two studies, apparently, had opposing findings ("one had statistical significant results and the other had not"), while the data indicated that the results were actually very similar (Hunter, 1997; Smithson, 2001; Cumming & Fidler, 2010).

This has led to three broad recommendations: scholars should present confidence intervals and effect sizes in their data presentation. In addition to the latter point, if applicable, researchers should conduct meta-analyses to synthesize prior research to guide predictions for follow-up studies and interpretations of the data. It allows researchers to compare their effect sizes with those of previous studies to see whether the results deviate or not (Smithson, 2003; Kline, 2004; Ellis, 2010; Cumming, 2012). Furthermore, "Meta-analysis demonstrates statistically what the naïve interpreters instinctively understood—that consistency exists without reliance on the significance test" (Allen & Preiss, 2007, p. 17).

It is not a standard practice for (mass) communication scholars and those in related fields, such as social psychology and political science, to present confidence intervals and effect sizes. They neither provide the basic statistical results for other researchers to calculate the effect sizes, especially in the relative older scholarly work in those fields (see: Fritz, Morris & Richler, 2011). Fortunately, it has been possible to conduct some meta-analytic studies on important mass and news media effects, yet the magnitude is best described as moderate, although Perse (2007) argued that there are indications that the effects, in reality, are considerable higher.

Several of those meta-analytic studies are relevant for the interpretation of the data of this dissertation. For instance, Hansen and Kim (2011) conducted a meta-analysis of 34 hostile media effect studies that were either published in a scholarly journal, theses, or dissertation, or presented at an academic conference. The overall effect size is $r = 0.3$ after a correction for sampling error, with a 95 percent confidence interval from 0.23 to 0.37. The researchers concluded that the effect size is medium in magnitude, although it is smaller than the effect sizes found in meta-analyses for agenda-setting and third-person effects, which are both theoretically closely related to hostile media perception (Blom, 2011b). For instance, Wanta and Ghanem (2007) reported a larger effect size for agenda-setting ($r = 0.5$).

Paul, Salwen, and Dupagne (2000) did find a similar magnitude for third-person effect ($r = 0.5$), although Sun, Pan, and Shen (2008) argued that a different formula to calculate the effects for within-subject designs and a larger sample resulted in a considerable lower correlation ($r = 0.3$). In a third meta-analysis about third-person perceptions, Xu and Gonzenbach (2008) argued that the effect for the behavioral component of the model is relatively smaller than studies focusing on perceptual components that usually bring forth higher effect sizes. That is a valuable observation as this dissertation focuses on such perceptual perceptions.

The meta-analytic studies presented above focused on the effect size of how people perceive the validity of mediated information. Information sources play an important role in those hostile media effect studies, and to a lower degree for agenda-setting and third-person effect studies, but they usually focus on an overall effect and not necessarily on the effects of news source credibility and message expectancy specifically, if at all.

Wilson and Sherrell (1993) found with a meta-analysis that a manipulation of source characteristics accounts for 4.5 percent of the explained variance in opinion change after exposure to an attempt to persuade the audience to adopt a certain issue position. (The authors collected 166 studies from 1950 to 1990, although for one-third of them it was not possible to calculate an effect size.) Source manipulations accounted for an average of nine percent of the explained variance in studies. The levels of trustworthiness of the sources, to which a persuasive message was attributed, explained small amounts of variance that were not far from the average effect size for all source characteristics ($\omega^2 = .07$).

That meta-analysis did not include Wiener and Mowen's (1986) study that has been discussed in detail above. They had varied levels of trustworthiness in a laboratory experiment and found effect sizes ($\omega^2 = 0.06–0.10$) that are in line with the findings of Wilson and Sherrell (1993).

Another study of interest (Kaufman, Stasson & Hart, 1999) was not included in the Wilson and Sherrell's (1993) meta-analysis either as the study was published after 1990. The scholars, following up on Priester and Petty's (1995) study, used two existing news media publications for the experimental news source manipulation. Undergraduate psychology students read a story about evolution theory that was attributed to either the *Washington Post* or *National Enquirer*. In general, the *Washington Post* was considered a more credible source than the

National Enquirer, and the *Washington Post*'s article was more believable, accurate, factual, and true than for the other source. The subjects also indicated that the *National Enquirer* was more likely to present false information than the *Washington Post*. Beyond a main effect of source credibility, similar to Priester and Petty's (1995) findings, the interaction between source trust, need for cognition, and communication strength was statistically significant. Argument strength had no effect for low need for cognition participants when the article was attributed to the *Washington Post*. The same group rated the article from the *National Enquirer* higher when there were strong arguments than when there were weak arguments. People with high need for cognition paid more attention to argument strength than source. This again, indicates that some—but not all people—processes messages only when it is attributed to a distrusted source.

The authors did not calculate an effect size to qualify this mean difference, although they presented an *F*-value (4.47) for this main effect with data from 132 participants. It is also unclear whether the subgroups had the equal amount of participants. Assuming that this was the case, it is possible to calculate Cohen's d coefficients using equation 1 to transform the *F*-value to a *t* statistic for a two-group ANOVA test and equation 2 to determine the Cohen's *d* value. (For some other studies, equations 3 and 4 are utilized.) This indicates a moderate effect size (d = 0.4) for the difference in perceived accuracy.

Equation 1:

$$F = \mathrm{t}^2$$

Equation 2:

$$d = t\sqrt{\frac{1}{\mathrm{N1}} + \frac{1}{\mathrm{N2}}}$$

Equation 3:

$$d = \frac{(\mathrm{M2} - \mathrm{M1})}{s}$$

Equation 4:

$$t = \frac{(\mathrm{M2} - \mathrm{M1})}{Sp\sqrt{\frac{1}{\mathrm{N1}} + \frac{1}{\mathrm{N2}}}}$$

The study participants also considered it less likely that the *Washington Post* would deliberately present false information than the *National Enquirer*. Similarly, the authors did not calculate effect sizes, but also here presented an *F*-value (42.95) for this main effect with data from 132 participants. Calculations based on the same equations as presented above indicates that there was a very large effect size (d = 3.7) for the difference in the perceived presentation of potential falsehoods in the coverage of the two publications.

The effect size for the latter comparison is relatively large and has probably to do with an overwhelming expectation within in the entire sample that the *National Enquirer* would publish information that is beyond the truth. The size of the effect for the accuracy comparison is most likely inflated for the same reasons. If anything, the effect sizes are larger in comparison of the literature examined by Wilson and Sherrell (1993), but, at least, it indicates that the manipulation of the identification of news sources in an experimental setting may lead to different perceptions of news content, which is an experimental design that was not covered by the studies that were investigated for that meta-analysis.

2.6.1 Effect sizes for news statement expectancy

There is no meta-analysis available for the literature concerning statement expectancy. The few studies in social psychology journals that focused on message expectancy, often in combination with other variables, such as need for cognition, have not presented effect sizes. Many of them neglected to add information to their manuscript that allows for calculation of effect sizes as well. Three studies that have been presented above included enough information to calculate effect sizes for differences in trustworthiness, message expectancy, and/or opinion change for presented sources that either confirmed or disconfirmed an expected message (Walster, Aronson & Abrahams, 1966; Dutton, 1973; Petty, Fleming, Priester & Feinstein, 2001).

Walster and colleagues (1966) provided different scenarios to high school student in which either a criminal or a prosecutor advocated for more or less power for the courts to fight crime. As explained earlier, it was expected that the participants would perceive the criminal to have a vested interest in convincing the subjects that the courts should have less power and that the prosecutor would have a vested interest in convincing others that the courts should have more power. In this experimental design, the source that confirmed the expectancy barely was able to change the perception of the participants when arguing for less power of the courts. In fact there was a small boomerang effect, while the source that disconfirmed the expectancy was able to change the perception of the participants to a much higher degree. This represented a large effect size (d = 1.8). A replication of the study with another group of high school student led to similar results, although the effect size was considerably smaller (d = 0.5).

Dutton (1973) created a different cover story to manipulate perceptions about message expectancy. (See the earlier discussion about this paper for more information about the

experimental design.) Sources that were arguing against their self-interest were able to persuade the participants to support the advocated position to a higher degree than sources that were arguing in support of their self-interest. This mean difference demonstrates a large effect size (d = 2.6). Their former group also is considered more trustworthy (d = 0.8) and its arguments were considered more justified (d = 1.3), both leading to effect sizes with a relative large magnitude.

Petty, Fleming, Priester & Feinstein (2001) conducted two experiments (see for details above) for which effect sizes can be calculated for a few analyses. For instance, a source that disconfirmed individual interest was considered more trustworthy than when individual interest was confirmed. This mean difference represents a large effect size (d = 0.8). In the group interest conditions, there was no statistical difference between expectancy disconfirmation and confirmation conditions. However, the participants sample (N = 32) may have been too small to achieve a statistical significant result beyond the $p < 0.05$ threshold, whereas there is a moderate effect size (d = 0.5) that would suggest that there actually are trustworthiness differences between disconfirmation and confirmation in the group interest condition—yet, on a slightly smaller scale.

Participants were also asked to what extent they were surprised by the position taken by the sources. The data indicate that there was a large difference in the level of surprise for sources that did not have a self-interest in the advocated position than sources that had a self-interest in the advocated position—leading to an effect size of a large magnitude (d = 1.5). In a second experiment, the effect size was smaller (d = 0.5) for the strong argument condition. (The effect size for the difference between the group means for the weak argument condition was not calculated because of the theoretical expectations that this difference would be trivial.)

Other studies presented above that focused on source credibility and message expectancy that would have enhanced our understanding of potential effect sizes for this dissertation did not report effect size values or did not include enough information to calculate them subsequently. For instance, unfortunately, there is not enough information for effect sizes from Baum and Gussin (2007), which used CNN and Fox News for their news source manipulation.

Overall, the results of the meta-analytic studies and the calculation of the effect sizes for some other studies that were presented above indicate that the effect sizes for the results of this dissertation will most likely be relatively moderate, if not small, because source manipulation usually does not lead to large changes between groups of people, unless there is an exception when a source is distrusted by the overwhelming majority of research participants.

It is important to note that of the experimental design that is deployed in this dissertation may result in a moderate effect size rather than a small one, because several meta-analyses demonstrated that the average effect size for experiments are larger than for other means of data collection (Hansen & Benoit, 2007; Paik & Comstock, 1994), but Hansen and Kim's (2011) meta-analysis found that study methodology did not have a significant influence on the size of the hostile media effect. That study did not examine whether non-random and college student samples had larger effect sizes than in random and non-college student samples, but Paul and colleagues (2002) warned this has been demonstrated for the third-perception effects literature and Wilson and Sherrell (1993) reached similar conclusion after meta-analyzing source credibility studies. This study employs a large random-selection sample of U.S. adults and, therefore, may have less inflation of the effect sizes in comparison to experiments with small convenience samples.

Furthermore, the experimental design presented in this dissertation is focused on a manipulation of source attribution without any further explanation about the trustworthiness of the sources. In fact, the study participants are rating the trustworthiness of *existing* news network source that they most likely know about. Thus, there are no artificial cues that would polarize the credibility of the sources, such as in Kelman and Hovland (1953) and Johnson, Torvicia, and Poprick (1969), which may lead to less inflation of the effect size in this dissertation compared to those prior experiments that are presented in the literature review.

2.7 Mechanisms

According to Bower (1975), "The information-processing approach [in cognitive psychology] assumes that perception and learning can be analyzed into a series of stages during which particular components ('mechanisms') perform certain transformations or recoding of the information coming into them" (p. 33). A mechanism "is a series of events governed by law-like regularities that lead from the *explanans* to the *explanandum*" (Little, 1991, italics in original). In other words, it is the "structure or process at the underlying layer which is causally responsible for the event or phenomenon at the empirical level" (Reiss, 2007, p. 166). Hence, mechanisms are used to better understand and explain attitudes and actions of people (Hedström, 2008), although some scholars have criticized the use of mechanisms to explain social scientific phenomena (Reiss, 2007).

If anything, they form assumptions about human behavior that further explain data that are collected for the specific reason to examine information processing. For the purpose of this dissertation it is proposed that variation in news statement believability can be predicted by a range of independent variables, because humans act on a personal motivational system that

monitors their goals in life. Fishbach and Furguson (2007) defined a goal as a "cognitive representation of a desired endpoint that impacts evaluations, emotions and behaviors" (p. 491).

The personal motivational system usually contains a variety of goals, about which Pittman and Zeigler (2007) maintained that that the satisfaction of those "basic needs are thought of as nutriments, and insufficient amounts of these nutriments result in a failure to thrive. Inadequate degrees of satisfaction of these basic needs may not lead to premature death but instead are revealed in the failure to achieve one's potential or to function as well as one might under more optimal conditions of need fulfillment" (p. 475). Thus, people are inherently motivated to pursue those goals because of the positivity that is associated with them. The opposite—failing to reach the goals—may lead to psychological processes in which distress leads to unpleasant experiences and thoughts.

Andsager and White (2007) identified three motivations that guide human behavior in pursuit of their goals: *accuracy* ("Being motivated by a concern for accuracy is an objective approach to persuasion that leads receivers to satisfy themselves that they are in possession of the best information available," p. 104), *defense* ("When receivers are motivated by defensive needs, they attempt to acquire new information congruent with their already established worldview and beliefs reinforcing self-definition," p. 105), and *impression* ("One may be highly motivated to process information for the sole purpose of impressing others with one's learned judgment on some issue," p. 105).

For the purpose of this dissertation, accuracy and defense are further explained below, because this dissertation is examining how people cope with information that to some degree may be congruent or incongruent with their (perceived) knowledge. The latter situation would challenge the perceived knowledge of an individual. A challenge of someone's prior knowledge

can lead to a defensive-mechanism in which cognitively incongruent information is processed in such way that it can be ignored—"in effect explaining away the discrepancy" (Roese & Sherman, 2007, p. 103).

Thus, even though many people have an apparent desire to be accurate in things they tell others, it could be that they want their current (perceived) knowledge to be correct in such that they will try to obscure any evidence that is challenges their beliefs and attitudes. In fact, a meta-analysis of Hart and colleagues (1999) indicated that people moderately prefer congruent over incongruent information.

Whereas accuracy and defense could serve as competing motivations, for some people they certainly will not be perceived as such. According to Newman (1999), "challenges to one's preexisting attitudes, values, or preferences trigger negative affect. In plain language, discovering that one's preconceptions might be wrong is a cause for concern" (p. 60). For some people, being accurate, therefore, also means to stay consistent, because inconsistency in opinion or (perceived) knowledge would indicate inaccuracy at some point in time—which may lead to embarrassment toward others. Overall this may lead to cognitive dissonance and wishful thinking (Festinger, 1957), or other cognitive-processing strategies to cope with inconsistencies that lead to stereotyping of sources and enhanced skepticism toward their messages.

2.7.1 Anxiety and stereotypes

According to Hoffman (2011), the climate change debate "appears to be reaching a level of polarization where one might begin to question whether meaningful dialogue and problem solving has become unavailable to participants" (p. 3). Hence, as Nisbet (2009) maintained, global warming ''has joined a short list of issues such as gun control or taxes that define what it

means to be a Republican or Democrat'' (paragraph 8). Therefore, debates about the existence of climate change and global warming, and the possible role of humans in those processes, have become *zero-sum* competitions: the success of one group is considered negative for the other, because evidence in support for one position frequently means evidence challenging the other position.

Within such competitive environments, people habitually develop group affiliations and contrast the people to which they feel affiliated with (in-group) with the people to which they feel not affiliated with (out-groups). According to Johnson and Levin (2009), the "in-group/out-group bias is more likely when there is strong categorization into groups, large actual or perceived inter-group threats and low information flow between groups" (p. 1598). Self-identified Democrats and Republicans are in- and out-groups about many political issues, depending on the perspective of a particular individual that feels affiliated with one of the groups, often by utilizing "collective pronouns such as 'we' or 'they' that are used to define people's ingroup or outgroup status" (Divideo & Gaertner, 2010, p. 1091).

This means that people create mental categories to differentiate between a variety of groups of people and things (Ashmore & Del Boca, 1981; Taylor, 1981; Chong & Druckman, 2007). "To cope with the enormous complexity of the world, people abstract meaning from their perceptions and develop heuristics and other simplifying principles for thinking about important elements in their environment" (Dividio & Gaertner, 2010, p. 1089).

Lippmann (1922) coined the term "stereotype" to refer to the mental pictures that people have to distinguish one social group from others. Those positive and negative responses toward those groups are stored in memory and are relied on for instant judgments at later occasions

(Bodenhausen & Moreno, 2000). Thus, as Lodge and Taber (2005) explained, "feelings become information" (p. 456).

Stereotypes are "relied on as a cognitive short cut, an efficient use of time and resources" (Wilder, 1993, p. 89) and are often utilized to "justify either love-prejudice or hate prejudice" (Allport, 1954, p. 189). Additionally, they can affect how people perceive the behavior of others and other causal attributions (Deaux, 1976; Duncan, 1976). Stereotypes could be positive or negative, or a combination of both, but—most important—are not necessarily accurate perceptions of reality. They can enhance memory when those stereotypes represent real group differences (Jussim, et al., 2009), but in other situations can lead to misremembering factual information (McGarty, Yzerbyt & Spears, 2002; Sherman, Crawford, Hamilton & Garcia-Marques, 2003; Quinn, Macrae & Bodenhausen, 2007).

According to Kunda and Sinclair (1999), people often rely on only those stereotypes (thus, not *all* stereotypes) that lead to a desired evaluation of an object or situation, even though people may not always be aware of their biases based on stereotypes. Information that challenges those attitudes may be disregarded, even when deliberate attempts are made to intentionally forget incorrect stereotypes (see: Johnson, 1998).

In the domain of public affairs, citizens rely on stereotypes to identify threatening situations. For self-preservation those threats need to be recognized quickly. Threat to self or a group someone feels strongly affiliated with, frequently leads to more negative out-group attitudes. A potential loss of resources for the in-group also leads to anxiety, which is an emotional state of mind in uncertain situations that are perceived as negatively reflecting on self-identity. It is a defense mechanism to detect and neutralize threats adequately (Riek, Mania & Gaertner, 2006).

People expect that members of an out-group to be biased against members of the in-group (Judd, Park, Yzerbyt, Gordijn, & Muller, 2005). Stereotyping, therefore, could lead to prejudice toward members of a specific group. For example, Allport (1954) defined this as "an antipathy based on faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group as a whole, or toward an individual because he [sic] is a member of that group" (p. 9). In other words, "prejudice represents a negative (or a less positive) evaluative or affective response, or both, to others in a given context based on their group membership" (Dovidio & Gaertner, 2010, p. 1085).

Wilkinson (2001) maintained that anxiety "serves to make us acutely aware of our anticipated 'embarrassment, shame, humiliation, guilt and chagrin' before others" and are "rooted in the unbearable experiences of being the subject of social failure" (p. 22; see also: Miller & Leary, 1992). For example, the theory of affective intelligence posits that the most anxious citizens are those whose own party is in office when the economy is in decline (Marcus, Neuman & MacKuen, 2000; see also: Lebo & Cassino, 2007).

Anxiety in competitive environments stimulates negative feelings toward out-groups, according to the realistic group conflict theory. Tajfel's (1981) social identity theory predicts similar outcomes by comparing the self-identity with those of out-groups (see also: Turner's [1985] self-categorization theory). Because humans strive to maintain a positive evaluation of self, this leads to in-group favoritism while creating a negative view of the out-group, although there are situations where the former (favoritism) takes places regardless of whether a different group is treated negatively (Brewer, 1999). Such hostility toward others, though, questions the ability for many citizens to tolerate opposing political viewpoints, which Huckfeldt, Johnson, and Sprague (2004) identify as a central issue in democratic politics.

As mentioned earlier, conflict between issue position and source credibility has been examined in a series of experiments by Wilder and Shapiro (1984, 1989a, 1989b, 1991). They explored the influence of anxiety on judgments of an out-group member who took an issue position similar to the in-group. They contended that because of the anxiety, participants of the experiment would fall back on their negative stereotypes of the out-group, even though the out-group members did not resemble the out-group stereotype in reality.

This demonstrates that people frequently assign "identical characteristics to any person in a group regardless of the actual variation among members of that group" (Aronson, 2011, p. 309).

2.7.2 Motivated skepticism

In the first few sections of the literature review it was discussed that that group membership, including political-ideological partisanship, affects perceptions of news media credibility, but that does not fully explain how people process news content and by taking into account the affiliated sources (Gunther, 1992).

According to D'Alessio and Allen (2007), people intentionally select information that is congruent with their attitudes and avoid information that is incongruent with their preexisting attitudes. But if they are exposed to incongruent information that does not necessarily mean that they will not make an effort to process the material. In fact, there may be differences in the amount of cognitive processing for congruent and incongruent information from sources that may be trusted or distrusted to a certain extent.

Several studies have found that partisans remembered more information when it supported their side rather then that it contradicted their position (Giner-Sorola & Chaiken, 1994;

Schmitt, Gunther & Liebhart, 2004). Turner (2007), therefore, initially expected that liberals would remember more arguments made in a news segment attributed to a news source that was perceived as having a liberal perspective (CNN) than when the news source was perceived as having a conservative perspective (Fox News), and vice versa for conservative voters. However, his data (Experiment 2) demonstrated the opposite: "Self-identified liberals and conservatives recall more correct information and less incorrect information when watching Fox News Channel and CNN, respectively, than when watching the network that they believe to be more suited to their ideological predispositions" (p. 60).

That conclusion is substantiated by a variety of prior studies. For instance, Priester and Petty (2003) found that higher source trustworthiness leads to lower message elaboration. And, Gillig and Greenwald (1974) demonstrated that higher source credibility leads to less discounting and counterarguing. Yet, importantly, even when exposed to certain news messages, this does not mean that consumers are actively processing information for short- and long-term memory storage. They only pay attention when new information is salient, if they are interested in or involved with the subject, and/or when prior attitudes are challenged (Entman, 1989).

Positive information is usually cognitively processed less heavily than negative information (Pratto & John, 1991). The more information is inconsistent with what an individual beliefs to be true (i.e. the larger the discrepancy between the position argued in a news message statement and one's own position on the issue), the larger the amount of counterarguing, in particular for overt persuasive attempts to change opinions (Brock, 1967; Edwards & Smith, 1996). This shows that people put more effort in causal reasoning (asking themselves the *why*-question) when an outcome is negative, especially when the outcome was unexpected (Wong &

Weiner, 1981; Hastie, 1984; see also: Lau & Russell, 1980; Brewer, Dull & Lui, 1981; Edwards & Smith, 1996).

Huckfeldt, Johnson, and Spraque (2004) pointed out that "attitudes and opinions are resistant, but not invulnerable, to political change" (p. 25), but after reviewing a large amount of persuasion literature, they concluded that information threatening one's viewpoints or perceived knowledge will likely be highly scrutinized—and, when possible, disregarded. Taber and Lodge (2006), therefore, proposed a model of motivated skepticism that explains such biased information processing: individuals counterargue contrary arguments and evidence to a much higher extent than supporting messages, if at all, in the latter cases. To do so, they adopt several strategies to delegitimize opposing messages by identifying flaws in those arguments or their sources. "People can thus defend current beliefs and attitudes against discordant information by some combination of avoiding, disbelieving, misperceiving, forgetting, or misremembering it" (Jacobson, 2008, p. 5).

Experiments from Ditto and Lopez (1992), Edwards & Smith (1996), and Ditto and colleagues (1998) demonstrated that information consistent with a preferred message is examined less critically than messages without a preferred conclusion. Additionally, people used less information to reach a conclusion about information consistent with their views. This suggests "that a core component of self-serving bias is the differential quantity of cognitive processing given to preference-consistent and preference-inconsistent information" (Ditto & Lopez, 1992, p. 568). Hence, supporting arguments are usually uncritically accepted, which allows individuals to "arrive at conclusions that they want to arrive at" (Kunda, 1990, p. 480; see also: Hastorf & Cantril, 1954).

This circumvents cognitive dissonance, because there is no tension between the drive to be accurate and belief perseverance (Festinger, 1957). Such attitude congruency bias is moderated by strength of prior attitudes, which may lead to further issue polarization as partisan groups with strong attitudes will be more confident in their own positions (Taber, Cann & Kucsova, 2009). This could be accounted for as a sense of closure whereby citizens desire certainty towards the conclusion of an issue that is consistent with the disposition (Kruglanski & Webster, 1996).

A classic example of cognitive dissonance leading to biased eyewitness accounts is provided by Hastorf and Cantril (1954), who observed that football fans from Dartmouth College and Princeton University disagreed on the amount of infractions made by the former team. The matchup between the two institutions in 1951 was vicious. Princeton's star player left the game in the second quarter with a broken nose and an opposing player broke his leg in the third quarter. The Dartmouth team was penalized for 55 more yards than Princeton. But fans from the former team argued that Dartmouth players committed as many infractions as the Princeton team, but Princeton fans argued that the other team had twice as many infractions. Hence, the supporters from both sides "counted" a particular number of infractions that made their *own* team look more positive and the *other* team more negative.

Cognitive bias is not only apparent when it comes to debating sporting events. Even scientists are prone to the same prejudice when it comes to taking side in academic discussions. In an experiment, a sample of scholarly researchers considered studies that confirmed their position on a controversial issue to be of higher quality (e.g., methodological quality and relevance of topic) than papers that did not confirmed their position, especially among scientist that had strong beliefs on the issue (Mahoney, 1977; Koehler, 1993).

To avoid dissonance in the political realm, partisan motivations often prevail over accuracy (Haider-Markel & Joslyn, 2009) and many people do not want "further information to disturb the images and opinions that they had already formed" (Graber, 1988, p. 125). For example, capital punishment proponents argued that a study abstract in support of their viewpoint was better conducted and contained more believable evidence than an abstract that discredited their position. This belief was reversed for opponents of the death penalty. When asked whether respondents had changed their overall opinion on the issue, three-quarters of them demonstrated further attitude polarization rather than ambivalence or moderation (only 6 percent depolarized), while the two abstracts altogether contained mixed data (Lord, Ross & Lepper, 1979).

In a replication, it became apparent that even though there was balance in the pro- and con-statements, participants were overall resistant to change towards the opposite position of their initial opinion. More specifically, this process did not deter participants from choosing the one study supporting their prior beliefs as more convincing than the other. Both groups accepted evidence that validated its position at face value, but regarded the other piece of lesser value (Miller, McHoskey, Bane & Dowd, 1993).

The studies of Lord et al. (1979) and Miller et al. (1993) did not manipulate source identification or strength, while Cook (1969) speculated that prior research findings that highly trusted sources are more persuasive than distrusted sources could be explained by a difference in the amount of counterarguing that is stimulated by the level of source credibility: the number of rebuttals declines when source credibility increases. He found evidence for this in his own experiments, in which decreased counterarguing mediated the attitude change that is caused by the level of source credibility.

This is also what Turner (2007), mentioned at the beginning of this section, concluded in a third experiment. Liberals barely counterargued news segments attributed to CNN or when it is not attributed to a news source, but considerably questioned the same footage when attributed to Fox News. Similarly, conservatives barely counterargued news segments attributed to Fox News or when it is not attributed to a news source, but considerably questioned the same footage when attributed to CNN. Contrary, political moderates did not differ in the number of counterarguments for those news networks.

