Feeling is Believing? How emotions influence the effectiveness of political fact-checking messages

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

Brian Edward Weeks

Graduate Program in Communication

The Ohio State University

2014

Committee:

R. Kelly Garrett, Advisor

David Ewoldsen

R. Lance Holbert

Emily Moyer-Gusé
Copyrighted by

Brian Edward Weeks

2014
Abstract

Political misperceptions are a complex problem for scholars, journalists, and politicians. Despite ubiquitous fact-checking and corrective messages online and in the media, polls show citizens are consistently misinformed about a variety of political issues. To date, most explanations for the failure of these messages to correct false beliefs have centered only on partisan-based information processing strategies, which suggest citizens are more likely to believe a claim that reflects well on their preferred party while rejecting those that reflect poorly. However, I argue there are several reasons to suspect this approach by itself is insufficient for explaining and predicting why and how fact-checking messages often fail. In this dissertation I build on affective intelligence theory and propose a theoretical model that outlines how citizens’ unique emotional states interact with their party affiliation to influence belief in political misperceptions. I argue the experience of two discrete emotions of the same valence, anxiety and anger, can have dramatically different effects on citizens’ beliefs about politics by determining whether they consider misinformation in either a partisan or more deliberative fashion. The unique influence of anxiety and anger is tested in two experimental studies that manipulate emotional states and show how these discrete emotions come to have contrasting effects on people’s beliefs about contemporary political issues. Study 1 tests whether emotions unrelated to the target of the misperception can influence belief, while
Study 2 examines if emotions stemming directly from the issue of interest affect beliefs. These studies provide evidence that anger facilitates partisan, motivated processing of inaccurate political claims, which results in beliefs that are consistent with prior attitudes. Anxiety contributes to more deliberative consideration of the content of the claims and less reliance on partisanship, which results in beliefs based more on the nature of the evidence at hand. The results of the study suggest that much of the difficulty in fact-checking previously attributed to partisan motivated reasoning may be a result of the discrete emotion anger, specifically. Based on these findings I argue that studies of political misinformation should examine the interactions between citizens’ discrete emotional states, their partisanship, and the nature of the message in order to better understand the underlying theoretical mechanism driving false beliefs.
Acknowledgments

I have had the good fortune of working with several smart, kind, and supportive people during my time at Ohio State. I am particularly grateful to Kelly Garrett and Lance Holbert for their guidance and encouragement over the last four years. I truly cannot imagine having better exemplars of a dedicated academic mentor. Both have been incredibly generous with their time and resources, given me the space to develop on my own, and been there when I needed them. Kelly’s insistence to find my own voice and to not settle for anything less than my best has benefitted me tremendously. I am also deeply indebted to Kelly for providing the funding to make this project possible. I have profited greatly from Lance’s wisdom and advice. No matter the situation, he seems to have the right answer and has taught me to see the big picture in all of this. His insights will no doubt be valuable as I move forward in my career. I am also thankful to my other committee members, Dave Ewoldsen and Emily Moyer-Gusé. Dave’s devotion to the graduate students in this department is both commendable and inspiring. Emily’s thoughtful suggestions have expanded the way I think about my research topic and helped me identify my work’s broader theme. I sincerely appreciate my entire committee’s help with this dissertation.

My parents, Edward and Debra, deserve immense credit for helping me get to where I am today. Through triumphs and failures they have been the one consistency in
my life. Their love and support is unwavering and they have always encouraged me to pursue my interests. It is difficult to express how thankful I am for the endless sacrifices they have made to help me achieve my goals. For this and so much more, I am forever grateful. I would also like to thank my sister, Kirsten, for always being there as well.

I have also been fortunate to form some terrific friendships over the past few years. Dave DeAndrea and Sarah Esralew are always available to listen, offer advice, and provide some much-needed respite from work. I also thank Jen Tyrawski, Michael Beam, Brandon Van der Heide, and Steve Kleinman for their friendship. Most importantly, I must thank Ariel Hasell for providing me so much happiness over the past year. Her comfort, reassurance, and confidence in me made any challenge much easier.

Finally, this dissertation was supported by the National Science Foundation under Grant No. IIS-1149599, awarded to Kelly Garrett. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.
Vita

2000 ......................................................... Washington High School, Washington, IA
2005 .......................................................... B.A. Journalism and Mass Communication;
                                          Political Science, University of Wisconsin-
                                          Madison
2010 .......................................................... M.A. Mass Communication, University of
                                          Minnesota-Twin Cities

Publications

  presidential election from a diversity of explanatory principles: Understanding,
  consistency, and hedonism. American Behavioral Scientist, 57, 1663-1687.
Weeks, B.E., & Holbert, R.L. (2013). Predicting dissemination of news content in social
  media: A focus on reception, friending, and partisanship. Journalism & Mass
  Communication Quarterly, 90, 212-232.


**Fields of Study**

Major Field: Communication
Table of Contents

Abstract ................................................................................................................................. ii

Acknowledgments ................................................................................................................ iv

Vita ........................................................................................................................................ vi

List of Tables ........................................................................................................................ xi

List of Figures ......................................................................................................................... xii

Chapter 1: Introduction ......................................................................................................... 1

Outline .................................................................................................................................. 9

Chapter 2: Theory ................................................................................................................... 11

Defining Misperceptions ....................................................................................................... 11

Political Rumors ................................................................................................................... 14

Attitudes, Beliefs, and Misperceptions .................................................................................. 15

The Psychology of Political Misperceptions .......................................................................... 18

Moving Beyond Partisan Motivated Reasoning .................................................................. 26

Confounding Attitude and Affect .......................................................................................... 28

Measuring Affect, Emotions, and Attitudes ......................................................................... 30

Discrete Emotions and Political Misperceptions .................................................................. 32
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Appraisal Theory Approach to Differential Effects of Discrete Emotions</td>
<td>36</td>
</tr>
<tr>
<td>Emotions and Political Behavior</td>
<td>40</td>
</tr>
<tr>
<td>Anger, Anxiety, and Political Misperceptions</td>
<td>45</td>
</tr>
<tr>
<td>Conclusion</td>
<td>50</td>
</tr>
<tr>
<td>Chapter 3: Study 1</td>
<td>52</td>
</tr>
<tr>
<td>Purpose</td>
<td>52</td>
</tr>
<tr>
<td>Sample and Participants</td>
<td>53</td>
</tr>
<tr>
<td>Design</td>
<td>54</td>
</tr>
<tr>
<td>Measures</td>
<td>56</td>
</tr>
<tr>
<td>Results</td>
<td>65</td>
</tr>
<tr>
<td>Post-hoc Analyses</td>
<td>77</td>
</tr>
<tr>
<td>Chapter 4: Study 2</td>
<td>79</td>
</tr>
<tr>
<td>Purpose</td>
<td>79</td>
</tr>
<tr>
<td>Sample and Participants</td>
<td>80</td>
</tr>
<tr>
<td>Design</td>
<td>80</td>
</tr>
<tr>
<td>Measures</td>
<td>81</td>
</tr>
<tr>
<td>Results</td>
<td>87</td>
</tr>
<tr>
<td>Post-hoc Analyses</td>
<td>104</td>
</tr>
<tr>
<td>Chapter 5: Discussion</td>
<td>106</td>
</tr>
</tbody>
</table>
Overview of Findings and Theoretical Contributions ..........................108
Limitations ..........................................................................................121
Future Research .....................................................................................123
Conclusion ..........................................................................................125
References .........................................................................................127
Appendix A: Study Instrument ...............................................................141
Appendix B: Study 1 Experimental Stimuli ...............................................160
Appendix C: Study 2 Experimental Stimuli ...............................................168
List of Tables

Table 1. Study 1 Mean Belief by Issue.................................................................59
Table 2. Study 1 Descriptive Statistics...............................................................65
Table 3. Study 1 Effects of Emotion, Correction, and Partisanship on Belief............70
Table 4. Study 1 Interactive Effects of Anger, Partisanship, and Corrections on Belief..72
Table 5. Study 2 Mean Belief by Issue.................................................................83
Table 6. Study 2 Descriptive Statistics...............................................................86
Table 7. Study 2 Effects of Emotion, Partisanship, and Correction on Belief............91
Table 8. Study 2 Interactive Effects of Anxiety, Partisanship, and Corrections on Belief93
Table 9. Study 2 Interactive Effects of Anger, Partisanship, and Corrections on Belief..99
List of Figures

Figure 1. Anger by Correction by Partisanship on Belief Accuracy..............................74

Figure 2. Conditional Indirect Effect of Anger on Belief through Source Liking and Credibility..............................................................................................................................76

Figure 3. Interactive Effect of Anger and Partisanship on Source Liking and Credibility77

Figure 4. Experimental Cell Sizes, Issues Combined..............................................................81

Figure 5. Interactive Effect between Anxiety and Source of Misinformation ................95

Figure 6. 3-way Interactions between Emotion, Correction, and Source of Misinformation ...............................................................................................................................97

Figure 7. Interactive Effect of Anger and Misinformation Source on Belief..................98

Figure 8. Conditional Indirect Effect of Anxiety on Belief through Deliberative Processing........................................................................................................................................102

Figure 9. Interactive Effects of Deliberation and Correction on Belief .........................103
Chapter 1: Introduction

In August 2010, nearly two years into his presidency, Barack Obama faced a perplexing problem. A Pew poll released that month found a substantial increase in the percentage of Americans who incorrectly believed Obama was Muslim. Almost 20% of the public believed the false claim at that time, which was significantly higher than the percentage who inaccurately identified Obama’s religion during the 2008 presidential campaign and after his inauguration in 2009 (Pew, 2010). Although this misperception had circulated on the Internet since 2006 and received extensive media coverage in 2008 (Weeks & Southwell, 2010), journalists, independent fact-checkers, and Obama’s political team each devoted extensive resources to combatting and dispelling the misinformation (Weeks & Holbert, 2014). These corrective and fact-checking campaigns were based on the seemingly logical premise that if only the public is exposed to correct information, they will hold accurate beliefs. Yet that is not what happened. After years of hearing from the media and official sources that Obama was not Muslim, more Americans believed this claim, not less.

Evidence that messages intended to correct false beliefs often fail and in some cases may even exacerbate the influence of inaccurate claims has puzzled researchers, journalists, and political practitioners. To examine this phenomenon scholars have turned primarily to partisan-based explanations rooted in the theory of motivated reasoning (e.g.
Motivated reasoning suggests people are driven by affective partisan goals that often lead them to process incoming information in a way that is consistent with their prior attitudes and beliefs, resulting in biased evaluations of that information (Taber & Lodge, 2006). This means that false claims about an opposed candidate or issue are more likely to be believed than those about a supported one. Similarly, a fact-checking message that contradicts a prior belief will likely be met with skepticism and may be counter-argued or its source may be dismissed as not credible. These efforts to bolster one’s prior attitude or beliefs by dismissing the corrective message may result in a “boomerang” or “backfire” effect in which the initial, inaccurate belief becomes stronger (Lodge & Taber, 2000; Nyhan & Reifler, 2010).

At first blush partisan motivated reasoning appears to be an appropriate and sensible theoretical perspective for the study of political misperceptions and their corrections. After all, polls consistently show that misperceptions about a range of political candidates, topics, and issues often fall along party lines. From the existence of weapons of mass destruction (WMDs) in Iraq, to the validity of the science behind global warming, to the belief that the 9/11 attacks were actually carried out by the U.S. government, Republicans, Democrats, and Independents vary in their accuracy regarding the veracity of these false claims (Kull, Ramsay, & Lewis, 2003; Leiserowitz, Maibach, Roser-Renouf, & Hmielowski, 2011; Stempel, Hargrove, & Stempel III, 2007).

Although these patterns of political misperceptions initially seem to fit well with partisan motivated reasoning I contend that the current conceptualization of the theory is
limited in its capacity to fully explain false political beliefs and the frequent failure of their corrections. In particular, research on political misperceptions has yet to identify why partisanship matters for some people or the underlying causal mechanism leading to partisan motivated reasoning. The theory suggests that general negative affect stemming from partisan motivations makes people more susceptible to believing false claims consistent with their prior attitudes. However, I argue this approach fails to distinguish between different, discrete emotional responses that may determine whether someone engages in motivated reasoning and ultimately is misinformed or not. Different discrete emotions like anxiety and anger set in motion different information processing strategies that uniquely impact how people think about politics (MacKuen, Wolak, Keele & Marcus, 2010; Marcus, Neuman, MacKuen, 2000; Marcus, MacKuen, & Neuman, 2011).

Incorporating these emotions into the study of misperceptions and examining how they interact with prior attitudes to influence beliefs may provide answers to the open question of why people often resist corrective messages and are misinformed about politics. In making the case for examining the role discrete emotions play in this process I highlight three problems with the nearly exclusive application of partisan motivated reasoning as the theory to study political misperceptions.

First, a demonstrated relationship between party identification or ideology and a political misperception does not necessarily indicate partisan motivated reasoning processes are at work, or if they are, why people engaged in this process. Survey research showing, for example, that Republicans are more likely than Democrats to believe Obama was born outside of the United States tells us little about the underlying
theoretical mechanism. In this research partisan motivated reasoning is often assumed rather than explicitly tested. Likewise, experimental research showing that corrections to misperceptions often fail is not always an indication of partisan bias (Kahan, 2012).

Partisan motivated reasoning is inferred in these studies when a correction to an attitude-consistent misperception fails to make beliefs more accurate or when the effects of a correction differ between supporters and opponents of a candidate or issue (e.g. Garrett & Weeks, 2013; Nyhan & Reifler, 2010). Although it is possible that partisan motivated reasoning is occurring, it is also plausible that participants fully considered the correction in an open-minded manner but simply did not find it convincing, perhaps because the corrective message was structurally weaker than the misperception (Kahan, 2012). It is also conceivable that the accumulated “evidence” for the inaccurate belief—the information used to form the false belief—is perceived to be so strong that exposure to a correction is not enough to overcome it. In sum, the failure to update beliefs in response to corrective information is not necessarily evidence of partisan bias (Bullock, 2009).

Extant misperception studies in this vein are valuable in that they demonstrate partisanship or ideology and misperceptions are often associated, but are less informative theoretically in terms of why, how, and when citizens engage in partisan information processing and its effects on political beliefs.

Second, many have argued that the presence of partisan motivated reasoning processes in real-world political settings are overstated (Bullock, Gerber, Hill, & Huber, 2013; Druckman, 2012; Kruglanski & Boyatzis, 2012), a claim that likely extends to political misperceptions. Partisan motivated reasoning alone is unable to explain
people’s occasional willingness to believe false, *counter-attitudinal* claims and reject pro-attitudinal ones. For example, the 2010 Pew survey regarding beliefs about Obama’s religion highlights that *Democrats* and Independents—not only Republicans—were also increasingly more likely to believe Obama is Muslim and less likely to correctly identify him as Christian compared to earlier surveys. This is striking given that Democrats, according to the theory of partisan motivated reasoning, should be highly motivated by partisan goals to reject this claim. Other studies also indicate partisans reject attitude consistent misinformation. For example, a majority of Republicans believe that global warming is happening (Leiserowitz et al., 2011) and 69% of those who supported President Bush accurately believed that Iraq did not have WMDs (Kull, Ramsay, Subias, Lewis, & Warf, 2003), two misperceptions that are perceived by many to be in line with the Republican political agenda. Partisanship plays a role in what people believe but there appear to be limits to its influence. This strongly suggests that partisan motivations are not the only factor contributing to political misperceptions.

Finally, as it stands right now partisan motivated reasoning suffers from conceptual and methodological problems that inhibit a complete understanding of the underlying theoretical mechanism driving misperceptions. The theory argues that “prior attitudes” anchor the evaluation of new information but also claims motivated skepticism is driven by “automatic affective processes” (Taber & Lodge, 2006). Most extant studies applying the theory confound attitude and affect, raising questions about what creates any demonstrated biased processing. There is typically little attempt to separate the two concepts as affect is often measured with feeling thermometers (e.g. Redlawsk, 2002) and
is treated as one’s tendency to like or dislike a political target—a conceptualization that makes it difficult to discern if items are tapping actual affective responses or something else (Marcus, 1988). As we will see, affect is not simply liking or disliking but rather a subjective feeling state (Clore & Schnall, 2005). Distinguishing the two concepts is necessary to examine their influence and how they might interact.

Based on these critiques I argue that the current conceptualization of the theory of partisan motivated reasoning alone cannot explain political misperceptions. Although partisanship certainly contributes to what citizens believe I contend the theory is currently limited in informing us about why some people engage in motivated information processing strategies that result in incorrect beliefs about politics. It applies broad, partisan-based generalizations to a phenomenon that calls for a more nuanced perspective and, as a result, falls short in identifying why misperceptions persist. What is needed is a theoretical approach that includes partisan motivations but also clearly illustrates the underlying processes leading to false beliefs, explains why some people believe misperceptions that are consistent or inconsistent with their prior beliefs while others do not, and isolates the interactive influence of affect and attitude.

This dissertation moves beyond explanations based solely on partisan motivated reasoning and tests a novel theoretical approach to the study of political misinformation and its corrections. Drawing on appraisal and functional theories of emotion (e.g. Frijda, 1986; Lazarus, 1991; Lerner & Keltner, 2000; Nabi, 2003; Roseman, Wiest, & Swartz, 1994; Smith & Ellsworth, 1985), as well as affective intelligence theory (e.g. MacKuen et al., 2010; Marcus et al., 2000; Marcus et al., 2011), I argue that incorporating discrete
emotions into the study of political misperceptions furthers our understanding of how misinformation takes hold. Discrete emotions, even those of same valence (i.e. positive or negative), can have dramatically different effects on cognitive processing, evaluation, judgment, and behavior (see Keltner & Lerner, 2010 for review) and interact with people’s prior dispositions to influence how people think about politics (Marcus et al., 2011). I expect these emotions to also influence how people consider political misinformation.

In establishing the role of emotions in this process, I focus here on two negatively-valenced discrete emotions that are central to political behavior: anxiety and anger (MacKuen et al., 2010). I argue citizens’ experience of these two emotions will lead to very different information processing strategies that will ultimately have consequences for the effectiveness of fact-checking messages. Feelings of anxiety are associated with uncertainty and lead to information seeking, less reliance on habit and prior dispositions (such as partisanship), increased reliance on contemporary information, and openness to new ideas (e.g. Brader, 2006; Marcus et al., 2000). As a result, I expect anxious citizens to depend less on their party identification when forming their beliefs and be more deliberative in weighing misinformation, which should allow them to “learn” more from corrective messages and come to hold more accurate beliefs after exposure to corrections. Angry citizens should engage misinformation in a very different way. Anger increases reliance on habitual behavior and prior feelings and attitudes, decreases the influence of the information at hand, and reduces willingness to consider viewpoints that are inconsistent with one’s priors (MacKuen et al., 2010; Valentino,
Hutchings, Banks & Davis, 2008). Anger can also trigger retributive and punishing behaviors (Lerner & Keltner, 2000; Nabi, 2003), as well as psychological reactance, which can be manifested as counter-arguing or source derogation (Knowles & Linn, 2004; Tormala & Petty, 2004). Anger impedes learning and facilitates rejection of information inconsistent with prior beliefs (MacKuen et al., 2010). I therefore expect anger to facilitate the motivated reasoning process, as angry citizens should rely more on their party affiliations as they consider inaccurate political claims and their corrections, resulting in beliefs that are more consistent with their prior partisan dispositions.

Examining the differential effects of discrete emotions advances our theoretical understanding of why political misperceptions are believed and why corrections often fail. It moves beyond explanations based only on partisanship and instead looks at how emotions interact with party affiliation in determining how people process information and what they believe. By integrating what is known about both emotions and partisanship, it provides important insight into why some people engage in partisan motivated reasoning processes while others do not. The effects of anger closely parallel the theoretical expectations of partisan motivated reasoning but that connection has rarely been made in the political communication literature (though see Brader, 2011; MacKuen et al., 2010; Marcus et al., 2011) and to date has not been extended to political misperceptions. Because of the association between the two processes, I contend that much of the prior demonstrated effects of partisan motivated reasoning are in fact driven by anger rather than simple partisanship or general negative affect as others have argued (e.g. Taber & Lodge, 2006). Utilizing discrete theories of emotion to study
misperceptions also allows us capture the differential effects of each emotion—rather than simply valenced affect—which may help explain why partisans and non-partisans alike fall victim to political misperceptions.

Providing more nuance and conceptual clarification in the measurement of emotion helps to delineate its effects from the impact of attitudes. Some have raised concerns that emotions are endogenous to political attitudes. That is, the influence of emotions is not causal but simply a reflection of prior attitudes, ideology or partisan affiliations (Ladd & Lenz, 2008). I address these concerns—one through conceptual measurement and one through experimental design. Consistent with other studies of discrete emotions I measure affect by tapping participants’ self-reported experience of various emotions. I measure political attitudes by assessing partisanship and prior attitudes toward political issues. Measuring the two concepts separately allows for examination of both their unique and interactive influence and avoids conflating them, as is often the case with prior research (see Marcus, 1988 for a critique of measurement of affect). I address the endogeneity issue by directly manipulating emotions. Much research shows that both integral and incidental emotions can impact judgment and evaluation (e.g. Schwarz, 2012; Schwarz & Clore, 1983) and assessing the causal influence of emotions provides a robust test of the theory and eliminates concerns regarding endogeniety.

Outline

This dissertation contributes to our understanding of why people hold political misperceptions and why they are often resistant to fact-checking messages intended to
correct those false beliefs. It provides a theoretical model that incorporates both partisan considerations but also suggests discrete emotions—anger and anxiety in particular—play a pivotal role in the evaluation of false political claims. Two experimental studies test the theory. The first study examines the influence of incidental emotions—emotions that are not directly related to the evaluation of political claims. The second study tests the role of integral emotions—emotions that stem directly from a political figure or issue.

Chapter 2 begins by outlining the key concepts in this study and reviews the extant research on political misperceptions. I next make an argument for why it is theoretically valuable to look at both discrete emotions and partisanship and offer a series of relevant hypotheses. Chapter 3 describes the methodology and reports the results for Study 1. Chapter 4 provides the same information for Study 2. In Chapter 5 I offer a discussion of the results and summarize the theoretical findings of the two studies.
Chapter 2: Theory

Defining Misperceptions

Political misperceptions are broadly defined as personal beliefs that deviate from political reality. That is, misperceptions are beliefs that are inaccurate or simply wrong when compared to the best available evidence in the marketplace of ideas (Kuklinski et al., 2000; Kuklinski, Quirk, Schweider, & Rich, 1998). It is important to distinguish those who are misinformed from those who are uninformed. Uninformed individuals hold no factual beliefs at all. This can stem from a lack of knowledge or exposure about a given topic, person, or policy. If a citizen has not heard or knows little about an issue, they are unlikely to hold beliefs about the issue, accurate or not. Misinformed individuals, however, hold beliefs that are incorrect given the nature of the evidence at hand. These misperceptions could result from receiving inaccurate or misleading information from the media or someone in a social network, or may be the consequence of a number of different psychological biases. Of course, those who are uninformed may at times be asked to report their beliefs or knowledge on a particular topic or issue. In such instances their responses might be inaccurate. However, we should hesitate to label these individuals as misinformed. The critical distinction between the uninformed and misinformed is that the former’s subsequent preferences and behaviors are not based on those incorrect beliefs, whereas the latter group is influenced by and likely to behave in
ways that reflect those inaccurate beliefs (Kuklinski et al., 2000; Weeks & Garrett, 2014). Further, the misinformed are likely to resist correcting their mistaken beliefs because they hold those beliefs with confidence and think they are correct. For example, citizens who do not know about the nature of stem cell research or those who hold no beliefs about the issue are uninformed. If asked about some aspect of stem cell research they might provide an inaccurate response but it is unlikely that their subsequent behavior will be guided by that inaccuracy because that false belief is not strong or a core factor in how they think about the issue. Compare this to the misinformed, whose misperceptions about stem cell research are strongly held, based on false evidence, and resistant to corrections. Because this belief is strong and central to their perception of the issue, it is more likely to influence their preferences and behaviors.

Any discussion of political misperceptions should consider epistemology and the nature of political facts. As Kuklinski et al. (1998) note, politics are by definition contentious and this creates a situation in which no political “facts” are beyond dispute. What may be fact to one person or group could be seen as illegitimate to another individual or group of people. For example, studies demonstrating that a national healthcare plan would lower medical expenses can be disputed, as a second set of studies using different criteria might show an increase in costs. Here, the facts become political. To be clear, in cases where political facts are contended one person or group is most likely wrong. Although some claim that all information in the political environment is open to individual interpretation and often colored by one’s view of the world (e.g. Baym, 2010; van Zoonen, 2012), there is no question that in most instances of political
disagreement there are facts—that is, there is an agreed upon standard of evidence that can be drawn on to support or discredit a given claim. Objective and correct evidence therefore establishes the facts (Kuklinski et al., 1998). Of course, the scientific process demonstrates the nature of truth is always changing as discoveries are made and older theories are disproven (Popper, 1972), but this does not diminish the power of existing evidence at any given time. A fact simply reflects the current reality or truth, given what is known at the time of judgment.

Despite disagreements about what constitutes a political truth, political facts can be put to an evidentiary test. Some political facts are easy to support with objective data. For instance, if Congress passes a bill on immigration we can look to the language of the law to clearly see what is included and what is not. Similarly, claims about the unemployment rate can be verified using expert reports from government agencies. Other, seemingly more subjective issues may be harder to label as fact, though again the best available evidence can be utilized in such instances. For example, the non-partisan Congressional Budget Office released a report indicating that the Affordable Care Act (ACA) will reduce the labor force in the U.S. by 2 million jobs. Many politicians therefore claimed it to be a fact that the ACA would result in 2 million jobs lost. But the evidence strongly indicates that the reduction in jobs will result from workers voluntarily leaving their jobs rather than being laid off (Factcheck.org, 2014). So although it is a fact that 2 million fewer people will work after the ACA is implemented, the evidence illustrates why it is factual. These examples demonstrate that facts are based on existing evidence and, unless the evidentiary support changes, they can be considered reality.
Political Rumors

There has been much talk in both the academic and political realms about the role political rumors have played in recent elections and campaigns (see e.g. Berinsky, n.d.; Weeks & Garrett, 2014). Though related to misperceptions, rumors are a distinct phenomenon and it is important to distinguish the two concepts. Rumors are stories or information statements that circulate among people without confirmation of facts (DiFonzo & Bordia, 2007). They are “collective hypotheses” about the nature of reality that help people make sense of ambiguous situations (DiFonzo, Robinson, Suls, & Rini, 2012, p. 1100). Rumors, though sometimes true, remain rumors because they lack evidence confirming their verity (Allport & Postman, 1947). For instance, there were rumors in the summer of 2012 that Mitt Romney would select Paul Ryan as his running mate—rumors that turned out to be true but could not be verified or discredited until a choice was actually made. Recall that misperceptions are inaccurate personal beliefs that deviate from the best available evidence at hand (Kuklinski et al., 2000). Based on this definition, misperceptions are distinguishable from rumors in that the former are beliefs supported by false evidence or that result from the rejection of the best available evidence, while the latter are information statements that do not have secure evidence supporting or negating them. So for example, the claim that Obama was not born in the United State was a rumor until the point where strong evidence (i.e. his birth certificate) discredited it. Those who continued to believe the claim after the evidence was available held a misperception. Although rumors are an important and unique phenomenon, the
remainder of this dissertation focuses on misperceptions, as these are beliefs that are indeed inaccurate, not simply claims that cannot (or have yet to) be verified or rejected.

