Affective Language and Attitudes Toward Public Policy

Rachel A. Wolitzky

Graduate Center, City University of New York
The manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the Dissertation requirements for the degree of Doctor of Philosophy

(Print) Paul Wachtel, Ph.D.

(Signature) Chair of Examining Committee

(Print) Maureen O'Connor, Ph.D.

(Signature) Executive Officer

(Print) Drew Westen, Ph.D.

(Print) Elliot Jurist, Ph.D., Ph.D.

(Print) Steve Tuber, Ph.D.

(Print) Diana Púñales, Ph.D.

Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK
ABSTRACT
Affective Language and Attitudes Toward Public Policy

by

Rachel Wolitzky

Advisor: Paul Wachtel, Ph.D.

This dissertation project focused on affective and unconscious processes involved in the evaluation of public policy. It follows recent scholarship in political psychology showing how the response to political messages depends greatly on what values and emotions are evoked. Of particular focus has been the notable discrepancy between the conscious way people construe their political judgments and the unconscious operations that more truly account for their views and actions. Motivated by a neuroscientific and psychoanalytic model of the mind and brain that recognizes both the pre-eminence of unconscious (implicit) processing and the primacy of affect in mind (brain) activity, this study investigated the impact of emotionally-valenced introductory sentences on judgments of public policy. A cross-sectional New York City sample of 367 English-speaking adults completed anonymous questionnaires, in which they evaluated written statements by hypothetical candidates for public office. Political messages pertained to issues of energy and immigration reform, and varied only in the emotional quality of their introductory sentences; identical policy statements were either preceded by a values-based, affective introduction or by a parallel, non-affective introduction composed of bland verbiage. The hypothesis that the emotionally evocative introductory sentences would operate in a generalized way in persons across the political spectrum, by amplifying message ratings, was not borne out by the data. Rather, results indicated
relevant differences in the impact of the affective introductions, associated with issue, policy condition and, most notably, political party. Differential, and often opposite, effects of the introductory language were seen, depending on participants’ political persuasion. Magnitudes of effect, when detected, were moderate to large, suggesting a practical significance to these differences. Noteworthy patterns also emerged with regard to order of message presentation, highlighting the import of contrast in the evaluative process. Implications of these findings will be discussed in relation to the premise that affective factors are the principal driver of human behavior and decision-making. Future research should include a more sensitive assessment of initial attitude towards each policy, and should utilize methodology that can more conclusively answer questions regarding the nature of the unconscious aspects of affect in the evaluative process.
# TABLE OF CONTENTS

ABSTRACT ......................................................................................................................... iv

ACKNOWLEDGMENTS ......................................................................................................... vi

LIST OF TABLES .................................................................................................................. x

LIST OF FIGURES ............................................................................................................... xii

CHAPTER I. INTRODUCTION ................................................................................................. 1

Significance and Rationale for Study .................................................................................... 3

Statement of Purpose ............................................................................................................. 5

Research questions ............................................................................................................... 5

Hypotheses ............................................................................................................................ 5

CHAPTER II. LITERATURE REVIEW ..................................................................................... 7

Unconscious Processes ........................................................................................................ 7

Psychoanalytic theory ......................................................................................................... 8

The evolving picture ............................................................................................................ 9

A contemporary neuroscientific perspective ....................................................................... 10

Priming ................................................................................................................................. 11

Affective Processes ............................................................................................................. 12

The human brain is an emotional brain ........................................................................... 13

Language, affect and the brain .......................................................................................... 14

The primacy of affective and unconscious processing ...................................................... 15

Affective and Unconscious Processes in Judgment and Decision-Making ................. 16

Priming Identity and Values ............................................................................................... 18
CHAPTER V. DISCUSSION

Sample Characteristics.................................................................64
Judgments of Energy and Immigration Policies..................................66
  Favorability of the issues................................................................66
  Political identity and policy preference............................................71
The Impact of Affective Priming.........................................................77
  Relationship to pre-existing attitudes............................................79
  The affective nature of the ‘affective’ introductions..........................80
  Affective implications of the differential effects of prime....................81
Limitations and Suggestions for Future Research.................................84
Conclusions Regarding the Primacy of Affect and Unconscious Processing.....86

APPENDICES......................................................................................89
APPENDIX A: ENERGY POLICY STATEMENTS........................................89
APPENDIX B: IMMIGRATION POLICY STATEMENTS...............................90
APPENDIX C: INTRODUCTIONS TO ENERY MESSAGES.......................91
APPENDIX D: INTRODUCTIONS TO IMMIGRATION MESSAGES.............92
APPENDIX E: DEMOGRAPHIC AND POLITICAL QUESTIONS..................93
APPENDIX F: SAMPLE QUESTIONNAIRE PAGE.......................................95
REFERENCES......................................................................................96
# LIST OF TABLES

Table 1. Demographic Characteristics of Sample..........................................................32

Table 2. Political Profile of Sample..............................................................................35

Table 3. Mean message ratings as a function of issue (energy vs. immigration),
policy (liberal vs. conservative) and ideological group (liberal, moderate,
conservative)..................................................................................................................41

Table 4. 2 (Issue) x 3 (Policy) within-subjects ANOVA: Overall sample.................41

Table 5. Three-way mixed-design ANOVA for message ratings.................................42

Table 6. 2 (Prime) x 3 (Party) factorial ANOVAs for all dependent variables.......51

Table 7. Mean ratings for liberal energy message as a function of party affiliation
(Democrat, Leaning Democrat, Independent, Leaning Republican,
Republican, None), prime condition (affective vs. neutral), and order (1\textsuperscript{st}
vs. 2\textsuperscript{nd})..................................................................................................55

Table 8. Mean ratings for conservative energy message as a function of party
affiliation (Democrat, Leaning Democrat, Independent, Leaning
Republican, Republican, None), prime condition (affective vs. neutral),
and order (1\textsuperscript{st} vs. 2\textsuperscript{nd})......................................................................56

Table 9. Mean ratings for liberal immigration message as a function of party
affiliation (Democrat, Leaning Democrat, Independent, Leaning
Republican, Republican, None), prime condition (affective vs. neutral),
and order (1\textsuperscript{st} vs. 2\textsuperscript{nd})........................................................................57
Table 10. Mean ratings for conservative immigration message as a function of party affiliation (Democrat, Leaning Democrat, Independent, Leaning Republican, Republican, None), prime condition (affective vs. neutral), and order (1st vs. 2nd)
LIST OF FIGURES

Figure 1. Bar chart showing breakdown of sample across spectrum of ideological orientation..........................................................36

Figure 2. Pie chart showing percentages of sample across ideological groups........37

Figure 3. Bar chart showing breakdown of sample across spectrum of political party affiliation..........................................................38

Figure 4. Pie chart showing percentages of sample in main political party groups..............................................................................38

Figure 5. Plot of significant issue x ideology interaction..........................................................44

Figure 6. Plot of significant policy x ideology interaction for energy messages..................................................................................46

Figure 7. Plot of significant policy x ideology interaction for immigration messages........................................................................46

Figure 8. Dimensions of difference and corresponding language in study’s liberal and conservative energy statements..................................................74
CHAPTER I

Introduction

This dissertation project focuses on the role of affective and unconscious processes in the formation of political judgments. Through an empirical examination of affective priming in political messaging, the study investigates whether framing public policy statements in emotionally evocative ways will influence evaluations of those policies. The guiding premise for this research is that affective, rather than cognitive, material is the principal driver of human behavior and decision-making, and that most, if not all, of the evaluative process occurs outside of conscious awareness.

This work lies at the intersection of clinical, social and political psychology, but largely belongs to the growing discourse on psychological dynamics in political communication. It concerns the way people react to candidates, platforms, speeches, policies, and, most notably, the huge discrepancy between the conscious way people construe their judgments and the unconscious operations that more completely account for their views and actions. More distally, the project relates to communication in psychotherapy and mechanisms of therapeutic action: What enables change in psychotherapy? What is the role of affect in this process? And how, as therapists, can we utilize language to facilitate this change?

Theoretical and empirical support for this research comes primarily from an integration of psychoanalytic psychology and neuroscience; ancillary support is provided by literature from the disciplines of social psychology, political science, cognitive linguistics, marketing, and media and cultural studies.
The psychoanalytic tradition has long anchored itself in the centrality of unconscious processes in human behavior. Bolstered by neuroscientific advances, an explosion of empirical research from nearly every corner of the cognitive sciences (e.g. memory, perception, learning, and decision-making), has amounted to a solid and converging literature documenting that people are not very aware of what motivates their actions. (Hassin, Uleman & Bargh, 2005; Gilhooley, 2008)

Scholarship from psychology and the affective brain sciences provides robust empirical and theoretical support for the supremacy of affect in brain and behavioral processes. Research from social and political psychology has demonstrated that judgment and decision-making is more often governed by affective than cognitive constraints, and further, that this is largely an implicit process (one which occurs and operates outside of conscious awareness) (Cacioppo, Gardner & Berntson, 1999; Westen & Arkowitz, 2002; Westen & Gabbard, 2002). Neuroscientists, in elucidating the neural bases of emotion, have come to the same conclusions: that we are organized around, and principally shaped by, affective mechanisms (Damasio, 1994; Siegel, 1999; Panksepp, 2008; Berlin, 2011).

On a related note, psychoanalytic theory and applied research offers a rich literature on the prominent role of emotional experience in therapeutic action (Gabbard & Westen, 2006; Greenberg & Pascual-Leone, 2006; Greenberg 2012). In fact, data from a wide range of psychotherapies are converging to show that affectively involved treatment is more effective in bringing about change than treatment that engages people in an intellectualized fashion (Whelton, 2004).

In recent years, attention has turned to similar ideas regarding politics, exploring the interplay of psychological processes on political judgments. Findings indicate that
affective dynamics also explain the way people vote for candidates and on issues. What is
more, political influence has been found to occur mostly through unconscious affective
channels, in spite of its apparent appeal to conscious, ‘rational’ thought processes
(Marcus, Neuman & Mackuen, 2000; Westen, 2007).

**Significance and Rationale for the Study**

Within a therapeutic context, psychologists aim to use language to communicate
with people emotionally in a way that motivates positive change. Although techniques
vary, the therapeutic process often involves creating meaningful narratives, presumably
forming new associative networks so as to enable and maintain behavioral change.
Targeting emotionality, vis-à-vis language choice, is a prime way in which practitioners
resonate with those they treat.

Outside of a therapeutic context, these mechanisms of influence are shared by
other disciplines, such as marketing and advertising, concerned with inducing changes in
people’s attitudes and behaviors. Though many eschew the notion that there is an aspect
of ‘persuasion’ to the therapeutic process, there is good reason to believe that there is;
acknowledging and doing our best to understand this means of influence is vital to being
skilled and ethical practitioners.

Politics offers a unique perspective from which to examine this process of
influence, and to witness the ways in which affectively evocative verbiage can contribute
to shaping and framing positions. Political messages that do not differ in their general
underlying policy positions can vary greatly in their impact, depending on what values,
images and feelings they evoke. Although common to advertising, marketing and
psychology, this principle holds a unique import in politics, where the implicit processes that guide decision-making may have tremendous consequences for the public at large.

Language plays an integral role in who holds sway in political conversation, and is consequently a contested space in terms of political influence. One dramatic demonstration of the relationship between language and political influence is the history of abortion politics in the United States over the past four decades. The leaders of the anti-abortion movement in the 1970’s, by luck or wisdom, coined the phrase “pro-life” to represent their position, thereby setting the terms of the debate. Would not everyone be drawn to this value-driven, emotionally resonant identification if we did not know the acquired cultural meaning of the term “pro-life”? Would you be anti-life?; Or, perhaps, pro-death? The words frame the value associations, and suggest that if you are in favor of abortion rights, you do not value life. In comparison, the use of the term “pro-choice” falls short in terms of impact; we all like choices, but ‘choice’ doesn’t ring as many emotional bells, or set the networks of associations firing to the same degree as ‘life’ does.

Politicians, psychotherapists, religious leaders, and advertisers communicate with their respective audiences in ways that are compelling, inspire confidence and make the listener feel in some way understood. Drawing similarities between the aforementioned professions can be unsettling; we prefer to think separately of our political leaders, our priests, and advertising hucksters. And well we should, as their goals, decisions and morals (we hope) are quite different. But while their intentions may differ, the means of influence—the ways they induce us to change our attitudes, shift our beliefs, make choices or otherwise ‘move’ us—are strikingly similar. Whether the aim is to heal, sell,
persuade, or win an election, ‘getting the message right’ goes beyond simply presenting people with the right information.

**Statement of Purpose**

The aim of this research was to explore the role of emotional and unconscious processes in the formation of political judgments by examining the impact of affective priming on people’s appraisals of political messages. To what extent can simply framing political messages with emotionally evocative, values-based introductory statements influence preference? Are political judgments consistent with a convergent finding demonstrated in scholarship spanning from psychoanalytic traditions to bourgeoning research in affective neuroscience regarding the preeminence of affective, unconscious processes? Specifically, the following research questions and hypotheses are addressed in this study:

**Research questions.**

1. Will priming participants with emotionally compelling introductory sentences influence how they judge identical public policy statements?
2. If so, how will this influence compare with that of the policy information presented?
3. And, will this be independent of political party and orientation?

**Hypotheses.**

1. When primed with emotionally evocative, values-laden introductions to policy statements, participants will judge political messages more favorably than when the same policy statement is presented with a less affective introduction.
2. Variations in emotionally compelling language will impact participants’ evaluations of the messages beyond the effect of the substantive attributes of the policy positions.

3. The priming will have an effect across political groups.
CHAPTER II

Literature Review

Before returning to a description of the study and its results, I review literature germane to the intersection of politics, emotion and unconscious processing. This review will contextualize the variables explored in this research. I begin with a selected review of the literature in the area of unconscious processing in order to provide both theoretical and empirical grounding for the construct and, by extension, its inclusion in this study.

Unconscious Processes

Within the sub-fields of psychology there are different ways of understanding and explaining mental activity that occurs outside of conscious awareness, and correspondingly, a host of different terms used to describe these processes (e.g. unconscious, nonconscious, implicit, automatic, anoetic, unknowing). Despite the nuanced distinctions which differentiate these terms, there is much more agreement than disagreement about the “unexperienced aspects” of mental life (Vandekerckhove & Panksepp, 2009). Therefore, for the purposes of the present discussion, the concept of unconscious processing is considered in an inclusive and broad sense. Terminology notwithstanding, across disciplines, the evidence overwhelmingly shows that information can be acted upon without it being explicitly in our awareness (Tulving, 2001).

Despite strong and ever-mounting empirical support, unconscious processing remains undervalued within academic psychology. There are myriad potential reasons for resistance to the idea of unconscious. One, mentioned by a number of scholars, is the palpable discomfort with, or even fear of, the notion that our behavior and general
functioning is influenced by unconscious perceptions and thought processes (Dixon, 1986; Nørretranders, 1998; Dijksterhuis, Aarts & Smith, 2005). In other words, the idea that there are thoughts, emotions, and motives that operate outside of our explicit awareness is simply unwelcome to people. Another explanation for the still controversial and even taboo status of the unconscious is a prevailing negative bias towards psychoanalysis among many modern psychological scientists. That it remains shrouded in skepticism for many, consequent to intrapsychic, historical or other such reasons, stands in contradiction to the now incontrovertible empirical evidence for the phenomenon (and preeminence) of unconscious processing.

**Psychoanalytic theory.** The notion that there is an unconscious aspect to mental life has been most readily (almost ubiquitously) associated with Freud and his pioneering conceptualization. The foundation of the psychoanalytic position is that unconscious material (i.e., the unrecognized nature of what we want, fear, need) can lead us to act against our conscious interests - often in ways that create distress and maladaptive functioning. Freud’s then-provocative perspective provided the platform upon which theories of personality, psychopathology, and psychoanalytic technique would later be built. Although Freud’s conceptualization of the nature of the unconscious evolved throughout his career, he never swayed from the fundamental notion that material located within the unconscious (although potentially able to be brought into consciousness) exerts great influence over human behavior while in its unconscious state.

Freud’s notion of a dynamic unconscious saw opposition from the rise of behaviorism in the 1950’s. Reflective of the zeitgeist, and exemplified in the field of perception research, the idea of an unconscious aspect to perception was profoundly
rejected. There was an unwillingness to accept what Erdelyi (1974) described as, “the verbally simple but theoretically profound idea that motives and expectations impinge upon perceptions” (p.2). The following statement is an example of the reaction to this theory – that perception may be influenced by unconscious defensive processes – among most perception researchers at the time: “To speak of perceptual defense is to use a mode of discourse which must make any precise or even intelligible meaning of perceptual defense impossible, for it is to speak of perceptual process as somehow being both a process of knowing and a process of avoiding knowing.” (Howie, 1952, p.311, as quoted by Erderlyi, 1974). The concurrent states of both “knowing” and “avoiding knowing,” – central to our current understanding of unconscious processes – was then considered impossible. There did exist a modicum of dissenting opinion within the field: a number of lines of thought comprising the “New Look” – those who deemed plausible the idea that attitudes, values, wishes, needs, fears, expectancies, and psychodynamic defenses affect our perception of external stimuli (Erderlyi, 1974). For these scholars, the contention, “that certain inputs reach unconscious levels of registration and identification but are blocked from conscious perception” (Erderlyi 1974, p.2) was reasonable.