2.8 Hypotheses

For the purpose of this dissertation it is assumed that self-identified Democrats consider CNN more neutral than self-identified Republicans, because CNN is generally known to present news from a liberal or moderate—but certainly not overwhelming conservative—point of view. Because of the congruency between the political ideology of a participant (self-identified Democrats are generally more liberal than self-identified Republicans) and the perceived reporting slant of the news source, such participant would generally agree with the ideological perspective of the news and, according to his or her worldview, consider it a more or less neutral presentation of facts (see: Feldman, 2011). Moreover, the same predictions can be made for Democrats considering Fox News less neutral and less trustworthy than self-identified Republicans. Therefore, as a manipulation check, it is hypothesized that;

H1a: People who identify themselves as Democrat consider CNN more neutral than people who identify themselves as Republican.

H1b: People who identify themselves as Democrat consider Fox News less neutral than people who identify themselves as Republican.

Consequently, it is expected that self-identified Democrats consider CNN more trustworthy than self-identified Republicans. This is not necessarily a manipulation check to investigate whether participants differentiate between news networks based on their perceived reporting slant, but it is also important that such recognition results in a discrimination between the network based on their perceived trustworthiness. Therefore, it is hypothesized that;

H2a: People who identify themselves as Democrat trust CNN more than people who identify themselves as Republican.
H2b: People who identify themselves as Democrat trust Fox News less than people who identify themselves as Republican.

Because people assume that trusted sources make accurate statements and that distrusted sources make inaccurate statements (Fragale & Heath, 2004), it would be assumed that the polar bear headlines is more likely to be broadcasted on Fox News than CNN. Therefore, it is hypothesized that;

H3a: People who identify themselves as Democrat are more surprised that CNN maintains the news statement is true than people who identify themselves as Republican.
H3b: People who identify themselves as Democrat are less surprised that Fox News maintains the news statement is true than people who identify themselves as Republican.

Democratic voters are less likely to believe a news statement that is negative toward the possible existence of global warming than a news statement that is positive toward the possible existence of global warming, and vice versa for Republican voters. Therefore, for the polar bear headline it is hypothesized that;

H4: Individuals who identify themselves as Democrat have lower news statement believability than people who identify themselves as Republican.

2.8.1 News statement believability model

Highly expected news statements from much trusted news sources are most likely to result in high statement believability—with the supposition that trusted news sources provide news statements that are in line with what the news statement receivers already consider believable. Contrary, highly expected news statements from low trusted news sources are most likely to result in low statement believability—with the supposition that distrusted news sources provide news statements that are not in line with what the news statement receivers consider believable before receiving the news statement. Therefore, it is hypothesized that:

H5a: When news statement expectancy increases, the news statement believability increases with an increase in news source trust for trusted sources.

H5b: When news statement expectancy increases, the news statement believability decreases with a decrease in news source for distrusted sources.

H5c: Regardless of the news statement expectancy level, the news statement believability remains the same for people who are neutral on news source trust.

Regardless of news statement expectancy level, in no situation it is hypothesized that a specific news source trust level corresponds to higher news statement believability in comparison to higher news source trust levels. Thus, for much unexpected messages, higher news source trust levels will have higher news statement believability, even though, the gaps in differences for news statement believability is smaller between news source trust levels for unexpected messages than expected news statements. Therefore, it is hypothesized that;

H6: Individuals will have higher news statement believability when news source trust increases.

As explained in the theoretical framework, the expected direction of a main effect of news statement expectancy depends on the average news statement believability and the starting point of the news source trust conditions in the regression plot. When statements are highly believable for a sample of respondents, then the direction is positive and when statements are, generally, unbelievable, then the direction would be expected to be negative. The pre-test, which is described in the next chapter, has indicated that the overall believability for the polar bear headline used during the main survey is considerably low. Therefore, it is hypothesized that;

H7: News statement believability decreases with increases in news statement expectancy for statements that, on average, are less believable than not.

The earlier discussions about the role of value-relevant involvement in the model have focused on the possibility that people are processing new information in a learning or cognitive biased manner. In those models, one group, based on the level of value-relevant involvement and political ideology, is expected to stand out in its news statement believability as it is much higher of lower than the average of the other participants in the sample. Because the literature is ambiguous about which model is correct (e.g., Fiorina, 2002 vs. Bartels, 2002), competing hypotheses are proposed for the role of the interaction between value-relevant involvement and political ideology.

More important, just because there is a majority, this does not mean that those people are not misinformed. In fact, it could be that an entire population is misinformed. In that case, the assumptions of the eight scenarios still hold, but should not be seen as an inquiry for which group is better informed than others based on political ideology and value-relevant involvement. For instance, there is evidence that the polar bear headline is a correct representations of reality (see the methods section of the pre-test), yet the content of the headline may come to a surprise of many people, because recent news coverage of global warming and its focus on risks for potential decimation of the polar bear population—even for possible extinction in the wild.

If high value-relevant involvement leads to higher attention to news coverage regarding the risks for the polar bear population, whereas reports about the opposite possibility of population increase may be scarce or at least overwhelmed by stories of the contrary, this means that both highly-involved liberals and highly-involved conservatives would have equivalent (low) levels of news statement believability.

But would that mean that low value-involved liberals would have comparable news statement believability levels as low value-involved conservatives, as well? That is not

necessarily expected, because for the polar bear headline in the main study it would be a surprise when a large group of liberals would highly believe that the polar bear population is increasing, regardless of the hypotheses for their value-relevant involvement. If they are not assumed to pay much attention to news content about potential global warming risks, it is safe to expect that they rarely are exposed to news content that focuses on potential population increase. Additionally, the statement is against the hypothesis that global warming is happening, which liberals, in general, consider to be true. Therefore, it would be surprising when they en masse would agree with statements about population increase. In that case, there would not be much difference in news statement believability for each liberal news source trust level between the different levels of news statement expectancy.

It may be the case that conservatives with a low value-relevant involvement are less exposed to news selection that is primarily focusing on the risk of extinction, while the headline is pointing to a position that is threatening the global warming hypothesis, which would find more support among conservatives than liberals. In that case, conservatives with lowest value-relevant involvement would have highest news statement believability among all respondents.

Therefore, for the information learning scenarios it is hypothesized that;

H8a: When people who identify themselves as belonging to the same political ideology have equivalent levels of news statement believability, regardless of value-relevant involvement, people with low value-relevant information from the opposing political ideology will have discrepant levels of news statement believability.

For the information bias scenarios it would be the opposite for conservatives. It would be the natural state for high value-relevant involved participants to stand out in comparison to other subpopulation with the sample. Therefore, it is hypothesized that;

H8b: When people who identify themselves as belonging to the same political ideology have equivalent levels of news statement believability, regardless of value-relevant involvement, people with high value-relevant information from the opposing political ideology will have discrepant levels of news statement believability.

While the previous discussion focused on political ideology, it is expected that the results are comparable for a potential interaction between party identification and value-relevant involvement. This is because of the expectation that political ideology and party identification will be positively correlated to each other, yet are distinct independent predictors in the news statement believability model. For the reasons outlined above, competing hypotheses are proposed.

For the information learning scenarios it is hypothesized that;

H9a: When people who identify themselves as belonging to the same political party have equivalent levels of news statement believability, regardless of value-relevant involvement, people with low value-relevant information from the opposing political ideology will have discrepant levels of news statement believability.

For the information bias scenarios it is hypothesized that;

H9b: When people who identify themselves as belonging to the same political party have equivalent levels of news statement believability, regardless of value-relevant involvement, people with high value-relevant information from the opposing political ideology will have discrepant levels of news statement believability.

It would be possible that, beyond interaction effects of value-relevant involvement with political ideology and party identification, or without such effects at all, that there is a main effect for value-relevant involvement in predicting news statement believability. The direction would depend on whether the sample indicates information learning or information bias, as discussed above.

For the information learning scenarios it is hypothesized that;

H10a: Lower value-relevant involvement leads to higher news statement believability.

For the information bias scenarios it is hypothesized that;

H10b: Higher value-relevant involvement leads to higher news statement believability.

CHAPTER 3

METHODS

3.1 Experimental stimulus

The data that are generated for this dissertation are obtained through an experimental survey design. According to Thorson, Wicks, and Leshner (2012), "Experiments are important to the theoretical development of fields like journalism and mass communication because they provide the most rigorous way to establish causal relationships between independent and dependent variables (as well as moderators and mediators), relationships critical for building and evaluating theory" (p. 112). For this dissertation, news media source identification gets manipulated during an online survey experiment.

The more news media sources people use, the more they generally know about important political issues, such as global warming (Kahlor & Rosenthal, 2009), although this may depend on the kind of news media outlets that are selected. This is because some news organizations are perceived as reporting with a liberal or republican slant at times (Morris, 2005). There are some indications that framing differences can have some profound impact on the electorate (see: Druckman, 2001; Chong & Druckman, 2007). According to Levendusky (2011), news outlets increase attitudinal polarization in the mass electorate. Additionally, Morris and Francia (2010) found that opinion change toward presidential candidates during the 2004 election campaign was associated with exposure to reports of the national party conventions on cable news networks.

Such cable news networks have created a dominant place within the mainstream news media during the past few decades (Feldman, 2011). CNN was the first television news network that captured large viewership, especially during times of war and other domestic or international crises. The Fox News Channel and MSNBC have followed since in popularity. Fox News, in

fact, has taken over the top spot from CNN when it comes to average daily viewership (Morris, 2005).

Those channels offer a combination of news reports and commentary, although in many cases the lines have become blurry. “Along with the proliferation of news outlets has come a healthier regard for narrowcasting or niche programming: As media audiences fragment, television networks and programs now cater to specific segments of the public rather than to the masses” (Feldman, Maibach, Roser-Renouf & Leiserowitz, 2012, p. 5). And the formats of CNN, Fox News, and MSNBC have proven to be successful. Hence, “media firms have incentives to match the beliefs of reporters to those of consumers” (Stone, 2010, pp. 2-3).

This dissertation focuses on the two best known cable news networks within the United States: CNN and Fox News. Of those two outlets, Fox News programming usually attracts more conservative than liberal viewers. In contrary, CNN programming usually attracts more liberal than conservative viewers (Morris, 2007; Roy, Traynor & Rumsey, 2011). This is because the coverage of Fox News is generally more favorable to politicians and issues associated with the Republican Party than the coverage of CNN (Morris & Francia, 2010), although this is not always the case (Fico, Zeldes, Carpenter & Diddi, 2008).

Because of these differences in ideological slant, it is expected that news audiences that vary in party identification and ideology will have different perceptions about the trustworthiness and believability for CNN and Fox News (see also: Baum & Groeling, 2009; Gruszczynski, 2010) Therefore, they are selected to function for the experimental manipulation for the pre-test and main survey experiment. One-third of the participants is exposed to news headlines that are attributed to CNN, another third of the participants is exposed to the same headlines, but they are

attributed to Fox News, and the other participants are exposed to that same headline, but are not aware of the news source.

The participants of the CNN and Fox News conditions were able to note the experimental manipulation for each question, as the news source is explicitly mentioned in almost all of them (the value-relevant involvement item is the exception). Moreover, those items are accompanied by a small vignette with the news network's logo. Those logos are usually visible for all the networks' programs in one of the corners of the screen. Evidently, there were no logos or additional source descriptions for the control condition.

3.2 Survey experiment items

3.2.1 News source slant (manipulation check)

News source slant is the extent to which a news consumer expects that a statement by a news organization has a certain point of view. The participants in the CNN condition were asked, "To what extent do you think that CNN generally reports from a liberal or conservative point of view, or reports neutrally?" The participants in the Fox News condition were asked, "To what extent do you think that Fox News generally reports from a liberal or conservative point of view, or reports neutrally?" They were able to answer on a 7-point scale: (Very Liberal)-(Liberal)-(Somewhat Liberal)-(Neutral/Neither Liberal or Conservative)-(Somewhat Conservative)-(Conservative)-(Very Conservative). Hence, the lower score means higher liberalism. Participants in the control condition did not respond to any a news slant item.

3.2.2 News source trust

Participants in the CNN condition were asked to respond to the statement: "CNN is generally trustworthy?" Participants in the Fox News condition were asked: "Fox News is generally trustworthy?" They were able to answer on a 7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree). Hence, the lower score means higher agreement. Participants in the third condition were not provided a news media source attribution and, for that reason, were not asked to respond to a news source trust item.

3.2.3 News statement believability

The news statement believability is the extent to which a news consumer accepts a statement from a news media organization as true. Therefore, in the next stage of the survey, the participants were explained that they were going to see news headlines that were recently taken from the website of CNN or Fox News, or they received no explanation about which news outlet had provided the headlines.

It was further explained that they had to provide their news statement believability level: "We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the headline is true."

After exposure to a headline, the participants in the CNN condition were asked: "What do you think the odds are that this headline from CNN is factually true?" The participants in the Fox

News condition were asked: “What do you think the odds are that this headline from Fox News is factually true?” The participants in the control condition were asked, “What do you think the odds are that this headline is factually true?” They were able to indicate a percentage with a slider that ranged from 0% to 100%.

3.2.4 News statement expectancy

News statement expectancy is the extent to which a news consumer is surprised or unsurprised by a statement from a news organization. After the participants had indicated their news statement believability, those in the CNN condition were asked to respond to the news statement expectancy item: “To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?” The participants in the Fox News condition were asked, “To what degree do you think it is surprising or unsurprising that Fox News claims that this statement is factually true?” They were able to respond on a 7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising). The lower score, the higher the surprise, the more it was unexpected. Participants in the third condition were not provided a news media source and for that reason were not asked to respond to a news statement expectancy item.

3.2.5 News source trust and news statement expectancy interaction

The news statement believability model includes an interaction variable between news source trust and news statement expectancy. The measurement of those variables is explained above and the individual scores were subsequently centered by subtracting those scores from the

sample mean for each variable. The centered score for news source trust and the centered score for news statement expectancy were multiplied for each individual to create the interaction score.

3.2.6 Party identification and political ideology

In hindsight (which will be further discussed in the conclusion chapter), the survey that was conducted to gather the data for this dissertation lacked a measure about the extent to which the individuals agree that climate change and global warming are true. The best alternatives within this dataset are political ideology and party identification. Several studies and public opinion polls that were introduced in the literature review have suggested that Democrats (liberals), in general, to a higher extent, believe that the earth is warming and that such warming is caused by human activities in comparison to Republicans (conservatives). Therefore, political ideology and party identification are added to the model to investigate whether they predict changes in news statement believability.

Party identification is the self-described identification of affiliation with a political party. Participants were asked whether they identified themselves as Democrat or Republican, or independent/neither. Those who picked the Republican Party were asked whether they identified themselves as a strong Democrat or not strong democrat. A similar question was asked to all Republicans. Those who indicated to be independent or neither supported the Democratic Party or Republican Party, were asked if they leaned toward the Democratic Party, leaned toward the Republican Party, or neither.

Survey company GfK ordered these answers in 7-point scale: (Strong Republican)-(Not Strong Republican)-(Leans Republican)-(Undecided/Independent/Other)-(Leans Democrat)-(Not Strong Democrat)-(Strong Democrat). For the purpose of this dissertation, all Democrats were

grouped together and the same was done with all Republicans, because prior research has determined that people who claim to be independent but lean towards one of the two parties usually vote for similar electoral candidates as partisans of that specific party (Keith et al., 1986; Dennis, 1988), even though the groups may also differ in some areas (Green, 2000). Democrats were coded as1 and Republicans were coded as 0.

Participants that indicated that they were undecided, independent, or a supporter of another (third) party, and did not lean toward the Democratic Party or Republican Party, were left out of the data analysis. There were only 42 out of 1329 respondents who did not identify them self as Democrat or Republican. This was less than 3 percent of the entire sample. Tabachnick and Fidell (1983) recommended deleting dichotomous variables with 90-10 splits between categories. When the independents were sized up to the Democrats or Republicans individually, the independents are still less than 10 percent. Therefore, it was determined that such amount of independents was not large enough for valid comparisons within this dataset (see also: Bergan, 2012).

Political ideology has been described as "any set of beliefs about the proper order of society and how it can be achieved" (Erikson & Tedin, 2003, p. 72). Participants were asked: "How would you describe your political ideology?" They were able to respond on a 7-point scale: (Very liberal)-(Liberal)-(Somewhat Liberal)-(Moderate, middle of the road)-(Somewhat conservative)-(Conservative)-(Very conservative). The lower the score, the higher the liberalism.

3.2.7 Value-relevant involvement

Value-relevant involvement has been described as "the psychological state that is created by the activation of attitudes that are linked to important values," and it is frequently associated

with attitude extremity" (Johnson & Eagly, 1989, p. 290). Cho and Boster (2005) developed and tested a value-relevant involvement scale with seven items. For the purpose of this dissertation, one of those questions is adopted to measure value-relevant involvement. It was phrased in such way that the participants were inquired about their interest in political issues in general. They were asked to what extent they agreed or disagreed on the following statement: "Knowing my position on political issues is central to understanding the kind of person I am," which had been a reliable item (> 0.7) in five confirmatory factor analyses that were conducted for testing the scale for five issues, including abortion and the death penalty. They were able to answer on a 7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree). The lower the score, the higher value-relevant involvement.

3.2.8 Value-relevant involvement and political ideology interaction

The news statement believability model includes an interaction variable between political ideology and value-relevant involvement. The measurement of those variables is explained above and the individual scores were subsequently centered by subtracting those scores from the sample mean for each variable. The centered score for political ideology and the centered score for value-relevant involvement were multiplied for each individual to create the interaction score.

3.2.9 Value-relevant involvement and party identification interaction

The news statement believability model includes an interaction variable between party identification and value-relevant involvement. The measurement of those variables is explained

above and the individual scores were subsequently centered by subtracting those scores from the sample mean for each variable. The centered score for party identification and the centered score for value-relevant involvement were multiplied for each individual to create the interaction score.

3. 3 Sample

The survey was filled out by members of the KnowledgePanel, a probability-based panel from Knowledge Networks (2012) and its parent company GfK. The organization has created a participant pool after randomly selecting telephone numbers and residential addresses. One person in those households was invited to participate in the KnowledgePanel. People without Internet access were given a laptop and Internet connection. Participants who are responding to survey requests on their own computer, are rewarded a few dollars per month ($4-$6) depending on the length of the questionnaires. All participants get a small financial token for participating in surveys that take more than 20 minutes, on average.

People in the KnowledgePanel receive invitations by email to be part of research projects and they are asked to participate in two to four surveys per month with an average length of about 15 minutes for each. People who have missed eight to ten opportunities are eliminated from the participant pool that consists of about 32,000 people on average. The attrition rate of the pool is three percent per month and those people are replaced by persons from other randomly-selected households.

The survey data for this dissertation was gathered as part of GfK's Omnibus service, which allows researchers to add a small number of questions to one survey questionnaire, while sharing the fixed costs among each other. The survey was introduced on August 7 and taken

offline about a week later, on August 13. It took most of the 1329 participants a few minutes to provide answers to the items. About nine out of ten participants were done within ten minutes or less. The mode was two minutes and the median three minutes.

Because all respondents frequently participate, they have filled out a profile with demographic information to avoid answering those questions for each individual survey. The panel members are asked to indicate their date of birth, gender, race, ethnicity, household income, and education level, among a variety of other variables. Those items were not part of the questionnaire that was designed for the purpose of this study.

For race and ethnicity, participants could choose between five options: (1) White, Non-Hispanic, (2) Black, Non-Hispanic, (3) Asian, Non-Hispanic, (4) Hispanic, and (5) two or more races. These answer possibilities are not ideal, because these answer possibilities are not mutually exclusive, as it could be that someone identifies as Caucasian and Hispanic or any other combination that is left out. However, these were the only possibilities provided by the survey provider (GfK) and because of a limited budget it was not feasible to probe the survey participants further on their racial and ethnic backgrounds. Three of the answer possibilities were selected by more than 10 percent by the respondents: White, Non-Hispanic; Black, Non-Hispanic; and Hispanic. Dummy variables were created in which the specific group was coded as 1 and the other participants were coded as 0. All three dummy variables were added as an independent variable in the OLS regression.

For household income, the participants could choose between nineteen answer possibilities, starting with "Less than $5000" and ending with "$175,000 or more." A higher score means higher household income.

For education level, the participants could choose between fourteen answer possibilities, starting with “No formal education” and ending with “Professional or Doctorate degree.” A higher scores means higher education level.

The average participant was 49 years old at the time of the survey, self-identified to hold a moderate ideology, had taken some college classes but did not have a college degree, and calculated a household income of just over $50,000. There were slightly more men (50.6%) and people who identified themselves as Democrat (53.8%). About 73 percent of the participants identified themselves as Caucasian. Table 1 indicates that the demographics are virtually similar among the source manipulation conditions.

Table 1

Demographic sample data

	CNN (n=438)	**FOX NEWS** (n=446)	**CONTROL** (n=445)
Age	**49.20** (17.03)	**49.54** (17.35)	**48.29** (17.45)
Education level	**10.15** (2.11)	**10.24** (1.96)	**10.17** (2.00)
Household income	**12.01** (4.30)	**12.05** (4.25)	**11.95** (4.50)
Political ideology	**4.19** (1.46)	**4.20** (1.51)	**4.19** (1.48)

	CNN (n=438)	**FOX NEWS** (n=446)	**CONTROL** (n=445)
Male	49.3%	47.4%	48.2%
Democrat	56.2%	55.8%	56.0%
Republican	41.3%	38.5%	40.6%
White, non-Hispanic	68.1%	67.3%	64.3%
Black, non-Hispanic	10.4%	10.5%	13.8%
Other, non-Hispanic	7.3%	4.7%	6.4%
Hispanic	12.2%	16.6%	14.5%
Two races	2.0%	0.9%	1.0%

Note. Demographic information about the sample of U.S. adults that participated in the main survey. The results are split between the three experimental conditions. The means and percentages in this table are not weighted according to U.S. census population data. Standard deviations are in brackets below the group means. (See Appendix C for more information about the item scales.)

3.4 Outliers

A few data points, even a single observation, could greatly influence the outcome and accuracy of multiple regression analysis. Therefore, the data generated for this dissertation is examined for such statistical outliers to investigate if they have an overwhelming influence and leverage in manipulating the regression results. Cook's D is utilized to measure the relative change in the predicted values when individual observations are removed from the analysis. An observation has no influence when there is no or a marginal difference between the predictions with or without the observation (Cook, 1977).

Cook's D is frequently applied in social science research and most statistical packages are able to generate the values for each corresponding observation, however "consensus on the best cutoff is absent" (Bollen & Jackman, 1990, p. 266). According to Cook and Weisberg (1982), scores greater than 1.00 would generally be considered a large influence on the regression. Other scholars prefer a different interpretation of the Cook's D values and compare them to D_i, which is the score from a rule of thumb based on the sample size and the number of parameters in the regression model (see formula below). Values equal or higher than D_i are considered to extort a relatively large influence on the regression results (e.g., London & Robinson, 1989; DiNardo, 1993).

None of the Cook's D values generated for this dissertation dataset comes close to the value Cook and Weisberg (1982) recommend: the highest score is 0.09. There are 18 cases that should be considered suspicious when the other rule of thumb is applied. All of those cases were examined, yet there are no indications that there is a structural reason for why they would be outliers. The data were entered correctly and there did not seem to be unexpected values for any of the dependent and independent variables compared to other responses in the rest of the

sample. Moreover, with a moderate sample size and a relative small number of predictors, the second rule of thumb always leads to a much smaller critical value than 1. In fact, with a relative large sample, the critical value for D will always be very small, because the sample size largely outnumbers the number of predictors. Overall, this provides enough confidence that is was not necessary to exclude cases from the data analysis.

Equation 5:

$$D_i \geq \frac{4}{n-(k-1)}$$

3.5 Multicollinearity

The independent variables that are used to create the interaction variables (news source trust and news statement expectancy; political ideology and value-relevant involvement; and party identification and value-relevant involvement) are mean-centered before computing the product term to avoid multicollinearity problems, which exists when two or more of the predictors in a regression model are highly correlated. This could result in inflated variance and coefficient estimates. The variance inflation factor (VIF) is determined for each bivariate relationship to examine whether multicollinearity possibly distort the regression results. This is usually problematic when the VIF-score is far beyond "4.00" and it is highly undesirable when it reaches double-digits. The highest VIF-score for this dataset is 1.84.

3.6 Missing data

The amount of missing data is quite small. Thirty responses are missing for news statement believability (2.3%), seven responses are missing for news source trust (0.8%), seven

responses are missing for news message expectancy (0.8%), seven responses are missing for value-relevant involvement (0.8%), and fifteen responses are missing for news source slant (1.7%). There are no indications that there is a structural reason that can explain why participants neglected to answer one or more items. In fact, the overwhelming majority of them answered all questions (96.6%). Three people did not answer any of those question, while three others only answered one. They were removed from the statistical analysis. The other missing data were replaced with values gathered after five multiple imputation rounds with IBM's SPSS Statistics 19 program.

3.7 Statistical analysis

The news statement believability model is tested with ordinary least square (OLS) regression. The model is tested with the eight independent variables that have been introduced earlier. The model is also tested with those eight independent variables as well as seven demographic control variables: age; gender; White, non-Hispanic (dummy); Black, non-Hispanic (dummy); Hispanic (dummy); education level; and household income. There is no theoretical prediction about why there would be a linear relationship between news statement believability and any of those demographic variables, but this additional analysis is performed to make sure that there are no major changes in beta-coefficients and standard errors when the demographic variables are added. That analysis indicated that this was not the case, although it should be noted that there was a small statistically significant effect for age on predicting the level of news statement believability. Because there was barely an influence on the beta-coefficients of the eight independent variables it was decided to drop the control variables for further analysis (see: Appendix F).

The news statement believability model is tested for the CNN and Fox News conditions separately, because there is the possibility that some of the beta-coefficients are unequal as some independent variables could have a higher impact in predicting news statement believability for one news media organization in comparison to the other. Consequently, it would not be appropriate to pool the data together for an analysis of the entire dataset. A Chow (1960) test is conducted to determine whether there are unequal coefficients for one or more independent variables among the two experimental conditions. The test compares the residual sums of squares for the entire dataset with the residual sums of squares for the separate conditions (see: Lee, 2008). The test only determines whether there is a structural break between the conditions, but does not point out which variable or variables possess unequal coefficients. This can be done by creating a dummy variable (1 = Fox News and 0 = CNN) and creating interaction terms between the dummy variable and all independent variables in the model. Those interaction terms are added to the OLS regression, as well as the dummy variable, to examine whether they are a statistically significant predictor of the dependent variable. If so, this means that the independent variable that was multiplied with the dummy variable has unequal coefficients in the separate conditions.

Equation 6:

$$F = \frac{(RSS - RSScnn - RSSfox) - (k+1)}{(RSScnn + RSSfox) \,/\, ((Ncnn + Nfox) - 2k)}$$

The hypotheses related to the OLS regression results are examined with the strength and direction of the coefficients. For instance, for hypotheses 5a, 5b, and 5c, the regression equation

will hold all variables constant except news source trust, news statement expectancy, and the interaction between them. All their possible values are entered in the equation, leading to figures in which a predicted value for news statement believability (y-axis) corresponds with values of news statement expectancy (x-axis) and news source trust (presented with seven lines corresponding to the centered 7-point scale). The directions of those lines in the figure are compared to the hypothesized direction to evaluate the amount of support. The other hypotheses are explored with the same procedures.