**Attitudes, Beliefs, and Misperceptions**

The concepts of attitudes and beliefs are central to the study of political misperceptions. Political misperceptions are about people, issues, and policies and individuals often approach these objects with a set of attitudes and beliefs that influence how they think about them and what they ultimately believe. Though attitudes and beliefs mutually influence each other, they are no doubt distinct and must be treated as such. However, attitudes and beliefs are sometimes conflated in political psychology and communication research, making it necessary to properly define and differentiate them.

**Attitudes.**

Attitudes serve a variety of functions for human beings—they direct attention, guide information processing, influence perception, affect behavior, help orient us to our worlds, and aid in decision-making (Fazio, 1989; Fazio, Roskos-Ewoldsen, & Powell, 1994). Although the degree of influence attitudes have depends on the context, this functional approach to attitudes is useful to the study of political misperceptions because it illustrates how attitudes can affect our political environments. An attitude is the association between an attitude object and a summary evaluation of that object (Fazio, 2000). An object is broadly defined and can include people, issues, political parties, policies, places, and other physical objects—an object is anything about which an evaluation can be formed. An evaluation can range from favorable to unfavorable and can be informed by a variety of factors. Summary evaluations may result from emotional
responses to attitude objects, cognitive thoughts about the object, beliefs about whether the object has certain characteristics, as well as prior behavioral experiences with the object (Eagly & Chaiken, 1993; Fazio, 1989). No matter the source of the evaluation, the attitude is the link between the object and the evaluation (Fazio, 2000).

An attitude’s ability to serve a functional role depends on its strength and accessibility. Stronger associations between an attitude object and its evaluations should make attitudes more accessible in memory, and thus, more functional (Fazio, 1989). For example, if a person associates Barack Obama or the Democratic Party with a very unfavorable evaluation, it is likely that this attitude will come to mind rather easily and as a result will guide their subsequent encounters with anything Obama related. It will impact how they process new information about the President, influence their perceptions and beliefs about him, as well as likely affect their behavior (i.e. voting). However, if the association between Obama and evaluation is weak, this attitude is less likely to be functional to the person.

**Beliefs.**

Beliefs are associations between an attitude object and specific attributes of that object (Eagly & Chaiken, 1993). They are mental estimates that an attitude object has a certain characteristic or that a particular event will occur (Wyer & Albarracin, 2005). For example, a person who thinks that as a result of global warming the earth’s average temperature will rise 10 degrees over the next 100 years holds a particular belief about climate change. Similarly, if a person thinks that Barack Obama is Muslim, this a specific attribute that is believed to be associated with the president.
Beliefs are distinguishable from attitudes in that they are not inherently evaluations of the object. Though it will become clear that attitudes and beliefs have a mutually causal relationship, beliefs in and of themselves are not evaluative. So while the belief that the earth’s temperature is rising 10 degrees may help inform an attitude (or be formed by the attitude), that particular belief reflects no evaluation. Beliefs can often be verified or falsified using objective evidence, whereas attitudes cannot easily be put to such tests (Eagly & Chaiken, 1993).

An important subcomponent of beliefs is knowledge. Knowledge is defined here as beliefs that are accurate and correct based on the best available evidence (Nozick, 1981). In this sense, knowledge is the opposite of misperceptions. For example, people who correctly identify Washington, D.C. as the capital of the United States have knowledge. People who believe a different city is the seat of government are misinformed and those who do not know what city is the capital are uninformed.

Beliefs are often formed through causal and logical linkages between various networks in memory (Eagly & Chaiken, 1993; McGuire & McGuire, 1991). People seek causal explanations for events and want to find ways to understand why things happen. Beliefs help fill this gap by providing justification for certain events or attributes of a person. If we hear a particular claim, we evaluate it to determine whether or not it fills the logical causal gap (Wyer & Albarracin, 2005). If it does provide a plausible explanation for why an event occurred, we are apt to believe it. In this sense, beliefs can at times represent wishful thinking, as the preferred explanation of events may actually develop into beliefs (Marsh & Wallace, 2005). Beliefs often justify humans’ naïve or
implicit theories about how the world works. For instance, an experimental study found that people were more likely to believe the inaccurate claim that a prominent Muslim leader was a terrorist sympathizer when the correction to that misinformation was accompanied by information that reinforced their naïve theory that Islam is threatening (Garrett, Nisbet, & Lynch, 2013).

**The Psychology of Political Misperceptions**

Democratic theorists have argued an accurately informed public is necessary to ensure effective deliberation and meaningful political outcomes (Delli Carpini & Keeter, 1996; Luskin, et al., 2002). Misperceptions threaten these democratic ideals by raising the possibility that political judgments are based on inaccurate and false beliefs. Indeed, citizens who are misinformed will at times make decisions based on erroneous claims (e.g. Weeks & Garrett, 2014) and those who are misinformed often have preferences that diverge from their more accurately informed peers (e.g. Gilens, 2001; Kuklinski et al., 2000; Lau & Redlawsk, 1997). To make matters worse, advances in information technologies increase the likelihood that citizens will be exposed to false or misleading information. The availability of inaccurate information on the Internet (e.g. Ayres, 1999; Bordia & Rosnow, 1998; Katz, 1998), the widespread use of email (Garrett, 2011), the ease of retrieving false information through search engines (Weeks & Southwell, 2010), and news consumers’ ability to selectively choose their information environment (Bennett & Iyengar, 2008; Sunstein, 2009) all increase the possibility for citizens to encounter incorrect information about politics.
A plausible and often used approach to the study of political misperceptions lies in theories of motivated and biased information processing. Building off cognitive consistency theories such as dissonance (Festinger, 1957), balance (Heider, 1958), and, in particular, motivated reasoning theory (Ditto & Lopez, 1992; Kunda, 1990), extant research shows that partisan affiliation and ideology as well as issue or candidate support can at times bias evaluations and processing of political information. For example, several studies demonstrate that new political information consistent with preexisting attitudes and beliefs is evaluated as more strong, convincing, and valid, while inconsistent information is considered weak, unconvincing, and invalid (e.g. Lord, Lepper, & Ross, 1979; Munro et al., 2002; Taber & Lodge, 2006). Information challenging an attitude is also often subject to intense counter-arguing (Lodge & Taber, 2000; Wyer & Albarracin, 2005). As a result, attitude-consistent information is often accepted and inconsistent information is rejected, regardless of the actual validity of the information (Houston & Fazio, 1989; Kunda, 1990; Lord et al., 1979). The biased evaluation of incoming information has implications for misperceptions. It suggests that if people hear a political claim consistent with their political ideology or issue position (attitude), they are more likely to accept that claim, regardless of its veracity. In contrast, people will be more likely to discredit and reject information that challenges their attitudes, even if that information is accurate. Attitude-consistent claims are therefore often accepted based on little evidence, while attitude-discrepant claims are frequently rejected even if they are well supported by the facts.
This contention has been supported by empirical research. For example, an experiment conducted in the lead up to 2004 Presidential election demonstrated that supporters of the incumbent, George W. Bush, were more likely to believe false claims about John Kerry, the competing candidate, than were Kerry supporters (Einwiller & Kamins 2008). Survey research during that same election cycle showed people were more likely to hold misperceptions about the opposing candidate as a result of misleading advertising than they were their preferred candidate (Winne, Kenski, & Jamieson, 2005). Related work prior to the 2008 and 2010 elections illustrates partisans were more likely to accept false claims and political smears about the opposing candidate, as demonstrated by both implicit (Hartman & Newmark, 2012; Kosloff et al., 2010) and explicit measures (Berinsky, n.d.; Weeks & Garrett, 2014).

This research on motivated misperceptions has been extended beyond political candidates, showing that partisans’ attitudes are related to their acceptance of misinformation about political issues. For example, supporters of the war in Iraq were among the most likely to incorrectly believe Iraq possessed weapons of mass destruction (Kull, Ramsay, Lewis, 2003). Research using a series of national public opinion polls demonstrates partisans have more accurate knowledge of facts across a variety of political issues when those facts confirm their worldview than when the facts challenge their beliefs (Jerit & Barabas, 2012). Support (or opposition) of political and scientific issues such as health care (e.g. Meirick, 2013; Nyhan, 2010) or climate change (e.g. Myers, Maibach, Roser-Renour, Akerlof & Leiserowitz, 2013) can also be a strong predictor of misperceptions. Based on evidence from extant research and the theory of
partisan motivated reasoning, it is expected that prior attitudes and partisanship will contribute to whether people are misinformed about politics.

**H1: Pro-attitudinal misperceptions will be believed more than counter-attitudinal misperceptions.**

Although partisan motivated information processing contributes to initial acceptance of misinformation there is mixed evidence regarding its impact on people’s acceptance of messages correcting the false information. Some studies show that prior attitudes relate to the effectiveness of corrections. For example, public opinion polls indicate that extensive media coverage dispelling the claim that Barack Obama is Muslim failed to correct the misperception (Pew, 2010). Garrett and Weeks (2013) report that real-time corrections to political misperceptions online were only effective for those whose attitudes were consistent with the correction. Other work shows that corrections can fail by activating negative heuristics based on prior beliefs (Garrett, et al. 2013). Perhaps the most abundant evidence for the failure of corrections comes from a series of experiments by Nyhan and colleagues. In one study, corrections to political misperceptions were only found to be effective when they were attitude-consistent, while attitude-discrepant corrections backfired. Here, Republicans who received an attitude-challenging correction were more likely to believe the misinformation than those who never saw the correction (Nyhan & Reifler, 2010). In a related experiment about Sarah Palin’s false claims regarding heath care “death panels,” corrections showed some signs of effectiveness but were found to increase misperceptions for politically knowledgeable Palin supporters (Nyhan, Reifler, & Ubel, 2013). In both of the Nyhan studies, the failure
of the corrections and the backfire effect was attributed to motivated reasoning but the precise mechanism driving the effect was not tested.

Although some attribute the failure of corrections to motivated reasoning, there are reasons to suspect that corrections can be effective in spite of these biases in information processes. The theory of partisan motivated reasoning suggests that corrections to misperceptions that support one’s prior attitudes would likely be rejected. For example, according to the theory opponents of President Obama would be motivated to reject corrections to the claim that he was born outside of the U.S. because the corrective information is at odds with their prior attitudes. However, the persistence of motivated reasoning in the face of attitude-challenging evidence may be contingent on the quantity of disconfirming information. When exposed to low levels of negative information about a preferred candidate, people engage in the partisan motivated reasoning process and do not lower their evaluation of that candidate (Redlawsk, Civettini, & Emmerson, 2010). A very different pattern emerges when people are exposed to high levels of incongruent information. In these instances the effects of partisan motivated reasoning are greatly diminished, as people began to update their evaluations in accordance with the information at hand rather than their prior attitudes. It is suggested that partisan motivated reasoners eventually reach a “tipping point” in which they can no longer ignore the evidence that their evaluation or prior beliefs are wrong (Redlawsk et al., 2010). This would indicate that people might update their beliefs when faced with an abundance of strong corrective information, even if that information is inconsistent with their prior attitudes.
The claim that corrections can be effective has received empirical support. For instance, survey research conducted during the 2008 presidential election suggests that exposure to corrections to false statements about candidates Barack Obama and John McCain was related to more accurate beliefs for both Republicans and Democrats (Weeks & Garrett, 2014). Experimental work directly contrasts the Nyhan studies and demonstrates that corrections help to form more accurate beliefs, even when the correction challenges prior attitudes (Berinsky, n.d.; Thorson, 2013). The strongest evidence that corrections work independently of prior attitudes comes from a recent study by Ecker, Lewandowsky, Fenton, & Martin (in press). They found that messages retracting inaccurate information about Australian Aboriginal persons were equally effective for those who were highly prejudiced against Aboriginals as they were for individuals without prejudice. Their evidence indicates that people do not necessarily reinforce their prior attitudes by rejecting corrective information, which is inconsistent with the theory of motivated reasoning. They suggest that corrective messages can be effective so long as they do not require a change in attitude toward the original target.

Although the nature of the evidence regarding the effectiveness of corrections is mixed, prior research suggests that corrections may overall be effective in improving belief accuracy. However, it is yet to be determined whether these effects are contingent on prior attitudes and partisan motivated reasoning. The following hypothesis and research question address these issues.

**H2: Corrections to political misperceptions increase belief accuracy.**
RQ1: Are corrections more effective for counter-attitudinal misperceptions than for pro-attitudinal misperceptions?

It is clear from existing research on political misperceptions that prior attitudes, including partisanship, can impact what people believe. This effect has largely been attributed to partisan motivated reasoning processes and it is assumed that false claims about an opposed candidate or issue are more likely to be believed than those about a supported one because people interpret this information through an ideological or partisan lens. Despite the plausibility of this explanation, there are reasons to believe explanations based solely on partisanship might be an insufficient explanation of how people respond to political information.

Certainly, the mixed evidence of whether corrections are dependent on prior attitudes suggests partisanship may at times be less influential. Further, both survey and experimental research show people are occasionally willing to believe attitude-discrepant claims and reject attitude-consistent ones. It is clear that citizens are not always motivated by partisan goals. For example, polls conducted in 2003 before and during the war in Iraq found nearly one-third of Democrats incorrectly believed Saddam Hussein had ties with al-Qaeda, a misperception that seem to contradict Democrats’ opposition to the war (Kull et al., 2003). Similarly, in some situations people hold a positive attitude toward an object but report belief in an unflattering claim or have a negative attitude toward an object but fail to accept the unseemly claim. For instance, surveys fielded during the 2012 presidential election show between 10 and 20% of Democrats either believed or were unsure whether Obama was a citizen, while between 30 and 40% of Republicans
dismissed this claim as blatantly false (e.g. Cassino, 2013; Gallup, 2011). Importantly, recent work suggests that the influence of partisanship on factual beliefs is greatly diminished when people are provided a cash incentive to give correct answers to partisan questions (Bullock et al., 2013). Clearly, people are more likely hold misperceptions that are attitude-consistent but by no means do all citizens’ beliefs fall in line with their prior dispositions. Although these self-identified partisans may not have a strong affiliation with their party, it is clear beliefs can be independent of and inconsistent with political attitudes. The two are not by definition codependent. Further, many citizens do not have strong attitudes about political parties, issues or candidates (Converse, 1964) and are actually internally conflicted and ambivalent about most political concepts (Zaller & Feldman, 1992), yet a substantial percentage hold misperceptions about politics. As I contend, these instances highlight that additional factors other than partisanship or ideology, perhaps emotion, contribute to beliefs.

This raises a number of additional questions about the theoretical process involved in the formation of inaccurate political beliefs and the effectiveness of corrections to political misperceptions that have not been adequately addressed using the theory of partisan motivated reasoning alone. In particular, studies based only in partisan motivated reasoning have not fully examined how and why biased processing strategies are used. What factors other than partisanship or ideology affect how people consider new, and perhaps more accurate, information? There remains a need to clearly identify the theoretical mechanisms underlying the acceptance of misperceptions and their corrections. The following section argues that specific, discrete emotions contribute to
false beliefs about politics by interacting with prior political dispositions. These interactions can lead to very different types of information processing, influence how people consider misinformation, and ultimately affect what they believe. It calls for a more nuanced examination of the processes leading to misperceptions—one that considers both partisanship and emotions but also helps explain why partisan processing is not always the default strategy.

**Moving Beyond Partisan Motivated Reasoning**

Partisan motivated reasoning is premised on the idea that prior attitudes trigger general affective responses that bias information processing. Sociopolitical concepts, such as Barack Obama, the debate over immigration, or Republicans and Democrats, are thought to immediately call to mind associated attitudes that generate affective responses in citizens that influences how they judge, evaluate, or behave toward those targets (Taber & Lodge, 2006; Redlawsk, 2002). This affect is presumed to motivate people to defend their prior attitudes (Taber, Cann, & Kucsova, 2009). According to the theory, people who dislike Obama or Democrats, for example, experience some kind of negative feeling upon encountering information about him, which ultimately colors how they interpret that information.

Although the theory of partisan motivated reasoning assumes that biased information processing is rooted in affect stemming from prior attitudes, including partisanship, no studies of political misperceptions that use the theory actually assess the role affective responses to sociopolitical concepts play in this process. Instead, much research demonstrates a relationship between partisanship or ideology and political
misperceptions and this work often assumes that the association is due to the motivation to defend those prior attitudes (e.g. Jerit & Barabas, 2012). Evidence for this effect often comes in the form of partisanship as a moderator, either through experimental studies or survey data, as the belief in a misperception or the effectiveness of a correction is often dependent on party identification (e.g. Nyhan & Reifler, 2010). But this tells us very little about the mechanisms driving these motivations and biases. It tells us that members of one party or those who support a political issue are more likely to hold a particular misperception than their counterparts but not why or how. Nonetheless, partisanship and ideology are most often identified as the culprits leading to motivated reasoning and the acceptance of political misperceptions, while the contribution of affect, thought to be a key concept in the theory, is often left untested.

Partisan motivated reasoning may be driving misperceptions but prior research has not provided definitive evidence for how the process works and has made few attempts to incorporate other theories (though see Garrett et al., 2013). The uncertainty about how and when partisan motivations contribute to false political beliefs raises several critical questions that must be addressed. First, does affect facilitate the partisan motivated reasoning process? That is, do emotions make people more reliant on their prior dispositions in assessing misinformation? In order to answer these questions there must be a clear conceptual delineation between partisanship and affect, a distinction that is missing in prior research. As noted these concepts are different but existing research on political misperceptions has yet to examine how they might complement each other to influence beliefs. Second, if affect does facilitate partisan motivations it is then
necessary to determine if different discrete emotions work the same way. Much prior research has demonstrated that discrete emotions can have unique influences on political attitudes and behaviors but misperception research has not examined how the experience of different emotions might interact with partisan motivations to affect what people believe. In sum, there is a need for conceptual and methodological clarification and the central tenets of partisan motivated reasoning must be tested in conjunction with discrete emotions. Doing so will provide a deeper theoretical understanding of how people respond to political misperceptions, including when prior attitudes might bias beliefs.

**Confounding Attitude and Affect**

A major problem with the partisan motivated reasoning paradigm is it often conflates attitude and affect. The theory argues “prior attitudes” anchor evaluations of new information but simultaneously claims motivated reasoning is driven by “automatic affective processes” (Taber & Lodge, 2006, p. 756). Most studies utilizing the theory make little attempt to separate the two concepts, as affect is often treated as one’s tendency to like or dislike a political target—a conceptualization related more to attitude than affect. This may lead to measurement issues, as it is difficult to discern if items in these studies are tapping actual affective responses or prior attitudes. It also raises theoretical questions as to which concept drives these effects, or how they might work together.

But affect and attitudes are different concepts with different antecedents, measurement strategies, and outcomes. As previously noted, an attitude is the link between an attitude object and a summary evaluation of that object (Fazio, 2000). These
evaluations can take many forms and may range from positive to negative, favorable to unfavorable, or like to dislike, for example. Affect, however, is more than simply liking or disliking a target. Affective responses are a category of subjective experiences that can impact a wide range of psychological processes including attitudes, beliefs, perceptions, attention, information-processing, judgments, and decision-making (Cacioppo & Gardner, 1999). Affect is defined as a subjective feeling state characterized as either good or bad (Clore & Schnall, 2005), can be conscious or unconscious, directed at something or not, caused by experiences or stimuli in the environment, and can be induced by hormones or drugs (Schimmack, & Crites, Jr., 2005). The affective system is thought to have developed as an evolutionary mechanism allowing people to determine whether stimuli are friendly or problematic, which guides their approach or avoidant behavior (Cacioppo & Gardner, 1999).

The general concept of affect can be categorized into lower order states including moods and emotions. Moods are untargeted, long-lasting, source irrelevant feeling states (Schimmack, & Crites, Jr., 2005). They can be characterized as good or bad, such as a happy or sad mood. Emotions are “internal, mental states representing evaluative, valenced reactions to events, agents, or objects that vary in intensity…they are generally short-lived, intense, and directed at some external stimuli” (Nabi, 1999 p. 295). Emotions can serve functional roles for humans’ responses to their environment. For example, emotions can focus attention, generate cognitive activity, prepare and motivate people for action and behavior, and impact information processing (Nabi, 1999). As a
result emotions play a key role in how people interact with the personally relevant stimuli they encounter.

So how exactly are attitudes different from affective responses? Though they can be mutually influential on one another, and can both be present in response to objects in the environment, they differ primarily in their temporal constraints (Clore & Schnall, 2005). Affect, including moods and emotions, is a temporary evaluative state and cannot be stored. It exists only in the presence of thoughts, perceptions, or environmental stimuli and disappears when these factors are gone (Clore & Schnall, 2005). Moods, emotions, and feelings can be directed at an object or not. Attitudes can be either temporary or enduring and do not necessarily go away when thoughts about the attitude object or the attitude object itself are not present. In addition, attitudes are always about an object.

In summary, affect is an *experienced feeling state* that includes both moods and specific emotions. Discrete emotions, such as anger or fear, are short-lived feeling states that are valenced and targeted at a specific object (Clore & Schnall, 2005). Attitudes are *global evaluations of* a person, object, or issue (Fazio, 1986). Attitudes are valenced but the positivity or negatively associated with an attitude is not experienced as a feeling or emotional response but simply as an evaluation (Petty, DeSteno, & Rucker, 2001).

**Measuring Affect, Emotions, and Attitudes**

Proponents of the theory of partisan motivated reasoning argue automatic affective response trigger biased processing of information (Taber & Lodge, 2006). Ironically, the very studies used as evidence for the influence of affect fail to adequately
define it or test how it plays a role in this process. Rather than explicitly testing the effect of feelings or emotions, which are experienced, most of the extant studies on politically motivated reasoning ultimately test the influence of prior attitudes, which are evaluations. For example, Taber & Lodge (2006) hypothesize that affect drives partisan processing and measure participants’ position toward political issues, as well as the strength of those positions. This conceptualization captures attitudes but not affect. The authors also coded open-ended responses in an effort to capture affective responses but like the scaled items, the coding of these responses actually assesses prior attitudes. Responses such as "I like (don't like) this argument or conclusion" were treated as evidence of affect, but these types of responses clearly map onto definitions of attitude rather than affect. They capture evaluations, not feelings. This measurement strategy based on prior attitude, not affect, has been used in multiple studies testing the general theory (e.g. Lebo & Cassino, 2007; Lodge & Taber, 2005; Redlawsk, 2002; Taber et al., 2009). Other work on partisan motivated reasoning uses a feeling thermometer as a measure of affect (e.g. Redlawsk, 2002). Using a feeling thermometer to assess affect can hinder the measurement of emotions (Marcus et al., 2011). As Marcus (1988, p. 756) notes, “the thermometer scale, as a measure of emotional response, is a confounded measurement device” as it does not adequately capture global feelings toward a target.

Other recent studies tangentially related to partisan motivated reasoning have utilized more refined measures of affect. Many of these studies are not specifically designed to test the theory of motivated reasoning but instead attempt to compare it to or test another affect-based theory of political behavior, affective intelligence theory
(Marcus & MacKuen, 1993; Marcus, et al., 2000). These studies have wisely moved beyond the use of attitude as a proxy for affect and instead measure several discrete emotions such as anxiety and enthusiasm (Brader, Valentino, Suhay, 2008; Redlawsk, Civettini, & Lau, 2007; Redlawsk et al., 2010). Although these attempts to better capture affect are an important step in the right direction, they are the exception. Most studies explicitly testing partisan motivated reasoning processes fail to properly measure affect and instead confound it with attitudes. Partisan motivated reasoning theorists are correct in highlighting affect as an important component of political information processing but until affect and attitudes are delineated and properly conceptualized, it is not possible to pinpoint the role they play in biasing people’s beliefs.

This is especially true with studies using politically motivated reasoning to study misperceptions. To date, the role of affect in misperception studies is often presumed or forgotten, an important omission that prevents more complete understandings for why citizens are misinformed about politics and are often resistant to corrective messages. Instead, the majority of studies continue to only test the influence of partisan motivations or prior attitudes, without examining how those partisan goals might depend on affect (e.g. Jerit & Barabas, 2012; Nyhan & Reifler, 2010; Garrett & Weeks, 2013). It is therefore critical that studies of political misperceptions examine the simultaneous and complementary influence of affect.

**Discrete Emotions and Political Misperceptions**

Incorporating affect into studies of political misperceptions and corrective messages requires the additional consideration of how to conceptualize affect. Social
psychologists are currently engaged in an ongoing debate about the nature of humans’ affective, or emotional, experience. There are two, somewhat contrasting approaches to the study of affect. The dimensional approach to affect assumes that all emotions can be defined by two dimensions—valence and arousal (Barrett, 2006; Russell, 2003). Valence ranges from positive to negative and all affect falls somewhere on this continuum. The poles on the arousal dimension are anchored by activation and deactivation and all affective responses fall on that continuum. This approach argues that specific emotions of the same valence such as fear and anger or joy and excitement cannot easily be distinguished from one another, as they often coexist, and the labels we place on them are at times based more on folk theory and linguistics than on scientific distinctions (Russell, 2003).

The second approach to emotions argues there are specific, distinguishable, categorical emotions that must be treated separately. Evidence for the discrete model is based primarily on studies showing that different emotions serve different functional goals and motivations, and result in different cognitive appraisals, thought patterns, and ultimately action tendencies (e.g. Frijda, 1986; Lazarus, 1991; Nabi, 1999, 2010; Roseman, et al., 1994). For example, fear signals danger, triggers a protection function, and leads to avoidance behavior tendencies, while anger highlights an obstacle in the environment that must be removed and subsequently results in approach behavior tendencies (Dillard & Peck, 2000). Because of the numerous differences between emotions in terms of cognition and behavior, discrete theorists suggest each emotion
should be studied as its own unique concept, rather than simply as part of a two-dimensional experience.

Sorting out which approach is the more accurate representation of the human experience is a topic that is outside the scope of this study, though recent conceptualizations of emotion suggest that the dimensional and discrete approaches are more compatible than previously acknowledged (Larsen, Berntson, Poehlmann, Ito, & Cacioppo, 2008). Incorporating insights from both approaches, including a focus on the extent to which emotions trigger approach or avoidant behavior, may be a fruitful operationalization of emotions moving forward (Lang & Ewoldsen, 2011).

Setting this ongoing debate aside, scholars have convincingly argued that theorizing about the role of emotion in the communicative process is better served using a discrete approach (e.g. Dillard & Seo, 2013; Goodall, Slater, & Myers, 2013; Nabi, 1999). As Nabi (2010) notes, the primary advantage of the discrete approach over the dimensional is that measurement of discrete emotions captures both valence and arousal and still allows for the distinction between specific emotions. For example, by asking people about the experience of specific emotions, both positive and negative, the valence dimension is captured. The arousal dimension can simultaneously be assessed by measuring the strength of each discrete emotional experience. This approach provides more nuance in the emotional experience and allows for comparisons between emotions.

