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## **Leader Psychology and Involvement in International Events**

John Beiler

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# Leader Psychology and Involvement in International Events

by

John Beielor

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Dr. Joe Clare

Department of Political Science

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Louisiana State University & Agricultural and Mechanical College

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## **Abstract**

In this paper, I explore a previously under-examined area of the international conflict literature: involvement in international events. I argue that to fully understand the causal processes at work in international conflict, it is necessary to understand what drives a leader to act in the first place, regardless of what type of action, cooperative or conflictual, a leader chooses. Towards this end, I make use of two event datasets, WEIS and COPDAB, to determine how many events the United States pursues in a given month. In addition, I argue that two psychological variables, Conceptual Complexity and Self-Confidence, have a significant impact on the number of events a leader pursues. After an extensive review of the literatures surrounding these two variables, I derive new hypotheses relating to each, and offer a new interpretation of Conceptual Complexity that has not yet been examined. Using quantitative measures of these two concepts drawn from the Leadership Trait Analysis framework, I find that statistical models provide support for the hypotheses offered. The findings of this paper contribute to both the international conflict and political psychology literatures. The findings provide a richer understanding of the processes underlying foreign-policy decision making and serve as a basis for further research in the field of political psychology to determine what causal impact these two variables have on the international behavior of elites.

# Contents

<b>1</b>	<b>Theories of International Politics</b>	<b>6</b>
1.1	Structural Theories of International Politics . . . . .	7
1.2	Psychological Theories of International Politics . . . . .	9
<b>2</b>	<b>Complexity and Confidence in International Relations</b>	<b>11</b>
2.1	Self-Confidence . . . . .	11
2.1.1	Self-loathing or Self-Efficacy? . . . . .	12
2.1.2	Stable vs. Unstable Self-Confidence . . . . .	14
2.1.3	Changing Self-Confidence . . . . .	15
2.1.4	Hypotheses . . . . .	16
2.2	Conceptual Complexity . . . . .	16
2.2.1	Origins of Conceptual Complexity . . . . .	17
2.2.2	Information Managers . . . . .	17
2.2.3	Default to Peace? . . . . .	19
2.2.4	Hypotheses . . . . .	20
2.3	Complexity and Confidence . . . . .	21
2.3.1	Moderating effects . . . . .	22
2.3.2	Hypotheses . . . . .	22
<b>3</b>	<b>Data and Measurement</b>	<b>24</b>
3.1	Dependent Variables . . . . .	24
3.2	Independent Variables . . . . .	24
3.2.1	Controls . . . . .	26
<b>4</b>	<b>Results</b>	<b>26</b>
4.1	Psychology and the Number of Events . . . . .	28
4.2	Combining Complexity and Confidence . . . . .	30

## List of Tables

1	Descriptive Statistics for Variables . . . . .	40
2	Descriptive Statistics for Psychological Variables by President . . . . .	41
3	Bivariate Negative Binomial Regressions of Psychological Traits and Total Number of Events . . . . .	42
4	Multivariate Negative Binomial Regressions of Psychological Traits and Total Number of Events . . . . .	43
5	Quantities of Interest . . . . .	44

# The Puzzle of Participation

*“I believe that it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures.”*

- President Harry Truman

The above quote from Harry Truman represents one of the major foreign-policy directives of the United States since World War II: intervention. It can be argued that the decision to intervene in a given situation is the result of structural factors; the 2011 NATO action in Libya was not the result of an individual’s beliefs, but of structural constraints such as domestic politics or a consideration of the relative “ease” of engaging in conflict. What this approach ignores, however, is the fact that some leaders do become more involved in foreign policy than others. In addition, among leaders who choose to become involved, there is variance in degree, both in type and number. Some leaders will engage in a large number of hostile actions, while others will pursue a large number of cooperative actions. This variance leads to the question of what causal processes are at work in driving a leader’s decision to intervene in the international system. A leader’s decision to act is at the foundational level of international relations. Without this decision to act, studies of conflict are irrelevant; the choice by a leader to produce a discrete event is of paramount importance to international relations. Given the importance of this topic, it is surprising that the processes surrounding the decision to act remain understudied.

The developments within the political psychology research program over the last few decades have uncovered many interesting links between psychology and foreign policy that can shed some light on the questions posed by a leader’s decision to act. I contribute to this growing body of research by examining how the number and type of international engagements favored by a leader are influenced by his or her psychological attributes. Specifically, this thesis examines the way in which a leader’s view of him or herself and how information

regarding the outside world is processed relates to his or her decision to be actively engaged in foreign policy. Towards this end, I develop some previously unexplored hypotheses regarding leader psychology and international politics. The two variables under examination, self-confidence and cognitive complexity, currently lack a solid foundation upon which future scholarship can be built. With these problems in mind, I attempt to fill gaps in both the psychology and conflict literatures. First, I examine the under-explored area of what drives a leader to act. Second, I combine large- $n$  conflict studies with individual-level psychology variables. This large- $n$  dataset allows for more rigorous testing of the hypotheses presented below. Finally, I draw upon the extensive background literatures on self-confidence and cognitive complexity to formulate theoretically-grounded hypotheses for psychology and international participation. In order to achieve these goals, I make use of event data and at-a-distance measures of a leader's psychology to draw conclusions relating to foreign-policy decision making.