3.8 Pre-test

Because of the resource limitations, it is only possible to test the news statement believability model for one headline with a representative sample among the U.S. adult population. A pre-test lab experiment was conducted to determine which stimulus is most suitable to be tested during the main survey experiment. For the purpose of this dissertation, a stimulus is a news headline that is attributed to a news network, or is provided to participants without any source attribution in a control condition. Participants of the pre-test are exposed to five headlines:

Headline 1: Barack Obama's Birth Certificate is Authentic; Born in Hawaii

Headline 2: Polar Bear Population Keeps Growing at North Pole

Headline 3: Sea Ice at South Pole Increased in Past Decade

Headline 4: One Million Lost Health Insurance during Obama's First Year in Office

Headline 5: Half Million Fewer Illegal Immigrants during Obama's First Two Years in Office

The five headlines represent five topics that had much news coverage in the previous years. The first headline is focusing on the challenge against Barack Obama about his birth place, as has been discussed in the prologue. He, allegedly, was not born on U.S. soil and, consequently, he would be ineligible to serve as President of the United States. Obama has released a copy of his birth certificate in 2012, but that has not stopped all allegations. Yet, no one has been successful in court to dispute the legality of Obama's occupation of the White House. Hence, it is quite possible that a news headline claiming the authenticity of his birth certificate is factually true.

The second headline is based on information from IUCN/SSC Polar Bear Specialist Group (2013) and other sources. There is much ambiguity about the polar bear population on the planet, especially in some countries, such as Norway and Russia. There is also limited information available about the population in the United States and Canada as well, because it is not easy to track polar bears in their immense natural habitat. One thing is clear: conservation efforts have led to a large population increase in the past decades, despite legal hunting quota. Therefore, a headline depicting such an increase is factually correct on the long term. However, there have been indications that some of the polar bear subpopulations are currently in decline, although others are stable. Moreover, there is an increase in the population of the M'Clintock Channel. Also, for other areas, the statistics show an increase, but because of large confidence intervals there is still no solid statistical evidence. Previous efforts have also pointed to an increase of other subpopulations beyond the one at the M'Clintock Channel (see: VanderKlippe, 2004; Langan, 2007). A news headline cannot always tell the whole story and a headline depicting an increase or decrease always needs qualification in the details of the news story, so a

headline either way can be justified. For the purpose of this dissertation it was chosen to include a headline that argues for an increase in the polar bear population.

The third headline is based on information from the National Snow and Ice Data Center (2013) that distributes scientific data, creates tools for data access, and performs scientific research about the cryosphere. The scientific data management activities are funded by the National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), and National Oceanic and Atmospheric Administration (NOAA), as well as other federal agencies. NSIDC indicates that there is a small increase of Antarctican sea ice of about 0.9 percent per decade as measured between 1979 and 2008. As the NSIDC is a non-partisan research organization that synthesizes the literature on anything related to snow and ice environments in the Arctic and Antarctic regions, it is considered an authority on such data. Hence, it is quite possible that the news headline is factually true.

The fourth headline is based on information from the study "Income, poverty, and health insurance coverage in the United States: 2010," which was released by the US Census Bureau (DeNavas-Walt, Proctor & Smith, 2011). Based on data from the Census Bureau and other federal agencies it was concluded that about 49.0 million U.S. citizens did not have health insurance in 2009. One year later, that were 49.9 million people, which means that after the first year of Barack Obama's presidency there were about a million million more citizens without health insurance compared to the situation when he was inaugurated. The US Census Bureau is an authority on population data because of its data-gathering practices and has access to a large amount of other datasets to synthesize all information to reach close estimations of health insurance coverage among the population. Hence, it is quite possible that the news headline is factually true.

The fifth headline is based on information from the study "Unauthorized Immigrant Population: National and State Trends, 2010," which was released by the Pew Hispanic Center, a project of the Pew Research Center, in February 2011. It was estimated that there were 11.6 million illegal immigrant in 2008, whereas there were about 11.1 million illegal immigrants in 2009 and 11.2 million in 2010. According to Pew, that was "significant reversal in a two-decade pattern of growth" until 2007(p. 1). Because there is no database with all illegal immigrants, the study provides an "educated guess" after analyzing large governmental datasets from U.S. Bureau of Labor Statistics and the Census Bureau, as well as other agencies (see the publication for more information about the methodology and statistical analyses). Therefore, it is reasonable to conclude that the Pew Research Center is qualified to provide indications on the quantity of illegal immigrants in the United States. Hence, it is quite possible that the news headline is factually true.

The selection for the stimulus material for the main survey experiment was based on a variety of indicators: the combined amount of variance explained by the independent variables for the news statement believability model; the beta-coefficients for news source trust, news statement expectancy, the interaction between those two variables, as well as the beta-coefficients for the other independent variables; the multiple regression equations and the influence of news source trust, news statement expectancy, and the interaction between news source trust and news statement expectancy; and the bivariate correlations between the independent variables with the dependent variable.

A pre-test survey questionnaire was programmed with software of Qualtrics, an online survey service provider. It allowed the programming of all items, as well as the inclusion of the logos of CNN and Fox News. Individual surveys were created for all three manipulation

conditions and they had individual hyperlink addresses. Only registered participants were able to fill out the questionnaires.

Students of an introductory mass communication course at a Midwestern research university were offered the opportunity to participate in the pre-test experiment in exchange for extra course credit. The sample contained more women (n = 45) than men (n = 34). The average participant was 19.4 years with a range from 18 to 26 years. More than half the respondents were 18 or 19 years old. They registered through an online survey for classroom sessions held in April 2011. (They were also asked to answer the news source slant and news source trust question for both CNN and Fox News to avoid a priming effect during the actual experimental session about two weeks later.)

Participating students were asked to pick any of the unused computers in the classroom upon arrival for the experimental session. One of the three survey hyperlinks was already entered in the web browser. The students were not aware of this manipulation when they selected a random computer, so they could have picked any condition. The participants were dismissed as soon as they went through the entire questionnaire.

The model is only tested with the entire sample of the CNN and Fox News conditions combined. A separate analysis is undesirable, because that would mean that the model with multiple independent variables is tested with subsamples of thirty participants. The effect size for the OLS results are presented with adjusted R-squared values, because R-squared is inflated by sampling error, especially for relative small samples (Ellis, 2010). Missing data were replaced with values gathered after five multiple imputation rounds with IBM's SPSS Statistics 19 program. Some of the items of the pre-test questionnaire are slightly different from the main study. (See Appendix A for the definitions and the specific wording of all pre-test items).

Analyzing the results for all five headlines, the third headline explains the highest amount of variance in news statement believability, although the small sample size also leads to large confidence intervals, which makes it impossible to conclude that the explained variance for the third headlines is, indeed, larger than for the other headlines, in particular headlines 1, 2, and 4. (See Appendix B for additional pre-test data.)

The inspection of the beta-coefficients for the independent variables leads to a more ambiguous conclusion. Most headlines have one variable that seems to be dominant, whereas at least three were anticipated. The beta-coefficients are relative smaller for the other independent variables, although that is not the case for headline 3. Additionally, the beta-coefficients for the interaction between news source trust and news statement expectancy are relative low for all headlines, but headline 3 is, again, an exception. The inspection of the multiple regression equation leads to additional focus on the second and third headlines, as those are the headlines for which the interaction effects are in the expected direction.

There are statistically significant bivariate correlations between news statement believability and news source trust, news statement expectancy, and their multiplication for both headlines 2 and 3. The only exception is that the correlation between news source trust and news statement believability for the second headline is relatively high, which is appealing because prior research leads to the prediction that a larger representative sample would, indeed, demonstrate a larger correlation than that is shown for the data of the five headlines.

Overall, this leads to the conclusion that the environmental headlines are the better candidates to serve as the experimental stimulus for the main study. There may not be much difference in the results of the main survey experiment regarding of which headline is chosen, as they seem equally appealing based on the analysis above, but there is one area in which headline

2 shows an additional advantage that is not discussed yet. The R-squared values for all models increase when the outliers are removed, but the differences are not as large for the second headline. That is not the case for headline 3, because it initially has a moderate R-squared value, although a very weak adjusted R-squared value, and this suddenly increased drastically after removal of a few outliers. The model is less stable with the inclusion of those participants. This may be explained by the small sample size, but that does not take away the concerns that are not visible for the model analysis for the second headline. This discrepancy serves as a tie-breaker for the decision about the stimulus selection. Participants of the main survey experiment will be exposed to the second headline.

CHAPTER 4

RESULTS

4.1 Manipulation check (new source slant)

It was hypothesized that people who identify themselves as Democrat consider CNN more neutral than people who identify themselves as Republican (H1a). The data provide support for this proposition: self-identified Republicans consider that CNN is reporting from a liberal point of view (M = 2.9, 95% CI [2.8, 3.1], SD = 1.2), while self-identified Democrats consider CNN as virtually neutral in its coverage (M = 3.9 [3.8, 4.0], SD = 0.89). The difference between those group means, M_{diff} = 0.9 [0.7, 1.1], is statistically significant, $t(420) = 8.56$, $p < .001$, equal variances not assumed. Therefore, we reject the null hypothesis that there is no difference in news source slant between self-identified Democrats and Republicans. Further, Cohen's effect size value (d = 0.9) suggested a strong practical significance.

Additionally, it was hypothesized that people who identify themselves as Democrat consider Fox News less neutral than people who identify themselves as Republican (H1b). The data provide support for this proposition as well: both self-identified Democrats and Republicans maintain that Fox News reports from a conservative point of view, but the Democrats consider Fox News coverage slightly more conservative, M = 4.9 [4.7, 5.1], SD = 1.6, than the Republicans, M = 4.6 [4.4, 4.8], SD = 1.3. The difference between those group means, M_{diff} = 0.3 [0.5, 0.6], is statistically significant, $t(429) = 2.38$, $p < .05$, equal variances not assumed. Therefore, we reject the null hypothesis that there is no difference in news source slant between self-identified Democrats and Republicans. However, Cohen's effect size value (d = 0.2) suggested a weak to moderate practical significance.

This provides evidence in support for both hypothesis 1a and hypothesis 1b. This points out that the experimental manipulation of the news network conditions is successful, although there is only a small magnitude for the effect size of the different perceptions about the slant of Fox News.

4.2 News source trust

New source trust was conceived as one of the main predictors of the news statement believability model. As the previous analysis indicated, self-identified Democrats and Republicans have different perceptions about the news source slant of those networks. Therefore, it is expected that those groups have different perceptions about their trustworthiness as well. This would provide evidence that news source trust is a perception of the audience than rather the quality of the news sources.

CNN (M = 3.3 [3.2, 3.5], SD = 1.3) was considered more trustworthy than Fox News (M = 3.8 [3.6, 3.9], SD = 1.9). The difference between those groups means, M_{diff} = 0.4, [0.2, 0.6], is statistically significant, $t(883) = 4.01$, $p < .01$, although Cohen's effect size value (d = 0.3) suggests a low magnitude.

It is more important to examine how self-identified Democratic and Republican partisans assess both news networks' perceived source trust. It was hypothesized that people who identify themselves as Democrat trust CNN more than people who identify themselves as Republican (H2a). The data provide evidence for this contention: self-identified Democrats consider CNN more trustworthy than do Republicans. The Democrats have a relative low score on the trustworthiness-scale, which indicates an average closer to the "strongly agree" end on the scale (M = 2.9 [2.8, 3.1], SD = 1.0). The Republicans are considerable ambivalent about the

trustworthiness of CNN, as the group mean is near the center of the scale (M = 3.9 [3.7, 4.1], SD = 1.5). The difference between those group means, M_{diff} = 0.9 [0.7, 1.2], is statistically significant, $t(418) = 7.61$, $p < .001$. Therefore, we reject the null hypothesis that there is no difference in news source trust between self-identified Democrats and Republicans. Further, Cohen's effect size value (d = 0.7) suggested a strong practical significance.

It was expected that these scores would be the opposite for the Fox News condition. Therefore, it was hypothesized that people who identify themselves as Democrat trust Fox News less than people who identify themselves as Republican (H2b). This was indeed the case: self-identified Democrats (M = 4.4 [4.2, 4.7], SD = 1.8) trusted Fox News much less than do Republicans (M = 2.8 [2.6, 3.0], SD = 1.5). The difference between those group means, M_{diff} = 1.6 [1.29, 2.0], is statistically significant, $t(429) = 9.75$, $p < .001$. Therefore, we reject the null hypothesis that there is no difference in news source trust between self-identified Democrats and Republicans. Further, Cohen's effect size value (d = 0.9) suggested a strong practical significance.

This provides evidence in support of both hypothesis 2a and hypothesis 2b. This points out that there is a range of opinions on the trustworthiness of CNN and Fox News based on party identification. For both analyses a large effect size is observed.

4.3 News message expectation

As the news source slant manipulation indicates, people consider CNN to be reporting from the liberal point of view. As liberals are more likely than conservatives to believe that global warming is true, it would also be more likely that news sources that are perceived as leaning to a liberal point of view, such as CNN, to provide coverage that would provide further evidence in

Table 2

Group means for survey experiment items

	CNN		FOX NEWS		CONTROL	
	DEM (n = 244)	**REP** (n = 180)	**DEM** (n = 254)	**REP** (n = 176)	**DEM** (n = 245)	**REP** (n = 177)
News statement believability	**34.30** (32.77)	**44.52** (33.46)	**33.74** (32.23)	**48.60** (34.82)	**18.96** (23.30)	**34.61** (29.65)
News source trust	**2.93** (1.04)	**3.87** (1.48)	**4.42** (1.84)	**2.80** (1.47)		
News statement expectancy	**3.33** (1.53)	**3.58** (1.50)	**3.97** (1.57)	**3.75** (1.45)		
Value-relevant involvement	**4.16** (1.52)	**4.71** (1.48)	**3.86** (1.47)	**4.50** (1.47)	**3.83** (1.60)	**4.72** (1.64)

Note. Group means for news statement believability, news source trust, news statement expectancy, and value-relevant involvement split among the three experimental conditions, as well as between self-identified Democrats (DEM) and self-identified Republicans (REP). Standard deviations are in brackets below the group means.

support of the existence of global warming. But the headline that is presented to the survey participants is not. Therefore, is assumed that people who identify themselves as Democrat are more surprised that CNN maintains the news statement is true than people who identify themselves as Republican (H3a). Contrary, the Democrats probably would expect such a headline coming from a news source that is perceived as leaning to a conservative point of views, such as Fox News. Therefore, people who identify themselves as Democrat are less surprised that Fox News maintains the news statement is true than people who identify themselves as Republican (H3b).

As expected, self-identified Democrats were more surprised by CNN's headline (M = 3.3 [3.1, 3.5], SD = 1.5) than self-identified Republicans (M = 3.6 [3.4, 3.8], SD = 1.5). The

difference between those group means, M_{diff} = 0.3 [-0.1, 0.6], is not statistically significant, $t(419) = 1.78$. Therefore, we cannot reject the null hypothesis that there is no difference in news message expectancy between self-identified Democrats and Republicans in the CNN condition. Further, Cohen's effect size value (d = 0.2) suggested a low practical significance.

For the Fox News condition there was an opposite effect: self-identified Democrats were less surprised (M = 4.0 [3.8, 4.2], SD = 1.6) than self-identified Republicans (M = 3.8 [3.5, 4.0], SD = 1.5), although the difference between those group means, M_{diff} = 0.2 [-0.1, 0.5], is not statistically significant, $t(428) = 1.42$. Therefore, we cannot reject the null hypothesis that there is no difference in news message expectancy between self-identified Democrats and Republicans in the Fox News condition. Further, Cohen's effect size value (d = 0.1) suggested a low practical significance.

This provides evidence that is challenging both hypothesis 3a and hypothesis 3b, especially as the effect sizes are relatively low. This suggests that a micro-analysis of the effects of news media expectancy on news statement believability may be more appropriate than a macro-analysis for differences between partisan groups that are separated based on party identification.

4.4 News statement believability

New statement believability was measured in three manipulated experimental conditions. The participants in two of those conditions were told that the news source of the headline was a news network (either CNN or Fox News), while the remaining respondents were not provided the identity of the news source. The results indicate that, on average, there is not much difference between the perceived believability for the two networks. The mean for the CNN-condition (M =

38.4 [35.2, 41.5], *SD* = 33.3) is somewhat smaller than the mean for the Fox News-condition (*M* = 40.3 [37.1, 43.4], *SD* = 34.2). In other words, the discrepancy between the group means is less than two points on the 101-point believability scale that reached from 0 percent to 100 percent, M_{diff} = 1.9 [-2.5, 6.3]. An independent-samples *t*-test was conducted to compare news source slant for the CNN and Fox News conditions: with such a small discrepancy there is no statistical significant difference in the group means, *t*(889)= 0.85. Further, Cohen's effect size value (*d* = 0.1) suggested a very low practical significance, but that was anticipated as certain partisan groups would average out perception differences of news source believability.

Both the news network conditions differ largely from the control group. Participants were generally more skeptical about a possible population increase of polar bears on the North Pole without the identification of the headline's news source (*M* = 25.2 [22.7, 27.8], *SD* = 27.4).

An independent-samples *t*-test was conducted to compare news source slant for the CNN and control conditions, which indicates that there is a significant difference, *t*(867) = 6.35, *p* < .001, in the group means, M_{diff} = 13.1 [9.1, 17.2], equal variances not assumed. Therefore, we reject the null hypothesis that there is no difference in news statement believability between participants in the CNN condition and the control condition. Further, Cohen's effect size value (*d* = 0.4) suggested a moderate practical significance.

An independent-samples *t*-test was conducted to compare news statement believability for the FOX News and control conditions, which indicates that there was a statistical significant difference, *t*(891) = 7.28, *p* < .001, in the group means, M_{diff} = 15.0 [11.0, 19.1], equal variances not assumed. Therefore, we reject the null hypothesis that there is no difference in news

statement believability between participants in the Fox News condition and the control condition. Further, Cohen's effect size value ($d = 0.5$) suggested a moderate practical significance.

As expected, self-identified Democrats ($M = 29.1$ [26.9, 31.3], $SD = 30.6$), on average, have lower news statement believability than self-identified Republicans ($M = 42.6$ [39.8, 45.4], $SD = 33.2$) for the headline that was presented during the survey. The difference between those group means, $M_{\text{diff}} = 13.5$ [9.9, 17.1], is statistically significant, $t(1275) = 7.51$, $p < .001$. Therefore, we reject the null hypothesis that there is no difference in news statement believability between self-identified Democrats and Republicans. Further, Cohen's effect size value ($d = 0.4$) suggested a moderate practical significance.

This also becomes clear when self-identified Democrats and Republicans are compared in the control group, in which news source identification was not a confounding factor: self-identified Democrats ($M = 19.0$ [16.0, 21.9], S.D. = 23.3), on average, have lower news statement believability than self-identified Republicans ($M = 34.6$ [30.2, 39.4], $SD = 29.6$). The difference between those group means, $M_{\text{diff}} = 15.7$ [10.4, 21.2], is statistically significant, $t(420) = 6.07$, $p < .001$. Therefore, we reject the null hypothesis that there is no difference in news statement believability between self-identified Democrats and Republicans in the control condition. Further, Cohen's effect size value ($d = 0.6$) suggested a moderate practical significance.

Such differences are also noticeable for the two other conditions. Self-identified Democrats ($M = 34.3$ [30.2, 38.4], $SD = 32.8$), on average, have lower news statement believability than self-identified Republicans ($M = 44.5$ [39.6, 49.4], $SD = 33.5$) when CNN is attributed to be the source of the headline. The difference between those group means, $M_{\text{diff}} =$

10.2 [3.8, 16.6], is statistically significant $t(422) = 3.15$, $p < .01$. Therefore, we reject the null hypothesis that there is no difference in news statement believability between self-identified Democrats and Republicans in the CNN-condition. Further, Cohen's effect size value ($d = 0.3$) suggested a low to moderate practical significance.

When the headline is attributed to Fox News, self-identified Democrats ($M = 33.7$ [29.8, 37.7], $SD = 32.2$), on average, have lower news statement believability than self-identified Republicans ($M = 48.6$ [43.4, 53.8], $SD = 34.8$). The difference between those group means, $M_{diff} = 14.8$ [8.5, 21.3], is statistically significant, $t(430) = 4.56$, $p < .001$. Therefore, we reject the null hypothesis that there is no difference in news statement believability between self-identified Democrats and Republicans in the Fox News condition. Further, Cohen's effect size value ($d = 0.4$) suggested a low to moderate practical significance.

This provides evidence in support for hypothesis 4, because it was expected that individuals who identify themselves as Democrat have lower news statement believability than people who identify themselves as Republican. However, the magnitude of the effect sizes for this main survey is low to moderate differences in for news statement believability.

4.5 News statement believability model

The ordinary least square (OLS) regression analysis was performed separately for the news network manipulation conditions to see if there were any major differences among the CNN and Fox News groups. The independent variables explain about 20 percent of the variance in news statement believability for participants in the CNN condition. There are statistically significant contributions to explain news statement believability from news message expectancy and the interaction between news source trust and news message expectancy.

Table 3

OLS regression results (CNN)

CNN	B	SE	ß	*p*
(Constant)	40.82	1.54		< **.001**
News source trust	-2.28	1.22	-.09	.062
News statement expectancy	7.77	1.00	.35	< **.001**
News source trust * News statement expectancy	-2.33	0.67	-.16	< **.001**
Political ideology	0.80	1.16	.04	.492
Party identification	-6.80	3.56	-.10	.056
Value-relevant involvement	1.94	1.18	.09	.101
Value-relevant involvement * Political ideology	0.98	0.68	.09	.151
Value-relevant involvement * Party identification	3.69	2.33	.08	.113
N	420			
R^2	.21	[.14, .28]		
R^2_{adj}	.20			
F	14.20	($p <$ .001)		

Note. OLS regression results of statement believability model with data from the CNN condition. Statistically significant results are bold.

The independent variables explain about 32 percent of the variance in news statement believability for participants in the Fox News condition. There are statistically significant contributions to explain news statement believability from news source trust, news message expectancy, the interaction between news source trust and news message expectancy, political ideology, and the interaction between value-relevant involvement and ideology.

Table 4

OLS Regression Results (Fox News)

Fox News	B	SE	ß	*p*
(Constant)	40.19	1.41		< **.001**
News source trust	-6.77	0.88	-.37	< **.001**
News statement expectancy	7.92	0.96	.35	< **.001**
News source trust * News statement expectancy	-2.30	0.45	-.24	< **.001**
Political ideology	3.01	1.08	.14	**.005**
Party identification	1.62	3.39	.02	.633
Value-relevant involvement	-0.06	1.07	.00	.957
Value-relevant involvement * Political ideology	1.46	0.60	.12	**.015**
Value-relevant involvement * Party identification	-0.77	2.14	-.02	.718
N	431			
R^2	.33	[.26, .40]		
R^2_{adj}	.32			
F	26.34	(*p* < .001)		

Note. OLS regression results of statement believability model with data from the Fox News condition. Statistically significant results in bold.

The Chow test indicates that there is a difference between the coefficients in the linear regressions for the CNN and Fox News conditions, $F(9, 835) = 3.09$, $p < .01$, because the coefficients for news source trust are unequal (see: Table 5). The overall effect size differs between the conditions as well. The 95 percent confidence level for the CNN condition [.14, .28] barely overlaps the one for the Fox News condition [.26, .40], which means that there is a statistically significant difference for the amount of variance that is explained between the two conditions.

Table 5

Chow test results

Chow test	B	SE	ß	*p*
(Constant)	51.29	5.60		< .001
News source trust	-2.28	1.12	-.11	.054
News statement expectancy	7.77	0.97	.35	< .001
News source trust * News statement expectancy	-2.33	0.65	-.21	< .001
Political ideology	-0.80	1.13	.04	.478
Party identification	-6.80	3.45	-.10	.049
Value-relevant involvement	1.94	1.15	.09	.091
Value-relevant involvement * Political ideology	0.98	0.66	.08	.138
Value-relevant involvement * Party identification	3.69	2.26	.08	.102
News source trust (GROUP)	-4.49	1.49	-.18	**.003**
News statement expectancy (GROUP)	0.15	1.39	.01	.916
News source trust * News statement expectancy (GROUP)	0.03	0.80	.00	.968
Political ideology (GROUP)	2.21	1.58	.07	.162
Party identification (GROUP)	8.42	4.91	.09	.087
Value-relevant involvement (GROUP)	-2.00	1.59	-.06	.209
Value-relevant involvement * Political ideology (GROUP)	0.49	0.90	.03	.591
Value-relevant involvement * Party identification (GROUP)	-4.47	3.15	-.07	.157
Group	-0.63	2.09	-.01	.763

N	851	
R^2	.28	
R^2_{adj}	.26	
F (8, 422)	18.75	($p <$ .001)

Note. Chow test results for main survey experiment. It includes all eight independent variables of the news statement believability model, a dummy variable indicating whether a participant was exposed to the Fox News condition (Group), and interaction variables between those eight independent variables and the dummy variable (indicated as GROUP in brackets). Statistically significant results for the newly created interaction variables in bold.

4.6 News source trust and news statement expectancy interaction

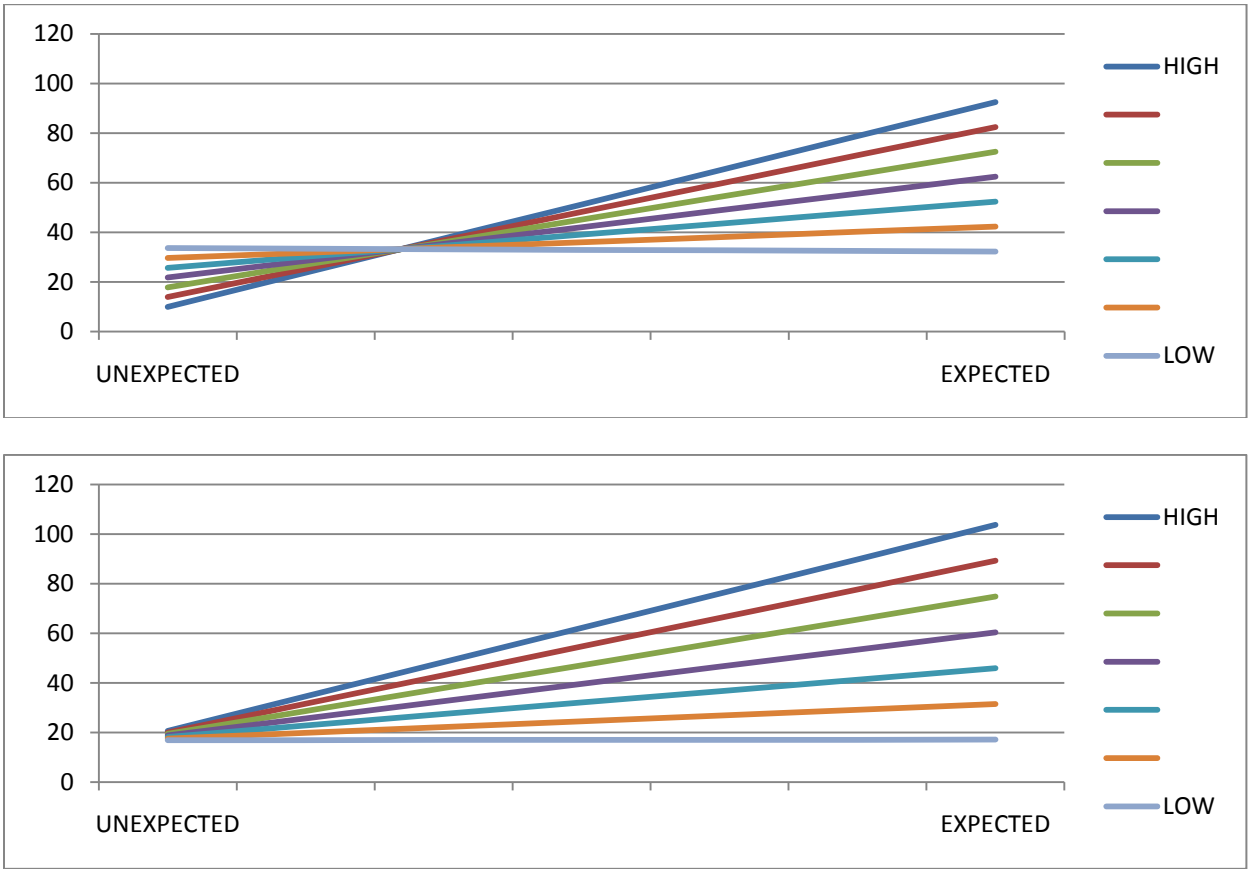
As expected, there is a statistically significant interaction effect between news source trust and news statement expectancy. However, the direction of the interaction effect in both conditions is different from what was anticipated. It was hypothesized that the more unexpected statement positions would lead to higher news statement believability for sources that to some extent were distrusted. Contrary, the more expected statement positions would lead to higher news statement believability for trusted sources. The data provide clear evidence in support for hypothesis 5a, but not for hypothesis 5b and hypothesis 5c.

