AFFECTIVE INTELLIGENCE, THE POLITICAL PERSUASION PROCESS, AND OUTCOME INTENT: AN EXPERIMENTAL TEST

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ABSTRACT

Political communication scholars aim to understand the effect of messages on political attitudes and behavior. Past scholarship has identified three sources of influence in forming attitudes and behavior: affective, cognitive, and personality factors. While much attention has been paid to the impact of each single factor, little research has attempted to integrate them. Using the Affective Intelligence model as a theoretical point of departure (Marcus, & MacKuen, 1993; Marcus et al., 2000), this dissertation explored the simultaneous—and, in some cases, interactive relationships—between these attitudinal and behavioral influences.

An experiment was conducted to answer three questions: first, do the causal claims made by Marcus and colleagues regarding the impact of emotion on political attitudes and behavior hold-up outside the realm of survey research? Second, what role does cognitive appraisals of messages play in the political persuasion process? Finally, does political efficacy moderate the relationships between induced emotional response, cognitive appraisals of messages, and political attitudes and behavior? Alternatively stated, does political efficacy link these factors together?

The results of this study should be carefully interpreted as the causal instrument underlying manipulated attitudes was not transparent. The desired experimental manipulation—induced anxiety—was not unidimensional. While inductions did induce negative affect, they simultaneously induced positive affect. Within the confines of this document, this result is discussed at length and numerous possible explanations are offered.

Structural equation modeling indicated that affect had a small impact on political attitudes and behavior. Likewise, the impact of cognitive appraisals of messages on attitudes and behavior was small. Alternatively, internal efficacy had a substantial main effect—not an interactive effect—on political attitudes and behavior.

In summary, the results demonstrated the power of personality in predicting political attitudes and behavior. By trait, some individuals are more politically efficacious than others. Those with higher levels of internal efficacy tended to identify experimental messages as relevant to the attitudes they held, indicating that confidence in one's ability to comprehend politics and understand political happenings leads to identifying message content as applicable or appropriate. Additionally, these same individuals were likely to seek out more information about politics.

CHAPTER I

INTRODUCTION

The study of emotion and its effect on political attitudes and behavior has received considerable attention in the last twenty-five years (e.g., Abelson, Kinder, Peters, & Fiske, 1982; Brader, 2005; Conover, & Feldman, 1986; Hullett, Louden, & Mitra, 2003; Marcus, 1988; Marcus, & MacKuen, 1993; Marcus, Russell, & MacKuen, 2000; Ragsdale, 1991; Rudolph, Gangl, & Stevens, 2000). About twenty-five years ago, a marked change in scholarship occurred when affect—which had long been held to be inferior and potentially detrimental to cognition—became the focus of many political studies (Marcus, 2003). The emergence of new research programs focusing on political affect challenged conventional wisdom regarding the supremacy of cognition—a notion that dated back to Plato (1974).

Despite the emergence of affect as an important construct in the realms of political communication and political psychology, scholars tend to adhere to either rational choice (Downs, 1957) or affective theoretical viewpoints (e.g., Marcus, & MacKuen, 1993, Marcus et al., 2000) rather than an integration of the two. That is, despite the existence of these competing schools of thought, little work has been done to explain how both affect and cognition work together to determine political attitudes and behavior. In the past, when studies have integrated political affect and cognition, the focus of empirical questions has involved simultaneous regression analyses where the aim has been to increase predictive utility. Other studies have incorporated both affect and cognition merely to control for the variable that is *not* of theoretical interest. Still,

others have utilized both affect and cognition in more advanced models, but have conceptualized one or the other as theoretically exogenous.

In the following pages, this dissertation will explore both cognitive and affective thought in the political, psychological, and communication disciplines. In addition, the dissertation will identify the role of the economy as an important predictor of political attitudes and behavior. Furthermore, I will introduce and discuss the Affective Intelligence model—the guiding theoretical framework underlying this dissertation. I will review the literature pertaining to the Affective Intelligence model and identify problems with past empirical studies that have led to conflicting research findings. In response to these conflicting results, I will offer an explanation in the form of a revised model. This revised model will bridge political thought from the cognitive, affective, and personality literatures.

Political science, communication science, and political communication

Political theorist David Easton (1953) put forth, arguably, the most notable definition of politics when he described it as "the authoritative allocation of values for a society" (p. 129). Underscoring this statement is the belief that a limited supply of valuable resources, possessions, and objects of importance exist in society. Consequently, understanding the shape and causal nature behind the distribution of control of these resources, possessions, and objects of importance is—according to Easton—the central interest of political scientists. Easton's outlook is intentionally wide-ranging allowing for the scholastic inquiry of a variety of political issues.

Likewise, communication science has adopted a broad scholastic purview. While many communication science research programs emerged from the rhetorical tradition, the current boundaries of communication extend well beyond the study and application of Aristotle's canons. Scholars Steven Chaffee and Charles Berger (1987) noted that at its most basic level communication science involves human interactions across a variety of levels (e.g., intra-individual, interpersonal, network, mass) under a variety of topical issues and circumstances (e.g., interpersonal influence, news media, television violence). Among its numerous sub-disciplines, communication science supports relational, organizational, and public opinion scholarship. While distinctions between these sub-disciplines can be made within the field of communication, the common underlying trait they share is the study and interpretation of messages.

Within these broad, over-arching domains of political science and communication science, the interdisciplinary field of political communication exists. Doris Graber (2005) defined political communication as "the construction, sending, receiving, and processing of messages that potentially have a significant direct or indirect impact on politics" (p. 479). Others like Steven Chaffee (1975) have simply stated that political communication is the "role of communication in the political process" (p. 15). While political communication is subsumed under both political science and communication disciplines, it is still a large, wide-reaching field that includes a variety of research interests and topics. Among these interests, the examination of political attitudes and behavior is a research area that scholars have dedicated considerable effort to understanding. Efforts toward understanding the role of cognitive and affective predictors in formulating

attitudes have led political communication scholars to draw upon research from the field of psychology. This dissertation benefits from examining some of the thinking about attitudes and behavior that have emerged from that discipline.

Cognitive and affective thought in psychology

When examining how attitudes are formed, developed, or changed, psychologists have noted that attitudes can be a function of either or both cognitive and affective influences. Historically, scholars have distinguished between cognitive and affective constructs using both simple and complex frameworks. Early psychological thought characterized cognition as "reasoning" or "thinking," while conceptualizing affect as "emotion" or "passion" (Marcus, 2003, p. 187). While modern psychology has expanded to include perspectives that incorporate psychological states comprised of *both* cognition and affect (e.g., sentiments, interests), vague explications about what specifically qualifies as a cognitive or affective construct still remain (Marcus, 2003). Although from early on scholars recognized the powerful influence of affect on the formation of attitudes, scholastic writings about emotion typically characterized it as an interference or nuisance to be controlled and avoided whenever possible.

During the 1980s, psychologists began to pay closer attention to the role that emotion has in formulating attitudes. While the origin of this revolution in thought focused on whether affect or cognition causally preceded the other (e.g., Zajonc, 1980; 1984; Lazarus, 1984), the debate ultimately illuminated the power of emotion to shape attitudes. In particular, scholars (e.g., Zajonc, 1980; 1984) began to observe that it was overly simplistic to assert that an individual's attitude about some stimulus was solely a

function of his or her cognitions. If this were true, the introduction of contrary evidence would be the only requirement for attitude change. In short, anyone inclined to elicit persuasion could easily change other's minds based on the manipulation of evidence.

While psychologists consider a variety of settings where attitudes and behavior can vary substantially, scholars of politics examine a narrower domain. In other words, while psychologists have considered the role of cognition and affect across a range of contextual settings, political psychologists focus their attention on examining cognitions and affect associated with political candidates, issues, and events.

Cognitive and affective thought in politics

In his review of the various cognitive approaches to studying political attitudes and behavior, Donald Kinder (1994) observes a common underlying theme. He writes: "citizens muddle through, doing the best they can, given incomplete and uncertain information and inherent limitations in processing capacity. The basic task of citizenship implicit in these studies is the adequate management of information" (p. 278). In other words, according to Kinder, the cognitive approach to studying political attitudes involves identifying certain mental abilities (e.g., memory, knowledge, attention) and, subsequently, using those cognitive variables in causal equations predicting attitudes, vote choice, issue beliefs and so on.

Alternatively, affective approaches to studying political attitudes identify emotions as the driving agent in determining candidate preference and issue involvement, while also serving as a defining force in the interpretation of political events. Marcus et al. (2000) have observed that political scholars measure affect in relatively simplistic

terms. They write: "for most of the common era the term typically used to identify the political impact of affect has been *passion*"[1] (p. 14). More modern approaches like that put forth by Glaser and Salovey (1998) have defined affect as a state of "acute, differentiated arousal" (p. 157) in response to a political stimulus.

Like the cognitivists, scholars of political affect have offered competing equations where affect takes center stage as the causal agent in forming political attitudes and behavior. In particular, Glaser and Salovey note that most affective-centered research tends to pit affective and cognitive models against one another in an attempt to see which theoretical side will win. It is notable that under the investigation of numerous independent scholars, affective models have outperformed their cognitive counterparts (e.g., Abelson et al., 1982; Granberg, & Brown, 1989; Jones, & Iacobucci, 1990; Ragsdale, 1991).

The role of the economy in political attitude formation

Marcus et al. (2000) are not alone among political scholars when they observe that "the most obvious candidate for translating reality into emotional resonance is the state of the economy" (p. 76). Since the 1970s, scholars have spent considerable efforts investigating the role of the economy in formulating political attitudes and behavior (e.g., Conover, & Feldman, 1986; Conover, Feldman, & Knight, 1987; Kenski, 1977; Kinder, & Kiewiet, 1981; Lau, & Sears, 1981; Rosenstone, Hanson, & Kinder, 1986; Sniderman, & Brody, 1977). One of the most common examples of the economy affecting political attitudes is "the pocketbook prediction." The pocketbook prediction argues that

[1] Italics by Marcus et al. (2001).

individuals assess their personal financial situation and vote accordingly. If their personal situation is favorable they will support the incumbent; otherwise, they will support the challenger.

While a substantial amount of research has investigated the pocketbook prediction, some scholars have argued that macro-level estimates of the nation's economic situation are better predictors of political attitudes than personal finance estimates (Kinder, & Kiewiet, 1981). It has been argued that by estimating whether the nation is doing well, individuals may, in fact, be gaining an indirect measure of what the future holds for them. Irrespective of micro or macro perspectives, the state of the economy has been demonstrated to have a persuasive impact on political attitudes and behavior.

Novelty and the persuasive process in brief

In a world filled with messages competing for attention, psychologists have long understood that when individuals encounter a novel, unusual, or arousing stimulus (e.g., a message) they tend to focus on it. Such attention garnering responses are called orienting responses (OR). In brief, an OR occurs when some aspect of a stimulus causes attention to automatically shift. Wise and Reeves (2007) have noted that "novelty is a key factor in determining whether something will elicit an orienting response" (p. 552). In other words, when a stimulus contains arousing content, individuals tend to direct their attention to the stimulus (see Potter, 2000, for a review of the OR literature). This claim is manifested on a daily basis when car engines backfire, horns honk, or when individuals

are aroused by messages that shift their attention from "business as usual" to focus on the causal source.

Additionally, scholars have noted that when attention is focused on a message, a natural reaction is to think about the message—in particular, about how to handle it (Marcus et al., 2000). In other words, with increased attention, levels of scrutiny and thinking about the message are also likely to increase. This increased thinking can manifest itself in a variety of ways, including positive and negative thoughts about the message (e.g., Greenwald, 1968; Petty, & Cacioppo, 1986), evaluations of message quality (e.g., Lavine, & Snyder, 1996), and evaluations of message relevance (e.g., Hullett, 2002). Finally, numerous scholars (e.g., Fishbein, & Ajzen, 1975; Witte, 1992) have noted that cognitive evaluations of messages are strong predictors of behavioral intentions and outcomes associated with the message.

Dissertation objectives

Given a history of research suggesting that either emotional or rational processes alone affect political attitudes and behavior, the following dissertation proposal puts forth an alternative argument: Using Marcus' Affective Intelligence model as a theoretical starting point, I adopt a linear model of political persuasion making the case that variation in message novelty leads to variation in cognitive responses/evaluations which, in turn, leads to variation in behavioral outcomes—namely, message learning and behavioral intention to learn about politics. In the coming pages, I will review Marcus' Affective Intelligence model, consider political efficacy as a moderating influence in the political

persuasion process, and propose a revision of Marcus' Affective Intelligence model to be empirically tested.

CHAPTER II

THE AFFECTIVE INTELLIGENCE MODEL

While scholars in psychology have produced a number of affective theories (e.g., Lazarus, 1991; Russell, 1980; Watson, & Tellegen, 1985), few of these theoretical perspectives have adequately explained political attitudes and behavior (Marcus, 2003). That is, while most affective theories sufficiently explain attitudes and behavior in general, they do not effectively explain *political* attitudes and behavior in particular (see Abelson et al., 1982; Marcus, 1988; Marcus, & MacKuen, 1993; Marcus et al. 1995; 2000 for a discussion). Thus, political psychologists adopt the perspective that emotion functions differently within the domain of politics. They argue that theories of affect developed in the fields of clinical and social psychology do not adequately explain political attitudes (Marcus et al., 2000).

Political scientists George Marcus and Michael MacKuen (1993) began developing a dual systems approach to explain political attitudes and behavior about 15 years ago. This approach takes a unique perspective in that it emphasizes affect—not cognition—as the underlying determinant of political attitudes and behavior. According to the Affective Intelligence model, two subsystems of the brain—the behavioral approach system and the behavioral inhibition system—govern attitudes and behavior either through (1) the enactment of behaviors based on procedural norms, or (2) by altering routine behaviors to account for an anxiety-inducing threat.

The chief hypothesis of the Affective Intelligence model is that when a threat is introduced, it raises anxiety levels which, in turn, causes individuals to seek out

information about the source of the threat (be it a political issue, political candidate, etc.). As a result, Marcus and colleagues argue that when anxiety levels are raised, adherence to previously held political attitudes diminishes, leaving individuals vulnerable to persuasive messages that they would otherwise not consider (Marcus et al., 2000). Consequently, a linear relationship between induced anxiety and both attitudinal and behavioral outcomes is hypothesized. Thus, the Affective Intelligence model does not differentiate between individuals of varying cognitive abilities or psychological traits. Rather, it identifies anxiety as a causal force leading individuals to seek out new information and figuratively scratch their anxiety-induced itch.

Psychological origins

The Affective Intelligence model is based on James Russell's (1980) circumplex model of emotion. Russell's circumplex emerged as an alternative to either a simple valence account of emotion or, conversely, more complex independence- assuming discrete models of emotion. Simple valence models characterize emotional responses as falling along a single approach/avoidance continuum. Thus, affective reactions can be classified as either positive or negative. Alternatively, discrete models posit that there are a limited number of emotions (e.g., 8 different emotions), and that each emotion distinctly leads to a different behavioral outcome. For instance, when an individual is "anxious" he or she will act in a way that is qualitatively different from how he or she will act when "sad."

Challenging these perspectives, Russell (1980) put forth a model that conceptualizes affect as comprised of two-dimensions: arousal and pleasure. Each of

these dimensions is bipolar and is conceptualized as orthogonal to the other. According to the circumplex, a particular emotional state is determined by the combined influence of each dimension or factor. The arousal factor ranges from emotional states high in stimulation (e.g., elation) to those low in stimulation (e.g., sleepy). Alternatively, the pleasure factor ranges from emotional states high in pleasure (e.g., happy) to those low in pleasure (e.g., sad). Every emotional state is a function of the additive combination of these two dimensions. Consequently, one can map-out emotional states along the perimeter of an imaginary circle that surrounds the factor plane. As a result, emotions that are geographically close to each other in factor space are also similar qualitatively.

Finally, it is worth repeating that Russell's circumplex both theoretically and statistically assumes that the two affective factors are independent of each other. This is an important assumption that psychologists have consistently attempted to empirically verify during the last 25 years. Despite empirical verification in a variety of clinical and non-clinical domains, scholars have not been able to consistently demonstrate zero correlations between factor dimensions when applying the two-dimensional model to politics (e.g., Abelson et al., 1982). While the Affective Intelligence model conceptualizes emotion as two-dimensional, it builds upon this by explaining the underlying subsystems of the brain that direct this emotional elicitation.

Neuroscience origins

Imaging studies from neuroscience have repeatedly confirmed the existence of two subsystems in the limbic system representing the behavioral approach system and the behavioral inhibition system. These subsystems simultaneously operate guiding human

attitudes and behavior (Gray, 1970; 1981; 1990; Marcus et al. 2000). Each subsystem has two chief responsibilities: (1) develop distinct emotional states; and (2) guide individual action. Not only do the subsystems produce different emotional responses, they enact certain behaviors aimed at maximizing individual successes and minimizing individual failures.

The behavioral approach system

The behavioral approach system governs attitudes and behavior based on procedural memories established from past experiences and learned routines (Cacioppo, & Berntson, 1994; Shen, & Dillard, 2007). During the course of life, individuals learn skills of both simple and complex varieties. Regardless of levels of complexity, mastery of a particular skill requires making mental note of the steps, stages, and procedures required to successfully accomplish a particular task. In other words, individuals learn how to accomplish certain tasks by retaining the information gathered during the learning process and, subsequently, use that information to (1) guide expectations for future similar situations as well as (2) enact the learned routines when those future situations occur.

One way of conceiving of this process is through a discussion of habit. Simply put, habit drives the behavioral approach system. As Marcus et al. (2000) observe, even the most basic of behaviors (e.g., tying one's shoes) requires a series of smaller steps that are learned, internalized, mastered, and enacted without much conscious effort. Similarly, the behavioral approach system is comprised of the sum total of an individual's learned habits and resulting expectations based on them. The implications of this are meaningful.

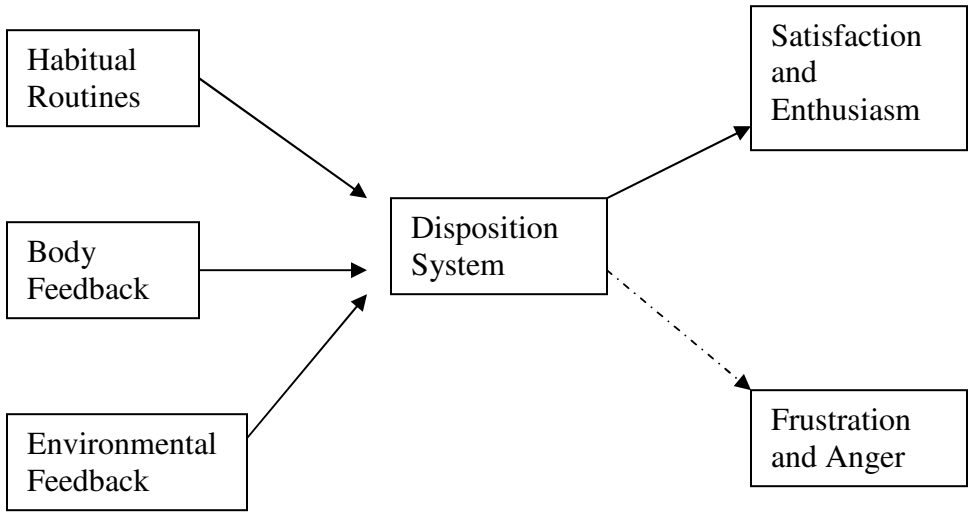
When an individual is successful at some undertaking (as a function of enacting the learned routines internalized from previous experiences), the behavioral approach system produces excitement and enthusiasm. Conversely, when an individual fails or struggles with a given endeavor, the behavioral approach system produces anger and frustration (see Figure 1). Thus, the behavioral approach system produces emotional states that range from pleasure to sadness.

The behavioral inhibition system

While the behavioral approach system enacts procedural routines, the behavioral inhibition system is simultaneously operating. The behavioral inhibition system constantly monitors the environment for potential threats, focusing on stimuli that are unexpected or atypical. The sole purpose of the behavioral inhibition system is to halt current behavior when a threat is detected (Gray, 1970; 1981; 1990). Underlying the idea of the behavioral inhibition system is a notion of self-protection. One might think of the behavioral inhibition system as a home security alarm. That is, the behavioral inhibition system is *not* responsible for any action other than redirecting attention to the source of the threat. Marcus and MacKuen (1993) characterize the influence of the behavioral inhibition system best when they write: "the appearance of a novel or threatening intrusion causes us to stop, look, listen, and get ready for action" (p. 673) (see Figure 2). When the behavioral inhibition system encounters a potential threat or stimulus that defies expectations, the result is the production of anxiety. To alleviate this psychologically uncomfortable state, individuals will seek out the anxiety-inducing

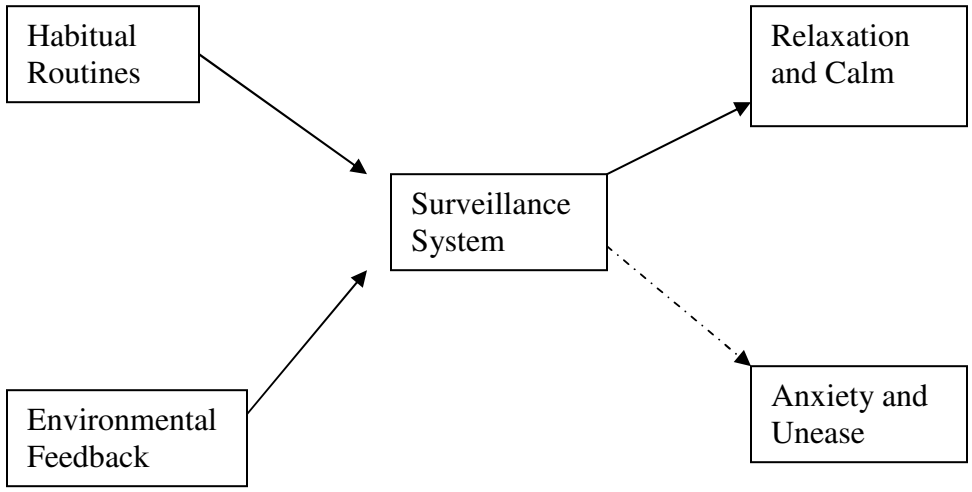
source. Alternatively, if no threatening stimulus is encountered, the behavioral inhibition system maintains a state of calmness.

Figure 1: The behavioral approach system as modeled by Marcus et al.'s (2000) Affective Intelligence and Political Judgment



Note: whole line indicates success; dashed line indicates failure.

Figure 2: The behavioral inhibition system as modeled by Marcus et al.'s (2000) Affective Intelligence and Political Judgment



Note: whole line indicates no recognition of threat; dashed line indicates alert

Affective intelligence and politics

Applied to politics, the simultaneous operation of these systems has meaningful implications for persuasion. The Affective Intelligence model argues that it is possible to alter political perspectives, enable party defections, and generally change political attitudes and behavior through the manipulation of the behavioral inhibition system. The central idea is that by introducing a threat and stimulating anxiety, it is possible to cause individuals who are otherwise not persuadable to be persuaded. By redirecting the attention of an individual to the source of a political threat (i.e., orienting), the Affective Intelligence model argues that the anxious individual lends his or her ears to a position that he or she would otherwise preemptively dismiss or ignore. Consequently, by providing an opportunity to be heard, the Affective Intelligence model opens the door for opposing arguments.

The assumption of political apathy

The key assumption underlying the Affective Intelligence model is that most people are chronically inattentive to politics. This apathy is the end result of learned or habitual routines and is a function of the behavioral approach system at work. The model argues that because political candidates, elections, and other political occurrences tend to follow patterned, repetitive formats, individuals internalize this political blueprint of sorts and stop paying attention to politics. In short, the model assumes that individuals operate out of a state of cognitive management, limiting their attention to politics due to the belief that politics is predictable and not worthy of effortful, close scrutiny. Thus, for most

individuals their conception of politics is formulated earlier in their lives and is habitually enacted thereafter.

One example of chronic political apathy is party identification. In the past 50 years, no other variable has been more predictive of political attitudes and behavior. Seen through the lens of the Affective Intelligence model, party identification is a cognitive heuristic—an embodiment of past learned routines. Accordingly, party identification is not rational—rather, it is habitual. Individuals adhere to partisan loyalties out of custom. The Affective Intelligence model argues that at some point during their lives, individuals adopted the identification of "Democrat," "Republican," or "Independent" and have thoughtlessly continued down the path of partisanship ever since this initial decision (Marcus et al. 2000).

The role of enthusiasm

The Affective Intelligence model argues that generating enthusiasm is the key to increasing like-minded, habitual (e.g., within-party) political involvement. Recall the influence of the behavioral approach system. When political stimuli match the expectations of individuals, a sense of enthusiasm or pleasure is exhibited. In other words, when the enactment of procedural norms results in reward, the resulting effect is happiness and satisfaction. In political terms, happiness and satisfaction manifest themselves as increased political involvement. Alternatively, when a disappointing mismatch between procedural expectations and political stimuli occurs, a sense of

depression or frustration is exhibited.[2] In political terms, depression and frustration manifest themselves as decreased political involvement. Thus, among those who already are in agreement politically, the Affective Intelligence model observes that induced enthusiasm will correspond with increases in political involvement. To be clear, these relationships are hypothesized to be linear where even small increases (or decreases) in enthusiasm are predicted to correspond with small increases (or decreases) in involvement. Thus, the Affective Intelligence model argues that one can spur political involvement—among like-minded individuals—if one instills political enthusiasm. While this claim is not particularly original, the claims of the Affective Intelligence model regarding non-like-minded (e.g., cross-party) individuals is of greater theoretical interest, especially when it comes to the study of persuasion.

The role of anxiety

While many see "apathy as the norm" as an unfortunate reality, Marcus et al. (2000) argue that widespread political apathy serves as an opportunity to persuade. By manipulating the behavioral inhibition system through the induction of anxiety, Marcus and colleagues argue that a change in state-anxiety will affect levels of cognitive response, political learning, and behavioral intention to learn about politics. In other words, when an anxiety-inducing message is received, individuals will become psychologically uncomfortable. Both the novelty of the message and the uncomfortable nature of its anxiety-inducing contents will lead individuals to redirect their attention

[2] Obviously this is not the case if the mismatch is a pleasant surprise. Rather, the Affective Intelligence model characterizes such a positive violation of expectations as "novel," "unusual" or "atypical" and is considered under the context of the behavioral inhibition system.

from “business as usual” toward the message. As a result of increased attention toward the message, individuals will (1) dedicate more cognitive effort to scrutinizing the message; and (2) seek to learn more about the message content.

In terms of political communication, this process opens the door for persuasion. If one can induce anxiety among the public, one can awaken them from their procedural, habitual behavioral patterns. When an individual is awoken from his or her habitual slumbers, that individual will refocus his or her attention on the source of the political threat and systematically evaluate candidates, positions, and ideas that otherwise would be ignored. At this point, a well-crafted argument will be evaluated rationally and systematically (i.e., on the merits of its content) as individuals’ habitual patterns of filtering and ignoring new, alternative, or different messages have been disarmed. Again, it is worth repeating that the relationships posited here are conceived as linear. While some scholars (e.g., Joslyn, 2001) have questioned whether this assumption is tenable, the Affective Intelligence model follows a long line of social scientific research in assuming that the relationship between induced anxiety and persuasion is linear.