The evolving picture. For decades, trends in scientific inquiry relegated the unconscious to the fringes of academic psychology; it remained controversial at best, ignored at worst, with those ‘in the know’ unable to “prove” what they knew. Until recently, unconscious processing, largely associated with the psychoanalytic tradition, lacked the backing of sound scientific data. However, neuroscience, with its increasing ability to find brain correlates of unconscious processes, has come to the empirical rescue of psychoanalysis (Yingling, 2001; Stein, Solms & van Honk, 2006, Spence et al. 2009).
This has enabled concepts of the unconscious to gain legitimacy in eyes of the larger psychological, psychiatric and medical communities. Today, owing in large part to advances in neuroimaging technology and research in cognitive and affective neuroscience, there is abundant empirical evidence for the phenomenon of unconscious processing.

**A contemporary neuroscientific perspective.** Marie Vandekerckhove along with Jaak Panksepp, leaders and pioneers in the field of affective neuroscience, recently put forth an incredibly thorough, complex, but well articulated, formulation of the layers of consciousness (with a central focus on the unconscious end of the continuum) (Vandekerckhove & Panksepp, 2009). Although the depth and breadth of their work is well beyond the scope of this research, their conclusions/assertions are invaluable in framing the theoretical position of the current study. The first, as alluded to above, is that consciousness exists on a continuum. That is, there are many degrees of knowing and unknowing. Consequently, any time the unconscious is referred to in broad strokes, it is being referenced as a grand oversimplification (useful, and even necessary as that oversimplification may be at times).

To be more precise, Vandekerckhove and Panksepp refer to a “continuum of stages,” and dedicate themselves to mapping out at least 3, distinct, global levels of consciousness – anoetic, noetic and autonoetic – with multiple sub-levels within each. Anoetic, a term they credit to neuroscientist Endel Tulving, refers to consciousness that is “purely experiential and unreflective.” It is most relevant to our discussion because it may overlap with much of what we casually call unconscious. In their conceptualization, the
…unreflective anoetic form of consciousness…is ultimately a mixture of primary-process affective and sensorial-perceptual-cognitive experiences that are…critically important for the creation of emergent implicit procedural memories. In other words, anoetic consciousness is the bridge that may take us from deeply unconscious information-processing and primary-process consciousness (raw experience) toward the possibility of a dynamic cognitive unconscious and then consciousness which is probably largely situated within higher regions of the brain such as the neocortex. (p. 3, 2009)

One corollary of what they describe as “gradients from unknowing to knowing” (p. 3) is the difficulty of differentiating between what is unconscious and what is merely unattended to. The complexity of this distinction cannot be underestimated and consequently not much is known about how and when thoughts or affective states could be detected if pointed out or focused on in a particular way.

**Priming.** One way in which implicit or unconscious processes are empirically studied – and have been validated – is through the use of priming paradigms (Slipp, 2000). To “prime” is to present an earlier stimulus that influences a response to a later stimulus. Priming has been a hot topic in the psychological literature since the mid-1960’s, with a strong focus on subliminally presented stimuli. Subsequent research has used various forms of priming to illustrate the influence of implicit or unconscious processes on decision-making and behavior.

Subliminal priming is the oldest and most reliable way psychologists have demonstrated the existence of unconscious mechanisms. When a stimulus that is
presented subliminally (too briefly for it to be consciously detected) induces behavioral or emotional change, this change is attributed to unconscious processing. The utility of traditional subliminal priming paradigms has been exponentially enhanced by advancements in neuroimaging technologies (e.g., event-related fMRI). The ability to simultaneously measure brain activity is a robust method by which to explore and evidence neurophysiological correlates of unconscious processing (e.g. Ortigue et al., 2007; Kouider et al., 2009)

However, priming does not need to be subliminal for it to exert its influence outside of awareness and effect people’s behavior or judgments; supraliminal priming can also be “implicit” (exerting its influence outside of conscious awareness). Westen (2007) terms this “functionally subliminal” (p. 59), to suggest that as long as people don’t know that a stimulus is influencing them, they will not employ conscious strategies to attempt to counteract that influence. In fact, it has been systematically shown that, if people are unaware of a stimulus aimed at influencing them, subliminal and supraliminal exposures have the same effect (Dijksterhuis, Aarts & Smith, 2005).

Having attended to the theoretic and scientific foundations of the unconscious, I now turn to mechanisms related to (and implicated in) unconscious processing, in particular affect and language.

**Affective Processes**

One of the long-standing quandaries of psychology, and, in another language, philosophy, involves the complex and illusive relationship between thoughts and feelings: which comes first, cognition or emotion? To what extent are we affectively driven? How can we best use our cognitive thought processes to achieve our goals? Freud
wrestled with the interplay of cognition and emotion in his structural theory of the mind. Other thinkers (e.g., James, Lange, Cannon, Bard, Schachter, Zajonc) also developed theories in this realm. Modern neuroscience research has been able to shed light on this topic through progressive understanding of brain processes. So too, have modern psychological researchers through innovative laboratory studies. Thus, the relationship between cognition and emotion may no longer be the riddle it once was.

Converging evidence points to emotion as the most salient motivator of human behavior. It is a fallacy to assume that the cognition precedes the emotion merely because it may seem to us that our thoughts cause us to feel a certain way. Although we have some ability to use conscious thought to direct our emotions and actions, it is more accurate to say that emotional processes drive us—that emotion precedes thought, with thought serving as a moderating variable.

The human brain is an emotional brain. It is increasingly argued that, in fact, even the common dichotomization of thought (cognition) and feeling (emotion) may be artificial and misleading (Siegel, 1999, p. 123). According to Siegel, among others, “the entire brain can be considered ‘emotional’” (1999, p. 142). This contention is true neurobiologically—the demarcation between functional structures in the brain is less boundaried than we were previously led to believe. Panksepp (2008) confirms that “there is no unambiguous biological dividing line between the amygdala and the many brain areas with which it communicates,” (p. 51) and explains that the amygdala is a “heuristic simplification” (p. 49). The same can be said of the “limbic system” (and likely most other areas of the brain of which we speak at present). In other words, the amygdala and limbic system are concepts created to facilitate communication about neuroanatomy;
necessary, but with the caveat that the brain is exceedingly complex and our continual approximation of an understanding leaves much to be desired. As science evolves, so too do our terms; neuroscience has already exchanged the amygdala and limbic system for the “extended amygdala” and “extended limbic” system, reflecting this expanding scope of neurophysiological emotional processes.

**Language, affect and the brain.** The power and ubiquity of emotional processing also involves linguistic mechanisms. Researchers, including Panksepp (2008), purport all communication, in one way or another, to be affective communication. Linguistic communication specifically, relies heavily on the affective system. In his aptly titled manuscript, “The Power of the Word May Reside in the Power of Affect” Panksepp writes, “If one’s purely cognitive arguments are divorced from the affective-rhetorical power of emotional convictions, one’s ability to understand language and to attract the cognitive attention of others suffers.” Behaviorally, Havas, Glenberg and Rinck (2007) have shown that people more quickly process and understand the meaning of a sentence when the speaker’s facial expression and sentence valence are matched than when there is an incongruence.

A recent neuroscientific investigation (Foroni & Semin, 2009) has shown that language comprehension involves the simulation and recruitment of neural systems used for emotion (as well as action and perception). These researchers demonstrated that subliminally presented semantic stimuli (e.g. the word “laugh”) influenced affective judgments (in this case, ratings of the ‘funniness’ of a series of cartoons). They were also able to demonstrate that motor resonance plays a role in this process, further highlighting
the neurobiological connection between affect, language and bodily processes (Foroni & Semin, 2009).

**The primacy of affective and unconscious processing.** Following the logic of Siegel (1992), if the entire brain is considered to be emotional, then the concept of mind (believed to be a product of the brain) can also be considered emotional in its entirety. This logic is thought to hold true, despite the subjective human experience of categorically segregated mental processes.\(^1\) Damasio’s (1994) revision of Descartes’ famous proposition “I think, therefore I am,” to “We are, and then we think,” (p. 248) reflects the primacy of our unconscious emotional (and bodily) states in defining the self, rather than our conscious awareness of our thinking. Panksepp (2008) makes the case for the preeminence of affect in Brain-Mind processes, arguing that raw emotional feelings are essentially “objectless” (p. 51). Although we believe that our thoughts come to us “in the moment,” our experience of the present is always time-delayed in relation to the unconscious, and it is likely that affective processes create and mediate our current conscious ‘state of mind’. Vandekerckhove and Panksepp (2009) argue for the primacy of affect, portraying its omnipresence in our mental lives, and especially its strong relation to our less knowing forms of consciousness: “…anoetic consciousness is heavily linked…to various subcortical emotional and motivational process-intrinsic affective value structures…” (p. 9) In light of abundant evidence of the omnipresent role of affect, it is puzzling that support for an “emotional unconscious” has lagged behind that for a “cognitive unconscious.”

---

\(^1\) Again, Panksepp (2009) elevates us above the traditional and (somewhat artificial) notion of the mind and brain as separate entities. He prefers to use “Mind-Brain,” “Brain-Mind,” or even “MindBrain” interchangeably, denoting that we are discussing a fully unified concept with no residue of dualism.” p. 2
Affective and Unconscious Processes in Judgment and Decision-Making

Pertinent to the current study, research has demonstrated the pre-eminence role of affect in directing attention and decision-making (Cacioppo, Gardner & Berntson, 1999). Westen and colleagues (2002) have empirically shown that compromise formations are ruled more by affective constraints than by cognitive constraints. By experimentally manipulating cognitive constraints, (i.e., giving people false information related to their decision) they were able to show that affective constraints accounted for nearly all of the variance in people’s judgments, and that cognitive constraints only came into play when there was no strong associated affect related to the decision (Westen & Arkowitz, 2002). At the very least, they determined that “where affects are strong, cognitions will typically follow” (p. 86).

Research has demonstrated that affect motivates our behavior and judgments even when we don’t consciously experience emotion. Winkielman and Berridge’s (2004) laboratory work makes, perhaps, the most compelling case for unconscious emotion. These researchers concluded that, “emotional processes may nevertheless drive the person’s behavior and physiological reactions, even while remaining inaccessible to conscious awareness” (p. 120). In one experiment, they presented angry, neutral or happy faces subliminally (embedded in a cognitive task in which participants had to classify a clearly visible neutral face as male or female) and then asked participants to try a novel lemon-lime beverage and evaluate how much they would pay for it. Participants primed with happy faces consumed more, and were willing to pay about twice as much for the drink, than those primed with angry faces. This was not accounted for by any affective reaction of which the participants were aware, as conscious emotional experiences
(whether assessed before or after the beverage task), were unrelated to priming condition. In other words, as assessed by a variety of self-report scales, participants did not report more positive feelings after the subliminally presented happy faces or more negative feelings after the angry faces. Nevertheless, their behavior was altered suggesting that the induced behavior was the result of an unconscious affective reaction.

Van Honk, Peper, and Schutter (2005) further validate the concept of behavior being driven by unconscious affect, highlighting the occurrence of discrepant conscious and unconscious emotional experience. They found that, after a single dose of testosterone, participants showed significantly lower levels of fear-based responding on a masked emotional Stroop task (as compared to placebo), even though they did not consciously experience a reduction in anxiety, as assessed by multiple self-report measures (Van Honk, Peper, & Schutter, 2005). It is perhaps easier to imagine the opposite situation – people responding in fear-based ways while reporting no conscious experience of that emotion; it appears that the reverse can be true as well.

Within the field of social cognition, researchers have used brain imaging to explore the neural circuitry of unconscious social evaluation, providing neurobiological support for the already established finding that unconscious attitudes toward social groups affect behavior in subtle and often unintentional ways (e.g., Fazio et al, 1995, Greenwald & Banaji, 1995; Chen & Bargh 1997; Phelps, et al., 2000). Elizabeth Phelps and colleagues studied amygdala activity while White American participants viewed pictures of Black and White unfamiliar male faces with neutral expressions. They found that strength of amygdala activation was significantly associated with unconscious racial bias (detected on two indirect measures – the Implicit Association Test (IAT, Greenwald
et al., 1998) and the magnitude of eyeblink startle responses to Black and White faces).

Interestingly, this relationship did not exist with conscious racial bias – when racial attitudes were expressed directly on the Modern Racism Scale (McConahay, 1986).

**Priming Identity and Values**

The remainder of the chapter will highlight particular studies that show the effects of priming identity, schemas and values – larger constructs that nonetheless draw on the same affective and unconscious processes to direct decision-making and judgment. More specifically, research on these specific mechanisms will touch upon data from the political arena, and consequently provide a cogent preparation for a discussion of this research – namely, the examination of unconscious processes in political judgment.

Studies which employ identity priming can be found across various fields, including marketing, business management, social psychology, and behavioral decision-making. With the recognition that people’s self-concept is usually comprised of multiple identity dimensions pertaining to different, and often conflicting sets of values, beliefs and ideals, it naturally follows that decision-making can be contextually influenced by the particular identity construct that is salient at the time of the decision. This model of identity is consistent with a psychodynamic view of personality.

In their seminal study on stereotype threat, Steele and Aronson (1995) demonstrated that, for African American students, priming racial identity induced poorer performance on tests of intellectual ability. Simply positioning demographic questions at the beginning of the test lowered the scores of black students but not of white students; for the black students, the unconscious (or at least “functionally unconscious”) priming mechanism activated their anxiety about potentially confirming the negative stereotype
about how their racial group performs on standardized tests, consequently worsening their performance. The study, which unequivocally demonstrates the detrimental effects of stereotype threat, has since been replicated in various forms. Researchers at Montclair State University found that minority students scored higher on tests of cognitive ability when demographic questions were asked after rather than before the test (Kirnan et al., 2009). In another study, Asian-American women performed better on a mathematics test when their ethnic identity was primed, but worse when their gender identity was primed (Shih, Pittinsky & Ambady, 1999).

LeBoeuf, Shafir, and Belyavsky (2009) performed a series of studies on the effects of social identity priming on decision-making and consumer behavior, based on the premise of multiple and conflictual identity constructs that can be differentially activated through experimental manipulation. For example, in one study, these researchers hypothesized that undergraduate students possessed both social and academic components to their identities, and found that decision-making could be influenced by one or the other, depending on the situational context. They found that priming students’ “scholar” identity lead them to choose scholarly-congruent consumer items (e.g. *The Wall Street Journal*, *Newsweek* vs. *USA Today*, *Sports Illustrated*) more often than students whose “socialite” identities had been primed. Another study by these researchers explored the effects of ethnic identity priming in Chinese-American students. Results indicate that when students’ American identity was primed, they demonstrated significantly more individualistic preferences than when their Chinese identity was evoked (LeBoeuf, Shafir, & Belyavsky, 2009). Other research has also demonstrated effects of ethnic identity priming. For example, Forehand, Deshpandé, & Reed (2002)
found that ethnic identity priming increases a person’s liking of a same-ethnicity spokesperson.

**Political studies.** Priming political identity has been shown to bias financial decision-making (Morris, Carranza & Fox, 2008), and in explaining the effect, these researchers identified a “linguistic–resonance” mechanism that operates separately from, and perhaps more powerfully than, the identity related values activated by the priming condition. Specifically, they conducted four related studies in which participants were asked about their party affiliation (Democrat versus Republican) and candidate preference in the 2004 presidential election (Bush versus Kerry), (priming condition) and then asked to choose between a low and high risk gamble or investment (dependent variable). The authors found that when political identity was made salient, Republicans were more inclined to choose a gamble or investment labeled “conservative” (versus “risk-tolerant”). Note that participants were not primed for ideological identification – the word “conservative” was not actually used in the priming questions but presumably held a close enough associative link to individuals’ Republican identity to influence their choices in the experiment. No effect was observed for Democratic participants. (However, one could hypothesize that had the financial options been labeled “liberal” versus “risk-aversive,” a comparable bias might have been observed in the Democrats studied.)

In this same study, two findings are of particular interest: first, that Republicans chose the gamble/investment *labeled* conservative, regardless of whether that choice actually held lower risk, and second, when the financial options were *not* labeled, Republicans were equally likely to choose the high or low risk option. These results led
the authors to conclude that the priming effect was due to the activation of identity-related language (the group label “conservative”) and not identity-related values. The authors submit that, beyond merely activating associated values, calling attention to identity categories primes for linguistic content associated with that group’s identity (labels, words, characteristic phrases). They cite this “linguistic-resonance” mechanism as potentially dangerous in that it can lead to arbitrary choices based on superficial labels—labels related linguistically but not substantively to the identity that was activated.