For Fox News, the news statement expectancy does not matter for the level of news statement believability for highly distrusted sources. Additionally, for less distrusted sources—but still distrusted overall—have news higher believability levels when the news statement is considered to be expected. Hence, that leads to evidence that is not in support of hypothesis 5b. That also means there is no support for hypothesis 5c, because the level of news message expectancy has an influence on the news statement believability for participants that consider the news sources neither trusted nor distrusted. There is evidence for hypothesis 5a, because trusted sources lead to higher news statement believability when the news statement is more expected. The same conclusions can be drawn from the data of the CNN condition; yet distrusted sources could be somewhat more believable than more trusted source in case of a highly unexpected headline.

The main effects of news source trust and news source expectancy are in the predicted direction. Both higher news source trust and higher expectancy leads to higher news statement believability. The latter is the case because the overall news statement believability is low. This provides evidence in support of H6 and H7.

Figure 2

News source trust and news statement expectancy interaction



Note. Depiction of the relation between news source trust and news statement expectancy based on the multiple regression coefficients. News message expectancy is measured on a 7-point scale. Both ends of the scale are labeled to indicate which part of the scale is for unexpected and expected statements. The colored lines represent the different levels of news source trust on its 7-point scale. Also here the ends of scale are labeled to indicate which part of the scale is for trusted sources and distrusted sources. The top figure shows the results for CNN and the bottom figure is Fox News. For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation.

4.7 Value-relevant involvement

Self-identified Democrats had higher value-relevant involvement (M = 4.0, SD = 1.5) with information about climate change than self-identified Republicans (M = 4.7, SD = 0.5). This was the case in all three conditions. The difference between those group, M_{diff} = 0.7, [0.5, 0.9], is statistically significant, $t(1275) = 8.09$, $p < .001$. The group means indicate that the Democrats, on average, are virtually neutral on value-relevant involvement and the Republicans, on average, are below that. Cohen's effect size value (d = 0.5) indicates a moderate practical significance.

Value-relevant involvement has a prominent place in the news statement believability model as there is a prediction for a main effect, as well as two interaction effects with political ideology and party identification. Yet, there was not an expectation that those variables would play such a large role in explaining news statement believability in comparison to news source trust and news statement expectancy. The data demonstrate this was a correct prediction. The beta-coefficients are relative weak and only in the case of the interaction between value-relevant involvement and political ideology there is some statistical support of the existence of such interaction effect, but only in the case of Fox News.

The direction of that interaction effect was not fully expected following the predictions related to the information learning and information bias scenarios, although there is more support for the former than the latter. In the Fox News condition, there was not much difference in the level of news statement believability for people with a very high level of value-relevant involvement. This was predicted with the information learning scenario. Furthermore, conservatives with lower value-relevant involvement had higher levels of believability, which also is as predicted in the information learning scenario. It was only not anticipated that liberals with a very low level of value-relevant involvement would have lower news statement

believability that their peers with higher levels. That leads to some evidence in support of hypothesis 8a and against hypothesis 8b for the data in the Fox News condition. There was no empirical support for both hypotheses in the CNN condition.

The results for the potential interaction between value-relevant involvement and party identification were ambiguous as well. The anticipated interaction was not statistically significant. Therefore, there is no consistent evidence in support of either hypothesis 9a or hypothesis 9b. There was also no main effect for value-relevant involvement. In the CNN condition, there is a positive relationship between the variables, but not statistically significant. There is virtually no relationship between the two in the Fox News condition. Therefore, there is no evidence in support for hypothesis 10a and hypothesis 10b.

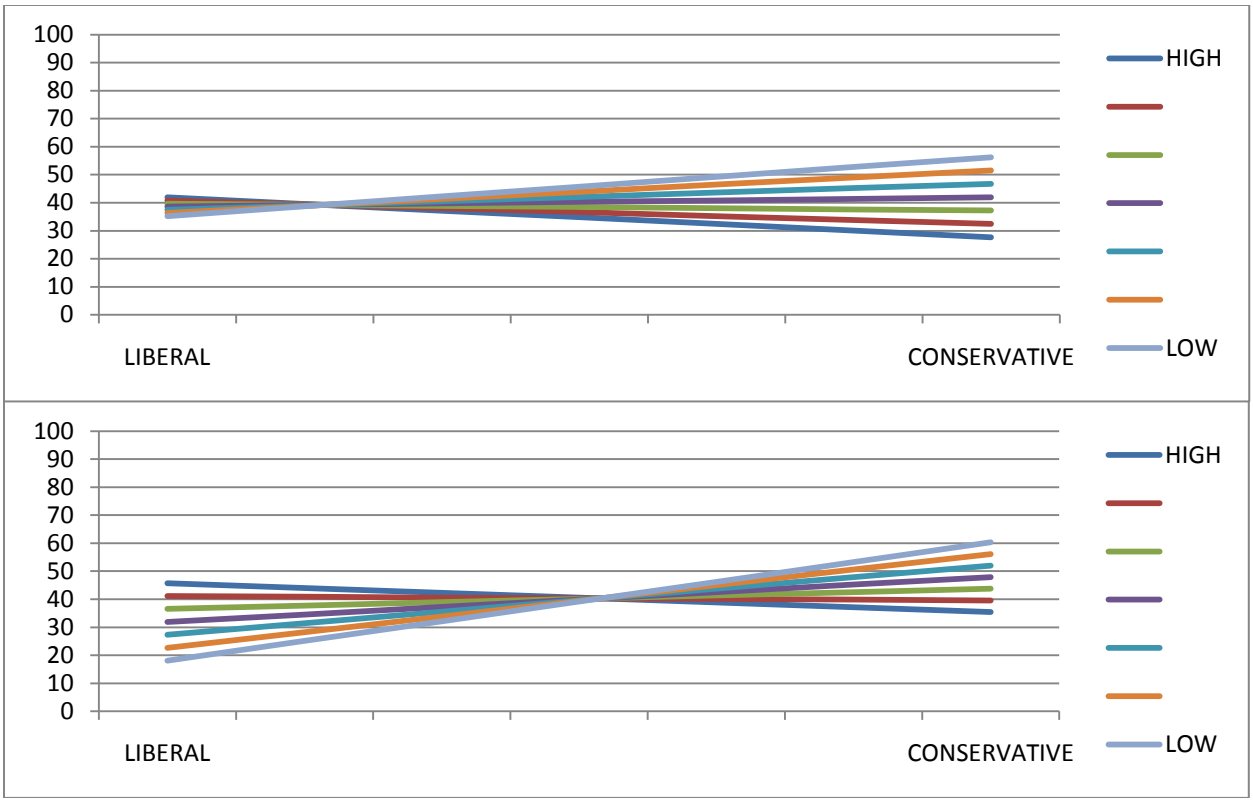
4.8 Summary

Overall, there is much support for the main assumptions of the news statement believability model. Yet, even though there was an interaction for both news network conditions, the direction of the interaction was in an unanticipated direction. Therefore, there was only evidence for hypothesis 5a. In addition, there were main effects for news source trust (only for Fox News) and news statement believability.

There was some evidence that value-relevant involvement led to information learning as a better explanation for variation in news statement believability, but only in an interaction with political ideology in the Fox News condition. In that condition, political ideology was a statistically significant predictor as well.

Figure 3

Value-relevant involvement and political ideology interaction



Note. Depiction of the relation between value-relevant involvement and political ideology based on the multiple regression coefficients. Political ideology is measured on a 7-point scale. Both ends of the scale are labeled to indicate which part of the scale is for liberalism and conservatisms. The colored lines represent the different levels of value-relevant involvement on its 7-point scale. Also here the ends of scale are labeled to indicate which part of the scale is for high and low value-relevant involvement. The top figure shows the results for the model analysis with for the CNN condition and the second figure is the Fox News condition. For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation.

Table 6

Summary of news statement believability model hypotheses

	SUPPORT	CNN	Fox News
H5a	YES		
H5b	NO		
H5c	NO		
H6	MIX		
H7	YES		
H8a	MIX		
H8b	NO		
H9a	NO		
H9b	NO		
H10a	NO		
H10b	NO		

Note. Summary of the hypotheses related to the news statement believability model that was tested with the data from the main survey. A logo means that the hypothesis is supported for that specific analysis.

CHAPTER 5

CONCLUSIONS

5.1 General observations

Knowledge matters for humans to understand changes in their environment. Every new piece of information that is processed cognitively and emotionally is compared to what they thought the world looked like a nanosecond before. And, while these are instant judgments, the processes underlying such evaluations are quite complex: it is an immediate response to a message, its source, and a range of hypotheses that could explain the source's actions, as well as whether the behavior violated any previous assumptions about the source. This happens by taking into account prior knowledge and attitudes that have evolved over time after socialization and affiliation with groups of people that share similar values and beliefs, while interacting with people that do not.

Knowledge, thus, matters for humans to guide their political and electoral decisions. They retrieve information from memory about what they know and how they feel about important issues and the actors in the executive, legislative, and judicial branches. As a result, they, individually, reach conclusions about policy options that eventually lead to collective actions with large implications for everyone in the population.

That would be a great recipe for any democratic society, if only all citizens could agree on the facts underlying political debates when they are arguing for their preferred solutions. Yet, that is also quite utopian and is, certainly, not applicable on most occasions when talking politics in the United States, where partisan groups usually play a zero-sum game. Instead, cognitive bias has an important role in what people perceive as truthful knowledge assessments and prior research has indicated that political attitudes are unstable as well for a large group of citizens.

Therefore, it is unlikely that information updating automatically leads to actual knowledge gains, even after exposure to truthful news accounts.

This dissertation is, in essence, an investigation about the evaluation of new information and how this translates in adopting the information as being the truth. Two-thirds of the participants were presented a headline attributed to a well-known news network and each of them was asked to what extent they believed the headline to be true. The roles of the specific independent variables are discussed below, but, in general, the data provide encouraging signs that the news statement believability model can be considered a valid contribution to the news media perception literature. The main survey experiment, overall, provided considerable amounts of evidence that the main assumptions underlying the model are correct.

The pre-test provided a broad examination of the model as it was analyzed with data for five different headlines. This led to support of certain elements of the model, but in many cases the data was still ambiguous because of the relative small sample size and the respondents were all college students from an introductory mass media course. Those findings, therefore, cannot be generalized to the larger population of college students or the entire U.S. population. The small sample size also resulted in large confidence intervals for group means and effect sizes, and it was not possible to investigate the individual news network conditions. The main survey experiment resulted in much more stable and representative data. There was a large group of respondents and they were randomly-selected from a large pool of public poll respondents, which is representative for the larger U.S. adult population. This relative large sample allowed for an analysis with much smaller confidence intervals and this resulted in much support for the hypotheses and the fit of the news statement believability model.

There was one downside in comparison to the pre-test: because of resource limitations it was only possible to test the model for one headline. Whereas the pre-test hinted that the results differed to some extent among headlines focusing on a variety of political issues, the design of the main study could not verify whether those earlier differences could be explained by sampling error or the lack of a representative sample for the pre-test. Recommendations for such follow-up research will be discussed below.

5.2 News source trust and news statement expectancy

It was expected that a variety of independent variables predicted changes in news statement believability, in particular news source trust, news message expectancy, and the interaction between them. The latter was something that was not really discussed in prior research and several limitations of those studies were pointed out in the theoretical framework chapter. For instance, statement expectancy has never been tested with existing sources, which means that study participants never were able to retrieve prior knowledge and attitudes about the sources to create a real expectancy judgment about the message content. Moreover, those studies also neglected to discuss more in detail the interaction between news source trust and news message expectancy.

The most important theoretical assessment of the model is the interaction between news source trust and news message expectancy. It was expected that when news statement expectancy increases, the news statement believability increases with an increase in news source trust for trusted sources; when news statement expectancy increases, the news statement believability decreases with a decrease in news source for distrusted sources; and regardless of

the news statement expectancy level, the news statement believability remains the same for people who are neutral on news source trustworthiness.

The main survey experiment provided primarily evidence for the first contentions of the news source trust and news statement expectancy interaction. When all other independent variables are held constant, the OLS regression equation indicates that news statement believability increases when the news statement expectancy increases for trusted sources, but there is no decrease for distrusted sources. There was not much support for the other two contentions. Higher expectancy led to higher news statement believability in almost all cases. Future research should determine whether this is a structural phenomenon or whether there were some unique results for this particular headline about a polar bear population increase. Importantly, the news statement believability for the headline was generally low (and even more so in the control group). Earlier it was explained that such situation most likely would result in a positive correlation between news statement expectancy and news statement believability. It may be the case that this worked as a ceiling effect for the interaction effect as well. It would be interesting to see whether the opposite headline (polar bear population decrease) would lead to the opposite results. This would provide some important clues on what kind of other methods could be necessary to investigate the news source trust and news statement expectancy more in-depth.

Prior research that investigated Kelley's (1973) framework obtained evidence that messages became more believable when they were more unexpected. Consequently, that would also mean that high trusted sources with very expected messages (that the receiver highly agrees with) would possibly be less believable than low trusted sources with much unexpected messages (that the receiver highly agrees with as well). That seemed unlikely with evidence

obtained in experiments focusing on in-group and out-group stereotyping, Therefore, for the survey experiment that was conducted for the purpose of this dissertation, it was anticipated that there would be a statistically significant main effect for news source trust in predicting scores of news statement believability and that news sources that are perceived as more trustworthy are more believable than news source that are perceived as less trustworthy. This was the case in the Fox News condition, but not in the CNN condition. It would, indeed, be possible, in some extreme cases, that distrusted sources are more believable than more trusted sources when new statement expectancy is taken into account. Hence, further research is necessary to get a better understanding of the situations when distrusted news source become more trustworthy than more trusted news sources and the role of news statement expectancy in that process.

This first examination of the news statement believability model, thus, also indicates that it is important to examine a range of news media outlets, because the regression results may differ among those conditions. Certain variables play relative larger roles for the evaluation of a news statement from one news source, but may be of lesser importance when evaluating content from another news source. There are considerable differences between the CNN and Fox News conditions on the roles of the main effect for news source trust and the interaction between news source trust and news statement expectancy. Both variables play a more dominant role in the Fox News condition for explaining changes in news statement believability, while there is virtually no difference in the beta-coefficients for news statement expectancy between the conditions. The participants in both conditions believed the statement more when they had a higher trust in the news source, but that was a much more important role in assessing the headline attributed to Fox News, as demonstrated with a Chow test. Such source differences may also on the topic and the general level of knowledge about the news statement topic, as the pre-test provided different

results for varying topics, even though the small sample size does not allow for additional probing for this. It may be that other news sources lead to different ratios in beta-weights among the independent variables. Additional research is necessary to provide a better insight.

Overall, there is much support for the attribution analysis of persuasion framework that has been adopted for the dissertation. Kelley (1973), based on the data of this dissertation, correctly, hypothesized that people take into account the extent to which a news statement was expected when they evaluate the believability of that message. The main survey experiment demonstrates that news statements from news sources that are perceived as trustworthy are not automatically considered highly believable and the level of news statement expectancy plays an important role in that process. Overall, this emphasizes that an evaluation of news coverage not necessarily depends on just an analysis of the content or just its source. They are not independent from each other, especially when an individual is exposed to a message from a source that he or she has personal experience with or knowledge about through other channels. The audience of CNN is not going to belief everything presented on CNN—even when they consider it a very trustworthy source, whereas the audience of Fox News is not going to do that automatically with everything that is broadcasted on that network. Those audiences generate expectancies about the content and compare those expectancies with what it actually presented on air. Those individuals may not be aware that they are generating those expectancies, but information is recognized as such when those expectancies are violated.

Expectancy violation is not directly discussed in much of the journalism, mass communication, and political science literatures that have focused on knowledge acquisition and attitude change in relation to exposure to opinionated and non-opinionated news content. In hostile media effect and third-person effect studies there often are discussions about the role of

how people expect others to respond to news media coverage, but that is not news statement expectancy is such that specific content, attributed to a news source, is evaluated. There is still a lack of research on expectancy violations in relation to news content to understand how those breaches lead to increased or decreased levels of factual information.

Expectancy violations have been primarily examined in non-news media contexts, but Kelley's framework has rarely been cited and tested in relation to news media bias studies, even though the publications that described those expectancy effects provided solid evidence that such attributional analysis can be helpful in determining how people update their knowledge about important political topics. This dissertation provides additional evidence that further exploration is fruitful for getting a better understanding of why people belief certain factual news content whereas others do not. The model may be extended to investigate why certain individuals do not belief and, therefore, challenge conflicting news reports about widely held conspiracy theories, such as claims that the U.S. government staged the moon landing, was responsible for destroying the World Trade Center on 9/11, and shot a Pakistani girl through the head in the hope that people would lose sympathy for members of the Taliban, who have been accused of being the actual perpetrators.

5.3 Political ideology and party identification

Political ideology and partisan identification were added to the model with the expectations that people who identify themselves as Democrat (liberal) would have different opinions on political topics than people who identify themselves as Republican (conservative). Yet, their contributions in predicting variation in news statement believability were much smaller than expected.

Political ideology was a statistically significant contributor in the main survey experiment, but only when participants were exposed to the headline attributed to Fox News. Party identification, surprisingly, played only a marginal role in this condition. It was a much better predictor of news statement believability in the CNN conditions, but not yet statistically significant. Notably, the beta-coefficients changed signs for party identification between the news network conditions, meaning that Democrats considered the statement attributed the CNN more believable, whereas Republicans considered the statement attributed to Fox News more believable. However, for political ideology the sign indicated higher news statement believability for more conservative participants for both conditions, although to a higher degree when the news statement was attributed to Fox News.

Overall, the low strength of the relationships between news statement believability and both party identification and political ideology was unexpected, because in the political science literature there is much evidence of differences between Democrats and Republicans (liberals and conservatives) on knowledge and attitudes of important political issues, including climate change and global warming, as had been discussed in the literature review. There were clear differences, although with varying levels of effect sizes, between the groups when news source slant, news source trust, news statement expectancy, and news statement believability were examined outside the context of multiple regression analysis. This leads to the conclusion that the predictive value of party identification and, to a smaller extent, political ideology disappears to a large extent when variables, such as news source trust and news statement expectancy, are added to the model. This is an important observation, because in the aforementioned literature that compares attitudes and knowledge of Democrats and Republicans, as well as in public opinion polls, there often is no statistical control for other variables. Therefore, it may be that the

differences between the partisan groups may have disappeared in those situations as well when other variables had been added to the analysis.

There may be several plausible reasons for why the relationships with news statement believability are very weak. Even though a person is very conservative, this does not automatically mean that Fox News is considered highly trustworthy. And, even though a person is very liberal, this does not automatically mean that CNN is considered highly trustworthy. Similarly, even though a person a Republican, this does not automatically mean that Fox News is considered highly trustworthy. And even, even though a person is a Democrats, this does not automatically mean that CNN is considered highly trustworthy.

It may be that some people recognize a structural reporting bias for those news networks and wish to find news sources that are perceived as more neutral, balanced, and fair. Therefore, there may be congruency between political ideology/party identification and the perceived slant of a network, but that may not always translate into to higher news source trust. It could be that an individual has no trust in any news source and his or her party identification and political ideology, therefore, may not lead to any predictions regarding discrepant news source trust, news statement expectancy, and news statement believability.

There are only small to moderate bivariate relations between news source trust and political ideology and between news source trust and party identification. It was anticipated that people that identify with either the Democratic Party or the Republic Party would not be monolithic in their knowledge and attitudes toward news source trust and news statement believability, but the variability demonstrated in the survey experiment is larger than expected. This emphasizes the need for additional knowledge and attitudinal variables about the political

topics that need to be included during follow-up studies, which will be further discussed in the limitations and future research sections.

5.4 Value-relevant involvement

The discussion about the role of value-relevant involvement in the news statement believability model was centered on a discussion about whether people update their understanding of a political issue accordingly to new information they receive or do not update their understanding because they do not want to change their prior knowledge and attitudes. The literature review offered two models from the political science literature that offer contradicting predictions. The mechanism sections provided additional background information about the possibility that the models could be explained by either a motivation to be accurate or a motivation to defend knowledge and attitude changes.

The results of the main survey experiment provided some support for the information learning scenario when the interaction between political ideology and value-relevant involvement is examined, although primarily for Fox News. Generally, lower value-relevant involved conservatives had higher news statement believability for a statement that was considered relatively unbelievable by most other respondents. This led to support for the information learning scenario, because the change in news statement believability is primarily noticeable for people with lower value-relevant involvement.

The results for the interaction between value-relevant involvement and party identification where more ambiguous, because both low and high value-relevant involved Republicans differed much from the self-identified Democrats, who did not show much difference in news statement believability regardless of value-relevant involvement. It is

puzzling why Republicans with a very high value-relevant involvement would have lower news statement believability than any other partisan group based on party identification, especially because it was expected that it is more likely to have higher news statement believability for when cognitive bias would play a role in that evaluation. Future research should determine whether this result is an anomaly, especially because the results of the interaction between value-relevant involvement and political ideology went into the expected direction. In this survey experiment, there is not a large positive correlation between liberalism and affiliation with the Democratic Party, which is almost taken for granted in the political science literature. This means that the results for this dissertation may be a distortion, because there is no compelling reason for why people with a self-identified liberal ideology would differ, in general, much on environmental issues, such as global warming and climate change, than people that self-identify with the Democratic Party, especially because there is considerable overlap.

This may indicate that participants may not necessarily have considered an increase in the polar bear population as an issue related to global warming. Even though there was quite a group of people that indicated that global warming was a subject they were value-relevant involved with, that did not translate into large beta-coefficients for predicting news statement believability. It may be that the stimulus was not perceived as a climate change issue, or others may not have made a link between the polar bear population change in relation to their attitudes to global warming. It also could be that people, generally, do not know much about polar bears, even though they have been featured in the news media quite often when it comes to potential declining habitats in the Arctic region. Yet, that does not mean that people consume that news coverage or are attentive to all details they are exposed to, especially when articles about

population increase are relatively uncommon while there is a larger amount of stories stating or hinting at the opposite.

5.5 Effect sizes

There is a statistically significant difference for the amount of variance that is explained with the two conditions, because there is barely an overlap between the confidence intervals of the two conditions. This means that the difference is statistically significant, because the overlap is smaller than a quarter of the confidence intervals (see: Cummings, 2012). Therefore, this provides empirical evidence that the Fox News condition explains more variance than the CNN condition. Both effect sizes are moderate in magnitude, which is in line with the results of related mass communication phenomena, such as hostile media effects and third-person effects, as discussed in the effect sizes sections. Meta-analyses and additional studies focusing on the effects of source credibility on persuasion found smaller magnitudes than obtained in this dissertation.

The effect sizes were calculated for a few studies that were of interest for the design of this current study. News source manipulation led to an overwhelming magnitude in the case of Hart and colleagues (1999), but that was due to an extreme comparison between a well-respected newspaper (*Wall Street Journal*) and one of the best-known tabloids of the time (*National Enquirer*). The CNN and Fox News comparison did not lead to such a large effect size. Walster, Aronson, and Abrahams (1966), Dutton (1973), and Petty, Fleming, Priester, and Feinstein (2001) found larger effects too, yet those studies presented fictitious scenarios with fictitious sources for which people were not familiar with. Therefore, they had to base their knowledge about the sources on the information provided by the researcher, which may have led to an

overreliance on those polarizing cues that resulted in inflated coefficients for the explained amount of variance. Additionally, the small sample sizes, perhaps, also contributed to such inflation. As discussed above, it was anticipated that the effect sizes for this dissertation survey experiment would be relatively lower than studies with fictitious sources, because participants were able to use their own judgments about credibility.

Overall, the effect sizes for this dissertation survey experiment were in a magnitude that was expected, based on the limited number of comparison studies. There is a need for comparable manuscripts that provide effect size information on studies focusing on expectancy violation. This study is one of the first studies that can be used for a comparison with future studies in this area.

5.6 Limitations

One important limitation is that the variables in the studies were recorded with only one item. Ideally, multiple items are used to create scales to allow for reliability testing and there are several advantages for validity examinations as well. Unfortunately, a lack of resources did not allow for such extended questionnaire. Follow-up studies should try to incorporate existing or novel scales for news statement believability, news source trust, and value-relevant involvement.

News statement expectancy has only been tested with a single item so far in the literature, usually by asking whether respondents were surprised or unsurprised by the statement, or if they had expected or unexpected such statement. An exploratory study should investigate whether there are similar items that can form an item-scale. Such study also could delve into different kind of expectations. In this study, most participants were asked about the extent to which they were surprised or unsurprised that CNN or Fox News claims that the headline is factually true.

Yet, there is no certainty to whether they are surprised or unsurprised that the headline is considered true or that they are surprised or unsurprised that *the news source* claims that the headline is true. It may be possible that these are two distinct expectancy observations or that just a simple manipulation check item is sufficient to make sure that study participants are focusing on the source-portion of the item.

As discussed above, in hindsight, it would have been valuable to include items about additional knowledge and attitudes toward the topic(s) discussed in the headlines. This became vastly clear when political ideology and party identification did not predict much variance of change in news statement believability, even though prior research has indicated that those partisan groups, for both the extent of liberalism and party identification. It would be helpful to know to what extent a person beliefs that the earth is warming and other elements of climate change, because that would indicate whether someone is more likely to support the hypothesis that the polar bear population is at risk because climate change is decreasing their natural habitat. There are certainly also other variables that have an influence in explaining variation in news statement believability that are left unexamined in this dissertation.