My findings advance both the conflict and political psychology research programs. These findings provide a basis for further research into the psychological correlates of foreign-policy decision making. In addition, they provide further validity for the use of individual-level attributes in the large-scale study of international relations. Finally, these findings and hypotheses provide a new, theoretically driven foundation for future research in the areas of political psychology and international conflict.

## **1 Theories of International Politics**

The primary goal of international relations research is to explain the actions of states. Why did the United States invade Iraq in 2003? Why does North Korea continue its nuclear program in the face of international condemnation? Questions such as these are fundamental to international relations scholarship. Within international relations, the subfield of conflict studies endeavors to explain why some nations have hostile relations towards each other, while

other relationships are marked by cooperation. Again, at the heart of this type of research is the focus on the actions of states. Thus, it seems that most questions in international relations can be boiled down to a question of why did state  $x$  act in manner  $y$  in situation  $z$ ? More fundamental than that, however, is the question of why a state chose to act at all. The decision to act should not be trivialized or ignored. While the decision to choose violence or cooperation is an important part of a decision-making process, it would not be a factor without the decision to act in general. This part of the decision-making process, why and how states choose to act, serves as the focus of this paper.

## 1.1 Structural Theories of International Politics

Walker (2010) engages in a thorough examination of the prevailing topics in international relations research. He identifies the most predominant set of theories as those he refers to as “billiard ball models” (Walker 2010, 23). These theories hold that states are similar to billiard balls on a pool table; the entities crash into each other causing diverse reactions, but forces outside of the ball cause the crash. These models view state behavior as being driven solely by the “reward and punishment contingencies specified by the structural balances of power and interests among the states in the international system” (Walker (2010, 23) citing Tetlock (1998)). States, in other words, are essentially treated as black boxes; machinations that occur within a state’s decision-making apparatus are treated as non-essential. By this thinking, the most important variable for explaining variation in the actions of states is the constraints a state faces within the structural balance of power.

Many of the structural explanations stem from Morgenthau’s (1948) doctrine of realism and derivative schools of thought such as neorealism (Waltz 1979). Both realism and neorealism hold at their core that states seek to maximize a specific good, be it power under realism or security under neorealism. These theories assert that the answer to questions such as why the U.S. invaded Iraq, or why North Korea keeps its nuclear weapons, is utility maximization. Actors have a good they have identified as desirable, be it power, security, or



wealth, and act in such a manner as to obtain the maximum amount of this good possible. Thus, the United States and North Korea act in the manner they do in order to maximize a good such as security.

Other theories, while not necessarily “realist” in name, similarly treat the state as a “black box.” Vasquez’s steps-to-war theory, for example, shows how several realist-type variables have both independent and additive effects on the probability of war (Senese and Vasquez 2003; Vasquez 1993, 2004). This explanation draws on much of the work done in international conflict studies. For example, the probability of war is highest when several “risk factors” - territorial disputes, arms races, outside alliances, etc. - are present (Bennett and Stam 1996; Goertz and Diehl 1995; Mitchell and Prins 1999; Sample 1997; Senese and Vasquez 2005; Vasquez 2004). Finally, the offensive-defensive theory (ODT) of war exemplifies another black box theory for war (Van Evera 1999). The ODT argues that as the act of engaging in conflict becomes easier for a state - i.e. when the offense is predominant - the likelihood of crisis initiation rises (Lynn-Jones 1995). In other words, as the costs of engaging in a conflict drop a state sees the relative gain from war to be larger, thus making conflict seem more attractive as an option.

As mentioned, all of these studies share the assumption that differences in the internal make-up of the state are irrelevant; states are treated as black boxes. A separate line of research has attempted to open up the state, focusing on factors such as regime type or domestic political calculations. For example, democratic peace theories put forth the explanation that two democracies will not fight each other (Maoz and Russett 1993). These democratic countries, however, tend not to hesitate when attacking non-democratic countries. Another explanation that focuses on regime type is the selectorate theory of conflict (Bueno De Mesquita, Morrow, Siverson and Smith 1999). This theory holds that different levels of violence are pursued by different regimes due to the type of audiences to which they must appeal in order to remain in power. Dictators appeal to a smaller group of people, which leads to a focus on private goods and more flexibility and latitude in regard to conflict decisions

(Bueno De Mesquita et al. 1999, 793-794). On the other hand, democratic leaders must appeal to larger groups, which leads to a reliance on public goods. Since wasting valuable resources on a long or costly war can decrease a leader's ability to provide public goods, he or she is more cautious in his or her foreign policies (Bueno De Mesquita et al. 1999, 793-794). In addition, there are other sets of theories that also examine domestic causes of conflict such as diversionary explanations for conflict (Foster and Palmer 2006; Morgan and Bickers 1992; Sobek 2007), and those that look to the actions of other states as predictors, such as tit-for-tat models (Axelrod 1981, 1984).