Past examinations of anxiety and fear in persuasive contexts

James Price Dillard (1994) has noted that the use of fear to encourage persuasion is a practice that dates back to the Greeks. The underlying idea behind fear appeals is that if one can instill fear in individuals, it may promote the consideration and adoption of alternative attitudes or behaviors. Several meta-analyses (e.g., Mongeau, 1990) drawing upon research that dates back to the 1960s have demonstrated small though meaningfully positive, linear relationships between fear and both (1) attitudes and (2) behavior.

Appreciating what qualifies as fear is central to the induction of fear appeals. Dillard (1994) observes that understanding fear is contingent on understanding how individuals subjectively interpret a fearful occasion; how they outwardly handle the onset of a fearful state; how they express that fear in terms of expressive behavior; and how they physiologically react to it. Taken together, Dillard observes that "fear tends to be characterized by the perception of a stimulus that is (1) important; (2) is negatively valenced; (3) is impending; (4) will require considerable effort to deal with, i.e., presents an obstacle; and (5) is beyond the control of the actor" (Dillard, 1994, p. 310).

In light of this characterization, it is worth noting that most fear appeals focus on health-related issues (Dillard, 1994). Health-related issues are typically easy to operationalize in terms of relevance to the individual. While persuasive effects may or may not occur, getting individuals to merely understand that certain health-related behaviors are associated with undesirable health outcomes is typically not difficult. Alternatively, within the political domain, developing fear-inducing appeals may require greater thought and creativity. Moreover, the exact meaning of fear or anxiety in the political context is not entirely transparent.

What constitutes political anxiety?

Because anxiety-inducing threats are such an important part of the Affective Intelligence model, it is worth investigating what qualifies as such. To some extent, the term "anxiety" is too precise to capture the true meaning of the type of induction Marcus and colleagues require—though it is their preferred terminology. Rather, better terms are novelty, uniqueness, or negative arousal. Moreover, Marcus and colleagues do not

differentiate between a host of negatively-valenced affective terms. For example, anxiety, fear, distressed, and upset as well as several others affective states are treated as interchangeable. The underlying rationale behind this treatment is the logic put forth by the circumplex model. Recall that the circumplex argues that these negatively-valenced items are indicators of the negative affective factor (Watson, & Tellegen, 1985).[3] Throughout the remainder of this document I will follow Marcus et al. (2000) and use "anxiety," however the shrewd reader should note that this omnibus term extends to include issues of fear, distress, and particularly novelty—all negative affective indicators.

Generally speaking, the adjectives "novel" or "unusual" are, perhaps, better descriptions of the kind of political stimulus the Affective Intelligence model posits to persuade non-like-minded individuals. To be sure, a mugger brandishing a knife in a dark alley after midnight is certainly threatening however no political stimulus is likely to reach a similar level of threat. Consequently, within the realm of politics a threat is characterized as something lesser, something novel, unique, or unusual that grabs individuals' attentions (Marcus et al., 2000). In short, a political threat awakens individuals from "business as usual" and brings about an orienting response where attention is focused. Marcus et al. (2000) explain that "Of course, we mean to limit our discussion to matters of ordinary political affect—the sort experienced by Americans during the past quarter century. We have no evidence for the sorts of deep passion associated with palpable threats to life and self-identity" (p. 95).

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[3] Numerous critics of the circumplex model of emotion (e.g., Lazarus, 2006) argue that its chief weakness is its over-simplification of affect, namely the reduction of all emotional states to dual factor dimensions. While this criticism is noted, this dissertation follows Marcus et al. (2000) in adopting the claims of the circumplex as a theoretical point of departure.

For example, in 2006 Vice-President Dick Cheney accidentally shot a fellow quail hunter while on vacation at a Texas ranch. This incident certainly qualifies as novel and anxiety-inducing. According to the Affective Intelligence model, a shrewd Democratic campaign advertisement could have appealed to Republicans by using this anxiety-inducing incident to persuade them to reconsider their habitual political leanings and re-evaluate their opinion of Cheney and, by extension, their Republican loyalties. The underlying rationale here is that the anxiety-inducing event will bring heightened scrutiny to its cause (in this case, Cheney). With that heightened scrutiny, rational arguments negatively characterizing Cheney will be more likely to be heard and listened to. Thus, those who initially would have ignored negative messages about Cheney might be persuaded to lend an ear to these arguments as result of the anxiety-inducing accident.

Additionally, what is interesting and initially counterintuitive about the Affective Intelligence model is that it posits that the highest levels of anxiety should be associated with incumbents—not challengers (Marcus et al., 2000). While challengers may initially seem to be the greater of anxiety-inducing threats due to their novelty and relatively unknown identities, the lack of association and level of investment between the public and challengers is, generally, slim. Conversely, the public has already established a relationship with the incumbent. If a threat is introduced regarding the incumbent, the stakes are higher. The incumbent already holds political office. Moreover, levels of personal involvement are greater. Citizens live under the incumbent's administration and have spent some period of time getting to know the incumbent.

While the previous example depicts anxiety-inducing threats in terms of a political figure, it should be emphasized that anxiety-inducing threats are not exclusively limited to candidates. Marcus and colleagues have argued that any political issue, group, or event can potentially induce anxiety. In this way, threats associated with Supreme Court decisions, the political maneuverings of various interest groups, issues of institutional transgressions (e.g., appropriateness of Congressional hearings regarding the health status of Terri Schiavo), or other anxiety-inducing occasions like economic recessions are all considered potential anxiety-inducing threats. The important issue regarding political stimuli crafted to induce anxiety is that they defy the norm, upset the habitual, and raise questions about that which is typically taken for granted. To repeat, stimuli must be novel.

Review of the Affective Intelligence model

The Affective Intelligence model assumes that individuals are chronically inattentive to politics. Based on this assumption, the model puts forth two testable claims. Among politically like-minded citizens, the induction of enthusiasm will positively predict political involvement. Alternatively, to persuade individuals who otherwise would not consider certain political views, the induction of anxiety positively predicts political learning. To generate anxiety, one must provide a stimulus that is novel and unique to the effect that it awakens individuals from their politically habitual states. Both predictions assume a linear relationship between induced emotional states and resulting outcome states.

One final point about the Affective Intelligence model deserves note. The model puts forth the claim that affect is comprised of two distinct emotional states—enthusiasm and anxiety. The underlying assumption behind this claim is that individuals' emotions exhibit structural properties consistent with a two-dimensional affective model rather than a simple valence model. This assumption is theoretically driven by Russell's circumplex model (1980) which argues for factor orthogonality and is typically measured with Watson and Tellegen's (1985) PANAS.

Past studies (e.g., Abelson et al., 1982; Cacioppo et al., 1993; Marcus, 1988; McHugo et al., 1985) have found both orthogonal and correlated relationships between factors. To explain these results, Marcus et al. (2000) argue that affective factors will be correlated when the candidate or issue becomes substantively meaningful to study participants. They write: "When politicians are unfamiliar, people generally experience two concurrent reactions, one positive and one negative. As people get to know a politician better they integrate these two distinct reactions into a harmonized like or dislike" (p. 146). This assertion is important as it illustrates a shift in the structure of affect when political stimuli are substantively meaningful. Clinical and social psychological studies have neither argued for nor demonstrated such claims. This is an important point as it illustrates the evolving nature of affect in the political domain—a potentially unnerving contention for many psychologists and behavioral scientists who do not study political affect.

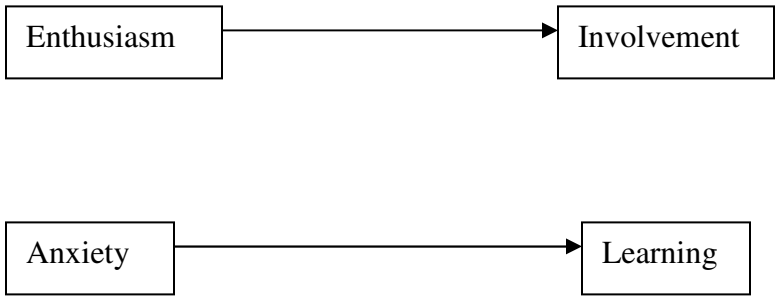
Initial empirical examinations of the Affective Intelligence model

Marcus and MacKuen (1993) first tested the Affective Intelligence model on two datasets: the 1980 NES panel survey and a 1988 survey taken during the presidential campaign that was comprised of three cross-sections of respondents from Missouri. Specifically, they examined the roles of anxiety and enthusiasm on three criterion variables: vote choice, learning, and campaign involvement while marking changes in respondents' attitudes over time.[4] The results indicated that enthusiasm was positively associated with vote choice. While vote choice is not the primary focus of the Affective Intelligence model, it follows logically that positive emotions like enthusiasm would be associated with candidate preference, while negative emotions like anxiety would be negatively associated with candidate preference.

More importantly and related to the Affective Intelligence model, enthusiasm was positively correlated with campaign involvement toward the end of the campaign season. In other words, as the campaign was coming to a close the more enthusiastic individuals were, the more that they would became involved in the campaign. Alternatively and perhaps more interestingly, anxiety was positively correlated both early and later on in the campaign season with learning. Taken together, these findings formed the basis for later empirical tests of the Affective Intelligence model (see Figure 3). As Marcus and MacKuen (1993) note: "when politics makes people anxious, people sharpen their eyes and pay careful attention; when politics drums up enthusiasm, people immerse themselves in the symbolic festival" (p. 681).

[4] Obviously, this was only possible with ANES dataset.

Figure 3: Marcus and MacKuen's (1993) substantive findings



Note: The relationships between variables depicted are positive.

In *Affective Intelligence and Political Judgment*, Marcus et al. (2000) provide considerable evidence of the legitimacy of their model. In analyses investigating the 1980-1996 NES datasets, they found that anxiety played a key role in learning about politics, while *also* playing a moderating role in predicting vote choice. In particular, they repeatedly found that anxiety was positively associated with policy-related knowledge. The more anxious individuals are, the more they are likely to learn about politics.

In terms of predicting vote choice, it is noteworthy that anxiety plays a crucial moderating role as well. The statistical interactions of anxiety with (1) partisanship; (2) candidate personality traits; and (3) policy preference have been demonstrated to be all associated with vote inclination. While the latter two interactions indicated a synergistic effect (i.e., high levels of anxiety accentuated main effect relationships), the interaction of anxiety and partisanship is of greater interest. This interaction was negatively associated with vote choice corroborating claims of the model. If one examines the main effect of partisanship on vote inclination, a positive association is observed. Taken together, these results indicate that as levels of anxiety rise, the relationship between partisanship and vote inclination changes. Higher anxiety levels transform the relationship between partisanship and vote inclination from positive to negative. As the model predicts, the introduction of anxiety alters the efficacy of habitual factors (i.e., partisanship) on political attitudes and behavior.

In review, the chief claim of the Affective Intelligence model is that heightened anxiety will orient individuals to the source of anxiety. That orienting response will lead to increased interest which will lead to increases in willingness to consider alternative

perspectives as well as drive individuals to engage in knowledge-seeking behavior. While Marcus and colleagues have empirically demonstrated that the main effect of anxiety exists under a variety of conditions (e.g., political participation beyond the voting act), they also have tested several moderation hypotheses (e.g., anxiety with comparative enthusiasm, partisanship, candidate personal qualities, and policy preference) with outcome variables vote choice and knowledge-seeking behavior.

Further empirical examinations of the Affective Intelligence model

Since the initial tests of the Affective Intelligence model (Marcus, & MacKuen, 1993), several scholars have subjected the model to empirical verification. Across studies, the most common application of the Affective Intelligence model has been to explain political attitudes related to terrorism (Davis, & Silver, 2004; Huddy et al., 2005; Schubert et al., 2002).

Generally, findings from these studies indicated that as anxiety levels about terrorism increased individuals (1) redirected attention to the source of the threat in an attempt to mitigate their anxiety; and (2) heightened anxiety lowered their willingness to protect the rights of others. These findings support claims of the Affective Intelligence model by emphasizing that the induction of anxiety brings attention to the forefront while also shaping attitudes in favor of self-protection.

For example, Huddy et al. (2005) found that higher levels of anxiety were positively associated with increased attention to television news, support for military endeavors, and support for increased scrutiny of illegal immigrants and Arab-Americans. Similarly, Davis and Silver (2004) found that as respondents' anxiety levels increased,

they were less willing to protect others' civil liberties. Likewise, in a series of experiments examining attitudes toward *hypothetical* outgroups (e.g., White Supremacist factions, Christians in politics, Women for Justice, etc.), Marcus et al. (1995) found that higher levels of anxiety were associated with lower tolerance for outgroups. Recall that the chief claim of the Affective Intelligence model is that if anxiety is induced, citizens will react by abandoning their customary routines and habits. In this released state, individuals will be more willing to listen to ideas and adopt perspectives that they otherwise would not.

From an alternative perspective, Schubert et al. (2002) examined levels of enthusiasm two hours following the 9/11 terrorist attacks. They observed that levels of political enthusiasm increased substantially after citizens viewed President Bush's handling of the crisis on television. This enthusiasm translated into extremely high presidential approval ratings and substantial increases in political interest/involvement. While these results confirm the effect of enthusiasm on involvement, they are not particularly unusual.

Beginning with Mueller (1973), political scholars have observed a "rally around the flag" effect in response to national involvement in war (see, Brody, 1991; Edwards, & Swenson, 1997; Sigelman, & Conover, 1981, for just a few relevant examples). The rally around the flag effect posits that in times of national emergency, the public will come together uniting in support of national leaders while temporarily dismissing partisan disagreements.

In the Schubert et al. study, they conceptualized the rally around the flag effect in terms of the Affective Intelligence model. That is, they observed that as enthusiasm increased following Bush's behavior in the aftermath of 9/11 so did political involvement and interest among the public. From the position put forth by the Affective Intelligence model, the public had certain expectations regarding the response of political leaders following the terrorist attacks. These expectations were met by Bush and, consequently, enthusiasm for Bush increased. Thus, Bush's response created satisfaction in terms of habitual expectations about politics.

One important point should be reiterated when it comes to studies of political attitudes in response to terrorism. This is not a typical example of political anxiety. Rather, this type of anxiety is indicative of the kind of anxiety measured in the fear appeal literature—which, as previously noted—can be life-threatening and, consequently, easier to bring about desired experimental effects. Rather, the typical anxiety-inducing political stimulus (which is argued for in the Affective Intelligence model) simply halts individuals from enacting habitual routines and redirects attention to the source of anxiety. Thus, the typical stimulus serves to refocus attention—not threaten the physical well-being of subjects.

Other studies incorporating the Affective Intelligence model have focused on both political candidates and issues. Hullett, Louden and Mitra (2003) tested the Affective Intelligence model in a quasi-experimental study that examined political attitudes among debate viewers during the 2000 presidential debate between Al Gore and George W. Bush. Contrary to the two-dimensional view of emotion put forth by the Affective

Intelligence model, they found that a simple valence model explained emotional reactions associated with each candidate. One potential reason why this may have occurred stems from Marcus et al.'s (2000) argument about substantive meaningfulness of stimuli. Because Al Gore and George W. Bush were arguably substantively meaningful to those who attended the presidential debate, the association between positive and negative affective factors should have been correlated (as it was). Because it is possible that the election was extremely important to debate attendees, a single like/dislike factor may have emerged where the presence of enthusiasm for Gore meant the absence of anxiety for him—and vice versa.

Focusing strictly on the effect anxiety on political attitudes, Brader (2005) conducted a study that examined the impact of political advertisement cues (e.g., grainy images and ominous music) on levels of anxiety and political attitudes. He found that these cues had an additional impact in forming attitudes about candidates beyond the substantive content of candidate political ads.

Finally, Nadeau et al. (1995) utilized a two-staged least squares analysis to consider the simultaneous relationships between (1) political knowledge about French language laws and perceived issue importance; and (2) perceived issue importance and political knowledge, anxiety, hope, and the interaction between anxiety and hope. They found that the relationship between anxiety and issue importance was moderated by feelings of hope or expectations for legislative success. That is, those who felt that there was some hope for success regarding French language laws had higher levels of perceived issue importance than those who did not.

In review, the Affective Intelligence model has been used to explain attitudes about terrorism, political issues, and political candidates. Empirical tests have generally been supportive of the claims put forth by the model although notable exceptions exist (e.g., Hullett et al., 2003). It is important to repeat that that there is a qualitative distinction between measures of anxiety related to terrorism (i.e., where a life threatening consequence exists) and other forms of political anxiety (e.g., a political scandal or fears about a potential economic recession). It must be stressed that a potentially life threatening anxiety-induction is not at the core of the Affective Intelligence model. Rather, a successful experimental induction causes subjects to stop enacting their habitual routines, redirects attention to the source of anxiety, and motivates them to learn more about the source.

Criticism of the Affective Intelligence model

The Affective Intelligence model puts forth two key claims that are relevant to political communication. The first is that increases in enthusiasm lead to increases in political involvement. While this assertion has received considerable empirical support in previous studies (e.g., Marcus, & MacKuen, 1993; Marcus et al., 2000; Schubert et al., 2002) it is not particularly controversial or contentious. Rather, the relationship between enthusiasm and involvement, in fact, seems in tune with common sense and certainly echoes claims put forth by learning theorists (e.g., Bandura, 1986). In particular, Social Cognitive theory argues that positive reinforcement leads to the increased frequency of enacting a particular behavior. It is not a giant departure from this claim to observe that increased enthusiasm—established through the reinforcement of expectations learned

during the course of life—leads to greater involvement or interest in a particular stimulus. It is not a contentious claim to observe that people who are enthusiastic about a particular issue tend to also be interested in it.

The second major claim put forth by the Affective Intelligence model is of more substantive import and provides a better test of theory. The model argues that the introduction of an anxiety-inducing stimulus will cause individuals who were previously not persuadable to be persuadable. This happens because the introduction of anxiety awakens individuals from their habitual practice of ignoring messages that are not of interest. Instead, anxious individuals turn their attention to the source of anxiety and systematically evaluate information associated with it. Thus, this assertion highlights the claim that anxiety serves as an important motivator to alter routine political attitudes and behavior.

Despite this major argument, the Affective Intelligence model is neither insistent nor explicit in its treatment of anxiety as a main or interactive effect. That is, Marcus and colleagues, as well as numerous other scholars (e.g., Nadeau et al., 1995; Rudolph et al., 2000) have examined the impact of anxiety on outcome variables in both additive and multiplicative forms. Past studies have identified statistical interactions of anxiety with hope, internal efficacy, and political sophistication.

In an important study influencing this dissertation, Rudolph et al. (2000) argued that political efficacy moderated the relationship between anxiety induced from a political stimulus and political campaign involvement. They write, “In short, efficacious people are less likely to be inhibited by their anxiety and more likely to confront

environmental demands by increasing their involvement" (p. 1190). Incorporating the Affective Intelligence model as a theoretical framework, Rudolph et al. subjected their hypotheses to empirical verification on the 1980 ANES dataset. Specifically, they argued that levels of internal efficacy will interact with anxiety such that those with higher levels of internal efficacy will exhibit greater levels of campaign involvement. Interestingly, the authors found that the moderating relationship was not uniform. That is, when considering the sample as a whole, the hypothesized interaction was not statistically significant. Subsequently, the authors bi-furcated the sample into low and high internal efficacy sub-groups based on median split. In this way, they allowed for the possibility that the interaction was not "bi-linear" (p. 1194). Consequently, they observed that anxiety served as a significant predictor of campaign involvement *only* among those in the high internal efficacy sub-sample. In fact, the magnitude of the regression coefficient for anxiety was slightly higher than that for enthusiasm in the high internal efficacy sub-sample. The authors concluded that "the extent to which negative affect influences individual's campaign involvement is conditional on individual's perceived ability to successfully undertake political action" (p. 1196).

This finding is important in that it indicates that under certain conditions, the arguments put forth by Marcus and colleagues may not hold. To explore the extent to which the Affective Intelligence model is generalizable, further empirical testing must be conducted. By evaluating the limits of a model's external validity, scholars are able to better understand, define, and re-conceptualize a theory's intellectual merits (Shadish et

al., 2002). By continuing to explore the limits of a theoretical model, scholars aim to expand the knowledge of the field.

CHAPTER III

POLITICAL EFFICACY

Political efficacy as a form of individual difference

From an alternative perspective, some of the earliest empirical studies of politics (e.g., Campbell, et al., 1954; Campbell et al., 1960) argued that cognitions and personality traits were the only theoretically tenable predictors of political attitudes and behavior. *The American Voter* goes to notable lengths in characterizing the typical individual as disinterested and apathetic when it comes to politics and, consequently, unlikely to have emotional reactions to political issues or figures.

In the past 50 years, scholarship has demonstrated considerable interest in political efficacy (e.g., Clarke, & Acock, 1989; Curran, 2007; Craig et al., 1990; Finkel, 1985; Iyengar, 1980; Kenski, & Stroud, 2006; Madsen, 1978; 1987; 1988; McPherson et al. 1977; Morrell, 2003; Morrell, 2005; Newhagen, 1994; Niemi et al., 1991; Pinkleton et al., 1998; Pinkleton, & Austin, 2002; Rudolph et al., 2000). Most models involving political efficacy define it as a necessary agent to motivate political behavior. That is, it is widely held that individuals need to have some degree of confidence in their understanding of politics *as well as* their ability to affect political outcomes to perform a given political behavior. In short, political efficacy is seen by many as requisite for holding a meaningful political attitude.

The emergence of political efficacy

Since the cognitive revolution, scholars across the social scientific landscape have maintained that an individual's sense of his or her ability to undertake a given task will

have predictive utility in determining whether or not the individual successfully accomplishes, or even undertakes, the behavior (e.g., Bandura, 1977). Scholars conceive of political efficacy as a measure of personality. For instance, *The Voter Decides* characterizes political efficacy as "the feeling that individual political action does have, or can have, an impact upon the political process, i.e., that it is worthwhile to perform one's civic duties. It is the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change" (Campbell et al., 1954, p. 187). Furthermore, scholars have argued that feeling politically efficacious is a democratic ideal that is on par with party identification, political attentiveness, and political engagement in terms of predicting other political attitudes and behavior (Almond, & Verba, 1963; Delli Carpini, & Keeter, 1996).

One of the first notable examinations of political efficacy and its role in the formation of political attitudes and behavior is presented in *The Voter Decides* (Campbell et al., 1954). As just noted, Campbell et al. (1954) define political efficacy as a self-evaluation of one's ability to affect the political process. Numerous scholars (e.g., Craig et al., 1990; Niemi et al., 1991) have observed that this initial conceptualization conveys a key claim about political efficacy. It operationalizes political efficacy as a unidimensional construct.

Despite this early definition, scholars—beginning with Lane (1959)—have questioned the assertion that political efficacy is unidimensional. Several studies—typically using survey data from the American National Election Studies (ANES)—have relied on exploratory and confirmatory factor analytic techniques to demonstrate the

multi-dimensional nature of political efficacy (Balch, 1974; Craig, 1979; Craig et al., 1990; Niemi et al., 1991). Moreover, a cursory review of the items used to tap political efficacy in these mass surveys have indicated multi-dimensionality. When examining the face validity of political efficacy items, Converse (1972) noted that some items measure an individual's perception of his or her own efficacy, whereas other items measure an individual's perception of government responsiveness.

Two forms of political efficacy

Influenced by past studies, Stephen Craig (1979) reviewed the literature on political efficacy and observed four measurement "themes." They are: (1) personal effectiveness; (2) political effectiveness; (3) institutional responsiveness; and (4) institutional benevolence. The first, *personal effectiveness*, refers to the extent to which an individual believes that he is able to "bring about preferred outcomes in his daily life" (Craig, 1979, p.228). The second, *political effectiveness*, refers to the extent to which an individual feels he or she can be effective in the realm of politics. Third, *institutional responsiveness*, refers to the extent to which an individual believes that the government will heed the demands of the citizenry. Finally, *institutional benevolence*, refers to the extent to which an individual believes that the government will act to meet the needs of the citizenry irrespective of citizen demands (i.e., this measures the willingness of the government to act on behalf of the citizenry without directly being pressured to do so).

Using both theoretical arguments and empirical evidence via confirmatory factor analyses, Craig demonstrated over the course of several studies (Craig, 1979; Craig, & Maggiotto, 1982; Craig et al., 1990; Niemi et al., 1991) that these four thematic areas can

be reduced to two political efficacy constructs and one political trust construct. Numerous other studies have confirmed these findings (e.g., Acock et al., 1985; Clarke, & Acock, 1989; Finkel, 1985).

In particular, studies have consistently demonstrated that political efficacy is comprised of both internal efficacy and external efficacy. Niemi et al. (1991) define internal efficacy as an individual's beliefs about his or her ability to understand politics as well as participate in politics. Morrell (2005) has written that "without a sense of internal political efficacy, citizens will likely become apathetic about, indifferent to, and disengaged from the democratic process" (p. 50). In addition, internal efficacy has been identified as a positive correlate of political knowledge (Delli Carpini, & Keeter, 1996), political interest (Kenski, & Stroud, 2006), and political participation (Finkel, 1985).

Alternatively, external efficacy refers to an individual's beliefs about political actors or institutions' responsiveness to citizens' demands (Niemi et al., 1991). That is, external efficacy measures an individual's sense that government officials are interested and care about the citizenry. Studies examining external efficacy have evaluated it in terms of political participation (Clarke, & Acock, 1989), third party support (Koch, 1998), and levels of satisfaction with current administrations based on respondents' party identification (Rodgers, & Lewis, 1975; Wright, 1976).

One of the most impressive explications of the distinction between internal and external efficacy is provided by Acock et al. (1985). Using structural equation modeling, these authors demonstrated the theoretical distinction between internal and external efficacy using three ANES datasets (1972, 1976, and 1980) and one international dataset

surveying eight nations. Across all datasets, their findings consistently indicated the existence of two distinct efficacy factors (internal and external efficacy), both consistently demonstrating the same factor structure over datasets. In addition, Acock et al. (1985) tested their model for measurement invariance across both sex and race (i.e., blacks and whites) and found no difference between sub-samples.

In review, scholars have learned that political efficacy is comprised of two-dimensions: internal and external efficacy. Internal efficacy measures belief's in one's ability to understand politics and political issues. External efficacy measures beliefs that the government is responsive to the needs, demands, and wishes of the citizenry. Internal efficacy is a measure of personality while external efficacy is a cognitive measure. It should be mentioned that neither measure is included in Marcus's Affective Intelligence model. Despite Marcus et al.'s disregard for political efficacy, other scholars (e.g., Rudolph et al., 2000) have redefined the Affective Intelligence model to include either internal or external efficacy though their applications have been haphazard and inconsistent.

The relationship between internal and external efficacy

While the distinction between internal and external efficacy has been well-documented, this distinction should not be taken as an implication of orthogonality. Rather, numerous studies have demonstrated positive associations between the two efficacy constructs. While the presence of an underlying second-order factor has been empirically ruled out, the correlation between internal and external efficacy has ranged from moderate to strong across studies. For instance, Acock et al. (1985) found

reasonably high correlations between internal and external efficacy in their analysis of the three ANES datasets plus an international dataset of eight nations. Alternatively, Niemi et al. (1991) found moderate-sized correlations between internal and external efficacy in their analysis of the 1988 ANES dataset. Morrell (2003) also found moderate-sized relationships between internal and external efficacy across ANES datasets from 1988, 1992, and 2000.[5] Finally, using panel data from before and after the first presidential debate in 2000, Curran (2007) found similar moderate-sized correlations between both internal and external efficacy.