The main survey experiment was conducted online. It, therefore, is not possible to detect whether one or more participants were answering the news believability item without referencing any other sources. As mentioned before, most participants were done filling out the questionnaire within a few minutes and, hopefully, this means they did not do any extensive research on the potential size changes of the polar bear population, although there is no way of telling this has been the case for all participants. Controlling for answer time is not a solution, because it is possible that someone had opened the questionnaire, but was taken away from the computer to

deal with another matter, before returning to answer the questions sincerely and within a couple minutes. Follow-up research could apply different modes of survey collection.

5.7 Future research

Future research is needed to implement all the recommendations made in the limitations section, but there are also other possibilities to use this dissertation as a stepping stone to create additional research projects to study why some people are becoming informed by exposure to a news statement and others are becoming or staying misinformed by exposure to the same stimulus. There are several avenues to continue this line of research.

One of the most striking results of this dissertation has nothing to do with the news statement believability model, but is the difference between the average news statement believability among control condition and the two network conditions. On average, the respondents of the two studies seem to find headlines more believable when they are attributed to a news source than when there is no source at all. In the control condition there is no news source trust and news message expectancy attitudes available to judge the believability of a headline. That leaves people's own knowledge as the only comparison.

The current studies are a reflection of a single point in time, but it would be interesting to examine changes over time to see if the news statement believability model also can predict an increase or decrease in believability when people are exposed to the same headline multiple times, while they are attributed to different sources. In such study design, it would be possible to expose participants to the headline without news source attribution first and then to the headline with attribution to a news source, a few weeks later. Then it could be examined whether a combination of news source trust, news statement expectancy, in addition to value-relevant

involvement, political ideology, and party identification, can predict changes in news statement believability among individuals. It would be evenly interesting to compare when a person gets exposed to the headline for CNN first and then for Fox News, or vice versa, to examine to what there are differences in news statement believability. Those study designs also allow for examination of a confirmation factor when multiple sources are in agreement. Of course, that also invites researchers to investigate what happens with the believability level when news statements are contradicting each other in multiple waves with different news sources attributed to those news statements (e.g., CNN presents a headline stating that the polar bear population increases, while Fox News presents a headline stating that the polar bear population decreases).

It may be possible that the news statement believability model can explain changes in news statement believability in all those situations, because people still have to evaluate news source trust and news statement expectancy. The only things that may have changed, and that needs to be accounted for in the study design, is that a person's value-relevant involvement and (perceived) knowledge may have changed in comparison to before the exposure of the first headline. A news topic may also be more salient after the first exposure.

Future research can additionally examine the role of involvement on news statement believability. This study explored the influence of value-relevant involvement, but the literature discussed above has indicated that outcome-relevant and impression-relevant involvement may influence knowledge and attitudes as well. It could be that they all play some role in predicting news statement believability, but it could also be that certain types of involvement are more important for some individuals than others, or that certain types of news content and news topics lead to prioritizing certain kinds of involvement. This may also provide a better understanding of

possible interactions between involvement and party identification, as well as involvement and political ideology.

There may be other variables that could be added to the news statement believability model. For instance, of the limited number of studies that used attribution analysis of persuasion theory as a framework, many of them also manipulated arguments strength of the stimulus material. That allowed them to investigate whether a need for cognition played a role in persuasion. They, indeed, found some evidence for that, but it was determined that need for cognition was not applicable to the design of the dissertation experiment. Participants were only exposed to headlines, which would make it hard to manipulate them in such way that they were distinguishably different in strength. Such design is more applicable when it includes news stories. It would be possible to manipulate the extent to which evidence in news stories is backed up with solid or ambiguous pieces of information.

Or it could be that the information is attributed to news sources that differ in trustworthiness within news statements (i.e., complete news stories). In that case the news statement believability model not only should contain a news source trust variable for the news source that is attributed to the article, but also a news source trust variable for each source mentioned in the news content. As prior research has indicated that many news sources usually are not balanced in time or space for multiple stakeholders, such research design would allow for additional explorations to whether balanced and unbalanced news coverage has influence on news statement believability.

A lot of studies investigating source credibility have focused on trustworthiness and expertise. The latter construct was left aside in this dissertation, for the reason that it was assumed that large cable news networks have access to the same intelligence on which they base

their reports. However, meta-analyses have pointed out that there is some role of expertise in persuasion. It may be that citizens have different *perceptions* about expertise, similar to perceptions about trustworthiness that may not be similar to the objective trustworthiness. Future research provide an opportunity to examine whether there are, indeed, varying perceptions of expertise of news organizations, and whether such perceptions play a role in predicting variation in news statement believability.

It would also be fruitful to investigate to what extent the news statement believability model is similar to other studies of cognitive bias (e.g., Sternthal, Dholokia & Leavitt, 1978; Osgood & Tannenbaum, 1955; Reid, 2012). In the mechanisms section, a variety of studies was discussed that focused on the amount of counterarguing and memorized details of persuasive-intended messages. Turner (2007), for instance, found that self-identified liberals and conservatives recall more correct information from a news source that reports from an incongruent ideological slant. It would be interesting to investigate whether the differences in recall is partially caused by perceptions of news statement expectancy, or vice versa.

It may be that the amount of recalling (as well the influence of news statement expectancy) is lower for topics that are not polarizing. Roberts and Leifer's (1975) results were mentioned in the literature review about environmental news coverage as they found that CBS was considered more trustworthy to report on environmental issues than other topics, because, arguably, air pollution was not considered a hotly-debated topic with multiple sides highly invested in the discussion. A replication of the study may determine whether CBS (and other news sources) are still considered trustworthy on reporting environmental news, thus, testing Roberts and Leifer's speculations. That also provides new data on the amount of that counterarguing takes place depending on the polarizing-level of the news topics and allows for

an experimental design to investigate whether there are differences between news networks, as well as the role of news statement expectancy in this process.

Such study may also be used to get a better understanding about the, apparent, irony in this type of research. Participants need to pay attention to news statement content to assess whether the statement confirms or disconfirms expectations, yet research has determined that the strength of the arguments may not play a role in the overall persuasiveness of a message for some parts of the population (e.g., Priester & Petty, 1995; Petty, Fleming, Priester & Feinstein, 2001). Those studies used need for cognition to explain that some people will scrutinize all arguments of a message, but that others only pay attention to the extent that expectancies are confirmed. Still, that last group has paid attention to some part of the message to determine a potential expectancy violation. Additional research is necessary to determine how people can pay attention to a message without thorough processing of the arguments. This line of research may also explain whether the news statement believability model van help explain differences in cognitive processing the amount of counterarguing.

APPENDICES

APPENDIX A

Definitions and measures for pre-test

Table 7

Definitions and measures for pre-test

	Theoretical definition	**Operational definition**	**Coding**
News source slant	The extent to which a news consumer expects that a statement by a news organization has a certain ideological point of view.	C1: To what extent do you think that CNN generally reports from a liberal or conservative point of view? C2: To what extent do you think that Fox News generally reports from a liberal or conservative point of view?	1 – Very liberal 2 – Liberal 3 – Somewhat liberal 4 – Neutral/neither 5 – Somewhat republican 6 – Republican 7 – Very republican

News statement believ.	The extent to which a news consumer accepts a statement from a news media organization to be true.	C1: What do you think the odds are that this headline from CNN is factually true? C2: What do you think the odds are that this headline from Fox News is factually true? C3: What do you think the odds are that this headline is factually true?	0 – 100 (percentage)

Table 7 (cont'd)

News source trust	The extent to which a news consumer expects that statements by a news organization to be true before receiving a news statement.	C1: CNN is generally trustworthy? C2: Fox News is generally trustworthy?	1 – Strongly agree 2 – Agree 3 – Somewhat agree 4 – Neither agree/disagree 5 – Somewhat disagree 6 – Disagree 7 – Strongly agree
News statement expectancy	The extent to which a news consumer is surprised or unsurprised by a statement from a news organization.	C1: To what extent do you think it is surprising or unsurprising that CNN claims that this statement is factually true? C2: To what extent do you think it is surprising or unsurprising that Fox News claims that this statement is factually true?	1 – Very surprising 2 – Surprising 3 – Somewhat surprising 4 – Neither Surp./Unsurp. 5 – Somewhat unsurprising 6 – Unsurprising 7 – Very unsurprising
Party ID	The self-described identification of affiliation with a political party.	Q1: Which term best describes your political affiliation? Q2: Do you consider yourself a moderate or strong Democrat? Q3: Do you consider yourself a moderate or strong Republican Q4: Do you lean more to the Democratic party or do you lean more to the Republican Party?	X – Democratic (Q2) X – Republican (Q3) X – Other party (Q4) X – Independent (Q4) X – Moderate D. (coded 1) X – Strong D. (coded 1) X – Moderate R. (coded 2) X – Strong R. (coded 2) X – Democratic (coded 1) X – Republican (coded 2) X – Neither/Indep. <u>Coding</u> 1 – Democratic Party 2 – Republican Party

Table 7 (cont'd)

Political ideology	The mental models that are utilized to interpret reality and that guide someone's thinking on how society should be structured.	How would you describe your political ideology?	1 – Very liberal 2 – Liberal 3 – Somewhat liberal 4 – Moderate, middle / road 5 – Somewhat conservative 6 – Conservative 7 – Very conservative
Value-relevant involve.	Value-relevant involvement is a psychological state based on attitudes that are associated with important values about a certain issue.	Knowing my position on political issues is central to understanding the kind of person I am.	1 – Strongly agree 2 – Agree 3 – Somewhat agree 4 – Neither agree/disagree 5 – Somewhat disagree 6 – Disagree 7 – Strongly agree

APPENDIX B

News statement believability model results for pre-test

Table 8

News statement believability model results for pre-test

	HEAD 1	HEAD 2	HEAD 3	HEAD 4	HEAD 5
	ß	ß	ß	ß	ß
News source trust	.02	-.51***	-.44***	.00	-.31*
News statement expectancy	.47***	.22	.24*	.53***	.46***
News s. trust * News s. expectancy	-.11	-.22	-.28*	-.11	-.02
Political ideology	-.31***	-.20	-.21	-.22	.11
Party identification	-.01	.10	.28***	.09	-.18
Value-relevant involvement	-.30*	.07	.06	.03	.00
Value-relevant involvement * Pol. ideo.	-.18	.00	.21*	-.20	.13
Value-relevant involvement * Party ID	.12	.01	-.12	-.07	-.01
Gender	.00	.07	.10	.03	-.03
N	54	56	54	55	56
R^2	.43	.56	.54	.42	.34
R^2_{adj}	.32	.32	.45	.31	.21
F	3.71**	5.13***	5.17**	3.67*	2.60*

Note. Pre-test beta-coefficients and effect sizes for the ordinary least square regressions for all five headlines. (*** $p < .001$; ** $p <$,01; * $p < .05$)

APPENDIX C

Definitions and measures for main survey experiment

Table 9

Definitions and measures for main survey experiment

	Theoretical definition	**Operational definition**	**Coding**
News source slant	The extent to which a news consumer expects that a statement by a news organization has a certain ideological point of view.	C1: To what extent do you think that CNN generally reports from a liberal or conservative point of view? C2: To what extent do you think that Fox News generally reports from a liberal or conservative point of view?	1 – Very liberal 2 – Liberal 3 – Somewhat liberal 4 – Neutral/neither 5 – Somewhat republican 6 – Republican 7 – Very republican

	Theoretical definition	**Operational definition**	**Coding**
News statement believ.	The extent to which a news consumer accepts a statement from a news media organization to be true.	C1: What do you think the odds are that this headline from CNN is factually true? C2: What do you think the odds are that this headline from Fox News is factually true? C3: What do you think the odds are that this headline is factually true?	0 – 100 (percentage)

Table 9 (cont'd)

News source trust	The extent to which a news consumer expects that statements by a news organization to be true before receiving a news statement.	C1: CNN is generally trustworthy? C2: Fox News is generally trustworthy?	1 – Strongly agree 2 – Agree 3 – Somewhat agree 4 – Neither agree/disagree 5 – Somewhat disagree 6 – Disagree 7 – Strongly agree
News statement expectancy	The extent to which a news consumer is surprised or unsurprised by a statement from a news organization.	C1: To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true? C2: To what degree do you think it is surprising or unsurprising that Fox News claims that this statement is factually true?	1 – Very surprising 2 – Surprising 3 – Somewhat surprising 4 – Neither Surp./Unsurp. 5 – Somewhat unsurprising 6 – Unsurprising 7 – Very unsurprising
Party ID	The self-described identification of affiliation with a political party.	Q1: Which term best describes your political affiliation? Q2: Do you consider yourself a moderate or strong Democrat? Q3: Do you consider yourself a moderate or strong Republican Q4: Do you lean more to the Democratic party or do you lean more to the Republican Party?	X – Democratic (Q2) X – Republican (Q3) X – Other party (Q4) X – Independent (Q4) X – Moderate D. (coded 1) X – Strong D. (coded 1) X – Moderate R. (coded 2) X – Strong R. (coded 2) X – Democratic (coded 1) X – Republican (coded 2) X – Neither/Indep. <u>Coding</u> 1 – Democratic Party 2 – Republican Party

Table 9 (cont'd)

Political ideology	The mental models that are utilized to interpret reality and that guide someone's thinking on how society should be structured.	How would you describe your political ideology?	1 – Very liberal 2 – Liberal 3 – Somewhat liberal 4 – Moderate, middle / road 5 – Somewhat conservative 6 – Conservative 7 – Very conservative
Value-relevant involve.	Value-relevant involvement is a psychological state based on attitudes that are associated with important values about a certain issue.	Knowing my position on climate change is central to understanding the kind of person I am.	1 – Strongly agree 2 – Agree 3 – Somewhat agree 4 – Neither agree/disagree 5 – Somewhat disagree 6 – Disagree 7 – Strongly agree

Table 9 (cont'd)

Age		How old are you?	18 – 100 years old
Gender		How do you describe yourself?	1 – Female 2 – Male
Race Ethnicity		How do you describe yourself?	1 – White, Non-Hispanic 2 – Black, Non-Hispanic 3 – Asian, Non-Hispanic 4 – Hispanic 5 – Two or more races
Education		What is your highest level of education that you have completed?	1 – No formal education 2 – 1st, 2nd, 3rd, or 4th Gr. 3 – 5th or 6th grade 4 – 7th or 8th grade 5 – 9th grade 6 – 10th grade 7 – 11th grade 8 – 12th grade, no diploma 9 – High school graduate 10 – Some college, no degr. 11 – Associate degree 12 – Bachelors degree 13 – Masters degree 14 – Prof. or Doct. degree
Income		What was the income of all your household members combined, for the past calendar year?	1 - Less than $5,000 2 - $5,000 to $7,499 3 - $7,500 to $9,999 4 - $10,000 to $12,499 5 - $12,500 to $14,999 6 - $15,000 to $19,999 7 - $20,000 to $24,999 8 - $25,000 to $29,999 9 - $30,000 to $34,999 10 - $35,000 to $39,999 11 - $40,000 to $49,999 12 - $50,000 to $59,999 13 - $60,000 to $74,999 14 - $75,000 to $84,999 15 - $85,000 to $99,999 16 - $100,000 to $124,999 17 - $125,000 to $149,999 18 - $150,000 to $174,999 19 - $175,000 or more

APPENDIX D

Questionnaires, pre-test

==========

All Participants – Online survey presented two weeks before experimental session

==========

Knowing my position on political issues is central to understanding the kind of person I am.

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

==========

CNN is generally trustworthy?

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

Fox News is generally trustworthy?

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

==========

To what extent do you think that CNN generally reports from a liberal or conservative point of view, or reports neutrally?

7-point scale: (Very Liberal)-(Liberal)-(Somewhat Liberal)-(Neutral/Neither Liberal or Conservative)-(Somewhat Conservative)-(Conservative)-(Very Conservative)

To what extent do you think that Fox News generally reports from a liberal or conservative point of view, or reports neutrally?

7-point scale: (Very Liberal)-(Liberal)-(Somewhat Liberal)-(Neutral/Neither Liberal or Conservative)-(Somewhat Conservative)-(Conservative)-(Very Conservative)

==========

==========

Subgroup A – Experimental session

==========

On the next page you see a news headline that was recently taken from the website of CNN. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the headline is true.

==========

Headline 1:
"Barack Obama's Birth Certificate is Authentic; Born in Hawaii"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 2:
"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 3:
"The Sea Ice at South Pole Increased in Past Decade"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

Headline 4:
"One Million Lost Health Insurance during Obama's First Year in Office"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)
==========

Headline 5:
"Half Million Fewer Illegal Immigrants during Obama's First Two Years in Office"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)
Are you a male or female?
Two options: "male" and "female"

How old are you?
Fill in blank

How would you describe your political ideology?
7-point scale: (Very liberal)-(Liberal)-(Somewhat Liberal)-(Moderate, middle of the road)-(Somewhat conservative)-(Conservative)-(Very conservative).

Which term best describes your political affiliation?
Four options: "Republican," "Democrat," Other party," and "Independent"

[REPUBLICAN ONLY]
Do you consider yourself a moderate or strong Republican?
Two options: "Moderate Republican" and "Strong Republican
[DEMOCRAT ONLY]
Do you consider yourself a moderate or strong Democrat?
Two options: "Moderate Democrat" and "Strong Democrat"
[OTHER PARTY AND INDEPENDENT ONLY]
Do you lean more to the Democratic Party or do you lean more to the Republican Party?
Three options: "Leaning to Democrats," "Republicans," and "Neither/Independent"
==========

==========

Subgroup B – Experimental session

==========

On the next page you see a news headline that was recently taken from the website of CNN. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the headline is true.

==========

Headline 1:

"Barack Obama's Birth Certificate is Authentic; Born in Hawaii"

What do you think the odds are that this headline from CNN is factually true?

Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?

7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 2:

"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this headline from CNN is factually true?

Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?

7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 3:
"The Sea Ice at South Pole Increased in Past Decade"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 4:
"One Million Lost Health Insurance during Obama's First Year in Office"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

Headline 5:
"Half Million Fewer Illegal Immigrants during Obama's First Two Years in Office"

What do you think the odds are that this headline from CNN is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

Are you a male or female?
Two options: "male" and "female"

How old are you?
Fill in blank

How would you describe your political ideology?
7-point scale: (Very liberal)-(Liberal)-(Somewhat Liberal)-(Moderate, middle of the road)-(Somewhat conservative)-(Conservative)-(Very conservative).

Which term best describes your political affiliation?
Four options: "Republican," "Democrat," Other party," and "Independent"

[REPUBLICAN ONLY]
Do you consider yourself a moderate or strong Republican?
Two options: "Moderate Republican" and "Strong Republican

[DEMOCRAT ONLY]
Do you consider yourself a moderate or strong Democrat?
Two options: "Moderate Democrat" and "Strong Democrat"

[OTHER PARTY AND INDEPENDENT ONLY]
Do you lean more to the Democratic Party or do you lean more to the Republican Party?
Three options: "Leaning to Democrats," "Republicans," and "Neither/Independent"
==========

==========

Subgroup C – Experimental session

==========

On the next page you see a news headline. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the statement is true.

==========

Headline 1:
"Barack Obama's Birth Certificate is Authentic; Born in Hawaii"

What do you think the odds are that this headline factually true?
Number box with range 0% - 100%

==========

Headline 2:
"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this headline is factually true?
Number box with range 0% - 100%

==========

Headline 3:
"The Sea Ice at South Pole Increased in Past Decade"

What do you think the odds are that this headline is factually true?
Number box with range 0% - 100%

==========

Headline 4:
"One Million Lost Health Insurance during Obama's First Year in Office"

What do you think the odds are that this headline factually true?
Number box with range 0% - 100%

==========

Headline 5:
"Half Million Fewer Illegal Immigrants during Obama's First Two Years in Office"

What do you think the odds are that this headline is factually true?
Number box with range 0% - 100%

==========

Are you a male or female?
Two options: "male" and "female"

How old are you?
Fill in blank

How would you describe your political ideology?
7-point scale: (Very liberal)-(Liberal)-(Somewhat Liberal)-(Moderate, middle of the road)-(Somewhat conservative)-(Conservative)-(Very conservative).

Which term best describes your political affiliation?
Four options: "Republican," "Democrat," Other party," and "Independent"

[REPUBLICAN ONLY]
Do you consider yourself a moderate or strong Republican?
Two options: "Moderate Republican" and "Strong Republican

[DEMOCRAT ONLY]
Do you consider yourself a moderate or strong Democrat?
Two options: "Moderate Democrat" and "Strong Democrat"

[OTHER PARTY AND INDEPENDENT ONLY]
Do you lean more to the Democratic Party or do you lean more to the Republican Party?
Three options: "Leaning to Democrats," "Republicans," and "Neither/Independent"
==========

APPENDIX E

Questionnaires, main survey experiment

==========

Subgroup A – Experimental session

==========

Knowing my position on climate change is central to understanding the kind of person I am.

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

==========

CNN is generally trustworthy?

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

To what extent do you think that CNN generally reports from a liberal or conservative point of view, or reports neutrally?

7-point scale: (Very Liberal)-(Liberal)-(Somewhat Liberal)-(Neutral/Neither Liberal or Conservative)-(Somewhat Conservative)-(Conservative)-(Very Conservative)

==========

On the next page you see a news headline that was recently taken from the website of CNN. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the headline is true.

==========

Headline:

"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this headline from CNN is factually true?

Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that CNN claims that this statement is factually true?

7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)

==========

==========

Subgroup B – Experimental session

==========

Knowing my position on climate change is central to understanding the kind of person I am.

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

==========

Fox News is generally trustworthy?

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

To what extent do you think that Fox News generally reports from a liberal or conservative point of view, or reports neutrally?

7-point scale: (Very Liberal)-(Liberal)-(Somewhat Liberal)-(Neutral/Neither Liberal or Conservative)-(Somewhat Conservative)-(Conservative)-(Very Conservative)

==========

On the next page you see a news headline that was recently taken from the website of Fox News. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the headline is true.

Headline:

"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this headline from Fox News is factually true?
Number box with range 0% - 100%

To what degree do you think it is surprising or unsurprising that Fox News claims that this statement is factually true?
7-point scale: (Very Surprising)-(Surprising)-(Somewhat Surprising)-(Neither surprising or unsurprising)-(Somewhat Unsurprising)-(Unsurprising)-(Very Unsurprising)
==========

==========

Subgroup C – Experimental session

==========

Knowing my position on climate change is central to understanding the kind of person I am.

7-point scale: (Strongly Agree)-(Agree)-(Somewhat Agree)-(Neither Agree or Disagree)-(Somewhat Disagree)-(Disagree)-(Strongly Disagree)

==========

On the next page you see a news headline. We would like to know to what extent you think that this headline is believable or not. You are asked to indicate a percentage. When you think the information is not true at all, you select 0%. But when you think the information is absolutely true, you select 100%. You can also select any other percentage between 0% and 100% to indicate what you think the chance is that the statement is true.

==========

Headline:

"The Polar Bear Population Keeps Growing at the North Pole"

What do you think the odds are that this statement is factually true?

Number box with range 0% - 100%

==========

APPENDIX F

Regression results with demographic control variables

Table 10

Regression results with demographic control variables (CNN)

CNN	B	SE	ß	*p*
(Constant)	36.57	28.58		.201
News source trust	-2.57	1.24	-.10	**.038**
News statement expectancy	7.87	1.02	.36	**< .001**
News source trust * News statement expectancy	-2.18	0.69	-.15	**.002**
Political ideology	0.93	1.18	.04	.431
Party identification	-5.92	3.75	-.09	.115
Value-relevant involvement	1.82	1.19	.08	.127
Value-relevant involvement * Political ideology	0.77	0.69	.07	.265
Value-relevant involvement * Party identification	3.59	2.35	.08	.127
Age	0.06	0.09	.03	.501
Gender	-1.54	3.04	-.02	.612
White, non-Hispanic	-3.10	5.28	-.04	.557
Black, non-Hispanic	-5.05	6.96	-.05	.469
Hispanic	0.57	6.73	.01	.933
Education level	0.85	0.82	.06	.301
Household income	0.65	0.39	.09	.091

N	420	
R^2	.24	[.17, .31]
R^2_{adj}	.21	
F	8.33	($p <$ .001)

Note: OLS regression results of statement believability model, in addition of demographic control variables, with data from the CNN condition. Statistically significant results are in bold.

Table 11

Regression results with demographic control variables (Fox News)

Fox News	B	SE	ß	*p*
(Constant)	26.79	33.70		.427
News source trust	-6.99	0.93	-.38	< **.001**
News statement expectancy	8.10	0.98	.36	< **.001**
News source trust * News statement expectancy	-2.35	0.45	-.24	< **.001**
Political ideology	3.69	1.11	.17	**.001**
Party identification	2.91	3.60	.04	.419
Value-relevant involvement	-0.02	1.08	.00	.985
Value-relevant involvement * Political ideology	1.50	0.61	.13	**.014**
Value-relevant involvement * Party identification	-0.18	2.16	.00	.934
Age	-0.20	0.09	-.10	**.021**
Gender	-1.82	2.78	-.03	.515
White, non-Hispanic	2.62	6.38	.04	.682
Black, non-Hispanic	1.76	7.50	.02	.815
Hispanic	11.80	7.04	.13	.094
Education level	-0.39	0.78	-.02	.619
Household income	0.73	0.37	.01	.845
N	431			
R^2	.35	[.28, .42]		
R^2_{adj}	.33			
F	15.09	($p <$ .001)		

Note: OLS regression results of statement believability model, in addition of demographic control variables, with data from the Fox News condition. Statistically significant results are in bold.

APPENDIX G
IRB study approval

April 4, 2012

To: Stephen Lacy
305 Comm. Arts & Sci.
MSU
Re: **IRB# x12-236e** Category: Exempt 2
Approval Date: April 4, 2012

Title: Fact or Fiction: Believability of Statements Made By News Networks

The Institutional Review Board has completed their review of your project. I am pleased to advise you that **your project has been deemed as exempt** in accordance with federal regulations.

The IRB has found that your research project meets the criteria for exempt status and the criteria for the protection of human subjects in exempt research. **Under our exempt policy the Principal Investigator assumes the responsibilities for the protection of human subjects** in this project as outlined in the assurance letter and exempt educational material. The IRB office has received your signed assurance for exempt research. A copy of this signed agreement is appended for your information and records.

Renewals: Exempt protocols do not need to be renewed. If the project is completed, please submit an ***Application for Permanent Closure***.
Revisions: Exempt protocols do not require revisions. However, if changes are made to a protocol that may no longer meet the exempt criteria, a new initial application will be required.
Problems: If issues should arise during the conduct of the research, such as unanticipated problems, adverse events, or any problem that may increase the risk to the human subjects and change the category of review, notify the IRB office promptly. Any complaints from participants regarding the risk and benefits of the project must be reported to the IRB.
Follow-up: If your exempt project is not completed and closed after three years, the IRB office will contact you regarding the status of the project and to verify that no changes have occurred that may affect exempt status.

Please use the IRB number listed above on any forms submitted which relate to this project, or on any correspondence with the IRB office. Good luck in your research. If we can be of further assistance, please contact us at 517-355-2180 or via email at IRB@msu.edu. Thank you for your cooperation.