Although these studies make a valuable contribution in differentiating between states based on their internal processes, they still share with realism a common disregard for the human aspect of decision making. In other words, they all ignore the messiness and personality that is involved in a state's decision-making process. As Snyder, Bruck and Sapin write, "the state is its decision-makers" (2002, 59). The field of political psychology developed precisely in response to this disregard for the role of personality in decision making

## **1.2 Psychological Theories of International Politics**

In 1951, Nathaniel Leites wrote his seminal piece examining what he termed the "operational codes" of the Russian Bolsheviks (Leites 1951). It arose from a perceived need to examine how the Russian leaders thought and made decisions (Walker 1990). American policy makers felt that they were dealing with alien entities in the Russian Bolsheviks, which complicated US decision making by masking the true intentions and possible reactions of their foreign counterparts. In order to rectify this situation, Leites pulled concepts from various branches of psychology, such as social psychology and psychoanalysis (Walker 1990, 404). Using these concepts, he constructed the operational code of leaders. The operational code sought to capture the cognitive, or conscious, beliefs of the Russian leadership. Since it was impossible to conduct an in-person psychological evaluation of the Russian leadership, Leites used several questions to capture this concept from a distance. These questions aimed

to determine concepts such as whether a leader viewed the outside world as conflictual or cooperative, and how much control a leader believed he could exercise over a situation (Walker 1990, 404).

Some time after Leites' original analysis, Alexander George picked up the operational code research program and formalized it. George (1969) formulated ten questions from Leites' original set. In addition, George separated these questions into two separate categories, the philosophical and the instrumental. Philosophical questions, as their name implies, sought to determine how a leader views the political world in general, such as whether the world is inherently conflictual or cooperative (George 1969, 202-205). The instrumental beliefs examine a leader's beliefs about the physical world, such as whether cooperation or violence is the best way to achieve one's goals (George 1969, 205-216). After George formalized the operational code, the research program was largely silent for many years. The next major step came with the development of formalized content-analysis methods.

Walker, Schafer and Young (1998) developed a formalized content-analysis method for the Operational Code, as opposed to the previously qualitative nature of operational code analysis (OCA). The formalization of the operational code is based on the assumption that the statements a leader makes reflect something about his or her beliefs and psychology. Walker, Schafer and Young (1998) devised the Verbs-In-Context system to determine who the target of a statement is (self or other) and how positive or negative that comment was on a scale of -3 to 3. These ratings are then translated into a score based on the ten operational code questions. Shortly after the development of the formalized OCA system, the computer program Profiler Plus was released, which allowed for the computerized analysis of speech acts. The operational code and Margaret Hermann's (1999) Leadership Trait Analysis (LTA) program were both able to be coded using Profiler Plus. The computerized coding allowed a much larger number of speech acts to be analyzed.

The development of computerized methods allowed political psychology to engage in large- $n$  studies that, up to this time, had not been possible. Recent research has begun to

bridge the gap between more traditional conflict studies, which make use of large datasets, and political psychology, which had focused previously on small-n case studies or comparisons (Beasley, Kaarbo, Hermann and Hermann 2001; Crichlow 1998; Dyson and Preston 2006; Malici and Malici 2005; Malici and Buckner 2008; Schafer and Walker 2006). This forward progression has allowed researchers to draw the conclusion that psychology does play some role in determining policy outcomes. However, these studies have also raised many questions. For example, firm directional hypothesis, supported by empirical findings, are often lacking for many of the psychology variables used, especially within the LTA research program. Does a high level of self-confidence lead to more or less conflict? What types of results occur when different psychology variables are interacted?

In this paper, I address two problems within the political psychology and conflict literatures. First, I explore the relationship between specific psychological variables and conflict. In particular, this paper examines how a leaders view of himself (self-confidence) and his information processing schemes (conceptual complexity) affect conflict decisions. Second, I make use of event data and psychological variables derived from speech acts to create a large-n dataset, thus addressing some of the problems with a small-n that plagued earlier political psychology research efforts.

## 2 Complexity and Confidence in International Relations

The two variables I examine are both drawn from Margaret Hermann’s Leadership Trait Analysis research program (Hermann 1999). The variables are levels of a leader’s self-confidence and of conceptual complexity. It is the general theory in this paper that these two variables are the primary driving forces behind a leader’s decision to participate in the international arena. The following is a theoretical examination of these two variables.<sup>1</sup>

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<sup>1</sup>How these variables are operationalized will be discussed in detail in the Data and Measurement section.