Review of political efficacy

Some of the earliest studies examining political attitudes and behavior (Campbell et al., 1954; Campbell et al., 1960) identified political efficacy as an important predictor variable. In short, it was argued that without a sense of political efficacy individuals were likely to hold attitudes that were neither meaningful nor interpretable. That is, inefficacious attitudes were largely conceptualized as whimsical responses motivated by interviewer reactivity.

While political efficacy remained at the forefront of research endeavors throughout the 1960s and 1970s, research by Stephen Craig in the 1980s led to widespread recognition that political efficacy was, in fact, multidimensional and comprised of internal and external efficacy factors. With this realization came renewed interest in political efficacy particularly focused on differentiating the various effects associated with internal and external efficacy.

[5] It is reassuring to see that Morrell's (2003) findings match Niemi et al.'s (1991) results as both studies overlap in their respective analyses of the 1988 NAES dataset.

CHAPTER IV

DISSERTATION ARGUMENTS

The need to test the Affective Intelligence model

The Affective Intelligence model argues that emotional reactions to political figures, issues, groups, and events—specifically in the forms of enthusiasm and anxiety—are the crucial determinants in assessing political attitudes and behaviors. While the Affective Intelligence model explains how political attitudes are formed and how vote choices are determined, its value as a theory of political communication exists in its claims regarding persuasion.

According to the model, one can alter longtime, stable, political attitudes through the introduction of political anxiety. One can persuade those who were previously believed to not be persuadable. One can dispel political stubbornness and myopia, while motivating those to action who were previously inactive. To be clear, the Affective Intelligence model argues for a linear relationship between induced anxiety and attitudinal and behavioral outcomes. In other words, even low levels of anxiety are hypothesized to yield proportional effects. The Affective Intelligence model puts forth tremendous claims with respect to political attitudes. These claims are both testable and are of such a grandiose nature that they deserve empirical verification.

Dual influential paradigms: A review

This dissertation is influenced by thought from two both distinct paradigms: (1) the influence of affect in formulating political attitudes as conceived by the Affective Intelligence model; and (2) the role of political efficacy in formulating political attitudes.

In a search of the databases *Communication and Mass Media Complete, PsycInfo*, and *JSTOR,* only two studies (Brader, 2005; Huddy et al., 2005;) have attempted to measure the impact of anxiety on persuasion-related variables while incorporating the Affective Intelligence model. These studies are not without problems. For instance, Brader (2005) used generic candidate issue ads that were fairly indistinct, lacking in novelty which was likely responsible for the low levels of anxiety reported in both experimental and control conditions. Alternatively, Huddy et al. (2005) measured the impact of anxiety about terrorist attacks on information seeking and knowledge about terrorism however their analysis largely ignored considerations of personal relevance (i.e., proximity to New York City)—a known requisite for emotional reactions.[6]

The other key influence on this dissertation comes from the work of Stephen Craig and incorporates his work on internal and external efficacy. Numerous scholars have argued that these variables serve as important antecedents in forming political attitudes. Many view internal efficacy as a necessary precursor for attitude formation, arguing that without a sense of internal efficacy, individuals' political attitudes and behavior are whimsical and, potentially, meaningless. Alternatively, scholars have noted that when individuals lack confidence in governmental responsiveness to the demands of the citizenry (i.e., external efficacy) it leads to political disinterest and reduces political participation.

The current endeavor

[6] While Huddy et al. (2005) discuss the statistically significant effect of living in close proximity to the site of the 9/11 attacks they seem to diminish the import of this finding. Most emotion scholars (e.g., Lazarus, 1991) maintain that without personal relevance emotionality will be substantially diminished—perhaps impossible to generate. Consequently, Huddy et al. should have tested an interactive model with proximity as a moderating variable across all relationships.

The focus of this dissertation is to empirically test the Affective Intelligence model. What differentiates this test from other studies is its full explication of the persuasion process. While Marcus and colleagues have made clear that increased anxiety leads to increased message scrutiny, they have not empirically tested this claim. Rather, the focus of their work has been on predicting vote choice and political learning. Moreover, this dissertation conceptualizes these claims as theoretically linked so that positive linear associations between arousal, cognitive response/message scrutiny, and learning and intent to learn about politics are predicted. By incorporating endogenous variables of cognitive response/message scrutiny as well as behavioral intent, I aim to test the claims of the Affective Intelligence model with respect to the cognitive appraisal of messages (i.e., persuasive effects) as well as political behaviors and intentions.

This dissertation argues for a theoretical model that hypothesizes (1) an interactive relationship between political efficacy and both anxiety and cognitive response/message scrutiny; (2) which explores the theoretical robustness of the Affective Intelligence model to a political issue other than fear of terrorism or French language laws; (3) that utilizes appropriate methodological and statistical approaches; and, (4) incorporates a personally relevant stimulus.

Using the Affective Intelligence model as a theoretical point of departure, I argue that internal efficacy plays an important moderating role in the relationship between anxiety-induction and cognitive response/message scrutiny. I argue that anxiety-inducing threats will lower individuals' habituated barriers against persuasion only to the extent that individuals feel politically efficacious. Individuals who are highly internally

efficacious will be able to rise above the negative affect associated with political anxiety and respond with high levels of message scrutiny.

Alternatively, only individuals who exhibit high levels of external efficacy will demonstrate high levels of political learning and behavioral intentions to learn about politics. In line with results from Rudolph et al. (2000), I argue that those who do not feel that the government is responsive to the needs of the citizenry will not put forth the attention, interest, or care required to become engaged in a political issue. In other words, external efficacy will moderate the relationship between anxiety and learning/intent to learn about politics such that only those with high levels of external efficacy will exhibit increased learning and be willing to seek out political information. [7]

Revising the Affective Intelligence model

The main purpose of this dissertation is to extend the Affective Intelligence model by incorporating internal and external efficacy moderating hypotheses in addition to the linear relationships argued for by Marcus et al. (2000). The marriage of political efficacy to the Affective Intelligence model is a worthy endeavor as it seeks to accomplish three aims: first, due to the long histories of cognitive and affective scholarly camps existing in relative discord, fewer studies have combined variables outside each domain into

[7] Some might perceive this argument as Witte's (1992) EPPM brought to the political domain. This is not accurate. In the EPPM, individuals' efficacy levels are comprised of (1) self-efficacy and (2) response efficacy. While self-efficacy is somewhat similar to internal efficacy, response efficacy is entirely different from external efficacy. Response efficacy is a measure of confidence that the recommendations put forth by the message will actually benefit the individual. Conversely, external efficacy measures individuals' beliefs in governmental responsiveness to the demands of the citizenry. While response efficacy is a measure of trust in message advice, external efficacy is a measure faith in political figures' concern for the populace.

predictive models than one would like. As a result, the Affective Intelligence model has been tested with a variety of both variables, but has not been tested exhaustively.

Second, the extension of the Affective Intelligence model to incorporate political efficacy allows for the empirical investigation of the generalizibility of the model. Since Campbell et al. (1954), scholars have consistently identified political efficacy as a crucial variable in predicting political attitudes and behavior. Based on this, it is vital and logically necessary for the Affective Intelligence model to be evaluated in concurrence with such a paradigmatic predictor.

Finally, while most studies have examined the Affective Intelligence model based on survey data, few have examined the model under experimental conditions (see Marcus et al. 1995; Brader, 2005, for exceptions). Consequently, the existence of unknown confounds and the inability to make causal claims is a limitation that past research has not fully overcome. While certainly there are limitations to experimental research (e.g., the ecological validity of findings), I believe the drawbacks do not outweigh the advantages.

Figures 4-6 identify causal models that this study looks to examine. To be clear, this study exclusively aims to assess the anxiety component (i.e., the behavioral inhibition system) of the Affective Intelligence model. While the enthusiastic component (i.e., the behavioral approach system) of the Affective Intelligence model provides an explanation for campaign involvement, it is of relatively little scholarly interest. The linear relationship between enthusiasm and support for a candidate or political issue is not a contentious claim. On the other hand, the behavioral inhibition system and its

ability to impact message perception, political learning, and intent to learn more is a more interesting and better source of empirical investigation.

Hypotheses

Despite the main focus of this study being on the behavioral inhibition system, the analysis will not ignore the importance of investigating the empirical relationship between affective factors. To answer this question, the following hypothesis is offered.

H1: The relationship between affective factors will be zero.

While testing the null hypothesis is not customary in social scientific research, it is not prohibited. One reason against testing the null is low statistical power. While standard power analyses for confirmatory factor analysis have not yet been developed, one can estimate differences between factors via measured-variable composite correlations. In this case, if power is set to .80 given that $n = 232$, the effect size required for a statistically significant result is .18.

While statistical power is not optimal based on this sample size, it is noteworthy that confirmatory factor analysis provides information on relationships between factors that is measurement error-free. To be clear, the purpose of discussing statistical power here is for considering the relationship between factors in the two-factor solution. While an increased sample size will certainly reduce confidence intervals around factor loadings, the issue with respect to Hypothesis 1 is the relationship between factors (i.e., their correlation). While the sample size in the present study is not ideal for finding small effect sizes, the investigation of whether the affective factors are orthogonal is valuable for interpretive purposes.

Next, past research (e.g., Marcus, & MacKuen, 1993) has noted that as anxiety increases, individuals will "stop, look, listen…" (p.673). Marcus and colleagues have argued that when anxious individuals will be more willing to consider alternative arguments and perspectives than they otherwise would. Specifically, when anxiety is introduced individuals will process messages at a higher level and believe that a message is more relevant and of a higher quality than they would in the absence of an anxiety-inducing stimulus.

H2: The relationship between anxiety and cognitive response/message scrutiny will be positive.

As depicted in Figure 4, the proposed model will test a moderating hypothesis about the relationship between levels of anxiety and cognitive response/message scrutiny. In particular, the moderating hypothesis will examine the role of internal efficacy in the relationship between anxiety and cognitive response/message scrutiny. While Rudolph et al. (2000) demonstrated that internal efficacy interacted (albeit in an asymmetrical fashion) with anxiety in predicting campaign involvement, past research has not tested the interaction of anxiety and internal efficacy on cognitive response/message scrutiny. Following Rudolph et al. (2000), the relationship between anxiety and cognitive response/message scrutiny should be accentuated by the introduction of the internal efficacy moderating variable. Numerous past studies have shown that internal efficacy is a necessary requirement for political attitudes to exist. That is, without internal efficacy political apathy and ambivalence are likely. As a result, I put forth the following hypothesis.

H3: The relationship between anxiety and cognitive response/message scrutiny will be moderated by internal efficacy such that high levels of internal efficacy will have a greater effect above and beyond the main effect of anxiety on cognitive response/message scrutiny.

Three constructs will measure cognitive response/message scrutiny (i.e., total cognitive response, message quality, and message relevance). The relationship between each of these variables and anxiety is predicted to be moderated by levels of internal efficacy.

Figure 5 depicts an alternative scheme where the criterion variable has been changed to learning. In this model, the relationship between anxiety and learning is moderated by external efficacy. First, the depicted relationship between anxiety and learning follows the classic Marcus and MacKuen (1993) argument that increased levels of anxiety lead to increased knowledge-seeking behavior. Others like Hullett et al. (2003) have tested similar hypotheses.

H4: The relationship between anxiety and learning will be positive.

Hypothesis 4 will also be measured with an alternative measure—intent to learn. These alternative measures serve similar purposes as instantaneous learning, but allow for testing the impact of future intent in addition to immediate retention of information.

Additionally, the substitution of external efficacy as a moderator variable in Figures 5 stems from arguments presented by Iyengar (1980) as well as others who maintain that external efficacy is predictive of evaluations or assessments of the political system. Here, a positive assessment of the responsiveness of government (i.e., external efficacy) is an important precursor to engaging in some behavior. Likewise, Clarke and

Acock (1989) have argued that external efficacy is a function of a citizen's past experiences (both successes and failures) in forming an attitude about whether the government cares about the citizenry. In short, it is has been argued that an individual needs to have a sense of governmental responsiveness in order to become involved in a participatory action. Without this sense, most individuals will not be compelled to act. Based on this, the following hypothesis is offered.

H5: The relationship between anxiety and learning/intent to learn is moderated by external efficacy such that high levels of external efficacy will have a greater effect above and beyond the main effect of anxiety on learning/intent to learn.

To be clear, internal efficacy is predicted to moderate the relationships between anxiety and cognitive response/message scrutiny. Underlying this hypothesis is the belief that higher levels of internal efficacy are required for political comprehension. Alternatively, external efficacy is predicted to moderate the relationships between anxiety and learning/intent to learn. Underlying this hypothesis is the belief that higher levels of external efficacy are required to motivate participant action.

Finally, a wealth of past research has shown that persuasion precedes action (see Dillard et al., 2007; Fishbein, & Ajzen, 1975; Lavine, & Snyder, 1996 for just a few examples). Combining Figures 4 and 5 creates an omnibus model that depicts a complete psychological process from anxiety induction to message perception to learning/intent to learn (see Figure 6). Thus, this model reiterates the moderating hypotheses 3 and 5, combining them into a single schema.

One exception to the previous claim deserves mention: Hypothesis 5 argues that external efficacy moderates the relationship between anxiety and learning/intent to learn, while figure 6 depicts external efficacy as moderating the relationship between cognitive response/message scrutiny and learning/intent to learn. This is not contradictory rather it merely clarifies the role of cognitive response/message scrutiny as an intervening variable in the relationship between anxiety and learning/intent to learn. Consequently, a final cluster of hypotheses is offered.

H6: The relationship between anxiety and learning/intent to learn will be mediated by cognitive response/message scrutiny.

H7: The relationship between cognitive response/message scrutiny and learning/intent to learn will be positively moderated by external efficacy.

H8: The omnibus model of political persuasion will fit the data.

Figure 4: Latent variable model depicting the revised Affective Intelligence model

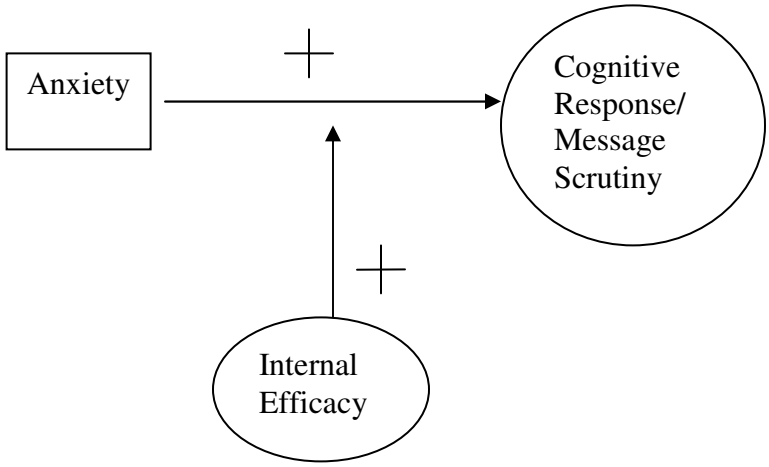


Figure 5: Latent variable model depicting the revised Affective Intelligence model

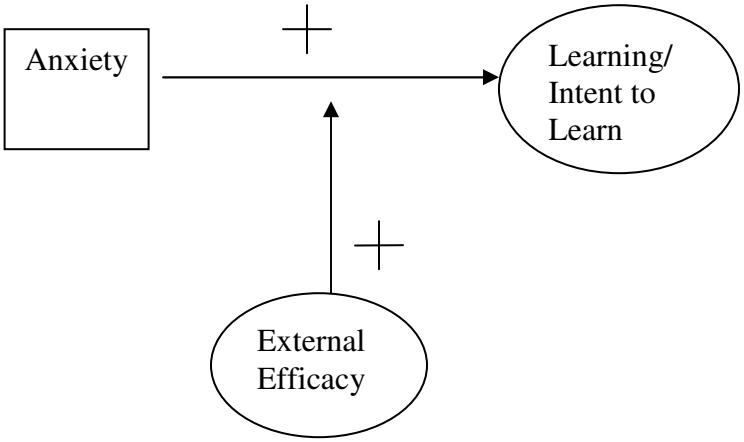
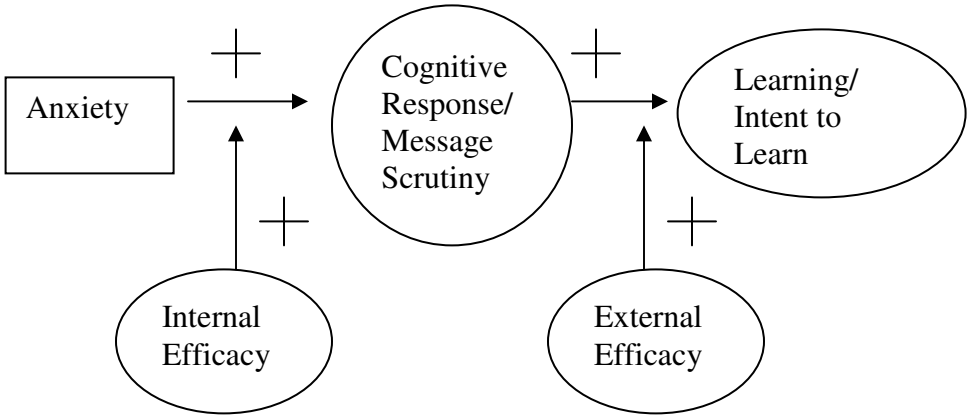


Figure 6: Latent variable model depicting the revised Affective Intelligence model



CHAPTER V

METHOD

Procedures

Prior to the onset of this study, a pretest on a small sample (n = 60) of college-aged students confirmed that message inductions exhibited the desired effect. Because message inductions were authored by the principal investigator it was reasonable to question the validity of their content. The results of the pretest affirmed the belief that the messages effectively manipulated participants. As a result, confidence in the efficacy of message inductions was not unwarranted.

This experiment measured levels of anxiety in response to a political stimulus. Upon arrival, participants were told that they were invited to participate in a study examining political attitudes. Participants were randomly assigned to experimental and control conditions. Both conditions were given brief, false newspaper clips created by the principal investigator reporting about poor economic forecasts for workers entering the job market. Specifically, the stories addressed future job acquisition and employment forecasts for younger Americans. The experimental group received a news clip that included a high anxiety message emphasizing a dismal future for those entering the job market. The control group also received a negative economic forecast however the newspaper article was devoid of the anxiety-inducing language and tone of the experimental induction (see Appendix for specific details).

After reading the initial newspaper clips, participants from both conditions were provided with a post-induction questionnaire measuring political affect. Subsequently,

both experimental and control groups received the same full- length political news story addressing the economy and job outlook for younger adults. The full-length news story included false factual information embedded within the article for the purpose of later recall testing. After reading the full-length article, participants were measured on total cognitive response, message quality, message relevance, recall, and behavioral intent to learn more about politics. Upon completion of the questionnaire, participants were debriefed and dismissed.

Participants

Students at the University of Arizona enrolled in communication courses were recruited by the primary investigator to serve as participants in this experiment. In return for participation, students received a small amount of extra credit to be used toward their final grade in a communication department course. Prior to the onset of the experiment, participants were provided with a disclaimer form which was used to gain participant consent. Participation in this study required that students be over the age of 18. The experiment took approximately 25 minutes to complete.

A total of 232 participants completed the study. Of the 232 participants, 130 (56.3%) were women, the average age was 21.61 years (SD = 2.40), 73.0% were Caucasian; 10% were Hispanic; 3.9% were African American; 3.5% were Asian; 1.3% were Native American; and 8.3% identified as other.[8] One hundred twenty-one participants were assigned to the experimental condition and 111 participants were assigned to the control condition.

[8] One participant did not respond to any items measuring age, sex, or race. Another participant did not racially identify.

Instruments

Predictor variables

Affect:PANAS

The Positive Affect Negative Affect Schedule (PANAS) developed by Watson, Clark, and Tellegen (1988) was used to assess political affect following the experimental induction. The scale is comprised of 20 self-report items measuring affect on a 5-point scale ranging from "very slightly/not at all" to "extremely." Because the PANAS scale measures general affect it was augmented to apply to the political domain. For example, the original PANAS asks respondents "to indicate to what extent you have felt [insert affective state] during the past week." Items like this were be transformed to ask about *political* affect; and to emphasize the present—not past—affect.

Watson, Clark, and Tellegen (1988) measured the internal consistency of the PANAS across a variety of time periods (e.g., this moment, today, past few days, past few weeks, year, and general) and found coefficient alphas ranging from .84 to .90 for both negative and positive dimensions across these time periods. Additionally, Watson et al. (1988) conducted an exploratory factor analysis which indicated the existence of two factors (i.e., positive and negative) where all 20 items loaded above .50 on their respective factor. Finally, they established the convergent validity of both positive and negative factors by demonstrating high correlations with similar affective scales (e.g., Diener, & Emmons, 1985; McAdams, & Constantian, 1983).

In addition, Marcus et al. (2000) have recommended that scholars employing the Affective Intelligence model use the PANAS to measure the emotional impact of political

stimuli. Specifically, they write: "relying on Watson's research base we have concluded that the best markers for the positive affect dimension are the terms *enthusiastic*, *interested*, *determined*, and *excited* and, for the negative affect dimension, the terms *scared*, *afraid*, *upset*, and *distressed*.

Affect: STAI

The State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) is comprised of 40 items designed to measure both state anxiety and trait anxiety. Only 20 items—those which measure state anxiety—were utilized in this study. State anxiety measures "subjective, consciously perceived feelings of tension and apprehension, and heightened automatic nervous system activity" (Spielberger et al., p. 3) on a 4-point scale ranging from *not at all* to *very much so*. Like the PANAS, the state component of the STAI measures "*how you feel right now, that is, at this moment.*" Items in the STAI are both positively and negatively worded to reflect the presence (negatively-worded) or absence (positively-worded) of anxiety. This measure has been found to be reliable in numerous past studies (e.g., Spielberger et al., 1970; Hishinuma et al., 2000). The factor structure of the whole STAI tends to follow hypothesized predictions: state and trait factors. The state factor—when analyzed alone in exploratory factor analyses—tends to break down into two sub-factors of positively and negatively worded items indicating the absence and presence of anxiety respectively. This is not surprising as some psychometricians (e.g., Carmines, & Zeller, 1979; Marsh, 1986) have noted that the inclusion of negatively-valenced items in questionnaires tends to introduce method associated dimensions.

Internal and external efficacy

Throughout the political science and political communication literatures, Craig et al.'s recommendations (1990) have become the gold standard when measuring internal and external efficacy. Based on both exploratory and confirmatory factor analyses, Craig et al. suggest the following six items as measures of internal efficacy: "I feel that I could do as good a job in public office as most other people"; "I consider myself well-qualified to participate in politics"; "I feel that I have a pretty good understanding of the important issues facing our country"; "I think that I am as well-informed about politics and government as most people"; "I often don't feel sure of myself when talking with other people about politics and government"[9]; and "sometimes politics and government seem so complicated that a person like me can't really understand what's going on.[10]" In their initial analysis, Craig et al, found that these six items were internally consistent ($\alpha = .80$).

Additionally, Craig et al. (1990) suggest the following four items as measures of external efficacy: "There are many legal ways for citizens to successfully influence what the government does"; "Under our form of government, the people have the final say about how the country is run, no matter who is in office"; "If public officials are not interested in hearing what the people think, there is really no way to make them listen[11]"; and "People like me don't have any say about what the government does." Craig et al. found that these four items failed to reach conventional alpha levels ($\alpha = .61$) in their initial study, however numerous other studies have continued to use these items despite

[9] Note that this item was reverse-coded.
[10] This item was reverse-coded.
[11] This item was reverse-coded.

sometimes failing to reach conventional standards of reliability (e.g., Finkel, 1985; Craig, 1979). In an attempt to preemptively increase reliability, the following variant on Craig et al.'s items was added creating a fifth measure of external efficacy: "Neither Congress nor the President is interested in what I have to say[12]."

Outcome variables

Total cognitive response

The Affective Intelligence model argues that when an anxiety-inducing stimulus is introduced, participants will process information at a higher level. Following Petty and Cacioppo (1979), participants were provided with a blank form and instructed to provide their thoughts regarding the full-length newspaper story. Subsequently, participants were asked to review their written responses and code them as positive, negative, or neutral. A participant's number of positive thoughts minus the number of negative thoughts equals their total cognitive response.

Message quality

Evaluating message quality provides a cognitive appraisal of the political issue (i.e., the economy). To assess message quality, Lavine and Snyder (1996) proposed a scale measuring participant's responses to statements like: "I found the material to be convincing"; and "The material did not contain persuasive arguments." Lavine and Snyder used 12 items to measure message quality demonstrating a high level of internal consistency ($\alpha = .90$).

Message relevance

[12] This item was reverse-coded.

Similarly, perceptions of message relevance provide a cognitive appraisal of the extent to which the message was deemed appropriate, suitable, or significant. Hullett (2002) conceptualized message relevance as "the extent to which participants perceive the persuasive message as relevant to the bases for their attitudes" (p. 166). For example, a specific message relevant item asked participants: "The news story was relevant to my thoughts on this issue."

Learning

Learning measured participants' ability to recall statements appearing in the full-length political news story. These items were measured on a 3-point qualitative scale of "correct," "incorrect," or "uncertain." Hullett, Louden, and Mitra (2003) used similar measures in their analysis of the 2000 presidential debate between Al Gore and George W. Bush. While items tapping learning for Al Gore fell below conventional benchmarks (i.e., $\alpha = .50$) it is noteworthy that only five items were retained after confirmatory factor analysis. In light of this, seven items were put forth in this questionnaire in an attempt to boost reliability. Each correct answer was coded as "1" while each incorrect or uncertain answer was coded as "0."

Behavioral intent to learn

Intent to learn more about politics was adapted from Lavine and Sndyer's (1996) measurement of vote intentions. In their second experiment, Lavine and Snyder asked participants to provide a self-reported probability that they would vote (in terms of percent). Borrowing from them, this study asked participants three items related to behavioral intention: "After leaving here today, what is the probability (in percentage)

that you will seek out further information about politics?"[13]; "In the future, how likely are you to look into current political happenings?"; and "How interested are you in receiving regular emails about political news?" Additionally, a fourth item where a space was provided to collect email addresses "to receive future information" served to further measure behavioral intention as well as provide greater credibility to the questionnaire.

The measurement model

To evaluate the validity of the constructs employed in this study, confirmatory factor analyses (CFA) were conducted (Hunter, & Gerbing, 1982; Klein, 1998). In this study, CFAs measured internal and external efficacy, message quality, message relevance, behavioral intent to learn about politics and the affective constructs. This is an important step in the analytic process as it accomplishes two goals: first, it allows for the investigation of potential second-order factors. Second, it allows for an analysis of model fit which indicates whether items load on a factor other than the hypothesized factor through the examination of residuals (Hunter, & Gerbing, 1982). All specific items utilized in this study appear in the Appendix as do their respective factor loadings. The specific means, standard deviations, and reliability coefficients observed in the present study are displayed in Table 1.

[13] This item was initially measured on a scale of 0 to 1. Scores were subsequently recoded to fit a 5-point scale to facilitate convergence in statistical analysis.