Weise et al. (2008) demonstrated that priming attachment security can influence endorsement of extreme military tactics, and to their surprise, this effect was independent of political orientation. In this case, they primed participants with a secure attachment relationship by asking the participant to think of person in their life who accepts them for who they are without judgment. Whether they identified themselves politically as conservative or liberal, participants who were primed with a secure attachment relationship showed less support for the use of extreme military tactics. The authors’ explanation of this finding is of particular significance with respect to influence and judgment in politics: they note, cultural worldviews are complex, often containing conflicting elements, and which element (value, belief) is activated can motivate different political attitudes.

Bryan et al. (2009) began with a similar assumption – that individuals hold a mix of values and beliefs and that the particular schemas that are activated at the time they make an evaluation can influence how they judge political issues. In this case, undergraduate students were primed with either a “Personal Merit schema,” (based on
conventional conservative ideology) or a “Good Fortune schema” (reflecting conventional liberal ideology) and asked to make judgments on various socio-political issues (e.g. building more prisons, toughening restrictions on unemployment benefits, universal guaranteed health care, affirmative action, instituting gifted tracks in elementary schools.) Participants were primed by being directed to write a paragraph about their own success (having been accepted to a highly selective university), focusing on the role of wise decisions, hard work and self-discipline (Personal Merit condition) or focusing on the role of chance, opportunity and help from others (Good Fortune condition). As predicted, following the priming task, participants in the Personal Merit condition endorsed more conservative positions on the political judgment questionnaire than those in the Good Fortune condition. Even after factoring in the effect of participants’ self-identified ideology, schema priming significantly predicted participants’ political judgments. The authors view this as evidence of a more malleable, dynamic component of political thinking.

**Conclusion**

The psychological principles outlined in this chapter help explain how people make decisions and form opinions. Namely, people are ruled more by affective processes than by cognitive ‘rational’ thinking, and most of those processes occur outside of awareness. As with all interdisciplinary research, this chapter drew from a variety of fields, aiming to contextualize and provide support for the current study. To that end, care was taken to organize and assimilate the research cited through the reconciliation of minor between-field differences (e.g., field specific terms and language). With this relevant literature base in tow, I now describe this study’s methodology.
CHAPTER III

Methodology

Overview

Through anonymous questionnaires, a cross-sectional sample of adults in New York City was asked to rate their preference for hypothetical political candidates and their positions after being presented with identical written policy statements that varied only in the emotional quality of their introductory sentences. The political messages contained liberal and conservative policy positions on two issues relevant to present political discourse in the U.S.—immigration reform and climate change.

Participants

Participants consisted of English-speaking adults (18 years or older), who were approached in public and asked to fill out short questionnaires.

Procedure

Method of recruitment. Recruitment took place at 5 different New York City locations. Individuals were approached by the primary investigator or a trained research assistant and asked to fill out a questionnaire, using a standard script. Participation involved only the completion of an anonymous written questionnaire, with responses that could in no way be used to identify participants.

To maximize participation, recruitment occurred in places where people choose to linger or must wait (e.g. train station) for sizeable periods of time. Locations were in Manhattan except when noted and included (1) outdoor and indoor plazas in the financial district, (2) Union Square Park, (3) Staten Island Ferry (travels back and forth between
Staten Island and downtown Manhattan), (4) Bryant Park, and (5) Grand Central Station. Although this was a convenience sample, locations were selected to maximize the diversity of respondents’ political orientation, within the constraints of the partisanship of the New York City population.

The primary investigator and trained research assistants were responsible for data collection. To the extent possible, people were approached at random, with a conscious intent to maximize the diversity of age and race in the sample. Potential participants were invited to participate using the following script: “As part of a dissertation project at City College, I am studying the psychology of political decision making and would appreciate your completing a survey, which will take about 10 minutes of your time. We’re interested in getting input from people of every political viewpoint.” Individuals who agreed were provided with the consent form, questionnaire and a pen.

Participants were provided with a consent form that explained the study procedure, risks, benefits, confidentiality, and voluntary nature of participation, and that provided contact information for the IRB and the principal investigators. We did not ask for written consent in order to preserve the participants’ anonymity – the form spelled out that filling out the anonymous questionnaire is an expression of consent, and participants were given a copy to take with them. A 2nd copy of the consent form allowed participants to provide their name and e-mail address should they wish to receive information about the overall study results. The copies of the consent form were immediately placed in a separate folder, ensuring that the names and e-mail addresses were not be associated with the questionnaires, which remained completely confidential.
**Questionnaire.** The questionnaire, which takes about 10 minutes to complete, consists of two sections. The first section contains 4 paragraph-long statements (“messages”) made by hypothetical candidates for public office. After each message, the participant is asked to rate how much s/he agrees with the statement and how likely s/he would be to support this candidate. Ratings are made on a 0-10 point scale. The second section contains 11 questions regarding respondents’ demographic and political profile.

**Messages.** Messages pertained to two issues relevant to current political discourse in the U.S. – energy and immigration reform. On each issue, participants read a conservative policy message and a liberal policy message. Messages were constructed based on (a) relevant statements made by Democratic and Republican politicians, and (b) messages developed and tested by experienced political consultants and strategists (Westen Strategies, LLC, and Lake Research Partners) that include emotionally compelling, values-laden language or more rationalistic statements introducing the same policy positions.

**Other questionnaire items.** Following the messages, there were two pages of questions (11 items total) in which respondents selected answers from a set of pre-determined options. Phrasing for these questions was based on the language used in the American National Election Studies (ANES) (http://www.electionstudies.org/) surveys. The only exception was an exploratory item on political involvement, based on the researchers’ interest.

**Demographic questions.** Participants were asked to provide information on their gender, age, marital status, level of education, racial/ethnic background, and household income.
‘Politico’ questions. Three items pertained to general level of political knowledge and involvement. Participants were asked to rate how interested they had been in the political news this year (“very much,” “somewhat,” “not very”). As an additional proxy for political awareness, they were asked to select how many days in the past week they consumed political news (“none,” “1-2,” “3-5,” “6-7.”) A question on political involvement listed 10 forms of political action (e.g. “taken part in a demonstration, protest, boycott or march concerning a political issue”) and asked the participant to check which, if any, they had done over the last decade.

Partisanship and ideology questions. Political identification questions separately queried individuals’ ideological orientation and party affiliation. In the former, participants placed themselves on a liberal-conservative continuum scale ranging from 1-7, and also had the option to select “Don’t know haven’t thought much about this.” The political partisanship question offered the following options: “Strong Republican, “Not so strong Republican,” “Independent-lean Republican,” “Pure Independent,” “Independent-lean Democrat,” “Not so strong Democrat,” “Strong Democrat,” and “None of these labels describe me.”

Study design

Each participant read messages containing the same 4 policy statements -- a liberal and a conservative statement on immigration reform, and a liberal and a conservative statement on energy policy (Appendix A). However, the overall message paragraphs differed in their introductions. Each message began with either a values-laden, emotionally compelling introduction or a more rationalistic, non-affective introduction. These constitute the priming manipulation and serve to create the
experimental conditions hereafter referred to as, “affective” and “non-affective.” The design was randomized such that half the participants read the affective version and half read the non-affective version of each message. The order of message presentation was balanced across participants.

**Priming manipulation.** A brief introduction was inserted before the policy statement was varied with the intent to prime values through emotionally evocative language. In the case of energy messages, in the “affective” priming condition, respondents read the following:

*There’s nothing more important that we can do for our national security, our economy and the earth we leave our children than to end our dependence on foreign oil. Freedom, independence and self-sufficiency are the heart of who we are as a nation, and they should be at the heart of a robust strategy for energy independence in the 21st century.*

In the “non-affective” priming condition, this introduction was replaced with the following:

*To address our growing energy problems we need economically feasible policies that consider issues of energy production, distribution and consumption, taking into account relevant environmental factors. Ensuring future energy security for our nation means drawing upon the full range of energy sources, including alternatives.*

Appendix D contains the primes for the immigration policy statements.
Data Analysis

Each participant read the same 4 policy statements (liberal energy, conservative energy, liberal immigration, and conservative immigration), allowing for within-subjects as well as between-subjects comparisons. Repeated-measures ANOVAs were used whenever possible to take advantage of the increase in power associated with reduced error variance. Initial steps examined whether message ratings differed between the two issues and across each policy condition. The sample was parsed with regard to ideological orientation, and other political and demographic data were also considered. Results from this portion of the analysis lay the groundwork for test the main hypotheses by identifying factors likely to influence message ratings and potentially moderate the effect of the primes.

The data analytic plan was to test for overall priming effects using repeated measures analyses, looking at the difference in ratings for each participant. Energy and immigration messages ratings would be submitted to separate multivariate 2 x 3 x 2 mixed design ANOVAs, in which priming condition (affective versus non-affective) and political party (Democrat, Independent, Republican) would serve as between-subjects variables and message ratings (liberal versus conservative) would serve as the within-subjects variable.

However, a beneficial aspect of the study design - the use of the same primes for the liberal and conservative policy conditions within each issue - was unappreciated in its potential to confound the data analytic process. Within each issue, there was only one version of the affective introduction and one version of the non-affective introduction; therefore, participants who received the liberal policy paired with the affective prime
would receive the conservative policy paired with the non-affective prime and vice versa. Consequently, including prime condition as a variable in repeated-measures ANOVAs was not deemed appropriate; any effect of prime condition would be undetectable or, at the very least, obscured, as it inherently represented different conditions across the two policy messages. Hence, the effect of prime was tested separately for each dependent variable (liberal energy policy, conservative energy policy, liberal immigration policy, conservative immigration policy) using a fully between-subjects design. Initial one-way ANOVAs examined the effects of prime in the overall sample; these were followed by two-way factorial ANOVAs to investigate whether the impact of the primes varied by political group (Ideology and Party).

The data analytic plan was further re-considered in light of the lack of independence between order of prime (first message read had affective/non-affective introduction) and order of policy (first message read was liberal/conservative policy) inherent in study design. Although order of message presentation and prime were both varied (for each issue, the messages and prime conditions were seen in equal proportions first and second), stimuli characteristics permitted only two possible combinations (four possible orders) in which the messages could be presented. All participants saw a conservative policy and a liberal policy for each issue, and all were exposed to both an affective and non-affective prime, but participants either read: (i) the affective liberal message followed by the non-affective conservative message, (ii) the non-affective conservative message followed by the affective liberal message, (iii) the affective conservative message, followed by the non-affective liberal message, or (iv) the non-affective liberal message followed by the affective conservative message. Consequently,
half of the participants who read the "non-affective" conservative message, read it following the "affective" liberal message, and the other half did not; half of the participants who read the "affective" liberal message, read it following the "non-affective" conservative message and half did not, and so on. Either a message was seen first - free from any preceding influence - or, if seen second, it necessarily followed a message that contrasted both in policy position and affective valence (to the extent that the prime set an affective tone to the message). There was no instance in which an "affective" liberal message was preceded by a "non-affective" liberal message, or in which an "affective" liberal message was seen following an "affective" conservative message.

Looking only at the ratings for the first message seen by participants, comprised the most “pure” test of priming, as this eliminated the potential confound of seeing a contrasting policy first. However, this analysis reduced the sample size by half, with a consequent loss in power to detect significant effects. Nonetheless, this approach to the data analysis – examining ratings separately for messages read first (and second) – was the only option for isolating the effect of prime.
CHAPTER IV

Results

Data were collected in New York City between April 10 and 29, 2012. The primary investigator and trained research assistants collected the data across 6 days. Of the individuals who were approached and invited to participate, the response rate was 48% (50% for females, 47% for males).

Descriptive Statistics

Incomplete questionnaires (less than 50% filled out) were not included in the analyses. Questionnaires were also considered incomplete if the participant did not rate all four messages. In total, 12 cases were excluded for these reasons. For the majority of questionnaire items, omission rate ranged from 0% to 2%. The exceptions were questions pertaining to age and income, which participants left blank in much greater numbers: 24% of sample ($n = 87$) did not report their age, and 7% ($n = 24$) did not disclose information on income. While this defies the logic of anonymous surveying, it bears an understandable relationship to the content of the questions, reflecting the sensitive nature of disclosing age and financial status in our society. Table 1 presents detailed information on the demographic composition of the sample; selected summary information is described below.
Table 1.

Demographic Characteristics of Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Proportion of sample</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.52</td>
<td>192</td>
</tr>
<tr>
<td>Female</td>
<td>.46</td>
<td>167</td>
</tr>
<tr>
<td>Missing</td>
<td>.02</td>
<td>8</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 24</td>
<td>.20</td>
<td>72</td>
</tr>
<tr>
<td>25 – 33</td>
<td>.19</td>
<td>70</td>
</tr>
<tr>
<td>34 – 48</td>
<td>.20</td>
<td>72</td>
</tr>
<tr>
<td>49-83</td>
<td>.18</td>
<td>66</td>
</tr>
<tr>
<td>Missing</td>
<td>.24</td>
<td>87</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>.38</td>
<td>138</td>
</tr>
<tr>
<td>Widowed</td>
<td>.01</td>
<td>.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>.07</td>
<td>24</td>
</tr>
<tr>
<td>Separated</td>
<td>&lt;.01</td>
<td>3</td>
</tr>
<tr>
<td>Never married</td>
<td>.43</td>
<td>158</td>
</tr>
<tr>
<td>Partnered, not married</td>
<td>.10</td>
<td>38</td>
</tr>
<tr>
<td>Missing</td>
<td>&lt;.01</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-11 years</td>
<td>.02</td>
<td>7</td>
</tr>
<tr>
<td>High school graduate</td>
<td>.11</td>
<td>39</td>
</tr>
<tr>
<td>Technical or vocational school</td>
<td>.04</td>
<td>13</td>
</tr>
<tr>
<td>Technical or vocational school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>beyond high school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 years of college or less</td>
<td>.09</td>
<td>34</td>
</tr>
<tr>
<td>2 years college (junior college)</td>
<td>.05</td>
<td>20</td>
</tr>
<tr>
<td>More than 2 years of college/no</td>
<td>.10</td>
<td>35</td>
</tr>
<tr>
<td>degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-year college graduate</td>
<td>.29</td>
<td>107</td>
</tr>
<tr>
<td>Post college education</td>
<td>.31</td>
<td>112</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>.18</td>
<td>67</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>.09</td>
<td>33</td>
</tr>
<tr>
<td>Native American/American Indian</td>
<td>&lt;.01</td>
<td>3</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>.09</td>
<td>34</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>.50</td>
<td>185</td>
</tr>
<tr>
<td>Mixed/Other</td>
<td>.11</td>
<td>41</td>
</tr>
<tr>
<td>Missing</td>
<td>.01</td>
<td>4</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $25,000</td>
<td>.16</td>
<td>60</td>
</tr>
<tr>
<td>$25,000-$34,999</td>
<td>.07</td>
<td>24</td>
</tr>
<tr>
<td>$35,000-$49,990</td>
<td>.14</td>
<td>51</td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>.15</td>
<td>55</td>
</tr>
<tr>
<td>$75,000-$99,999</td>
<td>.11</td>
<td>39</td>
</tr>
<tr>
<td>$100,000-$149,999</td>
<td>.15</td>
<td>56</td>
</tr>
<tr>
<td>$150,000-$250,000</td>
<td>.11</td>
<td>39</td>
</tr>
<tr>
<td>$250,000 or more</td>
<td>.05</td>
<td>19</td>
</tr>
<tr>
<td>Missing</td>
<td>.07</td>
<td>24</td>
</tr>
</tbody>
</table>
**Demographic characteristics of the sample.** The sample was evenly divided by gender. Participants ranged in age from 18 to 83 years old, with a mean of 36.2 years ($SD = 13.86$). Examined by cohort, respondents fell evenly into 4 age groups: young adult (18 - 24 years), early adulthood (25 - 33 years), middle adulthood (34-48 years), and adults 49 and over.

Half of the sample identified as “White/Caucasian,” followed by “Black/African American” (18%), “Hispanic/Latino (10%) and “Asian/Pacific Islander” (9%). Eight percent of respondents selected “Other;” and nearly all of these write-in responses included multiple races and/or ethnicities. An additional 3% of respondents indicated mixed racial/ethnic background by selecting two or more of the listed categories. These two groups were combined for purposes of analyses. Only 3 participants identified as “Native American/American Indian”; this group could not be analyzed separately for psychometric reasons.

The sample was highly educated: 60% ($n = 219$) were college graduates and of these, more than 50% had completed some post-graduate education (31% of total sample). This is not surprising given the inherent bias of the sampling locations. Twenty eight percent ($n = 102$) of participants had completed some college, technical or vocational school. Only 7 individuals (< 2%) had not completed high school; three of these individuals were 18 years old.

Median income was between $50,000-$74,999. Overall, individuals with household income > $100,000 constituted nearly a third of the sample ($n = 114$). Approximately one quarter of the sample fell in the middle-income range of $50,000-$99,000. The remainder (37% of the total sample) reported a family income of less than
$50,000. Although high-income earners were overrepresented compared to the population of New York City at large, the data are consistent with our sampling locations. In addition, income data should be interpreted cautiously, given the wording of the question and the age range of the sample- “total family income from all sources” may have been interpreted differently, particularly in the “young adult” age-group, depending on whether they still resided with their family of origin.