## 2.1 Self-Confidence

Self-confidence is widely defined as a person’s “typical, or general, global [feeling] of self-worth” (Kernis 2005, 1571). While there may be some debate regarding this definition, it serves as a plausible and intuitive basis for examination and discourse. When one begins to examine the role of self-confidence in determining the actions that a person pursues, one of the primary problems with psychological variables becomes clear. Some theories associated with self-confidence argue that low confidence leads to violent actions due to a feeling of self-loathing. This, in turn, leads a person to lash out against others. Others argue that low confidence leads to less violent actions due to a lowered sense of self-efficacy. In addition to these two primary arguments, many other researchers have branched out and formed derivative theories that modify and add to these primary expectations. This proliferation of theories makes it difficult to formulate consistent hypotheses regarding self-confidence and international involvement or the level of hostility a leader pursues. The next sections examine the differing conceptions of self-confidence in an attempt to form a unified and coherent set of hypotheses relating to self-confidence and levels of international involvement. A barrier on the path to this goal does exist, however; much of the literature on self-confidence discusses the impact of self-confidence in relation to either hostile or non-hostile actions, instead of examining how self-esteem affects the decision to act in general.

### 2.1.1 Self-loathing or Self-Efficacy?

One of the most prevalent set of theories that examines self-confidence argues that those individuals who have lower levels of self-esteem will feel a sense of self-loathing (White 1949; McNeil 1959; Eckhardt 1974; Cale and Lilienfeld 2006; Gecas 1989).<sup>2</sup> This feeling of self-loathing leads an individual to lash out and compensate for his or her feelings of low self-confidence. In terms of international conflict, these theories suggest that a leader with low self-confidence should favor conflictual policy choices, i.e. more militarized disputes,

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<sup>2</sup>I refer to how a person sees his or herself as both self-confidence and self-esteem.

more hostile responses to the onset of a crisis, and more hostility in daily actions. These theories find a basis in Maslow's (1943) hierarchy of needs. The basic argument of Maslow's hierarchy asserts that individuals who have failed to fulfill their basic needs, such as food, shelter, and security, cannot move onto higher levels of fulfillment. This lack of fulfillment often leads to violent or aggressive actions (Maslow 1943, 382). Thus, if an individual fails to achieve higher levels of fulfillment for any reason, such as lacking a sufficient concept of the self (low self-esteem), the person becomes more oriented towards aggression. These theories also argue that those individuals with high self-esteem will be less likely to act in an aggressive or conflictual manner due to a high level of comfort in their skin and a lower need to seek affirmation from others (Cale and Lilienfeld 2006).

While these theories of self-loathing are highly prevalent, another school of thought directly opposes the belief of low self-esteem relating to self-loathing. These theories argue that those leaders who have low levels of self-esteem do not possess a sense of self-loathing. Rather, these individuals are uncertain in their ability to assert themselves into a situation (McIntyre 1983; Paulhus 2001; Post 1986; Spinner-Halev and Theiss-Morse 2003). In other words, these individuals lack a sense of self-efficacy. This uncertainty in his or her own abilities causes an individual to be more hesitant and less aggressive in a given situation. Translated to international relations, this set of theories leads to the assertion that a leader with low self-confidence will tend towards a lower number of actions, and that these actions will tend to be less conflictual, due to a lack of confidence in his or her ability to achieve successful foreign policies (Baumeister, Tice and Hutton 1989; Campbell 1990; Campbell, Trapnell, Heine, Katz, Lavalley and Lehman 1996). This second group of theories seems to fit with Hermann's conception of self-confidence. Hermann (1999, 22) writes that the actions of a low confidence individual "often [appear] highly inconsistent, matched as [they are] to the nature of the setting not to the needs and desires of the individual." These theories assert that those leaders with high self-confidence would prove more likely to pursue a higher number of events due to their belief that they can successfully insert themselves into a situation

and change an outcome.

While this dimension of self-confidence, self-loathing versus self-efficacy, represents a large portion of the literature, there are other dimensions of self-confidence that may also play a role in determining a leader's actions. Of particular interest to this paper is how these other theories take much of what has been addressed in the current section and either completely ignores it, or turns it on its head. These differences begin to hint at the difficulty in choosing only one set of theories from which to draw empirical expectations.

### **2.1.2 Stable vs. Unstable Self-Confidence**

This section addresses the second dimension of self-confidence present in the literature, stable and unstable levels of self-confidence.<sup>3</sup> While the previous set of theories looked exclusively at the absolute level of self-esteem, high or low, to derive expectations for actions, this set of theories looks primarily at the stability of these levels (Kernis and Paradise 2002; Kernis 2003, 2005). Stability in this instance is defined as “the magnitude of short-term fluctuations that people experience in their contextually based, immediate feelings of self-worth” (Kernis 2005, 1572). Thus, these theories are concerned with how a person arrives at their levels of self-confidence; how does a person define his or her self-worth or derive his or her vision of the self?