Table 1
Scale Range, Items Retained, Means, Standard Deviations, and Coefficient Alphas for Constructs in the Present Study

Construct	Scale	Items Retained	Mean	SD	α
Internal Efficacy	1→5	4	3.06	.84	.74
External Efficacy	1→5	3	3.35	.93	.76
TCR	-8 →7	1	-.59	2.46	
Msg. Quality	1→5	4	3.30	.69	.78
Msg. Relevance	1→5	3	3.27	.75	.78
Learning	0→1	4	.72	.30	.60
BI Learn	1→5	3	2.97	1.05	.69
PANAS-NEG	1→5	8	2.12	.86	.90
PANAS-POS	1→5	6	2.25	.79	.81
STAI	1→4	20	1.95	.54	.93
STAI-ANX	1→4	10	1.61	.54	.88
STAI-CALM	1→4	10	2.28	.64	.90

Statistical procedures

This study reports descriptive as well as inferential statistics. Descriptive statistics were reported through the use of the SPSS 10.0 statistical software program. Two types of inferential statistics were analyzed. First, standard analysis of variance (ANOVA) was used to compare control and experimental conditions.

Second, this study utilized latent variable modeling to empirically test the hypothesized models. All latent variable analyses were conducted using the *Mplus 5* statistical software program (Muthén, & Muthén, 2007). *Mplus* allows researchers to estimate latent variable interactions utilizing the method proposed by Klein and Moosbrugger (2000). In short, this method incorporates full information maximum likelihood (FIML) to estimate latent variable interactions.

Numerous applied statisticians (e.g., Bollen, 1996; Hayduk, 1987; Kenny, & Judd, 1984; Ping, 1996) have developed approaches to estimating latent variable interactions. The problem with these alternative methods is two-fold: first, several of the approaches require statistical software that permits researchers to specify nonlinear constraints which are not available in most statistical software packages. Second, others like Ping (1996) developed a computationally intensive method for overcoming the nonlinear constraint problem by engaging in a two-step process involving a series of algebraic calculations. Despite the existence of Ping's method, the approach offered by Klein and Moosbrugger (which is available in *Mplus*) is not only simpler to employ but has also been shown to outperform the alternative approaches in simulations (see results of Klein and Moosbrugger, 2000, for details).

CHAPTER VI

RESULTS

Message inductions

At the onset of the present study, a manipulation check was conducted to verify the results of the pretest. Two scales were used to measure the anxiety induction: the state component of STAI and the negative sub-scale of the PANAS. Independent samples t-tests examined differences between experimental and control conditions. With regard to the STAI, participants in the experimental condition ($M = 2.14$, $SD = .54$) exhibited significantly higher levels of anxiety than in the control condition ($M = 1.74$, $SD = .45$), $t(230) = 6.14$, $p < .01$, $r^2 = .14$. Likewise, the negative subscale of the PANAS demonstrated a similar result with the experimental condition ($M = 2.54$, $SD = .81$) having greater levels of negative affect than the control condition ($M = 1.66$, $SD = .64$), $t(226) = 9.06$, $p < .01$, $r^2 = .27$.

The factor structure of affect

Hypothesis 1 argued that the relationship between affective factors in the PANAS would be zero. To investigate this hypothesis, a confirmatory factor analysis (CFA) was conducted with particular interest in the correlation between affective factors. While the positive sub-scale of the PANAS was not relevant to any of the structural models tested in this study, several scholars (e.g., Abelson et al., 1982; Marcus et al., 2000) have argued for the need to examine the structure of emotion in order to ensure the validity of claims made from results connecting negative affect with outcome variables. Recall that the Affective Intelligence model argues that the extent to which an issue is substantively

meaningful to participants will determine whether the factors are orthogonal or correlated.

The initial examination of the factor structure of the PANAS was discouraging. The overall fit of the two-factor model was poor, χ^2 (169, N = 227) = 576.76, p < .01, CFI = .81, TLI = .79, RMSEA = .10, SRMR = .09. Moreover, modification indices pointed toward several item cross-loadings. Specifically, items "interest," "enthusiasm," and "inspired" (all positive affective items) also loaded on the negative factor. In addition, an examination of the standardized factor loadings indicated that two items ("excite;" and "guilty") loaded poorly on their respective factors (F = .28 for "excite" and F = .33 for "guilty). An examination of the residuals indicated that 19 residual correlations exceeded .10—a conventional cutoff point for identifying problematic fit (Klein, 1998). Moreover, of these 19 large residuals, 8 exceeded .20, and 2 exceeded .30. Finally, it is noteworthy that the correlation between positive and negative factors was .60 (95 % CI = .50 to .70). The zero order correlation matrices for the PANAS are presented in Tables 2-4.

Table 2
Zero-Order Correlations Among PANAS Items (n = 232)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	--																			
2	.55	--																		
3	.23	.18	--																	
4	.55	.64	.11	--																
5	.46	.40	.35	.46	--															
6	.05	.17	.01	.24	.18	--														
7	.51	.63	.02	.73	.38	.30	--													
8	.25	.34	.10	.44	.29	.31	.45	--												
9	.13	**-.02**	.34	.05	.36	.16	.06	.17	--											
10	.00	**-.02**	.26	.05	.22	.12	.03	.10	.29	--										
11	.34	.41	.03	.51	.37	.23	.56	.51	.12	.04	--									
12	.44	.37	.08	.38	.35	.11	.43	.28	.21	.12	.42	--								
13	.15	.30	.07	.30	.20	.34	.36	.34	.18	.05	.42	.30	--							
14	.30	.15	.31	.18	.41	.13	.21	.15	.49	.22	.14	.33	.13	--						
15	.50	.57	.04	.61	.33	.23	.76	.40	**-.05**	.02	.52	.40	.33	.15	--					
16	.51	.42	.17	.51	.53	.20	.48	.26	.29	.21	.35	.41	.19	.56	.44	--				
17	.44	.28	.24	.29	.43	.08	.28	.23	.24	.22	.34	.65	.12	.42	.31	.52	--			
18	.23	.38	.14	.35	.22	.26	.42	.25	.06	.23	.44	.26	.30	.11	.48	.28	.27	--		
19	.31	.21	.18	.27	.44	.16	.27	.27	.32	.40	.28	.42	.19	.43	.22	.55	.55	.31	--	
20	.47	.55	.04	.57	.34	.25	.79	.44	.09	.05	.56	.44	.43	.15	.79	.39	.31	.39	.27	--

All correlations greater than or equal to.13 are significant at the $p < .05$ level
Boldface indicates negative correlations.

Table note:

1 = Interest; 2 = Distressed; 3 = Excited; 4 = Upset; 5 = Strong; 6 = Guilty; 7 = Scared; 8 = Hostile; 9 = Enthusiastic; 10 = Proud; 11 = Irritable; 12 = Alert; 13 = Ashamed; 14 = Inspired; 15 = Nervous; 16 = Determined; 17 = Attentive; 18 = Jittery; 19 = Active; 20 = Afraid.

Table 3
Zero-Order Correlations Among Negative Subscale Of PANAS (n = 232)

	1	2	3	4	5	6	7	8	9	10
1	--									
2	.64	--								
3	.17	.24	--							
4	.63	.73	.30	--						
5	.34	.44	.31	.45	--					
6	.41	.51	.23	.56	.51	--				
7	.30	.30	.34	.36	.34	.42	--			
8	.57	.61	.23	.76	.40	.52	.33	--		
9	.39	.35	.26	.42	.25	.44	.40	.48	--	
10	.55	.57	.25	.79	.44	.56	.43	.79	.39	--

All correlations greater than or equal to.13 are significant at the $p < .05$ level

Table note:

1 = Distressed; 2 = Upset; 3 = Guilty; 4 = Scared; 5 = Hostile; 6 = Irritable; 7 = Ashamed; 8 = Nervous; 9 = Jittery; 10 = Afraid.

Table 4
Zero-Order Correlations Among Positive Subscale Of PANAS (n = 232)

	1	2	3	4	5	6	7
1	--						
2	.35	--					
3	.26	.22	--				
4	.08	.35	.12	--			
5	.17	.53	.21	.41	--		
6	.24	.43	.22	.65	.52	--	
7	.18	.44	.40	.42	.55	.55	--

All correlations greater than or equal to.13 are significant at the $p < .05$ level

Table note:

1 = Excited; 2 = Strong; 3 = Proud; 4 = Alert; 5 = Determined; 6 = Attentive; 7 = Active;

Because of the poor fit of the initial CFA, a second CFA was conducted with the aforementioned cross-loading items and poor loading indicators eliminated from the analysis. While slightly better, the revised PANAS did not achieve conventional standards of fit, χ^2 (89, N = 227) = 299.80, $p < .01$, CFI = .88, TLI = .86, RMSEA = .10, SRMR = .07. Two points are worth mentioning: first, the modification indices now indicated the cross-loading of another item (i.e., “attentiveness”) on the negative factor; second, the modification indices identified 10 error correlations that—if allowed to

correlate—would reduce the model chi square. While it is tempting to correlate error terms, Anderson and Gerbing (1988) make a fairly strong case for not doing so unless specified a priori, noting that correlating errors in a cross-sectional design is likely to "take advantage of chance" (p. 417). The correlation between affective factors in this second CFA was .59 (95% CI = .49 to .70).

Table 5 depicts the correlations between the affective constructs and other constructs of interest in this study. As the table depicts, the relationships between affective constructs and other constructs are parallel in several—but not all—cases. Because the psychometric properties of affect are important when interpreting the structural models hypothesized in this study, a second-order emotion factor was tested via second-order confirmatory factor analysis. A second order factor analysis is mathematically equivalent to a first order factor analysis with correlated error terms (Bollen, 1989). To ensure an over-identified second-order factor, the STAI was incorporated into the model. The STAI measures anxiety via 20 items made up of positively-worded and negatively-worded statements (e.g., "I feel anxious"). It was a priori posited that this scale was comprised of two factors: anxiety (negatively-worded items) and the absence of anxiety (positively-worded items). Combined, the four factors (PANAS positive; PANAS negative; STAI anxiety; STAI calm) were tested in both four factor and second-order factor solutions with chi square and practical fit difference testing to determine the best fitting model.

Table 5
Correlations Among Affective Constructs And Other Constructs Of Interest

	POS	NEG	TCR	LEA	BI	QUAL	REL	INT	EXT
POS	--								
NEG	.59*	--							
TCR	.04	.05	--						
LEA	-.05	.00	.00	--					
BI	.29*	.23*	-.04	-.02	--				
QUAL	.09	-.05	.09	-.01	.23*	--			
REL	.36*	.14†	.19*	.05	.40*	.66*	--		
INT	.19*	.02	-.02	.10	.66*	.14†	.25*	--	
EXT	-.16†	-.11	-.06	.01	.01	.06	.00	.21*	--

* = correlation is significant at the $p < .05$ level
† = correlation is significant at the $p < .10$ level

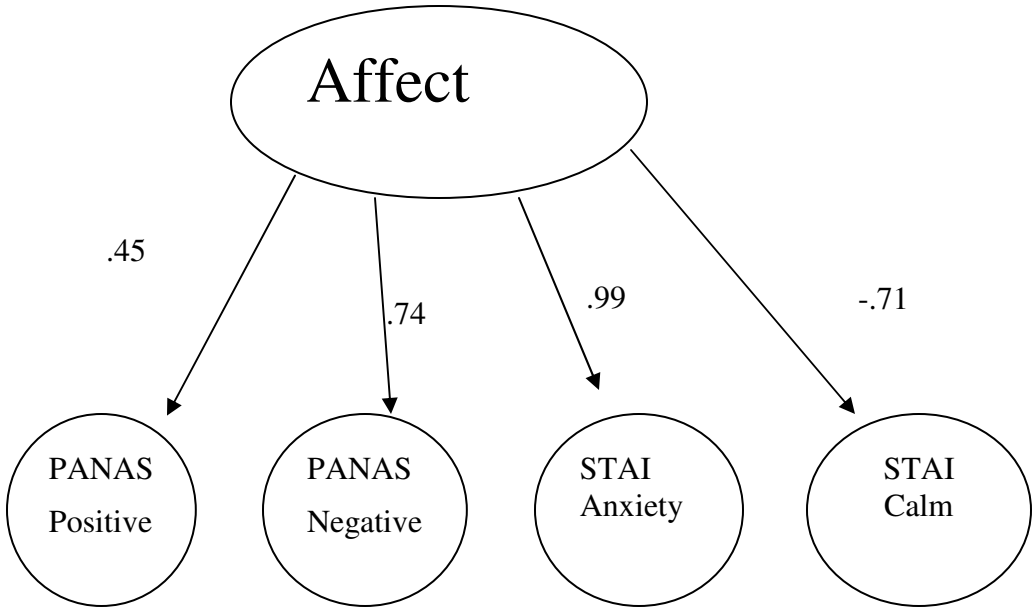
Table note:

POS = positive subscale of PANAS
NEG = negative subscale of PANAS
TCR = total cognitive response
LEA = learning
BI = behavioral intent
QUAL = message quality
REL = message relevance
INT = internal efficacy
EXT = external efficacy

The results of the second-order CFA demonstrated that the four-factor solution, χ^2 (623, N = 623) = 1396.27, p < .01, CFI = .81, TLI = .80, RMSEA = .07, SRMR = .07 fit the data slightly better than the second-order factor solution, $\chi^2_{\text{difference}}$ (2) = 50.46, p < .01. Additionally, the changes in CFI = .01, TLI = .01, RMSEA = .00, and SMR = .01 were small though not ignorable (Widaman, 1985). While the reduction in chi square as well as the practical fit indices is of note so too is the loss of two degrees of freedom through the use of the four-factor solution. Consequently, one must consider the cost of the four-factor solution in terms of the loss in parsimony that comes with the improvement in fit. As Rindskopf and Rose (1988) note, "one reason for preferring the second-order model is that when more measures are obtained, the second-order model will be more parsimonious" (p. 55).[14] What is clear is that the four-factor and second-order solutions are quite similar. Figure 7 illustrates the second order solution, while Table 5 indicates the correlations between affective constructs in the four-factor solution.

[14] It is somewhat counter-intuitive that the second-order model is more parsimonious. The reason that this is true has to do with factor correlations. In the four-factor model, correlations must be estimated between all factors. In the second-order model, the first-order factors are treated as indicators (i.e., loadings) thus requiring less (in this case, 2) estimated relationships.

Figure 7: Results of Second-Order Confirmatory Factor Analysis of Affect.



Depicted are standardized factor loadings.
χ^2 (625, N = 224) = 1446.73, p < .01, CFI = .80, TLI = .79, RMSEA = .08, SRMR = .09.

Table 6
Correlations Among Affective Constructs in Four-Factor Solution

	PANAS-POS	PANAS-NEG	STAI-ANX	STAI-CALM
PANAS-POS	--			
PANAS-NEG	.58*	--		
STAI-ANX	.44*	.72*	--	
STAI-CALM	-.09	-.51*	-.72*	--

* = correlation is significant at the $p < .05$ level
Table note:

PANAS-POS = positive subscale of PANAS
PANAS-NEG = negative subscale of PANAS
STAI-ANX = negative subscale of STAI
STAI-CALM = positive subscale of STAI

When examining the factor correlation matrix it seems relatively clear that a single, second-order arousal factor—rather than a four-factor solution—is more appropriate. To verify this, a target coefficient was calculated by divided the chi square statistic for the four-factor model by the second-order model (Marsh, & Hocevar, 1985). The target coefficient indicated that 96.5 percent of the variation in the four-factor model is explained by the second-order model.

To be clear, both the four-factor solution and the second-order factor solution indicate that participants exhibited affective responses consistent with a single, unipolar arousal factor. In other words, participants were either aroused (in which case, they were simultaneously positively and negatively aroused) or they were unaffected by the stimulus. Thus the structure of affect as measured in this study ranged from the absence of arousal to a simultaneous (though relatively low) occurrence of positive and negative affect. A cursory glance at the means for each affective scale verifies this claim (PANAS-POS = 2.25 [5-point scale]; PANAS-NEG = 2.12 [5-point scale]; STAI-CALM = 2.28 [4-point scale]; STAI-ANX = 1.61 [4-point scale]. This result stands in contrast to numerous findings from social psychology (e.g., Crawford, & Henry, 2004; MacKinnon et al., 1999; Terracciano et al., 2003) as well as political psychology (Abelson et al., Marcus et al., 2000) where the relationships between positive and negative affect have ranged from potentially -.6 to .2 (Marcus et al, 2000).

For the sake of examining the remaining structural models, the negative sub-scale of the PANAS was used as a proxy for arousal. This sub-scale correlated highly with the positively-worded component of the STAI as well as highly with the positive sub-scale of the PANAS. In addition, the negative sub-scale of the PANAS is identified by Marcus et al. (2000) as the most desirable measurement instrument to use when exploring the relationship between affect, learning, and behavioral intent.[15] Finally, while the choice to treat affect as a second-order factor is important for purposes of interpreting results, there

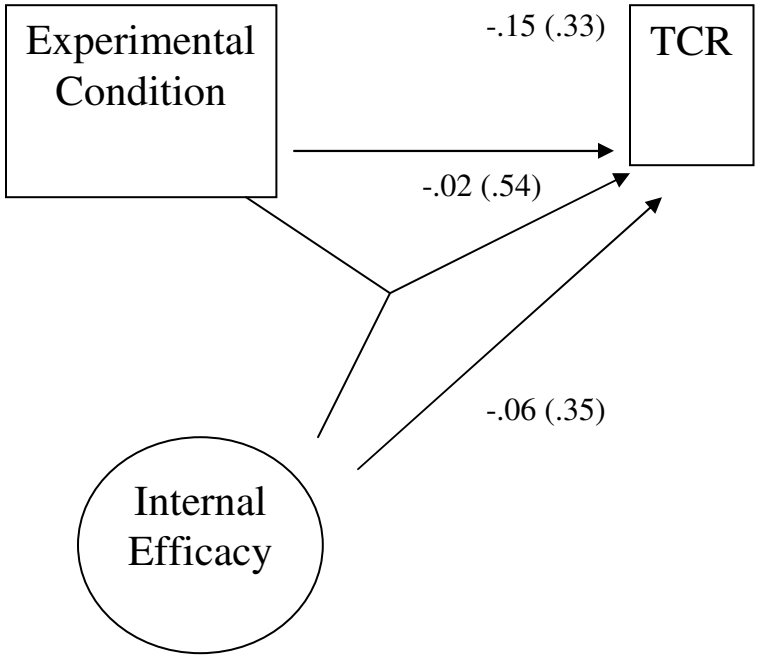
[15] One additional reason to use the negative subscale of the PANAS is statistical estimation. As models become increasingly more complex, problems with convergence tend to arise. Because some of the structural models tested in this study required substantial iterations to converge, choosing the negative subscale of the PANAS in lieu of estimating second-order relationships lightens the computational load.

is little doubt that hypothesis 1 was not supported. The relationship between affective factors was substantial.

Test of the structural models

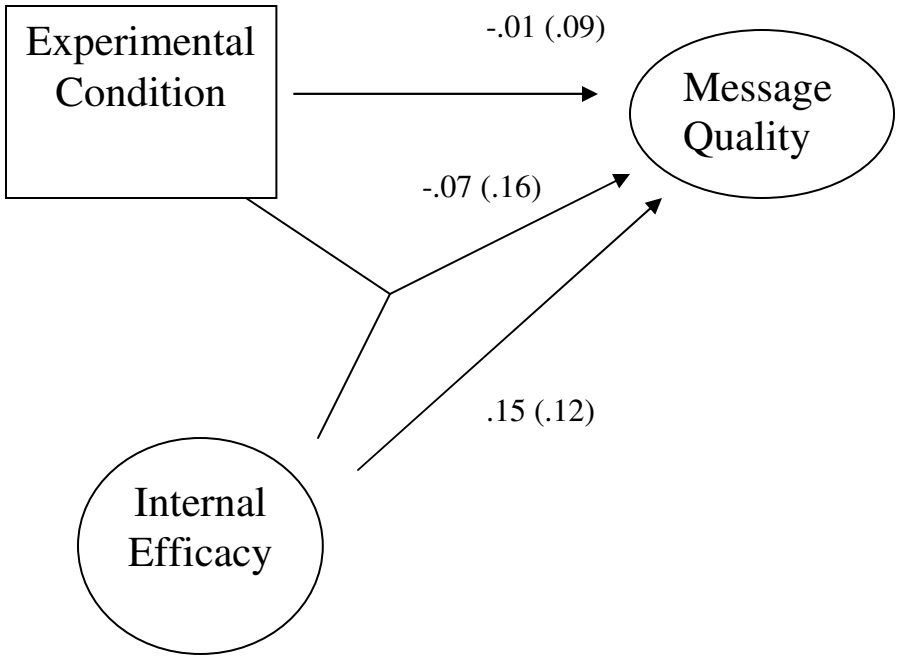
Hypotheses 2 and 3 were depicted earlier in this document in Figure 4. These hypotheses argued for a positive relationship between experimental condition and total cognitive response/message scrutiny. Moreover, this relationship was predicted to be moderated by levels of internal efficacy. Because total cognitive response/message scrutiny entails three separate constructs, three separate models were run. The results are presented in figures 8-11. It should be noted that because fit indices have not been developed for structural equation models that include interactions, none can be provided. Rather, Muthén and Muthén (2007) recommend examining the fit indices of main effects-only models instead. To ascertain whether the interaction adds anything to the fit of the model, they recommend relying on the significance test associated with the particular effect. Below are figures 8-11. In the case of figure 10, the main effects model is presented for illustrative purposes.

Figure 8: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Total Cognitive Response with Interaction Effect.



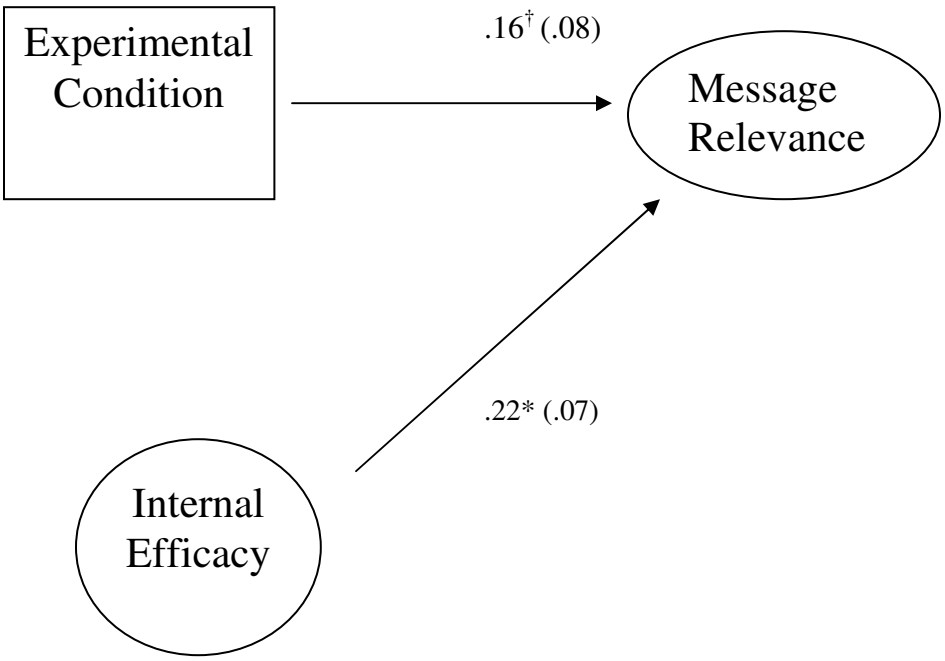
Depicted are unstandardized coefficients with standard errors in parenthesis. Main effects-only fit statistics: χ^2 (8, N = 227) = 9.23, p = .32, CFI = 1.00, TLI = .99, RMSEA = .03, SRMR = .03.

Figure 9: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Message Quality with Interaction Effect.



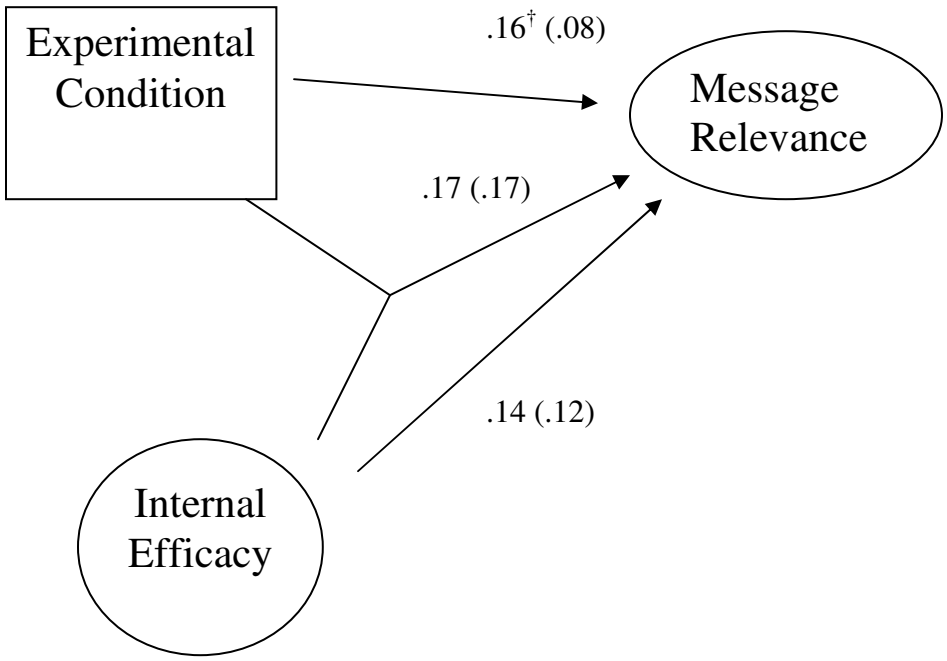
Depicted are unstandardized coefficients with standard errors in parenthesis. Main effects-only fit statistics: χ^2 (25, N = 227) = 19.53, p = .77, CFI = 1.00, TLI = 1.02, RMSEA = .00, SRMR = .03.

Figure 10: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Message Relevance (main effects only model).



Depicted are unstandardized coefficients with standard errors in parenthesis.
†: *p* = .06; χ^2 (18, *N* = 227) = 19.36, *p* = .37, CFI = 1.00, TLI = 1.00, RMSEA = .02, SRMR = .04.

Figure 11: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Message Relevance with Interaction Effect.



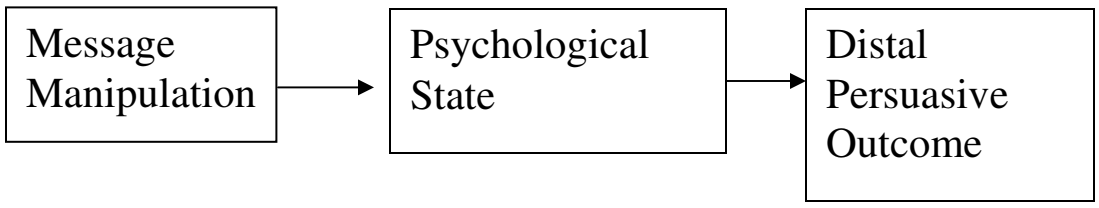
Depicted are unstandardized coefficients with standard errors in parenthesis.
†: *p* = .06; main effects-only fit statistics: χ^2 (18, N = 227) = 19.36, p = .37, CFI = 1.00, TLI = 1.00, RMSEA = .02, SRMR = .04.