**Political profile of the sample.** Participants were asked questions pertaining to general level of political knowledge, interest and involvement; full data are provided in Table 2. The large majority of respondents reported having a high or moderate level of interest in politics, suggesting a possible inclusion bias of the study. A combined 89% of respondents ($n = 323$) described themselves as either “very much” or “somewhat” interested in the political news. Similarly, the sample reported a high frequency of consuming of political news in the past week: 35% of respondents selected “6-7 Days” ($n = 127$), followed by 33% who selected “3-5 days” ($n = 120$), 22% who selected “1-2 days” ($n = 82$), and 9% who selected “none” ($n = 33$). Regarding political participation, 64% of the sample reported voting in national elections and 50% in local elections. Twenty three percent had been involved in active protest of some sort (e.g. demonstration, protest, boycott) in the last 10 years. Further data pertaining to political involvement and activism are can be found in Table 2.
Table 2.

**Political Profile of Sample**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Proportion of sample</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Days of news consumption in past week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>.09</td>
<td>33</td>
</tr>
<tr>
<td>1-2 days</td>
<td>.22</td>
<td>82</td>
</tr>
<tr>
<td>3-5 days</td>
<td>.33</td>
<td>120</td>
</tr>
<tr>
<td>6-7 days</td>
<td>.35</td>
<td>127</td>
</tr>
<tr>
<td>Missing</td>
<td>.01</td>
<td>5</td>
</tr>
<tr>
<td><strong>Interest in the political news so far this year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not much interested</td>
<td>.11</td>
<td>42</td>
</tr>
<tr>
<td>Somewhat interested</td>
<td>.43</td>
<td>156</td>
</tr>
<tr>
<td>Very much interested</td>
<td>.46</td>
<td>167</td>
</tr>
<tr>
<td>Missing</td>
<td>&lt;.01</td>
<td>2</td>
</tr>
<tr>
<td><strong>Specific forms of involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signed a written or email petition about a political or social issue</td>
<td>.46</td>
<td>167</td>
</tr>
<tr>
<td>Participated in online political discussions</td>
<td>.21</td>
<td>76</td>
</tr>
<tr>
<td>Contacted a newspaper or magazine to express your opinion on an issue</td>
<td>.14</td>
<td>51</td>
</tr>
<tr>
<td>Attended a public forum or government meeting</td>
<td>.29</td>
<td>107</td>
</tr>
<tr>
<td>Called in to a radio or television talk show to express your opinion on a political issue</td>
<td>.04</td>
<td>16</td>
</tr>
<tr>
<td>Contributed time or money to a political campaign</td>
<td>.27</td>
<td>99</td>
</tr>
<tr>
<td>Taken part in a demonstration, protest, boycott, or march concerning a political issue</td>
<td>.23</td>
<td>84</td>
</tr>
<tr>
<td>Contacted an elected official by telephone, letter, email or in person</td>
<td>.27</td>
<td>97</td>
</tr>
<tr>
<td>Voted in most national elections</td>
<td>.64</td>
<td>233</td>
</tr>
<tr>
<td>Voted in most state and local elections</td>
<td>.50</td>
<td>184</td>
</tr>
<tr>
<td><strong>Total involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endorsed 0 forms of involvement</td>
<td>.14</td>
<td>50</td>
</tr>
<tr>
<td>Endorsed 1 form of involvement</td>
<td>.19</td>
<td>70</td>
</tr>
<tr>
<td>Endorsed 2 forms of involvement</td>
<td>.14</td>
<td>53</td>
</tr>
<tr>
<td>Endorsed 3 forms of involvement</td>
<td>.13</td>
<td>47</td>
</tr>
<tr>
<td>Endorsed 4 forms of involvement</td>
<td>.13</td>
<td>48</td>
</tr>
<tr>
<td>Endorsed 5 forms of involvement</td>
<td>.08</td>
<td>28</td>
</tr>
<tr>
<td>Endorsed 6 forms of involvement</td>
<td>.09</td>
<td>32</td>
</tr>
<tr>
<td>Endorsed 7 forms of involvement</td>
<td>.04</td>
<td>13</td>
</tr>
<tr>
<td>Endorsed 8 forms of involvement</td>
<td>.03</td>
<td>11</td>
</tr>
<tr>
<td>Endorsed 9 forms of involvement</td>
<td>.02</td>
<td>6</td>
</tr>
<tr>
<td>Endorsed 10 forms of involvement</td>
<td>.01</td>
<td>4</td>
</tr>
</tbody>
</table>
**Ideological orientation.** Participants identified their ideological orientation on a 7-point spectrum from “Extremely liberal” to “Extremely conservative,” with an additional option to select “I don’t know, haven’t thought much about this” (See Figure 1). Collapsing the 7 categories into 4 groups (liberal, moderate, conservative and “don’t know”), 44% of participants \((n = 158)\) described themselves as liberal, 25% as moderate \((n = 90)\), 22% as conservative \((n = 81)\) and 9% \((n = 34)\) selected “I don’t know, haven’t thought much about this.” The “I don’t know, haven’t thought much about this” group was excluded from analyses in which ideological orientation was an independent variable, as the group’s responses, compared to other defined groups, were erratic and tended to obscure the overall pattern of effects.

*Figure 1.* Bar chart showing breakdown of sample across spectrum of ideological orientation
Figure 2. Pie chart showing percentages of sample across ideological groups

**Party affiliation.** Participants’ self-identified party affiliation was also measured on a spectrum, to gather data on both the nature and strength of political partisanship (Figure 3). Thirty-eight percent of the sample ($n = 140$), identified as clearly partisan; of this group, 77% were Democrats ($n = 108$), and 23% were Republican ($n = 32$). Another 30% of the sample ($n = 109$) identified as “Independent-leaning” - 68% toward the Democratic party ($n = 74$) and 32% toward the Republican party ($n = 35$). Combined, this is approximately a 3:1 ratio of Democrats to Republicans. Of those who did not identify with either party, 11% ($n = 39$) identified as “Pure Independent” and 19% of respondents ($n = 71$) selected “none of these labels describe me.” Figure 4 presents the breakdown of the sample across the three aforementioned categories (Democrat, Republican, Neither).
**Figure 3.** Pie chart showing breakdown of sample across spectrum of political party affiliation.

**Figure 4.** Pie chart showing percentages of sample in main political party groups
Preliminary Analyses of Message Ratings: Issues and Policies

Participants were asked to rate the messages in two regards - first, how much they agreed with the statement they just read, and second, how likely they would be to support the hypothetical candidate for office. The two questions were hypothesized to address overlapping, but somewhat discrepant, concepts. The first was considered a more global assessment of participants’ reaction to the message; the second, a judgment about the particular message combined with the relative weight of the political issue in the participant’s voting behavior (e.g. if they had a positive response to the message but the overall issue was not very important to them, then they might rate the first high and the second low). Preliminary analyses revealed that these the two ratings were identical in 53% - 56% of cases, in more than 80% of cases the ratings differed by no more than 1 point, and that, across the four policy statements, correlations ranged from .90 to .92 ($p < .01$ for all). Exploratory analyses of the discrepancy between the two ratings for each message suggested ways in which they differ, but the study lacked the requisite power to examine the nuances of these differences. Therefore, in primary analyses, the first rating, thought to be a more pure, immediate (less modulated) evaluation of the message, was employed as the dependent variable.

Overall sample. Mean ratings for all policy statements are presented in Table 3 (along with the same statistics with the sample parsed by ideological group). In the overall sample, the liberal energy policy received the highest ratings ($M = 7.7$, $SD = 2.1$), and had the largest negative skew of the statements. The conservative immigration policy received the lowest ratings ($M = 4.9$, $SD = 3.22$) by a large margin; the next lowest was the conservative energy policy with mean of 6.2 ($SD = 2.86$).
Message ratings were submitted to a fully within-subjects 2 (Issue: energy, immigration) x 2 (Policy: liberal, conservative) ANOVA (Table 4) to examine whether there were differences in ratings between the two issues, and according to policy position. Main effects, with large effect sizes, were seen for both factors, revealing that: (i) the overall sample gave more favorable ratings to the energy messages than the immigration messages ($M_E = 7.0, SE = .093, 95\% CI [6.8, 7.2]; M_I = 5.9, SE = .129, 95\% CI [5.6, 6.1]$), and (ii) the sample responded more positively to the liberal policies than to the conservative policies ($M_L = 7.2, SE = .091, 95\% CI [7.1, 7.4]; M_C = 5.6, SE = .135, 95\% CI [5.4, 5.9]$).

**Political groups.** To analyze whether political identification moderated the findings presented above, ideological orientation (hereafter referred to as “Ideology”) and party affiliation (hereafter referred to as “Party”) served as between-subjects grouping factors in separate three-way mixed-design ANOVAs with Issue (energy, immigration) and Policy (liberal, conservative) as within-subjects factors. Results from the 3 (Ideology: liberal, moderate, conservative) x 2 (Issue: energy, immigration) x 2 (Policy: liberal, conservative) ANOVA are presented in Table 5. An analogous three-way ANOVA for Party yielded comparable results in terms of significance testing and effect sizes. Unless otherwise noted, findings reported below regarding Ideology align with those for Party in the expected fashion (i.e. Liberal/Democrat, Conservative/Republican).
Table 3.

*Mean message ratings as a function of issue (energy vs. immigration), policy (liberal vs. conservative) and ideological group (liberal, moderate, conservative).*

<table>
<thead>
<tr>
<th></th>
<th>Energy messages</th>
<th>Immigration messages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liberal Policy</td>
<td>Conservative Policy</td>
</tr>
<tr>
<td>N</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Liberal</td>
<td>158</td>
<td>8.2 (1.83)</td>
</tr>
<tr>
<td>Moderate</td>
<td>90</td>
<td>7.9 (1.81)</td>
</tr>
<tr>
<td>Conservative</td>
<td>81</td>
<td>6.6 (2.46)</td>
</tr>
<tr>
<td>Total</td>
<td>329</td>
<td>7.7 (2.10)</td>
</tr>
</tbody>
</table>

Table 4.

ANOVA Table: 2 (Issue) x 3 (Policy) within-subjects ANOVA: Overall sample

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>479.51</td>
<td>1</td>
<td>479.51</td>
<td>76.36</td>
<td>&lt;.001</td>
<td>.173</td>
</tr>
<tr>
<td>Error</td>
<td>2298.24</td>
<td>366</td>
<td>6.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>966.27</td>
<td>1</td>
<td>966.27</td>
<td>136.87</td>
<td>&lt;.001</td>
<td>.272</td>
</tr>
<tr>
<td>Error</td>
<td>2584.48</td>
<td>366</td>
<td>7.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue x Policy</td>
<td>2.37</td>
<td>1</td>
<td>2.37</td>
<td>.596</td>
<td>.441</td>
<td>.002</td>
</tr>
<tr>
<td>Error</td>
<td>1457.38</td>
<td>366</td>
<td>3.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.

ANOVA Table: Three-way mixed-design ANOVA for message ratings

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between-Subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>221.19</td>
<td>2</td>
<td>110.59</td>
<td>9.65</td>
<td>&lt;.001</td>
<td>.056</td>
</tr>
<tr>
<td>Within-group error</td>
<td>3737.34</td>
<td>326</td>
<td>11.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within-Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>311.47</td>
<td>1</td>
<td>311.47</td>
<td>51.72</td>
<td>&lt;.001</td>
<td>.137</td>
</tr>
<tr>
<td>Issue x Ideology</td>
<td>153.10</td>
<td>2</td>
<td>76.55</td>
<td>12.71</td>
<td>&lt;.001</td>
<td>.072</td>
</tr>
<tr>
<td>Issue x Subject (error)</td>
<td>1963.39</td>
<td>326</td>
<td>6.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy</td>
<td>571.06</td>
<td>1</td>
<td>571.06</td>
<td>92.86</td>
<td>&lt;.001</td>
<td>.222</td>
</tr>
<tr>
<td>Policy x Ideology</td>
<td>363.97</td>
<td>2</td>
<td>181.98</td>
<td>29.59</td>
<td>&lt;.001</td>
<td>.154</td>
</tr>
<tr>
<td>Policy x Subject (error)</td>
<td>2004.82</td>
<td>326</td>
<td>6.150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue x Policy</td>
<td>8.933</td>
<td>1</td>
<td>8.933</td>
<td>2.269</td>
<td>.133</td>
<td>.007</td>
</tr>
<tr>
<td>Ideology x Issue x Policy</td>
<td>44.58</td>
<td>2</td>
<td>22.29</td>
<td>5.662</td>
<td>.004</td>
<td>.034</td>
</tr>
<tr>
<td>Issue x Policy x Subject (error)</td>
<td>1283.37</td>
<td>326</td>
<td>3.94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Ideology x Issue x Policy ANOVA (Table 4) yielded significant effects for all three factors, for two of three possible two-way interactions, and for the three-way interaction. Here, the main effects for Issue and Policy are redundant with findings reported above regarding the overall sample hence the interactions are of primary theoretical interest. The significant main effect of Ideology shows that ideological groups differed with respect to overall positivity of ratings, such that conservatives gave the highest ratings (\(M_C = 7.0, SE = .188, 95\% CI [6.6-7.4]\), followed by moderates (\(M_M = 6.4, SE = .178, 95\% CI [6.1-6.8]\)), and then liberals (\(M_L = 6.0, SE = .135, 95\% CI [5.7-6.2]\)). Post hoc tests (LSD) revealed that each group differed significantly from one another, though, as seen in the marginal means, the greatest difference was between the liberal and conservative group. Yet, as noted, the significant two- and three-way interactions qualify these results and follow-up tests to more closely pinpoint and accurately describe the nature of the relationship between issue and policy position.

Examining each policy statement separately according to political group, the liberal energy policy was the highest rated message for the both the liberal and moderate groups (Table 3), as well as for the Democrat (\(M = 8.3, SD = 1.71\)), Leaning Democrat (\(M = 8.4, SD = 1.51\)), Independent (\(M = 7.2, SD = 2.41\)) and No Labels groups (\(M = 7.7, SD = 2.19\)). The conservative immigration policy, on the other hand, was the lowest rated statement for the liberal and moderate groups, and all party groups except the Republicans (Democrat: \(M = 4.2, SD = 3.25\), Leaning Democrat: \(M = 4.7, SD = 2.81\), Independent: \(M = 4.8, SD = 3.62\), Leaning Republican: \(M = 5.7, SD = 3.05\) and No Labels: \(M = 5.0, SD = 3.25\)). Analysis of simple main effects for each dependent variable revealed an effect of Ideology for each of the four policy statements, (liberal energy: \(F(2)\)
= 68.98, \( p < .001 \), \( \eta_p^2 = .096 \), conservative energy: \( F(2) = 13.17, \ p < .001 \), \( \eta_p^2 = .075 \), liberal immigration: \( F(2) = 3.99, \ p = .019 \), \( \eta_p^2 = .024 \), conservative immigration: \( F(2) = 21.12, \ p < .001 \), \( \eta_p^2 = .115 \). The pattern of means (conservative > moderate > liberal) existed for all but the liberal energy policy, which showed the reverse pattern. Post-hoc tests (LSD) revealed the following notable findings: in their ratings of conservative policies, all three ideological groups differed significantly from one another (\( p < .05 \)), but in their ratings of liberal policies, liberals and moderates differed from conservatives (\( p < .05 \)), but not from one another.

\[ \text{Figure 5. Plot of significant issue x ideology interaction} \]
**Issue x ideology interaction.** The general pattern of the interaction between Ideology and Issue, shown in Figure 5, was confirmed by analyses of simple effects:

Energy messages were strongly preferred in the liberal group, $F(1) = 73.88, p < .001, \eta_p^2 = .320$, and the moderate group, $F(1) = 25.65, p < .001, \eta_p^2 = .224$, whereas the conservative group rated the issues equally overall, $F(1) = .002, p = .96, \eta_p^2 = 0.0$.

Likewise, one-way ANOVAs testing simple effects for each issue revealed that groups showed equivalent liking for the energy messages, $F(2) = .78, p = .459, \eta_p^2 = .005$, but differed significantly in their ratings of the immigration messages, $F(2) = 16.09, p < .001 \eta_p^2 = .09$. For immigration ratings, mean ratings were 5.1 for liberals ($SE = .189, 95\% CI [4.8-5.2])$, 5.9 for moderates ($SE = .251, 95\% CI [5.3-6.2]$) and 7.0 for conservatives ($SE = .264, 95\% CI [6.5-7.5]$). Post-hoc tests (LSD) indicate that conservatives rated the immigration messages significantly higher than liberals ($p < .001$) and moderates and moderates ($p = .001$), and that the difference between liberals’ and moderates’ ratings approached significance ($p = .052$).