The discrete approach of emotion has numerous additional benefits for communication research. For example, by assessing and comparing specific emotions separately, these models offer more predictive power as they can isolate how each
emotion affects attitudes, behaviors, and opinions (Dillard & Seo, 2013; Goodall et al., 2013; Nabi, 2003). Different emotions of the same valence, fear and anger, for example, can lead to different persuasive outcomes and these distinctions can only be captured using the discrete approach (e.g. DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; Dillard & Peck, 2001; Dillard, Plotnick, Godbold, Freimuth, & Edgar, 1996; Lerner, Gonzalez, Small, & Fischhoff, 2003; Nabi, 2003; 2002). Given that communication scholars are often interested in informing message design (e.g. fact-checking messages), knowing how different emotions trigger different responses is extremely valuable in creating effective interventions (Nabi, 2010). Finally, practically speaking, the discrete approach provides much more precision and control in both study design and analyses (Dillard & Seo, 2013; Nabi, 2010). The discrete approach is particularly well-suited for the study of political misperceptions and is therefore utilized in the present work.

The discrete approach can also provide much theoretical refinement to the central notion of partisan motivated reasoning. Recall that politically motivated reasoning theorists suggest biased information processing is a result of automatic affective responses to sociopolitical targets but that the measurement strategies often confound attitudes and affect (e.g. Taber & Lodge, 2006). Setting aside the conceptual issues of whether these studies have validly measured affect, even if one accepts that this measurement approach effectively taps affect, that work still falls short in identifying what kind of affect facilitates partisan goals because it fails to address the unique influence of different emotions, especially those of the same valence. For example, a person may rate Barack Obama low on a feeling thermometer, which motivated
reasoning scholars would argue represents negative affect toward Obama. However, this tells us very little about how that person actually feels toward Obama or their emotional response upon encountering information about him. Are they angry at him? Afraid? Anxious? Experiencing any of these negative emotions would likely result in a below-the-mid-point response on the feeling thermometer yet because of their associated action tendencies we would expect very different outcomes for the acceptance or rejection of political misinformation. For example, someone who is anxious about Obama will likely process new information about him in a different way than someone who is angry, which might have different consequences for what they believe. If the conceptual model used by partisan motivated reasoning research is correct, any negatively valenced affect toward an opposed political target should make misperceptions more believable. Someone who experiences anxiety in response to Obama should be just as likely to believe a false claim as someone who is angry. This is an untested proposition, however. In its current theoretical state, the dimensional approach used in much partisan motivated reasoning research leaves numerous questions about how affect interacts with prior attitudes to influence political misperceptions—questions that can be answered using a discrete emotion approach.

**An Appraisal Theory Approach to Differential Effects of Discrete Emotions**

Why might we expect different discrete or categorical emotions to at times have different effects on what people believe about politics? At their core, discrete emotions serve a functional purpose for human beings. From an evolutionary perspective, emotions help individuals respond to and overcome problems and challenges in their
environments (Keltner & Lerner, 2010). Different emotions result from different appraisals of situations and each emotion is associated with a core-relational theme that guides responses to stimuli (Lazarus, 1991). For example, anger results from appraisals of unjustified offenses against oneself or others, whereas fear results from appraisals of imminent danger or harm (Nabi, 1999). These appraisals occur in two stages, the first being an appraisal tendency that considers whether the situation is congruent or incongruent with one’s goals and the second being an action tendency that determines possible responses and the potential consequences of different actions (Keltner & Lerner, 2010). There are six primary dimensions on which people appraise situations and these appraisal tendencies ultimately determine what kind of emotional response they will have (Smith & Ellsworth, 1985). These include certainty of future events, pleasantness (unpleasantness) of situation, attentional activity (drawing or repelling of attention), perceived control over situational outcomes, anticipated cognitive and physical effort, and responsibility for events (self vs. others) (Lerner & Keltner, 2000). Although two emotions may share tendencies on several of the appraisal dimensions, their differences are what make each unique. For instance, anger and fear are both unpleasant but anger is associated with high certainty, individual control, and personal responsibility, whereas fear appraisals signal uncertainty, situational control and less personal responsibility (Lerner & Keltner, 2000).

In addition to the appraisal tendencies, each emotion is associated with an action tendency that motivates people toward goal-based behaviors (Frijda, 1986; Roseman et al., 1994). Recall that anger signals an offense against oneself and will result in
behaviors intended to remove the obstacle, restore justice and hold individuals’ responsible, whereas fear suggests a threat to oneself and triggers protective behaviors such as fleeing and uncertainty reduction (Dillard & Peck, 2000; Keltner & Lerner, 2010). Of course, this is not to say each emotion is always accompanied by these appraisal and actions, but rather there is a strong and reliable tendency associated with each.

Through their effects on cognition and processing, the appraisal and action tendencies associated with each emotion can ultimately affect a variety of outcomes including reason, judgments, evaluations, attitudes, beliefs, and decisions. Critically, these outcomes can be influenced by either integral or incidental emotions (Keltner & Lerner, 2010; Schwartz, 2012). An integral effect occurs when a target elicits an emotional response, which has a subsequent effect on the evaluation of that target. Numerous studies have demonstrated this integral effect of emotion on judgment. For example, studies examining emotions’ influence on policy support have manipulated the emotional frame of a news story, which can subsequently demonstrate each discrete emotions’ direct influence on people’s attitudes toward a policy (e.g. Brader et al., 2008; DeSteno et al., 2004; Druckman & McDermott, 2008; Goodall et al., 2013; Nabi, 2002, 2003). In these instances the elicitation of a specific, discrete emotion related to the issue at hand had a direct effect on how people felt about the issue.

An effect of incidental emotions occurs when an emotional response that is seemingly unrelated to the judgment or evaluation at hand has an influence on an outcome. This is the core aspect of feelings-as-information theory (Schwarz, 2012). The
theory suggests people also use their affective state--their mood, feelings, or specific emotions--as another source of information. These affective cues of moods or emotions can influence their evaluation of the object by providing people “experiential and bodily information regarding how one feels about the object of judgment” (Clore & Huntsinger, 2007 p. 2). When encountering some stimuli in their environment, people simply ask “how do I feel about this?” (Clore, Gasper, & Garvin, 2001; Schwarz, 2012). This need not be a conscious process but subjectively asking this question provides the individual with information on how to respond to the situation. If a particular emotional response is experienced in the moment, that emotion will likely have an influence on how the person perceives a subsequent target and what they believe about it, even if that experienced emotion is unrelated to the target. These misattributed, incidental emotions impact evaluations in much the same way as integral emotions. For example, if people are feeling sad or angry at the time of evaluation, that feeling will likely result in a more negative evaluation and their response to the target will follow the appraisal related to the experienced emotion. This effect has been found in experimental studies showing that people report lower life satisfaction when asked on rainy days than on sunny days (Schwarz & Clore, 1983). This effect occurs because the negative affect associated with a rainy day and positive affect from the sunny day biased their evaluation of life satisfaction.

But as Lerner and Keltner (2000, 2001) convincingly argue, most studies of the influence of incidental affect take a valenced approach, suggesting that negative feelings lead to negative evaluations and positive feelings to positive evaluations. They challenge
this valence-only model and demonstrate the incidental experience of two emotions of the same valence, in their case fear and anger, have vastly different outcomes on judgment and evaluations. Taken together, this work suggests different emotions, even those of the same valence, can have different effects on myriad consequences regardless of whether the emotional experience is integral or incidental to the outcome at hand.

**Emotions and Political Behavior**

Emotions play an important and unique role in politics. Emotions can diminish or enhance partisan considerations and can be crucial to making political evaluations. For example, campaigns frequently use persuasive messages with emotional appeals in order to win over voters (Brader, 2005). Citizens’ attitudes toward and support of various policies and issues can be influenced by the emotional language used in news stories (Brader et al., 2008; Druckman & McDermitt, 2008) and people often use emotional terms to describe politics (Abelson, Kinder, Peterson, & Fiske, 1982). Examining the role of emotions is especially important for the study of political misperceptions. Political rumors and misinformation circulating online and in partisan circles often play on people’s emotions and use emotional language. For example, various rumors that Obama is Muslim or was not born in the United States might tap some individuals’ fear toward otherness or out-groups. The claim that Mitt Romney did not pay taxes for several years may have been propelled by people’s anger and resentment toward the wealthy. Political misperceptions are fundamentally beliefs. Importantly, emotions can interact with prior dispositions to influence what people believe by leading them to rely more or less on evidentiary information or prior attitudes when forming those beliefs (Schwarz, 2012;
Marcus, et al., 2000). Given the demonstrated power of emotions in political judgment and behavior, it is necessary to examine how they influence the evaluation of false political claims.

Two discrete emotions are relevant not only to the study of politics in general but political misperceptions in particular: anxiety and anger. Anxiety is a distinct aversive and motivational state that occurs in response to threatening stimuli in one’s environment (Eysenck, 1992; Eysenck, Derakshan, Santos, & Calvo, 2007; Marcus, et al., 2000). From an evolutionary perspective, anxiety signals danger and threat to one’s goals, which subsequently triggers action behaviors intended to help the organism survive (Eysenck, 1992; Frijda, 1988). Anxiety elicits worry, uncertainty, perceptions of situational control, and high levels of physiological arousal, leading people to develop active strategies to reduce anxiety and uncertainty (Eysenck et al. 2007), such as increased information seeking (Marcus et al, 2000) and sharing information with others (Berger, 2011; Berger & Milkman, 2012).

Anger is defined as a negatively valenced discrete emotion that is triggered when an individual’s goals are blocked, when one feels slighted, or when a perceived injustice or violation of standards has occurred (Carver & Harmon-Jones, 2009; Frijda, 1986; Ortony, Clore, & Collins, 1988). Anger is associated with perceptions of certainty and individual control (Lerner & Keltner, 2000; Smith & Ellsworth, 1985) and results in behaviors that seek restitution and the restoration of goals, often by causing harm or damage to and punishing others (Carver & Harmon-Jones, 2009; Frijda, 1986).
The influence of anxiety on political decision-making and behavior has a long tradition in research on emotion and politics. Much of this work has been situated under affective intelligence theory, which often takes a dimensional approach to the influence of emotion. The theory suggests that affect and cognition work in tandem with one another through two information processing systems. The “surveillance” system scans an individual’s environment for novelty and threat, which, if found, trigger feelings of anxiety (Marcus et al., 2000, p. 10). The anxiety motivates people to take action against that impending threat. This action is manifested behaviorally by increased information seeking and information processing, and less reliance on habit and prior attitudes or beliefs. The anxiety engages thought and leads people to pay less attention to their previous focus and closer attention to the information at hand (Marcus, Sullivan, Theiss-Morse, & Stevens, 2005). As a result, they depend less on prior dispositions or attitudes like ideology or partisanship, process information more deeply, and are ultimately more likely to be influenced by contemporary information (Brader 2005, 2006). Importantly, even strong partisan are willing to give up on an attitude consistent belief when experiencing anxiety (Redlawsk et al., 2010). Because of this, Marcus et al. (2000) consider the surveillance system to be the “learning” system.

The second system working to process human cognition and emotion is the “dispositional” system. This system monitors behavior by allowing people to unconsciously rely on their established habits, attitudes, or beliefs whenever possible (Marcus et al., 2000). The dispositional system signals everything is as it should be, and there is nothing novel or challenging enough about the situation to set off the surveillance
system. The dispositional system is associated with two contrasting emotional experiences (Marcus et al., 2011). When existing habits are sufficient, feelings of enthusiasm are triggered by the dispositional system and people actively seek rewards that will maintain that enthusiasm (Brader, 2005; Marcus et al., 2000). The dispositional system is also associated with aversion, which occurs in response to consistent, known, and recurrent threats (MacKuen et al., 2010) and can take the form of anger (Lerner & Keltner, 2001). Anger leads to avoidance of information and kick-starts defensive motivations (Marcus et al., 2011). Angry individuals are less likely to consider new information and that information is subsequently less influential and persuasive (Valentino et al., 2008). Anger allows people to avoid challenging information and to fall back on their prior dispositions, attitudes, and habits. Ultimately anger hinders learning as it leads to selective exposure and attention, reduced information seeking, and rejection of information that is not consistent with existing beliefs (MacKuen et al., 2010). This evidence is our first hint that motivated reasoning processes in response to political information may be driven by the discrete emotion anger (Marcus et al., 2011), rather than anxiety or general negative affect. As we will see, this has important implications for the study of political misperceptions.

Much existing research on the role of emotions in politics collapses measures of anxiety and anger (e.g. Abelson et al., 1982; Brader, 2006; Brader et al., 2008; Marcus et al., 2000) or simply looks at valence (Taber & Lodge, 2006; Redlawsk, 2002), which do not allow for tests of the individual influence of each negatively-valenced emotion. Although the two emotions often do co-occur and are not mutually exclusive, we know
from appraisal theories and discrete emotion approaches that anxiety and anger (aversion) fundamentally work differently and can have drastically different consequences (Lerner & Keltner, 2000, 2001; Smith & Ellsworth, 1985). In recent years, many political communication scholars have rightly recognized the value of exploring the unique effects of these two discrete emotions in particular. This work has identified a variety of differential effects between anxiety and anger on outcomes such as political participation, policy support, political learning, information seeking, political choice, and decision-making (see Groenendyk, 2011 for complete review).

Empirical support for differences between anger and anxiety is robust. Although anger and anxiety both increase attention to politics (Valentino et al., 2008), anger appears to stimulate political participation (Valentino, Brader, Groenendyk, Gregorowicz, & Hutchings, 2011). Anxiety also often increases political information seeking, learning, and deliberation (Redlawsk et al., 2010; Redlawsk et al., 2007) whereas anger depresses each and promotes close-mindedness (Druckman & McDermott, 2008; MacKuen et al., 2010; Valentino et al., 2008). Anger and anxiety are also associated with differences in support for various political policies. Studies demonstrate that anxiety surrounding the 9/11 terrorist attacks led to higher perceptions of risk and support for conciliatory and precautionary policies, whereas anger (or known threat) reduced risk estimates but boosted punitive policy support (Huddy, Feldman, Taber, & Lahav, 2005; Lerner et al., 2003). The finding that anger is associated with causal attributions and support for political policies that punish and seek retribution and anxiety’s (or fear) association with
precautionary policies has received much empirical support (e.g. Goodall, 2013; Nabi, 2003; Small, Lerner, & Fischhoff, 2006).

It is clear that anger and anxiety can have very different effects on numerous political outcomes. What has yet to be determined, however, is whether these differences extend to the study of political misperceptions. In the following section, I use insights from appraisal theories of emotion as well as affective intelligence theory to outline a theory explaining how anger and anxiety may differentially affect false beliefs about politics by promoting or reducing the influence of partisanship and contemporary information.

**Anger, Anxiety, and Political Misperceptions**

Extant research on political misperceptions and the public’s resistance to corrective messages predominantly relies on the theory of partisan motivated reasoning to explain why people hold false beliefs about politics (e.g. Jerit & Barabas, 2012; Kuklinski et al., 2000; Nyhan & Reifler, 2010; Garrett & Weeks, 2013). Though this work has demonstrated relationships between misperceptions and party affiliation, this dissertation highlights why this approach may be insufficient and argues why including discrete emotions into these models may be a fruitful theoretical path to understanding misperceptions. But questions remain as to how discrete emotions, in particular anger and anxiety, exert their influence and ultimately affect what people believe about politics.

If the discrete emotion model argued for in this dissertation is correct, experienced anger and anxiety will work very differently and lead to different outcomes when people consider political misperceptions and their corrections. Despite both
emotions being negatively valenced, it is expected that anger and anxiety will set in
motion different cognitive and behavioral strategies for dealing with these messages,
which will subsequently interact with their party affiliation to impact the accuracy of
their beliefs. Anger and anxiety should therefore influence the extent to which people rely
on their original attitudes and party identification. All things being equal, anxiety should
lead to more deliberation and less reliance on prior attitudes and partisanship, whereas
anger will kick start the motivated reasoning process and reliance on existing
dispositions.

Affective intelligence theory argues that novel and uncertain situations trigger
feelings of anxiety, which lead to more deliberation in response to political information
(Marcus et al., 2000). An individual’s pre-existing habits may not be enough to diminish
those anxious feelings so they must adopt behaviors that are not based on heuristics or
prior attitudes. As a result, anxiety leads to increased information seeking, and more
careful consideration and reflection of contemporary information (Brader 2005; Brader et
al., 2008; Gino, Wood Brooks & Schweitzer, 2012). Anxiety also reduces the influence
of prior attitudes or beliefs associated with party identification or ideology, increases the
depth of information processing, and boosts learning (MacKuen et al., 2010; Marcus et
al., 2000). For example, an experimental study found that Republicans became more
favorable toward Bill Clinton after viewing a series of anxiety-inducing stimuli (Way &
Masters, 1996). In another study, anxious individuals viewed more political news stories,
including stories that challenged their prior attitudes, and were more likely to endorse
compromise with their political opponents than were angry individuals (MacKuen, 2010).
Finally, using ANES data Marcus et al. (2010) found that voters who were anxious about their preferred party’s candidate were more likely to reconsider their vote choice and pay closer attention to the candidates’ policy positions and personality characteristics, which at times resulted in an intention to vote against their party’s candidate.

Experiencing anxiety when evaluating the veracity of a political claim should affect how people process the information and ultimately what they believe. When faced with a false claim about politics those who are anxious should rely less on their prior attitudes or political affiliation and more on the nature of the information at hand. Depending on the information environment, this could lead to either less or more accurate beliefs. Consider a scenario in which a Democrat experiencing anxiety is exposed to misinformation that reflects negatively on a political issue they support. Because anxiety increases the value of contemporary information and decreases reliance on existing habits like prior beliefs, the information presented in this claim should make it more likely that they evaluate the claim as true, especially if corrective information is not presented. This would theoretically account for the significant number of citizens who believe misperceptions about their own candidate, for instance Democrats who do not believe Barack Obama was born in the United States. However, anxiety experienced when evaluating a claim accompanied by a fact-based correction should make the correction more effective, regardless of whether the claim is pro- or counter-attitudinal. In this case, prior dispositions should be less influential and people should be more willing to consider the evidence at their disposal. Their thought processes should be more balanced and the information in the correction should carry more weight in their evaluation.
Again, this would help explain why nearly one-third of Republicans reject the claim that Obama was born abroad. They are paying closer attention to the information within the correction and relying less on their party affiliation, which should increase the probability that they hold an accurate belief. Corrections presented under feelings of anxiety should therefore be more effective than under non-anxious situations. A series of linear interactions are therefore proposed, looking at the mutual influence of anxiety, partisanship, and the information environment (i.e. corrections). Based on this reasoning the following hypotheses are offered:

**H3:** Anxiety increases the effectiveness of corrections to both pro- and counter-attitudinal misperceptions.

**H4:** Anxiety decreases belief accuracy for counter-attitudinal misperceptions.

**H5:** Anxiety further decreases belief accuracy to counter-attitudinal misperceptions when a correction is absent.

Anger should have very different effects for the acceptance of political misperceptions. Anger is characterized by aversion (Lerner & Keltner, 2000) and should facilitate many of the motivated reasoning processes previously used to explain political misperceptions, including counter-arguing and source derogation. Anger sets off the dispositional system, which leads to less motivation to process information in depth, less consideration of the information at hand, and more reliance on habits and prior dispositions. Support for these patterns of behavior come from a study on the influence of emotions in the political information environment. Here, MacKuen et al. (2010) found that angry individuals sought out more news stories that confirmed their prior attitudes,
became resolute in those prior attitudes, and were less willing to compromise. As a result, anger should result in less openness to new information contained in a fact-checking message and an unwillingness to hear the other side. Anger also sets in motion retributive and punitive behaviors intended to punish the source of the anger (e.g. Goodall, 2013; Nabi, 2003; Small, Lerner, & Fischhoff, 2006). Thus, anger should make people more susceptible to believing inaccurate claims that are consistent with their prior attitudes and hinder the effectiveness of corrective messages when those corrections challenge prior attitudes. Similarly, anger should lead to more accurate beliefs when misperceptions are inconsistent with prior attitudes, as people reject claims that reflect poorly on their disposition. In sum, anger should interact with political affiliation such that people become more reliant on their partisanship under conditions of anger. This would suggest that anger leads to many of the motivated information processing strategies identified by the theory of partisan motivated reasoning by increasing the influence of prior attitudes on beliefs. It should also trigger source derogation and counter-arguing, two processes associated with partisan motivated reasoning.

H6. Anger decreases belief accuracy of pro-attitudinal misperceptions.

H7. Anger increases belief accuracy of counter-attitudinal misperceptions.

H8. Anger decreases the effectiveness of corrections to pro-attitudinal misperceptions.

H9: Anger increases the effectiveness of corrections to counter-attitudinal misperceptions.
As outlined above, anxiety and anger should affect how people consider the information they encounter about political misperceptions. Anxiety should facilitate more deliberative information processing, whereas anger should promote biased processing and both strategies should have consequences on what people believe. Thus, the following hypotheses are offered.

**H10:** Anxiety decreases biased information processing, which should subsequently increase the effectiveness of corrections.

**H11:** Anger increases biased information processing, which results in beliefs that are consistent with prior attitudes.

**H12a:** Anger increases counter-arguing of counter-attitudinal information, which subsequently decreases belief accuracy.

**H12b:** Anger increases source derogation of counter-attitudinal information, which subsequently decreases belief accuracy.

**Conclusion**

This dissertation reviews the existing literature related to belief in political misperceptions and how people respond to fact-checking messages. It argues in favor of moving beyond only partisan-based explanations and advocates for an approach also based in theories of discrete emotions. This theoretical perspective allows for the explicit test of the influence of various discrete emotions, like anger and anxiety, which are not captured in existing theories used to study political misperceptions. It also pinpoints and carefully tests the underlying mechanisms that are thought to drive motivated reasoning. Evidence supporting these hypotheses would indicate emotions have a pivotal role in how
people see the political world and also demonstrate citizens do not evaluate all political information strictly through a partisan lens but that their emotional response helps determine their reliance on prior attitudes.
Chapter 3: Study 1

Purpose

The goal of Study 1 is to demonstrate that incidental (unrelated to the target) emotional states can influence individuals’ accuracy in assessing false political claims. In order to cleanly test the influence of emotions proposed in this dissertation, it is necessary to isolate emotions’ influence on belief. Study 1 is therefore designed to offer an unadulterated test of the theory. The benefits of testing the impact of incidental emotions are two-fold. First, it eliminates issues of endogeniety (Ladd & Lenz, 2008) by testing whether different emotions people bring to a message—not only emotions stemming from the message or topic—can impact how they assess the content of the message and ultimately what they believe. Second, examining incidental emotions highlights the independent and unique influence of emotions. If emotions that are entirely unrelated to the message or issue impact what people believe, this would indicate that emotions by themselves are an important factor in judgment and evaluation. Study 1 also seeks to demonstrate that different discrete emotional states, even those of the same valence, affect evaluations of these claims differently.

Study 1 tests the influence of these emotional states on two types of informational situations citizens most often see in a news environment. The first situation involves misinformation presented on its own, without much factual support and without an
explicit correction. This type of information is often presented as rumor on political websites, blogs and in emails (Garrett, 2011). It can also be presented in news stories, as was news coverage of the claim that Obama was Muslim (Weeks & Southwell, 2010). It often includes a preface such as “some are claiming…” (DiFonzo et al., 2012). The second type of information related to misperceptions includes an explicit and fact-based correction. This type of message is frequently used by journalists and independent fact-checking organizations such as Politifact or Fact-check.org. It contains clear information rebutting the false claim and is often supported by evidence provided by relevant experts.

Sample and Participants

Study 1 was conducted between March 25 and March 27, 2014. Participants were 384 English-speaking adults over age 18 who live in the United States and have access to the Internet. This demographically diverse sample was recruited using an opt-in panel administered by Qualtrics (See Table 1 for descriptive statistics). Participants received a small cash incentive for completing the study. Using Cohen’s (1992) calculations, a total sample size of 384 (64 in each experimental condition for the emotion and misperception factors) is needed to find medium-sized effects ($d = .50$) for power of .80 at an alpha level of .05. Because this study is interested in specific comparisons of mean differences between groups (and not simply differences in the Grand Mean), the effect size index $d$ is used rather than $f$.

The mean age for the sample was 47.98 ($SD = 13.11$) and 50 percent were men. 38 percent of participants have a college degree and the mean annual income is approximately between $40,000 and $50,000. 84.6 percent of the sample identified as
Caucasian, 8.9 percent as Black, and 3.1 percent Asian. 5.7 percent were Hispanic/Latino.

**Design**

A posttest-only experiment was utilized to assess the influence of emotions on belief in misinformation about two political issues, immigration reform and the death penalty. Two issues were used as a form of stimulus sampling, which improves both construct and external validity and can serve to replicate the findings (Wells & Windschitl, 1999). The two issues selected, immigration and the death penalty, were chosen for several reasons. First, many citizens are misinformed about proposed immigration legislation (Cave, 2011), as well as the death penalty (Cohen, 2013). Second, both issues have similar general levels of “support” and there is nearly an even divide in overall public opinion about the issues (i.e. in favor of immigration reform; support for the death penalty), though support does fall along party lines. For instance, Democrats are more likely to support policies that increase immigration into the US than are Republicans (Gallup, 2013b). The opposite pattern is true with the death penalty, as 81 percent of Republicans support the death penalty compared to 47 percent of Democrats (Gallup 2013c). Finally, neither issue is viewed by the public as a “most important” issue, which suggests the issues are less likely to be on citizens’ political agendas (Gallup, 2013a).

Participants were told the purpose of the study is to assess how people process political news and information. After providing consent, participants first reported their attitudes toward a series of political issues, including the two issues that were the focus of
the misperceptions. Next, participants were randomly assigned to one of 12 conditions using a 3 (Emotion: anxiety, anger, neutral) x 2 (Misinformation: misinformation only, misinformation and correction) x 2 (Issue: immigration, death penalty) experimental design.

Emotion was manipulated by having participants read one of three randomly assigned news articles. The news articles were designed to elicit anger, anxiety, or a neutral emotional state. The anger article focused on a woman who received a light sentence after killing a teenager while driving drunk. The anxiety article reported that nuclear materials were stolen during transport from a hospital to a waste storage facility. Finally, the neutral article discussed routes tourists can take to view autumn foliage. The news articles were non-political in nature and their content was unrelated to the misperceptions participants later encountered (See Appendix A for stimuli). Immediately after reading the initial news article, participants were asked to retrospectively report their emotional state while reading the article. These items captured how angry, anxious, and enthusiastic participants felt after reading their news story.

Next, participants were asked to read a second news article containing either a series of claims about immigration or the death penalty (misinformation-only article), or an article with the same claims as well as corrective information providing explicit evidence that the statements are false (misinformation with correction article, henceforth “correction”). The news articles were attributed to the Associated Press. The misinformation-only articles suggested the recent debate over immigration or the death penalty has suffered from several misperceptions. The inaccurate claims were presented
alone, without any corrective information. This format for presenting misperceptions around a political issue is sometimes used by news outlets and is also a format citizens may encounter on political blogs or websites. Each claim used in the articles was explicitly false based on expert reports.