As figures 8-11 indicate, the relationship between experimental condition and the proposed outcomes is not statistically significant in either main effect or interactive forms. It is noteworthy that the relationship between experimental condition and message relevance approaches statistical significance ($p = .06$), however altogether the results are disappointing. In sum, hypotheses 2 and 3 were not supported. Altogether, the hypotheses outlined earlier in this document identified 17 theoretical models to be tested. The remainder of these models (Figures 12-25) is presented in the Appendix. In sum, of the 17 models tested *none* demonstrate a statistically significant relationship between experimental condition and any of the other constructs of interest.[16] To be clear, hypotheses 2-8 were not empirically supported.

While these results are discouraging, they may not fully explain the story behind the data. O'Keefe (2003) has observed that when researchers posit a relationship between an experimental condition variable and an outcome variable, they assume a perfect relationship between random assignment and the desired manipulative effect. This assumption may not be tenable. Consequently, O'Keefe argues that scholars should demonstrate that the relationship between the condition variable and the outcome is mediated by the manipulation effect. Based on O'Keefe's arguments, it is worth considering that some of the aforementioned unsuccessful models may be unsuccessful due to a missing third-variable—namely, measured affect. To illustrate the aforementioned argument, a replica of the model depicted in O'Keefe (2003) is represented below in Figure 26.

[16] A single-cause MIMIC model confirmed that there was no relationship between experimental condition and any of the constructs in this study.

Figure 26: Replica of O'Keefe's (2003) Proposed Model.

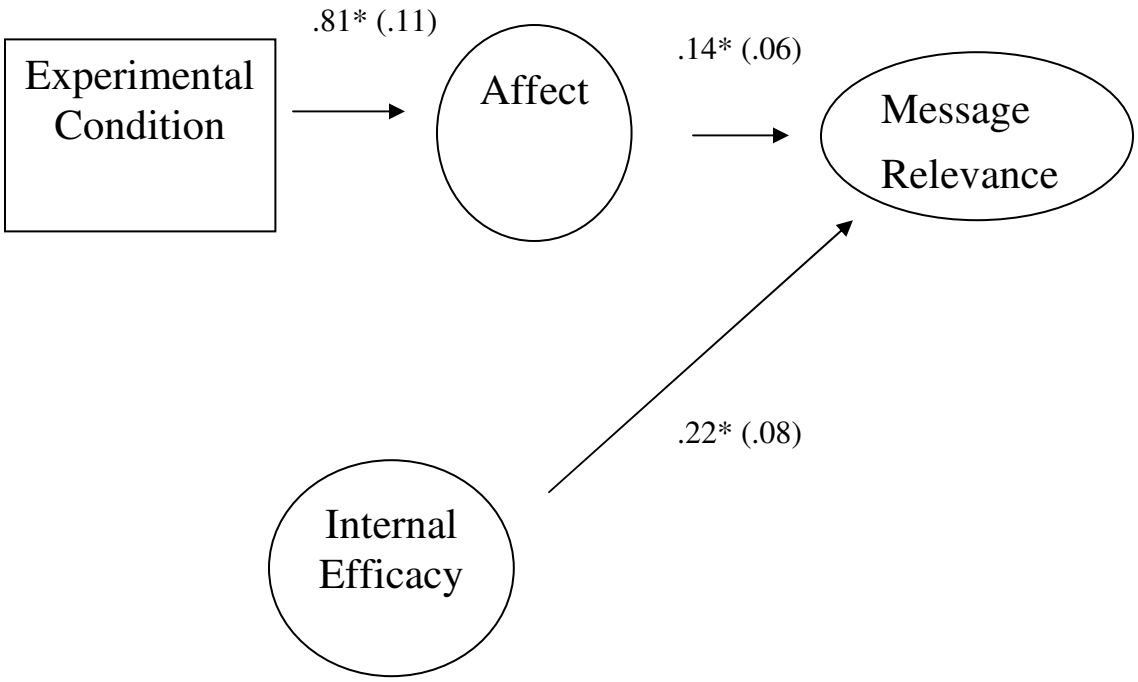


Revised models

Following O'Keefe (2003), the models tested in this study were re-estimated by including affect as a mediating construct between experimental condition and the various outcome variables. For presentational purposes, only models that (1) exhibited reasonable fit and (2) depicted statistically associated variables are presented below. Figures 27 and 28 illustrate positive relationships between affect and message relevance (Figure 27) and affect and behavioral intent (Figure 28). In addition, the models illustrated the positive impact of internal efficacy on both outcome variables. In particular, it is noteworthy that the relationship between internal efficacy and behavioral intent was relatively large (B = .86, SE = .13).

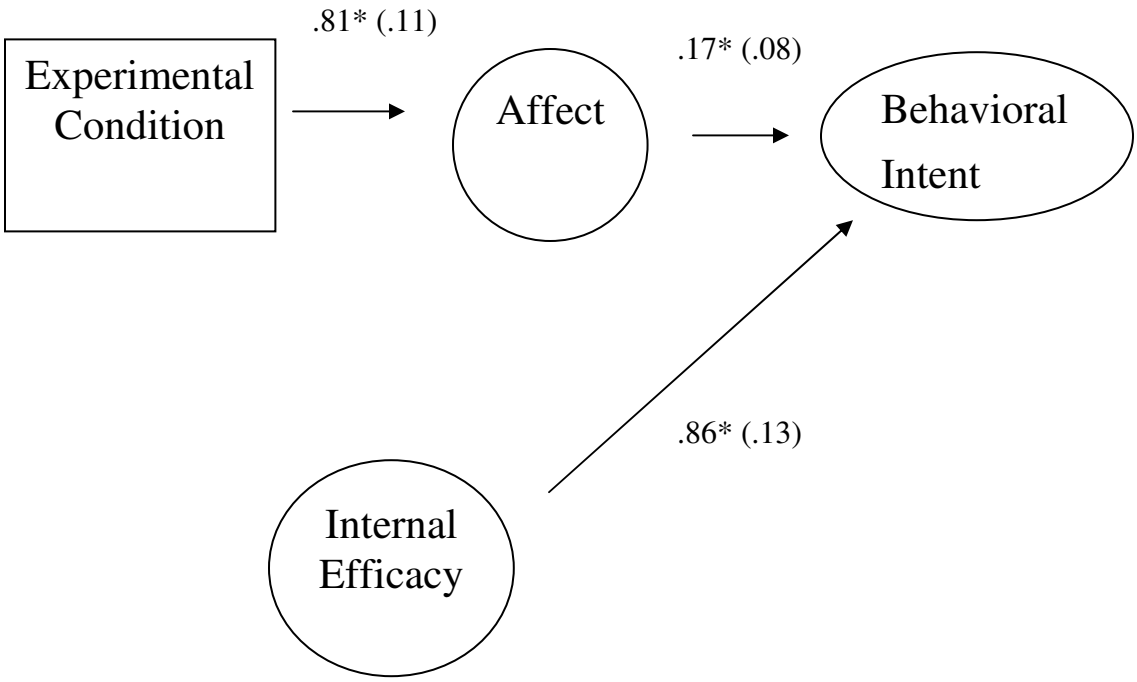
Figure 29 combines the constructs presented in these previous models into a single model. It is noteworthy that the impact of affect on behavioral intent is not mediated via message relevance. A direct path from affect to behavioral intent was observed (B = .16, SE = .08) indicating that as levels of affect increased so too did behavioral intent to learn about politics. The model explains an estimated 45.7 percent of the variance in the latent variable behavioral intent while explaining 9.2 percent of the variance in the latent variable message relevance. Supporting the point raised by O'Keefe, experimental condition explained 28 percent of the variance in affect. While these findings are an improvement from the initial run of models tested in this study, these results were still discouraging. Visual depictions of the results are provided below.

Figure 27: Results of Latent Variable Model Depicting Relationship Between Experimental Condition, Affect, Internal Efficacy and Message Relevance.



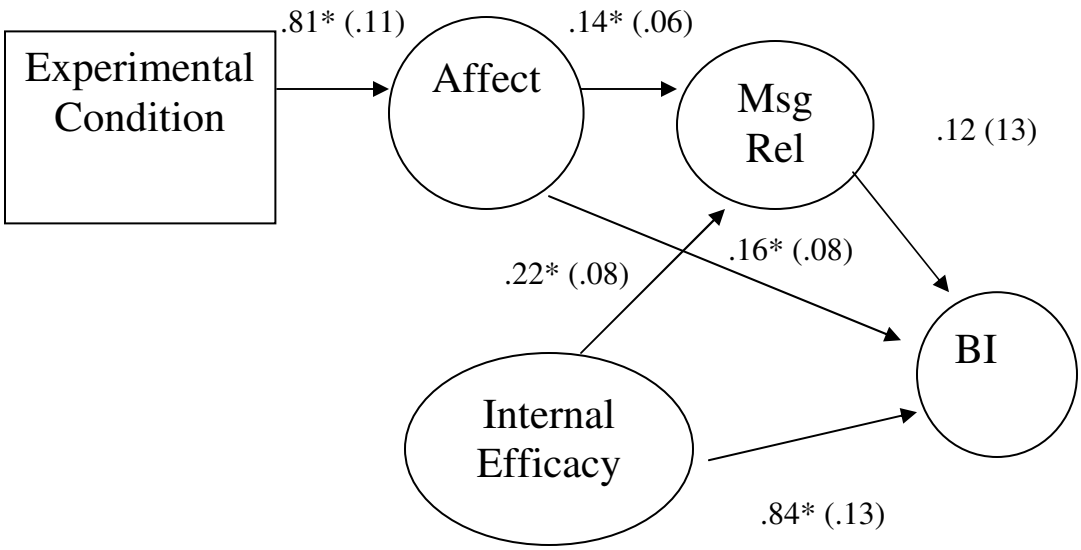
Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (101, N = 227) = 197.92, p < .01, CFI = .94, TLI = .92, RMSEA = .07, SRMR = .05.

Figure 28: Results of Latent Variable Model Depicting Relationship Between Experimental Condition, Affect, Internal Efficacy, and Behavioral Intent.



Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (101, N = 227) = 202.00, p < .01, CFI = .93, TLI = .92, RMSEA = .07, SRMR = .05.

Figure 29: Results of Latent Variable Model Depicting Relationship Between Experimental Condition, Affect, Message Relevance, and Behavioral Intent.



Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (146, N = 227) = 252.95, p < .01, CFI = .94, TLI = .92, RMSEA = .06, SRMR = .05.

Summary of revised models

Given the perspective put forth by O'Keefe (2003), a review of Figures 27-29 yields a different assessment of the hypotheses. Hypothesis 2 argued that the relationship between affect and cognitive response/message scrutiny would be positive. This hypothesis was supported in the case of message relevance where higher levels of affect were associated with higher levels of message relevance. Hypothesis 3 argued that the aforementioned relationship would be moderated by levels of internal efficacy. This hypothesis was altogether not supported. Hypothesis 4 argued that the relationship between affect and learning/behavioral intent would be positive. This hypothesis was supported in the case of behavioral intent. As levels of affect increased so did levels of behavioral intent to learn more about politics. Hypothesis 5 argued that the aforementioned relationship would be moderated by levels of external efficacy. This hypothesis was altogether not supported. Hypotheses 6 argued the relationship between affect and behavioral intent would be mediated by message relevance. This hypothesis was not supported. The relationship between affect and behavioral intent was direct.

Hypothesis 7 argued that the relationships between total cognitive response/message scrutiny and learning/intent to learn would be positively moderated by levels of external efficacy. This hypothesis was not supported. Neither total cognitive response, nor message quality, nor message scrutiny interacted with external efficacy.

Hypothesis 8 argued for an omnibus model of political persuasion. This model did not fit the data well nor were most of its estimated relationships statistically significant. The main effects-only fits statistics indicated χ^2 (202, N = 227) = 391.87, $p < .01$, CFI =

.90, TLI = .88, RMSEA = .07, SRMR = .07. Of the interaction effects tested, neither the interaction between internal efficacy and affect nor the interaction between external efficacy and message relevance was statistically significant.

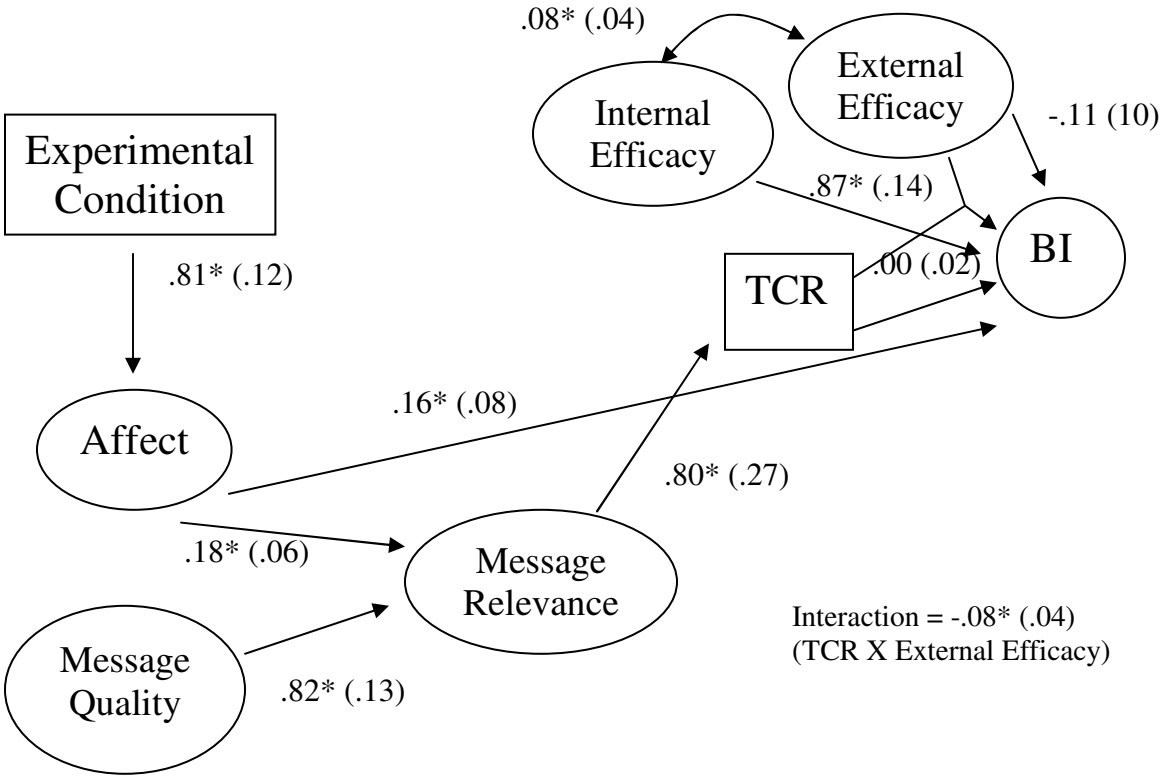
An assessment of the impact of affect

The central goal of this dissertation was to examine the impact of affective, cognitive, and personality constructs on distal persuasive outcomes. While the initial results were relatively uninformative in explaining the political persuasion process, the revised models shed some light on the relationships between affect, message relevance, and behavioral intent to learn more about politics. While these findings were appreciated, they did not fully answer the question that this dissertation put forth.

To be clear, this dissertation has argued on behalf of affect as an important influence in the political persuasion process. The need to understand the nature of affect in the political persuasive process led to a testing of two models—a model including affect and one without it. The goal of this endeavor was to ascertain the impact of affect on behavioral intent and determine where affect fit in vis a vis cognitive and personality predictors.[17] It should be stated that the following analysis was not a priori specified. Rather, the relationships between constructs depicted in Figures 30-31 were empirically derived. Finally, it is important to note that the model presented in Figure 31 is nested within the model presented in Figure 30. Thus, the cognitive/personality model was nested within the affective/cognitive/personality model. This nesting allows for meaningful comparisons of the two models via chi square difference testing.

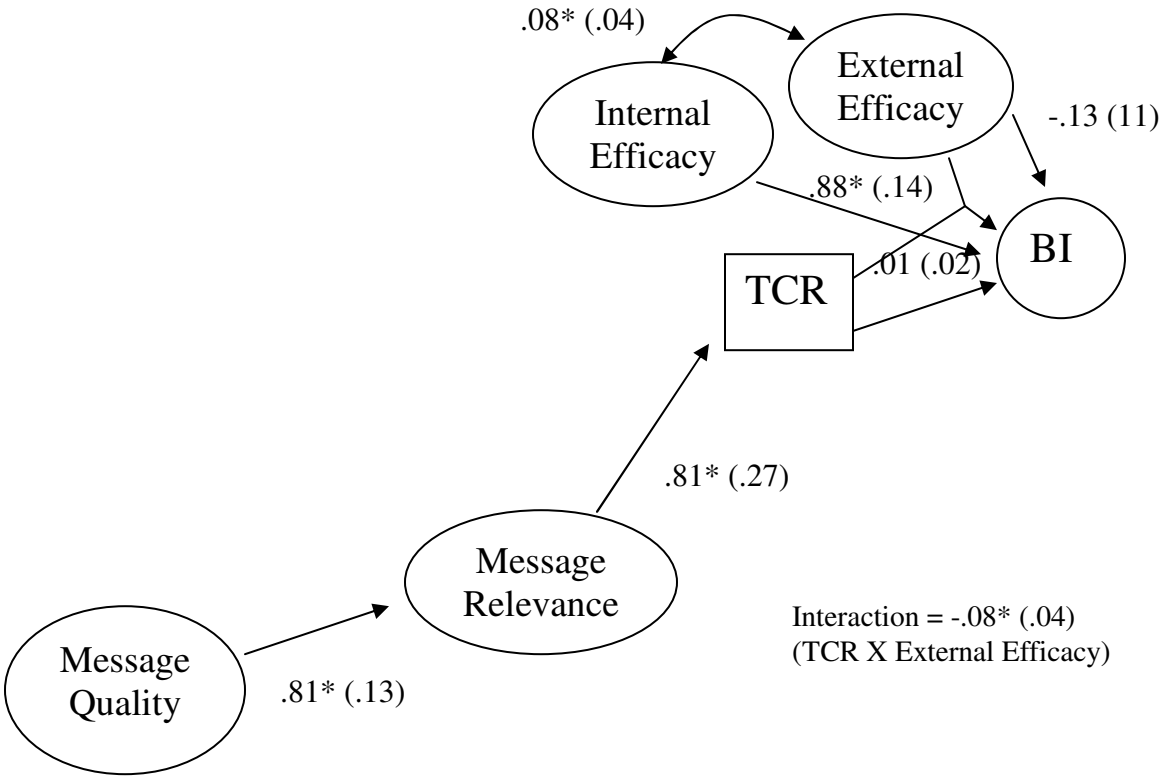
[17] It is noteworthy that learning was not statistically associated with any of the predictive constructs in this study.

Figure 30: A model of persuasion formed from affective, cognitive, and personality predictors.



Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (312, N = 227) = 473.59, p < .01, CFI = .93, TLI = .92, RMSEA = .05, SRMR = .06.

Figure 31: A model of persuasion formed from cognitive and personality predictors.



Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (130, N = 227) = 166.61, p = .02, CFI = .97, TLI = .96, RMSEA = .04, SRMR = .07.

An examination of the affective/cognitive/personality model indicates a fairly good fit to the data, χ^2 (312, N = 227) = 473.59, p < .01, CFI = .93, TLI = .92, RMSEA = .05, SRMR = .06. All of the paths were statistically significant with the exception of two: external efficacy → behavioral intent and total cognitive response → behavioral intent. Typically, this would indicate the need for structural trimming, however the interaction between external efficacy and total cognitive response was statistically related to behavioral intent (B = -.08, SE = .04). Thus, among individuals who believed that government is highly responsive to the needs of the citizenry, higher levels of total cognitive response were associated with lower levels of behavioral intent to learn more about politics. Put another way, among those who felt that the government does not respond to the public's will, the more positive thoughts individuals had about the economy the more they intended to learn more about politics.

The affective component of the model indicates positive associations between affect and message relevance (B = .18, SE = .06) and affect and behavioral intent (B = .16, SE = .08). As previous models have indicated, higher levels of arousal were associated with greater perceptions of message relevance and a greater desire to learn more about politics. In the main effects-only model, an estimated 46 percent of the variance in behavioral intent was explained as was an estimated 55.6 percent of the variance in message relevance. Five percent of the variance in total cognitive response was explained and an estimated 28 percent of the variance in affect was explained by the model.

The cognitive/personality model fit the data better, χ^2 (130, N = 227) = 166.61, p = .02, CFI = .97, TLI = .96, RMSEA = .04, SRMR = .07. Like the larger model, all of the paths were statistically significant except the two main effects of external efficacy and total cognitive response with outcome behavioral intent. Again, the interaction between external efficacy and total cognitive response was significant. Like the larger model, the cognitive/personality model illustrates the impact of internal efficacy in predicting behavioral intent. The extent to which individuals feel they understand politics is highly predictive of their desire to seek out more information about politics (B = .88, SE = .14). In the main effects-only model, an estimated 42.9 percent of the variance in behavioral intent was explained as was an estimated 50.6 percent of the variance in message relevance. As before, 5 percent of the variance in total cognitive response was explained by the model.

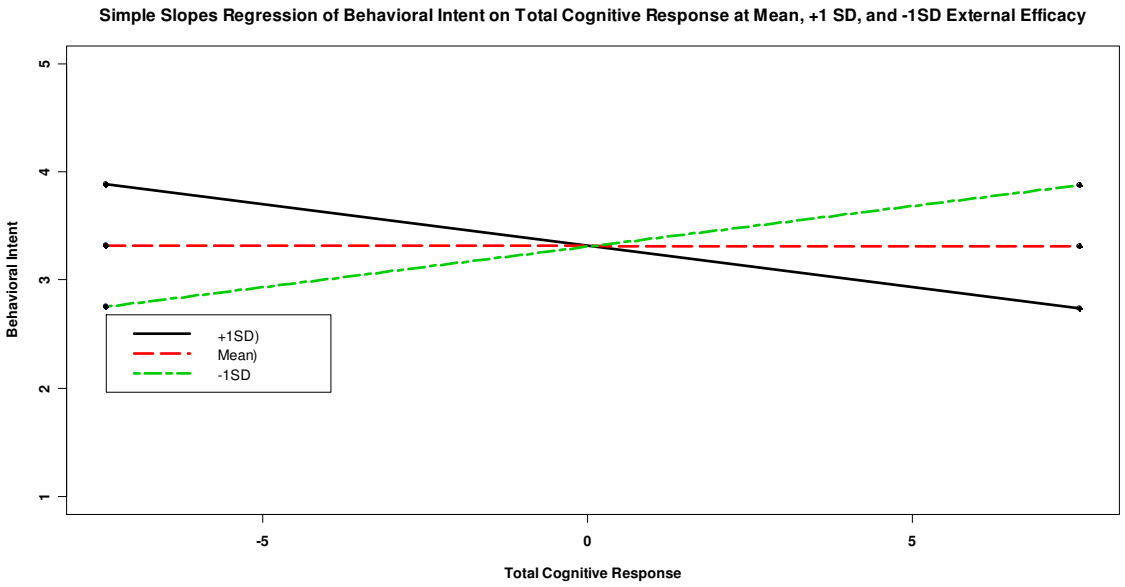
While the omnibus model indicates that affect is statistically associated with message relevance and behavioral intent, one must consider whether affect's benefit to the model is worth its cost in terms of parsimony. A comparison of the two models through a chi square difference test revealed the superiority of the nested model, $\chi^2_{\text{difference}}$ (182) = 306.98, $p < .01$. The cognitive/personality model explains the data best with fewer parameters.

One point of interest in both models is the statistically significant interaction between external efficacy and total cognitive response. While graphical methods for exploring latent variable interactions have yet to be widely adopted, one feasible approach is to consider the interaction under observable composite variables. To do this,

composite variables were calculated for external efficacy and behavioral intent. Following Cohen, Cohen, West and Aiken (2002), external efficacy and total cognitive response were mean-centered. Subsequently a product term was computed. An OLS regression was run with the centered variables and the interaction as predictors and the un-centered behavioral intent composite as the outcome. The results of this regression were similar to those yielded from the latent variable approach $F(3, 221) = 407.72$, $p < .01$, $R^2 = .02$. Specifically, an examination of the coefficients indicating no relationship between either the main effect of total cognitive response ($B = .00$, $SE = .03$, $p > .05$) or the main effect of external efficacy ($B = .00$, $SE = .09$, $p > .05$). The interaction between total cognitive response and external efficacy was statistically significant ($B = -.08$, $SE = .04$, $p < .05$, $sr^2 = .02$).

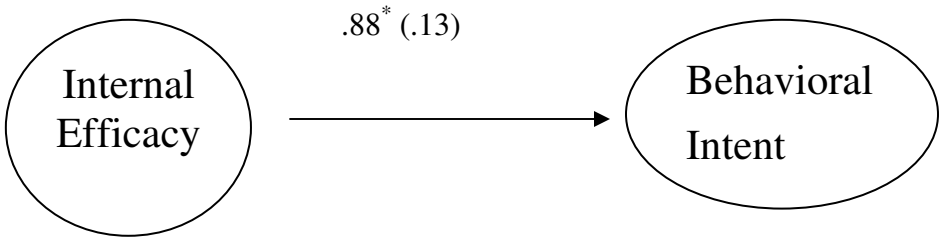
To appreciate this interaction in graphical form, three simple slopes illustrating the relationship between total cognitive response and behavioral intent at varying levels of external efficacy are depicted. Following Cohen, Cohen, West, and Aiken (2002), the three levels of external efficacy are the mean, one standard deviation above the mean, and one standard deviation below the mean. The graphical display in Figure 32 was created in the statistical software program *R*, following instructions documented in Preacher, Curran, and Bauer (2006). Additionally, it should be noted that the regions of significance of this interaction exist outside the interval of -5.34 and 5.90. In other words, the interaction is statistically significant only at values of total cognitive response beyond this interval.

Figure 32: The interaction of total cognitive response and external efficacy.



Returning to the cognitive/personality model, it is worthwhile taking into account the impact of internal efficacy on levels of behavioral intent. In light of this, a final nested model comparison is considered. This final model simply proposed that internal efficacy alone served as a sufficient, single predictor of behavioral intent. To be clear, this nested model entails simply the regression of the behavioral intent on internal efficacy in a latent variable context. The results of this analysis were noteworthy and are depicted in Figure 33.

Figure 33: Results of Latent Variable Model Depicting Relationship Between Internal Efficacy and Behavioral Intent.



Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (20, N = 227) = 26.13, p = .16, CFI = .98, TLI = .98, RMSEA = .04, SRMR = .04.

While the fit of the model is good, it is largely irrelevant due to the nature of the two-construct model. A chi square difference test indicated that the simpler model was slightly inferior to the cognitive/personality model, $\chi^2_{\text{difference}}$ (110) = 140.48, p = .03. Consequently, conventional practice suggests that the more parsimonious model should be rejected. The contribution of other cognitive constructs adds supplementary information to the model that internal efficacy alone does not provide.

Finally, it is worth noting that the aforementioned models were tested on two sub-samples: college seniors (n = 122) and Democrats (n = 101). The underlying rationale behind selecting these particular groups was the belief that either or both would exhibit increased levels of affect, message relevance, and behavioral intent. While this idea seemed plausible, an empirical examination indicated that these subgroups did not significantly differ in the political persuasion process.

Review of hypothesized predictions

Hypotheses 1 argued for the independence of affective constructs in the PANAS. This hypothesis was not supported. The relationship between positive and negative affect was positive.