**Policy x ideology interaction.** To understand the main effect of policy, the initial three-way ANOVA was followed by splitting the file by issue and conducting two-way mixed-design ANOVAs with Policy (liberal, conservative) as the within-subjects factor and Ideology (Liberal, Moderate, Conservative) as the between-subjects factor.

For the energy messages, there was a main effect of Policy $F(1) = 39.97, p < .001, \eta_p^2 = .109$, qualified by a significant Policy x Ideology interaction, $F(2) = 30.11, p < .001, \eta_p^2 = .156$. As seen in Figure 6, for the energy messages, the disordinal Policy x Ideology interaction represents the expected relationship between ideological orientation and policy preference: participants showed a preference for the policy that corresponded
Figure 6. Plot of significant policy x ideology interaction for energy messages

Figure 7. Plot of significant policy x ideology interaction for immigration messages
with their ideological orientation, such that those who identified as conservative rated the conservative policies higher and those who identified as liberal rated the liberal policies higher. Considering cell means (Table 3) and conducting simple effects analyses for each group separately, confirmed the liberals’ preference for the liberal policy, $F(1) = 95.52, p < .001, \eta^2_p = .378$, the moderates’ preference for the liberal policy, $F(1) = 28.01, p < .001, \eta^2_p = .239$, and the conservatives’ preference for the conservative policy $F(1) = 4.45, p = .038, \eta^2_p = .053$.

For the immigration messages, the main effect of Policy $F(1) = 78.27, p < .001, \eta^2_p = .194$, was also qualified by a significant Policy x Ideology interaction, $F(2) = 8.58, p < .001, \eta^2_p = .050$. However, in this case, the interaction (Figure 7) was not in the expected direction. Rather, for immigration, all three groups preferred the liberal policy, and the significant interaction term was due to the greater degree of preference among the liberal group, and secondarily the moderate group. Analysis of simple main effects show that this preference for the liberal policy reached significance for the liberal group, $F(1) = 81.77, p < .001, \eta^2_p = .342$, the moderate group, $F(1) = 39.01, p < .001, \eta^2_p = .305$, and at a trend level for the conservative group, $F(1) = 3.71, p = .058, \eta^2_p = .044$. Interestingly, although the liberals’ ratings of the two immigration policies differed to a greater degree, conservatives rated both policies higher than the other two groups. These findings were unexpected, as there was no hypothesized reason to expect that for immigration messages the conservative group would rate both the conservative and liberal policy statements higher than the other ideological groups. There was a between-subjects main effect of Ideology for the immigration messages, but not the energy messages (a finding redundant
with previously reported simple effects, showing that the groups differed in mean immigration ratings, but not in mean energy ratings).

**Three-way interaction and conclusions.** Taken together, these preliminary findings suggest relevant differences between ideological groups (and political party groups) for the issues of energy and immigration reform and for the liberal and conservative policy conditions. The two-way interactions and follow up tests indicate a differential effect of ideological group for each issue and, within each issue, between the two policy conditions. Hence, the three-way interaction, interpreted as a difference in the two-way interactions at each level of the third variable, represents how the relationship between political group and policy preference differs for the topics of energy and immigration reform. Most importantly, these analyses show that all three factors – issue, policy condition and ideological orientation – influence message ratings, and could potentially obfuscate any effects of prime if averaged and not considered separately in subsequent analyses.

**Effect of Prime**

A number of findings from the preliminary set of analysis informed decisions about how to compare ratings for the affectively valenced introductions. In addition, some unanticipated consequences of the study design required consideration. As planned, energy and immigration messages were analyzed separately; the affective and non-affective primes used for each issue were not the same, and would be an additional source of variability if combined in analyses. Findings regarding the differences in ratings between the issues, and particularly the interactions with political group, supported this decision. The discrepancy between ratings for each policy, and more importantly, the
nature of the interaction between Policy and Ideology (and the three-way Policy x Issue x Ideology interaction) cautioned against testing the effect of prime in a way that combined the liberal and conservative policies. Results from preliminary analyses confirmed the relevance of the relationship between political group and message ratings; thus, as planned, analyses were performed to examine whether the impact of prime varied according to political ideology or party affiliation.

**Overall sample.** Ratings for messages seen first were submitted to one-way ANOVAs to examine the effect of prime in the sample at large. Of the four policy statements, the liberal immigration policy was the only one for which the effect of prime was significant, \( F(1) = 6.22, p = .014, \eta^2_p = .033 \). Contrary to prediction, in this case marginal means reveal that the sample gave less favorable evaluations to the liberal immigration policy in the affective condition \( (M_A = 6.0, SE = .22, 95\% CI [5.6, 6.4]) \), than in the non-affective condition \( (M_N = 6.7, SE = .23, 95\% CI [6.3, 7.2]) \).

**Relationship with political ideology.** To investigate whether political ideology moderated the influence of the affectively valenced introductions, 2 (Prime: affective, non-affective) x 3 (Ideology: liberal, moderate, conservative) ANOVAs were conducted for each policy statement. These analyses did not reveal significant prime x ideology interactions for any of the policy statements. For the conservative immigration messages there was an inconsistency between \( p \)-value and effect size, such that the interaction term did not reach significance \( (p = .175) \), but showed a small estimated effect size \( (\eta^2_p = .022) \). All other findings (regarding main effects of Prime and Ideology) are redundant with findings already reported. Combined, the results from these ANOVAs do not indicate that ideological orientation added any predictive value to impact of prime.
**Relationship with political party.** An analogous set of ANOVAs examined whether political party moderated the impact of the primes. For the purposes of these analyses, political party was parsed with regard to party and strength of party affiliation (Independent-leaning groups were considered separately). Independents and those participants who selected “None of these labels describe me,” were also included in the analyses as separate groups. Thus, the sample was divided into 6 groups: Democrat (D), Leaning Democrat (LD), Republican (R), Leaning Republican (LR), Independent (I), and No Labels (NL).

Results, reported in Table 6, suggest that Party (unlike Ideology) was related to the effect of prime, though differentially across the 4 policies. The prime x party interaction was significant for the liberal energy messages, and reached trend level significance for the conservative energy messages. These effects were both of medium size ($\eta^2_p = .064, .059$, respectively). For the immigration messages, there was a discrepancy between the $p$-value and effect size in the prime x party interactions, such that calculations of the magnitude of effect suggested small effect sizes ($\eta^2_p = .028, .022$) though $p$-values were nonsignificant. Since these effect sizes were for interaction terms, they were considered large enough to warrant further examination.

To summarize, the data show notable differences in ratings based on prime condition within certain political party groups—differences, that in some cases, attained statistical significance (with large effect sizes), and in some cases, in spite of similar magnitudes of difference, did not. These prime x party interactions warranted follow-up testing; however, for the most part, the analyses did not have enough power to detect the effects of prime in political subgroups, on account of smaller sample sizes.
Table 6.

ANOVA Table: 2 (Prime) x 3 (Party) factorial ANOVAs for all dependent variables

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liberal Energy Policy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prime</td>
<td>.872</td>
<td>1</td>
<td>.87</td>
<td>.23</td>
<td>.636</td>
<td>.001</td>
</tr>
<tr>
<td>Party</td>
<td>63.68</td>
<td>5</td>
<td>12.74</td>
<td>3.28</td>
<td>.007</td>
<td>.088</td>
</tr>
<tr>
<td>Prime x Party</td>
<td>44.94</td>
<td>5</td>
<td>8.99</td>
<td>2.32</td>
<td>.046</td>
<td>.064</td>
</tr>
<tr>
<td>Within-group error</td>
<td>659.24</td>
<td>170</td>
<td>3.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conservative Energy Policy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prime</td>
<td>1.07</td>
<td>1</td>
<td>1.07</td>
<td>.14</td>
<td>.708</td>
<td>.001</td>
</tr>
<tr>
<td>Party</td>
<td>57.77</td>
<td>5</td>
<td>11.55</td>
<td>1.51</td>
<td>.189</td>
<td>.044</td>
</tr>
<tr>
<td>Prime x Party</td>
<td>79.50</td>
<td>5</td>
<td>15.90</td>
<td>2.08</td>
<td>.070</td>
<td>.059</td>
</tr>
<tr>
<td>Within-group error</td>
<td>1260.56</td>
<td>165</td>
<td>7.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liberal Immigration Policy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prime</td>
<td>22.09</td>
<td>1</td>
<td>22.09</td>
<td>3.40</td>
<td>.067</td>
<td>.020</td>
</tr>
<tr>
<td>Party</td>
<td>56.77</td>
<td>5</td>
<td>11.35</td>
<td>1.75</td>
<td>.126</td>
<td>.050</td>
</tr>
<tr>
<td>Prime x Party</td>
<td>30.91</td>
<td>5</td>
<td>6.18</td>
<td>.952</td>
<td>.449</td>
<td>.028</td>
</tr>
<tr>
<td>Within-group error</td>
<td>1084.68</td>
<td>167</td>
<td>6.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conservative Immigration Policy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prime</td>
<td>10.05</td>
<td>1</td>
<td>10.05</td>
<td>1.01</td>
<td>.317</td>
<td>.006</td>
</tr>
<tr>
<td>Party</td>
<td>200.40</td>
<td>5</td>
<td>40.08</td>
<td>4.02</td>
<td>.002</td>
<td>.107</td>
</tr>
<tr>
<td>Prime x Party</td>
<td>38.52</td>
<td>5</td>
<td>7.70</td>
<td>.77</td>
<td>.571</td>
<td>.022</td>
</tr>
<tr>
<td>Within-group error</td>
<td>1676.41</td>
<td>168</td>
<td>9.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notwithstanding, observing some of the magnitudes of difference within particular political groups (Tables 7-10), tests of simple main effects were performed, with the awareness that only extremely large effect sizes would be detectable. Differences that did not attain significance will be discussed in instances in which there was a discrepancy between the *p*-value and the effect size. Non-significant results with standardized differences between means of moderate size or greater will be addressed, though should be interpreted with caution for the above-mentioned reasons.

**Differential effects of prime within party groups.** Means and standard deviations for message ratings by party group and prime condition are presented in Tables 7-10. Effect sizes were calculated using the formula for Hedges *g*:

\[
g = \frac{M_1 - M_2}{s_{\text{pooled}}}
\]

Due to unequal sample sizes and differences in within-group variances, the pooled standard deviation was calculated using the following formula:

\[
s_{\text{pooled}} = \frac{(N_1 - 1)s_1^2 + (N_2 - 1)s_2^2}{N_1 + N_2 - 2}
\]

**Liberal energy messages.** There was a significant effect of prime in the Leaning Democrat group, *F*(1) = 8.04, *p* = .008, \(\eta_p^2 = .187\), such that the affectively primed policy was rated higher (\(M_A = 9.1\), \(SD = .857\)) than the non-affective version (\(M_N = 7.9\), \(SD = 1.66\)). The standardized difference between the means (\(g = .94\)) characterizes this as a large effect size (Cohen, 1988; Cohen, 1996; Rosenthal 1998). The Independent group
also rated the policy more favorably when paired with the affective prime ($M_{A} = 8.2, SD = 1.72$) than with its non-affective counterpart ($M_{N} = 6.9, SD = 2.85$) with a slightly larger difference in mean ratings; however with the smaller sample size ($N_{LD} = 37$ v. $N_{I} = 16$), this effect did not reach significance, $F(1) = 1.42, p = .253, \eta_{p}^{2} = .092$. In spite of the discrepancy between $p$-value and effect size, the standardized difference between the means ($g = .83$) would be considered large in this group as well.

In contrast, the Republican group rated the liberal energy policy higher when paired with the non-affective prime ($M_{N} = 7.7, SD = 1.90$) than the affective prime ($M_{A} = 5.7, SD = 3.39$). The effect did not reach significance, $F(1) = 2.64, p = .125, \eta_{p}^{2} = .125$ in this small group ($N = 17$), but is of notable magnitude, with a moderate to large effect size ($g = .78$). The Leaning Republican group showed the same pattern as the Republican group, but with a smaller magnitude of difference and small estimated effect size.

**Conservative energy messages.** For the conservative energy policy, there was a very large effect of prime in the Republican group ($g = 1.24$), who rated the policy more favorably in the non-affective condition ($M_{N} = 8.9, SD = 1.29$ vs. $M_{A} = 7.0, SD = 1.73$), $F(1, 14) = 5.82, p = .031, \eta_{p}^{2} = .309$, as they had for the liberal energy policy. Democrats also rated the non-affective message ($M_{N} = 7.1, SD = 2.48$) higher than the affective one ($M_{A} = 5.6, SD = 3.02$) though this difference only reached trend level significance, $F(1) = 3.13, p = .083, \eta_{p}^{2} = .062$, with moderate effect size ($g = .50$).

In contrast, the Leaning Democrat group gave higher ratings to the affectively primed message ($M_{A} = 7.4, SD = 1.98, M_{N} = 5.8, SD = 2.91$), as did the Independent group ($M_{A} = 6.2, SD = 3.09, M_{N} = 4.7, SD = 2.67$). The effect was significant at the trend level for the Leaning Democrat group, $F(1, 36) = 3.17, p = .084, \eta_{p}^{2} = .083$, with a
moderate effect size ($g = .61$). The magnitude of difference also approached moderate size for the Independent group ($g = .49$), but the effect did not obtain statistical significance.

**Liberal immigration messages.** The liberal immigration messages showed a notable effect of prime for three of the groups – the Democrats, the Leaning Democrats, and the Leaning Republicans – and all three groups rated the policy higher in the non-affective condition than the affective one. Of these groups, consistency between the $p$-value and effect size was only achieved for the Leaning Democrats, $F(1, 34) = 10.76, p = .002, \eta_p^2 = .246$, with a considerably large magnitude of effect ($g = 1.13$). The other two groups had magnitudes of difference that approached medium size (Democrats, $g = .46$; Leaning Republicans, $g = .47$) but the effects did not reach statistical significance.

**Conservative immigration messages.** In comparison to the other policies, ratings of the conservative immigration policy showed the fewest differences based on prime condition. The Leaning Republicans were the only group in which there was an appreciable ($g = 1.11$) and significant, $F(1, 14) = 5.27, p = .039, \eta_p^2 = .288$, effect of prime. As with the liberal immigration policy, Leaning Republicans gave less favorable ratings to the policy it was paired with the affective prime, although this occurred to a much greater degree in this case of the conservative policy.
Table 7.

Mean ratings for liberal energy message as a function of party affiliation (Democrat, Leaning Democrat, Independent, Leaning Republican, Republican, No Labels), prime condition (affective vs. neutral), and order (1st vs. 2nd). (Standard deviations in parentheses.)

<table>
<thead>
<tr>
<th>Party Affiliation</th>
<th>1st message read</th>
<th>2nd message read</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affective</td>
<td>Non-affective</td>
</tr>
<tr>
<td></td>
<td>M (SD)</td>
<td>N</td>
</tr>
<tr>
<td>Democrat</td>
<td>8.0 (2.02)</td>
<td>30</td>
</tr>
<tr>
<td>Leaning-Democrat</td>
<td>9.1 (.86)</td>
<td>17</td>
</tr>
<tr>
<td>Independent</td>
<td>8.2 (1.72)</td>
<td>9</td>
</tr>
<tr>
<td>Leaning-Republican</td>
<td>6.7 (1.94)</td>
<td>9</td>
</tr>
<tr>
<td>Republican</td>
<td>5.7 (3.39)</td>
<td>6</td>
</tr>
<tr>
<td>No Labels</td>
<td>7.4 (2.61)</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 8.

Mean ratings for conservative energy message as a function of party affiliation (Democrat, Leaning Democrat, Independent, Leaning Republican, Republican, No Labels), prime condition (affective vs. neutral), and order (1<sup>st</sup> vs. 2<sup>nd</sup>). (Standard deviations in parentheses.)

<table>
<thead>
<tr>
<th>Party Affiliation</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; message read</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; message read</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affective</td>
<td>Non-affective</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>N</td>
<td>n</td>
</tr>
<tr>
<td>Democrat</td>
<td>5.6 (3.02)</td>
<td>7.1 (2.48)</td>
<td>6.3 (2.85)</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>22</td>
<td>49</td>
</tr>
<tr>
<td>Leaning-Democrat</td>
<td>7.4 (1.98)</td>
<td>5.8 (2.91)</td>
<td>6.3 (2.73)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>25</td>
<td>37</td>
</tr>
<tr>
<td>Independent</td>
<td>6.2 (3.08)</td>
<td>4.7 (2.67)</td>
<td>5.5 (2.94)</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Leaning-Republican</td>
<td>7.0 (2.45)</td>
<td>6.7 (2.56)</td>
<td>6.9 (2.42)</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Republican</td>
<td>7.0 (1.73)</td>
<td>8.9 (1.29)</td>
<td>8.3 (1.67)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>No Labels</td>
<td>6.0 (3.40)</td>
<td>7.1 (2.83)</td>
<td>6.4 (3.20)</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>14</td>
<td>37</td>
</tr>
</tbody>
</table>
Table 9.