The correction article presented the same series of false claims, but was accompanied by an additional paragraph labeled “FACT” that provided an explicit, evidenced-based rebuttal to the inaccurate information. This too is a format many journalists use and is the primary template used by fact-checking organizations. Immediately after reading the news article, participants were asked to report the extent to which they believed the series of claims presented in the article. After providing their responses to the belief items, participants were then asked several questions related to the sources of the information and their consideration of the evidence. The study concluded by asking several questions assessing psychological individual differences and demographics.

**Measures**

**Emotion.**

Immediately after reading the news article designed to manipulate anger and anxiety, participants reported the extent to which they experienced a series of emotions while reading the story. Specifically, they were provided the following prompt: “did the article make you feel…” which was followed by a randomized series of emotions measured on a five-point scale (1 = very slightly or not at all, 5 = extremely). Several emotions were assessed to measure anger (angry, outraged, disgusted; α = .96, M = 2.87,
The anger and anxiety scales were positive correlated with each other ($r = .55$, $p < .001$) and were negatively correlated with the enthusiasm scale (anger $r = -.56$, $p < .001$; anxiety $r = -.25$, $p < .001$). Additionally, a series of ANOVAs revealed no significant differences in the emotion scales between the misinformation-only and correction conditions ($p$-values from .19 to .33). There were also no differences in anxiety or enthusiasm between the two issues ($p = .590$ and .83, respectively), though anger was slightly higher in the death penalty condition $F(1, 383) = 3.51$, $p = .06$.

**Belief in false claims.**

Belief in the false claims put forth in the misinformation-only and correction articles was assessed immediately after participants completed reading their assigned article. Belief was measured by asking participants to assess the accuracy of the four claims that were presented in each article. Participants were asked the following: “The article you just read made several claims about immigration (death penalty). What do you think about the accuracy of these statements? For each statement listed below, please tell us if you think it is definitely true, probably true, probably false, definitely false or you are unsure?” Belief was assessed on a four-point scale ($1 = definitely true, 4 = definitely false$), with an “unsure” response offered as well. It is important to offer the “unsure” response for two reasons. First, it is likely that some respondents truly are unsure about the validity of the claims and their beliefs would not be reflected with a forced choice. Second, answering “unsure” may be a more socially acceptable form of belief. It is
possible that some subjects may feel social desirability pressure and be hesitant to indicate that they believe some of the false claims. Offering the unsure response provides respondents who tend to believe the claim but do not want to admit it a way to express their belief. For both of these reasons, the belief scale was recoded so that the “unsure” response option was located in the midpoint of the revised five-point scale. Thus, higher values on the scale represent greater accuracy in assessing these false claims.

Participants who read the immigration article ($N = 202$) were asked to report their belief in the following four false claims: A) Illegal immigrants are able to receive government welfare benefits like food stamps and housing benefits (“Welfare benefits”); B) The majority of immigrants do not learn to speak English (“Learn English”); C) Immigrants are more likely to become criminals than native born citizens (“Criminal activity”); D) Proposed legislation will allow any current illegal immigrant to become a citizen (“Path to citizenship”). The four items were combined to create a single belief scale in which higher values demonstrate greater accuracy ($\alpha = .77$). The mean is just below the mid-point of the scale, which indicates that participants were typically wrong in assessing the claims (See Table 1). For purposes of description, each item was also recoded into a dichotomous variable in which respondents were either accurate in their beliefs or not. Beliefs were considered accurate (coded 1) if the respondent selected either “probably false” or “definitely false,” whereas the two incorrect response options (“probably true,” “definitely true”), as well as “unsure” were treated as inaccurate (coded 0). This allowed for an accuracy count across the four items to be created, in which the value equates to the number of accurate beliefs across the four claims.
Participants who read the death penalty article (N = 182) were asked to report
their belief in the following four claims: A) The number of inmates executed in the U.S.
is growing (“Number of executions”); B) Minorities are more likely to be executed than
Whites (“Minorities executed”); C) It is legal to execute juveniles in the U.S. (“Juvenile
executions”); D) Public support for the death penalty has increased in recent years
(“Public support”). As with the immigration items, the death penalty belief items were
combined into a single scale (α = .79) and a dichotomous accuracy count.

Table 1. Study 1 Mean Belief by Issue

<table>
<thead>
<tr>
<th></th>
<th>Scale</th>
<th>Dichotomous</th>
<th>% Answering “Unsure”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immigration (N = 202)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Welfare benefits”</td>
<td>2.66 (1.49)</td>
<td>.34 (.48)</td>
<td>6.4%</td>
</tr>
<tr>
<td>“Learn English”</td>
<td>2.96 (1.44)</td>
<td>.46 (.50)</td>
<td>6.4%</td>
</tr>
<tr>
<td>“Criminal activity”</td>
<td>3.36 (1.42)</td>
<td>.57 (.50)</td>
<td>7.9%</td>
</tr>
<tr>
<td>“Path to citizenship”</td>
<td>2.85 (1.43)</td>
<td>.38 (.49)</td>
<td>6.4%</td>
</tr>
<tr>
<td>4 items combined</td>
<td>2.96 (1.11)</td>
<td>1.75 (1.40)</td>
<td>---</td>
</tr>
<tr>
<td><strong>Death Penalty (N = 182)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Number of executions”</td>
<td>3.08 (1.50)</td>
<td>.47 (.50)</td>
<td>10.4%</td>
</tr>
<tr>
<td>“Minorities executed”</td>
<td>3.02 (1.51)</td>
<td>.45 (.50)</td>
<td>7.1%</td>
</tr>
<tr>
<td>“Juvenile execution”</td>
<td>3.76 (1.46)</td>
<td>.68 (.48)</td>
<td>6.6%</td>
</tr>
<tr>
<td>“Public support”</td>
<td>2.97 (1.38)</td>
<td>.41 (.49)</td>
<td>8.8%</td>
</tr>
<tr>
<td>4 items combined</td>
<td>3.21 (1.15)</td>
<td>2.00 (1.43)</td>
<td>---</td>
</tr>
</tbody>
</table>

Note. Higher values equate to more accurate beliefs for the scaled items. Values for the
scale column represent the mean and standard deviation. Dichotomous values for
individual items represent the percentage of the sample holding accurate beliefs, with the
standard deviation in parentheses. The “4-items combined” item for the dichotomous
measures represents a count of accurate beliefs.
Paired-sample $t$ tests revealed that the two issues differed in mean levels of belief across the four belief items, as beliefs in the death penalty claims were more accurate than the immigration claims for the interval-level scale, $t(382) = 2.14, p < .05$. A marginal difference in accuracy was found when examining the dichotomous measures, $t(382) = 1.74, p < .10$. As a result, the two issues will be analyzed together but all analyses will control for issue ($M = 3.08, sd = 1.14$).

**Political party affiliation and issue favorability.**

Political party affiliation was measured on a seven-point scale ($1 = a \ strong Democrat$, $7 = a \ strong Republican$). The mean ($3.98$, $s.d. = 1.60$) is just under the midpoint of the scale and is closest to the response option representing true political Independents ($Independent, close \ to \ neither \ party$). Combining the two issues for analyses makes it difficult to determine the influence of party identification, as public opinion polls reveal Democrats are more inclined to support immigration reform and Republicans are more likely to favor the death penalty (Gallup 2013b; Gallup 2013c). Including a simple partisanship variable would therefore mask its effects across the two issues, as the influence of partisan predispositions would likely cancel one another out.

In order to account for this it was necessary to recode the partisanship variable into a new issue favorability variable so that members of both parties were on the same scale for both issues. To accomplish this the scale for partisanship in the immigration condition was reversed such that higher values were associated with Democrat affiliation. The “preferred party’s issue favorability” variable was then created by using this recoded partisanship variable for those in the immigration condition and the original party
affiliation variable for participants in the death penalty condition. The resulting variable represents each party’s expected issue favorability, as higher values in the immigration condition represent Democrats, who tend to support immigration reform, whereas higher values in the death penalty condition illustrate Republicans, who are typically more likely to support the death penalty. When combined they create a single, issue favorability variable in which the party whose members are typically inclined to support each issue are represented at the higher end of the scale.

**Perceived biased information processing.**

Biased information processing was measured using a four-item scale (Gross, 2008; Wolski & Nabi, 2000). Participants were asked to think back to the misinformation article they read and report on a five-point scale (1= *Strongly Disagree*, 5= *Strongly Agree*) the extent to which they “remained objective about the article’s content,” “tried not to let how I feel about the issue influence how I read the article,” “tried to remain impartial as I read the article,” and “prior beliefs about the issue prevented me from being objective (reverse coded)”. Thus, higher values represent less biased and more deliberative processing (immigration: α = .71, M = 3.73, sd = 0.63; death penalty: (α = .70, M = 3.83, sd = 0.66; combined, M = 3.78, sd = 0.65).

**Source liking and credibility.**

Participants were also asked to report the extent to which they liked both the original source of the misinformation and the correction, as well as the extent to which they found it credible (Nabi, Moyer-Gusé, & Byrne, 2007). Source liking and credibility were measured using the following prompt; “The Association for American Immigration
Reform (AAIR) (American Amnesty Coalition (AAC)) is:” The prompt was followed by eleven semantic differentials measured on a five-point scale (unfriendly-friendly, unlikeable-likeable, unpleasant-pleasant, untrustworthy-trustworthy, unconvincing-convincing, unreliable-reliable, dishonest-honest, incredible-credible, unqualified-qualified, uninformed-informed, inexpert-expert). After recoding, higher values indicate greater source liking and perceived credibility (immigration: α = .97, M = 3.09, sd = 1.03; death penalty: (α = .95, M = 2.99, sd = .95; combined, M = 3.04, sd = .99). Participants who also received a correction were asked to rate the fact-checking organization, Political Fact, on the same scale (immigration: M =3.41, sd = .95; death penalty: (M = 3.66, sd = .87; combined, α = .96, M = 3.54, sd = .92).

Counter-arguing.

The extent to which participants counter-argued the original source of the inaccurate claims and the source of the correction were measured (Nabi et al., 2007). Participants were provided the following prompt “When reading the claims (fact-checking materials) about immigration (the death penalty) provided by The Association for American Immigration Reform (AAIR)/American Amnesty Coalition (AAC)/Political Facts…” They then reported the extent to which they agreed with four statements measured on five-point scales (1= Strongly Disagree, 5= Strongly Agree). The statements were as follows: “I find myself actively agreeing with their points,” “I found myself actively disagreeing with their points,” “I was looking for flaws in their argument,” and “It was easy to agree with the arguments made in the message.” The first and fourth items were recoded so that higher values report greater counter-arguing.
Scales for the source of the inaccurate claims (immigration: $\alpha = .82, M = 3.02, sd = .92$; death penalty: $(\alpha = .82, M = 3.10, sd = .78$; combined, $M = 3.06, sd = .86$) and for the fact-checking organization (immigration: $M = 2.91, sd = 0.86$; death penalty: $(M = 2.73, sd = 0.72$; combined, $\alpha = .79, M = 2.82, sd = .80$) were treated separately.

**Perceived argument quality.**

All participants were next asked to assess the quality of the false claims about immigration/death penalty, as well as the strength of the information provided in the correction by the fact-checking organization (when appropriate). These items were based on prior persuasion research (e.g. Nabi et al., 2007) and were measured using the following question: “The claims about immigration (death penalty) made by the Association for American Immigration Reform (AAIR) (American Amnesty Coalition (AAC)) were:” followed by six semantic differentials measured on a five-point scale *(bad-good, weak-strong, unbelievable-believable, invalid-valid, unconvincing-convincing, false-true)*. Relevant items were reversed coded such that higher values indicate greater perceived quality of the arguments (immigration: $\alpha = .92, M = 3.15, sd = 1.02$; death penalty: $(\alpha = .93, M = 2.98, sd = 0.99$; combined: $M = 3.01, sd = 1.01$). Participants who also received a correction were asked to rate on the same scale “the information provided by the fact-checking organization Political Fact.” (immigration: $M = 3.42, sd = 1.08$; death penalty: $M = 3.70, sd = 0.93$; combined, $\alpha = .96, M = 3.59, sd = 1.01$).
Political knowledge.

Four items tap participants’ political knowledge. These include questions about the current make-up of congress, the party of President who appointed the current Chief Justice of the Supreme Court, the current unemployment rate, and the current U.S. Secretary of State. The items were summed, creating a range of possible scores from 0 to 4 ($M = 1.99$, $sd = 1.34$). This item was included as a control variable in all of these analyses.

Demographics.

Several demographic characteristics were also assessed. These include gender, age, race, income, and education (Table 2).
Table 2. Study 1 Descriptive Statistics

Conditions

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigration Reform (n,%)</td>
<td>202 (52.6%)</td>
</tr>
<tr>
<td>Death Penalty (n,%)</td>
<td>182 (47.4%)</td>
</tr>
<tr>
<td>Anger (n,%)</td>
<td>137 (35.7%)</td>
</tr>
<tr>
<td>Anxiety (n,%)</td>
<td>117 (30.5%)</td>
</tr>
<tr>
<td>Neutral (n,%)</td>
<td>130 (33.9%)</td>
</tr>
<tr>
<td>Misperception (n,%)</td>
<td>198 (51.6%)</td>
</tr>
<tr>
<td>Correction (n,%)</td>
<td>186 (48.4%)</td>
</tr>
</tbody>
</table>

Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republican</td>
<td>30.7%</td>
</tr>
<tr>
<td>Independent</td>
<td>23.9%</td>
</tr>
<tr>
<td>Democrat</td>
<td>43.0%</td>
</tr>
<tr>
<td>Conservative</td>
<td>32.8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>37.2%</td>
</tr>
<tr>
<td>Liberal</td>
<td>29.9%</td>
</tr>
<tr>
<td>Age (M, SD)</td>
<td>47.98 (13.11)</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>50%</td>
</tr>
<tr>
<td>Education (College graduate)</td>
<td>38%</td>
</tr>
<tr>
<td>Income (=M)</td>
<td>$40-50K</td>
</tr>
<tr>
<td>Caucasian</td>
<td>84.6 %</td>
</tr>
<tr>
<td>Latino</td>
<td>5.7 %</td>
</tr>
<tr>
<td>Political Knowledge (M, SD)</td>
<td>1.99 (1.34)</td>
</tr>
<tr>
<td>Interest in Politics (M, SD)</td>
<td>2.93 (.85)</td>
</tr>
</tbody>
</table>

Note. Total number of participants = 384.

Results

Pilot studies.

Two independent, non-overlapping samples were first used to test the experimental materials. Both samples were recruited from Amazon.com’s Mechanical
Turk (MTurk), which allows researchers to recruit and compensate subjects for studies. Although MTurk provides a convenience sample, its samples are generally representative of the population and have been shown to be valid for social science experiments (Berinsky, Huber, & Lenz, 2012).

The first pilot study tested the effectiveness of the news articles to manipulate emotions. An iterative process was used to create these materials. First, a total of four articles were created to manipulate anger and anxiety. The two anger articles focused on A) a woman who received a light prison sentence after killing a teenager while driving drunk, and B) how contaminated pet food from China was killing Americans’ pets. The two anxiety articles centered around A) North Korea’s ability to strike the U.S. with nuclear missiles, and B) a truck that was stolen in northern Virginia that contained dangerous nuclear material. A fifth article, which served as the control, focused on autumn foliage sightseeing tours.

Participants were randomly assigned to read one of these five articles and report their emotional responses on a five-point scale (1 = very slightly or not at all, 5 = extremely). Based on this initial test, it was apparent that the drunk driving and stolen nuclear materials articles were the most effective at creating anger and anxiety respectively.

After making minor changes to these two articles, a second sample of MTurk participants were randomly assigned to read the anger (n = 25), anxiety (n = 22), or neutral article (n = 21), and report the extent to which they experienced anger (angry, outraged, disgusted; \( \alpha = .88, M = 2.41, sd = 1.28 \)), anxiety (anxious, nervous, afraid; \( \alpha = .88, M = 2.41, sd = 1.28 \)),
.90, M = 2.27, sd = 1.20), and enthusiasm (enthusiastic, proud, hopeful; α = .88, M = 1.71, sd = 0.99). A series of ANOVAs indicate the manipulations were successful. First, those who read the article designed to elicit anger experienced significantly more anger (M = 3.32, sd = 1.01) than did those in the anxiety (M = 2.35, sd = 1.05) and neutral conditions (M = 1.38, sd = 0.96; F(2, 65) = 21.17, p < .001). Also as expected, participants in the anxiety condition reported significantly more anxiety (M = 3.20, sd = 0.88) than did those in the anger (M = 2.24, sd = 1.19) and neutral conditions (M = 1.23, sd = 0.48; F(2, 65) = 20.22, p < .001). Finally, paired-sample t tests indicate that those in the anger condition experienced more anger than anxiety, t(24) = 4.38, p < .001, and participants in the anxiety condition felt more anxiety than anger, t(21) = 4.92, p < .001.

**Manipulation check.**

A manipulation check was conducted to determine that the emotional inductions in the main study were effective. Three ANOVAS and follow-up contrasts reveal some issues with the manipulation in the anxiety condition. The anger induction resulted in significantly more anger (M = 4.14, sd = 1.03) than did the anxiety (M = 3.24, sd = 1.18) or neutral conditions (M = 1.21, sd = 0.66), F(2, 383) = 313.43, p < .001. The anxiety condition generated significantly more anxiety (M = 3.11, sd = 1.17) than did the anger (M = 2.21, sd = 1.14) or neutral conditions (M = 1.40, sd = 0.69), F(2, 383) = 85.57, p < .001. Also, participants in the neutral condition were significantly more enthusiastic (M = 3.24, sd = 1.08) than were those in the anxiety (M = 1.23, sd = 0.50) or anger conditions (M = 1.22, sd = 0.63), F(2, 383) = 282.19, p < .001. With the exception of the anger-anxiety conditions on the enthusiasm scale, all paired comparisons between
conditions were also significant, $ps < .001$. Finally, paired-sample $t$ tests indicate that those in the anger condition experienced more anger than anxiety, $t(136) = 17.97, p < .001$. However, participants in the anxiety condition felt similar levels of anger and anxiety with the mean for anger actually being slightly higher, $t(116) = 1.44, p = .16$ (two-tailed). This suggests that anxiety and anger coexisted in the anxiety condition, making it more difficult to determine which emotion is driving any potential effects in that condition.

**Main analyses.**

A series of ordinary least squares regression models were estimated to test the hypotheses related to the direct and interactive effects of anger, anxiety, corrections, and partisanship using the PROCESS tool in SPSS (Hayes, 2013). Models were constructed hierarchically, such that relevant two-way interactions were examined before adding the predicted three-way interactions or assessing moderated mediation (where appropriate).

The first set of hypotheses and research question relate to the main effects of partisanship, corrections to misperceptions, and the interaction between the two. In particular, H1 predicted that prior attitudes would impact belief accuracy such that pro-attitudinal misperceptions are believed more than counter-attitudinal misperceptions. Turning to Model 1 of Table 3, the coefficient for the relationship between an individual’s preferred party’s issue favorability and belief accuracy is positive and significant ($b = .12, p < .001$), providing support for H1. Participants who associate with the political party that tends to support immigration or the death penalty held more accurate beliefs about that issue, which is consistent with much prior research on
misperceptions and partisan motivated reasoning. With H2 it was expected that corrections to political misinformation would improve belief accuracy relative to misinformation presented alone. Returning to Model 1 we find support for this hypothesis, as the coefficient for the correction is positive and significant, $b = .94, p < .001$. This indicates that participants who received a correction held more accurate beliefs than those who did not and strongly suggests that corrections can be effective.

The research question addressed whether the effectiveness of corrections is contingent on partisanship. The results demonstrate they are not. Corrections were equally effective for participants who identified with the political party that was inclined to support or oppose the issue (Model 2, Table 3). This finding is inconsistent with prior research on misperceptions that shows corrections are less effective when the correction challenges prior attitudes or partisanship (e.g. Nyhan & Reifler, 2010; Garrett & Weeks, 2013), but supports other work indicating that corrections are not dependent on prior attitudes or partisanship (e.g. Ecker et al., in press; Weeks & Garrett, 2014).
Table 3. Study 1 Effects of Emotion, Correction, and Partisanship on Belief

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>.06 (.13)</td>
<td>.05 (.13)</td>
</tr>
<tr>
<td>Anger</td>
<td>.02 (.12)</td>
<td>.02 (.12)</td>
</tr>
<tr>
<td>Correction (coded high)</td>
<td>.94 (.10)***</td>
<td>1.00 (.24)***</td>
</tr>
<tr>
<td>Preferred party’s issue favorability</td>
<td>.12 (.03)***</td>
<td>.14 (.08)#</td>
</tr>
<tr>
<td>Correction X Preferred party’s issue favorability</td>
<td>---</td>
<td>-.01 (.05)</td>
</tr>
<tr>
<td>Issue (Death penalty coded high)</td>
<td>.26 (.10)*</td>
<td>.26 (.10)*</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>.13 (.04)**</td>
<td>.13 (.04)***</td>
</tr>
<tr>
<td>Constant</td>
<td>.53 (.25)*</td>
<td>.44 (.40)</td>
</tr>
<tr>
<td>Observations</td>
<td>379</td>
<td>379</td>
</tr>
<tr>
<td>$F$</td>
<td>22.62</td>
<td>19.35</td>
</tr>
<tr>
<td>$(df)$</td>
<td>(6, 372)***</td>
<td>(7, 371)***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.267</td>
<td>0.268</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>---</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. Unstandardized regression coefficients reported. Standard error is listed in parentheses. Belief measured on a five-point scale where higher values correspond to more accurate beliefs. # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. All $p$-values are two-tailed.

The second set of hypotheses (H3-H9) incorporates the effects of anxiety and anger, as well as these emotions’ interactions with partisanship and the type of message. Recall each emotion was manipulated experimentally and is represented in the model as a dummy variable that compares the anger or anxiety condition to the neutral emotion condition. Separate models were built to test the effects of anger and anxiety.
It is clear that anxiety did very little to influence beliefs in the first experiment (models not reported). The interactions between 1) anxiety and the correction condition and 2) anxiety and preferred party’s issue favorability variable were non-significant. The predicted the three-way interaction between anxiety, the correction condition, and party affiliation also did not find support. As a result, H3-H5 were not supported, as the influence of anxiety was not dependent on either partisanship or the information environment. These null findings may have been in part attributable to the failed manipulation in this condition.

The effects of anger in Study 1 were subtle. H6 predicted that anger facilitates inaccurate beliefs in misperceptions consistent with prior attitudes, while H7 claimed that anger would increase belief accuracy when the misperception was counter-attitudinal. Neither of these hypotheses was supported, as the interaction between anger and partisanship was non-significant (Model 1, Table 4). Anger had the same influence on belief whether the claim was pro- or counter-attitudinal.
Table 4. Study 1 Interactive Effects of Anger, Partisanship, and Corrections on Belief

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.04 (.25)</td>
<td>-.15 (.34)</td>
<td>-1.18 (.12)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.06 (.10)</td>
<td>.06 (.13)</td>
<td>.07 (.13)</td>
</tr>
<tr>
<td>Correction (coded high)</td>
<td>.94 (.10)***</td>
<td>.90 (.13)***</td>
<td>.71 (.29)*</td>
</tr>
<tr>
<td>Preferred party’s issue favorability</td>
<td>.12 (.03)***</td>
<td>.12 (.03)***</td>
<td>.06 (.10)</td>
</tr>
<tr>
<td>Anger X Preferred party’s issue favorability</td>
<td>-.00 (.06)</td>
<td>---</td>
<td>.25 (.17)</td>
</tr>
<tr>
<td>Anger X Correction</td>
<td>---</td>
<td>.12 (.21)</td>
<td>.87 (.51)#</td>
</tr>
<tr>
<td>Correction X Preferred party’s issue favorability</td>
<td>---</td>
<td>---</td>
<td>.04 (.06)</td>
</tr>
<tr>
<td>Anger X Correction X Preferred party’s issue favorability</td>
<td>---</td>
<td>---</td>
<td>-.18 (.11)#</td>
</tr>
<tr>
<td>Issue (Death penalty coded high)</td>
<td>.26 (.10)*</td>
<td>.26 (.10)*</td>
<td>.26 (.10)*</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>.13 (.04)***</td>
<td>.13 (.04)***</td>
<td>.14 (.04)***</td>
</tr>
<tr>
<td>Constant</td>
<td>.51 (.27)***</td>
<td>.58 (.28)*</td>
<td>.82 (.47)#</td>
</tr>
<tr>
<td>Observations</td>
<td>379</td>
<td>379*</td>
<td>379</td>
</tr>
<tr>
<td>F</td>
<td>19.34</td>
<td>19.40</td>
<td>13.84</td>
</tr>
<tr>
<td>(df)</td>
<td>(7, 371)***</td>
<td>(7, 371)***</td>
<td>(10, 368)***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.267</td>
<td>0.268</td>
<td>0.273</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.00</td>
<td>.00</td>
<td>.01#</td>
</tr>
</tbody>
</table>

Note. Unstandardized regression coefficients reported. Standard error is listed in parentheses. Belief measured on a five-point scale where higher values correspond to more accurate beliefs. $\Delta R^2$ refers to the change in variance due to the interaction. # $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. All $p$-values are two-tailed.

H8 and H9 incorporate corrections into the model. Because anger is expected to facilitate the motivated reasoning process, corrections to misperceptions about an
opposed issue should be less effective (H8), while corrective information about a supported issue should be more readily accepted (H9). In Model 4 (Table 4) the three-way interaction between anger, correction, and preferred party’s issue favorability is negative and marginally significant, $b = -.18$, $p = .10$ (two-tailed), which hints that the influence of anger on belief is partially dependent on both the corrective information and partisanship. Because three-way interaction coefficients are difficult to interpret it is necessary to probe where the differences lie and plot the interactions (Dawson, 2014). Figure 1 was generated using PROCESS (Hayes, 2013) and illustrates the interactions between anger and the correction condition at three levels of party issue favorability. A comparison of the two rows in Figure 1 tests H8. When angered individuals only received the misinformation (bottom row), they were more likely than those in the neutral condition to process information in a biased, partisan manner. Those who support the issue (hyphened line) rejected the false claims and held accurate beliefs, while those who opposed the issue (solid line) were more likely to be misinformed. These findings are consistent with partisan motivated reasoning and suggest anger contributes to partisan thinking when people are initially faced with an inaccurate claim. However, in contrast with H8, when provided a correction those in the anger condition who strongly associate with the party that opposes the issue became more accurate than their neutral counterparts. Although this conditional interaction effect is marginally significant, $b = .48$, $t(367) = 1.56$, $p = .12$ (two-tailed), the data do not support H8 as the effect is in the opposite direction of what was predicted. H9 was also not supported. The interactive effect of anger and the correction was not significantly different for those who were
inclined to support the issue, as illustrated in the top row of Figure 1. The correction had the same effect for those in the anger condition who belong to the party that strongly supports the issue as it did for those in the neutral condition.

![Figure 1. Anger by Correction by Partisanship on Belief Accuracy](image)

Note. Interactive only achieved marginal statistical significance. Interactions depicted at the mean ± 1 standard deviation.