Hypothesis 2 argued that the relationship between anxiety and total cognitive response/message scrutiny would be positive. This hypothesis was partially supported. A positive relationship between anxiety and message relevance was demonstrated. The relationship between anxiety and total cognitive response was not statistically significant. Likewise, anxiety and message scrutiny were not statistically related.

Hypothesis 3 argued that the aforementioned relationships would be moderated by levels of internal efficacy. This hypothesis was altogether unsupported. None of the relationships between anxiety and total cognitive response, message scrutiny, or message relevance was moderated by internal efficacy.

Hypothesis 4 argued that the relationship between anxiety and learning/intent would be positive. This hypothesis was partially supported. The relationship between

anxiety and intent to learn was positive. The relationship between anxiety and learning was not statistically significant.

Hypothesis 5 argued that the aforementioned relationships would be moderated by levels of external efficacy. This hypothesis was altogether unsupported. Neither anxiety and learning nor anxiety and intent to learn were moderated by external efficacy.

Hypothesis 6 argued that the relationship between anxiety and learning/intent to learn would be mediated by total cognitive response/message scrutiny. This hypothesis was altogether unsupported. Total cognitive response, message quality, and message relevance did not mediate the relationship between anxiety and learning/intent to learn.

Hypothesis 7 argued that the relationship between total cognitive response/message scrutiny and learning/intent to learn would be moderated by levels of external efficacy. This hypothesis was partially supported. The interaction of total cognitive response with external efficacy was negatively related to intent to learn more about politics. All other possible interactions were not significantly related to either outcome.

Hypothesis 8 argued for a complete model of political persuasion (as depicted in Figure 6). This model did not fit the data and was rejected.

CHAPTER VII

DISCUSSION

The purpose of this study was to take claims made by Marcus and colleagues (Marcus, & MacKuen, 1993; Marcus et al., 2000) and subject those assertions to rigorous empirical testing. The claims of the Affective Intelligence model arose inductively from the results of several correlational studies indicating relationships—in particular—between levels of anxiety and levels of knowledge-seeking behavior about politics. These studies used data collected from large-scale national surveys to arrive at their results. The present study enacted three analytic strategies: first, to subject these claims to causal testing via experimental methodology; second, to characterize the role of political efficacy in the political persuasion process; and, finally, to determine the nature of the best fitting model when predicting political attitudes and behavior.

Generally, the results of this study were contrary to hypothesized predictions. While the relationships between some of the constructs employed in this study were statistically associated, more of the hypothesized relationships indicated statistical independence rather than association. Moreover, most of the models tested in this study did not reach conventional standards of empirical fit.

To best address and interpret the results of this study, this chapter will discuss the findings that did and did not correspond with hypothesized predictions, address the experimental message manipulation and resulting manipulation effects, provide a general evaluation of the claims made by Affective Intelligence model, enumerate some of the limitations of this study, and, finally, address directions for future research.

The structural models and relationships between constructs

When including the manipulation effect as a mediating construct between random assignment and the other theoretical constructs of interest, three findings emerged: first, the relationship between affect and behavioral intent was positive. Higher levels of affect were associated with higher levels of behavioral intent to learn more about politics. Second, the relationship between message relevance and behavioral intent was not statistically significant while affect was positively related to both endogenous outcomes (see Figure 29). Finally, internal efficacy was positively associated with both message relevance and behavioral intent. The more participants felt confident in their ability to understand politics, the more they perceived the political news inductions to be relevant and the more they intended to learn more about politics.

Affect and behavioral intent

These findings tend to support Marcus et al.'s (2000) claims that increased levels of anxiety lead to increased levels of behavioral intent to learn more about politics. Recall that the Affective Intelligence model argues that the introduction of anxiety causes the behavioral inhibition system to alert the individual to stop his or her current behavior and redirect attention to the source of anxiety. Marcus et al. argue that the inevitable result of this change in focus is the seeking out of further information about the cause of the anxiety. In the present study, receiving an anxiety-inducing message about the negative employment outlook for the future caused increases in levels of affect. This increased level of affect caused individuals to intend to seek out more information about the economy.

The missing relationship between cognition and behavioral intent

Another interesting result is the lack of a statistically significant relationship between message relevance and behavioral intent. This unsupportive finding may indicate the power of affect as a motivator. While individuals might have recognized the relevance of the information in the newspaper story to their attitudes regarding employment forecasts for the future, that perception of message relevance had no impact on their intent to do anything about it. Rather, only increased levels of affect seem to be responsible for motivating participants to seek out new information. Similar findings have emerged throughout the fear appeal literature (see Witte, 1992, for a review) where the substantial import of affect in yielding adaptive behaviors is well-documented and frequently outweighs cognitive appraisals. While the inability of perceptions of message relevance to impact behavioral intent may be a function of the dominating influence of affect, an alternative explanation points toward the influence of personality.

Internal efficacy as a substantial predictor

The impact of internal efficacy on both behavioral intent and message relevance is noteworthy. As levels of participant's confidence in their ability to understand politics increased so did levels of both perceptions of message relevance and levels of behavioral intent to learn more about politics. In particular, the effect of internal efficacy on behavioral intent is notable.[18] The impact of a unit increase in latent internal efficacy corresponds to an increase in behavioral intent by .84 units. As mentioned earlier in this document, the impact of internal efficacy on political attitudes and behavior is well

[18] The coefficients presented—although unstandardized—can be compared as they were all measured on 5-point scales.

understood by scholars of politics. Confidence in one's ability to understand politics has been understood to be a strong predictor of the strength of an individual's attitude as well as a strong predictor of the likelihood that the individual will engage in political activity (Kenski, & Stroud, 2006; Newhagen, 1994; Niemi et al., 1991; Pinkleton et al., 1998; Pinkleton, & Austin, 2002; Rudolph et al., 2000).

Additionally, the positive association between internal efficacy and message relevance indicates that the more internally efficacious individuals were, the more they perceived the content of experimental inductions to be relevant to their thoughts about politics. Those who felt they understood politics also felt that the newspaper stories about the economy were relevant to their attitudes about the economy.

While the newspaper stories used as message inductions in this study were false, the content of those articles was made to resemble real-life economic news. Thus, individuals who felt that they understood politics also felt that the issues presented in the newspaper stories—which discussed the role of the Federal Reserve, the unemployment rate, trade with Colombia, and various other current economic realities—were relevant.

Interestingly, internal efficacy was not statistically associated with perceptions of message quality. Simply put, while greater confidence in one's ability to understand politics caused participants to identify the newspaper stories as relevant, it did not necessarily cause them to judge the content of those messages as valuable in determining their attitudes on the issue. This is an important distinction in the persuasion process as it differentiates between identifying messages as applicable or appropriate and identifying messages as accepted or agreed with. Participants with high levels of political self-

confidence agreed that the newspaper stories were appropriate. They did not necessarily judge the content of those stories as valuable in forming their attitudes.

Summary

In review, findings from the revised models suggested that affect has a positive impact on levels of both message relevance and behavioral intent to learn more about politics. In addition, the relationship between message relevance and behavioral intent was not statistically significant indicating that perceptions of the issues raised in the newspaper stories as relevant had no bearing on intentions to learn more about politics. Additionally, the revised models indicated that internal efficacy plays an important role in forming both behavioral intentions to learn more about politics as well as perceptions of message relevance, supporting past research findings from political science. Some individuals have intrinsic confidence in their ability to understand politics and political issues. This personality trait impacts their judgments of message content relevance as well as motivates their behavioral intent to learn more about politics.

Finally, it is important to note that the results did not support the hypothesized and advocated "marriage" of political efficacy with the Affective Intelligence model. While past research suggested the integration of these approaches to understanding political attitudes, the empirical evidence did not support the interactive relationships hypothesized. Neither internal efficacy nor external efficacy statistically interacted with any of the proposed cognitive and affective predictors.

Empirically derived models of political persuasion

This dissertation set out to untangle the influences of affect, cognition, and personality on political attitudes and behavior. Because the initial set of models as well as the revised models was largely unsuccessful, three empirically derived models were pitted against one another. The goal of this endeavor was to ascertain which of these three models best explained the data and, consequently, which model best explained the political persuasion process. Because these models were nested within each other, chi square difference tests allowed for empirical comparison. While this approach to comparing models is empirically based, substantive considerations are also warranted when ultimately considering which model is best. Typically, social scientific scholars who engage in model testing endeavors weigh explanatory power against model parsimony to come to a final decision. In other words, if a simpler model can equally describe the data as well as a more complex model, the simpler model is preferred *ceterus paribas*.

The omnibus model

The omnibus model included affective, cognitive, and personality predictors in explaining behavioral intent to learn more about politics. The results indicated that all of the three influences (affective, cognitive, and personality) were related to behavioral intent.[19] Again, like the earlier models it is useful to consider the lack of association between message relevance and message quality with behavioral intent as well as the lack of association between both message quality and total cognitive response with affect when trying to interpret these findings.

[19] Although the cognitive predictors are related in an indirect, interactive (i.e., moderated) way.

These results tend to point toward the relative independence of affect and cognition. In the present study, affect was only related to one of the three cognitive measures in the model (i.e., message relevance). While Lazarus (1991) has argued that affective responses are predicated on perceptions of personal relevance, message relevance measured whether the content of the newspaper stories was relevant to the thoughts participants had about the economy. Consequently, the association between affect and message relevance is not tautological. Participants could have been aroused and still could have thought the false *Wall Street Journal* articles were not germane or applicable to their attitudes about the economy (i.e., they could have disagreed with the economics solutions proposed in the stories). Rather, the structural relationship tested here supports the notion of the Affective Intelligence model that, when anxious, individuals are likely to become more yielding to new ideas (e.g., the proposed economic solutions presented in the stories). As Marcus et al. (2000) write, "In sum, anxious people seem to generate greater compliance that do calm people with the formal requirements of the rational choice model: explicit conscious consideration of the comparative utilities of available choices, investing in the best contemporary information, and diminished motivation to use heuristic or habituated shortcuts" (p. 58).

Additionally, of the three cognitive measures (i.e., message quality, message relevance, and total cognitive response) only total cognitive response was related to behavioral intent—and this relationship was interactive with external efficacy. Perceptions of message quality and message relevance had no association with behavioral intent to learn more about politics. Cognitive evaluations of the merit of the newspaper

stories had no bearing on aims to learn more about political issues in the future. Thus, only affect and personality traits influenced action. This finding can also be interpreted within the framework of the Affective Intelligence model by considering the model's point of departure: most individuals are chronically apathetic about politics. As a result, the lack of statistical relationship between assessments of quality/relevance of a message and intent to learn indicates that individuals are either inclined to learn more about politics through personality trait or emotional stimulation. Rational appeals emphasizing logic and reason may not compel people to action. As Zajonc (1980) has observed, simply providing valuable information was not enough to motivate and/or persuade an individual to adopt a particular attitude or undertake a particular course of action.

The interaction of total cognitive response with external efficacy

As previously discussed, the interaction of total cognitive response with external efficacy indicated that across varying levels of external efficacy, the relationship between total cognitive response and behavioral intent changed. Specifically, among those with higher levels of external efficacy, positive total cognitive response scores were associated with lower levels of behavioral intent. Conversely, among those with lower levels of external efficacy, positive total cognitive response scores were associated with higher levels of behavioral intent.

This result, too, can be interpreted within the framework of the Affective Intelligence model by substituting cognition for affect. To be clear, if one replaces affect with cognition, one can make sense of the interaction between total cognitive response and external efficacy according to the central ideas posited by the Affective Intelligence

model. Thus, the proposition put forth is that the Affective Intelligence model can be broadened to explain cognitive relationships in the same way that it explains affective ones.

Recall that the Affective Intelligence model argues for political apathy as the norm. Because people typically rely on procedural routines and habits to guide their attitudes and behavior, they rarely pay attention to politics, having written off politics as routine. In the present study, when individuals felt that the government was responsive to the needs of the citizenry (i.e., high external efficacy), those who had positive thoughts about the economy felt that they did not want to learn more about politics. In other words, apathy emerged, ostensibly out of a rationalization that the current economic situation was "business as usual" and could be handled by the government.

Alternatively, those who had negative thoughts about the economy wanted to learn more about politics. This finding can be seen as akin to the type of effect Marcus and colleagues argue is brought on by negative arousal: attention redirection. Characteristically, these individuals felt that the government is responsive to the needs of the citizenry; they had negative thoughts about the economy as result of reading the newspaper stories; and, subsequently, they wanted to learn more about politics. Seemingly, these individuals wanted to learn how the government was planning to handle the economic situation. As a result of their negative total cognitive response, these individuals were motivated to pursue more information about politics. While Marcus and colleagues have argued that negative affect is responsible for motivating behavioral intent

to learn about politics, it may simply be that negativity in general (in this case, negative cognitions) leads to greater levels of attention and desire to learn more.[20]

When considering those with lower levels of external efficacy, the results are even more meaningful. Subjects who had negative total cognitive response were less inclined to learn more about politics. This finding may indicate that subjects felt that learning more about politics was not worth their time. Again, procedural routines about politics—in this case, the belief that government does not respond to the needs of the citizenry—may have guided political attitudes and behavioral intentions. Conversely, subjects who had positive thoughts about the economy may have had their expectations violated. These individuals do not believe that the government responds to the needs of the citizenry, yet after reading the newspaper stories—where detailed plans for governmental action were enumerated—they had positive thoughts about the economy, and intended to learn more about politics. The kind of novel surprise or interruption from "business as usual" that Marcus and colleagues write about when describing anxiety's affect on intent may also have occurred here with cognition.

In regard to this finding, a few points are worth mentioning. The total cognitive response measure is comprised from a thought-listing procedure required of participants. Participants are asked them to review their thoughts and code them +, -, and 0 according to whether the thoughts listed were positive, negative, or neutral to determine total cognitive response. Casual review of the codes associated with the thoughts listed

[20] The role of negativity in politics has been heavily researched, particularly by scholars of political advertising. While normative theorists and the public generally eschew negative political ads, numerous scholars have identified negative ads as effective. For example, a study by Freedman and Goldstein (1999) demonstrated that increased exposure to negative campaign ads spurred voter turnout in the 1997 Virginia gubernatorial race

indicated a number of discrepancies. For example, several obviously negatively charged thoughts (e.g., "The story made me nervous") were coded incorrectly as positive. Similarly, other thoughts that were clearly neutral or irrelevant (e.g., "I am bored"; "I am hungry") on several occasions were coded either positively or negatively. As a result, the interactive relationship between external efficacy and total cognitive response may not endure subsequent empirical testing.

While the validity of this result might initially be questioned, it is worth considering alternative coding outcomes had the codes been "correctly" supplied. If all the items were miscoded (i.e., positive items were always coded negatively or vice versa) than the results would not change. If approximately half the items were miscoded—one way or the other—than the interaction would shift from negative to positive. If chance is allowed into the picture than there should not be any change in the sign of the interaction as positive miscodes will counter-balance negative miscodes *ceterus paribas*. Similarly, there is no reason to believe that the number of miscodes changes with the frequency of thoughts listed. In other words, as total thoughts listed increased a proportional number of irrelevant or miscoded information ought to have increased too.

Irrespective of the aforementioned scenarios, the decision was made at the onset of this study to have participants code their own thoughts. Underlying this decision was the notion that participants—more so than anyone else—would be able to best understand and, consequently, code their own thoughts. While discrepancies between some of the thoughts listed and the coding are apparent, by and large there is no compelling reason to

believe that the dataset is contaminated by systematic error as a function of these discrepancies.

Finally, it is worth repeating that the regions of significance were fairly wide for this interaction effect (total cognitive response < -5.34; and total cognitive response > 5.90).[21] This indicates that the interaction was only statistically significant for individuals who had very negative or, conversely, very positive levels of total cognitive response. Among those sampled, only 18/232 = .08 of the sample had either positive or negative levels of total cognitive response beyond these boundaries.

Model comparisons

In addition to the omnibus model, two other models were fit and compared. First, a model with cognitive and personality factors was evaluated against the omnibus model. A chi square difference test indicated that the cognitive/personality model fit the data best. Consequently, when the goal of the researcher is to get "the most bang for your buck" a model that includes affect is not the most prudent choice. While affect was associated with behavioral intent, the impact of affect on behavioral intent was not sizeable enough to warrant its inclusion in a model where parsimony is valued.

Next, a simple model where internal efficacy was the sole predictor of behavioral intent was evaluated against the cognitive/personality model. A chi square difference test indicated that while internal efficacy was a very strong predictor of behavioral intent, as a simple model it did not fit the data as well as the cognitive/personality model. Factors

[21] Note that the range of total cognitive response was -8 to 7.

like message quality, message relevance, and the interaction between total cognitive response and external efficacy had a small but non-ignorable impact on behavioral intent.

Because this study focused on the role of affect in the political persuasion process, it is worth attempting to understand the magnitude of affect on political attitudes and behavior. While the chi square difference test allows researchers to compare models in an attempt to ascertain which model best fits the covariance structure of the data, frequently scholars aim to explain the most variance possible in their outcome variables. In light of this, it is worth attempting to measure the effect sizes associated with the constructs utilized in these models.

Effect sizes

To begin, it is worth noting that it is difficult to calculate the equivalent of a semi-partial r^2 when considering effects with latent variables. Rather, a rough estimation needs to be made by the researcher (Muthén, & Muthén, 2007). The problem lies in the shared variance between predictors. For example, when attempting to isolate the independent effect of affect on behavioral intent, one cannot simply look at the difference in R^2. Because affect and the various cognitive/personality constructs are not orthogonal, it would be overly generous to assign that entire difference to affect. Thus, while the omnibus model explained 46 percent of the variance in behavioral intent and the cognitive/personality model explained 42.6 percent of the variance in behavioral intent, the difference (i.e., 3.4 percent) cannot be entirely ascribed to the influence of affect. While exactly how much variance can be ascribed to affect cannot be entirely discerned, it is noteworthy that affect was only statistically related to message relevance (B = .18,

SE = .06). Consequently, it is reasonable to assume that affect accounts for a substantial amount of the difference in R^2. However, again, this is just a best guess.[22]

Regardless, the impact of affect on behavioral intent is relatively small. In order to determine whether this finding is typical, comparisons with results put forth by Marcus and colleagues are warranted. Unfortunately, Marcus and colleagues tend not to report semi-partial r^2 statistics in their research. Despite this irregular reporting practice, there are a few examples where they indicate the sole, combined influence of anxiety and enthusiasm on outcome variables.

For instance, when predicting campaign interest during the combined campaign seasons of 1980-1996, Marcus et al. found that anxiety and enthusiasm combined to explain .07 percent of the adjusted variance (i.e., adjusted R^2). Similarly, for the same dataset the combined influence of anxiety and enthusiasm plus education, habitual political attentiveness, and strength of partisanship explained just .14 percent of the adjusted variance in "Care who wins the election;" .15 percent of the adjusted variance in "Newspaper attention;" and .16 percent of the adjusted variance in "Magazine attention."[23] As can be seen, the impact of affect on these outcomes is not enormous. Marcus et al. (2000) characterize it best when they write: "people who are upset about the

[22] Remember that all the constructs measured in this model were scaled between 1 and 5.

[23] Marcus et al. tend to scale their predictor variables in regression analyses between 0 and 1 to allow for comparable interpretation. In light of this, it is noteworthy that in each of the results presented above the coefficients for anxiety and enthusiasm range from .07 to .14 while the coefficients for habitual political attentiveness ranges from .26 to .47; for education it ranges from .04 to .39; and for strength of partisanship it ranges from -.02 to .36. Consequently, one can roughly estimate that only a small amount of the variance explained in these outcomes is due to the combined influence of positive/negative affect.

candidates or who are enthusiastic about the choices will be noticeably (but not shockingly) more interested in the campaign" (p. 85).[24]

Media scholars have long bemoaned the occurrence of small effect sizes. While scholars would certainly like to see large effects in their research, small effects should not be altogether dismissed. In the realm of politics, one need not look any further than the 2000 presidential election to see that small effects can have a tremendous impact on election results. In other words, the impact of affect on behavioral intent—while small—may have meaningful consequences in the political arena.

Summary

In review, a comparison of models indicated that the cognitive/personality model fit the data best. The incorporation of message quality, message relevance, and the interaction of total cognitive response with external efficacy added to the model. Despite the best fitting model, the impact of affect on political attitudes and behavior is worth considering. Although an exact measure of the influence of affect on behavioral intent is not possible to provide, a rough estimate indicates a relatively small effect size. Past research indicates that small effect sizes are typical (i.e., Marcus et al. 2000). While the impact of emotion on attitudes and behaviors appears to be small, it is worth considering that much of social scientific inquiry is a search for small effect sizes.

While some of the effects observed between constructs in this study were small, none of the relationships between random assignment and those constructs were

[24] Parentheses by Marcus et al. (2000).

statistically significant. As a result, an examination of the message manipulation and resulting manipulation effect is appropriate.

Message manipulation and resulting manipulation effect

The design of this study was straight-forward. There were two experimental conditions: a political message crafted to induce anxiety and an anxiety-free control message. Basic t-tests confirmed that the experimental and control groups differed in their levels of anxiety as measured by both the negative subscale of the PANAS and the STAI. Despite this manipulation check, several important points deserve mention about the messages used in this study as well as the psychological effects that accompanied those messages.

Low levels of anxiety

First, levels of induced anxiety were relatively low. In the case of the STAI, the experimental condition (M = 2.14, SD = .54) was significantly lower than the midpoint of the STAI scale (2.5), $t(120) = -7.30$, $p < .05$. Likewise, when compared against the midpoint of the 8-item negative sub-scale of the PANAS (3), the experimental group (M = 2.54, SD = .81) was significantly lower, $t(117) = -6.11$, $p < .05$. Thus, both measures of anxiety indicated that the experimental message failed to make individuals more anxious than the respective midpoints of these measures. Conversely, it is safe to say that participants in the experimental condition were not very anxious.

Regardless, the choice was made to use these message inductions based not only on pre-test results but also due to the substantive nature of the messages themselves. To be clear, the language used in the experimental message can aptly be characterized as

"novel." The headline of the experimental message "Economic Chief to Job Seekers: Have Fun Getting A Job" was crafted to be attention-redirecting. Additionally, the content of the actual newspaper story used intense language describing negative forecasts for job seekers. Moreover, past political experiments (e.g., Brader, 2005) have also induced low levels of anxiety. Brader (2005) found mean anxiety levels of 1.0 and .56 on 4-point scales for the experimental and control conditions respectively (note that both conditions were crafted to induce anxiety). Consequently, common sense as well as past research argues that it is unrealistic to expect that participants would be extremely anxious as result of receiving political messages. More importantly, the hypotheses put forth by the Affective Intelligence model (in addition to those of most other social scientific models of emotion) argue for linear relationships between anxiety and persuasive outcomes. Thus, even small amounts of induced anxiety should correspond with small persuasive effects.

Considering a nonlinear relationship

While the Affective Intelligence model assumes that the relationship between anxiety and persuasive outcomes is linear, there may be reason to question this assumption. For instance, the initial drive models of persuasion (e.g., Janis, 1967; McGuire, 1968) posited a curvilinear relationship between anxiety and persuasion. Although these models argued for inverted U-shaped curves demonstrating the ultimate debilitating effect of anxiety in terms of persuasion, other functional forms are certainly plausible. Perhaps, for example, a threshold effect exists. In other words, in order for a persuasive effect to take hold, a specific level of anxiety must be induced. Thus, by

implication small levels of induced anxiety that do not cross this threshold will bear no persuasive fruit. Of course, one problem with this suggestion is specifying that threshold point. As of this writing, I am aware of no a priori hypothesized level that scholars believe a persuasive effect will first occur. Indeed, it is likely that this is an empirical question that results accumulated over the course of numerous studies will resolve (if this question is resolvable).

A lack of personal relevance

Persuasion scholars have spent considerable efforts examining the concept of personal relevance and its role in cognitive evaluations of messages (e.g., Greenwald, 1968; Johnson, & Eagly, 1989; Petty, & Cacioppo, 1986). Arguably the most notable of these models is the Elaboration Likelihood model (Petty, & Cacioppo, 1986). The ELM contends that two forms of processing explain attitude formation and change: central and peripheral processing. Central processing entails close scrutiny of message content, requiring systematic thought where individuals critically evaluate messages on their merits. Conversely, peripheral processing involves the use of cues or cognitive shortcuts when evaluating of a given message.

When predicting which form of processing individuals will take, Petty and Cacioppo maintain that perceived relevance is a crucial determinant. Their perspective reasons that when individuals perceive an issue as personally relevant, they will be more likely to pay greater attention to messages associated with that issue. As a result, they are likely to engage in careful, critical consideration of the content of the message rather than rely on heuristic cues or cognitive shortcuts. In other words, messages judged personally

relevant will likely be centrally processed while messages not judged relevant will likely be peripherally processed.

In the same way, Perloff's Cognitive Processing model (1984) discusses the importance of personal relevance and its relationship to the processing of political information. His key claim is that when individuals deem a particular situation to be personally relevant, they will come to believe that it is "in their best interest to process the information deeply and systematically" (p. 151). This view characterizes individuals as selective receivers of information, choosing which messages to carefully consider and which ones to not.

In the present study, experimental messages were intentionally crafted to appeal to participants' perceptions of personal relevance. As noted earlier in this document, the issues of unemployment and a poor economy have been identified as some of the most personally relevant topical areas in the political domain. For instance, Kinder and Kiewiet (1981) found that national economic problems were more predictive of vote choice than party identification in three congressional and two presidential elections during the 1970s. Other scholars (e.g., Lau, & Sears, 1981) have noted similar findings.

Perceptions of personal relevance were taken for granted in the design phase of this study. Messages depicting a gloomy outlook for young Americans in search of employment were assumed to be perceived as personally relevant by participants. Consequently, no formal manipulation check of personal relevance was made. While this is regrettable, speculation based on observations from the thought-listing portion of the

questionnaire as well as the low levels of induced affect seem to indicate that levels of personal relevance were not high.

While it would seem that questions regarding future employment would be judged relevant by college students, political disinterest, immediate rejection of political and/or economic messages, or dismissal of current events brought about by the sheltering nature of university life may have led to the ineffectiveness of the stimulus.

On the other hand, it is worth considering that measures of message relevance were taken and did correlate with other outcomes. Consequently, the distinction between outcome-relevant involvement and values-relevant involvement (Johnson, & Eagly, 1989) may be worth considering. Outcome-relevant involvement occurs when participants' goals and outcomes are tied to the substantive nature of the stimulus. Alternatively, values-relevant involvement refers to the idea that stimuli are associated with participants' important values or beliefs. While experimental messages may have been related to participants' attitudes about their future goals, they may not have been related to participants' primary values. It may be that participants were not presently interested in thinking about their future job acquisition. Instead, participants may have had different immediate values or concerns. If this is the case then the association between message relevance and other outcomes indicates that participants perceived the message as appropriate in forming attitudes about politics yet simultaneously lacked meaningful levels of concern about the issue.

Positively correlated PANAS factors

Confirmatory factor analysis of the PANAS indicated that the positive and negative factors were highly correlated to the extent that a second-order factor model was fit. Participants in this study exhibited emotional responses that were of a singular nature: arousal. To be clear, participants' affective responses ranged from the absence of affect to increasing levels of being simultaneously anxious and enthused. To the best of the principal investigator's knowledge, this finding is unheard of (for more typical results, see Crawford, & Henry, 2004; MacKinnon et al., 1999; Terracciano et al., 2003). While psychologists have debated whether the positive and negative sub-scales of the PANAS should be negatively correlated or whether they should be conceived as orthogonal, a positive relationship between the sub-scales has not been put forth.