*Mean ratings for liberal immigration message as a function of party affiliation (Democrat, Leaning Democrat, Independent, Leaning Republican, Republican, No Labels), prime condition (affective vs. neutral), and order (1st vs. 2nd). (Standard deviations in parentheses.)*

<table>
<thead>
<tr>
<th>Party Affiliation</th>
<th>Affective</th>
<th>Non-affective</th>
<th>Total</th>
<th>Affective</th>
<th>Non-affective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>n</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Democrat</td>
<td>5.6 (2.42)</td>
<td>6.8 (2.59)</td>
<td>6.2 (2.55)</td>
<td>25</td>
<td>6.5 (2.71)</td>
<td>7.1 (2.61)</td>
</tr>
<tr>
<td>Leaning-Democrat</td>
<td>6.0 (2.15)</td>
<td>8.2 (1.63)</td>
<td>6.9 (2.22)</td>
<td>21</td>
<td>7.0 (2.39)</td>
<td>7.1 (2.38)</td>
</tr>
<tr>
<td>Independent</td>
<td>5.6 (4.28)</td>
<td>6.2 (2.86)</td>
<td>5.9 (3.51)</td>
<td>9</td>
<td>5.0 (3.69)</td>
<td>7.3 (2.20)</td>
</tr>
<tr>
<td>Leaning-Republican</td>
<td>6.0 (3.24)</td>
<td>7.2 (1.72)</td>
<td>6.7 (2.52)</td>
<td>9</td>
<td>8.4 (1.40)</td>
<td>8.0 (1.60)</td>
</tr>
<tr>
<td>Republican</td>
<td>8.1 (2.36)</td>
<td>7.6 (2.94)</td>
<td>7.9 (2.56)</td>
<td>8</td>
<td>7.3 (2.18)</td>
<td>5.8 (3.28)</td>
</tr>
<tr>
<td>No Labels</td>
<td>6.2 (2.58)</td>
<td>6.2 (2.33)</td>
<td>6.2 (2.43)</td>
<td>20</td>
<td>7.4 (2.45)</td>
<td>6.4 (2.87)</td>
</tr>
</tbody>
</table>
Table 10.

Mean ratings for conservative immigration message as a function of party affiliation (Democrat, Leaning Democrat, Independent, Leaning Republican, Republican, No Labels), prime condition (affective vs. neutral), and order (1st vs. 2nd). (Standard deviations in parentheses.)

<table>
<thead>
<tr>
<th>Party Affiliation</th>
<th>Affective</th>
<th>Non-affective</th>
<th>Total</th>
<th>Affective</th>
<th>Non-affective</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD) n</td>
<td>M (SD) n</td>
<td>M (SD) n</td>
<td>M (SD) n</td>
<td>M (SD) n</td>
<td>M (SD) n</td>
</tr>
<tr>
<td>Democrat</td>
<td>4.5 (3.35) 30</td>
<td>4.0 (3.18) 25</td>
<td>4.3 (3.26) 55</td>
<td>4.6 (3.21) 28</td>
<td>3.7 (3.33) 25</td>
<td>4.2 (3.27) 53</td>
</tr>
<tr>
<td>Leaning-Democrat</td>
<td>4.2 (3.36) 17</td>
<td>4.5 (2.48) 22</td>
<td>4.4 (2.86) 39</td>
<td>5.4 (2.95) 14</td>
<td>5.0 (2.64) 21</td>
<td>5.1 (2.74) 35</td>
</tr>
<tr>
<td>Independent</td>
<td>5.1 (3.53) 14</td>
<td>6.2 (3.19) 6</td>
<td>5.5 (3.40) 20</td>
<td>4.5 (3.87) 10</td>
<td>3.8 (3.99) 9</td>
<td>4.2 (3.83) 19</td>
</tr>
<tr>
<td>Leaning-Republican</td>
<td>3.9 (1.89) 8</td>
<td>6.7 (2.87) 7</td>
<td>5.2 (2.73) 15</td>
<td>6.4 (2.98) 11</td>
<td>5.8 (3.80) 9</td>
<td>6.1 (3.29) 20</td>
</tr>
<tr>
<td>Republican</td>
<td>8.1 (2.17) 8</td>
<td>7.7 (2.45) 9</td>
<td>7.9 (2.26) 17</td>
<td>7.6 (2.07) 7</td>
<td>7.8 (1.98) 8</td>
<td>7.7 (1.95) 15</td>
</tr>
<tr>
<td>No Labels</td>
<td>5.1 (3.50) 16</td>
<td>5.2 (3.81) 18</td>
<td>5.2 (3.61) 34</td>
<td>4.8 (3.03) 17</td>
<td>5.0 (2.91) 20</td>
<td>4.9 (2.93) 37</td>
</tr>
</tbody>
</table>
Exploratory analyses: order effects and interaction with prime. The study design involved a balanced order of message presentation, but there was no a priori hypothesis regarding the influence of order on message ratings. Nonetheless, interesting findings emerged when the “pure” effect of prime described above was compared with the effect of prime in messages read second (thereby with the potential of influence from the prior contrasting message). To test the effect of order, and specifically its interaction with prime, 2 (Prime: affective, non-affective) x 2 (Order: 1st, 2nd) ANOVAs were performed, followed by tests of simple effects of order and prime (for messages read second) when indicated. Due to the divergent effects of prime across political party groups, analyses were conducted separately for each group.

Liberal energy messages. For the liberal energy messages there were no straightforward effects of order for any party groups; however, using the criteria described earlier, there were four groups for which the interaction between order and prime was noteworthy. The Leaning Democrat and Independent groups demonstrated the same pattern: both had rated the affective version more favorably than the non-affective version when seen first, but showed no difference based on prime condition when the liberal energy policy was seen second, (following a conservative energy message). For the Leaning Democrats, this interaction approached significance, $F(1) = 3.73, p = .058, \eta_p^2 = .051$. For Independents, the strength of association was nearly the same ($\eta_p^2 = .051$) but the interaction did not attain significance, possibly on account of the much smaller sample size ($N_{LD} = 74$ vs. $N_I = 39$).

Republicans showed a trend level disordinal interaction between order and prime, $F(1) = 3.53, p = .071, \eta_p^2 = .112$, such in the “pure” condition they rated the affective...
version of the message less favorably than the non-affective version, but showed the reverse pattern when the message was read second. A follow-up test of prime in messages read second failed to attain significance, though the more positive evaluation of the affective version was of moderate size ($g = .56$).

Lastly, seeing the message second appeared to increase the effect of the prime for the Leaning Republicans group: Leaning Republicans evaluated the affective version less positively whether the message was seen first or second; however, this difference was of greater magnitude ($g = .85$ vs. $g = .27$) when the message was seen second. This difference, and attained trend level significance, $F(1) = 3.18, p = .096, \eta_p^2 = .185$), in spite of the group’s small sample size ($N = 16$).

**Conservative energy messages.** For the conservative energy messages, there was a straightforward order effect for only one group; three additional groups showed some relationship between order and prime. The Democrats were the group that showed a significant main effect of order $F(1) = 4.54, p = .035, \eta_p^2 = .042$, rating the conservative energy message higher when seen first ($M = 6.3, SD = 2.85$) than when seen second ($M = 5.2, SD = 2.85$). There was no interaction with prime – in both cases, Democrats rated the non-affective version more favorably than the affective one, with similar trend level significance and moderate effect size (for messages seen second: $F(1) = 2.87, p = .096$, $\eta_p^2 = .048, g = .43$).

The relationship between order and prime is worth noting for the Leaning Democrat, Independent and Republican groups in spite of the inconsistency between $p$-value and effect size in all three ANOVAs. The Leaning Democrats and Independents are of particular interest because these groups showed the same pattern for the conservative
energy messages as they had for the liberal energy messages: both groups evaluated the affective version of the conservative energy message more favorably than the non-affective version in the “pure” priming condition, but showed no difference based on prime condition when the message was seen second. The effect of order, then, was to effectively erase the impact of the introductory sentences. For the Republican group, seeing the conservative message second also decreased the effect of the prime: Republicans evaluated the non-affective version more positively whether the message was seen first or second, but the magnitude of the difference was much less and no longer statistically significant when the message was seen second (though still of moderate size, $g = .65$).

**Liberal immigration messages.** For the liberal immigration messages, order was implicated for three groups. There was a main effect of order for the Leaning Republican group, $F(1) = 4.85, p = .035, \eta^2_p = .135$, such that the message was rated significantly lower when seen first ($M = 6.7, SD = 2.52$) than when seen second ($M = 8.2, SD = 1.47$). The relationship between order and prime is noteworthy, in that the group evaluated the affective version less positively than the non-affective version in the “pure” condition, but showed the reverse pattern when the message was seen second. Yet, in the two-way ANOVA, the interaction was not significant, with there was an inconsistency between $p$-value and effect size, $F(1) = 1.19, p = .283, \eta^2_p = .037$. Differences based on order were also seen in the Republican group, however, in contrast to the Leaning Republican group, liberal immigration messages were evaluated more positively when seen first ($M = 7.9, SD = 2.56$) than when seen second ($M = 6.6, SD = 2.79$). In spite of the moderate
standardized difference between means ($g = .47$), this effect also did not attain significance.

As with the two energy messages, the Leaning Democrat group showed an effect of prime in the “pure” condition (non-affective > affective), but no difference based on prime condition when the message was seen second. This interaction was significant with moderate effect size, $F(1) = 4.32, p = .041, \eta_p^2 = .058$.

Lastly, there was a relationship between order and prime for the Independent group, who had not shown an effect of prime in the “pure condition,” but who rated the non-affective version higher ($M = 7.3, SD = 2.20$) than the affective version ($M = 5.0, SD = 3.69$) when the message was seen second. The magnitude of this difference was large ($g = .81$) though statistical significance was only at a trend level, $F(1, 19) = 3.02, p = .10, \eta_p^2 = .144$.

Conservative immigration messages. Unsurprisingly, no group showed an effect of prime when the conservative immigration message was seen second. The Leaning Republicans, who had rated the non-affective version more favorably than the affective version when seen first, showed no difference based on prime condition when the conservative immigration policy was seen second. This interaction, notable for its discrepant $p$-value and effect size did not reach significance, $F(1) = 2.78, p = .106, \eta_p^2 = .082$.

Conclusions. In sum, results do not support initial hypotheses regarding the impact of the affective and non-affective introductory sentences. The expectation that the primes would operate in a generalized way across groups and policy conditions was not borne out by the data. Findings contradict the prediction that the priming condition effect
would work in a simple fashion, by increasing ratings for all messages, regardless of policy condition or issue. Rather, what emerged was that the impact of the affective introductions depended on a host of factors, including issue and policy condition, and most notably, political party.

Though results did not provide support for the study hypotheses, effects of prime were of moderate to large magnitude when differences were detected, providing ample evidence that the affective introductions have the potential to have substantial practical impact. The implications of these findings will be discussed in the following chapter, along with the noteworthy patterns with regard to order and its relationship with prime.
CHAPTER V
Discussion

This research investigated the effects of emotionally-valenced introductory sentences on judgments of public policy. It was hypothesized that individuals would give more favorable ratings to political messages when policy statements were preceded by values-based, affective introductory sentences than when introduced by parallel sentences with bland, less affective verbiage and that this would be true for persons across the political spectrum, independent of their initial attitude towards the subject. The affective introductions were expected to exert influence through priming; that is by evoking certain values and emotional associations that would generate more positive views toward the policy statements.

As will be discussed below, none of the a priori hypotheses were borne out by the data. Rather, a more complicated picture emerged, whereby the primes had substantial impact but did not have the straightforward amplification effect that was expected. The effect of the introductory sentences varied according to the issue (energy vs. immigration), policy position (liberal vs. conservative), and political party affiliation. In addition, results indicated an impact of contrast, based on message order. Although the order of presentation was balanced, these effects had not been anticipated.

Sample Characteristics

Participants were evenly distributed across age and gender categories. There were several ways in which the sample was biased relative to the population of New York City (NYC) at large, while remaining consistent with the sampling locations. For instance, the
sample was more highly educated and had a higher median income. This was an arguably inevitable consequence of choosing specific sampling locations (certain areas of Manhattan, Staten Island) likely to have a higher percentage of conservatives and/or Republicans. There was also likely a self-selection bias in that people were more likely to participate if they were interested in politics.

Sampling locations were chosen with the intent to maximize diversity of political ideological orientations and party affiliation and it appears this sampling goal was sufficiently achieved. Approximately 50% of the sample identified with the Democratic party, 18% identified with the Republican party, and 29% were not affiliated with either party (11% “Pure independent,” 19% “None of these labels describe me”). With regard to political ideology, 43% of the sample described themselves as liberal, 25% as moderate, 22% as conservative, and 9% selected “Don’t know, haven’t thought much about this.”

Comparisons with recent NYC polling data (CBS News, and The New York Times, 2012) suggest that the political identity of the present sample was representative of the NYC population. Proportions of partisans in the study sample are fairly congruent with those of an August, 2012, CBS News/New York Times poll that found 58% of respondents identified as Democrat, 14% as Republican, 19% as Independent, and 9% as “Don’t know/Not applicable.” Similarly, the sample’s ideological composition aligns the CBS News/New York Times poll, in which 37% of respondents identified as liberal, 32% as moderate, 21% as conservative, and 10% endorsed “don’t know/not applicable” (CBS News, and The New York Times, 2012). The CBS News/New York Times poll did not measure party affiliation or ideological orientation on a spectrum, but the overall
comparison suggests that the present study captured the diversity of political identification within the heavily Democratic/liberal milieu of New York City as well as it could have.

The sample’s political composition also comports with national trends in political party association that indicate a declining percentage of people who identify with the two-party system (Pew Values Survey, 2012). In the current sample, only 38% of the respondents endorsed a clear affiliation with either the Democratic or Republican party, 30% of respondents described a weak association with one of the two parties (“Independent-lean” groups), and 30% rejected any association whatsoever with the labels “Democrat” or “Republican.” The political characteristics of the sample support conclusions from the 2012 Pew Values Survey that, “fewer Americans [are] affiliating with one of the major parties than at any point in the past 25 years,” and that, “it is safe to say that there are more political independents in 2012 than at any point in the last 75 years” (Pew Values Survey, 2012, p. 13). In terms of national trends, the Pew survey reports that the percentage of Democrats in the country has remained stable over the last two decades (33% in 1990, 32% in 2012), while the percentage of Republicans has decreased from 31% in 1990 to 24% in 2012. During this same period, the percentage of people identifying as Independent increased from 29% to 38%. Not addressed in the Pew polling, is whether this reflects a true shift in views/ideology or merely a change in desire to identify with the Republican label.

**Preliminary Analyses: Issues and Policies**

**Judgments of energy and immigration in the overall sample.** There was no specific hypothesis regarding differences in level of positive response toward the two
issues; however, data reveal that, in the sample at large, energy messages garnered more favorable responses from participants than immigration messages. Examined more closely, this appears to be due, in part, to a negative response to the conservative immigration policy—this message was rated significantly lower than the other three, and also differed in its distribution, with a substantially higher percentage of very low ratings. It thus appears that among a portion of the sample, the content of the conservative immigration policy produced an acutely negative response.

The sample’s low ratings of the conservative immigration policy only partially account for the differential response to the two issues. Energy messages were evaluated more favorably than immigration messages even when the conservative immigration policy was excluded from the analysis. Looked at another way, when only the liberal messages were compared, energy policy was judged more positively than immigration policy. Thus, it remains that this New York City sample agreed more with the proposed energy policies than the immigration policies.

The above finding was related to political identity (that is, ideology and party) in that groups differed in their relative response to the two issues. Liberals and moderates responded more favorably to the energy messages than to the immigration messages, whereas conservatives did not show a difference in overall positivity toward the issues. Furthermore, groups differed in their general positivity toward immigration reform – conservatives’ judgments (of both the liberal and conservative policy) were more positive than their liberal and moderate counterparts’. Beyond political identity, several factors help interpret the sample’s more favorable response to the energy issue and its relative dislike of the conservative immigration policy.
**Favorability of energy policies in light of NYC politics.** The sample’s positive evaluation of the energy messages (and especially the liberal energy policy) is consistent with trends in NYC public opinion at the time of data collection. New York City is not representative of the rest of the country and leans heavily toward the liberal end of the spectrum regarding beliefs about energy reform and environmental policy. Available data suggest that NYC residents may even be to the left of Democrats elsewhere in the country in favoring increased energy regulation. A 2007 survey found that 84% of NYC residents agreed with the statement, “the City of New York should REQUIRE owners of existing buildings to make their buildings more energy efficient.” Moreover, 66% of those surveyed said they would support a “$2.50 surcharge on the average household’s monthly electric bill for a special fund to help make buildings more energy efficient and teach New Yorkers how to reduce their energy use.”