Those individuals with unstable, or contingent, self-confidence link their self-esteem to success in external tasks (Kernis and Paradise 2002, 344-345). They have a self-esteem that is highly ego-focused. In short, their image of self is not drawn from an internal sense of self-worth, but instead from the external environment (Kernis and Paradise 2002; Kernis 2003). Thus, since these individuals are constantly seeking affirmation from external sources, when this feedback is not forthcoming these individuals tend to act in a reactionary and aggressive manner in an attempt to maintain their self-conception (Deci and Ryan 1995; Kernis and

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<sup>3</sup>Kernis (2005) provides what is perhaps the most comprehensive examination of both the problems plaguing previous self-confidence research, and the role that the conceptualization of stability has in drawing together diverse theories.

Paradise 2002). A simple example is an individual who fails at a given task, and then pursues a more extreme form of the task in order to prove, both to him or herself and to others, that he or she is capable.

Opposed to those with unstable self-confidence are individuals who draw their self-concept from within. These individuals accept themselves for who they are, faults and failings included, and thus have a self-confidence that is not based upon external factors and is built from a stable foundation (Kernis and Paradise 2002; Kernis 2003). Since these individuals build upon a stable foundation, they are less likely to experience the negative shifts in self-confidence found in unstable individuals. As a result, the negative shifts that are associated with hostile actions are not present in these stable individuals, making them less likely to embrace hostile actions in an attempt to reassert and orient themselves within an environment.

### **2.1.3 Changing Self-Confidence**

While each of these sets of theories is interesting in its own right, they pose problems for a theoretically-driven model. Which one does a researcher choose? Each of these theories has a significantly different implication for theoretical expectations. Luckily, there have been attempts made at integrating these two divergent sets of theories. Beiler and Butler (2011) argue that there are actually two different types of variables at play when examining a leader's self-confidence: static and change. These two variables account for the differences between the sets of theories outlined above; one set of theories, the self-efficacy set, is attempting to capture the effects of static self-confidence, while the other theories, stable vs. unstable self-confidence and self-loathing, are capturing some of the effects of changes in a leader's psychology (Beiler and Butler 2011, 9-13). Beiler and Butler's argument amounts to a statement that an individual's self-confidence does not exist in a vacuum; that person achieved that absolute level of self-confidence by either increasing, decreasing, or staying the same over time. A simple analogy would be the GDP of a country; while levels of GDP may



be low by an absolute measure, if the levels are rising over time this indicates a phenomenon that should be of interest to researchers.

With this information in mind, Beielser and Butler generated a set of hypothesis in which the directional relationship between confidence and policy decisions depends on both the levels of static self-confidence at a given point, and the amount and direction of a change from a prior period. This set of hypotheses presents a compelling case for the consideration of both types of variables. In addition, the unified set of hypotheses seems to clear up much of the confusion surrounding the behavioral implications of varying levels of self-confidence.<sup>4</sup>

#### 2.1.4 Hypotheses

Before turning to the hypotheses for this paper, a brief review of the self-confidence literature mentioned above is warranted. Beielser and Butler (2011) argue that static self-confidence is capturing the belief of self-efficacy that an individual holds. Changes in self-confidence, however, capture the effects of a stable or unstable self-image, which in turn leads to the feelings of self-loathing discussed in other theories of self-esteem. While it is important to understand both changing and static self-confidence in order to create a fully-informed set of theoretical expectations, for the purposes of this thesis I am interested only in the effects that a leader's view of his or her self-efficacy has on international participation. Changes in self-confidence affect how a leader will pursue *conflict* behavior. The goal of this thesis is to examine *participation* in more general terms, thus rendering the knowledge of how stable a leader's self-image is irrelevant for this particular project.

**Hypothesis 1:** *Leaders with high levels of static self-confidence, due to their assertive tendencies, will engage in a higher number of events.*

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<sup>4</sup>Interested readers can refer to Beielser and Butler (2011) for a more in-depth discussion of the specific hypotheses.

## 2.2 Conceptual Complexity

Conceptual complexity is, as the name may imply, a variable that has a fairly complex interpretation. While much of the literature has treated complexity as having a fairly straight-forward relationship with foreign-policy behavior, a close examination of the foundational literature suggests the opposite. This section provides an examination of the complexity literature, and puts forth a new conjecture relating to complexity and international relations.

### 2.2.1 Origins of Conceptual Complexity

Conceptual complexity, at its heart, examines how a person's cognitive processes are set up.<sup>5</sup> Cognitive complexity has two dimensions: differentiation and integration. Differentiation is the ability of a person to see differing options or paths within an environment, while integration refers to a person's ability to tie these options together, or integrate the options into a cognitive schema (Schroder, Driver and Streufert 1967, 7). Integration resides as a higher level of cognitive complexity; differentiation can exist without integration, but integration cannot exist without differentiation.