Sincerely,

H. McGee

Harry McGee, MPH
SIRB Chair

BIBLIOGRAPHY

BIBLIOGRPAHY

Abel, J. D., & Wirth, M. O. (1977). Newspaper vs. TV credibility for local news. *Journalism Quarterly, 54*, 371-375.

Abramowitz, A. (2010). Ideological realignment among voters. In J. M. Stonecash (Ed.), *New directions in American political parties* (pp. 126-147). New York, NY: Routledge.

Achen, C. (1992). Social psychology, demographic variables, and linear regression: Breaking the iron triangle in voting research. *Political Behavior, 14*, 195-211.

Adam, D. (2010, April 14). Scientists cleared of malpractice in UEA's hacked emails inquiry. *The Guardian*. Retrieved from http://www.guardian.co.uk/environment/2010/apr/14/oxburgh-uea-clearedmalpractice

Adams, G. D. (1997). Evidence of an issue evolution. *American Journal of Political Science, 41, 718-737.*

Ajzen, I., & Fishbein, M. (1983) Relevance and availability in the attribution process. In J. Jaspers, F. D. Fincham & M. Hewstone (Eds.). *Attribution theory and research: Conceptual, developmental, and social dimensions* (pp. 63-89), London: Academic.

Allen, M., & Preiss, R. W. (2007). Media, messages, and meta-analysis. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 15-31). Mahwah, NJ: Lawrence Erlbaum.

Allport, G. (1954). *The nature of prejudice.* New York: Doubleday.

Amodio, D. M., Jost, J. T., Master, S. L., & Yee, C. M. (2007). Neurocognitive correlates of liberalism and conservatism. *Nature Neuroscience, 10*, 1246-1247.

Andersen, K., & Clevenger, T. (1963). A summary of experimental research in ethos. *Speech Monographs, 30*, 59-78.

Andsager, J. L., & White. H. A. (2007). *Self versus other: Media, messages, and the third-person effect*. Mahwah, NJ: Lawrence Erlbaum.

Annis, A. D., & Meier, N. C. (1934). The induction of opinion through suggestion by means of "planet conten." *Journal of Social Psychology, 5*, 65-81.

Antilla, L. (2010). Self-censorship and science: a geographical review of media coverage of climate tipping points. *Publican Understanding of Science, 19*, 240-256.

Aronson, E. (2011). *The Social Animal* (11th edition). New York: Worth.

Aronson, E., & Golden, B. W. (1962). The effect of relevant and irrelevant aspects of communicator credibility on opinion change. *Journal of Personality, 30*, 135-146.

Aronson, E., Turner, J. A., & Carlsmith, J. M. (1963). Communicator credibility and communication discrepancy as determinants of opinion change. *Journal of Abnormal and Social Psychology, 57*, 31-36.

Ariyanto, A., Hornsey, M. J., & Gallois, C. (2006a). Group alliance and perceptions of media bias: Taking into account both the perceived and the source. *Group processes & Intergroup relations, 10*, 266-279.

Ariyanto, A., Hornsey, M. J., & Gallois, C. (2006b). Group-directed criticism in Indonesia: Role of message source and audience. *Asian Journal of Social Psychology, 9*, 96-102.

Ariyanto, A., Hornsey, M. J., & Gallois, C. (2010). United we stand: Intergroup conflict moderates the intergroup sensitivity effect. *European Journal of Social Psychology, 40*, 169-177.

Arpan, L. M., & Raney, A. A. (2003). An experimental investigation of news source and the hostile media effect. *Journalism & Mass Communication Quarterly, 80*, 265-281.

Arpan, L. M., Bae, B., Chen, Y.-S., Green, Jr., G. H. (2011). Perceptions of bias in political content in late night comedy programs. *Electronic News, 5*, 158-173.

Asch, S. E. (1948). The doctrine of suggestion, prestige and imitation in social psychology. *Psychological Review, 55*, 250-276.

Ashmore, R. D., & Del Boca, E. K. (1981). Conceptual approaches to stereotypes and stereotyping. In D. L. Hamiton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 1–35). Hillsdale, NJ: Erlbaum.

Atkins, A. L. (1966). Own attitude and discriminability in relation to anchoring effects in judgment. *Journal of Personality and Social Psychology, 4*, 497-507.

Atkins, A. L., Deaux, K., & Bieri, J. (1967). Latitude of acceptance and attitude change: Emperical evidence for a reformulation. *Journal of Personality and Social Psychology, 6*, 47-54.

Austin, E. W., & Dong, Q. (1994). Source v. content effects on judgments of news believability. *Journalism Quarterly, 71*, 973-983.

Bafumi, J., & Shapiro, R. J. (2009). A new partisan voter. *Journal of Politics, 71*, 1-24.

Baker, S. M., & Petty, R. E. (1994). Majority and minority influence: Source-position imbalance as a determinant of message scrutiny. *Journal of Personality and Social Psychology, 67*, 5-19.

Banning, M. E. (2009). When poststructural theory and contemporary politics collide—The vexed case of global warming. *Communication and Critical/Cultural Studies, 6*, 2850-304.

Barabas, J., & Jerit, J. (2009). Estimating the causal effects of media coverage on policy-specific knowledge. *American Journal of Political Science, 53*, 73-89.

Barabas, J., Jerit, J., & Pollock, W. M. (2013). *Unifying theories of political knowledge: Individual, environmental, procedural, and temporal-topical determinants.* Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Bartels, L. M. (2000). Partisanship and voting behavior, 1952-1996. *American Journal of Political Science, 44*, 35-50.

Bartels, L. M. (2002). Beyond the running tally: Partisan bias in political perceptions. *Political Behavior, 24*, 117-150.

Baum, M. A., & Groeling, T. (2009). Shot by the messenger: Partisan cues and public opinion regarding national security of war. *Political Behavior, 31*, 157-186.

Baum, M. A., & Gussin, P. (2007). In the eye of the beholder: How information shortcuts shape individual perceptions of bias in the media. *Quarterly Journal of Political Science, 3*, 1-31.

Beck, P. A. (1991). Voters' intermediation environments in the 1988 presidential contest. *Public Opinion Quarterly, 55*, 371-394.

Bem, D. J. (1963). An experimental analysis of self-persuasion. *Journal of Experimental Social Psychology, 1*, 190-213.

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review, 74*, 183-200.

Bennett, S. E. (1994). The Persian Gulf War's impact on American's political information. *Political Behavior, 16*, 179–201.

Bennett, S. E., Rhine, S. L., & Flickinger, R. S. (2001). Assessing American's opinions about the media's fairness in 1996 and 1998. *Political Communication, 18*, 163-182.

Bergan, D. E. (2012). Partisan stereotypes and policy attitudes. *Journal of Communication, 62*, 1102-1120.

Berinsky, A. J. (2009). *In time of war: Understanding American public opinion from world War II to Iraq*. Chicago: University Of Chicago Press.

Berinsky, A. J. (2011). *Rumors, truths, and reality: A study of political misinformation.* Paper presented at the Chicago Area Behavior Workshop, Chicago.

Berkley Earth Surface Temperature. (2012). [Website] Retrieved from: http://berkeleyearth.org/

Birch, H. G. (1964). The effect of socially disapproved labeling upon a well-structured attitude. *Journal of Abnormal and Social Psychology, 40*, 301-310.

Blais, A., Gidengil, E., Fournier, P., Nevitte, N., Everitt, J., & Kim, J. (2010). Political judgments, perceptions of facts, and partisan effects. *Electoral Studies, 29*, 1-12.

Blom, R. (2010). *Partisan, but not united: Limitations of the hostile media perception model due to assimilation bias*. Presented at the annual meeting of the National Communication Association, San Francisco.

Blom, R. (2011a). *Predicting a failing grade for the news media: Cognitive perceptions on fairness, influence, and political leaning.* Presented at the Midwest Cognitive Science Meeting, East Lansing, MI.

Blom, R. (2011b). *Blame it on the press: Implications of news media influence on political systems.* Presented at the annual meeting of the Midwest Political Science Association, Chicago.

Bock, D. G., & Saine, T. J. (1975). The impact of source credibility, attitude valence, and task sensitization on trait errors in speech evaluation. *Speech Monographs, 42*, 229-236.

Bodenhausen, G. V., & Moreno, K. N. (2000). How do I feel about them? The role of affective reactions in intergroup perception. In H. Bless & J. P. Forgas (Eds.), *The message within: The role of subjective and experience in social cognition and behavior* (pp. 216-239). Philadelphia, PA: Psychology Press.

Bollen, K. A., & Jackman, R. W. (1990). Regression diagnostics: An expository treatment of outliers and influential cases. In J. Fox & J. S. Long (Eds.), *Modern methods of data analysis* (pp. 257-91). Newbury Park, CA: Sage.

Boyer, J. H. (1981). How editors view objectivity. *Journalism Quarterly, 58*, 24-28

Boykoff, M. T. (2007). From convergence to contention: United States mass media representations of anthropogenic climate change science. *Transactions of the Institute of British Geographers, 32*, 477-489.

Boykoff, M.T., & Boykoff, J.M. (2004). Balance as bias: Global warming and the U.S. prestige press. *Global Environmental Change, 15*, 125–136.

Boykoff, M. T., & Boykoff, J. M. (2007). Climate change and journalistic norms: A case study of US mass media coverage. *Geoforum, 38*, 1190-1204.

Brady, H. E., & Sniderman, P. M. (1985). Attitude attribution: A group basis for political reasoning. *American Political Science Review, 79*, 1061-1078.

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues, 55*, 429-444.

Brewer, M. D. (2005). The rise of partisanship and the expansion of partisan conflict within the American electorate. *Political Research Quarterly, 58*, 219-229.

Brewer, M. B., Dull, V., & Lui, L. (1981). Perceptions of the elderly: Stereotypes as prototypes. *Journal of Personality and Social Psychology, 41*, 656-670.

Briñol, P., & Petty, R. E. (2009). Source factors in persuasion: A self-validation approach. *European Review of Social Psychology, 20*, 49-96.

Brock, T. C. (1967). Communication discrepancy and intent to persuade as determinants of counterargument production. *Journal of Experimental Social Psychology, 3*, 296-309.

Bullock, J. G., Gerber, A. S., & Huber, G. A. (2010). *Partisan bias in factual beliefs about politics.* Paper presented at the annual meeting of the American Political Science Association, Toronto.

Burke, J. (2012, October 9). How many polar bears live in the Arctic? *Alaska Dispatch*. Retrieved from: http://www.alaskadispatch.com/article/how-many-polar-bears-live-arctic?page=full

Burkemann, O. (2003, March 4). Memo exposes Bush's new green strategy. *The Guardian* . Retrieved from: http://go.nature.com/NfYAsm.

Buss, A. R. (1978). Causes and reasons in attribution theory: A conceptual critique. *Journal of Personality and Social Psychology, 36*, 1311-1321.

Cain, H. (2012, September 26). [Presentation] College Truth Tour. East Lansing, Michigan.

Calder, B. J. (1977). Attribution theory: Phenomenology or science? *Personality and Social Psychology Bulletin, 3*, 612-615.

Campbell, A., Converse, P. E., Miller, W. E., & Stokes, D. E. (1960). *The American voter.* New York: John Wiley and Sons.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research.* Boston: Houghton Mifflin Company.

Cantril, A. & Cantril, S. D. (1999). *Reading mixed signals: Ambivalence in public opinion about government*. Washington, DC: Woodrow Wilson Press.

Carney, D. R., Jost, J.T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: personality profiles, interaction styles, and the things they leave behind. *Political Psychology, 29*, 807-840.

Carsey, T. M., & Layman, G. C. (2006). Changing sides or changing minds? Party identification and party preferences in the American electorate. *American Journal of Political Science, 50*, 464-477.

Carter, S., Fico, F., & McCabe, J. A. (2002). Partisan and structural balance in local television election coverage. *Journalism & Mass Communication Quarterly, 79*, 41-53.

Casey, M. K., Allen, M., Emmers-Sommer, T., Sahlstein, E., DeGooyer, D., Winters, A., et al. (2003). When a celebrity contracts a disease: The example of Earvin "Magic" Johnson's announcement that he was HIV positive. *Journal of Health Communication, 8*, 249-266.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology, 39*, 752-766.

Chambers, J. R., & Melnyk, D. (2006). Why do I hate thee? Conflict misperceptions and intergroup mistrust. *Personality & Social Psychology Bullentin, 32*, 1295-1311.

Chia, S. C., Yong, S. Y. J., Wong, Z. W. D., & Koh, W.L. (2007). Personal bias or government bias? Testing the hostile media effect in a regulated press system. *International Journal of Public Opinion Research, 19*, 313-330.

Cho, H., & Boster, F. J. (2005). Development and validation of value-, outcome-, and impression-relevant involvement scales. *Communication Research, 32*, 235-264.

Choi, J., Yang, M., Chang, J. J. C. (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*, 54-75.

Chong, D., & Druckman, J. N. (2007). Framing theory. *Annual Review of Political Science, 10*, 103-126.

Chow, G. C. (1960). Tests of equality between sets of coefficients in two linear regressions. *Econometrica, 28*, 591–605.

Christen, C.T., Kannaovakun, P., & Gunther, A.C. (2002). Hostile media perceptions: Partial assessments of press and public during the 1997 United Parcel Service strike. *Political Communication, 19*, 423-436.

Clark, P. (2011, December 6). What is the IPCC? *Guardian*. Retrieved from: http://www.guardian.co.uk/environment/2011/dec/06/what-is-ipcc

Coe, K., Tewksbury, D., Bond, B. J., Drogos, K. L., Porter, R. W., & Zhang, Y. (2008). Hostile news: Partisan use and perceptions of cable news programming. *Journal of Communication, 58*, 201-219.

Cohen, B. (1963). *The Press and Foreign Policy*. Princeton: Princeton University Press.

Cook, R. D. (1977). Detection of influential observations in linear regression. *Technometrics, 19*, 15-18.

Cook, R. D., & Weisberg, S. (1982). *Residuals and influence in regression*. New York: Chapman and Hall.

Cook, T. D. (1969). Competence, counterarguing, and attitude change. *Journal of Personality, 37*, 342–358.

Conover, P. J., & Feldman, S. (1981). The origins and meaning of liberal/conservative self-identifications. *American Journal of Political Science, 25*, 617–645.

Converse, P. E. (2000). Assessing the capacity of mass electorates. *Annual Review of Political Science, 3*, 331-353.

Corbett, J. B., & Durfee, J. L. (2004). Testing public (un)certainty of science. *Science Communication, 26*, 129-151.

Cortina, J. M., & Landis, R. S. (2011). The earth is *not* round (*p*=.00). *Organizational Research Methods, 14*, 332-349.

Crawford, J. T., Jussim, L., Madon, S., Cain, T. R., & Stevens, S. T. (2011). The use of stereotypes and individuating information in political person perception. *Personality and Social Psychology Bulletin, 37*, 529–542.

Crisci, R., & Kassinove, H. (1973). Effect of perceived expertise, strength of advice and environmental setting on parental compliance. *Journal of Social Psychology, 89*, 245-250.

Cumming, G. (2012). *Understanding the new statistics: Effect sizes, confidence intervals, and meta-analysis*. New York, NY: Routledge.

Cumming, G., & Fidler, F. (2010). Effect sizes and confidence intervals. In G. R. Hancock & R. O. Mueller (Eds.),*The reviewer's guide to quantitative methods in the social sciences*. New York: Routledge.

D'Alessio, D. (2003). An experimental examination of readers' perceptions of media bias. *Journalism & Mass Communication Quarterly, 80*, 282-294.

D'Alessio, D. (2005). An experimental examination of reader's perceptions of media bias. *Journalism & Mass Communication Quarterly, 80*, 282-294.

D'Alessio, D., & Allen, M. (2000). Media bias in presidential elections: A meta-analysis. *Journal of Communication, 50*, 133-156.

D'Alessio, D., & Allen, M. (2007). On the role of newspaper ownership on bias in presidential campaign coverage by newspapers. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 103-118). Mahwah, NJ: Lawrence Erlbaum.

Dalton, R. J., Beck, P. A., & Huckfeldt, R. (1998). Partisan cues and the media information flows in the 1992 presidential election. *American Political Science Review, 92*, 111-126.

Davis, F. J. (1952). Crime news in Colorado newspapers. *American Journal of Sociology, 57*, 325-330.

Deaux, K. (1976). Sex: A perspective on the attributional process. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 1, pp. 335-352). Hillsdale, NJ: Erlbaum.

DeFleur, M.L., & Ball-Rokeach, S. (1989). *Theories of mass communication*. White Plains, NY: Longman.

Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters.* New Haven, CO: Yale University Press.

DeNavas-Walt, C., Proctor, B. D., & Smith, J. C. (2012). Income, poverty, and health insurance coverage in the United States: 2011. Washington, DC: U.S. Government Printing Office.

Dennis, J. (1988). Political independence in America, Part I: On being an independent partisan supporter. *British Journal of Political Science, 18*, 77-109.

Denzau, A.D., & North, D.C. (2000). Shared mental models: ideologies and institutions. In A. Lupia, M. C. McCubbins, & S. L. Popkin (Eds.), *Elements of reason: Cognition, choice, and the bounds of rationality* (pp. 23–46). New York: Cambridge University Press.

Devine, C. J. (2010). *Why liberals don't call themselves liberals: The effects of elite communication on ideological comprehension and identification.* Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

DeYoung, K. (2006). *Soldier: The Life of Colin Powell*. New York: Alfred A. Knopf.

DiFonzo, N., & Bordia, P. (2007). *Rumor psychology: Social and organizational approaches.* Washington, DC: American Psychology Association.

DiNardo, J. (1993). Law enforcement, the price of cocaine and cocaine use. *Mathematical and Computer Modeling, 17*, 53-64.

Dill, K. E. (2013). Introduction. In K. E. Dill (Ed.), *The Oxford handbook of media psychology* (pp. 3-9). New York: Oxford University Press.

Ding, D., Maibach, E. W., Zhao, X., Roser-Renouf, C., & Leiserowitz, A. (2011). Support for climate policy and societal action are linked to perceptions about scientific agreement. *Nature Climate Change, 1*, 462-466.

Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology, 63*, 568-584.

Ditto, P. H., Scepansky, J. A., Munro, G. D., Apanovitch, A. M., & Lockhart, L. K. (1998). Motivated sensitivity to preference-inconsistent information. *Journal of Personality and Social Psychology, 75*, 53-69.

Dovidio, J. F., & Gaertner, S. L. (2010). Intergroup bias. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 1288-1342), Hoboken, NJ: John Wiley & Sons.

Druckman, J. N. (2001). On the limits of framing effects who can frame? *Journal of Politics, 63*, 1041-1066.

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 & Social Psychological Bulletin, 24*, 3-16.

Duncan, E. L. (1976). Differential social perception and attribution of intergroup violence: Testing the lower limits of stereotyping of blacks. *Journal of Personality and Social Psychology, 34*, 590-598.

Dutton, D. G. (1973). The maverick effect: Increased communicator credibility as a result of abandoning a career. *Journal of Behavioural Science, 5*, 145-151.

Eagly, A. H., & Chaiken, S. (1975). An attribution analysis of the effect of communicator characteristics on opinion change: The case of communicator attractiveness. *Journal of Personality and Social Psychology, 32*, 136-144.

Eagly, A. H., Chaiken, S., & Wood, W. (1981). An attribution analysis of persuasion. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 3). Hillsdale, NJ: Lawrence Erlbaum.

Eagly, A. H., Wood, W., & Chaiken, S. (1978). Causal influences about communicators and their effect on opinion changes. *Journal of Personality and Social Psychology, 41*, 847-855.

Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology, 71*, 5-24.

Edwards, P. N. (2010). *A vast machine: Computer models, climate data, and the politics of global warming.* Cambridge, MA: MIT Press.

Edwards, K., & Smith, E. E. (1996). A disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology, 71*, 5-24.

Eiser, J. R. (1983). From attributions to behavior. In M. Hewstone (Ed.), *Attribution theory: Social and functional extensions* (pp. 160-169). Oxford, England: Blackwell.

Ellis, P. D. (2010). *The essential guide to effect sizes: Statistical power, meta-analysis, and the interpretation of research results*. Cambridge, United Kingdom: Cambridge University Press.

Entman, R. M. (1989). How the media affect what people think: An information processing approach. *Journal of Politics, 51*, 347-370.

Erikson, R.S., & Tedin, K. L. (2003). *American public opinion: Its origins, content, and impact* (8th edition). New York: Pearson.

Eveland, W. P., Jr., & Shah, D. V. (2003). The impact of individual and interpersonal factors on perceived news media bias. *Political Psychology, 24*, 202-117.

Ewing, T. N. (1942). A study of certain factors involved in changes of opinion. *Journal of Social Psychology, 16*, 63-88.

Farnsworth, S. J., Lichter, S. R. (2012). Scientific assessments of climate change information in news and entertainment media. *Science Communication, 34*, 435-459.

Feldman, L. (2011). Partisan differences in opinionated news perceptions: A test of the hostile media effect. *Political Behavior, 33*, 407-432.

Feldman, L., Maibach, E., Roser-Renouf, C., & Leiserowitz, A. (2012). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *International Journal of Press/Politics, 17*, 3-31.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Fein, S., Hilton, J. L., & Miller, D. T. (1990). Suspicion of ulterior motivation and correspondence bias. *Journal of Personality and Social Psychology, 58*, 753-764.

Fico, F., & Cote, W. (1999). Fairness and balance in the structural characteristics of newspaper stories on the 1996 presidential election. *Journalism & Mass Communication Quarterly, 76*, 124-137.

Fico, F., Freedman, E., & Love, B. (2006). Partisan and structural balance in newspaper coverage of U.S. Senate races in 2004 with female nominees. *Journalism & Mass Communication Quarterly, 83*, 43-57.

Fico, F., Richardson, J. D., & Edwards, S. M. (2004). Influence of story structure on perceived story bias and news organization credibility. *Mass Communication & Society, 7*, 301-318.

Fico, F., & Soffin, S. (1995). Fairness and balance of selected newspaper coverage of controversial national, state, and local issues. *Journalism & Mass Communication Quarterly, 72*, 621-633.

Fico, F., Zeldes, G. A., Carpenter, S., & Diddi, A. (2008). Broadcast and cable network news coverage of the 2004 presidential election: An assessment of partisan and structural imbalance. *Mass Communication & Society, 11*, 319-339.

Fiedler, K. (2000). On mere considering: The subjective experience of truth. In H. Bless & J. P. Forgas (Eds.), *The message within: The role of subjective and experience in social cognition and behavior* (pp. 13-36). Philadelphia, PA: Psychology Press.

Fiorina, M. P. (2002). Parties and partisanship: A 40-year retrospective. *Political Behavior, 24*, 93-115.

Fischhoff, B. (1976). Attribution, theory and judgment under uncertainty. In J. H. Harvey, W. J. Ickes and R. F. Kidd (Eds.), *New directions in attribution research* (pp. 419-450). Hillsdale, NJ: Erlbaum.

Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social Psychology: Handbook of basic principles* (2nd edition) (pp. 490-515). New York: Guilford Press.

Fragale, A. R., & Heath, C. (2004). Evolving informational credentials: The (mis)attribution of believable facts to credible sources. *Personality and Social Psychology Bulletin, 30*, 225-236.

Frankel, E., & Kassinove, H. (1974). Effects of required effort, perceived expertise, and sex on teacher compliance. *Journal of Social Psychology, 93*, 187-192.

Freedman, J. L. (1964). Involvement, discrepancy, and change. *Journal of Abnormal and Social Psychology, 69*, 290-295.

Friese, M., Fishman, S., Beatson, R., Sauerwein, K., & Rip, B. (2009). Whose fault is it anyway? Political orientation, attributions of responsibility, and support for the war in Iraq. *Social Justice Research, 22*, 280-297.

Fritz, C. O., Morris, P. E., & Richler, J. J. (2012). Effect size estimates: Current use, calculation, and interpretation. *Journal of Experimental Psychology: General, 141*, 2-18.

Gaines, B. J., Kuklinski, J. H., Quirk, P. J., Peyton, B., & Verkuilen, J. (2007). Same facts, different interpretations: Partisan motivation and opinion on Iraq. *Journal of Politics, 69*, 957-974.

Gallup. (2012, September 21). U.S. distrust in media hits new high. Retrieved from: http://www.gallup.com/poll/157589/distrust-media-hits-new-high.aspx

Gans, H. (1980). *Deciding what's news: A study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. New York: Random House.

Garner, A., & Palmer, H. (2011). Polarization and issue consistency over time. *Political Behavior, 33*, 225-246.

Garrett, R. K. (2009). Politically motivated reinforcement seeking: Reframing the selective exposure debate. *Journal of Communication, 59*, 676-699.

Geers, A. L., & Lassiter, G. D. (1999). Affective expectations and information gain: Evidence for assimilation and contrast effects in affective experience. *Journal of Experimental Social Psychology, 35*, 394-413.

Gelpi, C. (2009). *Performing on cue? The formation of public opinion toward war*. Paper presented at the annual meeting of the International studies Association, New York.

Gerber, A., & Green, D. P. (1998). Rational learning and partisan attitudes. *American Journal of Political Science, 42*, 794-818.

Gerber, A., & Green, D. P. (1999). Misperceptions about perceptual bias. *Annual Review of Political Science, 2*, 189-210.

Gilens, M. (2001). Political ignorance and collective policy preferences. *American Political Science Review, 95*, 379-396.

Gillig, P. M., & Greenwald, A. G. (1974). Is it time to lay the sleeper effect to rest? *Journal of Personality and Social Psychology, 29*, 132-139.

Giner-Sorolla R., & Chaiken, S. (1994). The causes of hostile media judgments. *Journal of Experimental Social Psychology, 30*, 165-180.

Goldenberg, S. (2012, February 14). Secret funding helped build vast network of climate denial thinktanks. *Guardian*. Retrieved from: http://www.guardian.co.uk/environment/2013/feb/14/funding-climate-change-denial-thinktanks-network

Goren, P. (2005). Party identification and core political values. *American Journal of Political Science, 49*, 881-896.

Gordon, R., & Spears, K. (2011). You don't act like you trust me: Dissociations between behavioral and explicit measures of source credibility judgment. *Quarterly Journal of Experimental Psychology, 65*, 121-134.

Gordon, R., & Spears, K. (2012). You don't act like you trust me: Dissociations between behavioral and explicit measures of source credibility judgement. *Quarterly Journal of Experimental Psychology, 65*, 121-34.

Graber, D. A. (1988). *Processing the news: How people tame the information tide.* New York: Longman.

Graber, D. A. (1990). Seeing is remembering: How visuals contribute to learning from television news. *Journal of Communication, 40*, 134-155.

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology, 96*, 1029-1046.

Green, D. P., Palmquist, B., & Schickler, E. (2002). *Partisan hearts & minds: Political parties and the social identities of voters.* New Haven, CT: Yale University Press.

Green, M. C., & Donahue, J. K. (2011). Persistence of belief change in the face of deception: The effect of factual stories revealed to be false. *Media Psychology, 14*, 312-331.

Green, S. (2000). The psychological sources of partisan-leaning independence. *American Politics Research, 28*, 511-537.

Gruszczynski, M. W. (2010). *Follow the messenger: Selective acceptance in the processing of political information*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Gulotty, R., & Neblo, M. A. (2010). *Barbarians at the gate & neighbors next door: Policy knowledge, anxiety, & public opinion about immigration in the U.S.* Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Gunther, A.C. (1988). Attitude extremity and trust in media. *Journalism Quarterly, 65*, 279-287.