**Dislike of conservative immigration policy contextualized: national immigration politics.** At the time of data collection (April, 2012), immigration reform was on deck to become a central topic for the nation at large, though the issue had not yet reached a crescendo. Public opinion polls taken within six months of this study’s data collection converge to show that most people (58-78%, depending on the poll) agreed with the general concept of a ‘path to citizenship’—that ‘illegal immigrants’ should be allowed “to remain in this country and eventually qualify for U.S. citizenship,” providing they meet certain criteria (e.g. learn English, pass background check). This included majorities in so-called “red” (majority Republican) states. Important to the present study, only 19-
25% of the public (depending on the survey) supported “mass deportation”—sending “all illegal immigrants back to their home country” (See Americasvoiceonline.org, 2011 for summary of polls).

In spite of the growing consensus in favor of a “path to citizenship” and against “mass deportation,” these policy points still showed the most division across party lines; hence, the study’s liberal and conservative policy statements reflected the two contrasting positions. In the liberal statement: “...politicians are not being honest if they say we can find and deport twelve million illegal immigrants. We need to...require those who came here without our permission to register...so we turn illegal immigrants into productive, tax-paying citizens.” In the conservative statement: “It means...tracking down those who overstay their visas...And it means that the 12 million people who’ve come here illegally should not be allowed to remain permanently in the United States.” This particular line of the conservative policy statement may account, in large part, for the message’s low favorability.

Another dimension across which the policy statements differed was whether or not they implicitly conformed to negative stereotyped views of “illegal immigrants.” Historically, Republicans have used stereotyped portrayals of ‘illegal immigrants’ as dependent and criminal to evoke negative responses and garnering support for their position (Luntz, Maslansky Strategic Research, 2005; Luntz, 2007). As a result, the study’s conservative statement included “prosecution for using false security numbers,” and, “not allowing illegal immigrants to receive any kind of public assistance, welfare or medical care.” In contrast, phrasing in the liberal policy statement in the study did not generate these types of negative connotations. Instead, it referenced immigrants who
“obey our laws, work hard and pay taxes” and who will become “productive, tax-paying citizens” and focused the blame on businesses over individuals: “We need to...crack down on employers who violate the law and undercut American jobs with cheap labor,” and later, with a reference to “illegal employers.” The elicitation of the negative stereotype in the conservative statement may also have factored into the sample’s response to the conservative immigration policy.

**The ‘ill’ terminology of ‘illegal immigration’**. There are controversies surrounding the terms of the debate and the appropriate label for someone who has come to this country without legal status; no label is impartial or without its own connotations. As the issue has become more topical, terms have shifted, with variations including “illegal alien,” “illegal immigrant,” and “undocumented worker,” among others. All terms have acquired cultural associations and provoked objections from some. In a July 2012 article for CNN.com, Charles Garcia argued that the term “illegal immigrant” is racially offensive and serves to, “dehumanize the individual and generate animosity toward them” (Garcia, 2012). At the same time, “undocumented worker” is largely associated with the liberal position and can evoke strong negative reactions among the opposition. In conservative strategist Frank Luntz's book, "Words That Work," he lists "The 21 Political Words and Phrases You Should Never Say Again." Included is the advice to “NEVER SAY” “Undocumented workers” and instead to use “Illegal immigrant,” with the precise note that “The label used to describe” these individuals "determines the attitudes people have toward them" (2007, p. 284). During the time frame of this study, “illegal immigrant” was the most commonly used term, and was the
recommendation of the Associated Press Stylebook\(^4\) (as well of the term of choice for editors at the New York Times and CNN) (Garcia, 2012). For these reasons, “illegal immigrant” was the term used in this study’s immigration messages, both liberal and conservative. Nevertheless, it is possible that the use of “illegal immigrant” dampened ratings for the issue of immigration reform in general.

**Political identity and policy preference.** In general, the relationship between political identity and policy preference was a compelling and complex one. Self-reported political identity (party and ideological orientation) predicted preference for the ideologically consistent policies for the energy messages (i.e. liberals preferred the liberal policy, conservatives preferred the conservative policy), but not for the immigration messages. Examined more closely, the lack of congruence between political identity and policy preference for the immigration messages appears to be largely due to the response from those on the conservative end of the spectrum—liberals showed the expected preference for the liberal policy, but conservatives, contrary to expectation, also preferred the liberal policy. In fact, with the exception of Republicans, all groups (ideological and party) preferred the liberal immigration policy to the conservative one. Of note, although ideological groups showed the same preference, the degree of preference did differ along ideological lines: liberals showed the largest difference, followed by moderates, and then conservatives. Another interesting finding regarding immigration policies was that the degree of preference and positivity of ratings were not related; although liberals showed the greatest split in policy ratings (preferring the liberal to the conservative message), conservatives’ evaluations of both policies were more positive than those of liberals and

\(^4\) The AP Stylebook is the standard-setter on word use for all mainstream media, including print, television and radio.
moderates. This was not true for the energy messages—here, liberals preferred the liberal policy and rated it more positively than other groups did; conservatives preferred the conservative policy and rated it more positively than other groups did. The pattern of immigration policy preferences resonates with aforementioned polling data that indicate strong agreement regarding a “path to citizenship” and strong disagreement with “mass deportation” among the public at large, and even among those on the conservative/Republican end of the political spectrum (although to a lesser degree than their liberal/Democrat counterparts). These findings are better understood in light of the following considerations regarding partisanship, current politics, and the NYC sampling population.

**Partisan divide on energy policy: national politics and study messages.** In the country at large, attitudes toward energy policies differ strongly along partisan lines. Public opinion data collected by the Pew Research Center between April 5th and April 14th, 2012 show that, among 12 major realms of political topics, the issue with the second largest partisan divide was the environment (social safety net was 1\textsuperscript{st}, Immigration shared the 5\textsuperscript{th} spot). In the Pew survey, 93% of Democrats, as compared to 47% of Republicans, agreed that there “needs to be stricter laws and regulations to protect the environment.” Of the variables measured (sex, age, generation\textsuperscript{5}, race, income, religious preference), political party identification accounted for the largest amount of the variance on this item, followed by race (90% of blacks agreed, 82% of Hispanics, and 69% of whites). On the item, “People should be willing to pay higher prices in order to protect the environment,” the largest divide was also along party lines; 58% of Democrats and 45% of Independents

\textsuperscript{5} In the Pew Survey, generation was considered as a separate variable from age, dividing the sample into age cohorts (Millennial, Gen X, Boomers, Silent)
agreed with this statement, while only 25% of Republicans did. Furthermore, one of the strongest indications of this partisan split on energy policy is seen in the declining number of Republicans who support funding alternative energy research. In recent years (between 2006-2011), this percentage decreased drastically from 83% to 53% (Pew Values Survey, 2012).

The study’s conservative and liberal energy policies mirror the partisan split on this topic, differing along three major dimensions: (1) renewable sources of energy, (2) traditional sources of energy, and (3) regulation and government involvement. The respective policies also accord with the following summary of liberal and conservative positions on energy and the environment:\(^6\) (Laser, 2012):

\textit{The liberal view}

- \textit{Our health, and our children’s, depends on the quality of the air we breathe and the water we drink. The environment is infinitely precious—and it’s not infinitely capable of healing itself. We need to protect our air and water from pollution, and to preserve unspoiled wilderness from thoughtless development.}

- \textit{The challenge of global warming presents us with an opportunity: by investing in clean energy technology (as China already has done), we can prevent the worst consequences of climate change and reinvigorate our economy.}

\(^6\) The liberal and conservative statements for both issues (Appendix A and B) represent the respective positions of the Democratic and Republican parties at the time of the study. Construct validity is supported by a review of recent Democratic and Republican platforms, as well as public opinion data on the issues (Democratic National Committee, 2012; Halloran, 2012; Pew Values Survey, 2012; Republican National Committee, 2012). In addition to addressing topic-specific differences, the policy statements in the study maintained allegiance to more general liberal and conservative ideological differences in their stance toward business, the private sector, the role of government, and the social safety net.
The conservative view

- The earth is ours to use responsibly. Some people make a religion out of preserving wild lands, but they don’t realize how much of the earth remains untouched. We’re nowhere near using it up.

- When clean energy can compete with fossil fuels in the marketplace—i.e., when it becomes affordable—then it may be widely adopted. Forcing people to pay a premium for “environmentally correct” energy is the wrong way to go.

Figure 8 highlights specific language used in each statement that relates to differences described above.

<table>
<thead>
<tr>
<th>Liberal policy statement</th>
<th>Conservative policy statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable sources of energy: wind, solar</strong></td>
<td>“It’s time we focus on exploring all sources of energy available now...” encourage the private sector to explore both existing and alternative energy sources.</td>
</tr>
<tr>
<td>“...invest in clean, safe sources of energy like the wind and sun that will never run out...”</td>
<td></td>
</tr>
<tr>
<td><strong>Traditional sources of energy: oil, coal, nuclear</strong></td>
<td>“We need to start by promoting new oil exploration...”</td>
</tr>
<tr>
<td>“...set tougher pollution standards for coal and industrial plants that damage our atmosphere...”</td>
<td>“...giving tax incentives to corporations that extract more oil here in America both on and offshore.”</td>
</tr>
<tr>
<td>“... coal and industrial plants that damage our atmosphere...”</td>
<td>“...stop putting up roadblocks to technologies like nuclear energy and clean coal, which are safe and clean.”</td>
</tr>
<tr>
<td><strong>Regulation and Government involvement</strong></td>
<td></td>
</tr>
<tr>
<td>“...set tougher pollution standards for coal and industrial plants...and make them pay if they fail to meet those standards.”</td>
<td>“...encourage the private sector to explore both existing and alternative energy sources.”</td>
</tr>
<tr>
<td>“...invest in clean, safe sources of energy...using technologies that will create millions of jobs and rebuild our manufacturing base.”</td>
<td>“...giving tax incentives to corporations that extract more oil here in America both on and offshore.”</td>
</tr>
<tr>
<td></td>
<td>“...freeing up businesses from government regulations...”</td>
</tr>
</tbody>
</table>

*Figure 8. Dimensions of difference and corresponding phrasing in study’s liberal and conservative energy statements.*
**Partisanship and immigration reform.** As indicated by the Pew Values Survey (2012), there is less of a partisan divide in attitudes toward immigration policy than in attitudes toward energy policy. Yet, the same polling confirms that immigration reform remains a partisan issue, and that in fact, views on immigration have become more partisan and differentiated over the last 10 years. Pew Research Center data show that in 2002, there was on average a four-point difference in how Democrats and Republicans thought about immigration; in 2012, this difference had increased to 24 points (Pew Values Survey, 2012). Nevertheless, the country appears to be in agreement on many central aspects of immigration reform, and this overlap was reflected in the liberal and conservative policy statements used in this study. For example, two aspects of immigration policy – border security and worksite enforcement – were included to some degree in both immigration policy statements. While this does not negate the consequential differences between the liberal and conservative immigration statements described earlier, it may begin to explain the lack of congruence between political identity and policy preference for the immigration messages.

**Immigration politics in NYC.** Although immigration reform was becoming more of a focus in national politics, there is no indication that the topic of “illegal immigration” was a particularly salient issue in New York City at the time of data collection. New York State consistently ranks among the six highest states in immigration population (mainly due to the high concentration of immigrants in New York City); recent reports from both the Department of Homeland Security and the Pew Hispanic Center list it as 4th, with only the California, Texas and Florida having more (Johnson & Hill, 2011; Passel & Cohn, 2011; Hoefer, Rytina, & Baker, 2012). Common sense might predict that
the issue would be a more intense or passionate one in areas where there is a more immediate impact, usually by virtue of high immigrant populations. However, this assumption may not be true upon closer examination. While there is research to suggest that during periods of high attention to immigration in national politics, anti-immigration attitudes increase among “established residents” in the country, living in areas with a larger proportion of immigrants does not appear to contribute to the negativity of these attitudes (Hopkins, 2010). Consistent with this finding, in spite of New York’s large immigrant population, a 2010 Marist poll concludes that immigration was not a major concern for New York City residents. This polling also found that the level of concern did not differ along racial lines: it was of “minor concern” to 45% of whites, 42% of blacks and 38% of Latinos (Marist Poll, 2012; McShane, 2012).

**The relativity of political identification.** The nature of the New York City partisan must be considered in contextualizing the sample and interpreting the data. People’s self-judgments are always relative to those around them: it is not a stretch to imagine that the average participant who identified as “Strongly Republican” in New York City would not be as “strongly” Republican as many people in more conservative areas of the United States. Moreover, the constellation of attitudes and opinions that might characterize the typical New York City Republican may bear little resemblance to those of the Mississippi Republican, or the Iowa Republican. Party labels are just that – labels; they represent views on numerous, specific issues and a handful of broader ideals that are by no means monolithic within the party or for individuals. For this reason, they are potentially a weak proxy for the participants’ pre-existing attitudes on any given issue. Likewise, participants’ ratings of themselves on the spectrum of conservatism to
liberalism are also relative and rather non-specific. Conservatism and liberalism have different meanings to different people. One particularly relevant example: conservatism has at least two popular dimensions, financial and social. Someone who identifies as ‘fiscally’ conservative may be liberal on social issues and vice versa. In a place like New York City, there is a high likelihood that conservatives and Republicans overlap with Democrats and liberals on social issues more than the average person indicating those self-descriptions in other parts of the country.

**Conclusion.** Situating the public policy issues within the political climate at the time of data collection and contextualizing the nature of political identity within NYC offer reasons to suggest it is less valid to consider the conservative message as ideologically congruent for conservatives in this sample. Taken together, considerations of relative partisanship, national attitudes toward each issue, and the character of local politics, help explain why conservatives preferred the liberal immigration message to the conservative immigration message, and why preference for energy policy fell along ideological (and party) lines.

**The Impact of Affective Priming**

In designing this study, broad hypotheses were proposed for a generalized impact of the affective introductions across participants and political groups. Results do not support these initial hypotheses. First, there was no overall effect of the emotionally-compelling introductions independent of considerations of differences in political bent and content of the policy statements. Second, contrary to prediction, political party affiliation was highly determinative of whether the priming manipulation had an impact. Furthermore, the effects of prime, when detected, were often not in the predicted
direction—in many cases, the ‘affective’ introduction was associated with less favorable evaluations than the “non-affective” introduction. Together, what the data point to is that the influence of introductory statements on message ratings depended upon on a host of factors, including partisanship (type and degree), and policy content (topic and ideological position).

Exploratory analyses revealed effects of order and its potential to moderate the effects of prime, adding further nuance and complexity to the analysis and interpretation of priming effects. In several cases, order had an independent effect on evaluations—i.e. irrespective of prime condition, the statement was evaluated more (less) favorably based on whether it was seen following a contrasting policy or in isolation (messages seen first, without any preceding experimental stimuli). For all straightforward order effects, the contrast served to either increase ratings for the group’s preferred policy (e.g. Leaning-Republicans—liberal immigration policy) or decrease ratings for the non-preferred policy (e.g. Democrats—conservative energy policy, Republicans—liberal immigration policy). However, in most cases, order was significant in its relationship to prime. The most prevalent pattern, particularly in the less partisan groups, was that an effect of prime that was present (and oftentimes large) when the message was presented first (as if it were the only message seen), did not hold when the message was presented second. This also suggests an impact of contrast, as well as its relative weight in the evaluative process.

Although unexpected, the differential effects of prime across policy statements, political groups and order were arguably the most interesting aspect of the results; they also remain difficult to interpret. Variations in the specific responses of each group related to differential responsiveness to the immigration and energy messages, the order
in which the two messages were presented to any given participant, and other such factors placed a great burden on the study’s power to analyze the influence of prime. Effectively, results reflect an interaction between policy content, prime, and message order that differed according to political party affiliation. Data were parsed by these factors for analysis, generating small group sizes, which severely limited power and presented challenges to interpretability. Thus, for many of the subgroup analyses that showed large magnitudes of difference based on prime, practical significance could not be justifiably interpreted. There were, however, subgroup analyses in which prime effects were of large enough magnitude to meet the probability requirements for statistical significance, in spite of small group size.

In what follows, the findings regarding prime will be elaborated upon, so as to integrate certain disjointed and underpowered results, and highlight those that showed the most consistency. This elaboration will identify trends in the data that seem to best capture the effect of prime, and relate them to the theoretical foundation for the study.

**Relationship to pre-existing attitudes.** The impact of affective introductions varied based on political party affiliation, and for the most part, were only observed when political party was accounted for. It follows, then, that political party was a moderating factor in the effect of prime. Or, more accurately, something associated with political party mediated the impact of the affective introductions. It stands to reason that the strength and nature of attitudes toward particular political topics is associated with political party affiliation, or partisanship more generally. This prevailing wisdom is corroborated by data from the Pew Research Center that show party identification
predicts opinions on a wide range of political topics, including policies of energy and immigration reform (Pew Values Survey, 2012).

Of interest, while party affiliation moderated the effects of prime, ideological orientation did not. Reasons for this are unclear, given the finding that ideology and party equivalently predicted evaluations with regard to issue and policy preference. Since political party and ideology were highly correlated, it is unclear what accounts for this difference. Other variables in the study did not provide any clarity as to what about party affiliation was more pertinent as regards the impact of introductory sentences. It is possible that party and ideology are both associated with pre-existing attitudes, but that party predicts something further about these attitudes, (e.g. how they relate to prior experience and exposure, how entrenched they are, how evocative counter-attitudes are). While all of these could potentially relate to whether, and how, judgments were affected by emotional appeals (as construed by the introductory sentences), there is presently nothing more specific to add to this speculation.