### 2.2.2 Information Managers

Since conceptual complexity aims to examine how cognitive processes are structured within a person's psychology, this concept also addresses how a person obtains and manages information regarding the outside world. Varying levels of differentiation and integration result in differing levels of awareness relating to the outside world.

In one of the seminal works on cognitive complexity, Schroder, Driver and Streufert (1967, 15-23) describe the implications for information processing suggested by varying levels of differentiation and integration. The lowest level is distinguished by rigid thought processes; there is a simple structure between information and the person. An individual with this

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<sup>5</sup>Hence conceptual complexity's other alias, cognitive complexity.

low level of integration and differentiation does not see the possibility of interactions and linkages between information. In addition, these individuals see few options in the world. Moving up the integration scale, more of these linkages and interactions are seen. Individuals begin to develop more rules for information, which enables the comparison and relation of information. This increase is also accompanied by an increase in the number of options seen in the world; these more complex rules are needed to handle the larger amount of information being processed. Finally, at the highest level of integration, a person develops an abstract conception of the world. This conception is related to a theoretical orientation, which “is characterized by the ability to generate the rules of the theory, the complex relations and alternate schemata, as well the relationships between the various structures” (Schroder, Driver and Streufert 1967, 23)

These levels of differentiation and integration, which indicate how a leader perceives the world, have implications for the actions a leader takes. Specifically, the level of cognitive complexity has an effect on how many actions a leader will initiate. Leaders with high levels of complexity:

remain highly attuned to contextual information since they do not necessarily trust their first response to an event. In the view of the conceptually complex leader, in order to understand a situation and plan what to do, one must gather a large array of information and seek out others’ opinions on what should be done - there is always room for one more piece of data or perspective. Such leaders often take their time in making decisions and involve a large array of actors in the decision-making process (Hermann 1999, 23).

In short, highly complex leaders involve themselves, and their administrations, at a high level in the information search. This makes them highly involved in the international arena and causes them to be more likely to initiate more events in the international system.

Streufert and Swezey (1986) present experimental evidence to support the assertion that those leaders who bring in more information engage in a higher number of events. The results

of the experiments indicate that “overall decision frequency showed a general increase with increasing load...strategic decision making reached an optimal level at intermediate loads” and that “few retaliatory decisions were made when little information was received, but the decisions increased in number toward more moderate levels as load approached optimal levels. As optimal load was exceeded, however, retaliatory actions increased sharply” (Streufert and Swezey 1986, 183). Load in these experiments is represented by the amount of information presented to an individual; individuals who had a greater capacity to process the increased load (information) initiated more events. Finally, Streufert and Swezey (1986, 184-188) found that highly complex leaders do, in fact, seek out more information and that this information is used in long-term, strategic-level, decision making.

What none of the foundational research of complexity points to, however, is what specific policy choices a leader will pursue. There is a large amount of discussion about information and information processing, but nothing regarding how that affects the direction, hostile or cooperative, of policy choices.<sup>6</sup> The following section discusses the assumption amongst political psychologists that higher levels of complexity leads to a default to peaceful actions.

### **2.2.3 Default to Peace?**

The majority, if not the entirety, of political psychology research has assumed highly complex leaders will prefer peace (Hermann 1977). The reasoning behind this is assumption is simple; a leader who sees more options in the world will have a lower probability of choosing an aggressive action due to the presence of more options. Under examination, however, this logic falls short. In a given situation, a leader could see 8 options (high complexity) as opposed to 2 options (low complexity). If 4 of the options for the high complexity leader are conflictual and 4 are cooperative, while the low complexity leader has 1 cooperative and 1 conflictual, then there is no information within this example that indicates which leader is

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<sup>6</sup>There was an experiment developed by Streufert, Clardy, Driver, Karlins, Schroder and Suedfeld (1965) that included actors making hostile or cooperative policy decisions. It does not seem, however, that any additional research explored how differing levels of complexity correlated with the direction of policy choice.

more likely to pursue aggressive policies. The only difference between the two leaders is the range of options they have within each category. In fact, Driver (1977), perhaps unknowingly, supports this assertion in his argument for why highly complex individuals should be less aggressive. Driver (1977, 339) writes that “persons with low levels of complexity will have few nonaggressive options. Such persons will view the international situation as one of war or peace, and when threatened have no alternative to war. The complex individual, on the other hand, can conceive of *other ways to signal aggressiveness short of war*” (emphasis added). By this argumentation, it is *not* the case that a complex leader will never be aggressive, simply that this leader will have more variation in his or her aggressive actions than a low complexity leader.