The final set of hypotheses test whether emotions biased processing of the messages participants receive and its subsequent effects on belief. H10 predicted that anxiety would promote more deliberative and less biased information processing, which would subsequently increase the effectiveness of corrections. This hypothesis was not supported. The effect of biased processing on belief did not interact with the correction
condition, nor was anxiety related to biased processing. Because these initial steps were non-significant, the mediation portion of the model was not tested.

H11 predicted that anger would decrease deliberative processing, which would subsequently interact with prior attitudes to influence belief. The interactive effect between processing bias and the preferred party’s issue favorability on belief was significant, $b = -.07, p < .10$ (two-tailed). Having established the significant interaction, we then look at the conditional indirect effect. 5,000 bootstrap samples with 90% confidence intervals indicate that the conditional indirect effect was not significant, as each level of the moderating variable contained 0, which demonstrates that mediation is not present. In other words, although the influence of biased processing on belief is moderated by prior attitudes, that effect is not a result of anger.

The final two hypotheses predicted that anger would increase counter-arguing (H12a) and source derogation (H12b) of counter-attitudinal information, which would subsequently decrease belief accuracy (PROCESS Model 7). First testing the effects on counter-arguing, the interaction between anger and the preferred party’s issue favorability was non-significant (model not reported), suggesting the effects of anger on counter-arguing do not differ between pro- and counter-attitudinal issues. This is consistent with previous research (e.g. Garrett & Weeks, 2014) and contributes to the mounting evidence that counter-arguing counter-attitudinal information may not be driving biased beliefs, as some have argued (eg. Nyhan & Reifler, 2010).

H12b was supported, however. The interactive effect between anger and the preferred party’s issue favorability variable on source liking was significant, $b = -.07, p <$
.05 (See Figure 2 for path diagram). This interaction was probed and is depicted in Figure 3. Compared to the neutral condition, participants in the anger condition who held a strong association with the party that typically opposed the political issue at hand liked the source of the misperception more and found it more credible, while those in the anger condition whose prior attitudes made them inclined to support the issue were considerably less favorable in their evaluations of the original source of the misinformation.

![Diagram of path model](image)

**Figure 2. Conditional Indirect Effect of Anger on Belief through Source Liking and Credibility**

Note. Model controls for anxiety, correction, issue, counter-arguing, perceived argument quality, and political knowledge. * p < .05, # p < .10 (two-tailed).

Source liking and credibility subsequently negatively impacted belief accuracy, such that liking the source of the inaccurate claims was associated with less accurate beliefs $b = -.16, p < .10$ (two-tailed) (Figure 2). 5,000 bootstrap estimates indicate the indirect effect of anger on belief accuracy through source liking was negative and significant for individuals who strongly affiliated with the party that opposed the issue (point estimate = -.03, 90% CI: -.11 to -.00), but not for those whose party affiliation
placed them in the middle of the scale or those whose party favored the issue. This finding provides evidence that anger facilitates the motivated reasoning process, as it amplified the influence of prior attitudes on the assessment of the source of the information. Based on the results of H12a and H12b, we find that anger leads to source derogation of counter-attitudinal information, not counter-arguing, which subsequently reduces belief accuracy.

![Interactive Effect of Anger and Partisanship on Source Liking and Credibility](image)

Figure 3. Interactive Effect of Anger and Partisanship on Source Liking and Credibility

Note. Source liking measured on a five-point scale where higher values equate to more favorable evaluations. Source relates to the source of the original misperception. Model controls for anxiety, correction, issue, counter-arguing, perceived argument quality, and political knowledge.

**Post-hoc Analyses**

An argument in favor of a discrete emotion approach to the study of misperceptions has been made throughout this dissertation and predictions were made
regarding the unique influence of anxiety and anger. One alternative possibility is that valenced affect is driving any observed effects. That is, rather than anxiety and anger working in different ways, it is simply negatively-valenced affect that accounts for the findings. To test this possibility and to demonstrate the benefits of the discrete approach, the analyses were rerun using a valence-only model. The anxiety and anger conditions were collapsed and compared against the neutral emotion condition. These results of these analyses further support the discrete approach. Under no circumstances did the valence models perform better. None of the unsupported hypotheses became significant using the valence approach. More importantly, the unique effects of anxiety and anger found in Study 1 were diminished using the valence-approach. None of the hypotheses supported using the discrete approach were fully supported using the valence models. The failure to find effects using simple affective valence adds further support to calls for discrete-based approaches to the study of emotions and communication (e.g. Nabi, 2010), particularly political communication (Druckman & McDermott, 2008; MacKuen et al., 2010; Valentino et al., 2011).
Chapter 4: Study 2

Purpose

There are two primary goals for Study 2. First is to demonstrate that integral, direct (related) emotional states can influence individuals’ accuracy in assessing false political claims. Second, Study 2 directly manipulates the political affiliation of the source of the inaccurate information such that it is attributed to Congressional Republicans or Democrats. This manipulation allows for comparisons of the relative and interactive strength of motivated reasoning (tested using partisanship) and discrete emotions. It can clearly show if and when emotions facilitate the motivated reasoning process.

Whereas Study 1 attempts to demonstrate the influence of incidental emotions on belief, Study 2 provides a more externally valid test of emotions by examining how anxiety and anger directly related to a particular issue can affect belief. Political issues trigger emotional responses in citizens and it is important to directly assess how those emotions related to the issue at hand influence beliefs. Public discourse surrounding political issues and news media framing can elicit various emotions (Brader et al., 2008; Druckman & McDermott, 2008) and ultimately determine what people believe. Study 2 therefore directly tests how emotions called about by contemporary political issues may influence misperceptions. By examining the effects of integral emotions, inferences can
be made about how the media and news can alter public perceptions based on the content they offer citizens. As in Study 1, the second study therefore compares effects of discrete emotions across two types of messages citizens encounter in the media environment—even misinformation presented without corrective information and misinformation accompanied by a correction.

**Sample and Participants**

Study 2 tested the proposed hypotheses on a unique set of 768 participants. The data were collected between March 25 and April 2, 2014. Like Study 1, these participants were English-speaking adults over age 18 who live in the United States and have access to the Internet. The sampling firm Qualtrics was used to recruit a demographically diverse sample using an opt-in panel. As in Study 1, participants received a small cash incentive for completing each phase of the study. Using Cohen’s (1992) calculations, a total sample size of 768 (64 in each experimental condition for the emotion, source of misperception, and correction type factors) is needed to find medium effects ($d = .50$) for power of .80 at an alpha level of .05.

**Design**

Study 2 follows the design of Study 1 but with two primary differences. First, the emotion manipulation is different given Study 2’s goal of testing the influence of integral, rather than incidental, emotions. Rather than reading a news article to trigger emotions, participants were asked to write something about either immigration or the death penalty that makes them either angry or anxious. A fifth control condition asked participants to write something about their life that makes them relaxed. This writing manipulation has
proven successful in prior research on the effects of discrete emotions (e.g. Lerner & Keltner, 2001; Valentino et al., 2008). The second difference between Study 1 and 2 is the source of the false claims in the misperception and correction articles. Rather than be attributed to non-governmental associations, the source of the false claims here is either Congressional Republicans or Democrats. This results in a misperception that is seemingly either pro- or counter-attitudinal based on participants’ political party affiliation. The remainder of the articles and the design of the study follow Study 1.

To summarize, participants were randomly assigned to one of 24 conditions using a 3 (Emotion: anxiety, anger, neutral) X 2 (Issue: immigration reform; the death penalty) X (source of misperception: Republican, Democrat) X 2 (Misinformation: misinformation-only, misinformation with correction).

![Table]

<table>
<thead>
<tr>
<th>EMOTION</th>
<th>Anger</th>
<th>Anxiety</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTICLE</td>
<td>Misinformation</td>
<td>Correction</td>
<td>Misinformation</td>
</tr>
<tr>
<td>Democrat</td>
<td>N= 85</td>
<td>N= 70</td>
<td>N= 82</td>
</tr>
<tr>
<td>Republican</td>
<td>N= 80</td>
<td>N= 79</td>
<td>N= 73</td>
</tr>
</tbody>
</table>

Figure 4. Experimental Cell Sizes, Issues Combined

**Measures**

**Emotion.**

Immediately after the writing task designed to trigger anger and anxiety about immigration or the death penalty, participants reported their current emotional state on the same five-point scale used in Study 1 (higher values = greater emotional experience).
The same items used to measure anger ($\alpha = .90, M = 1.83, sd = 0.93$), anxiety $\alpha = .84, M = 1.83, sd = 1.08$), and enthusiasm $\alpha = .84, M = 2.69, sd = 1.14$) were used. Anger and anxiety were positively correlated, ($r = .56, p < .001$), while anger and enthusiasm were negatively correlated ($r = -.06, p < .10$ (two-tailed)). Surprisingly, anxiety and enthusiasm were positively correlated ($r = .12, p < .001$).

**Source of misperception.**

One of the factors in the experimental design manipulated the source of the misperception. The claims made in the article were attributed to either Congressional Republicans or Democrats. Based on this manipulation, a dichotomous variable was created that represented whether the source of the misperceptions was from the political party participants supported or opposed. If, for example, a self-reported Republican or individual who leans Republican who saw an article in which the false claims were attributed to Congressional Republicans, that combination would be coded as “supported party.” If a Democrat saw that same article that combination would be coded as “opposed party.” This resulted in a dichotomous variable in which 287 participants were coded as opposing party (coded low), while 275 participants saw claims from their supported party (coded high). This coding excludes true Independents who did not lean toward one party.

**Belief in false claims.**

Belief in the false claims was assessed immediately after participants completed reading their randomly assigned article about misperceptions surrounding immigration reform or the death penalty. The claims assessed were the same as in Study 1, as was the
measurement scale, where higher values equate to more accuracy (see Table 5; immigration scale, \( \alpha = .75 \); death penalty scale, \( \alpha = .74 \)). Beliefs were also converted to dichotomous measures, which provide a summative measure of the number of accurate beliefs across the four claims. Paired sample \( t \) tests show that beliefs about the death penalty were more accurate than those about immigration reform for both the scaled measures, \( t (766) = 2.52, p < .05 \), and the dichotomous measures, \( t (766) = 2.58, p < .05 \). The issues were combined for analyses (\( M = 3.09, sd = 1.07 \)) but the issue variable will serve as a control in all analyses.

Table 5. Study 2 Mean Belief by Issue

<table>
<thead>
<tr>
<th></th>
<th>Scale</th>
<th>Dichotomous</th>
<th>% Answering “Unsure”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immigration (N = 386)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Welfare benefits”</td>
<td>2.77 (1.45)</td>
<td>.38 (.49)</td>
<td>5.2%</td>
</tr>
<tr>
<td>“Learn English”</td>
<td>2.97 (1.40)</td>
<td>.45 (.50)</td>
<td>6.2%</td>
</tr>
<tr>
<td>“Criminal activity”</td>
<td>3.45 (1.31)</td>
<td>.59 (.49)</td>
<td>11.7%</td>
</tr>
<tr>
<td>“Path to citizenship”</td>
<td>2.77 (1.33)</td>
<td>.33 (.47)</td>
<td>11.1%</td>
</tr>
<tr>
<td>4 items combined</td>
<td>2.99 (1.06)</td>
<td>1.76 (1.38)</td>
<td>---</td>
</tr>
<tr>
<td><strong>Death Penalty (N = 382)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Number of executions”</td>
<td>3.19 (1.42)</td>
<td>.52 (.50)</td>
<td>8.6%</td>
</tr>
<tr>
<td>“Minorities executed”</td>
<td>2.96 (1.43)</td>
<td>.43 (.50)</td>
<td>8.1%</td>
</tr>
<tr>
<td>“Juvenile execution”</td>
<td>3.68 (1.49)</td>
<td>.66 (.47)</td>
<td>6.5%</td>
</tr>
<tr>
<td>“Public support”</td>
<td>2.91 (1.35)</td>
<td>.41 (.49)</td>
<td>9.2%</td>
</tr>
<tr>
<td>4 items combined</td>
<td>3.19 (1.07)</td>
<td>2.02 (1.38)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Higher values equate to more accurate beliefs for the scaled items. Values for the scale column represent the mean and standard deviation. Dichotomous values for individual items represent the percentage of the sample holding accurate beliefs, with the standard deviation in parentheses. The “4-items combined” item for the dichotomous measures represents a count of accurate beliefs.
**Perceived biased information processing.**

Biased information processing was measured using the same four-item scale from Study 1 (Gross, 2008; Wolski & Nabi, 2000). Again, higher values represent less biased and more deliberative processing (immigration: $\alpha = .61, M = 3.77, sd = 0.54$; death penalty: $\alpha = .74, M = 3.78, sd = 0.86$; combined, $M = 3.77, sd = 0.63$).

**Source liking and credibility.**

Source liking and credibility were measured using the same set of semantic differentials outlined in Study 1 (immigration: $M = 2.85, sd = 0.97$; death penalty: ($M = 2.69, sd = 0.95$; combined, $M = 2.77, sd = 0.96$). Participants who also received a correction were asked to rate the fact-checking organization, Political Fact, on the same scale (immigration: $M = 3.35, sd = 0.95$; death penalty: ($M = 3.48, sd = 0.89$; combined: $\alpha = .96, M = 3.41, sd = 0.92$).

**Counter-arguing.**

Counter-arguing was measured using the four statements outlined in Study 1 for both the source of the original misinformation (immigration: $M = 3.12, sd = 0.89$; death penalty: $M = 3.23, sd = 0.83$; combined: $M = 3.17, sd = 0.86$) and the fact-checking organization (immigration: $M = 2.94, sd = 0.87$; death penalty: $M = 2.75, sd = 0.75$; combined: $\alpha = .76, M = 2.84, sd = 0.82$).

**Perceived argument quality.**

The quality of the false claims about either immigration or the death penalty, as well as the strength of the information provided in the correction by the fact-checking organization was assessed (when appropriate). The same six five-point semantic
differentials used in Study 1 were used and higher values indicate greater perceived quality in the arguments (immigration: $M = 2.99$, $sd = 1.15$; death penalty: $(M = 2.74$, $sd = 1.01$; combined: $M = 2.87$, $sd = 1.09$). Participants who also received a correction were asked to rate on the same scale “the information provided by the fact-checking organization Political Fact.” (immigration: $M = 3.42$, $sd = 1.00$; death penalty: $(M = 3.57$, $sd = 0.96$; combined: $\alpha = .95$, $M = 3.49$, $sd = 0.98$).

**Political knowledge.**

The four items used to tap political knowledge in Study 1 were again summed, creating a range of possible scores from 0 to 4 ($M = 2.00$, $sd = 1.37$). Political knowledge was included as a control in the analyses.

**Demographics.**

The same demographic variables from Study 1 were measured in Study 2 (see Table 6 for descriptive statistics).
Table 6. Study 2 Descriptive Statistics

<table>
<thead>
<tr>
<th>Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigration Reform (n,%)</td>
<td>386 (50.3%)</td>
</tr>
<tr>
<td>Death Penalty (n,%)</td>
<td>382 (49.7%)</td>
</tr>
<tr>
<td>Anger (n,%)</td>
<td>314 (40.9%)</td>
</tr>
<tr>
<td>Anxiety (n,%)</td>
<td>285 (37.1%)</td>
</tr>
<tr>
<td>Neutral (n,%)</td>
<td>168 (21.9%)</td>
</tr>
<tr>
<td>Misperception (n,%)</td>
<td>408 (53.1%)</td>
</tr>
<tr>
<td>Correction (n,%)</td>
<td>360 (46.9%)</td>
</tr>
<tr>
<td>Republican Source (n,%)</td>
<td>388 (50.5%)</td>
</tr>
<tr>
<td>Democratic Source (n,%)</td>
<td>380 (49.5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Republican</td>
<td>29.6%</td>
</tr>
<tr>
<td>Independent</td>
<td>23.7%</td>
</tr>
<tr>
<td>Democrat</td>
<td>43.6%</td>
</tr>
<tr>
<td>Conservative</td>
<td>33.7%</td>
</tr>
<tr>
<td>Moderate</td>
<td>36.1%</td>
</tr>
<tr>
<td>Liberal</td>
<td>30.2%</td>
</tr>
<tr>
<td>Age (M, SD)</td>
<td>47.99 (14.05)</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>50%</td>
</tr>
<tr>
<td>Education (College graduate)</td>
<td>36.9%</td>
</tr>
<tr>
<td>Income (≈M)</td>
<td>$40-50K</td>
</tr>
<tr>
<td>Caucasian</td>
<td>83.3 %</td>
</tr>
<tr>
<td>Latino</td>
<td>7.0 %</td>
</tr>
<tr>
<td>Political Knowledge (M, SD)</td>
<td>2.00 (1.37)</td>
</tr>
<tr>
<td>Interest in Politics (M, SD)</td>
<td>2.95 (.85)</td>
</tr>
</tbody>
</table>

Note. Total number of participants = 768.
Results

Pilot study.

A pilot study was conducted to ensure the emotional manipulation worked for Study 2. One hundred ten participants were recruited through MTurk to participate in the study. The pilot follows a 2 (emotion: anger, anxiety) X 2 (issue: immigration, death penalty) experimental design and includes a control group. After providing consent, participants were randomly assigned to write for two minutes about something that makes them either angry or anxious about either immigration reform or the death penalty. Those in the control condition were asked to write something about their life that makes them enthusiastic. Upon completion of the writing task, participants rated on five-point scales the extent to which they were experiencing several emotions (higher values signal a stronger emotional experience), including anger (angry, outraged, disgust; $\alpha = .86, M = 1.80, sd = 0.91$), anxiety (anxious, nervous, afraid; $\alpha = .82, M = 1.78, sd = 0.81$), and enthusiasm (enthusiastic, proud, hopeful; $\alpha = .80, M = 2.76, sd = 1.06$).

Setting aside the control condition, two 2 (Emotion: anger vs. anxiety) x 2 (political issue: immigration vs. death penalty) ANOVAs were conducted in order to test the effectiveness of the anger and anxiety manipulations in triggering the desired emotion. A main effect of emotion was found when anger served as the dependent variable, $F (1, 88) = 5.03, p < .05$. Those assigned to the anger condition (n =50; $M = 2.07, sd = 0.70$) reported significantly more anger than those in the anxiety condition (n = 42; $M = 1.64, sd = 0.77$). Importantly, there was no main effect of political issue ($p = .66$) and the emotion-issue interaction did not emerge ($p = .97$), suggesting the two
political issues can be combined for analyses. A main effect of the emotional manipulation was also found when anxiety was the dependent variable, $F(1, 88) = 4.70, p < .05$. Anxiety was significantly higher for those asked to write about something that made them anxious ($M = 2.06, sd = 0.94$) compared to those who wrote about their anger ($M = 1.69, sd = 0.68$). Again, no main effect of political issue ($p = .80$) or interactions ($p = .80$) emerged. Further, paired sample $t$ tests revealed that anger was significantly higher than anxiety for those in the anger conditions, $t (49) = 3.25, p < .01$, while anxiety was higher than anger for those in the anxiety conditions, $t (41) = 5.00, p < .001$. Taken together, the data suggest the emotion manipulations were effective.

Although the manipulations were successful in the pilot test, there were concerns that the prompt to generate a neutral emotional state in the control condition may actually trigger strong positive emotions, as participants were asked to write about something that made them enthusiastic. This raised the possibility that the study would be comparing the experience of arousing positive emotions to the negative emotions (enthusiasm vs. anger and anxiety). To address this possibility, the writing task for the neutral emotion condition was changed for the main study. Instead of writing about something that made them enthusiastic, participants in the main study were asked to write something about their life that makes them relaxed. Although being relaxed is a positive emotional experience, the experience of relaxation is not associated with strong physiological arousal and it is closely related to feelings of calm and placidity (Russell, 2003). In comparison, enthusiasm is more closely related to elation or excitement, which are more arousing positive emotions. This revised strategy for the control condition should
therefore ensure a more neutral emotional state rather than promoting the strong positive emotion enthusiasm.

**Manipulation check.**

A manipulation check was conducted to ensure the writing task in the main study generated the intended emotional response. As in the pilot test, three ANOVAs demonstrate the manipulations were successful. Participants asked to write about something that made them angry reported more anger ($M = 2.10$, $sd = 1.17$) than participants in the anxiety ($M = 1.78$, $sd = 1.06$) or neutral conditions ($M = 1.41$, $sd = 0.75$), $F(2, 767) = 23.61$, $p < .001$. The difference in generated anger between the anger and anxiety conditions was also significant, $t(597) = 3.50$, $p < .001$. Participants who wrote about what made them anxious reported higher levels of anxiety ($M = 1.95$, $sd = 1.00$) than participants in the anger ($M = 1.78$, $sd = 0.88$) or neutral conditions ($M = 1.71$, $sd = 0.89$), $F(2, 767) = 4.04$, $p < .05$. A direct comparison of generated anxiety between the anxious and angry conditions was significant, $t(597) = 2.15$, $p < .05$ (two-tailed).

Participants who wrote about something that makes them relaxed had more enthusiasm ($M = 2.84$, $sd = 1.07$) than participants in the anger ($M = 2.60$, $sd = 1.16$) or anxiety conditions ($M = 2.70$, $sd = 1.16$), $F(2, 767) = 2.61$, $p < .10$. Paired-sample $t$ tests indicate that participants in the anxiety condition felt more anxiety than anger, $t(284) = 3.23$, $p < .001$, while participants in the anger condition experienced greater anger than anxiety, $t(313) = 5.35$, $p < .001$. 
Main analyses.

Study 2’s initial set of hypotheses were tested with ordinary least squares regression models, using PROCESS (Hayes, 2013) to estimate the direct and interactive effects of anger, anxiety, corrections, and the source of the misinformation. Separate models were estimated for the effects of anxiety and anger. Belief accuracy served as the dependent variable for each model, with higher values corresponding to more accurate beliefs.

The first hypothesis predicted that pro-attitudinal misperceptions would be more readily accepted than counter-attitudinal ones. This hypothesis received partial support, as those who received misinformation from a source within their own party held marginally less accurate beliefs than those who received the false claims from an opposed source, $b = -.13, p = .10$ (two-tailed) (Model 1, Table 7). The subtly of this effect is surprising given the strong influence of partisanship on misperceptions in prior research (e.g. Nyhan & Reifler, 2010). According to H2, corrections were expected to improve belief accuracy because they provide information that directly contradicts the misinformation. This hypothesis was supported, as there was a strong main effect of the correction condition, $b = .78 p < .001$, indicating that participants who received corrective information were significantly more accurate in assessing the claims than those who received only the misinformation. The research question asked whether corrections to counter-attitudinal misperceptions were more effective than for pro-attitudinal claims. The data indicate they are not; corrections to false claims were equally effective.
regardless of whether the falsehoods were credited to a member of the supported or opposed party (Model 2 Table 7).

Table 7. Study 2 Effects of Emotion, Partisanship, and Correction on Belief

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>-.14 (.11)</td>
<td>-.14 (.11)</td>
</tr>
<tr>
<td>Anger</td>
<td>-.09 (.11)</td>
<td>-.09 (.11)</td>
</tr>
<tr>
<td>Correction (coded high)</td>
<td>.78 (.08)***</td>
<td>.79 (.12)***</td>
</tr>
<tr>
<td>In-party source</td>
<td>-.13 (.03)#</td>
<td>-.12 (.12)</td>
</tr>
<tr>
<td>Correction X In-party source</td>
<td>---</td>
<td>-.03 (.17)</td>
</tr>
<tr>
<td>Issue (Death penalty coded high)</td>
<td>.27 (.08)**</td>
<td>.27 (.08)*</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>.15 (.03)***</td>
<td>.15 (.03)***</td>
</tr>
<tr>
<td>Constant</td>
<td>2.18 (.18)***</td>
<td>2.17 (.18)***</td>
</tr>
<tr>
<td>Observations</td>
<td>561</td>
<td>561</td>
</tr>
<tr>
<td>$F$</td>
<td>20.46</td>
<td>17.51</td>
</tr>
<tr>
<td>($df$)</td>
<td>(6, 554)***</td>
<td>(7, 553)***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.181</td>
<td>0.182</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>---</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. Political Independents not included in analyses. Unstandardized regression coefficients reported. Standard error is listed in parentheses. Belief measured on a 5-point scale where higher values correspond to more accurate beliefs. # $p < .10$ * $p < .05$, ** $p < .01$, *** $p < .001$. All $p$-values are two-tailed.

The effects of anxiety on belief were assessed in H3-H5. The third hypothesis predicted that anxiety would boost the effectiveness of corrections to misperceptions, as people pay closer attention to the information at hand. This hypothesis was not supported, as the interaction between anxiety and the correction variable was not
significant (see Model 2 Table 8). Corrections were equally effective for those in the anxiety and neutral conditions. I consider possible explanations for this unexpected result in the discussion.
Table 8. Study 2 Interactive Effects of Anxiety, Partisanship, and Corrections on Belief

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anxiety</strong></td>
<td>-.29 (.14)*</td>
<td>-.10 (.14)</td>
<td>-.42 (.19)*</td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td>-.09 (.11)</td>
<td>-.09 (.11)</td>
<td>-.09 (.11)</td>
</tr>
<tr>
<td><strong>Correction (coded high)</strong></td>
<td>.77 (.08)**</td>
<td>.81 (.11)**</td>
<td>.70 (.15)**</td>
</tr>
<tr>
<td><strong>In-party source</strong></td>
<td>-.24 (.11)*</td>
<td>-.13 (.08)</td>
<td>.11 (.03)**</td>
</tr>
<tr>
<td><strong>Anxiety X In-party source</strong></td>
<td>.29 (.17)#</td>
<td>---</td>
<td>.63 (.24)**</td>
</tr>
<tr>
<td><strong>Anxiety X Correction</strong></td>
<td>---</td>
<td>-.10 (.17)</td>
<td>.27 (.24)</td>
</tr>
<tr>
<td><strong>Correction X In-party source</strong></td>
<td>---</td>
<td>---</td>
<td>.23 (.21)</td>
</tr>
<tr>
<td><strong>Anxiety X Correction X In-party source</strong></td>
<td>---</td>
<td>---</td>
<td>-.71 (.35)*</td>
</tr>
<tr>
<td><strong>Issue (Death penalty coded high)</strong></td>
<td>.28 (.08)**</td>
<td>.27 (.08)**</td>
<td>.27 (.08)**</td>
</tr>
<tr>
<td><strong>Political knowledge</strong></td>
<td>.15 (.03)**</td>
<td>.15 (.03)**</td>
<td>.15 (.03)**</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>2.20 (.18)**</td>
<td>2.16 (.18)**</td>
<td>2.25 (.19)**</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>561</td>
<td>561</td>
<td>561</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>18.00</td>
<td>17.56</td>
<td>13.07</td>
</tr>
<tr>
<td>(df)</td>
<td>(7, 553)**</td>
<td>(7, 553)**</td>
<td>(10, 550)</td>
</tr>
<tr>
<td><strong>R^2</strong></td>
<td>0.186</td>
<td>0.182</td>
<td>0.192</td>
</tr>
<tr>
<td>ΔR^2</td>
<td>.00#</td>
<td>.00</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Note. Political Independents not included in analyses. Unstandardized regression coefficients reported. Standard error is listed in parentheses. Belief measured on a five-point scale where higher values correspond to more accurate beliefs. Political independents were omitted in analyses. ΔR^2 refers to the change in variance explained due to the interaction. # p < .10 * p < .05, ** p < .01, *** p < .001. All p-values are two-tailed.
H4 and H5 tested whether anxiety increases susceptibility to counter-attitudinal misinformation, especially when a correction is not available. Both of these predictions find support. Model 1 in Table 8 provides the test for H4. Anxiety and the source of the misinformation interact, $b = .29$, $p < .10$ (two-tailed), indicating that anxiety reduces belief accuracy when the source of the inaccurate information is from a member of a party one opposes. The effects of anxiety were plotted and are displayed in Figure 5. When the source of the misinformation is from a supported party, people act in accordance with their partisanship whether they are anxious or not. However, a very different pattern is evident when the claim comes from the opposed party. In a neutral emotional state, participants rejected claims stemming from the party they opposed, as belief accuracy was high. But once anxiety takes hold we see people are influenced less by their partisanship as they become significantly less accurate when presented with false claims from a member of the opposing party. This conditional effect of anxiety on belief is significant when the source is from an opposed party member, $b = -.29$, $t(553) = -2.03$, $p < .05$ (two-tailed). Using an example from the data helps interpret the finding. This result would suggest, for example, that Democrats—who tend to support immigration reform—would be more susceptible to inaccurate claims about immigration made by Republicans when they are anxious than when they are not. This finding also provides some of the first evidence for why people might accept seemingly counter-attitudinal claims, such as Democrats who believe Obama was born outside of the United States.
Figure 5. Interactive Effect between Anxiety and Source of Misinformation

Note. Source of the misinformation refers to the political party providing the false claims such that those in the opposed condition saw claims stemming from the opposition party and those in the supported condition were exposed to claims attributed to the party they belong to. Political independents were omitted.