Gunther, A. C. (1992). Biased press or biased public? Attitudes toward media coverage of social groups. *Public Opinion Quarterly, 56*, 147-167.

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*, 177-191.

Gunther, A. C., Christen, C. T., Liebhart, J. L., & Chia, C. S. (2001). Congenial public, contrary press, and biased estimates of the climate of opinion. *Public Opinion Quarterly, 65*, 295–320.

Gunther, A. C., & Schmitt, K. (2004). Mapping boundaries of the hostile media effect. *Journal of Communication, 54*, 55-70.

Gunther, A. C., Edgerly, S., Akin, H., & Broesch, J. A. (2012). Partisan evaluation of partisan information. *Communication Research, 39*, 439-457.

Haider-Markel, D., & Joslyn, M. (2009). A partisan education? How education extends partisan divisions over facts. *Policy Studies Organization, Policy Studies Commons.* Paper 2.

Haiman, F. S. (1949). An experimental study of the effects of ethos in public speaking. *Speech Monographs, 16*, 190-202.

Hamilton, L. C. (2011). Education, politics and opinion about climate change evidence for interaction effects. *Climatic Change, 104*, 231-242.

Hansen, G. J., & Benoit, W. L. (2007). Communication forms as predictor of issue knowledge in presidential campaigns: A meta-analytic assessment. *Mass Communication & Society, 10*, 189–210.

Hansen, G. J., & Kim, H. (2011): Is the media biased against me? A meta-analysis of the hostile media effect Research. *Communication Research Reports, 28*, 169-179.

Harris, R. J. (1999). *A cognitive psychology of Mass Communication* (3rd edition). Mahwah, NJ: Lawrence Erlbaum.

Hart, W., Albarracin, D., Eagly, A. H., Brechan, I., Lindberg, M. J., & Merrill, L. (2009). Feeling validated versus being correct: A meta-analysis of selective exposure to information. *Psychological Bulletin, 135*, 555-588.

Hastdorf, A. H., & Cantril, H. (1954). They saw a game: A case study. *Journal of Abnormal and Social Psychology, 49*, 129-134.

Hastie, R. (1980). Memory for behavioral information that confirms or contradicts a personality impression. In R. Hastie, T. M. Ostrom, E. B. Ebbesen, R. S. Wyer, Jr., D. L. Hamilton, & D. E. Carlston (Eds.), *Person memory: The cognitive basis of social perception* (pp. 155-177). Hillsdale, NJ: Erlbaum.

Hastie, R. (1984). Causes and effects of causal attribution. *Journal of Personality and Social Psychology, 46*, 44-56.

Hastdorf, A. H., & Cantril, H. (1954). They saw a game: A case study. *Journal of Abnormal and Social Psychology, 49*, 129-134.

Hayes, D. (2011).When gender and party collide: Stereotyping in candidate trait attribution. *Politics & Gender, 7*, 133–165.

Hedström, P. (2008). Studying mechanisms to strengthen causal inferences in quantitative research. In J. M. Box-Steffensmeier, H. E. Brady, & D. Collier (Eds.) *The Oxford Handbook of Political Methodology* (pp. 319-338). Oxford: Oxford University Press.

Heesacker, M., Petty, R. E., & Cacioppo, J. T. (1983). Field dependence and attitude change: Source credibility can alter persuasion by affecting message-relevant thinking. *Journal of Personality, 51*, 653-666.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Hetherington, M. J. (2001). Resurgent mass partisanship: The role of elite polarization. *American Political Science Review. 95*, 619-631.

Hetherington, M. J. (2005). *Why trust matters: Declining political trust and the demise of American liberalism.* Princeton, N.J.: Princeton University Press.

Highton, B. (2010). The contextual causes of issue and party voting in American presidential elections. *Political Behavior, 32*, 453-471.

Hochschild, J. L. (2001). Where you stand depends on what you see: Connections among values, perceptions of fact, and political prescriptions. In J. H. Kuklinski (Ed.), *Citizens and politics: Perspectives from political psychology* (pp. 313-340). New York: Cambridge University Press.

Hofsetter, C. R., & Barker, D. (1999). Information, misinformation, and political talk radio. *Political Research Quarterly, 52*, 353-369.

Hoffman, A. J. (2011). Talking past each other? Cultural framing of skeptical and convinced logics in the climate change debate. *Organization & Environment, 24*, 3-33.

Hoffner, C., & Tooney, R. (2007). *The hostile media effect in the 2004 U.S. presidential election*. Paper presented at the annual meeting of the International Communication Association.

Holliman, R. (2011). Advocacy in the tail: Exploring the implications of 'climategate' for science journalism and public debate in the digital debate. *Journalism, 12*, 832-846.

Hovland, C. I., & Mandell, W. (1952). An experimental comparison of conclusion-drawing by the communicator and by the audience. *Journal of Abnormal and Social Psychology, 47*, 581-588.

Hovland, C. I., Harvey, O. J., & Sherif, M. (1957). Assimilation and contrast effects in communication and scales of attitude measurement: Item displacement in Thurstone scales. *Journal of Abnormal and Social Psychology, 47*, 822-832.

Hovland, C. I., & Weiss, W. (1951/1952). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly, 15*, 635-650.

Huckfeldt, R. R., Johnson, P. E., & Sprague, J. (2004). *Political disagreement: The survival of diverse opinions within communication networks.* Cambridge: Cambridge University Press.

Huckfeldt, R., Levine, J., Morgan, W., & Sprague, J. (1999). Accessibility and the political utility of partisan and ideological orientations. *American Journal of Political Science, 43*, 888-911.

Huckfeldt, R., Mondak, J. J., Craw, M., & Mendez, J. M. (2005). Making sense of candidates: Partisanship, ideology, and issues as guides to judgment. *Cognitive Brain Research, 23*, 11-23.

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.

Hunt, K. (1972). Source effects, message effects, and general effects. Proceedings 3rd Annual Conference, Association for Consumer Research, Chicago. Retrieved from: http://www.acrwebsite.org/volumes/display.asp?id=12015

Hunt, J. M., & Kernan, J. B. (1984). The role of disconfirmed expectancies in the processing of advertising messages. *Journal of Social Psychology, 124*, 227-236.

Hunter, J. E. (1997). A ban on the significance test. *Psychological Science, 8*, 3-7.

Ichheiser, G. (1949). "Visible" and "invisible" aspects of personality. *American Journal of Sociology, 55*, 12-17.

Inhofe, J. M. (2005, January 4). *Climate Change Update.* Senate Floor Statement. *January 4, 2005*.

Insko, C. A. (1967*). Theories of attitude change.* New York: Appleton-Century-Crofts.

Intergovernmental Panel on Climate Change. (2007). *Climate Change 2007: Synthesis Report*. Retrieved from http://www.ipcc.ch/publications_and_data/ar4/syr/en/mains2-2.html

IUCN/SSC Polar Bear Specialist Group. (2010, May 11). Summary of polar bear population status per 2010. Retrieved from: http://pbsg.npolar.no/en/status/status-table.html

Jacobson, G. C. (2010). Perception, memory, and partisan polarization on the Iraq War. *Political Science Quarterly, 125*, 31-56.

Jacoby, W. G. (2006). Value choices and American public opinion. *American Journal of Political Science, 50*, 706-723.

Jacoby, W. G., Ciuk, D., & Pyle, K. (2010). *Citizen perceptions of candidate ideology in the 2008 election*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, IL.

Jeon, J. (2009). *The influence of prior issue attitudes on perception bias and perceived message credibility: Online health information about smoking bans*. Unpublished master's thesis, Michigan State University.

Jerit, J., & Barabas, J. (2006). Bankrupt rhetoric: How misleading information affects knowledge about social security. *Public Opinion Quarterly, 70*, 278-303.

Jerit, J., & Barabas, J. (2011). Partisan perceptual bias and the information environment. *Journal of Politics, 74*, 672-684.

Jochim, A. E. (2011). *Policy responsiveness: What happens when issues become partisan*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Johnson, B. T., & Eagly, A. H. (1989). Effects of involvement on persuasion: A meta-analysis. *Psychological Bulletin, 106*, 290-314.

Johnson, D., & Levin, S. (2009). The tragedy of cognition: Psychological biases and environmental inaction. *Current Science, 97*, 1593-1603.

Johnson, H. H., & Scileppi, J. A. (1972). The effects of source identification on attitude change as a function of the type of communication. *Journal of Social Psychology, 86*, 81-87.

Johnson, H. H., Torcivia, J. M., & Poprick, M. A. (1968). Effects of source credibility on the relationship between authoritarianism and attitude change. *Journal of Personality and Social Psychology, 9*, 179-183.

Johnson, H. M. (1998). Disregarding information in text. In J. M. Golding & C. M. MacLeod (Eds.), *International forgetting: Interdisciplinary approaches* (pp. 219-237). Mahwah, NJ: Lawrence Erlbaum.

Johnson, M., & Arceneaux, K. (2010). *Who watches political talk? Revisiting political television reception with behavioral measures*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Jones, D. A. (2004). Why Americans don't trust the media: A preliminary analysis. *Harvard International Journal of Press/Politics, 9*, 60-75.

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. *Advances in Experimental Social Psychology, 2*, 219-266.

Jones, E. E., & McGillis, D. (1976). Correspondent inference and the attribution cube: A comparative reappraisal. In J. Harvey, W. Ickes, & R. Kidd (Eds.), *New directions in attribution research* (Vol. 1). Hillsdale, NJ: Erlbaum.

Jones, E. E., & Nisbett, R. E. (1972). The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 79–94). Morristown, NJ: General Learning.

Jones, E. E., Davis, K. E., & Gergen, K. J. (1961). Role playing variations and their information value for person perception. *Journal of Abnormal and Social Psychology, 63*, 302-310.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology, 60*, 307-337.

Jost, J. T., Napier, J. L., Thorisdottir, H., Gosling, S. D., Palfai, T. P., & Ostafin, B. (2007). Are needs to manage uncertainty and threat associated with political conservatism or ideological extremity? *Personality and Social Psychology Bulletin, 33*, 989–1007.

Judd, C. M., Ryan, C. S., & Park, B. (1991). Accuracy in the judgment of in-group and out-group variability. *Journal of Personality and Social Psychology, 61*, 366-379.

Judd, C. M., Park, B., Yzerbyt, V., Gordijn, E. H., & Muller, D. (2005). Attributions of intergroup bias and outgroup homogeneity to ingroup and outgroup others. *European Journal of Social Psychology, 35*, 677 – 704.

Jussim, L. J. (2005). Accuracy in social perception: Criticisms, controversies, criteria, components, and cognitive processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 1–93). San Diego, CA: Elsevier Academic Press.

Jussim, L., Cain, T. R., Crawford, J. T., Harber, K., & Cohen, F. (2009). The unbearable accuracy of stereotypes. In T.D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 199–227). New York: Psychology Press.

Kahan, D. M., Braman, D., Slovic, P., Gastil, J., & Cohen, G. (2007). The second national risk and culture study: Making sense of—and making progress in—the American culture war of fact. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1017189

Kahlor, L., & Rosenthal, S. (2009). If we seek, do we learn? Predicting knowledge of global warming. *Science Communication, 30*, 380-414.

Kaplan, T. (2012, December 3). Most New Yorkers think climate change caused hurricane, poll finds. *New York Times.* Retrieved from: http://www.nytimes.com/2012/12/04/nyregion/most-new-yorkers-tie-hurricane-sandy-to-climate-change-poll-finds.html?_r=0

Karlberg, M., & Hacket, R. A. (1996). Cancelling each other out?: Interest group perceptions of the news media. Canadian *Journal of Communication, 21* (4), 461-472.

Kaufman, D. Q., Stasson, M. F., & Hart, J. W. (1999). Are the tabloids always wrong or is that just what we think? Need for cognition and perceptions of articles in print media. *Journal of Applied Social Psychology, 29*, 1984-1997.

Keith, B. E., Magleby, D. B., Nelson, C. J., Orr, E., Westlye, M. C., & Wolfinger, R. E. (1986). The partisan affinities of independent 'leaners.' *British Journal of Political Science, 16*, 155-185. doi:10.1017/S0007123400003872

Kelley, H. H. (1972). *Causal schemata and the attribution process.* New York: General Learning Press.

Kelley, H. H. (1973). The process of causal attribution, *American Psychologist, 28*, 107-128.

Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Psychology, 31*, 457-501.

Kelly, G. A. (1955). *The psychology of personal constructs*. New York: Norton.

Kelman, H. C., & Hovland, C. I. (1953). "Reinstatement" of the communicator in delayed measurement of opinion change. *Journal of Abnormal and Social Psychology, 48*, 327-335.

Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. *Advances in Experimental Social Psychology, 38*, 283-357.

Kiesler, C. A., Colling, B. E., & Miller, N. (1969). *Attitude change: A critical analysis of theoretical approaches.* New York: Wiley.

Knowledge Networks. (2012). Response to ESOMAR 26 questions to help research buyers of online samples. Retrieved from: http://www.knowledgenetworks.com/insights/docs/Knowledge-Networks-Response-to-ESOMAR-26-Questions.pdf

Killian, M., & Wilcox, C. (2008). Do abortion attitudes lead to party switching? *Political Research Quarterly, 61*, 561-573.

Kim, K. S. (2011). Public understanding of the politics of global warming in the news media: The hostile media approach. *Public Understanding of Science, 20*, 690-705. doi: 10.1177/0963662510372313

Kim, K. S., & Pasadeos, Y. (2007). How partisans read the news: Hostile media and credibility perceptions. *Newspaper Research Journal, 28*, 99–106.

Kinder, D. R., & McConnaughy, C. M. (2006). Military triumph, racial transcendence, and Colin Powell. *Public Opinion Quarterly, 70*, 139-165.

Kinder, D. R., & Sears, D. O. (1985). Public opinion and political action. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (Vol. II, 3rd edition, pp. 659-741).

Kinnally, W. (2008). *Reactance and the hostile media effect: Placing the effect within the theory*. Unpublished doctoral dissertation, Florida State University.

Kiousis, S. (2001). Public trust or mistrust? Perceptions of media credibility in the information age. *Mass Communication & Society, 2001*, 381-403.

Kline, R. B. (2004). *Beyond significance testing: Reforming data analysis methods in behavioral research*. Washington, DC: American Psychological Association.

Koehler, J. J. (1993). The influence of prior beliefs on scientific judgments of evidence quality. *Organizational Behavior and Human Decision Processes, 56*, 28-55.

Konisky, D. M., Milyo, J., & Richarson, L. E., Jr. (2008). Environmental policy attitudes: Issues, geographical scale, and political trust. *Social Science Quarterly, 89*, 1066-1085.

Koteyko, N., Jaspal, R., & Nerlich, B. (2012). Climate change and 'climategate' in online reader comments: A mixed methods study. *Geographical Journal.* [published online]

Krosnick, J. A., & MacInnis, B. (2010). Frequent viewers of Fox News are less likely to accept scientists' views of global warming. *The Woods Institute for the Environment*. Retrieved from: http://woods.stanford.edu/sites/default/files/files/Global-Warming-Fox-News.pdf

Krosnick, J. A., Holbrook, A. L., Lowe, L., & Visser, P. S. (2006). The origins and consequences of democratic citizen's policy agendas: A study of popular concern about global warming. *Climate Change, 77*, 7–43.

Kruglanski, A. W. (1975). The endogenous-exogenous partition in attribution theory. *Psychological Review, 82*, 387-406.

Kruglanski, A. W. (1977). The place of naïve contents in a theory of attribution: Reflections on Calder's and Zuckerman's critiques of the endogenous-exogenous partition. *Personality and Social Psychology Bulletin, 3*, 592-605.

Kruglanski, A. W., & Webster, D. A. (1996). Motivated closing of the mind: "Seizing" and "freezing." *Psychological Review, 103*, 263-283.

Kuklinski, J. H. (2007). The limits of facts in citizen decision-making. *Extensions, Fall*, 5-8.

Kuklinski, J. H., Quirk, P. J., Jerit, J., Schwieder, D., & Rich, R. F. (2000). Misinformation and the currency of democratic citizenship. *Journal of Politics, 62*, 790-816.

Kull, S., Ramsey, C., & Lewis, E. (2003/2004). Misperceptions, the media, and the Iraq War. *Political Science Quarterly, 118*, 569-598.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*, 480-498.

Kunda, Z., & Sinclair, L. (1999). Motivated reasoning with stereotypes: Activation, application, and inhibition. *Psychological Inquiry, 10*, 12-22.

Kvaløy, B., Finseraas, H., & Listhaug, O. (2012). The publics' concern for global warming: A cross-national study of 47 countries. *Journal of Peace Research, 49*, 11-22.

Lacy, S., Fico, F., & Simon, T. F. (1991). Fairness and balance in the prestige press. *Journalism & Mass Communication Quarterly, 68*, 363-370.

Langan, F. (2007, May 3). Canadian controversy: How do polar bears fare? *Christian Science Monitor*, p. 13.

Larson, H. J., Cooper, L. Z., Eskola, J., Katz, S. L., & Ratzan, S. C. (2011). Addressing the vaccine confidence gap. *The Lancet, 378*, 526–535.

Lau, R. R., & Russell, D. (1980). Attributions in the sports pages. *Journal of Personality and Social Psychology, 39*, 29-38.

Layman, G. C., & Carsey, T. M. (2002). Party polarization and "conflict extension" in the American electorate. *American Journal of Political Science, 46*, 786-802.

Layman, G. C., Carsey, T. M., & Horowitz, J. M. (2006). Party polarization in American politics: Characteristics, causes, and consequences. *Annual Review of Political Science, 9*, 83-110.

Lebo, M., & Cassino, D. (2007). The aggregated consequences of motivated reasoning. *Political Psychology, 28*, 719-746.

Lee, H. B. (2008). Using the Chow test to analyze regression discontinuities. *Tutorials in Quantitative Methods for Psychology, 4*, 46-50.

Lee, T.-T. (2005). The liberal media myth revisited: An examination of factors influencing perceptions of media bias. *Journal of Broadcasting & Electronic Media, 49*, 43-64.

Lee, T.-T. (2010). Why they don't trust the media: An examination of factors predicting trust. *American Behavioral Scientist, 54*, 8-21.

Lehmann, E. (2011, September 8). Huntsman warns that GOP can't win the White House by denying climate science. *New York Times*. Retrieved from: http://www.nytimes.com/cwire/2011/09/08/08climatewire-huntsman-warns-that-gopcant-win-the-white-h-82737.html

Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Howe, P. (2012a). Climate change in the American mind: The potential impact of global warming on the 2012 presidential election. New Haven, CT: Yale Project on Climate Change Communication. Retrieved from: http://environment.yale.edu/climate/files/Global-Warming-2012-Election.pdf

Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Howe, P. (2012b). Climate change in the American mind: Americans' global warming beliefs and attitudes in September, 2012. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. Retrieved from: http://environment.yale.edu/climate/files/Climate-Beliefs-September-2012.pdf

Leiserowitz, A., Maibach, E., Roser-Renouf, C., Feinberg, G., & Howe, P. (2012c). Extreme weather and climate change in the American mind. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change Communication. Retrieved from: http://environment.yale.edu/climate/files/Extreme-Weather-Public-Opinion-September-2012.pdf

Lendon, B. (2013, March 8). World rejects new protections for polar bears. *CNN*. Retrieved from: http://www.cnn.com/2013/03/07/world/polar-bear-protections

Levendusky, M. S. (2009). *The Partisan Sort.* Chicago, IL: University of Chicago Press.

Levendusky, M. S. (2010). Clearer cues, more consistent voters: A benefit of elite polarization. *Political Behavior, 32*, 111-131.

Levendusky, M. S. (2011). *Do partisan media polarize voters?* Paper presented at the annual meeting of the CEES-NYU Experimental political science conference.

Lewandowsky, S., Eecker, U. K. H., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest, 13*, 106-131.

Lewis, H. B. (1941). Studies in the principles of judgments and attitudes: IV. The operation of "prestige suggestion." *Journal of Social Psychology, 14*, 229-256.

Lichtenberg, J. (2000). In defence of objectivity revisited. In J. Curran & M. Gurevitch (Eds.), *Mass Media & Society* (3rd edition, pp. 238-254). London: Oxford University Press.

Lieberman, M. D., Gaunt, R., Gilbert, D. T., & Trope, Y. (2002). Reflection and reflexion: A social cognitive neuroscience approach to attributional inference. *Advances in Experimental Social Psychology, 34*, 199–249.

Liebhart, J. L., & Gunther, A. C. (2006). *Testing mechanisms for the hostile media effect*. Paper presented during the annual meeting of the International Communication Association, Dresden, Germany.

Lippmann, W. (1922). *Public opinion.* New York: Macmillan.

Liscio, R. E., & Hayes, D. (2010). *Divided by information: The partisan polarization of political knowledge.* Paper presented at the annual meeting of the American Political Science Association, Washington, D.C.

Little D. (1991). *Varieties of social explanation: An introduction to the philosophy of social science*. Boulder, CO: Westview.

Lodge, M., & Taber, C. S. (2005). The automaticity of affect for political leaders, groups, and issues: An experimental test of the hog cognition hypothesis. *Political Psychology, 26*, 455-482.

London, B., & Robinson, T. D. (1989). The effect of international dependence on income inequality and political violence. *American Sociological Review, 54*, 305-308.

Lopes, D., Vala, J., & Garcia-Marques, L. (2007). Social validation of everyday knowledge: Heterogeneity and consensus functionality. *Group Dynamics: Theory, Research, and Practice, 11*, 223-239.

Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology, 37*, 2098-2109.

Lorge I. (1936). Prestige, suggestion, and attitudes. *Journal of Social Psychology, 7*, 386-402.

Lowrey, W. (2004). Media dependency during a large-scale social disruption: The case of September 11. *Mass Communication & Society, 7*, 339-357.

Lui, L., & Standing, L. (1989). Communicator credibility: Trustworthiness defeats expertness. *Social Behavior and Personality, 17*, 219-221.

Maheswaran, D., & Chaiken, S. (1991). Promoting systematic processing in low-motivation settings: Effect of incongruent information on processing and judgment. *Journal of Personality and Social Psychology, 61*, 13-25.

Maheswaran, D., Mackie, D. M., & Chaiken, S. (1992). Brand name as a heuristic cue: The effects of task importance and expectancy confirmation on consumer judgments. *Journal of Consumer Psychology, 1*, 317-336.

Mahoney, M. J. (1977). Publications prejudices: An experimental study of confirmatory bias in the peer review system. *Cognitive Therapy and Research, 1*, 161-175.

Malka, A., Krosnick, J. A., & Langer, G. (2009). The association of knowledge with concern about global warming: Trusted information sources shape public thinking. *Risk Analysis, 29*, 633-647.

Manusov, V., & Spitzberg, B. H. (2008). Attributes of attribution theory: Finding good cause in the search for theory. In D. O. Braithwaite & L. A. Baxter (Eds.), *Engaging theories in interpersonal communication* (pp. 37-49). Thousand Oaks, CA: Sage Publications.

Marcus, G. E. (2008). Different situations, different responses: Threat, partisanship, risk, and deliberation. *Critical Review, 20*, 75-89.

Marcus, G. E., Neuman, W. R. & MacKuen, M. (2000). *Affective intelligence and political judgment.* Chicago: University of Chicago Press.

Maraniss, D. A. (1981, April 18). Post reporter's Pulitzer Prize is withdrawn. *Washington Post*, A1.

Matheson, K., & Dursun, S. (2001). Social identity precursors to the hostile media phenomenon: Partisan perceptions of coverage of the Bosnian Conflict. *Group Processes & Intergroup Relations, 4* (2), 116-125.

McArthur, L. A. (1972). The how and what of why: Some determinants and consequences of causal attribution. *Journal of Personality and Social Psychology, 22*, 171-193.

McCombs, M., & Shaw, D. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly, 36*, 176-187.

McCright, A. M., & Dunlap, R. (2010). Anti-reflexivity: The American conservative movement's success in undermining climate science and policy. *Theory, Culture & Society, 27*, 100-133.

McCright, A. M., & Dunlap, R. (2011a). The politicization of climate change and polarization in the American public's views of global warming, 2001-2010. *Sociological Quarterly, 52*, 155-194.

McCright, A. M., & Dunlap, R. (2011b). Cool dudes: The denial of climate change among conservative white males in the United States. *Global Environmental Change, 21*, 1163-1172.

McGarty, C., Yzerbyt, V.Y.m Spears, R. (Eds.) (2002). *Stereotypes as explanations: The formation of meaningful beliefs about social groups.* New York: Cambridge University Press.

McGinnies, E. (1973). Initial attitude, source credibility, and involvement as factors in persuasion. *Journal of Experimental Social Psychology, 9*, 285-96.

McGinnies, E., & Ward, C. D. (1980). Better liked than right: Trustworthiness and expertise as factors in credibility. *Personality and Social Psychology Bulletin, 6*, 467-472.

McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Volume II, pp. 233-346). New York: Random House.

McKnight, D. (2010). A change in the climate? The journalism of opinion at News Corporation. *Journalism, 11*, 693-706.

McPeek, R. W., & Edwards, J. D. (1975). Expectancy disconfirmation and attitude change. *Journal of Social Psychology, 96*, 193-208.

Metzger, M. J., Flanagin, A. J., Eyal, K., Lemus, D. R., & McCann, R. (2003). Credibility in the 21st century: Integrating perspectives on source, message, and media credibility in the contemporary media environment. In P. Kalbfleisch (Ed.*), Communication Yearbook 27* (pp. 293-335). Mahwah, NJ: Lawrence Erlbaum.

Michaels, W. B., Rosenthal, B. G., & De Camp, M. A. (1949). An experimental investigation of prestige-suggestion for two types of literary material. *Journal of Psychology, 28*, 303-223.

Miller, A. G., McHoskey, J. W., Bane, C. M., & Dowd, T. G. (1993). The attitude polarization phenomenon: Role of response measure, attitude extremity, and behavioral consequences of reported attitude change. *Journal of Personality and Social Psychology, 64*, 561-574.

Miller, J. D. (2004). Public understanding of, and attitudes toward, scientific research: What we know and what we need to know. *Public Understanding of Science, 13*, 273-294.

Miller, G. R., & Baseheart, J. (1969). Source trustworthiness, opinionated statements, and response to persuasive communication. *Speech Monographs, 36*, 1-7.

Miller, R. S., & Leary, M. R. (1992). Social sources and interactive functions of emotion: The case of embarrassment. In M. S. Clark (Ed.), *Emotion and social behavior* (pp. 202-221). Newbury Park, CA: Sage.

Mills, J., & Harvey, J. (1972). Opinion change as a function of when information about the communicator is received and whether he is attractive or expert. *Journal of Personality and Social Psychology, 21*, 52-55.

Mindich, D. (1997). *Just the facts: How "objectivity" came to define American journalism*. New York: New York University Press.

Morgan, G. S., Mullen, E., & Skitka, L. J. (2010). When values and attributions collide: Liberals' and conservatives' values motivate attributions for alleged misdeeds. *Personality and Social Psychology Bullentin, 36*, 1241-1254.

Morris, J. S. (2005). The Fox News Factor. *Harvard International Journal of Press/Politics, 10*, 56-79.