Beieler (2011) argues for a slightly different conceptualization of complexity after discovering that highly complex leaders pursue more militarized interstate disputes (MIDs) than low complexity leaders. Beieler argues that this high number of MIDs is due to the nature of complexity discussed above: those leaders who have high complexity are more likely to engage in extensive information searches, which in turn leads to more involvement in the international system. This explanation boils down to: leaders who are complex just do more stuff, both cooperative and conflictual. While this theory begins to move in a direction more consistent with the literature, there is still a fundamental problem. All of the theories of complexity and conflict (or involvement) have assumed that conceptual complexity itself has a causal effect on policy choices, such as what type of policy to pursue or whether to act at all. Instead, based on the extant literature, it seems that there may not be a true causal relationship between complexity and policy choice in and of itself.

An analogy for the role complexity plays in determining policy decisions is the scientific research process. Conceptual complexity is analogous to the data gathering process. How complex a person is determines how much data he or she gathers. This data gathering process is agnostic; the process itself does not make a judgement regarding the data. Instead, the data that has been gathered is then passed off to various analytic techniques that are then

used to draw conclusions from the data. In the cognitive process, this refers to other variables within a person's personality. For instance, the decision of how to act on the data gathered is determined by things such as a leader's levels of distrust, need for power, or how a leader views the political universe.

#### 2.2.4 Hypotheses

Based on the above review of the existing complexity literature, this paper will make use of one hypothesis regarding conceptual complexity and international involvement:

**Hypothesis 2:** *Leaders with high levels of conceptual complexity will have a higher number of events due to an extensive information search.*

Since these highly complex leaders engage in a large-scale information search, they will tend to have a "finger on the pulse" of international events. These leaders should take a more hands-on approach, either themselves or through delegated tasks, which leads to a high level of involvement in international politics.

While this hypothesis regarding involvement is founded on the literature, it seems clear that there is more to complexity than just its effect in a bivariate situation. Hypotheses for complexity should be presented as interactions between complexity and another variable; complexity has a moderating effect on how other variables cause policy choices. A careful reading of the literature suggests that complexity may serve as a force that adds something more to another psychological variable; complexity provides the necessary information, while also having an impact of its own on foreign-policy decisions.

A large portion of the complexity literature also notes that complexity and self-image (or self-confidence) are intimately related. How self views self is closely linked to how self views other, and vice versa. Thus, this paper will formulate the relationship between complexity and confidence as an interaction term with a causal effect on levels of international involve-

ment. The following sections address the theoretical basis for this interaction, and outlines the hypotheses for same.

## **2.3 Complexity and Confidence**

The combination of confidence and complexity sums to an individual's belief of the relationship between self and other. Hermann (1999, 17-18) writes that "the self-other orientation indicates how open the leader will be to input from others in the decision-making process and from the political environment in general." This combination, as has been suggested in earlier sections and reaffirmed by Hermann's thinking, is crucial to determining when a leader will act. When discussing the literature related to a particular variable there have been undercurrents of the other variable present. In short, attempting to isolate each variable from the other ignores the reality of how human information processing works. For instance, when describing self-confidence, the literature discusses information gathering from the external environment, which is clearly the purview of conceptual complexity. On the other hand, the discussion of complexity discusses the role of complexity in determining whether a person sees self as a causal agent, which seems to have a ring of self-image and self-confidence in it (Schroder, Driver and Streufert 1967).

### **2.3.1 Moderating effects**

When discussing each of these variables it is important to remember the role that each plays in driving international involvement. The role of self-confidence is dependent upon both the static level and levels of change a person experiences. This level of change determines where a person draws his or her self-image from, thus affecting the type of actions a person will take. A person's static levels of self-confidence, however, has a closer relation to the decision to engage at all, regardless of type. Conceptual complexity is the data-gathering process that an individual engages in. This process is reliant on the amount of differentiation that an individual sees in the outside environment.

How a leader deals with information brought in is dependent upon that individual's conception of self. For instance, the highest level of differentiation and integration described by Schroder, Driver and Streufert (1967) refers to a highly abstract and constantly changing environment. Taken into consideration with Hermann's description of self-confidence's role, that of an orienting mechanism, it seems clear that how the perception of a highly abstract environment is acted on depends upon a person's ability to orient him or herself (Hermann 1999, 22). Thus, I argue that complexity and confidence are fundamentally linked in the decision-making process.

### 2.3.2 Hypotheses

The hypothesis in this section draws heavily from the self-confidence concepts discussed earlier, specifically those that refer to static measures of self-confidence. These theories suggest that static measures of self-confidence are tied to how a leader views his self-efficacy, or ability to get things done. When a leader's complexity is viewed in the light of that leader's views of his self-efficacy, the following hypothesis can be drawn:

**Hypothesis 3:** *Depending on how a leader views his self-efficacy, those leaders with high levels of conceptual complexity will be more involved than those with lower levels.*

Leaders can be placed on a continuum based upon their combination of complexity and confidence. Those leaders with high self-confidence and high complexity will have high levels of involvement. They feel confident in their ability to project themselves into the international arena, and see numerous opportunities to do so. Next, leaders with low levels of confidence and high complexity will engage in a moderate level of events since they see many options, but are tentative in pursuing these potential events. These leaders may see the world as fundamentally confusing and too complex.<sup>7</sup> Third, leaders with low complexity and