If one considers this finding as completely inaccurate or as a function of error, a possible reason why this may have occurred is because subjects were free to fill out questionnaires at their leisure. In short, cognitive rationalizations may have contaminated affective responses. Initially, participants may have been *only* negatively aroused. When they finished reading the message induction they were not immediately required to respond to the PANAS. Rather, they were allowed to fill out the questionnaire at their own pace. Because the instrument was (a) of considerable length and (b) passively administered, the intrusion of rationalizations may have occurred as a result. For example, participants in the experimental condition might have been nervous immediately after reading the experimental message. If the message was anxiety-inducing, it may have resulted in defensive avoidance (e.g., mustering attitudes of determination to rise above economic conditions depicted in the newspaper story). As a

result, recorded responses that indicated the presence of both positive and negative affect may be a function of a psychological maturation effect.

In their review of the state of emotion research, Barrett, Mesquita, Ochsner, and Gross (2007) point out that "a person cannot be aware of two scenes, or objects, or percepts within the same modality at exactly the same moment in time" (p. 378). In other words, Barrett et al. make clear that is impossible to be simultaneously positively affective and negatively affective. Rather, one must precede the other—even if that temporal ordering is fleeting and shifts back and forth over the course of milliseconds. In sum, they write: "it is very unlikely that pleasure and displeasure co-occur in real-time, although people can quickly shift experience contents from one moment to the next, and summarize all of the experienced contents in memory" (p. 378). Thus, by having the luxury to fill out paper questionnaires at their leisure, participants did not report their instantaneous affective responses to the stimulus. Rather, subjects had the opportunity to stew over experimental stimuli and report their attitudes at their leisure. This may have led to the simultaneous reporting of both positive and negative affect.

While it is possible that the nature of the experimental environment led to contaminated responses, it is noteworthy to mention that it is quite commonplace for experimenters to allow subjects to fill-out questionnaires at their own pace. Consequently, this aberrant finding is difficult to explain as attributable to method and more plausible explanations should be considered.

Perhaps a better explanation can be provided by considering the nature of the stimulus in light of the Affective Intelligence model. Recall that the model argues that the

behavioral approach system enacts procedural routines with outcomes of reward leading to enthusiasm and outcomes of failure leading to frustration. Simultaneously, the behavioral inhibition system scans the environment in search of novel occurrences where detection is associated with the elicitation of anxiety and non-detection is associated with calmness. In the present study, participants were both enthusiastic and anxious. Thus, according to the Affective Intelligence model, participants had their expectations from learned routines met nevertheless felt anxious about the negative economic job outlook. Certainly, it is not hard to see why participants were anxious. Most individuals would find the negative economic outlook disconcerting. The question is why were participants enthusiastic?

One plausible interpretation is that participants anticipated the job search after college would be difficult. It is not unlikely that stories about the difficulties people encounter when looking for a "first job" were known by participants. Consequently, participants may have been psychologically prepared for this situation. In short, the negative job outlook raised anxiety about securing a job, but it also conformed with learned expectations about the future.[25]

Additionally, it is worth considering that college students are likely to embody some sense of enthusiasm over "starting a new chapter in their lives" regardless of most depicted negative economic outlooks. In short, it may be that the excitement associated with finding a first job, leaving the university, and moving to a new place instilled enthusiasm and hope. Similarly, Nadeau et al. (1995) found that hope interacted with

[25] The Affective Intelligence model does not directly address situations where a recurring source of anxiety is realized. Consequently, speculation drives this interpretation.

anxiety to positively predict knowledge levels regarding French language laws. Thus, among those who were anxious and hopeful, an effect was observed. Having a positive outlook for the future may have played an important role. Unfortunately, no measure of hope was taken in the present study.

Finally, the Affective Intelligence model argues that when a stimulus is substantively meaningful for participants, positive and negative affective factors will be correlated. One important caveat to this assertion is that most—if not all—of the political studies that demonstrated correlated affective factors involved some personality (e.g., political candidate or political outgroup). Marcus et al. (2000) argue that human beings have a "natural inclination to simplify the world into clear normative oppositions—good guys versus bad guys" (p. 150). However, in the absence of a personality to like or dislike, the relationship between factors may become more simplified. That is, when considering a political issue the relationship between affective factors may indicate simple arousal or interest in the issue versus disinterest or boredom with it. In fact, many political issues may by their nature simultaneously induce anxiety and enthusiasm. For instance, consider abortion. Pro-choice proponents are frequently anxious that the Supreme Court will overturn *Roe v. Wade* yet are simultaneously enthusiastic about promoting women's rights to do what they please with their bodies. Alternatively, pro-life proponents are frequently enthused about the possibility of overturning *Roe v. Wade* yet are upset about the number of abortions occurring across the nation. Thus, it is possible that, under the condition of being substantively meaningful, political issues elicit both anxiety and enthusiasm because attitudes about political issues are more complex

than evaluations of political personalities. Character evaluations may be simpler in nature because they allow for "liking" or "disliking." With political issues, those reductions may be less likely.

Better than average participants

Finally, scholarship from the third person effect literature (Davison, 1983) may help explain both the low levels of arousal and the presence of the second-order arousal factor. Several scholars (e.g., Alicke, Klotz, Breitenbecher, Yurak, & Vrendenburg, 1995; Weinstein, 1980) have argued that individuals tend to see themselves through biased lenses colored by unrealistic optimism. Alicke et al. (1995) aptly characterize this phenomenon by referring to it as "the better than average effect." In the present study, a positive self-bias could explain the affective responses of participants. If participants felt that they were better than average than they could have dismissed the grim employment outlook depicted in the experimental message as irrelevant. For instance, some participants may have believed that the newspaper story was problematic for others but not themselves. Unfortunately, no measure of perceptions of the negative economic forecast on others was taken in this study to test this explanation empirically.

A general evaluation of the validity of the Affective Intelligence model

In 1993, George Marcus and Michael MacKuen published the first study to incorporate arguments that would later become the Affective Intelligence model (Marcus et al., 2000). Since then, numerous scholars have replicated the central findings put forth by Marcus and MacKuen: namely, that increased enthusiasm leads to increased political interest while increased anxiety leads to increased learning about politics. The multiple

replications produced by Marcus and colleagues—in addition to further empirical evidence put forth by other scholars—generally supported these central findings.

While these studies supported claims of the Affective Intelligence model, questions about the causal nature of the model's arguments, the mathematical form of emotion's impact on attitudes, and the generalizability of the model remained. This section examines the validity of the Affective Intelligence model in three ways: first, by considering the experimental effect; second, by reviewing the nature of the relationships between affect and political attitudes; and, finally, by evaluating the extent to which the Affective Intelligence model applies to political issues not just political candidates.

Causality

To test the causal claims put forth by the Affective Intelligence model, an experiment was conducted that allowed for the manipulation of a single variable: negative affect. Unfortunately, the results of the present study demonstrated that there were no statistically meaningful relationships between random assignment to condition and other cognitive and behavioral measures of interest.

While it is true that levels of induced affect were low in the experimental condition, reasonably-sized effects were observed when comparing conditions. Moreover, the Affective Intelligence model allows for small amounts of induced anxiety, arguing for correspondingly small persuasive effects. Alternatively, it is notable that some meaningful relationships between induced affect and other distal constructs were observed. Regardless, this finding must be interpreted as unsupportive of the causal claims put forth by the Affective Intelligence model. However, because of the

simultaneous induction of enthusiasm and anxiety, one would be wise not to put too much stock in the failure of the experimental design as indicative of shortcomings of the Affective Intelligence model. Without question, further research is required before fully resolving the question of causality vis a vis the Affective Intelligence model.

The nature of the relationship between affect and political attitudes and behaviors

Past scholarship has considered the impact of affect on political attitudes and behaviors in both main-effect and interactive forms. The question regarding the additive or multiplicative influence of affect on outcomes variables has not been fully explicated. To illustrate, some of Marcus et al.'s (2000) empirical results present affect as a single predictor while other results present affect as interacting with partisanship, candidate personal qualities, and policy preference, among other variables.

In this study, the relationships between affect and the various attitudinal and behavioral outcomes employed were tested in both additive and multiplicative forms. When treated interactively, affect was paired with political efficacy—a variable that past scholarship has identified as influential in shaping attitudes, and which past research (Rudolph et al., 2000) has identified as successfully interacting with anxiety in predicting campaign involvement.

This study found that—when statistically significant—affect had direct, main-effect relationships with outcomes variables. While this adds to the evidence in support of the argument in favor of main-effect relationships, the existence of an interaction with some unmeasured variable is, of course, possible. Despite this possibility, the Affective Intelligence model should adopt a firmer stance on the nature of the relationships

between affect and various outcomes—ostensibly arguing for main-effect relationships. While statistically significant results tend to drive publication, the incorporation of conditional effects without an underlying theoretical justification does little to educate researchers about why these effects do or do not occur. Simply finding a statistically significant interaction effect that involves affect should not necessarily be demonstrative of supporting the Affective Intelligence model. Moreover, post hoc explanations about what that interaction means are exploratory at best and capitalize on chance at worst.

Political issues as stimuli

The overwhelming majority of past research utilizing the Affective Intelligence model examined the impact of emotion in determining attitudes about political candidates. Despite this focus, Marcus et al. (2000) argue that the model is not limited to candidates and applies to political issues as well. While this ambition to extend the generalizability of the model should be commended, too little evidence exists for there to be conclusive findings about the model's purview. As noted earlier in this document, of the few studies that incorporate issue-related stimuli almost all adopt terrorism as their focus. Anxiety related to terrorism is conceptually distinct from mere novelty—which Marcus et al. use to characterize "normal" political anxiety.

In this study, the stimulus was chosen for the purpose of inducing as much "normal" anxiety as possible. Moreover, Marcus et al. (2000) explicitly advised the use of the economy as a source of negative arousal. In the design phase of this study, the use of a negative employment outlook for new job seekers appeared to be important, negatively charged, imminent, presenting an obstacle, and beyond the control of the

participants (see Dillard, 1994, for a discussion of the components of a fear-appeal message).

The effectiveness of political issues as experimental stimuli is debatable. While negative arousal associated with political candidates can be understood through fears that a particular politician will bring about negative outcomes for the public, the same kind of personification is difficult to instill when using political issues as experimental stimuli. Consequently, the lack of a specific personality to link with negative message content may diminish levels of affective responses or change the structural relationships associated with affect.

Additionally, several scholars (e.g., Conover, & Feldman, 1986) have found that affective reactions to the economy were meaningful predictors of candidate preference—not attitudes about political involvement, behavioral intentions to learn more about politics, or actual learning. In other words, it may be that the dependent variables of interest need to be associated with a particularly personality thereby allowing aroused participants to attribute blame.

Clearly, further research needs to continue investigating issue-based affective inductions within the framework of the Affective Intelligence model. While political personalities certainly are capable of inducing anxiety, one need not draw heavily from political theory to observe that plenty of individuals engage in heated debates regarding policy positions as well. In light of this, there seems room for issue-based affective inductions.

Limitations of this study

As a result of the unexpected findings and challenges that this study faced (e.g., positively correlated PANAS factors), researchers can learn from some of the missteps and lapses made.

First, careful readers might notice the absence of a direct measure of learning in the results. Recall that a measure of learning was employed in this study that was comprised of a seven-item knowledge quiz. The quiz tested information recall from the second, full-length news story that both experimental and control conditions were asked to read with hypotheses arguing that higher levels of affect would be associated with better scores on the quiz. After confirmatory factor analysis, four of the seven items were retained and although these items failed to reach conventional standards of internal consistency ($\alpha = .60$), the quiz did not seem completely unacceptable.

Despite this cursory endorsement, the quiz proved not to be related to any of the constructs measured in this study. One potential reason for this may be that the items were simple. Taken together, the four items yielded a mean score of .72 with a standard deviation of .30. If one looks at the frequency of responses, it is noteworthy that numerous individuals scored perfectly on the quiz (41.8 percent)—more than any other possible graded category. In addition, of the five possible grades on the quiz (0; .25; .50; .75; and 1) only a combined 33.2 percent of participants scored 0, .25, or .50.

The quiz items were crafted by the principal investigator and not subjected to any prior pre-testing or psychometric analysis (e.g., Rasch/IRT analysis). Consequently, this may have led to measures that poorly discriminated between subjects. Future research

endeavors incorporating quizzes may benefit from pre-tests and, perhaps, more sophisticated analyses examining the psychometric properties of said quizzes.

Additionally, this study relied on a fixed effects design to understanding the impact of message variation on a variety of outcomes. Persuasion scholars who incorporate random effects models are at the forefront of social scientific inquiry as the results of their studies can be extrapolated beyond the confines of the messages they craft. A limitation of the present study is that the relationships between affect, cognition, personality, and behavioral intent constructs cannot legitimately be inferred beyond the messages used in this study. While such a limitation diminishes the importance of this study, this limitation was known in advance. The choice to limit the number of experimental messages was made due to the trade off between using multiple messages and statistical power. Given a finite number of participants, it was decided that limiting the message conditions to two was the most prudent choice—especially in light of the objective to test for non-experimental interaction effects.

Directions for future research

First, while the economy is a well-known source of inducing anxiety in survey research, the economy may not be ideal for capturing anxiety under experimental conditions. That is, the economy is only likely to be successful in inducing anxiety when real life conditions match those depicted in an experiment. One unnoticed point during the design phase of the present study was that real world conditions might have stymied levels of arousal. In other words, because participants were likely to be well-aware of the poor economy in real life, experimental messages aimed at inducing anxiety about the

economy had their work cut out for them. Conversely, if the real economy is thriving, an experiment attempting to convince participants otherwise may also be ineffective due to lack of realism.

Second, future research ought to investigate the role of attitudes about others when considering the impact of political news. Incorporating scholarly ideas from the third-person effect literature may go a long way in explaining affective responses to political issues. Alternatively, if third-person effects do not occur under certain political contexts (e.g., assessments of the economy), than that research area benefits from understanding the boundaries of its purview.

Finally, future experimental research is wise to consider the use of more sophisticated measures of affect. While survey methodology must rely on such crude measures like self-report questionnaires, experimental studies can incorporate more sophisticated measurement strategies to test causal claims (e.g., fMRI, heart rate, skin temperature, etc.). This document has addressed the influence of findings from neuroscience and the impact of those findings on the Affective Intelligence model. Scholars who wish to place themselves on the frontier of emotion research should consider including such physiological measures into their methodological toolkit.

Conclusion

This dissertation examined the impact of affective, cognitive, and personality factors in an experiment aimed at explaining the political persuasion process. While the results of the present study did not match the hypothesized predictions put forth in the literature review, the results did indicate the small effect of affect on behavioral

intentions to learn about politics. While the impact of affect was small, the impact of internal efficacy (a personality variable) was substantial. Consequently, the findings of this experiment reflect the dominating influence of pre-determined psychological traits over the effects of experimentally manipulated psychological effects in determining attitudes.

While this finding may not be celebrated by communication scholars, it can certainly be understood. It cannot be expected nor would it be tolerated if messages were able to dramatically affect individual attitudes and behaviors. As a result, the affect-related effect sizes observed in this dissertation should not be considered relatively, but should be viewed optimistically as emblematic of small but potentially impactful persuasive communication.

APPENDIX A

Informed Consent

Political Attitudes Questionnaire

Introduction

You are being invited to take part in a research study. The information in this form is provided to help you decide whether or not to take part. Study personnel will be available to answer your questions and provide additional information. If you decide to take part in the study, you will be asked to sign this consent form. A copy of this form will be given to you.

What is the purpose of this research study?

You are being invited to participate in the above-titled research study. The purpose of this study is to better understand your political attitudes on a variety of topics related to communication.

Why are you being asked to participate?

You are being invited to participate because you are a student who is 18 years of age or older and you are registered in a course in the Department of Communication.

How many people will be asked to participate in this study?

Approximately 300 persons will be asked to participate in this study.

What will happen during this study?

If you agree to participate, you will complete a brief initial questionnaire (5 minutes). You will then be asked to read a newspaper article to familiarize yourself with the political issue to be considered (5 minutes). Afterward, you will be asked to read a brochure from a political action committee (5 minutes). Finally, you will be asked to respond to a questionnaire asking about your opinions of the issues addressed in the newspaper article and those addressed in the political action committee's brochure (10 minutes).

How long will I be in this study?

About 25 minutes will be needed to complete this study.

Are there any risks to me?

There are no foreseeable physical or psychological risks associated with this study. However, if for any reason you wish to stop participating at any time, you may do so without any penalty whatsoever.

Are there any benefits to me?

There are no direct benefits to participants.

Will there be any costs to me?

Aside from your time (approximately 25 minutes) there are no costs for taking part in the study.

Will I be paid to participate in the study?

You will not be paid for your participation. You will receive extra credit for participation, though no more than 1% of your grade for the course.

Will video or audio recordings be made of me during the study?

No.

Will the information that is obtained from me be kept confidential?

The only persons who will know that you participated in this study will be Michael D. Curran, M.A.

Your records will be confidential. You will not be identified in any reports or publications resulting from the study. Representatives of regulatory agencies (including The University of Arizona Human Subjects Protection Program) may access your records.

May I change my mind about participating?

Your participation in this study is voluntary. You may decide to not begin or to stop the study at any time. Your refusing to participate will have no effect on your student status. You can discontinue your participation with no effect on your student status. Also any new information

discovered about the research will be provided to you. This information could affect your willingness to continue your participation.

Whom can I contact for additional information?

You can obtain further information about the research or voice concerns or complaints about the research by calling the Principal Investigator Michael D. Curran, M.A., at (520) 626-3052. If you have questions concerning your rights as a research participant, have general questions, concerns or complaints or would like to give input about the research and cannot reach the research team, or want to talk to someone other than the research team, you may call the University of Arizona Human Subjects Protection Program office at (520) 626-6721. If out of state use the toll-free number 1-866-278-1455. If you would like to contact the Human Subjects Protection Program via the web, please visit the following website: http://www.irb.arizona.edu/contact/.

Your Signature

By signing this form, I affirm that I have read the information contained in the form, that the study has been explained to me, that my questions have been answered and that I agree to take part in this study. I do not give up any of my legal rights by signing this form.

_____
Name (Printed)

_____ _____
Participant's Signature Date signed

Statement by person obtaining consent

I certify that I have explained the research study to the person who has agreed to participate, and that he or she has been informed of the purpose, the procedures, the possible risks and potential benefits associated with participation in this study. Any questions raised have been answered to the participant's satisfaction.

_____
Name of study personnel

_____ _____
Study personnel Signature Date signed

APPENDIX B

Political Opinion Survey

Please answer the following questions regarding your background. Please circle/check/fill in as applicable.

Age: _____ years (write in number)

Gender: _____ Male _____ Female

Racial background:

_____American Indian or Alaskan Native _____Asian or Pacific Islander

_____African American _____Hispanic/Latino

_____White _____Other/Unknown

Party Identification:

_____Democrat _____Republican _____Independent

_____Other (write in)

Year in school:

Freshman_____

Sophomore_____

Junior_____

Senior_____

Please answer the following to the best of your ability. Circle the number that best characterizes your response.

I am interested in politics: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I like to think about politics: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I talk about politics with my friends: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I talk about politics with my family: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I argue about politics with my friends: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I argue about politics with my family: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

Yesterday, how much political news did you watch on tv? _____ _____

(hours) (minutes)

If you watched political news, what channel did you watch?

_____

(write in name of station)

Yesterday, I read political news in the newspaper _____ .

(yes/no)

If you read political news, what newspaper was it? _____

(write in name of newspaper)

Yesterday, I went online for political news _____ _____

(hours) (minutes)

I spend a lot of time thinking about politics:

Strongly Disagree 1 2 3 4 5 Strongly Agree

My political ideology is: (circle 1-5)

Very Liberal 1 2 3 4 5 Very Conservative

I pay attention to politics regularly: (circle 1-5)

Strongly Disagree 1 2 3 4 5 Strongly Agree

I feel that I could do as good a job in public office as most other people

Strongly Disagree 1 2 3 4 5 Strongly Agree

I consider myself well-qualified to participate in politics

Strongly Disagree 1 2 3 4 5 Strongly Agree

I feel that I have a pretty good understanding of the important issues facing our country

Strongly Disagree 1 2 3 4 5 Strongly Agree

I think that I am as well-informed about politics and government as most people

Strongly Disagree 1 2 3 4 5 Strongly Agree

I often don't feel sure of myself when talking with other people about politics and government

Strongly Disagree 1 2 3 4 5 Strongly Agree

Sometimes politics and government seem so complicated that a person like me can't really understand what's going on.

Strongly Disagree 1 2 3 4 5 Strongly Agree

There are many legal ways for citizens to successfully influence what the government does

Strongly Disagree 1 2 3 4 5 Strongly Agree

Under our form of government, the people have the final say about how the country is run, no matter who is in office

Strongly Disagree 1 2 3 4 5 Strongly Agree

If public officials are not interested in hearing what the people think, there is really no way to make them listen

Strongly Disagree 1 2 3 4 5 Strongly Agree

People like me don't have any say about what the government does

Strongly Disagree 1 2 3 4 5 Strongly Agree

Neither Congress nor the President is interested in what I have to say

Strongly Disagree 1 2 3 4 5 Strongly Agree

STOP HERE!!!

Please carefully read the news clip from *The Wall Street Journal*. Please take your time.

After reading the newspaper story, please indicate to what extent you feel this way right now. Circle the appropriate level.

Interested

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Distressed

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Excited

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Upset

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Strong

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Guilty

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Scared

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Hostile

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Enthusiastic

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Proud

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Irritable

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Alert

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Ashamed

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Inspired

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Nervous

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Determined

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Attentive

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Jittery

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Active

Very slightly/Not at All A little Moderately Quite a Bit Extremely

Afraid

Very slightly/Not at All A little Moderately Quite a Bit Extremely

---

Please indicate the extent to which you feel this way right now.

I feel calm.

Not at all Somewhat Moderately So Very Much So

I feel secure.

Not at all Somewhat Moderately So Very Much So

I am tense.

Not at all Somewhat Moderately So Very Much So

I am regretful.

Not at all Somewhat Moderately So Very Much So

I am at ease.

Not at all Somewhat Moderately So Very Much So

I feel upset.

Not at all Somewhat Moderately So Very Much So

I am presently worrying over possible misfortunes.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel rested.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel anxious.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel comfortable.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel self-confident.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel nervous.

Not at all **Somewhat** **Moderately So** **Very Much So**

I am jittery.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel “high strung.”

Not at all **Somewhat** **Moderately So** **Very Much So**

I am relaxed.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel content.

Not at all **Somewhat** **Moderately So** **Very Much So**

I am worried.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel over-excited and "rattled."

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel joyful.

Not at all **Somewhat** **Moderately So** **Very Much So**

I feel pleasant.

Not at all **Somewhat** **Moderately So** **Very Much So**

STOP HERE!!!

Please carefully read and consider the following full political news story. Please take your time. We are very interested in your opinion.

I found the material in this news story to be convincing

Strongly Disagree 1 2 3 4 5 Strongly Agree

The news story was not persuasive

Strongly Disagree 1 2 3 4 5 Strongly Agree

This news story makes a good argument

Strongly Disagree 1 2 3 4 5 Strongly Agree

The information contained in this news story is logically sound

Strongly Disagree 1 2 3 4 5 Strongly Agree

I was influenced by the content of this news story

Strongly Disagree 1 2 3 4 5 Strongly Agree

It is hard to argue with the points made in this news story

Strongly Disagree 1 2 3 4 5 Strongly Agree

The news story speaks directly to the reasons for my attitudes about this issue.

Strongly Disagree 1 2 3 4 5 Strongly Agree

The news story was relevant to my thoughts on this issue.

Strongly Disagree 1 2 3 4 5 Strongly Agree

This news story provided important information about this issue.

Strongly Disagree 1 2 3 4 5 Strongly Agree

This news story included information that applies to my own reasons underlying this issue.

Strongly Disagree 1 2 3 4 5 Strongly Agree

When I think about my attitude regarding this issue, the information contained in this news story is applicable.

Strongly Disagree 1 2 3 4 5 Strongly Agree

This news story included appropriate information when thinking about this issue.

Strongly Disagree 1 2 3 4 5 Strongly Agree

Please try to list all of the thoughts you've had. Please be as thorough as possible, here. We need to know everything that you have thought.

____1. _____

____2. _____

____3. _____

____4. _____

____5. _____

____6. _____

____7. _____

____8. _____

____9. _____

____10. _____

____11. _____

____12. _____

Now, please look back at those thoughts you listed above and code each one as follows:

Put a plus-sign "+" next to each thought that was in positively related to the newspaper story.

Put a minus-sign "-" next to each thought that was negatively related to the newspaper story.

Put a zero "0" next to each thought that was neutral or irrelevant to the newspaper story.

Please put all codes in the space to the left of the numbered line.

Please answer the following questions to the best of your ability.

The Bernanke Commission offered a six-point plan for economic improvement.

True_____ False_____ Uncertain_____

According to the Commission's report, one suggestion was to lower federal interest rates by 1 percent.

True_____ False_____ Uncertain_____

According to the Commission's report, one suggestion was to freeze housing foreclosures for 90 days.

True_____ False_____ Uncertain_____

One of the members of the Bernanke Commission was former Treasury Secretary Paul O'Neill.

True_____ False_____ Uncertain_____

The three problems leading to economic downturn that the Commission noted were: unethical political practices, rising inflation, and Congressional delays in approving free trade legislation with other nations

True_____ False_____ Uncertain_____

The report was criticized by financial insiders for not mentioning the impact of high gas prices.

True_____ False_____ Uncertain_____

According to the Commission's report, one suggestion was to encourage students to pursue degrees in mathematics and science.

True_____ False_____ Uncertain_____

After leaving here today, what is the probability (in terms of percentages) that you will seek out further information about politics?

_____
(provide a percentage estimate between 0 and 100)

In the future, how likely are you to look into current political happenings

Not Likely At All 1 2 3 4 5 Highly Likely

How interested are you in receiving regular emails about political news?

Not Interested At All 1 2 3 4 5 Highly Interested

If you are interested in obtaining more information on this issue, please write down your email address.

_____

(e.g., mcurran@email.arizona.edu)

APPENDIX C

Some Say: Same Old, Same Old

Economic Commission Report Gets Shrugs of Indifference From Wall Street And Academe Alike

By RANDALL DELPIANO
May 15, 2008
WASHINGTON, D.C. – According to Washington insiders it's politics-as-usual.

In a meeting on Capitol Hill yesterday, Federal Reserve Chairman Ben Bernanke and a bi-partisan commission of economists gathered to discuss the latest unemployment forecasts.

In a press conference immediately following the meeting, Chairman Bernanke announced that unemployment trends were likely to continue in the coming months.

Despite this announcement, several leading economists and political scientists have argued that this is simply politics-as-usual.

Columbia University Political Scientist Peter Hubbard argued, "It's a right of passage. Politicians like to make mountains out of molehills. I'll get nervous when something is said or happens that doesn't usually get said or done."

Goldman Sachs CEO Eliot Feingold echoed Hubbard's view. "It seems like every administration gives in to habit. They tell us to get ready for hard times so that when that doesn't happen, we'll judge them favorably."

May 15, 2008

Economic Chief to Job Seekers: Have Fun Getting A Job

Bi-Partisan Agreement About Unemployment Future Raises Heart Rates

By RANDALL DELPIANO
May 15, 2008

WASHINGTON, D.C. – The American dream might be turning into a nightmare for those looking for jobs.