In the absence of any more precise information on participants’ attitude toward the policy issues, it stands that the most likely explanation of the relationship between prime and political party is that individual’s pre-existing attitudes mediated the effects of prime. Yet, in addition to what’s presented above, there are reasons to believe that party was only a weak proxy for pre-existing attitudes in this sample.

The affective nature of the ‘affective’ introductions. In many cases the affectively valenced introductions were associated with lower ratings; this finding was unexpected, but can be reconciled with the study’s theorized mechanism of affective priming. These results do not accord with the initial hypothesis that the affectively
arousing prime would only act in one direction—to increase positivity of evaluations. However, neither does it present a fatal challenge to the theoretical grounding for this research. It is quite possible that a prime-related decrease in ‘liking’ could have been affectively driven just as much as a prime-related increase in ‘liking’. The finding that the same introduction could positively or negatively influence judgments does not in itself indicate that the ‘affective’ introduction failed to induce affective arousal, though it does indicate that the assumption that induced affective arousal would be consistently of a positive nature needs to be reconsidered. In retrospect, there are many ways to understand why the ‘affective’ introductions in this study may not have generated positive affective states, or at least, not when attached to particular policy content, or across all groups.

One important question is whether an association with lower ratings should be interpreted as a negative impact of the affective introduction or a positive/neutral impact of the non-affective introduction. And vice versa—when the affective introduction was associated with higher ratings, was this on account of a positive response to the affective introduction or a negative response to the non-affective introduction? Both interpretations are equally valid, and the study design is such that attributions of causality cannot be made conclusively. That said, a number of results from the analyses inform this question. Examining factors relevant to the effect of prime, and if they predicted differences in the direction of the effect, provides clues as to potential mediators – how and why the effect occurred.

Affective implications of the differential effects of prime. The direction of the prime effect differed based on issue. For energy, the priming manipulation influenced
judgments positively or negatively, depending on political party group. But for immigration, all effects were such that the affective prime had a negative impact (or the non-affective prime had a positive impact) on evaluations. In addition – and not surprising given the characteristics of the policy content and distribution of message ratings – the introductory sentences were more impactful for the liberal immigration policy than the conservative immigration policy. Based on the aforementioned findings, it appears that, paradoxically, even though energy is a more partisan issue, the sample may have had a more polarized response to immigration reform, suggesting pre-existing attitudes toward immigration may have been more negative, more ambivalent or simply more variable. This may explain the relationship between partisanship and direction of effect for the energy messages (and lack thereof for the conservative messages).

For energy, the direction of the effect was related to strength of partisanship, such that the “affective” introduction was only associated with more positive evaluations in less partisan groups (Leaning Democrats, Independents). Depending on the issue, policy position, and order of presentation, there were some cases in which the reverse was true – when less partisan groups evaluated a policy more favorably in the “non-affective” condition. However, there was no case in which the partisan groups (Republicans, Democrats) evaluated a message (liberal or conservative policy) more favorably when paired with an “affective” introduction.

One interpretation of this finding is that the affective prime influenced judgments in the manner initially hypothesized (generating more positive evaluations through affective mechanisms) only when pre-existing attitudes were less formed, or less strongly
held. In contrast, when attitudes are more stable or entrenched (as for partisan groups), affective appeals had a negative impact (or no impact).

Another possible explanation for this finding is that partisans’ greater exposure to the issues makes them more alert to attempts at persuasion. The ‘affective’ introduction may have stood out more starkly as a means of influence when paired with an ideologically incongruent policy (e.g. Democrats-conservative policy, Republicans-liberal policy). The strong language may have felt, to partisans, as if something was being ‘sold’ to them, thud prompting less favorable evaluations, especially if they recognized the subsequent policy as one representing the position of the national Democratic or Republican party. This also may imply that, for partisans (and perhaps other groups as well), some inference as to what the experimenter was interested in may have negated the influence, or in fact prompted the opposite response (See Orne, 1962; Stafford, 2000; Schwarz & Bohner, 2001). Many of the findings regarding differential effects of prime based on order, also support the idea that the effect of prime was erased or reversed by some negative reaction to the comparison, whether in policy, or affective valence. After the contrast, the sense that they were being pushed toward (or away) from something may have been even more pronounced, prompting a stronger affective reaction.

Although the appeal of the “affective” introductions is based on values that are presumed to be rather universal, it is possible that the affective primes were themselves negative stimuli for certain groups, or when combined with certain policies; this too would implicate affect in the evaluative process, also in a negative direction. For example, the frame of “national security,” “freedom,” and “self-sufficiency,” used in the energy prime, may have felt pejorative to Republicans, who evaluated the non-affective
message more favorably for both the liberal and conservative policies. If this is the case, then a negative affective reaction is implicated in the effect on judgments.

Even if the results are considered as a positive reaction to the “non-affective” introduction, affect may be the driving factor—in this case toward resolving negative affect or conflict. Very speculatively, it is possible the non-affective introduction had a mitigating effect on the controversial policy points and/or language in both of the immigration messages, such that, when framed as “practical” and “sensible,” ambivalent or unpopular attitudes were more easily rationalized than when framed by an affective appeal to values. Though the “non-affective” introductions were conceptualized as bland and non-stimulating, for the immigration policies, this may have been in the service of neutralizing more negative or provocative attitudinal objects.

**Limitations and Suggestions for Future Research**

This dissertation project was broad in its scope, covering both energy and immigration policies, and involving complex stimuli (e.g. paragraph length statements with multiple policy points). While these aspects of the study design bestowed certain advantages, they also provided opportunity for excessive variation that limited the power of the data analyses and increased the possibility that the effects of the priming manipulation would be obscured. Methodologically, anonymous surveys have obvious benefits in their brevity, and accessibility of participants. The disadvantages naturally follow. For example, information can be obtained only once; there can be no follow up with participants. The randomness of the sample selection is useful, but characterization of the sample on anything other than basic categories, is not possible. The opportunity to
more conclusively address the questions of this research was limited as well by other aspects of the study design and methodology that should be noted.

The study would have benefitted from an independent analysis of the introductory sentences. This would have served as a validity check for the premise that these were (a) apolitical, and (b) qualitatively different in emotional valence. In both conditions, the sentences were constructed to be equally consistent with a liberal or conservative political message, and thus appropriate to match with both. It would have been a useful addition to the study, however, to see if, separate from the policy statements, political groups responded differently to the primes. A separate study, investigating reactions to the primes in and of themselves, might have allowed for better understanding of how the values-based language or emotional valence might be having an impact.

Similarly, the inclusion of a control group who received the policy statements in the absence of any introductory sentences would have enhanced the study. The bland introductory sentences were used as a control for the affectively valenced introductions, to keep consistent the length of message and structure of argument (introduction, 3 body points). An additional level of control could have been achieved by the inclusion of a group who received a version of the questionnaire with only the policy portions of the messages. In sum, a more pure form of control might have enabled isolation of the effect of the prime in a more specific way.

The decision to give multiple messages to each participant granted the opportunity to collect a greater amount of data without having to increase the sample size. However, in retrospect, a simpler design might have provided more clarity of analysis. Looking at two issues advantaged the study in that it helped avoided erroneous
conclusions and generalizations that might have come from only testing one issue. Nevertheless, the inclusion of two issues, as well as the decision to present four messages, increased the complexity of the analysis and added substantial variance that could not be accounted for. At the same time, while confounding, this additional variance is relevant to the understanding of how evaluative processes operate, and should inform future research.

An independent means of assessing attitudes toward the issues (e.g. how important is the issue of immigration reform to you?) would have improved the study by helping to answer the question of how prior opinion might mediate response to the primes. As variables in the analysis, self-identified political party and ideological orientation were interpreted as a measure of prior attitude toward the issues; however, they were only weak proxies in this regard, perhaps especially so in the political context of New York City. Although questionnaire items inquired into participants’ level of political knowledge and interest, straightforward questions on how important these two specific issues were to the participant would have been useful additional data points.

**Conclusions Regarding the Primacy of Affect and Unconscious Processing**

The study began with a theoretical frame of reference that privileged emotion over cognition in information processing, and held that much of this processing goes on outside of conscious awareness. There is ample research to support the ubiquity of emotional processing, its importance in linguistic communication, and most importantly, that affective factors drive decision-making. In this investigation, affectively charged linguistic primes were utilized as a mechanism to activate this emotional channel of decision-making.
Although the affectively valenced introductory statements did not have the direct effect expected (or at least not to the extent that it outweighed or overshadowed other relevant factors) many aspects of the findings support the pre-eminent role of affect in the evaluative process. In light of the complexities of the evaluative process and the variegated nature of the stimuli used in the study, the magnitude of the priming effects is noteworthy and an affectively motivated influence is posited. Patterns in the data related to order of message presentation are also of interest in this regard, as an effect based on contrast could potentially operate through the same mechanism--by altering one's affective state. However, the nuanced findings regarding the differential effects of the introductory sentences do not allow for more than speculation regarding the specifics of how the affective priming impacted judgments. Questions remain about whether the issues, policy positions and content of the primes themselves were positive, negative or ambiguous stimuli for the participants in general or for specific subsets of participants, diminishing generalizability.

Due to the lack of knowledge regarding participants’ conscious attention to the presence or absence of the introductory sentences, the role of unconscious processing in this study is inconclusive. There is some indication, at least in some conditions, that the participants may have taken conscious notice of the affective introductions, but there is insufficient information to address this more comprehensively.

To conclude, the way people relate to political issues is steeped in a variety of emotional associations, attitudes, and experiences. The results of this dissertation project provide additional support for the notion that politics and the public’s attitude toward various policies depend on context, language and other aspects of how information is
presented. The overall thrust of the findings is consistent with the premise that the psychological state in which one receives (in this case, reads) a political message affects one's judgment of the material. Research into the means of this affective influence is fertile ground for future research.
APPENDIX A: ENERGY POLICY STATEMENTS

**Liberal**
It’s time we invest in clean, safe sources of energy like the wind and sun that will never run out, using technologies that will create millions of jobs and rebuild our manufacturing base. We need to set tougher pollution standards for coal and industrial plants that damage our atmosphere, and make them pay if they fail to meet those standards. And we need to cut the taxes of families for every dollar they spend on insulating their homes and buying fuel-efficient appliances and vehicles.

**Conservative**
It’s time we focus on exploring all sources of energy available now, by freeing up businesses from government regulations that interfere with their ability to get the job done. We need to start by promoting new oil exploration, giving tax incentives to corporations that extract more oil here in America both on and offshore. We need to stop putting up roadblocks to technologies like nuclear energy and clean coal, which are safe and clean, and encourage the private sector to explore both existing and alternative energy sources.
APPENDIX B: IMMIGRATION POLICY STATEMENTS

**Liberal**
We need to get our borders under control and to crack down on employers who violate the law and undercut American jobs with cheap labor. But politicians who say we can find and deport twelve million illegal immigrants aren’t being honest. We need to take tough measures to secure our borders, crack down on illegal employers, and require those who came here without our permission to register, obey our laws, work hard and pay taxes, so we turn illegal immigrants into productive, tax-paying citizens.

**Conservative**
That means immigration reform must begin -- and end -- with secure borders. It means a strict enforcement policy at places of employment, including prosecution for using false security numbers, tracking down those who overstay their visas, and not allowing illegal immigrants to receive any kind of public assistance, welfare or medical care. And it means that the 12 million people who’ve come here illegally should not be allowed to remain permanently in the United States.
APPENDIX C: INTRODUCTIONS TO ENERGY MESSAGES

Affective
There’s nothing more important that we can do for our national security, our economy and the earth we leave our children than to end our dependence on foreign oil. Freedom, independence and self-sufficiency are at the heart of who we are as a nation, and they should be at the heart of a robust strategy for energy independence in the 21st century.

Non-Affective
To address our growing energy problems we need economically feasible policies that consider issues of energy production, distribution and consumption, taking into account relevant environmental factors. Ensuring future energy security for our nation means drawing upon the full range of energy sources, including alternatives.
Affective
The first and most important job of government is to protect its people, and you can’t protect your people if you can’t protect your borders. We need comprehensive and effective immigration reform, not a band-aid. It’s time our leaders stop trying to score political points and start solving problems.

Non-Affective
We need to address the problem of illegal immigration and find practical resolutions to fix the current situation. Having borders that are not properly regulated is not sensible public policy. It’s time to take steps to improve the naturalization process now and for the future.
APPENDIX E: DEMOGRAPHIC AND POLITICAL QUESTIONS

The remaining questions ask some background information about you.

Are you: □ Male □ Female

How old are you? _____

What is your marital status?
□ Married
□ Widowed
□ Divorced
□ Separated
□ Never married
□ Partnered, not married

What is the highest grade of school or year of college you completed?
□ 0 -11 years
□ High school graduate
□ Technical or vocational school beyond high school
□ 2 years of college or less
□ 2 years college (junior college)
□ More than 2 years of college/no degree
□ 4-year college graduate
□ Post college education

What racial or ethnic group or groups best describes you?
□ Black/African American
□ Asian/Pacific Islander
□ Native American/American Indian
□ Hispanic/Latino
□ White/Caucasian
□ Other: ___________________

Last year, in 2011, what was your total family income from all sources, before taxes?
□ Less than $25,000
□ $25,000-$34,999
□ $35,000-$49,990
□ $50,000-$74,999
□ $75,000-$99,999
□ $100,000-$149,999
□ $150,000-$250,000
□ $250,000 or more

Some people don’t pay much attention to the political news. How about you? How interested would you say that you have been in the political news so far this year?
□ Very much interested
□ Somewhat interested
□ Not much interested
How many days in the past week did you watch the news on TV or read the newspaper or use the internet to get political news?

- None
- 1-2 Days
- 3-5 Days
- 6-7 Days

When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, extremely conservative, or haven’t you thought much about this?”

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate or middle of the road
- Slightly conservative
- Conservative
- Extremely conservative
- Don’t know, haven’t thought much about this

Generally speaking, do you think of yourself as a Republican, a Democrat, an Independent, or something else? If you consider yourself a Democrat or a Republican, is that strongly or not so strongly? If you consider yourself an Independent, do you lean Democrat or lean Republican? Even if you lean ever-so-slightly toward one of the parties, put yourself in one of the Independent-lean categories.

- Strongly Republican
- Not so strongly Republican
- Independent-leaning Republican
- Pure Independent
- Independent-leaning Democrat
- Not so strongly Democrat
- Strongly Democrat
- None of these labels describe me

Over the last 10 years, which of the following have you done? Check all that apply

- Signed a written or email petition about a political or social issue
- Participated in online political discussions
- Contacted a newspaper or magazine to express your opinion on an issue
- Attended a public forum or government meeting
- Called in to a radio or television talk show to express your opinion on a political issue
- Contributed time or money to a political campaign
- Taken part in a demonstration, protest, boycott, or march concerning a political issue
- Contacted an elected official by telephone, letter, email or in person
- Voted in most national elections
- Voted in most state and local elections

Thank you for participating in this survey!
Please read the following statement by a candidate for national office. Afterwards, you will make some judgments about it.

**Candidate A:** There’s nothing more important that we can do for our national security, our economy and the earth we leave our children than to end our dependence on foreign oil. Freedom, independence and self-sufficiency are at the heart of who we are as a nation, and they should be at the heart of a robust strategy for energy independence in the 21st century. It’s time we invest in clean, safe sources of energy like the wind and sun that will never run out, using technologies that will create millions of jobs and rebuild our manufacturing base. We need to set tougher pollution standards for coal and industrial plants that damage our atmosphere, and make them pay if they fail to meet those standards. And we need to cut the taxes of families for every dollar they spend on insulating their homes and buying fuel-efficient appliances and vehicles.

**How much do you agree with the statement you just read?** Please give a rating from 0 to 10 by circling a number below, where 10 means you strongly agree with Candidate A, and 0 means you strongly disagree with Candidate A, and you can be anywhere in between.

0 1 2 3 4 5 6 7 8 9 10

Strongly Disagree ------------------------------------------------- Strongly Agree

**Based on everything you heard, would this statement make you more or less likely to vote for Candidate A?** Please give a rating from 0 to 10 by circling a number below, where 10 means the statement you just heard would make you much more likely to vote for Candidate A, and 0 means you would be much less likely to vote for A, and you can be anywhere in between.

0 1 2 3 4 5 6 7 8 9 10

Much less likely ------------------------------------------------- Much more likely
REFERENCES


http://dx.doi.org/10.3886/ICPSR34633.v1


Foroni, F., & Semin, G. (2009). Language that puts you in touch with your bodily
feelings: The multimodal responsiveness of affective expressions. *Psychological Science*, 20(8), 974-980


Nunberg, G. (2006). *Talking right: How conservatives turned liberalism into a tax-


Siegel, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are.* New York: Guilford Press.