Morris. J. S. (2007). Slanted objectivity? Perceived media bias, cable news exposure, and political attitudes. *Social Science Quarterly, 88*, 707-728.

Morris, J. S., & Francia, P. L. (2010). Cable news, public opinion, and the 2004 partyconventions. *Political Research Quarterly, 63*, 834-849.

Muller, R. A. (2012, July, 28). The Conversion of a Climate-Change Skeptic. New York Times. Retrieved from: http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html?pagewanted=all&_r=0

Nan, X. (2009). The influence of source credibility on attitude certainty: Exploring the moderating effects of timing of source identification and individual need for cognition. *Psychology & Marketing, 26*, 321-332.

National Snow and Ice Data Center. (2013). All about sea ice. Retrieved from: http://nsidc.org/cryosphere/seaice/characteristics/difference.html

Neely, F. (2010). *Gender and three dimensions of party identification*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Nelkin, D. (1995). *Selling science: How the press cover science and technology*. New York: W. H. Freeman and Company.

Neuman, W. R. (1986). *The paradox of mass politics: Knowledge and opinion in the American electorate*. Cambridge, MA: Harvard University Press.

Newman, L. S. (1999). Motivated cognition and self-deception. *Psychological Inquiry, 10*, 59-63.

Newcombe, R. D., & Rutter, D. R. (1982a). Ten reasons why ANOVA theory and research fail to explain attribution processes: 1. Conceptual problems. *Current Psychological Reviews, 2*, 95-108.

Newcombe, R. D., & Rutter, D. R. (1982b). Ten reasons why ANOVA theory and research fail to explain attribution processes: 2. Methodological problems. *Current Psychological Reviews, 2*, 153-170.

Niemi, R. G., & Jennings, M. K. (1991). Issues and inheritance in the formation of party identification. *American Political Science Review, 35*, 970-988.

Nisbet, M. C. (2009, March–April). Communicating climate change: Why frames matter for public engagement. *Environment*. Retrieved from: http://www.environmentmagazine.org/March-April%202009/Nisbet-full.html

Norman, J. (2011, September 11). 9/11: Eleven years later. *CBS News*. Retrieved from: http://www.cbsnews.com/stories/2011/09/11/national/main20104377.shtml

Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behavior, 32*, 303-330.

Nyhan, B., & Reifler, J. (2011). *Opening the political mind? The effects of self-affirmation and graphical information on factual misperceptions*. Paper presented at the annual meeting for the Midwest Political Science Association.

O'Keefe, D. J. (1987). The persuasive effects of delaying identification of high- and low-credibility communicators: A meta-analytic review. *Central States Speech Journal, 38*, 65-72.

O'Keefe, D. J. (2003). Message properties, mediating states, and manipulation checks: Claims, evidence, and data analysis in experimental persuasive message effects research. *Communication Theory, 13*, 251-274.

Oreskes, N. (2007). The scientific consensus on climate change: How do we know we're not wrong? In J. F. C. DiMento & P. Doughman (Eds.), *Climate change: What it means for us, our children, and our grandchildren* (pp. 65-100). Cambridge, MA: MIT Press.

Osgood, C. E., & Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review, 62*, 42-55.

Paik, H., & Comstock, G. (1994). The effects of television violence on antisocial behavior: A meta-analysis. *Communication Research, 21*, 516–546.

Painter, J., & Ashe, T. (2012). Cross-national comparison of the presence of climate scepticism in the print media in six countries, 2007-10. *Environmental Research Letters, 7*, 1-8.

Palmgreen, P., & Clarke, P. (1977). Agenda-setting with local and national issues. *Communication Research, 1977*, 425-452.

Paul, B., Salwen, M. B., & Dupagne, M. (2000). The third-person effect: A meta-analysis of the perceptual hypothesis. *Mass Communication & Society, 3*, 57-85.

Paul, R. (2009, November 4). Fox Business. Retrieved from: http://www.ronpaul.com/2009-11-04/ron-paul-on-fox-business-its-business-as-usual-in-washington

Parker-Stephen, E. (2012). *Tides of disagreement: How reality facilitates (and inhibits) partisan public opinion*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Peeters, G., & Czapinski, J. (1990). Positive-negative asymmetry in evaluations: The distinction between affective and informational negativity effects. *European Review of Social Psychology, 1*, 33-60.

Peng, Z. (2005). *Ideology, source, news content, and perception of media bias and credibility: An empirical study on hostile media effect*. Unpublished doctoral dissertation, University of Missouri-Columbia.

Perloff, R. M. (1989). Ego-involvement and the third person effect of televised news coverage. *Communication Research, 16*, 236-262.

Perse, E. (2007). Meta-analysis: Demonstrating the power of mass communication. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 467-488). Mahwah, NJ: Lawrence Erlbaum.

Petrocik, J. R. (1996). Issue ownership in presidential elections, with a 1980 case study. *American Journal of Political Science, 40*, 825-850.

Petty, R. E., & Cacioppo, J. T. (1979b). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology, 37*, 1915-1926.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change.* New York: Springer-Verlag.

Petty, R. E., Fleming, M. A., Priester, J. R., & Feinstein, A. H. (2001). Individual versus group interest violation: Surprise as a determinant of argument scrutiny and persuasion. *Social Cognition, 19*, 418-442.

Pew Hispanic Center. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Washington, DC: Pew Research Center.

Pew Research Center for the People & the Press. (2009, January 22). Environment, immigration, health care slip down the list: Economy, jobs trump all other policy priorities in 2009. Retrieved from: http://people-press.org/reports/pdf/485.pdf

Pew Research Center for the People & the Press. (2012, October 15). More say there is solid evidence of global warming. Retrieved from: http://www.people-press.org/2012/10/15/more-say-there-is-solid-evidence-of-global-warming/

Pfau, M. (2007). What's a meta-analysis. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 455-464). Mahwah, NJ: Lawrence Erlbaum.

Pittman, T. S., & Zeigler, K. R. (2007). Basic human needs. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social Psychology: Handbook of basic principles* (2nd edition, pp. 473-489). New York: Guilford Press.

Polling Report. (2012a). President Obama and the Obama Administration . Retrieved from: http://www.pollingreport.com/obama_ad4.htm

Polling Report. (2012b). President Obama and the Obama Administration Retrieved from: http://www.pollingreport.com/obama_ad6.htm

Polling Report. (2012c). Religion. Retrieved from: http://www.pollingreport.com/religion.htm

Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology, 34,* 243-281.

Powell, C. (2003). U.S. Secretary of State Colin Powell addresses the U.N. Security Council. Retrieved from: http://www.whitehouse.gov/news/releases/2003/02/20030205-1.html

Prasad, M., Perrin, A. J., Bezila, K., Homan, S. G., Kindleberger, K., Manturuk, K., & Smith Powers, A. (2009). "There must be a reason": Osama, Saddam, and inferred justication." *Sociological Inquiry, 79,* 142-162.

Pratto, F., & John, O. P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology, 40,* 31-38.

Priester, J. R., & Petty, R. E. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. *Personality and Social Psychology Bulletin, 21,* 637-654.

Priester, J. R., & Petty, R. E. (2003). The influence of spokesperson trustworthiness on message elaboration, attitude strength, and advertising effectiveness. *Journal of Consumer Psychology, 13,* 408-421.

Prior, M., & Lupia, A. (2008). Money, time, and political knowledge: Distinguishing quick recall and political learning skills. *American Journal of Political Science, 52,* 169-183.

Public Policy Polling. (2012, March 12). Very close race in both Alabama and Mississippi. Retrieved from: http://www.publicpolicypolling.com/pdf/2011/PPP_Release_SouthernSwing_312.pdf

Pyszczynski, T., & Greenberg, J. (1981). Role of disconfirmed expectancies in the instigation of attributional processing. *Journal of Personality and Social Psychology, 40,* 31-38.

Quinn, K. A., Macrae, C. N., & Bodenhausen, G. V. (2007). Stereotyping and impression formation: How categorical thinking shapers person perception. In M. A. Hogg & J. Cooper (Eds.), *SAGE Handbook of Social Psychology*. Retrieved from: http://www.sage-ereference.com/hdbk_socpsych/Article_n4.html

Reid, S. A. (2012). A self-categorization explanation for the hostile media effect. *Journal of Communication, 62,* 381-399.

Reiss, J. (2007). Do we need mechanisms in the social sciences? *Philosophy of the Social Sciences, 37,* 163-184.

Rhine, R., & Severance, L. (1970). Ego-involvement, discrepancy, source credibility, and attitude change. *Journal of Personality and Social Psychology, 16*, 175-190.

Richardson, J. D., Huddy, W. P., & Morgan, S. M. (2008). The hostile media effect, biased assimilation, and perceptions of a presidential debate. *Journal of Applied Social Psychology, 38*, 1255-1270.

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review, 10*, 336-353.

Roberts, D. F., & Leifer, A. D. (1975). Actions speak louder than words—sometimes. *Human Communication Research, 1*, 257-264.

Rodriguez, A. (2011, May 31). Bin Laden raid gets little credence in conspiracy-minded Pakistan. *Los Angeles Times*. Retrieved from: articles.latimes.com/2011/may/31/world/la-fg-pakistan-conspiracies-20110601

Roese, N. J., & Sherman, J. W. (2007). Expectancy. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social Psychology: Handbook of basic principles* (2nd edition, pp. 91-115). New York: Guilford Press.

Ross, J. A. (1973). Influence of expert and peer upon negro mothers of low socioeconomic status. *Journal of Social Psychology, 89*, 70-84.

Ross, M., & Fletcher, G. J. O. (1985). Attribution and social perception. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Volume II, pp. 73-122). New York: Random House.

Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality, 35*, 615-665.

Rouner, D., Slater, M. D., & Buddenbaum, J. M. (1999). How perceptions of news bias in news sources relate to beliefs about media bias. *Newspaper Research Journal, 20*, 41-51.

Roy, O., Traynor, K., & Rumsey, J. (2011). *American consumer bias: Value Reinforcing media product in the context of the Iraq War*. Presented at the Annual Meeting of the Midwest Political Science Association, Chicago.

Ryan, M. (2001). Journalism ethics, objectivity, existential Journalism, standpoint epistemology, and public journalism. *Journal of Mass Media Ethics, 16*, 3-22.

Saadi, M., & Farnsworth, P. R. (1934). The degrees of acceptance of dogmatic statements and preferences for their supposed makers. *Journal of Abnormal and Social Psychology, 29*, 143-150.

Sabini, J., & Silver, M. (1980). Baseball and hot sauce: A critique of some attributional treatments of evaluation. *Journal for the Theory of Social Behaviour, 10*, 83-95.

Salmon, C. T. (1986).Perspectives on involvement in consumer and communication research. In B. Dervin & M. J.Voigt (Eds.), *Progress in communication sciences* (pp. 243-268). Beverly Hills, CA: Sage.

Santorum, R. J. (2009) Rush Limbaugh. Retrieved from: http://thinkprogress.org/climate/2011/06/09/241464/rabid-climate-zombie-santorum-tells-limbaugh-that-global-warming-is-junk-science/

Santorum, R. J. (2011, June 23). Glenn Beck. Retrieved from: http://thinkprogress.org/climate/2011/06/24/253389/santorum-theres-no-such-thing-as-global-warming/?mobile=nc

Schachter, S. (1964). The interaction of cognitive and physiological determinants of emotional state. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 1). New York: Academic Press.

Schmitt, K. M., Gunther, A. C., & Liebhart, J. L. (2004). Why partisans see mass media as biased. *Communication Research, 31*, 623-641.

Schmitt-Beck, R. (1994). Intermediation environments of West German and East German voters: Interpersonal communication and mass communication during the first all-German election campaign. *European Journal of Communication, 9*, 381-419.

Schoenfeld, A. C., Meier, R. F., & Griffin, R. J. (1979). Constructing a social problem: The press and the environment. *Social Problems, 27*, 38-61.

Schul, Y., & Burnstein, E. (1998). Suspicion and discounting: Ignoring invalid information in an uncertain environment. In J. M. Golding & C. MacLeod (Eds.), *Intentional forgetting: Interdisciplinary approaches* (pp. 321–348). Hillsdale, NJ: Erlbaum.

Schwarz, R. (2008). Events are what we make of them. In T. F. Shipley & J. M. Zacks, *Understanding events: From perception to action* (pp. 54-62). Oxford University Press: New York, NY.

Sears, D. O., & Funk, C. L. (1999). Evidence of the long-term persistence of adults' political predispositions. *Journal of Politics, 61*, 1-28.

Semin, G. R. (1980). A gloss on attribution theory. *British Journal of Social and Clinical Psychology, 19*, 291-300.

Shapiro, R. Y., & Bloch-Elkon, Y. (2008). Do the facts speak for themselves? Partisan disagreement as a challenge to democratic competence. *Critical Review, 20*, 115-139.

Shaw, M. E., & Sulzer, J. L. (1964). An empirical test of Heider's levels in attribution of responsibility. *Journal of Abnormal and Social Psychology, 69*, 39-46.

Sherif, C. W., & Jackman, N. R. (1966). Judgments of truth by participants in collective controversy. *Public Opinion Quarterly, 30*, 173-186.

Sherif, C. W., Sherif, M., & Nebergall, R. E. (1965). *Attitude and attitude change: The social judgment-involvement approach.* Philadelphia: Saunders.

Sherif, M. (1935). An experimental study of stereotypes. *Journal of Abnormal and Social Psychology, 29*, 371-375.

Sherif, M., & Cantril, H. (1947). *The psychology of ego involvements: Social attitudes and identifications*. New York: Wiley.

Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change.* New Haven: Yale University Press.

Sherif, M., & Sherif, C. W. (1967). Attitude as the individual's own categories: The social judgement-involvement approach to attitude and attitude change. In.C. W. Sherif & M. Sherif (Eds.), *Attitude, ego-involvement, and change* (pp. 88-104). New York: John Wiley & Sons.

Sherif, M., Taub, D., & Hovland, C. I. (1958). Assimilation and contrast effects of anchoring stimuli on judgments. *Journal of Experimental Psychology, 55*, 150-155.

Sherman, S. J., Crawford, M. T., Hamilton, D. L., & Garcia-Marques, L. (2003). Social inferences and social memory: The interplay between systems. In M. A. Hogg & J. Cooper (Eds.), *The SAGE handbook of social psychology* (pp. 65-86). Thousand Oaks, CA: SAGE.

Shoemaker, P., & Reese, S. (1991). *Mediating the message: Theories of influences on mass media content*. New York: Longman.

Sides, J. (2011). *What's so amazing about really deep thoughts? Cognitive style and political misperception.* Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Simons, H. W., Berkowitz, N. N., & Moyer, R. J. (1970). Similarity, credibility, and attitude change: A review and a theory. *Psychological Bulletin, 73*, 1-16.

Simmons, J. L. (1965). Tolerance of divergent attitudes. *Social forces, 43*, 347-352.

Slavin, B., & Diamond, J. (2003, February 6). Case is stronger when 'biggest dove' makes it. *USA Today*, 10A.

Smith, G. R. (2009). *Are perceptions of media bias an effective shortcut? Why people perceive bias and why it matters.* Unpublished dissertation, Washington State University.

Smith, M. F., & Hunt, J. M. (1987). Disconfirmation of expectations: A method for enhancing the effectiveness of costumer communications. *Journal of Personal Selling and Sales Management, 7*, 9-19.

Smith, N., & Leiserowitz, A. (2012). The rise of global warming skepticism: Exploring affective image associations in the United States over time. *Risk Analysis, 32*, 1021-1032.

Smithson, M. (2001). Correct confidence intervals for various regression effect sizes and parameters: The importance of noncentral distributions in computing intervals. *Educational and Psychological Measurement, 61*, 605-632.

Smithson, M. (2003). *Confidence intervals*. Thousand Oaks, CA: SAGE Publications.

Sniderman, P. M., & Bullock, J. (2004). A consistency theory of public opinion and political choice: The hypothesis of menu dependence. In W. E. Saris, & P. M. Sniderman (Eds.), *Studies in public opinion: Attitudes, nonattitudes, measurement error, and change.* Princeton, NJ: Princeton University Press.

Spitzberg, B. H. (2001). The status of attribution theory qua theory in personal relationships. In V.Manusov & J. H. Harvey (Eds.), *Attribution, communication behavior, and close relationships* (pp. 353–371). Cambridge, UK: Cambridge University Press.

Stamm, K. R., Clark, F., & Eblecas, P. R. (2000). Mass communication and public understanding of environmental problems: The case of global warming. *Public understanding of Science, 9*, 219-237.

Sternthal, B., Philips, L. W., & Dholakia, R. (1978). The persuasive effect of source credibility: A situational analysis. *Public Opinion Quarterly, 42*, 285-314.

Sternthal, B., Dholakia, R., & Leavitt, C. (1978). The persuasive effect of source credibility: Tests of cognitive response. *Journal of Consumer Research, 4*, 252-260.

Stimson, J. A. (2002). *The dimensionality of issues in two party politics*. Paper presented at the Conference on Elections, New York, NY.

Stoker, K. (1995) Existential objectivity: Freeing journalists to be ethical. *Journal of Media Ethics, 10*, 5-22.

Stone, D. F. (2010). Ideological media bias. *Journal of Economic Behavior and Organization, 78*, 56–271.

Stonecash, J. M. (2010). Changing American Political parties. In J. M. Stonecash (Ed.), *New directions in American political parties* (pp. 3-10). New York, NY: Routledge.

Sun, Y., Pan, Z., & Shen, L. (2008). Understanding the third-person perception: Evidence from a meta-analysis. *Journal of Communication, 58*, 280-300.

Tabachnick, B. G., & Fidell, L. S. (1983). *Using multivariate statistics*. New York: Harper & Row.

Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science, 50*, 755-769.

Taber, C. S., Cann, D., & Kucsova, S. (2009). The motivated processing political arguments. *Political Behavior, 31*, 137-155.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge: Cambridge University Press.

Taylor, S. E. (1981). A categorization approach to stereotyping. In D. L. Hamiton (Ed.), *Cognitive processes in stereotyping and intergroup behavior* (pp. 83-114). Hillsdale, NJ: Erlbaum.

Thernstrom, S. & Thernstrom, A. (1997). *America's in Black and White: One nation, indivisible*. New York: Touchstone.

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

Tormala, Z. L., Briñol, P., & Petty, R. E. (2006). When credibility attacks: The reverse impact of source credibility on persuasion. *Journal of Experimental Social Psychology, 42,* 684-691.

Tsfati, Y. (2003). Media skepticism and climate of opinion perception. *International Journal of Public Opinion Research, 15,* 1, 65-82.

Tsfati, Y. (2007). Hostile media perceptions, presumed media influence, and minority alienation: The case of Arabs in Israel. *Journal of Communication, 57,* 632-651.

Tsfati, Y., & Cappella, J. N. (2003). Do people watch what they do not trust? Exploring the association between news media skepticism and exposure. *Communication Research, 30,* 5, 504-529.

Tsfati, Y., & Cohen, J. (2005). Democratic consequences of hostile media perceptions: The case of Gaza settlers. *Harvard International Journal of Press/Politics, 10,* 28-51.

Tuchman, G. (1972). Objectivity as strategic ritual: An examination of newsmen's notions of objectivity. *American Journal of Sociology, 77,* 660-679.

Tuma, R. M. (2013). Media psychology and its history. In K. E. Dill (Ed.), *The Oxford handbook of media psychology* (pp. 62-74). New York: Oxford University Press.

Turner, J. (2007). The messenger overwhelming the message: Ideological cues and perceptions of bias in television news. *Political Behavior, 29,* 441-464.

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. Lawler (Ed.), *Advances in group processes: Theory and research* (Vol.2, pp. 77-271). Greenwich, CT: JAI Press.

Uncher, Z. (2013, February 8). Are polar bears really disappearing? *Wall Street Journal*, C3.

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,* 577-585.

VanderKlippe, N. (2004, December 29). A polar surprise: Bear population growing. *National Post,* A5.

Vergano, D. (2012, November 5). Sandy, rising seas fuel future climate concerns. *USA Today.* Accessed online: http://www.usatoday.com/story/tech/columnist/vergano/2012/11/03/bloomberg-climate-sandy-sea/1677463/

Wagner, M. W. (2007). The utility of staying on message: Competing partisan frames and public awareness of elite differences on political issues. *The Forum, 3*, i-18

Walster, E., Aronson, E., & Abrahams, D. (1966). On increasing the persuasiveness of a low prestige communicator. *Journal of Experimental Social Psychology, 2*, 325-342.

Wanta, W., & Ghanem, S. (2007). Effects of agenda setting. In R. W. Preiss, B. M. Gayle, N. Burrell, M. Allen, & J. Bryant (Eds.), *Mass media effects research: Advances through meta-analysis* (pp. 37-52). Mahwah, NJ: Lawrence Erlbaum.

Ward, C. D., & McGinnies, E. (1974). Persuasive effects of early and late mention of credible and noncredible sources. *Journal of Psychology, 86*, 17-23.

Warren, I. D. (1969). The effect of credibility in sources of testimony on audience attitudes toward speaker and message. *Speech Monographs, 36*, 456-458.

Wasserman, T., & Kassinove, H. (1976). Effects of type of recommendation, attire, and perceived expertise on parental compliance. *Journal of Social Psychology, 99,* 42-50.

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,* 144-175.

Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology, 71,* 3-25.

Weingart, P., Engels, A., & Pansegrau, P. (2000). Risks of communication: Siscourses on climate change in science, politics, and the mass media. *Public Understanding of Science, 9*, 261–283.

Whittaker, J. O. (1967). Resolution of the communication discrepancy issue in attitude change. In C. Sherif & M. Sherif (Eds.), *Attitude, ego-involvement, and change.* New York: Wiley.

Wiener, J. L., & Mowen, J.C. (1986). Source credibility: On the independent effects of trust and expertise. *Advances in Consumer Research, 13*, 306-310.

Wilder, D. A. (1993a). The role of anxiety in facilitating stereotypic judgments of outgroup behavior. In D. M. Mackie & D. L. Hamilton (Eds.) , *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 87-111). San Diego, C.A.: Academic Press.

Wilder, D. A. (1993b). Freezing intergroup evaluations: Anxiety fosters resistance to counterstereotypic information. In M. A. Hogg & D. Abrams (Eds.), *Group motivation: Social psychological perspectives* (pp. 68–86). New York: Harvester/Wheatsheaf.

Wilder, D. A., & Shapiro, P. N. (1984). Role of out-group cues in determining social identity. Journal of Personality and Social Psychology, 47, 342-348.

Wilder, D. A., & Shapiro, P. N. (1989a). Role of competition-induced anxiety in limiting the beneficial impact of positive behavior by an out-group member. *Journal of Personality and Social Psychology, 56*, 60-69.

Wilder, D. A., & Shapiro, P. N. (1989b). Effects of anxiety on impression formation in a group context: An anxiety-assimilation hypothesis. *Journal of Experimental Social Psychology, 25*, 481-499.

Wilder, D. A., & Shapiro, P. (1991). Facilitation of outgroup stereotypes by enhanced ingroup identity. *Journal of Experimental Social Psychology, 27*, 431–452.

Wilder, D. A., & Simon, A. F. (2008). Affect as a cause of intergroup bias. In R. Brown & S. L. Gaertner (Eds)., *Blackwell handbook of social psychology: Intergroup processes* (pp. 153-172). Oxford, UK: Blackwell Publishers.

Wilkinson, I (2001). *Anxiety in a risk society: Health, risk and society*. London: Routledge.

Wilson, J. M., & Gronke, P. (2000). Concordance and projection in citizen perceptions of congressional roll-call voting. *Legislative Studies Quarterly, 25*, 445-467.

Wilson, E. J., & Sherrell, D. L. (1993). Source effects in communication and persuasion research: A meta-analysis of effect size. *Journal of the Academy of Marketing Science, 21*, 101-112.

Wong, P. T. P., & Weiner, B. (1981). When people ask "why" questions, and the heuristics of attributional search. *Journal of Personality and Social Psychology, 40*, 650-663.

Wood, B. D., & Vedlitz, A. (2007). Issue definition, information processing, and the politics of global warming. *American Journal of Political Science, 51*, 552-568.

Wood, W., & Eagly, A. H. (1981). Stages in the analysis of persuasive messages: The role of causal attributions and message comprehension. *Journal of Personality and Social Psychology, 40*, 246-259.

Wood, W., & Kallgren, C. A. (1988). Communicator attributes and persuasion: Recipients' access to attitude-relevant information in memory. *Personality and Social Psychology Bulletin, 14*, 172-182.

Woodside, A. G., & Davenport, W. (1974). The effect of salesman similarity and expertise on consumer purchasing behavior. *Journal of Marketing Research, 11*, 197-202.

Wyer, R. S., & Radvansky, G. A. (1999). The comprehension and validation of social information. *Psychological Review, 106*, 89-118.

Xu, J., & Gonzebach, W. J. (2008). Does a perceptual discrepancy lead to action? A meta-analysis of the behavioral component of the third-person effect. *International Journal of Public Opinion Research, 20*, 375-385.

Yan, L., Tay, M., Yap, P., Hao, X., Chia, S., Detenber, B., & Lee, W. (2007, May). *Personal involvement and perception of press credibility*. Paper presented at the International Communication Association annual conference, San Francisco, CA.

Zaller, J. R. (1992). *The nature and origins of mass opinion*. New York: Cambridge University Press.

Zanna, M. P., & Del Vecchio, S. M. (1973). Perceived credibility of television news: A matter of viewerl's attitudes and the position taken by the media. *European Journal of Social Psychology, 3,* 213-216.

Zarefsky, D. (2007). Making the case for war: Colin Powell at the United Nations. *Rhetoric & Public Affairs. 10,* 275-302. doi:10.1353/rap.2007.0043

Zehr, S.C. (2000). Public representations of scientific uncertainty about global climate change. *Public Understanding of Science, 9,* 85–103.

Zeldes, G. A., Fico, F., Carpenter, S., & Diddi, A. (2008). Partisan balance and bias in network coverage of the 2000 and 2004 presidential elections. *Journal of Broadcasting & Electronic Media, 52,* 563-580.

Zhao, X. (2009). Media use and global warming perceptions. *Communication Research, 36,* 698-723.

Zhao, X., Leiserowitz, A. A., Maibach, E. W., & Roser-Renouf, C. (2011). Attention to science/environment news positively predicts and attention to political news negatively predicts global warming risk perceptions and policy support. *Journal of Communication, 61,* 713-731.

Zia, A., & Todd, A. M. (2010). Evaluating the effects of ideology on public understanding of climate change science: How to improve communication across ideological divides? *Public understanding of Science, 19,* 743-761.

Ziegler, R., Diehl, M., & Ruther, A. (2002). Multiple source characteristics and persuasion: Source inconsistency as a determinant of message scrutiny. *Personality Social Psychology Bulletin, 28,* 496-508.

Zimbardo, P. G. (1960). Involvement and communication discrepancy as determinants of opinion conformity. *Journal of Abnormal and Social Psychology, 60,* 86-94.

Zuckerman, M. (1977). On the endogenous-exogenous partition in attribution theory. *Personality and Social Psychology Bulletin, 3,* 387-399.

Zukin, C., & Snyder, R. (1984). Passive learning: When the media environment is the message. *Public Opinion Quarterly, 48,* 629-638.