In an emergency meeting on Capitol Hill yesterday, Federal Reserve Chairman Ben Bernanke and a bi-partisan commission of economists expressed anxiety about the latest unemployment forecasts.

In a press conference immediately following the meeting, Chairman Bernanke announced that unemployment trends were likely to spike in the coming months.

In particular, Bernanke emphasized the immediate threat to those without prior work experience. “I am unhappy to report that the consensus of this commission is a gloomy employment outlook for younger Americans. While recessions affect us all, I am worried that the impact on younger Americans will be dramatic,” Bernanke said

Analysts from both the private sector and academia fear that there is little that can be done to avoid an all-out recession.

Columbia University Economist Peter Hubbard argued that this will impact job seekers the most. “Companies are making layoffs, not hiring new employees. In the end, America’s youngest generation is going to pay the price. It doesn’t look good.”

Economic Commission Report Highlights Problems/Strategies

Bi-Partisan Agreement About Economic Issues Addressed

By RANDALL DELPIANO
May 18, 2008

WASHINGTON, D.C. – For the past week, analysts and investors have eagerly awaited the release of the Bernanke Commission's unemployment report.

The report which includes such notable signatories as former Chairman Allen Greenspan, Treasury Secretary Henry Paulson, former Secretary Robert Rubin as well as Chairman Bernanke provides an analysis of current economic conditions and a proposed five-point plan of action.

The report attributed growing unemployment rates to the combined influence of the sub-prime mortgage crisis, rising levels of inflation and Congressional delays in passing free trade legislation with foreign nations including Colombia. The Commission was particularly critical of Congress. "This is not the time to linger engaging in partisan tactics," warned the report.


Ben Bernanke

Reading a prepared statement, former Fed Chairman Allen Greenspan said "This situation is cause enough for concern. It behooves the nation for Congress to act quickly and move forward passing bills that help us back to our feet." Greenspan added that he had not seen such widespread agreement among economists since the 1970s. "Excessive spending needs to be curtailed, while a clearer long-term economic focus and strategy needs to be established and adhered to."

The centerpiece of the report—a five-point-economic plan—focuses on reinvigorating the economy, underscoring the belief that increased earnings will stimulate job growth. While the 352-page report discusses these issues at length, the executive summary enumerates the Commission's recommendations in five points:

- Lower federal interest rates by 0.5%
- Freeze all bank foreclosures of homes for 90 days
- Enact legislation overseeing investment banking firms
- Enact legislation promoting free trade with Colombia and other nations
- The 10:10 rule: cut taxes for small businesses by 10% if new hires increase by 10%

The report received mixed reviews from financial insiders. Jeff Fronteau of T&Q Securities argued that the report overlooked the impact of foreign interests. “I can’t see how this plan accounts for the influence of high gas prices or the floundering domestic auto industry.”

Others like Richard Dahmke of Beyerson & Grayhorn, Inc. were enthusiastic about the report. “It’s about time that someone take charge and provide some meaningful incentives to bail us out of this. The reduction in tax rates across the board will have a positive impact—no doubt about it.”

In March, President Bush charged the Bernanke Commission with the task of developing a strategy to resolve the looming unemployment crisis. The report was sent to the White House last week. Yesterday, the White House announced that President Bush will address the nation about the state of unemployment by the end of the week.

In response to questions from reporters regarding the President’s reaction to the Bernanke Commission report, White House spokesperson Donald Ryder said, “The President is very enthusiastic about the report and looks forward to expressing his feelings about this important subject with the American people.”

Write to Randall Delpiano at randall.delpiano@wsj.com[3]

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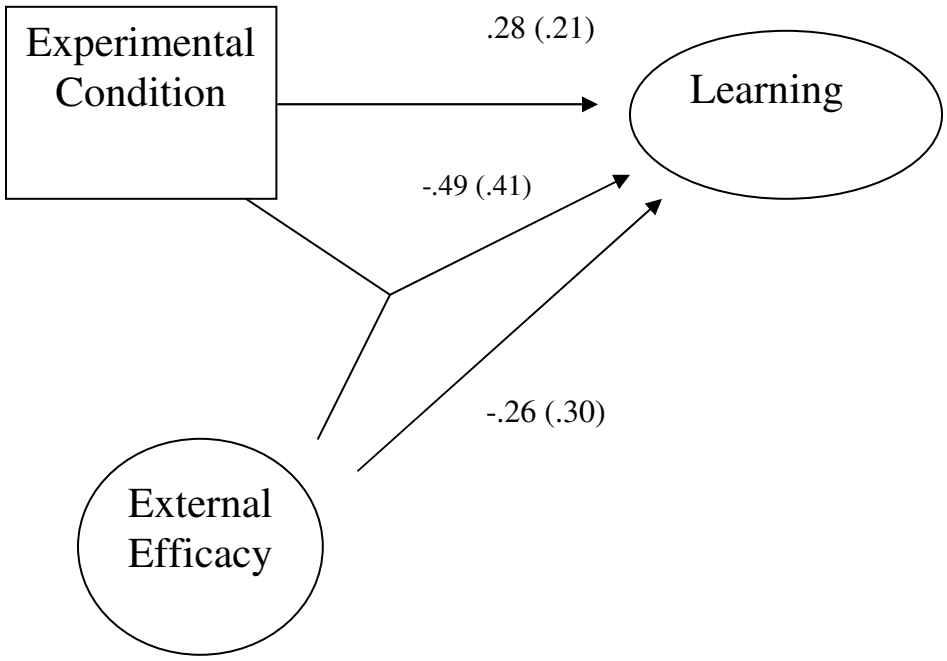
(2) http://online.wsj.com/public/resources/documents/info-LABOR_4801-17.html
(3) mailto:randall.delpiano@wsj.com

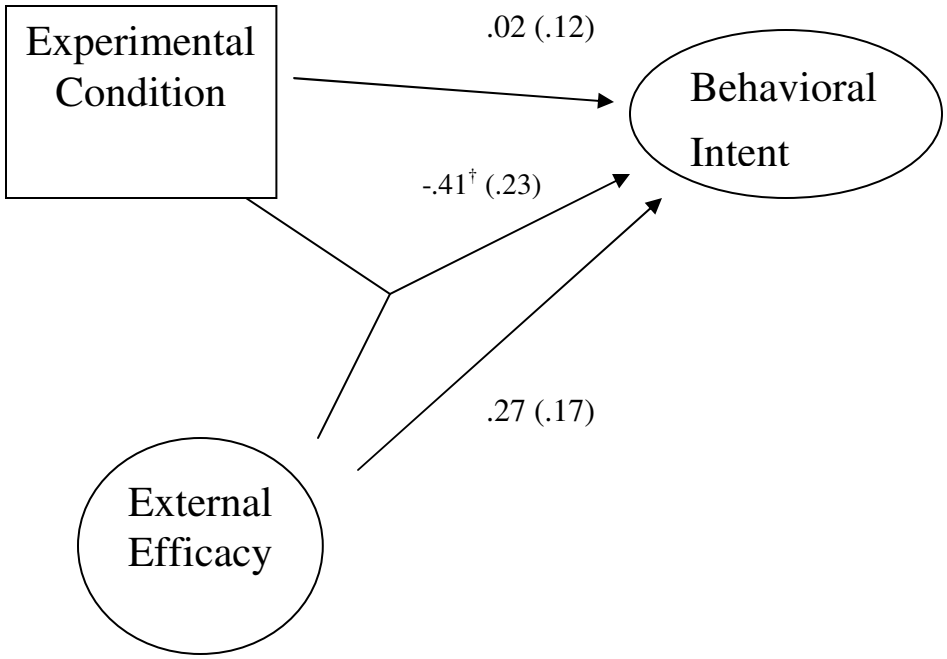
APPENDIX D

Figure 12: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Learning with Interaction Effect.



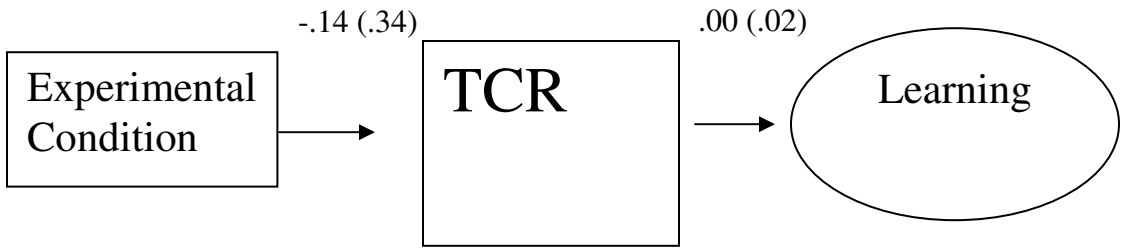
Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (12, N = 227) = 16.67, p = .16, CFI = .97, TLI = .96, RMSEA = .04, WRMR = .74.

Figure 13: Results of Latent Variable Model Depicting Relationship Between Experimental Condition and Behavioral Intention to Learn More About Politics with Interaction Effect.



Depicted are unstandardized coefficients with standard errors in parenthesis.
†: ***p* = .08;** main effects-only fit statistics: χ^2 (12, *N* = 227) = 12.32, *p* = .42, CFI = 1.00, TLI = 1.00, RMSEA = .01, SRMR = .03.

Figure 14: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Total Cognitive Response to Learning.



Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (7, N = 227) = 12.50, p = .09, CFI = .96, TLI = .93, RMSEA = .06, WRMR = .80.

Figure 15: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Total Cognitive Response to Behavioral Intention.

Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (5, N = 227) = 1.59, p = .90, CFI = 1.00, TLI = 1.11, RMSEA = .00, SRMR = .02.

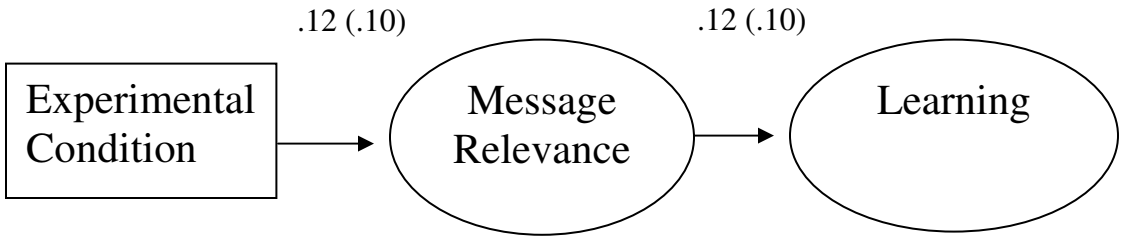
Figure 16: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Quality to Learning.

Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (15, N = 227) = 12.93, p = .61, CFI = 1.00, TLI = 1.01, RMSEA = .00, WRMR = .59.

Figure 17: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Quality to Behavioral Intention.

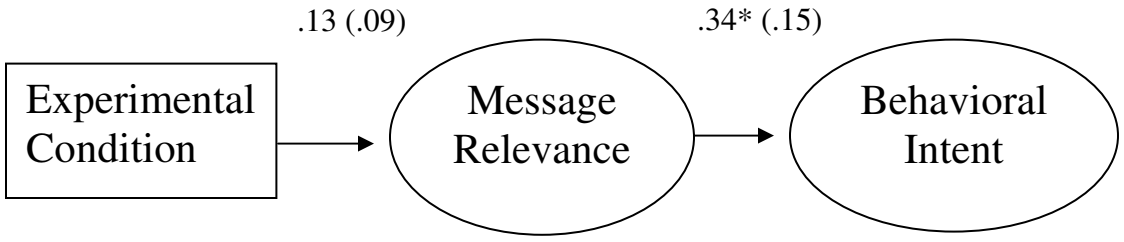
Depicted are unstandardized coefficients with standard errors in parenthesis.
†: *p* = .09; χ^2 (19, *N* = 227) = 17.99, *p* = .52, CFI = 1.00, TLI = 1.01, RMSEA = .00, SRMR = .03.

Figure 18: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Relevance to Learning.



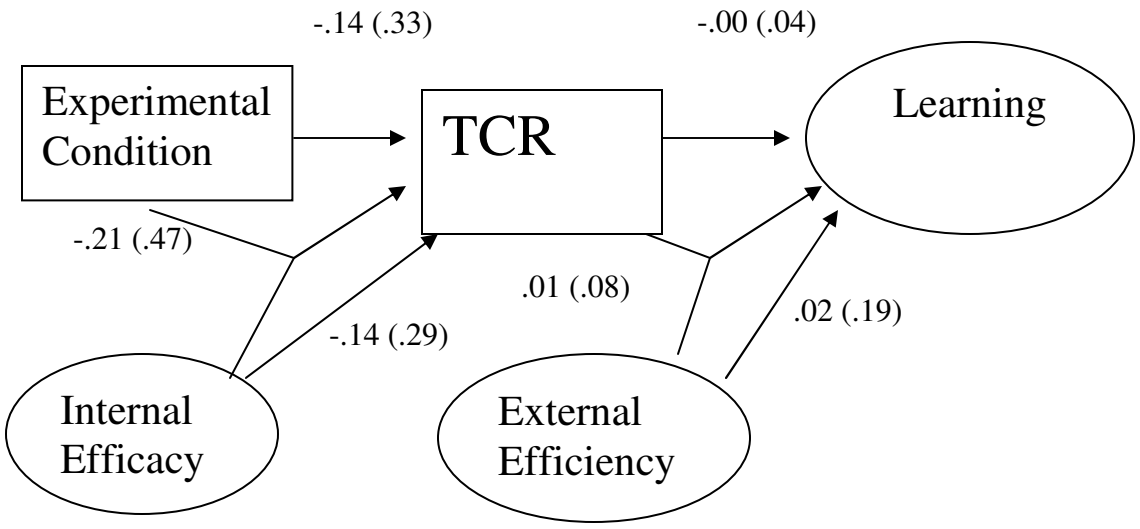
Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (40, N = 227) = 257.38, p = .00, CFI = .82, TLI = .82, RMSEA = .07, WRMR = 1.12.

Figure 19: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Relevance to Behavioral Intention.



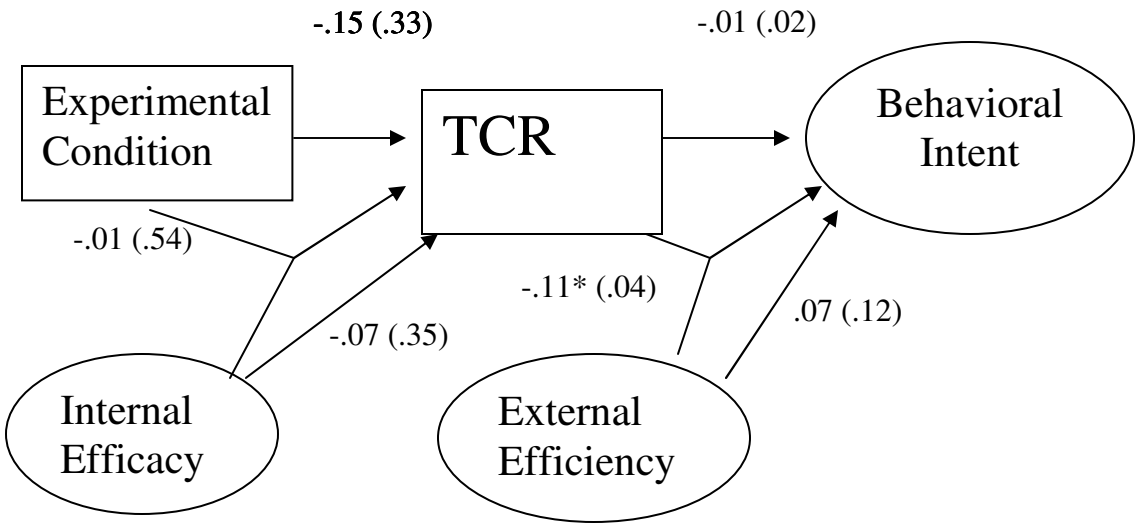
Depicted are unstandardized coefficients with standard errors in parenthesis.
χ^2 (12, N = 227) = 18.99, p = .09, CFI = .97, TLI = .94, RMSEA = .05, SRMR = .04.

Figure 20: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Total Cognitive Response to Learning with Internal and External Efficacy Interaction Effects.



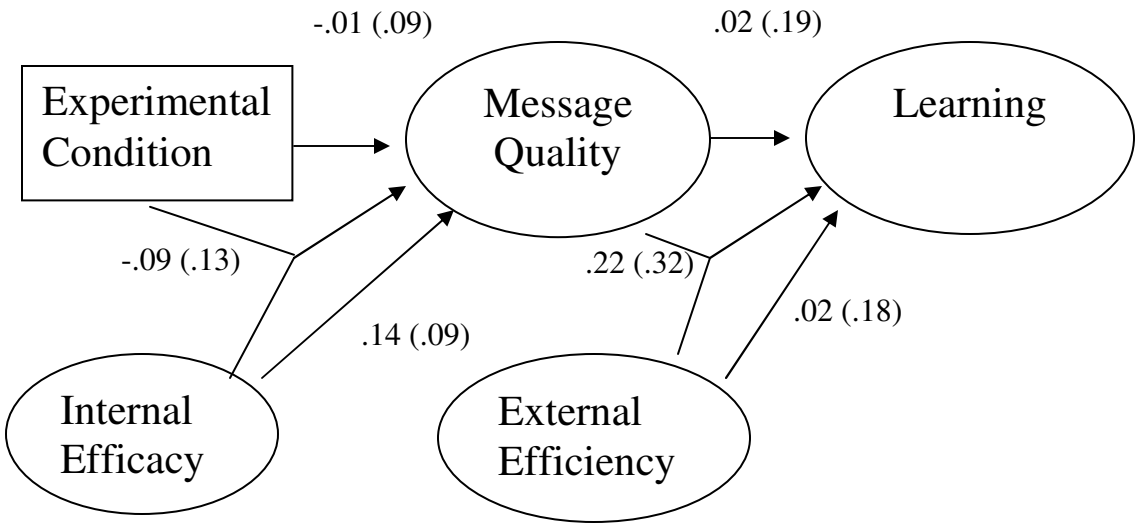
Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (7, N = 227) = 12.50, p = .09, CFI = .96, TLI = .93, RMSEA = .06, WRMR = .80.

Figure 21: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Total Cognitive Response to Behavioral Intention with Internal and External Efficacy Interaction Effects.



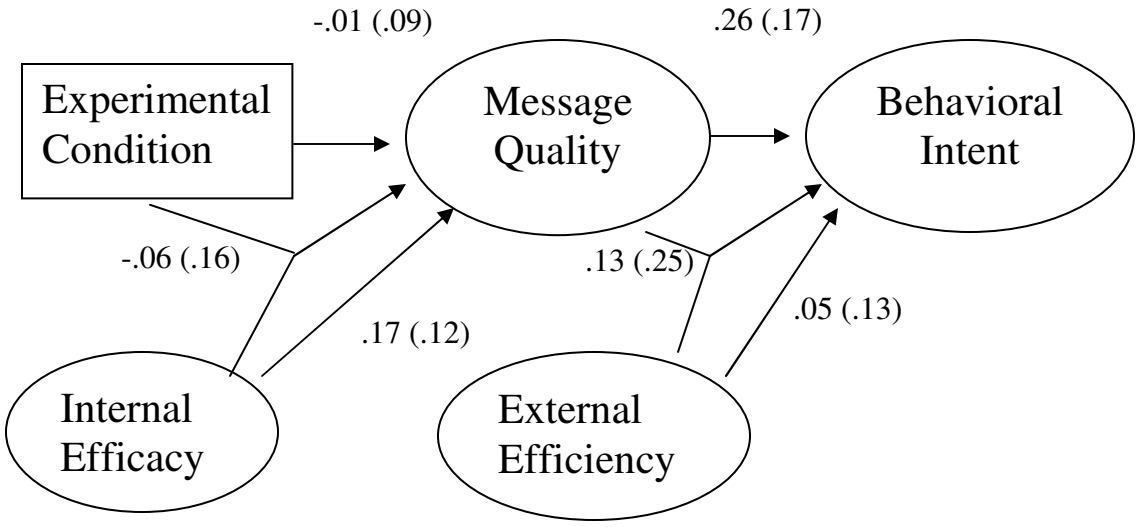
Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (5, N = 227) = 1.59, p = .90, CFI = 1.00, TLI = 1.11, RMSEA = .00, SRMR = .02.

Figure 22: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Quality to Learning with Internal and External Efficacy Interaction Effects.



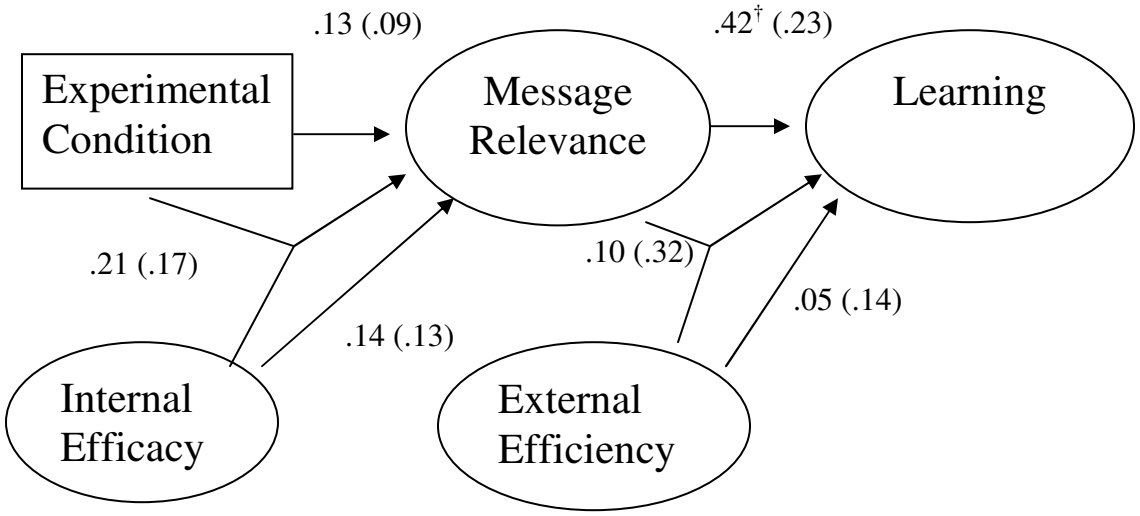
Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (15, N = 227) = 12.93, p = .61, CFI = 1.00, TLI = 1.01, RMSEA = .00, WRMR = .59.

Figure 23: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Quality to Behavioral Intention with Internal and External Efficacy Interaction Effects.



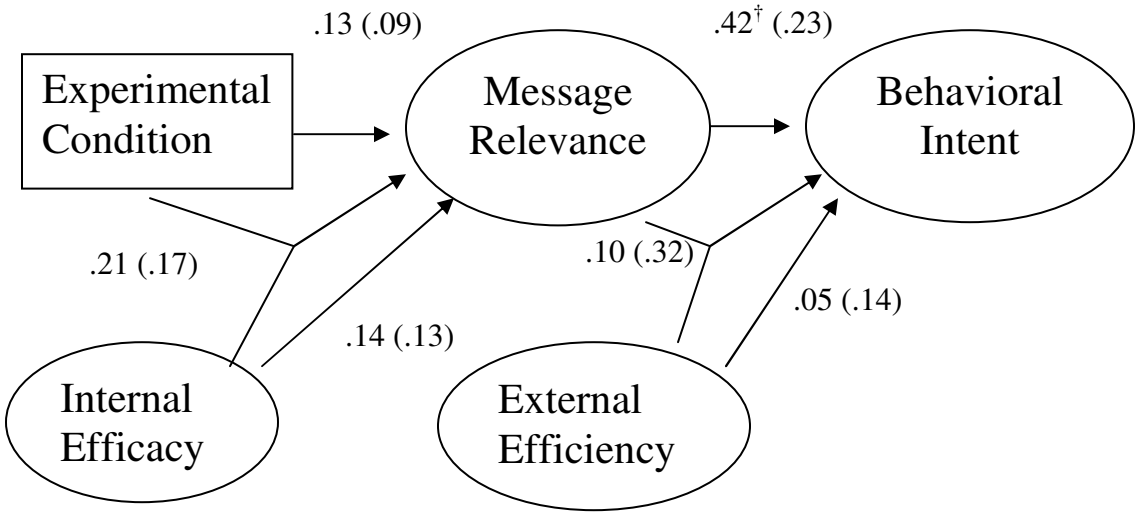
Depicted are unstandardized coefficients with standard errors in parenthesis.
Main effects-only fit statistics: χ^2 (19, N = 227) = 17.99, p = .52, CFI = 1.00, TLI = 1.01, RMSEA = .00, SRMR = .03.

Figure 24: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Relevance to Learning with Internal and External Efficacy Interaction Effects.



Depicted are unstandardized coefficients with standard errors in parenthesis.
†: *p* = .07; main effects-only fit statistics: χ^2 (12, N = 227) = 18.99, p = .09, CFI = .97, TLI = .94, RMSEA = .05, SRMR = .04.

Figure 25: Results of Latent Variable Model Depicting Political Persuasion Process from Experimental Condition to Message Relevance to Behavioral Intention with Internal and External Efficacy Interaction Effects.



Depicted are unstandardized coefficients with standard errors in parenthesis.
†: *p* = .07; main effects-only fit statistics: χ^2 (12, N = 227) = 18.99, p = .09, CFI = .97, TLI = .94, RMSEA = .05, SRMR = .04.

APPENDIX E

Measures

Internal Efficacy	F
1. I feel that I could do as good a job in public office as most other people.	.53
3. I feel that I have a pretty good understanding of the important issues facing our country.	.70
4. I think that I am as well-informed about politics and government as most people.	.87
6. Sometimes politics and government seem so complicated that a person like me can't really understand what's going on (reverse coded)	.49

External Efficacy	F
3. If public officials are not interested in hearing what the people think, there is really no way to make them listen (reverse coded).	.62
4. People like me don't have any say about what the government does	.82
5. Neither Congress nor the President is interested in what I have to say (reverse coded).	.71

Message Quality	F
1. I found the material in this news story to be convincing.	.74
3. This news story makes a good argument.	.72
4. The information contained in this news story is logically sound.	.65
5. I was influenced by the content of this news story.	.65

Message Relevance	F

4. This news story included information that applies to my own reasons underlying this issue.	.70
5. When I think about my attitude regarding this issue, the information contained in this news story is applicable.	.60
6. This news story included appropriate information when thinking about this issue.	.77

Learning	F
1. The Bernanke Commission offered a six-point plan for economic improvement.	.58
2. According to the Commission's report, one suggestion was to lower federal interest rates by 1 percent.	.90
3. According to the Commission's report, one suggestion was to freeze housing foreclosures for 90 days.	.73
7. According to the Commission's report, one suggestion was to encourage students to pursue degrees in mathematics and science.	.52

Behavioral Intent To Learn More About Politics	F
1. After leaving here today, what is the probability (in terms of percentages) that you will seek out further information about politics?	.91
2. In the future, how likely are you to look into current political happenings?	.54
3. How interested are you in receiving regular emails about political news?	.42

Positive Affect	F
Strong	.63
Proud	.31

Alert	.68
Determined	.72
Attentive	.78
Active	.71

Negative Affect	F
Distressed	.69
Upset	.76
Scared	.90
Hostile	.52
Irritable	.66
Nervous	.84
Jittery	.50
Afraid	.86

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