The fifth hypothesis examined the boundary conditions of the interaction found in H4 and predicted that anxiety would lower belief accuracy for counter-attitudinal misperceptions only when a correction is absent. The three-way interaction between anxiety, the source of the misinformation, and the correction in Model 3 (Table 8) was significant, $b = -0.71$, $p < .05$ (two-tailed), suggesting the predicted effect may exist. Figure 6 shows where the interaction lies. It is clear that the effect of anxiety when a correction is present does not depend on the source of the misinformation, as the slopes of the lines do not differ. However, anxiety works in the predicted manner when false information is presented alone (bottom-left graph). When people are not experiencing anxiety they tend to process information along party lines; beliefs were less accurate
when the false claims were made by the supported party compared to the opposed party. As predicted by affective intelligence theory, when anxiety enters the equation we see a reversal of this trend as people place less emphasis on their party affiliation when forming their beliefs and carefully consider the information at hand. Accuracy therefore plummets when claims are made by the opposed party and are less accurate than those made by the supported party. Probing the interaction indicates this effect is significant. The conditional effect of anxiety on belief is negative and significant when a misperception from an opposed source is presented without corrective information, $b = -.43$, $t(550) = -1.76$, $p = .07$ (two-tailed). This hypothesis was therefore supported and suggests that anxiety facilitates belief in false, counter-attitudinal claims if those claims are not corrected. In this situation people are more willing to abandon their party and consider the information presented to them, which ultimately makes them more likely to be misinformed.
Figure 6. 3-way Interactions between Emotion, Correction, and Source of Misinformation

Note. The effects of anxiety are illustrated on the left, anger on the right. The top row in each figure shows the correction condition, while the bottom row illustrates the misinformation only condition. Political independents were omitted from analyses.

The effects of anger on belief were addressed in H6-H9. Recall that anger is expected to facilitate the motivated reasoning process, which should result in beliefs that are consistent with one’s party affiliation. H6 predicted that anger would reduce belief accuracy when faced with a pro-attitudinal misperception, while H7 predicted that experienced anger would result in beliefs that are more accurate when the claims are counter-attitudinal. That is, anger will facilitate belief in claims that people “want” to believe based on their party association, while simultaneously leading to rejection of claims that are inconsistent with their party identification. In Model 1 of Table 9, we see the coefficient for the interaction between anger and in-party source is negative but falls just short of significance, $b = -0.26, p = .12$ (two-tailed). Although we cannot eliminate the possibility that chance is driving the effect, it is informative to plot the pattern of results to illustrate that anger takes hold in the predicted way.
The marginal effects of anger on belief by the source of the misperception are plotted in Figure 7. As predicted, the pattern of results are consistent with the claim that anger facilitates the motivated reasoning process. Note that beliefs for participants in a neutral emotional state did not depend on the source of the misinformation. Anger, however, polarized beliefs as people fell in line with *their* party when angry. When the source of the misperception was from the opposed party, people rejected those claims and held accurate beliefs. When the supported party made the claim, people tended to follow their lead which resulted in less accurate beliefs.

Figure 7. Interactive Effect of Anger and Misinformation Source on Belief

Note. Interaction failed to reach statistical significance, *p* = .12 (two-tailed). Political Independents not included in analyses.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.03 (.14)</td>
<td>-.07 (.14)</td>
<td>.28 (.18)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>-.15 (.11)</td>
<td>-.14 (.11)</td>
<td>-.15 (.11)</td>
</tr>
<tr>
<td>Correction (coded high)</td>
<td>.78 (.08)***</td>
<td>.80 (.11)***</td>
<td>.98 (.15)***</td>
</tr>
<tr>
<td>In-party source</td>
<td>-.03 (.11)</td>
<td>-.13 (.08)</td>
<td>.15 (.15)***</td>
</tr>
<tr>
<td>Anger X In-party source</td>
<td>-.26 (.17)</td>
<td>---</td>
<td>-.64 (.223)**</td>
</tr>
<tr>
<td>Anger X Correction</td>
<td>---</td>
<td>-.05 (.17)</td>
<td>-.45 (.24)#</td>
</tr>
<tr>
<td>Correction X In-party source</td>
<td>---</td>
<td>---</td>
<td>-.36 (.22)#</td>
</tr>
<tr>
<td>Anger X Correction X In-party source</td>
<td>---</td>
<td>---</td>
<td>.79 (.34)*</td>
</tr>
<tr>
<td>Issue (Death penalty coded high)</td>
<td>.27 (.08)**</td>
<td>.27 (.08)**</td>
<td>.27 (.08)**</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>.15 (.03)***</td>
<td>.15 (.03)***</td>
<td>.15 (.03)***</td>
</tr>
<tr>
<td>Constant</td>
<td>2.12 (.18)***</td>
<td>2.17 (.18)***</td>
<td>2.02 (.19)***</td>
</tr>
<tr>
<td>Observations</td>
<td>561</td>
<td>561</td>
<td>561</td>
</tr>
<tr>
<td>(F)</td>
<td>17.92</td>
<td>17.52</td>
<td>13.16</td>
</tr>
<tr>
<td>((df))</td>
<td>(7, 553)***</td>
<td>(7, 553)***</td>
<td>(10, 550)***</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.185</td>
<td>0.182</td>
<td>0.193</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>.00</td>
<td>.00</td>
<td>.01*</td>
</tr>
</tbody>
</table>

Note. Unstandardized regression coefficients reported. Standard error is listed in parentheses. Belief measured on a 5-point scale where higher values correspond to more accurate beliefs. Political independents were omitted in analyses. \(\Delta R^2\) refers to the change in variance explained due to the interaction. \(# p < .10 \ * p < .05, ** p < .01, *** p < .001.\) All \(p\)-values are two-tailed.

H8 and H9 incorporated corrections into the model by predicting that corrections under conditions of anger are less effective when the source of the initial misinformation
is pro-attitudinal and more effective when the source is counter-attitudinal. For example, under this model corrections provided to an angry Democrat who was exposed to false claims attributed to a fellow Democrat will be less effective, while corrections offered to a Republican who received the same Democrat-based misperceptions will be more effective. Initial evidence for these hypotheses exists in the positive and significant coefficient for the three-way interaction between anger, the correction, and the source of the misperception, $b = .79, p < .05$ (Model 3, Table 9). The interaction must next be plotted and probed to determine where the significance lies. Returning to Figure 6 above, the top row shows the effects of the interaction when a correction is present. The slope of the lines representing false claims stemming from an opposed or supported source do not differ depending on whether the participant was experiencing anger or in a neutral emotional state, which indicates that anger neither facilitates nor inhibits the effectiveness of corrections to pro- or counter-attitudinal misperceptions. As a result, H8 and H9 are not supported. Where we do see strong interactive effects of anger is at the level of initial belief and the pattern mirrors that presented in Figure 7. When corrections are absent people process the misperceptions along party lines. As evident in the right side of the bottom row of Figure 6, relative to the neutral condition anger increases belief accuracy when claims are made by an opposed party member and decreases belief accuracy when the misinformation stems from a member of the supported party. Here, beliefs fall in line with partisanship. Probing the interaction shows that people are not necessarily more likely to reject a false claim when the other party is the source of the inaccuracy, $b = .34$, $t(550) = 1.39, p = .17$ (two-tailed), but they are significantly more likely to believe
misinformation when their party is the source, $b = -0.45$, $t(550) = -1.90$, $p = .06$ (two-tailed). This finding provides evidence that anger facilitates partisan motivated reasoning in the absence of corrections, resulting in beliefs that are consistent with prior attitudes. However, while anger increases the influence of partisanship in determining what people initially believe, the evidence here indicates that strong corrections are powerful enough to overcome these initial misperceptions.

The final set of hypotheses address how anxiety and anger influence information processing and how those processing strategies affect beliefs. In H10 anxiety was predicted to facilitate more deliberative processing, which would subsequently make corrections more effective. This moderated mediation model expects that anxiety’s influence on belief will be indirect through more deliberative processing, which should be conditional on whether a correction is present.
Figure 8. Conditional Indirect Effect of Anxiety on Belief through Deliberative Processing

Note. Political independents excluded from analyses. The coefficient listed for the path leading to belief is the interaction between perceived deliberative processing and the correction. Model controls for anxiety, issue, source of the misperception, and political knowledge. ** $p < .01$, # $p < .10$ (two-tailed).

The moderating effect must first be established before assessing the mediation (Hayes, 2014). In Figure 8, we see that the effect of deliberative processing is moderated by the correction, as the coefficient is positive and significant, $b = .40$, $p < .01$. Plotting this interaction shows that the relationship is in the predicted direction; as Figure 9 illustrates, deliberative processing had no effect on belief accuracy for participants who only received the misinformation. However, participants who received a correction saw significant gains in belief accuracy as deliberative processing increased. Probing the interaction reveals that this effect of deliberative processing was significant for those in the correction condition, $b = .39$, $t(552) = 4.02$, $p < .001$. 

102
Figure 9. Interactive Effects of Deliberation and Correction on Belief

Note. Higher values of deliberative processing equate to less bias in processing.

Having demonstrated the moderated effect, the next step to assess the mediation (PROCESS, Model 14). Anxiety marginally increased deliberative processing, $b = .09$, $p < .10$ (two-tailed) (Figure 8), though it has no direct effect on belief, $b = -.17$, $ns$.

However, 5,000 bootstrap estimates reveal the conditional indirect effect of anxiety on belief through deliberative processing is significant when a correction is present (point estimate = .05, 90%CI .01 to .11) but not when the correction is absent (-.00, 90%CI -.03 to .02). The data are therefore consistent with the notion that anxiety indirectly increases belief accuracy by facilitating deliberative processing of corrections. This finding is consistent with the contention of affective intelligence theory that anxiety facilitates more deliberative processing of information.

H11 predicted anger would increase biased information processing, which then interacts with prior attitudes to form beliefs that are more consistent with those prior
attitudes. This hypothesis was not supported. The effect of processing bias on belief accuracy is not moderated by the source of the misinformation, indicating that the effect of processing bias on belief is the same for claims that stem from an opposed or supported source. Because the initial moderation was not significant, the mediation portion of the model was not tested (Hayes, 2013).

The last two hypotheses predict that anger leads to both counter-arguing (H12a) and source derogation (H12b) of attitude-challenging information, which then decreases belief accuracy. These two processes are often associated with partisan motivated reasoning and have been identified as potentially facilitating political misperceptions (e.g. Garrett & Weeks, 2013; Nyhan & Reifler, 2010). The data do not support either hypothesis. Anger did not facilitate either counter-arguing or source derogation of when the source of the misinformation was counter-attitudinal. Because both initial interactions were non-significant, the mediation portion of the models was not estimated.

**Post-hoc Analyses**

As in first study, Study 2 found that valence-based models of emotion did not perform as well as the discrete emotion models. Once again, none of the unsupported hypotheses found support when collapsing the anger and anxiety conditions. Most importantly, all of the unique effects of anxiety and anger found in Study 2 were not apparent when a valence approach was used. Further, there were no significant differences in belief between the neutral and negative emotion conditions and none of the tested interactions found any support. The failure to find support for any of the proposed effects using the valence model provides additional evidence that anxiety and anger work
in different ways and should be treated independently. Importantly, it challenges the notion put forth by the theory of partisan motivated reasoning that general affect drives biased information processing (e.g. Taber & Lodge, 2006).
Chapter 5: Discussion

Misperceptions are commonplace in American politics. Polls consistently show that significant percentages of the public are persistent in holding inaccurate beliefs about political candidates and issues. Politicians and journalists alike have worked to develop strategies to combat misinformation but these messages are often ineffective and may have the unintended consequence of further promoting misperceptions. This research directly addresses the questions of why people hold inaccurate beliefs about politics and why messages intended to correct those beliefs often fail by examining how two negative, discrete emotion—anxiety and anger—influence people’s responses to misinformation.

The study of political misinformation has flourished in recent years, coinciding with expanded media coverage of prominent misperceptions about weapons of mass destruction in Iraq, Barack Obama’s birthplace, and global warming, among others. To date, scholars have rightly looked at the role of partisanship in this process, demonstrating that political misperceptions typically fall along partisan lines; both Republicans and Democrats are more likely to believe claims that reflect well on their party. This pattern of belief is typically attributed to partisan motivated reasoning, which suggests that citizens tend to believe negative claims about the opposing party and reject ones about their supported party because they are motivated to defend their prior dispositions (e.g. Nyhan & Reifler, 2010; Garrett & Weeks, 2013). This motivation to
defend prior attitudes is thought to stem from “affective processes” that lead to biased information processing (Taber & Lodge, 2006). Although previous research has demonstrated a relationship between partisanship and political misperceptions, it has failed to provide a theoretical explanation for why some citizens engage in partisan information processing when exposed to misinformation and its corrections while others do not. Partisan processing is likely not the default strategy (Druckman, 2012), which is especially apparent when considering evidence that significant percentages of citizens are willing to accept counter-attitudinal misinformation while others are quick to reject pro-attitudinal claims (Pew, 2010). This phenomenon cannot be explained using only partisan-based theories. There are also lingering questions about the role affect plays in the motivated reasoning process. If biased processing of misinformation is driven by affective-based goals, does affect of the same valence work in the same way?

This dissertation addresses these critical theoretical questions by incorporating two discrete emotions, anxiety and anger, into the study of political misperceptions. From affective intelligence theory we know that the experience of anxiety and anger leads to different information processing strategies and political outcomes. Anxiety contributes to making citizens more deliberative, while anger makes them more partisan (MacKuen et al., 2010). Anxiety reduces reliance on partisanship when forming evaluations, furthers deliberative processing, facilitates compromise, and often leads to learning (Marcus et al., 2011; Marcus et al., 2000). Anger facilitates evaluations, judgments, and behaviors that are consistent with prior beliefs by occluding consideration of opposing viewpoints and reducing the influence of new information (MacKuen, 2010).
Based on what we know about these discrete emotions, anxiety and anger were predicted to influence the evaluation of political misperceptions in very different ways. In general, anxiety was expected to reduce the influence of partisanship and increase consideration of the information at hand, which should result in beliefs that are more in line with the content of the message. Anger was predicted to facilitate the motivated reasoning process by increasing the influence of partisanship in response to political misinformation, which should result in beliefs consistent with prior attitudes. These hypotheses were tested in two experiments. The first experiment examined the role of incidental emotions—emotions that were unrelated to the topic of the misinformation. The second experiment tested the effects of integral emotional responses that were directly tied to the political issue at hand. In the following section I provide an overview of the findings and discuss the theoretical contributions made in this dissertation. I then provide a discussion of the limitations of this work and an outline for future research in this area.

**Overview of Findings and Theoretical Contributions**

Before discussing the contributions and the interpretation of the results I briefly review the findings of each study. Study 1 provided limited evidence that incidental discrete emotions influence political misperceptions through their interactions with partisanship and the corrective environment. No effects of anxiety emerged in this study, but anger did affect belief in two ways. There is modest support that anger influenced initial acceptance of misinformation by increasing the impact of partisanship. Anger widened the gap in belief accuracy between participants in the misinformation-only
condition who supported and opposed an issue. Those who opposed the issue held less accurate beliefs when angry, while those who supported the issue rejected the misinformation and were more accurate in their assessments of the claims. Caution is advised in interpreting this pattern; although the trend was in the predicted direction the differences were not significant. Anger did influence belief, however, by working in tandem with partisanship to color participants’ evaluations of the source of the misperceptions, which subsequently affected what they believed. Angry opponents of an issue were more likely to deem the initial source of the misinformation as credible, which resulted in less accurate beliefs.

Although the effects of emotion were minimal in Study 1, the experiment supported the prediction that corrections work. In all of the models, receiving corrective information was consistently the strongest predictor of accurate beliefs. This was true regardless of partisanship or emotional disposition. These results strongly indicate that corrections can be effective under the right circumstances. Finally, evidence from Study 1 corroborates prior research by demonstrating that partisanship is related to inaccurate beliefs, although corrections were not dependent on party affiliation.

Study 2 examined how discrete emotions stemming directly from a political issue influences acceptance or rejection of political misinformation. In support of several of the theoretical predictions, this study found that anxiety and anger work in very different ways to influence beliefs. It offers strong evidence that anxiety reduces the reliance on partisanship and increases deliberative thinking about political misperceptions, which depending on whether corrective information is available may actually leave people more
or less informed. For example, participants experiencing anxiety were susceptible to inaccurate claims from the opposing party and this was especially true when a correction was not present. This finding provides a theoretical explanation for why some people fall victim to counter-attitudinal misperceptions—for example, Democrats who believe Obama was born outside of the United States. Study 2 also provides some evidence that anger facilitates partisan motivated reasoning by increasing the influence of partisanship when assessing inaccurate political claims, as angry individuals were at times more likely to hold beliefs that were consistent with their party affiliation. The effects of anger and anxiety were mostly found at the initial level of belief—those instances when misinformation was presented without a correction. This suggests that emotion is most influential when inaccurate beliefs are being formed and has important implications for our understanding of how misperceptions initially take hold. Much like Study 1, this work found that corrective messages were incredibly successful in forming accurate beliefs regardless of the issue, partisanship, or emotional state.

**The influence of discrete emotions.**

Overall, this research provides causal evidence that people’s discrete emotional states can influence their evaluations of political misinformation. Importantly, it highlights the conditions under which people process information in a partisan manner. People who are anxious or angry consider false claims in different ways, although this effect is contingent on whether their emotional response stems directly from the issue they are considering. Given that incidental emotions appeared to have little impact on
belief (Study 1), I address the effect of integral emotions (Study 2) before considering why emotions’ effects in first study were so subtle.

The primary contribution this dissertation makes is to demonstrate that emotions help determine how people respond to uncorrected political misinformation. When initially faced with inaccurate claims about politics, people are more likely to process the information in a partisan manner when they are angry, which results in beliefs that reinforce their party affiliation. In contrast, anxiety reduces the reliance on partisanship at this initial stage and leads to beliefs that are consistent with the information contained in the message. Although the evidence provided here is not definitive, the pattern of results indicates that the partisan motivated reasoning process is facilitated by anger rather than anxiety or general negative affect. This finding supports recent work on the theory of affective intelligence (e.g. MacKuen et al., 2010) and further suggests that the “automatic affective processes” that lead to biased processing of information might be limited to the discrete emotion anger (Taber & Lodge, 2006, p. 756). It may not be that political attitudes alone are enough to drive this motivated process, but attitudes that are tied to anger, resentment, or disgust. Surely these feelings will propel motivated processing. Having identified one possible mechanism driving partisan motivated reasoning, moving forward studies employing this theoretical approach would benefit from measuring different discrete emotions in addition to attitudes, including anger and anxiety, in order to better understand the underlying processes at work.

The results here have numerous implications for our understanding of political misperceptions. First, they offer an explanation for why some partisans accept pro-
attitudinal political misperceptions while others do not. In the data from Study 2, neutral partisans who received only the misinformation were equally likely to believe claims originating from a member of their own party as they were claims from the opposed party. Political misperceptions therefore appear not to stem from partisanship alone. Rather, the findings suggest that citizens who are angry about an opposed political candidate or issue are the most susceptible to believing negative misinformation about that target. Under these circumstances anger fuels partisan thinking, which facilitates belief in the inaccurate claim. So people do not necessarily believe derogatory claims about the other side simply because they are Republican or Democrat. Rather, it is the combination of anger and their party affiliation that leaves them misinformed. This may help explain why so many Republicans believe false, negative information about Barack Obama. For example, 64% of Republicans said it was “probably true” that Obama was hiding information about his birthplace in 2013 (Cassino, 2013), which roughly coincides with the percentage of Republicans (58%) who expressed anger at Obama during that same time period (Steinhauser, 2013). The interaction of anger and partisanship to facilitate belief of uncorrected misinformation is especially troubling given that anger also depresses information seeking and increases selective exposure (MacKuen et al., 2010; Valentino et al., 2008). Anger therefore has the potential to create media diets in which people are primarily surrounded by like-minded others. This may further enhance anger directed at the opposing political party while simultaneously increasing exposure to pro-attitudinal misinformation. This cocktail of anger and partisan reinforcement would
likely have dire consequences for political misperceptions and may help explain why belief often falls along party lines.

The results of this study also shed light on the interesting phenomenon in which people believe misinformation that is inconsistent with their partisan affiliation. Partisan motivated reasoning alone is unable to explain why, for example, significant percentages of Democrats believe Obama was born outside of the US. However, this study provides a theoretical explanation for why this occurs and highlights the role of anxiety in this process. In Study 2, anxious participants (compared to the neutral condition) who only received the misinformation saw a significant decrease in belief accuracy when exposed to misinformation stemming from an opposed candidate. The theory of partisan motivated reasoning would suggest these individuals would reject this misinformation because it challenges their political affiliation. Yet that is not what happened. In this circumstance they were less accurate when provided misinformation from the other side. Insights from affective intelligence theory help us understand why this seemingly counterintuitive result should actually be expected. Recall anxiety depresses the role of partisanship in evaluation and increases the influence of contemporary information (MacKuen et al., 2010). In the case of the present research, consider a Democrat who is asked to write about something that makes them anxious about immigration reform. This experienced anxiety signals that something is wrong and makes them more willing to reconsider their initial position (Marcus et al., 2011). When they are subsequently presented with misinformation from an opposed candidate they do not automatically process this information in a partisan way. Instead, their beliefs are influenced more by
the information at hand. When corrective information is not available, this means they are more likely to pay closer attention to what that opposed candidate has to say, and as a result have a higher probability of being misinformed. Although anxiety has typically been discussed as an emotion that facilitates democratic thinking, this finding suggests a paradox of anxiety. That is, anxiety promotes critical thinking and learning around politics but can also backfire if that careful deliberation involves misinformation.

Taken together, the findings of the independent and unique influence of anger and anxiety highlight the benefit of using a discrete emotion approach to the study of political communication. As reported in both studies, post-hoc analyses were conducted in which the two negatively valenced experimental conditions were collapsed and tested against the neutral condition. In no way did the valence-based model outperform the discrete based models. In nearly every case the significant results of from the discrete hypotheses tests failed to find support in the valence model. This study adds to the growing roster of work calling for discrete emotions to be treated separately in political communication research (e.g. Druckman & McDermitt, 2008; Mackuen et al., 2010; Nabi, 2010). The difficulty in testing the effects of anger and anxiety is parsing out their unique influence. The two emotions are correlated and often coexist. Future work must continue to strive to clearly delineate the two in order to see how they distinctively affect the political process.

The difficulty in separately manipulating anger and anxiety may help to explain why so few effects emerged in Study 1. The fact that the anxiety induction generated comparable amounts of anger and anxiety may help to explain why that condition failed
to produce significant effects. I discuss the implications of the unsuccessful manipulation when considering the limitations, below. I begin, however, by considering two other possibilities for why emotions did not have a stronger influence in this study, one theoretical and one methodological. Theoretically, the influence of discrete emotions might be contingent on the source of those emotions. That is, emotions may only affect political outcomes when they stem from the issue of interest. Incidental or irrelevant emotions like those generated in Study 1 might not carry over into political judgment and evaluation. However, prior work has demonstrated misattributed emotions can be influential on judgment and evaluation (e.g. Schwarz, 2012), and this effect extends to political outcomes. For example, Brader (2005) manipulated fear and enthusiasm using non-verbal cues in political ads, including the music and images, and found that these emotions affected how persuasive the ads were. Further, emerging research using physiological methods suggests incidental emotions can impact beliefs. Renshon, Lee, & Tingly (2014) manipulated anxiety through the use of video clips and assessed the relationship between emotional arousal physiologically and attitudes toward immigration. They found that self-reported measures of emotional response did not predict immigration attitudes but the physiological measures did; the more aroused people were the more likely they were to hold anti-immigration attitudes. This work indicates that incidental emotions can influence attitudes, although these emotions would not be expected to have as strong of effects as emotion stemming directly from political issues (Brader, 2011). In light of this evidence possible methodological issues must be addressed. Emotions are short-lived feeling states (Nabi, 1999) and it is very possible
that their duration in the present study was fleeting. Any potential anxiety or anger experienced from reading the manipulation article may have evaporated by the time they read the article containing the misinformation. Although this would have been a matter of a minute or two in most cases, it is possible that participants moved on from their feelings of anger and anxiety, which resulted in a series of null findings. It is doubtful that this occurred in Study 2, however, because the issue surrounding the misinformation was the source of the emotion and the emotional experience likely persisted as people weighed the false claims. Future research should attempt to manipulate incidental emotions using different methods that carry the emotional state through the evaluation process.

**Why corrections were successful.**

Another contribution of this dissertation is that it shows corrections to political misperceptions can be effective. Across both studies, participants who received a correction held significantly more accurate beliefs than those who only received the misinformation. This was true regardless of their emotional state, prior attitudes or partisanship, or the issue they read about. Whether corrections are effective has been one of the primary questions driving misperception research and the results of this prior work has been mixed. On one hand, studies have shown that under certain conditions corrections are ineffective when they challenge prior attitudes (Garrett & Weeks, 2013) and in some cases even backfire by further promoting the misperception (Nyhan & Reifler, 2010; Schwarz et al. 2007). In these cases, the failure of corrections has been attributed to partisan motivated reasoning or metacognitive experiences in which mere
repetition of misinformation when presented alongside corrective information increases
the plausibility that the inaccurate information is evaluated as true. Source derogation
and counter-arguing are thought to be two mechanisms that result from the motivated
reasoning process and help account for the failure of corrections (Nyhan & Reifler,
2010). On the other hand, exposure to corrective information has been shown to be
effective in reducing inaccurate beliefs, even when the corrections are counter-attitudinal
(e.g. Ecker et al., in press; Weeks & Garrett, 2014). How are these conflicting findings to
be reconciled? I offer several possibilities for why the corrections were effective in these
studies, including those that challenged prior attitudes.

First, as Ecker et al. (in press) argue, corrections to attitude-consistent beliefs can
be effective as long as they don’t require a change in attitude. It is possible that the false
claims presented in this study were not a critical component of people’s attitudes toward
immigration or the death penalty. In other words, the attitude was not dependent on this
set of beliefs. As a result, admitting that the claims were not true after seeing strong,
corrective evidence did not require people to change the way they felt about the issue.
For example, someone who opposes immigration reform might be willing to accept that
illegal immigrants are unable to receive welfare benefits but rejecting that claim does not
change their attitude toward the issue. So they update their belief based on the correction
but their attitude remains unchanged.

Both affective intelligence theory and the theory of partisan motivated reasoning
would predict that anger makes counter-attitudinal corrections especially likely to fail.
But again, that hypothesis was not supported here. One possibility for why corrections
were successful here involves a “tipping point.” Even strong partisan motivated
reasoners are willing to give up on their position when exposed to an abundance of
information telling them they are wrong (Redlawsk et al., 2010). If exposed to enough
belief or attitude challenging information, people will begin to update their beliefs
accordingly. Recall that in the correction condition people were exposed to strong and
clear corrections that each of the four claims was false. The corrections were attributed
to a credible source and supported by evidence highlighting why each statement was
inaccurate. It is therefore possible that even angry participants for whom the corrections
were inconsistent with their partisanship could no longer engage in motivated processing
because the corrective message was so convincing. This may also help to explain why
prior experimental research has failed to find corrective effects for counter-attitudinal
misperceptions. In many of those studies, the correction comes in the form of a brief
passage embedded in a news article (e.g. Nyhan & Reifler, 2010) or a subtle
identification of the misinformation (Garrett & Weeks, 2013), which may not provide
enough contradictory evidence to reach a tipping point.

Finally, the corrections may have been successful because the source of the
corrective information was deemed much more credible than the original source of the
misinformation. In both studies, the fact-checking organization was rated as more
credible and its arguments were perceived to be of higher quality than the source
providing the false claims (data not reported in results). Source credibility and perceived
argument quality are important factors in persuasion effects (e.g. Nabi et al., 2007) and it
is not surprising that the more credible source had a greater influence on beliefs. In the
studies here, the source of the corrective information was referenced several times in the article alongside strong evidence indicating why the initial false claims were wrong. This may have tipped the balance of credibility. Of course, outside the laboratory we know that even highly credible sources are often discredited and derogated. It is unlikely that a source in the real world will have credibility that cannot be disputed. The original sources of the misinformation in this study were fictional organizations or nameless partisans and it is possible that people were not invested enough in them to defend their position. But the findings here show that if a source of a fact-checking message can boost its credibility relative to the original source of the misinformation, the messages’ chances at success improve. The failure of previous studies to find corrective effects may result from a lack of prominence of the correction’s source within the message. For example, in their experiments Nyhan and Reifler (2010) demonstrate that corrections to the claim that Iraq had WMDs backfired for strong conservatives. However, the source of their correction—either the CIA or the Duelfer report—was only mentioned once in passing and simply may not have been salient enough to overcome the high credibility of the source of the original misinformation (President Bush).

Related to this final point are the findings regarding two possible outcomes of motivated information processing strategies that might influence beliefs: source derogation and counter-arguing. Both possibilities were tested by looking at whether anger increases counter-arguing and derogation of the source of the original misinformation. There was evidence in Study 1 that anger increased credibility of the source of the misinformation when the issue was pro-attitudinal and decreased credibility
when it challenged prior attitudes. In the data this would suggest, for example, that angry Republicans found the source of the misinformation about immigration to be more credible, which subsequently decreased their belief accuracy. This is consistent with motivated reasoning and hints that the extent to which people are misinformed may be influenced by their perceptions of the credibility of the source of the inaccurate claims and this evaluation may be bolstered by anger. This suggestion is tenuous, as the same pattern was not found in Study 2. Further, counter-arguing did not emerge as an explanatory factor in either study. This finding supports prior work demonstrating that counter-arguing did not affect acceptance of misinformation (Garrett & Weeks, 2013). The null findings in this study and in prior work calls into question whether counter-arguing is one of the mechanisms leading to false beliefs. Of course, the hypotheses here only examined source credibility and counter-arguing of the original source of the false claims. There is potential that people engaged in these processes with the fact-checking organization, which was the source of the corrections. To assess this possibility, post-hoc analyses were conducted looking at the interactions between anger and partisanship on source derogation and counter-arguing of the fact-checkers. These analyses did not find an interactive effect on either variable in either study, as anger did not propel the extent to which partisans like the source or pick apart its arguments. Other possible mechanisms, including psychological reactance might help explain these effects and should be explore in future research.
Limitations

Although these experimental studies provide important insights into the causal effects of discrete emotions on political misperceptions, this research has limitations that must be addressed. The primary limitation involves the noted problems with Study 1. In an effort to increase external validity anger and anxiety were manipulated by having participants read news articles. The manipulations were only partially successful, as participants in the anxiety condition experienced indistinguishable levels of anxiety and anger. It is conceivable that any potential effects of anxiety were washed out by simultaneously experiencing anger. This is especially possible given that post-hoc analyses showed that collapsing the anger and anxiety conditions masked most of the effects found in the two studies—without one emotion being primary it is difficult to see how they uniquely work. Manipulating anger and anxiety independently is difficult given that the two variables often coexist (MacKuen et al., 2010) and the anxiety article in Study 1 failed to depress anger as intended. Another concern is that the news articles used to manipulate emotion in Study 1 may not have allowed for strong tests of the effects of incidental emotions. Although the articles triggered emotional responses, those feelings may have disappeared by the time participants assessed the false claims. Again, the time between the emotional manipulation and reporting belief was only a few minutes but it is quite possible that any experienced anger or anxiety was erased by reading the misinformation article. If so, this would suggest that those in the emotion conditions might have ended up in the same emotional state as participants in the neutral condition, making it difficult to find effects. Unfortunately the nature of the design of the study did
not allow me to test this possibility. To address this, future research exploring incidental emotions might attempt to trigger the emotion \textit{while} people evaluate the claims, either through music or some other unrelated, seemingly innocuous stimuli.

A second limitation of this study involves a trade off in the design. This research was interested in how emotions help shape new political misperceptions and whether corrections to those claims work. In order to examine these effects the misperceptions used in this study were not real. It was necessary to control the nature of the information and present people with novel misperceptions in order to have a clear test of the theory. It is possible that the effects observed here might be different with long-standing public misperceptions that have been around for years. Studies attempting to correct real misperceptions have shown the task to be more difficult (e.g. Nyhan & Reifler, 2010) and the format of the corrections used here may work differently with prominent misperceptions in the real world. Nonetheless, the sacrifice in external validity allowed this work to examine the mechanisms underlying misperceptions in a controlled environment. The manipulation in Study 2 also sacrificed generalizability for internal control. The writing task was necessary in order to clearly manipulate the emotions and test their influence. Of course, this is not how citizens in the real world engage political information and future research should attempt to manipulate emotional states within a corrective message in order to better understand this process.

Another limitation also relates to the experimental design. In both studies, anger and anxiety were manipulated prior to receiving the fact-checking message rather than through the message itself. Potentially, any effect of the emotional manipulation was
eliminated by the fact-checking message. For example, participants who were either anxious or angry may have had those emotions alleviated as they read the corrective message. Perhaps their initial anxiety or anger stemmed from a particular aspect of the issue and the correction quickly dispelled that emotion by informing them that their emotional response was unnecessary or unjustified. One way to address this issue in the future is to manipulate emotion within the message and examine how anger and anxiety play out in that situation.

The final limitation of the study involves the nature of the correction. Only one type of correction was presented, which makes it more difficult to determine why these messages were so effective. Although this work demonstrates how people engage and process corrective messages, it does not provide a thorough understanding of the various message characteristics and features that can be used to correct political misperceptions.

**Future Research**

The results of this study highlight several promising areas of future research. First and foremost, more work is needed on how emotions interact with partisanship to affect political misperceptions. The present research is the first attempt to incorporate emotions into this area of study and the processes outlined here needs to be replicated before definitive conclusions can be drawn. There is evidence from this research that anger and anxiety uniquely influence beliefs but more work is needed to better identify the circumstances under which these emotions take hold and boundary conditions of their effects. The results of Study1 leave open the question of whether incidental emotions influence beliefs or if the impact of emotions depends on someone having a stake in the
political issue (Brader, 2011). Relatedly, it will be important to better understand how the relative strength of emotion and partisanship influence beliefs. For example, are moderate levels of anxiety enough to diminish the influence of partisanship? And is the partisan motivated reasoning process only facilitated by high levels of anger? It will also be important to determine how anger and anxiety influence belief in long-standing misperceptions, such as the numerous claims surrounding president Obama.

Another interesting area of research involves the intersection of emotions, social media, and misperceptions. Social media have become a platform for sharing news and information about politics (Weeks & Holbert, 2013) but research is just beginning to address how misperceptions are spread and corrected within these platforms and its consequences for belief (Hannak, Margolin, Keegan, & Weber, in press). Online social networks can influence the types of political information people are exposed to (Messing & Westwood, 2013) and the possibility that they impact exposure to and belief in political misinformation must also be explored. Important to this future work will be the concept of emotional contagion, which suggests that within computer mediated communication people can transfer their emotional state to others through their online communication (Hancock, Gee, Ciaccio, & Lin, 2008). The emotion stemming from angry or anxious posts about misinformation may therefore be transferred to others within a social network. If so, the results of the present research suggest this will impact how people consider the false claims.

Finally, more work is also needed to determine what types of corrective messages are effective. The “claim-facts” format used in this study was successful at updating
beliefs but other work using a similar design indicates that the effectiveness of these types of corrections can quickly decay (Schwarz et al., 2007). Based on the results of this study it would appear that inducing some level of anxiety might be a promising route to correct counter-attitudinal misinformation by reducing people’s reliance on their prior attitudes or partisanship when forming their beliefs. Also, insights from the research on “tipping points” would suggest that corrective messages that provide a heavy dose of accurate information might work in overcoming misperceptions (Redlawsk et al., 2010). These types of corrections must be careful, however, not to trigger psychological reactance that can lead to the rejection of the message (Dillard & Shen, 2005).

Regardless of the various strategies test, moving forward this line of research would greatly benefit from conceptualizing corrective messages as a form of persuasion. After all, updating inaccurate beliefs parallels other types of communication campaigns and insights from health and risk campaigns can be applied here to better inform corrective message strategies (Rice & Atkin, 2013).

Conclusion

Successful democracies depend on citizens making accurately informed decisions. Political misperceptions threaten the democratic process by raising the possibility that public opinion and behavior toward an issue or candidate is based not on the facts, but rather on false or misleading information. Understanding why citizens believe inaccurate information and what we can do to correct it is necessary in order to maintain a healthy and functional political debate. To date, many critics have taken the rather pessimistic view that political misperceptions are simply the result of partisan struggles. Republicans
believe one thing because they are Republicans; Democrats believe another because they are Democrats. This research began with the premise that partisanship surely plays a role in what people believe but is by no means deterministic.

This research provides evidence that the public’s acceptance or rejection of inaccurate political claims is by no means always driven by their political party affiliation. Instead, partisanship’s influence on political misperceptions depends in part on citizens’ emotional experiences. People who are angry about a political issue or candidate are more likely to be motivated to defend their attitudes or partisanship. As a result their beliefs more often resemble their prior disposition. In contrast, people who feel anxious about politics are more likely put their partisanship aside and consider the evidence in front of them. I have argued in this dissertation that we must consider how these two discrete emotions uniquely influence belief and the public’s engagement with political misinformation. The results suggest that partisan information processing is not necessarily the default strategy, especially when considering the corrective messages were effective in updating beliefs in spite of prior partisan commitments. It is clear from this work that political beliefs are formed not by a single consideration but rather by a set of interacting influences including emotion, partisanship, and the information environment. Understanding how these factors work together—not in isolation—will better serve us as we seek to solve the problem of political misperceptions.
References


service announcements. *Communication Research, 27*, 461-495.


Lodge, M., & Taber, C. S. (2005). The automaticity of affect for political leaders, groups, and issues: An experimental test of the hot cognition hypothesis. Political Psychology, 26, 455-482.

Lodge, M., & Taber, C.S. (2000). Three steps toward a theory of motivated political reasoning. In A. Lupia, M.D. McCubbins, & S.L. Popkin (Eds.) Elements of


Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political


Psychological Review, 110, 145-172.


Appendix A: Study Instrument

[Consent form presented]

ISS ATT

To begin, we would like to know your opinion about several policy initiatives.

Please rate your feelings about each policy initiative on a seven-point scale, where a higher score means you like it more.

Randomize:

a. Repeal of estate tax
b. Immigration reform
c. The death penalty
d. Green energy
e. Early childhood education

Study 1

We are interested in how citizens like you feel about the news stories you read. On the next page is a news article that we would like you to carefully read and answer some questions about. When you are finished reading the article, click on the “Next” button that will be at the bottom of the page.

[Randomly assign one of the three articles (anger, anxiety, or neutral)]

Study 2

[Randomly assign one of five writing tasks (anger or anxiety; immigration or death panel; political enthusiasm)]

Anger: Immigration: We are interested in your feelings about immigration reform, which is one of the most important political issues facing the country today. In the box below, please write something about immigration reform that makes you ANGRY. Examples of things that make some people ANGRY are the consequences of immigration reform or how it might affect the country. Be specific about what exactly it is that makes you
ANGRY. You should write this in a way that someone reading it might also get ANGRY. Take at least two minutes to write your response.

Anxiety: Immigration: We are interested in your feelings about immigration reform, which is one of the most important political issues facing the country today. In the box below, please write something about immigration reform that makes you ANXIOUS. Examples of things that make some people ANXIOUS are the consequences of immigration reform or how it might affect immigrant families. Be specific about what exactly it is that makes you ANXIOUS. You should write this in a way that someone reading it might also get ANXIOUS. Take at least two minutes to write your response.

Anger/Anxiety: Death penalty: We are interested in your feelings about the death penalty, which is one of the most important political issues facing the country today. In the box below, please write something about the death penalty that makes you (ANGRY/ANXIOUS). Examples of things that make some people (ANGRY/ANXIOUS) are the consequences of the death penalty or how it might affect the country. Be specific about what exactly it is that makes you (ANGRY/ANXIOUS). You should write this in a way that someone reading it might also get (ANGRY/ANXIOUS). Take at least two minutes to write your response.

Neutral: Now we are interested in what makes you relaxed. In the box below, please write about something that makes you relaxed. Examples of things that make some people relaxed are their families, friends, vacations, or hobbies. Be specific about what exactly it is that makes you relaxed. You should write this in a way that someone reading it might also get relaxed. Take at least two minutes to write your response.

EMOTION Now we want to ask you about how you were/are feeling while you read the news article/right now. The next several screens will have words that describe different feelings or emotions. Please read each item and then mark the appropriate answer for that word. Did the article make/to what extent do you feel”

<table>
<thead>
<tr>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Randomize

a. afraid
b. worried
c. anxious
d. hateful
e. angry
f. outraged
g. enthusiastic
h. hopeful
i. proud

[RANDOMLY ASSIGN FACT-CHECKING ARTICLE HERE]

Immigration Story Condition

BEL1 The article you just read made several claims about immigration. What do you think about the accuracy of these statements? For each statement listed below, please tell us if you think it definitely true, probably true, probably false, definitely false, or if you are unsure.

<table>
<thead>
<tr>
<th>Definitely True</th>
<th>Probably true</th>
<th>Probably false</th>
<th>Definitely false</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

a. Illegal immigrants are able to receive government welfare benefits like food stamps and housing benefits
b. The majority of immigrants do not learn to speak English
c. Immigrants are more likely to become criminals than native-born citizens
d. Proposed legislation will allow any current illegal immigrant to become a citizen

Death Penalty Story Condition

BEL1A The article you just read made several claims about the death penalty. What do you think about the accuracy of these statements? For each statement listed below, please tell us if you think it definitely true, probably true, probably false, definitely false, or if you are unsure.

<table>
<thead>
<tr>
<th>Definitely True</th>
<th>Probably true</th>
<th>Probably false</th>
<th>Definitely false</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

a. The number of inmates executed in the U.S. is growing.
b. Minorities are more likely to be executed than whites.
c. It is legal to execute juveniles in the U.S.
d. Public support for the death penalty has increased in recent years.

ATT

Now that you’ve read a little bit about [immigration/the death penalty], we are interested in your opinions about it. Several pairs of statements are listed below. Please place a mark closer to the statement that best describes your opinions:

A path to citizenship for undocumented immigrants who pass a background check, pay a fine and any outstanding taxes would be:

OR

Eliminating the death penalty for people convicted of murder would be:

[Randomize]

|                  | Bad | | | | | | Good |
|------------------|-----|| | | | | |     |
| Foolish          |     | | | | | | Wise |
| Negative         |     | | | | | | Positive |
| Wrong            |     | | | | | | Right |
| Unacceptable     |     | | | | | | Acceptable |

CRED

Next, we’d like to know a bit more about what you think about the information in the article you read. Several pairs of statements are listed below. Please place a mark closer to the statement that best describes your opinions:

The claims about immigration made by the Association for American Immigration Reform (AAIR)/Republicans/Democrats were:

OR
The claims about the death penalty made by the American Amnesty Coalition (AAC)/Republicans/Democrats, were:

<table>
<thead>
<tr>
<th>[Randomize]</th>
<th>O O O O O O</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>O O O O O O</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>O O O O O O</td>
<td>Strong</td>
</tr>
<tr>
<td>Unbelievable</td>
<td>O O O O O O</td>
<td>Believable</td>
</tr>
<tr>
<td>Invalid</td>
<td>O O O O O O</td>
<td>Valid</td>
</tr>
<tr>
<td>Unconvincing</td>
<td>O O O O O O</td>
<td>Convincing</td>
</tr>
<tr>
<td>False</td>
<td>O O O O O O</td>
<td>True</td>
</tr>
</tbody>
</table>

The information provided by the fact-checking organization Political Fact was:

OR

The information provided by the fact-checking organization Political Fact was:
Next, we’d like to know a bit more about what you think about the source of the information in the article you read. Several pairs of statements are listed below. Please place a mark closer to the statement that best describes your opinions:

The Association for American Immigration Reform (AAIR)/Democrats/Republicans is/are:

OR

The American Amnesty Coalition (AAC)/Democrats/Republicans is/are:

<table>
<thead>
<tr>
<th>[Randomize]</th>
<th>Untrustworthy</th>
<th>Trustworthy</th>
<th>Unconvincing</th>
<th>Convincing</th>
<th>Unreliable</th>
<th>Reliable</th>
<th>Dishonest</th>
<th>Honest</th>
<th>Uncredible</th>
<th>Credible</th>
<th>Unqualified</th>
<th>Qualified</th>
<th>Uninformed</th>
<th>Informed</th>
<th>Inexpert</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Untrustworthy</td>
<td>Unconvincing</td>
<td>Unreliable</td>
<td>Dishonest</td>
<td>Uncredible</td>
<td>Unqualified</td>
<td>Uninformed</td>
<td>Inexpert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>○  ○  ○  ○  ○</td>
<td>○  ○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustworthy</td>
<td>○  ○  ○  ○  ○</td>
<td>○  ○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td>○  ○  ○  ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COUNTERARG1:

[Randomize items]

<table>
<thead>
<tr>
<th>When reading the claims about immigration/death penalty provided by the [Association for American Immigration Reform (AAIR)/American Amnesty Coalition (AAC)/Republicans/Democrats]:</th>
<th>Strongly Disagree</th>
<th>Neithe Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I find myself actively agreeing with their points.</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. I found myself actively disagreeing with their points.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. I was looking for flaws in their argument.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

147
d. It was easy to agree with the arguments made in the message

COUNTERARG2:

[Randomize items]

When reading the fact-checking materials about immigration/the death penalty provided by the Political Facts:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree 1</th>
<th>Disagree 2</th>
<th>Neither Agree nor Disagree 3</th>
<th>Agree 4</th>
<th>Strongly Agree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I find myself actively agreeing with their points.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. I found myself actively disagreeing with their points.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. I was looking for flaws in their argument.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. It was easy to agree with the arguments made in the message</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REACTANCE:

[Randomize items]
The fact-checking materials about immigration/the death penalty provided by the Political Facts:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree 1</th>
<th>Disagree 2</th>
<th>Neither Agree nor Disagree 3</th>
<th>Agree 4</th>
<th>Strongly Agree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Threatened my freedom to choose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Tried to make up my mind for me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Tried to manipulate me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Tried to pressure me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEPTH OF PROCESSING:

[Randomize items]

<table>
<thead>
<tr>
<th>Still thinking about the article on immigration/the death penalty, please tell us how much you agree or disagree with the following statements:</th>
<th>Strongly Disagree 1</th>
<th>Disagree 2</th>
<th>Neither Agree nor Disagree 3</th>
<th>Agree 4</th>
<th>Strongly Agree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>This issue is interesting to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was interested in what the author had to say</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t find this issue very interesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was motivated to read the article</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

149
<table>
<thead>
<tr>
<th>I focused on the arguments the article made</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I paid close attention to each point that was made</td>
<td></td>
</tr>
<tr>
<td>I didn’t pay close attention to the article’s arguments</td>
<td></td>
</tr>
<tr>
<td>I concentrated on the article arguments</td>
<td></td>
</tr>
<tr>
<td>My mind kept wandering as I read the article</td>
<td></td>
</tr>
<tr>
<td>While reading, I didn’t let myself get distracted from focusing on the content</td>
<td></td>
</tr>
<tr>
<td>While reading the article, thoughts about other things kept popping into my head</td>
<td></td>
</tr>
<tr>
<td>My mind did not wander as I read the article</td>
<td></td>
</tr>
<tr>
<td>I remained objective about the article content</td>
<td></td>
</tr>
<tr>
<td>I tried not to let how I feel about the issue influence how I read the article</td>
<td></td>
</tr>
<tr>
<td>I tried to remain impartial as I read the article</td>
<td></td>
</tr>
</tbody>
</table>
My prior beliefs about the issue prevented me from being objective

[Randomize next 3 items]

<table>
<thead>
<tr>
<th>INFOSH1</th>
<th>How likely would you be to share the story you just read about immigration/death penalty on a social media site like Facebook or Twitter?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not likely at all</td>
</tr>
<tr>
<td>2</td>
<td>Not too likely</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat likely</td>
</tr>
<tr>
<td>4</td>
<td>Very likely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INFOSH2</th>
<th>How likely would you be to email this story about immigration/the death penalty to a friend or family member?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not likely at all</td>
</tr>
<tr>
<td>2</td>
<td>Not too likely</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat likely</td>
</tr>
<tr>
<td>4</td>
<td>Very likely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INFOSH3</th>
<th>How likely would you be to talk about this story related to immigration/the death penalty to a friend or family member?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not likely at all</td>
</tr>
<tr>
<td>2</td>
<td>Not too likely</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat likely</td>
</tr>
<tr>
<td>4</td>
<td>Very likely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INFOSEEK</th>
<th>How likely are you to seek out more information about immigration/the death penalty?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not likely at all</td>
</tr>
<tr>
<td>2</td>
<td>Not too likely</td>
</tr>
<tr>
<td>3</td>
<td>Somewhat likely</td>
</tr>
<tr>
<td>4</td>
<td>Very likely</td>
</tr>
</tbody>
</table>

POLITICAL INTEREST

151
NEWSATT How closely do you follow news about politics and public affairs?

1 Very closely
2 Somewhat closely
3 Not too closely
4 Not at all closely

POLINT More generally, how interested are you in politics and public affairs?

1 Very interested
2 Somewhat interested
3 Not very interested
4 Not at all interested

POLITICAL KNOWLEDGE

Now we are going to ask you several questions about events, topics, and people in the news. Not everyone is expected to know these answers. Please just try to answer to the best of your ability. You will have 1 minute to complete each question. If you do not know the answer, please feel free to select "unsure".

PK1A Do you happen to know which party has the most members in the US House of Representatives?

1 Republican
2 Democrat
3 Other
4 Unsure

PK2A The Chief Justice of the Supreme Court is John Roberts. Was he appointed by a…?

1 Democrat
2 Republican
3 Other
4 Unsure

PK3A Is the national unemployment rate as reported by the government currently closer to…?

1 5%
2 8%
3 15%
PK4 Who is the current U.S. Secretary of State?

1. John Kerry
2. Joe Biden
3. Hillary Clinton
4. Colin Powell
5. Unsure

OBAMA Please tell us if you think the following statement is definitely true, probably true, probably false, definitely false or if you are unsure.

President Barack Obama was born in the United States:

1. Definitely true
2. Probably true
3. Probably false
4. Definitely false
5. Unsure

VAC Please tell us if you think the following statement is definitely true, probably true, probably false, definitely false or if you are unsure.

Vaccines cause autism:

1. Definitely true
2. Probably true
3. Probably false
4. Definitely false
5. Unsure

GW Please tell us if you think the following statement is definitely true, probably true, probably false, definitely false or if you are unsure.

The rise in the earth’s temperature is due to man-made causes:

1. Definitely true
2. Probably true
3. Probably false
4. Definitely false
5. Unsure
RELATIVISM  Please tell us how much you agree or disagree with each of the following statements about facts and scientific claims.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[Randomize]

a) What counts as truth is defined by power
b) Scientific conclusions are shaped by politics
c) “Facts” depend on their political context
d) Fact checking is unbiased
e) Scientific results are free of political influence
f) The political situation doesn’t change the facts

INTUITION  Please tell us how much you agree or disagree with the following statements about how you reach your opinions.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[Randomize]

a) I believe what I want to believe, no matter what the evidence is
b) I trust my gut to tell me what’s true and what’s not
c) An argument that doesn’t feel right is probably wrong
d) Evidence is more important than whether something feels right
e) I rely on reason to figure out what the truth is
f) I trust the facts, not my instincts, to tell me what is right

MEDIA USE

How often did you get news or information about politics from each of these sources in the past month?

154
<table>
<thead>
<tr>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day or almost every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Several times a week</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Several times a month</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Randomize]

a. The website of a major national news organization that is not frequently characterized as favoring a particular party or ideology, including USA Today, CBS News, and Yahoo! News.
b. The website of a major national news organization that is frequently characterized as favoring liberal positions or Democratic candidates, such as The New York Times or MSNBC.
c. The website of a major national news organization that is frequently characterized as favoring conservative positions or Republican candidates, such as The Wall Street Journal or FOX News.
d. The website of a politically conservative online news organization or blog, such as Drudge Report, TownHall or the Cybercast News Service (CNS News).
e. The website of a politically liberal online news organization or blog, such as The Huffington Post, ThinkProgress or the Daily Kos.
f. The website of nonpartisan online news organizations or blogs, such as RealClearPolitics or Politico.
g. A website focusing on community news, including local news organizations and citizen journalism.
h. The website of a nonpartisan fact-checking organization, such as FactCheck.org or Politifact.
i. The website of a political television comedy program such as The Daily Show with Jon Stewart or The Colbert Report.

AUTH-INTRO Although there are a number of qualities that people feel that children should have, every person thinks that some are more important than others. On the next screens are pairs of desirable qualities. For each pair please mark which one you think is more important for a child to have:
AUTH1  It is more important for children to have

1  Independence
2  Respect for elders

AUTH2  It is more important for children to have

1  Obedience
2  Self-reliance

AUTH3  It is more important for children to have

1  Curiosity
2  Good manners

DOG1  On important public issues, I believe you should:

1  Always keep in mind that there is more than one side to most issues
2  Either be for them or against them and not take a middle course

DOG2  Which is better:

1  To remain undecided
2  To take a stand on an issue even if it’s wrong

DOG3  When it comes to the really important questions about religion and philosophy of life:

1  It doesn’t especially bother me to leave them undecided
2  A person must decide them, one way or the other

SOURCETRUST  Please tell us how much you personally trust each of the following sources to provide accurate information about important social issues.

<table>
<thead>
<tr>
<th>Highly Distrust</th>
<th>Distrust 2</th>
<th>Neither Trust nor Distrust 3</th>
<th>Trust 4</th>
<th>Highly Trust 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Randomize]
a) Major national news organizations in general
b) Fact-checking news services
c) Republican-leaning news organizations
d) Democratic-leaning news organizations

RR Now please tell us how strongly you agree or disagree with each statement below:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

[Randomize]

a. The Irish, Italians, Jews and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.
b. Generations of slavery and discrimination have created conditions that make it difficult for Blacks to work their way out of the lower class.

DEMOGRAPHICS

Now a few last questions for statistical purposes only…

GEN Are you:

1 Male
2 Female

AGE Please tell us your age on your last birthday:

EDUC What is the last grade or class you completed in school?

1 Grade 8 or below
2 High school incomplete
3 High School Graduate (grade 12 or GED certificate)
4 Technical, trade, or vocational school AFTER high school
5 Some college, no 4-year degree (includes associate degree)
6 4-year college degree (Bachelor’s or other 4-year degree)
7 Graduate or professional degree (Master’s, PhD, Law, or Medicine)

HISP Are you of Hispanic or Latino origin or decent?
1. Hispanic/Latino
2. Not Hispanic/Latino

RACE When describing your race, would you best describe yourself as…?
1. White/European American or Caucasian
2. Black or African-American
3. Asian/Asian-American or Pacific Islander
4. Native American/American Indian
5. Something else (please specify)________

POLID Now when thinking about politics, how would you describe your political views?
1. Very Liberal
2. Liberal
3. Somewhat Liberal
4. Moderate or Middle of the Road
5. Somewhat Conservative
6. Conservative
7. Very Conservative

POLAF Generally speaking, when it comes to political parties in the United States, how would you best describe yourself?
1. A Strong Democrat
2. A Not Very Strong Democrat
3. Independent, lean toward Democrat
4. Independent (close to neither party)
5. Independent, lean toward Republican
6. A Not Very Strong Republican
7. Strong Republican
8. Something else, please specify

AFFPOL We would like to know your feelings toward people who support the two main U.S. political parties on a scale from 0 to 10. If you feel very favorable toward this group, you can give them the highest score of 10; if you feel very unfavorable toward this group you can give them a 0 (zero); if you feel absolutely neutral toward this group, you can give them a 5.
A. Individuals who support the Republican Party
B. Individuals who support the Democratic Party

VOTE Are you currently registered to vote?
1 Yes, I am a registered voter
2 No, I am not a registered voter
3 Not sure

INCOME In 2013, what was your family’s total income before taxes?
1 Less than $10,000
2 $10,000 to under $20,000
3 $20,000 to under $30,000
4 $30,000 to under $40,000
5 $40,000 to under $50,000
6 $50,000 to under $75,000
7 $75,000 to under $100,000
8 $100,000 or more

[Debriefing]
(The appropriate debriefing will automatically appear after participants have completed the final question)
Appendix B: Study 1 Experimental Stimuli
Repeat DUI-Offender Receives Light Sentence For Killing Peoria Teen

PEORIA, IL. (AP) – A repeat DUI offender who triggered a two-car crash near Peoria that killed an 18-year-old woman was sentenced today to four years in prison, though she's likely to serve only half of that time.

Linda Marie Day, 53, pleaded guilty on December 12 to DUI gross vehicular manslaughter for the death five days before of Peoria resident Kristin Meyer. According to court records, Day had been convicted twice before for DUI. A third case was pending. The defendant was convicted in 2006 and 2010 of misdemeanor driving under the influence, resulting in her being sentenced to three years probation for each offense.

The defense made the plea directly to Peoria County Superior Court Judge Bruce Rushing, without negotiating with the District Attorney's Office.

Rushing imposed the maximum sentence on Day. But because of provisions in state law aimed at rewarding prisoners for good behavior and reducing inmate overcrowding, the defendant could be freed in two years.

"She basically gets to go back to living her life after two years, provided she doesn't mess up in prison, while the lives of the victim's family are damaged forever," said Deputy District Attorney Anthony Shaw. "The month of December, the holidays, entire lives, are ruined for this family."

Shaw said Day was heading home from a bar in the late afternoon when the Dec. 7 crash occurred.

According to the Illinois highway Patrol, Day was driving more than 90 miles per hour when she ran into the back of Meyer's vehicle.

"The defendant struck the victim's car and pushed it into oncoming traffic," Shaw said.

Meyer's sedan then collided head-on with a Ford pickup truck. Officials say Day drove another 300 feet after striking Meyer's vehicle before stopping.

The young woman -- who was one day away from turning 19 -- died at the scene. Meyer's eleven-year-old sister was also injured in the crash, though not fatally. The pickup driver walked away with minor injuries, as did Day's male passenger, who fled the location and has never been identified, according to Shaw. Day was slightly injured and was treated at a hospital before being booked into jail.

Day's blood-alcohol content at the time of the Dec. 7 wreck was .21, which is far above the .08 legal limit to operate a motor vehicle, records showed.

"Ms. Day had a history of drinking and driving," Shaw said. "She should have known better." Day declined an opportunity to make a statement to Meyer's family at the sentencing hearing.

Meyer's parents and Shaw say the sentence was too lenient considering Day's prior DUI convictions. "It just doesn't make any sense to me, how you can serve just two years for taking a young person's when you've already proven you don't learn from your mistakes," said Lonnie Meyer.
Truck carrying nuclear materials stolen in Virginia

WASHINGTON, D.C. (AP) – Thieves have made off with a truck in Virginia carrying a dangerous radioactive source used in medical treatments, a material that could provide an ingredient for a so-called "dirty bomb".

The International Atomic Energy Office said in a statement it had been informed by the Virginia State Police that the truck, which was taking cobalt-60 from a hospital to a radioactive waste-storage facility, was stolen at gunpoint on Monday in Falls Church, Va., about ten miles west of Washington, D.C.

Apart from peaceful medical and industrial uses, experts say cobalt-60 can also be used in a dirty bomb in which conventional explosives disperse harmful radioactive materials into the air. Direct exposure to cobalt-60 can kill a person in a matter of minutes.

Officials expressed concerns about the dangers of these stolen materials falling into the wrong hands.

"At the time the truck was stolen, the radioactive source was properly shielded. However, the source could be extremely dangerous if removed from the shielding," the IAEO statement said. "Authorities are currently conducting a search for these materials."

Cobalt-60 - the most common radioactive isotope of cobalt, a metal - has many applications in industry and in radiotherapy in hospitals. It is also used for industrial radiography to detect structural flaws in metal parts, according to the U.S. Environmental Protection Agency.

The IAEO statement noted security precautions were in place at the time of the theft but the armed thieves were able to overtake the truck's guards. The IAEO statement also said it was unclear at this time whether the thieves were after the truck or the cobalt-60.

Experts say militants and terrorists have attempted to obtain cobalt-60 because radioactive material is regarded as less hard to find and a dirty bomb is easier to manufacture than an atomic bomb.

Such "radiological dispersal devices" or RDDs combine conventional explosives with radioactive materials that contaminate the surrounding area upon detonation. Exposure to such toxic radioactive material can potentially be lethal and dramatically increase cancer rates. Officials worry that many U.S. cities would be uninhabitable were such a bomb to go off.

At a nuclear security summit in 2012, IAEO Director General Peter Hauser specifically singled out cobalt-60 among radioactive sources that could be used for harmful purposes.

"These materials, such as cobalt-60, could be used along with conventional explosives to make dirty bombs. A dirty bomb detonated in a major city could cause loss of life, mass panic, as well as serious health and environmental consequences," Hauser said, according to a copy of his speech.
Want to be Dazzled by Mother Nature’s Fall Foliage Display? Just Hop in the Car.

WASHINGTON, D.C. (AP) — Crisp air, panoramic views, brilliantly colored ash and poplar trees: the exhilarating route to North Carolina’s Mount Mitchell State Park—the highest peak in the Eastern United States—is a destination in itself. The scenic 78-year-old Blue Ridge Parkway is just one of the country’s great autumn drives.

The fall foliage season, when the changing palette of deciduous trees is in blazing bloom, is now starting. And the way to maximize your intake of color is to map out a driving route. In September, October, and—in some spots—even November, color seekers can visit 31 states and drive more than 3,000 miles of national scenic byways, plus thousands of other scenic roads.

Some nature lovers, like former Shenandoah National Park guide Hazel Mills, can’t wait to buckle up and get up close and personal with the purple dogwoods and deep burgundy leaves of the Virginia creepers. “It’s like a basketful of fall chrysanthemums in every color,” she says. “Red and yellow, purple, and deep burgundy. When the afternoon sun hits the hickory, it looks exactly like gold, absolutely breathtaking.”

Others, like Mike Boutin, owner of Maine-based Northwoods Outfitters, like to take country drives surrounded by mountains bursting with yellow beeches, scarlet maples, and purple witch hazel around Moosehead Lake. He also loves one of the season’s biggest local adventures—back-road moose safaris. “If it doesn’t get better than pulling over to see a huge brown male moose crash through a riot of bright red and yellow leaves,” says Boutin.

Certain areas of the country—the Northeast corridor, the Southeast, along the Appalachian Mountains, and much of the Midwest—produce the most striking and vibrant colors because of mild autumn days and cool (but not freezing) evenings. If daytime temperatures are too warm for an extended period of time, colors are less intense.

If you’re planning a fall foliage trip, choose your route based not only on the timing of nature’s fiery color display, but also around available activities. Horseback ride through the orange hickory trees in Shenandoah National Park. Or stand beneath a quivering golden aspen at Mammoth Lakes in the Eastern Sierra while peering through a dusty window in Bodie, the best-preserved ghost town in California.

But no matter where you are, the way to cover the most ground—and take in the biggest eyeful of color—is behind the wheel.
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) – As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. Here are four claims about immigration that are currently circulating on the Internet.

Claim #1: Illegal immigrants benefit from U.S. public welfare programs.
The Association for American Immigration Reform (AAIR) noted in a recent report that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs, according to the report, stem from welfare benefits such as food stamps and public housing assistance.

Claim #2: Immigrants today are not integrating into American life like past waves did.
The AAIR report also claims that most new immigrants resist learning English and fully integrate into American culture. According to the report, this limits immigrants’ ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.
AAIR reports that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. AAIR claims that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.
AAIR claims that over 10 million current illegal immigrants would quickly become U.S. citizens were a new immigration reform law to pass, which would make them immediately eligible for government benefits.
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) — As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. According to Political Facts, an independent fact-checking organization, here are the facts regarding four common claims about immigration that are currently circulating online.

**Claim #1: Illegal immigrants benefit from U.S. welfare programs.**
The Association for American Immigration Reform (AAIR) noted in a recent report that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs, according to the report, stem from welfare benefits such as food stamps and public housing assistance.

**FACTS:** U.S. law strictly prohibits undocumented immigrants from receiving the following benefits: welfare, non-emergency health coverage, disability coverage, public or assisted housing, food assistance, or unemployment compensation.

**Claim #2: Immigrants today are not integrating into American life like past waves did.**
The AAIR report also claims that most new immigrants resist learning English and fully integrate into American culture. According to the report, this limits immigrants’ ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

**FACTS:** An overwhelming majority of today’s immigrants seek English instruction such that adult-education programs cannot meet demand. Only 7% of second generation Latinos use Spanish as their main language. More than 68,000 foreign-born individuals are currently serving in the U.S. military and more than half of them are not yet citizens.

**Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.**
AAIR reports that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. AAIR claims that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

**FACTS:** Evidence from the U.S. Census Bureau and Bureau of Justice indicates that the statistics provided by AAIR are inaccurate. Foreign-born individuals ages 18-39 are five times less likely to be incarcerated than are the native-born. Violent crime rates, including those of noncitizens, have dropped dramatically since 2005. Murders, rape, robbery, and assault have seen a 22.6% decrease in the past eight years.

**Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.**
AAIR claims that over 10 million current illegal immigrants would quickly become U.S. citizens were they a new immigration reform law to pass, which would make them immediately eligible for government benefits.

**FACTS:** The current proposed legislation would allow undocumented workers to apply for lawful permanent residency (a “green card”). Those applying for green cards would have to pay taxes, pass additional criminal background and national security checks, register for Selective Service, pay additional fees and penalties, and learn English and U.S. civics. As under current law, five years after receiving a green card, individuals would be eligible to apply for U.S. citizenship like every other legal permanent resident. Legal permanent residents would not be eligible for welfare and other federal benefits.

**Conclusion:**
Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims about immigration is false. The claims are based on inaccurate and misleading information and statistics.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) – As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. Here are four claims about the death penalty that are currently circulating on the internet.

Claim #1: The number of inmates executed is growing.
The American Amnesty Coalition (AAC) noted in a recent report that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

Claim #2: Minorities are more likely to be executed than whites.
The AAC report also claims that since 1976 more Black and Hispanic inmates have been executed than White inmates.

Claim #3: It is legal to execute juveniles.
AAC reports that most states with the death penalty allow criminals who are under 18 years of age to be put to death.

Claim #4: The American public is more supportive of the death penalty than ever before.
AAC claims that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) – As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. According to Political Facts, an independent fact-checking organization, here are the facts regarding four common claims about the death penalty that are currently circulating online.

Claim #1: The number of inmates executed is growing.
The American Amnesty Coalition (AAC) noted in a recent report that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

FACTS: Political Facts has determined that much of the AAC report was based on flawed data. The number of inmates executed since 2000 has steadily decreased, not increased. 43 inmates were executed in 2012 and 39 in 2013, which is significantly less than the number in 2000, when 85 people were put to death.

Claim #2: Minorities are more likely to be executed than whites.
The AAC report also claims that since 1976 more Black and Hispanic inmates have been executed than have White inmates.

FACTS: Reviewing the data, Political Facts found that this claim is inaccurate. Since 1976, 56 percent of defendants executed were White, 34 percent were Black, and 8 percent were Hispanic.

Claim #3: It is legal to execute juveniles.
AAC reports that most states with the death penalty allow criminals who are under 18 years of age to be put to death.

FACTS: Political Facts notes that juveniles cannot be put to death. An investigation showed that the 2005 U.S. Supreme Court case Roper v. Simmons struck down the death penalty for juveniles.

Claim #4: The American public is more supportive of the death penalty than ever before.
AAC claims that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.

FACTS: Political Facts highlights many flaws in the AAC poll. Political Facts points to the numbers from several reputable polling firms, which suggests that about 50 percent of Americans are in favor of the death penalty. In fact, public support for the death penalty is the lowest it has been since the early 1990s.

Conclusion:
Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims about the death penalty are false. The claims are based on inaccurate and misleading information and statistics.
Appendix C: Study 2 Experimental Stimuli
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) -- As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Republican members of Congress for misrepresenting the facts about immigration reform. Here are four claims about immigration that some Republican members of Congress have been circulating.

Claim #1: Illegal immigrants benefit from U.S. public welfare programs.
Congressional Republicans say that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs stem from welfare benefits such as food stamps and public housing assistance.

Claim #2: Immigrants today are not integrating into American life like past waves did.
Republicans note that most new immigrants resist learning English and fully integrate into American culture. This limits immigrants' ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.
Republicans say that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. Republicans claim that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.
Republicans claim that over 10 million current illegal immigrants would quickly become U.S. citizens were a new immigration reform law to pass, which would make them immediately eligible for government benefits.
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) — As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Democratic members of Congress for misrepresenting the facts about immigration reform. Here are four claims about immigration that some Democratic members of Congress have been circulating.

Claim #1: Illegal immigrants benefit from U.S. public welfare programs.
Congressional Democrats say that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs stem from welfare benefits such as food stamps and public housing assistance.

Claim #2: Immigrants today are not integrating into American life like past waves did.
Democrats note that most new immigrants resist learning English and fully integrate into American culture. This limits immigrants' ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.
Democrats say that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. Democrats claim that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.
Democrats claim that over 10 million current illegal immigrants would quickly become U.S. citizens were a new immigration reform law to pass, which would make them immediately eligible for government benefits.
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) — As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Republican members of Congress for misrepresenting the facts about immigration reform. According to Political Facts, an independent fact-checking organization, here are the facts about four claims about immigration that some Republican members of Congress have been circulating.

Claim #1: Illegal immigrants benefit from U.S. public welfare programs.
Congressional Republicans say that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs stem from welfare benefits such as food stamps and public housing assistance.

FACTS: U.S. law strictly prohibits undocumented immigrants from receiving the following benefits: welfare, non-emergency health coverage, disability coverage, public or assisted housing, food assistance, or unemployment compensation.

Claim #2: Immigrants today are not integrating into American life like past waves did.
Republicans note that most new immigrants resist learning English and fully integrate into American culture. This limits immigrants’ ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

FACTS: An overwhelming majority of today’s immigrants seek English instruction such that adult-education programs cannot meet demand. Only 7% of second-generation Latinos use Spanish as their main language. More than 68,000 foreign-born individuals are currently serving in the U.S. military and more than half of them are not yet citizens.

Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.
Republicans say that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. Republicans claim that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

FACTS: Evidence from the U.S. Census Bureau and Bureau of Justice indicates that the statistics provided by Republicans are inaccurate. Foreign-born individuals ages 18-39 are five times less likely to be incarcerated than are the native-born. Violent crime rates, including those of noncitizens, have dropped dramatically since 2005. Murders, rape, robbery, and assault have seen a 22.6% decrease in the past eight years.

Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.
Republicans claim that over 10 million current illegal immigrants would quickly become U.S. citizens were a new immigration reform law to pass, which would make them immediately eligible for government benefits.

FACTS: The current proposed legislation would allow undocumented workers to apply for lawful permanent residency (a “green card”). Those applying for green cards would have to pay taxes, pass additional criminal background and national security checks, register for Selective Service, pay additional fees and penalties, and learn English and U.S. civics. As under current law, five years after receiving a green card, individuals would be eligible to apply for U.S. citizenship like every other legal permanent resident. Legal permanent residents would not be eligible for welfare and other federal benefits.

Conclusion:
Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims made by Republicans about immigration is false. The claims are based on inaccurate and misleading information and statistics.
Misperceptions about immigration make reform harder

WASHINGTON, D.C. (AP) — As Congress continues to debate immigration reform, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to immigration policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Democratic members of Congress for misrepresenting the facts about immigration reform. According to Political Facts, an independent fact-checking organization, here are the facts about four claims about immigration that some Democratic members of Congress have been circulating.

Claim #1: Illegal immigrants benefit from U.S. public welfare programs.
Congressional Democrats say that illegal immigrants cost American taxpayers $113 billion per year. The majority of the costs stem from welfare benefits such as food stamps and public housing assistance.

FACTS: U.S. law strictly prohibits undocumented immigrants from receiving the following benefits: welfare, non-emergency health coverage, disability coverage, public or assisted housing, food assistance, or unemployment compensation.

Claim #2: Immigrants today are not integrating into American life like past waves did.
Democrats note that most new immigrants resit learning English and fully integrate into American culture. This limits immigrants' ability to understand political information, serve on juries, participate in judicial proceedings, and serve in the armed forces.

FACTS: An overwhelming majority of today's immigrants seek English instruction such that adult-education programs cannot meet demand. Only 7% of second generation Latinos use Spanish as their main language. More than 68,000 foreign-born individuals are currently serving in the U.S. military and more than half of them are not yet citizens.

Claim #3: Immigrants are more likely to become criminals than are native-born U.S. citizens.
Democrats say that illegal immigrants are five times more likely to commit a felony than are U.S. citizens. Democrats claim that illegal immigrants have a higher probability to be involved in serious crimes such as murder, assault, kidnapping, and prostitution.

FACTS: Evidence from the U.S. Census Bureau and Bureau of Justice indicates that the statistics provided by Democrats are inaccurate. Foreign-born individuals ages 18-39 are five times less likely to be incarcerated than are the native-born. Violent crime rates, including those of noncitizens, have dropped dramatically since 2005. Murders, rape, robbery, and assault have seen a 22.6% decrease in the past eight years.

Claim #4: The current proposed legislation allows any person living in the U.S. illegally to become a citizen.
Democrats claim that over 10 million current illegal immigrants would quickly become U.S. citizens were a new immigration reform law to pass, which would make them immediately eligible for government benefits.

FACTS: The current proposed legislation would allow undocumented workers to apply for lawful permanent residency (a "green card"). Those applying for green cards would have to pay taxes, pass additional criminal background and national security checks, register for Selective Service, pay additional fees and penalties, and learn English and U.S. civics. As under current law, five years after receiving a green card, individuals would be eligible to apply for U.S. citizenship like every other legal permanent resident. Legal permanent residents would not be eligible for welfare and other federal benefits.

Conclusion:
Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims made by Democrats about immigration is false. The claims are based on inaccurate and misleading information and statistics.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) – As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. Recently, journalists, news outlets, and non-parisan fact-checking organizations have criticized Republican members of Congress for misrepresenting the facts about the death penalty. Here are four claims about the death penalty that some Republican members of Congress have been circulating.

Claim #1: The number of inmates executed is growing.
Republicans cite a recent report stating that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

Claim #2: Minorities are more likely to be executed than whites.
Congressional Republicans also claim that since 1976 more Black and Hispanic inmates have been executed than have White inmates.

Claim #3: It is legal to execute juveniles.
Congressional Republicans have noted that most states with the death penalty allow criminals who are under 18 years of age to be put to death when convicted of murder.

Claim #4: The American public is more supportive of the death penalty than ever before.
Republicans claim that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) – As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Democratic members of Congress for misrepresenting the facts about the death penalty. Here are four claims about the death penalty that some Democratic members of Congress have been circulating.

Claim #1: The number of inmates executed is growing.
Democrats cite a recent report stating that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

Claim #2: Minorities are more likely to be executed than whites.
Congressional Democrats also claim that since 1976 more Black and Hispanic inmates have been executed than have White inmates.

Claim #3: It is legal to execute juveniles.
Congressional Democrats have noted that most states with the death penalty allow criminals who are under 18 years of age to be put to death when convicted of murder.

Claim #4: The American public is more supportive of the death penalty than ever before.
Democrats claim that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) – As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Republican members of Congress for misrepresenting the facts about the death penalty. According to Political Facts, an independent fact-checking organization, here are the facts about four claims about the death penalty that some Republican members of Congress have been circulating.

Claim #1: The number of inmates executed is growing.
Republicans cite a recent report stating that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

FACTS: Political Facts has determined that much of the report cited by Republicans was based on flawed data. The number of inmates executed since 2000 has steadily decreased, not increased. 43 inmates were executed in 2012 and 39 in 2013, which is significantly less than the number in 2000, when 85 people were put to death.

Claim #2: Minorities are more likely to be executed than whites.
Congressional Republicans also claim that since 1976 more Black and Hispanic inmates have been executed than have White inmates.

FACTS: Reviewing the data, Political Facts found that this claim is inaccurate. Since 1976, 56 percent of defendants executed were White, 34 percent were Black, and 8 percent were Hispanic.

Claim #3: It is legal to execute juveniles.
Congressional Republicans have noted that most states with the death penalty allow criminals who are under 18 years of age to be put to death when convicted of murder.

FACTS: Political Facts notes that juveniles cannot be put to death. An investigation showed that the 2005 U.S. Supreme Court case Roper v. Simmons struck down the death penalty for juveniles.

Claim #4: The American public is more supportive of the death penalty than ever before.
Republicans claim that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.

FACTS: Political Facts highlights many flaws in the Republicans’ poll. Political Facts points to the numbers from several reputable polling firms, which suggests that about 60 percent of Americans are in favor of the death penalty. In fact, public support for the death penalty is the lowest it has been since the early 1990s.

Conclusion: Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims about the death penalty made by Congressional Republicans is false. The claims are based on inaccurate and misleading information and statistics.
Misperceptions about the death penalty cloud debate

WASHINGTON, D.C. (AP) - As states across the country continue to evaluate their stance on the death penalty, many groups and politicians have expressed concerns that public misperceptions surrounding the issue may limit any real change to death penalty policy. Recently, journalists, news outlets, and non-partisan fact-checking organizations have criticized Democratic members of Congress for misrepresenting the facts about the death penalty. According to Political Facts, an independent fact-checking organization, here are the facts about four claims about the death penalty that some Democratic members of Congress have been circulating.

Claim #1: The number of inmates executed is growing.
Democrats cite a recent report stating that the number of American prisoners put to death has increased each year since 2000. The report states that executions in 2012 and 2013 were at their highest level in 20 years.

FACTS: Political Facts has determined that much of the report cited by Democrats was based on flawed data. The number of inmates executed since 2000 has steadily decreased, not increased. 43 inmates were executed in 2012 and 39 in 2013, which is significantly less than the number in 2000, when 85 people were put to death.

Claim #2: Minorities are more likely to be executed than whites.
Congressional Democrats also claim that since 1976 more Black and Hispanic inmates have been executed than have White inmates.

FACTS: Reviewing the data, Political Facts found that this claim is inaccurate. Since 1976, 56 percent of defendants executed were White, 34 percent were Black, and 8 percent were Hispanic.

Claim #3: It is legal to execute juveniles.
Congressional Democrats have noted that most states with the death penalty allow criminals who are under 18 years of age to be put to death when convicted of murder.

FACTS: Political Facts notes that juveniles cannot be put to death. An investigation showed that the 2005 U.S. Supreme Court case Roper v. Simmons struck down the death penalty for juveniles.

Claim #4: The American public is more supportive of the death penalty than ever before.
Democrats claim that public support for the death penalty is at an all-time high. According to their internal poll, 72 percent of Americans support capital punishment for violent crimes, which is 10 percentage points higher than it was in 2000.

FACTS: Political Facts highlights many flaws in the Democrats' poll. Political Facts points to the numbers from several reputable polling firms, which suggests that about 50 percent of Americans are in favor of the death penalty. In fact, public support for the death penalty is the lowest it has been since the early 1990s.

Conclusion:
Fact-checking efforts by the independent fact-checking organization, Political Facts, as well as by the AP, indicate that each of these four claims about the death penalty made by Congressional Democrats is false. The claims are based on inaccurate and misleading information and statistics.