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<sup>7</sup>This group of leaders may fall into the U-curve hypothesis of complexity. Basically, these leaders are too overloaded by complexity and are not equipped with the cognitive tools to deal with the complexity they



high self-confidence will have a moderate-low number of events. These leaders feel able to inject themselves into a given situation but, due to their low levels of complexity, do not see many, if any, possibilities to do so. Finally, the leaders with the lowest level of events will be those who possess low levels of complexity and low levels of confidence. Not only do these leaders not see themselves as having the ability to participate in world, they do not even see any opportunities to do so. This set of hypotheses roughly matches the thinking that Hermann articulates relating to openness to contextual information, which is a slightly different conceptualization of involvement as discussed above (Hermann 1999, 20).

### 3 Data and Measurement

As has been mentioned throughout this paper, my focus is on determining how a leader's self-confidence and conceptual complexity affect a country's foreign-policy behavior. In order to achieve this goal, it is necessary to have a measure of activity in the international arena, which includes both the number and type of events pursued during a given time period, and a measure of a leader's psychological traits. The following sections provide details on how these two variables are operationalized.

#### 3.1 Dependent Variables

To measure a country's foreign-policy behavior, I use the WEIS and COPDAB datasets (Azar N.d.; Mclelland N.d.). These datasets identify discrete actions - both cooperative and conflictual - by one state directed toward another. In addition, they also identify the exact date of the events, which allows me to aggregate the number of events by the country/month, the unit of analysis for this project. The resulting dependent variable, *Total Events*, is the measure of the *total number of events* that a country, specifically the United States in this project, pursued during a given month. It ranges from 1948-1992, which allows for an  $n$  of

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see.

The resulting dataset gives an accurate representation of the international behavior of the United States during this time period, and allows the examination of the number of events the US participated in, both cooperative and conflictual. This combination of event types is necessary to draw accurate conclusions regarding a leader’s decision to create a discrete event in the international arena.

### 3.2 Independent Variables

It is, of course, difficult to measure the central, psychological concepts under examination in this paper. The most direct path would be to put a president “on the couch” and perform a battery of psychological tests. In reality, however, this is clearly impossible. In order to circumvent the necessity of having a leader present to determine psychological characteristics, at-a-distance techniques were developed. These techniques make use of speech acts by a leader and content-analysis methods to derive quantitative measures of a leader’s psychology. One of the foremost forms of at-a-distance political psychology research is Hermann’s (1999) Leadership Trait Analysis (LTA) program. The LTA research program allows a person to take quantitative measures of seven separate leadership characteristics such as a leader’s need for power, task orientation, self-confidence, conceptual complexity, and more. As the literature review above shows, I am interested in only two variables from the LTA framework: *Self-Confidence* and *Conceptual Complexity*.

The first variable, Self-Confidence, is measured by taking a proportion of “personal pronouns used such as ‘my,’ ‘myself,’ ‘I,’ ‘me,’ and ‘mine,’ which show speaker perceives self as the instigator of an activity, an authority figure, or a recipient of a positive reward” (Dyson 2006, 292). Conceptual Complexity is measured by focusing on “percentage of words related to high complexity (i.e., ‘approximately,’ ‘possibility,’ ‘trend’) vs. low complexity (i.e., ‘absolutely,’ ‘certainly,’ ‘irreversible’)” (Dyson 2006, 292).

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<sup>8</sup>There are 540 total observations in the dataset, but this number is lowered due to missing data on the independent variable side.

In order to obtain the quantitative measures of these variables, I make use of a dataset that pulls raw data from presidential news conferences.<sup>9</sup> The use of news conferences allows for the avoidance of speech-writer effects since the leader is responding spontaneously to questions asked. In addition, the use of news conferences leads to the capture of a broad, average picture of a leader’s psychology since these conferences often cover many different policy domains. These speech acts are then aggregated to the month and run through the software program Profiler Plus, which generates the quantitative measures of a leader’s psychology following the coding rules described above.<sup>10</sup> Once the quantitative measures are obtained, the data for each psychological variable is combined to create a three-month rolling average, which helps to account for missing data and aides in providing an accurate pictures of a leader’s psychology.

### 3.2.1 Controls

In order to control for phenomena that may account for a leader’s decision to pursue a certain number of events, this paper includes three control variables: *Misery Index*, *Military Capabilities*, and *Presidential Party*. The Misery Index is the economic misery index. It is the composite scale of unemployment added to the inflation rate. This variable is included in order to control for unfavorable domestic issues that may lead a president to pursue foreign-policy events in an attempt to create a rally-round-the-flag effect.<sup>11</sup> The next variable, Military Capabilities, is the composite score of a nation’s military capabilities. This variable “is measured using the composite indicator (military personnel and expenditures, urban and total population, iron and steel production, and energy consumption) from the Correlates of War Composite Indicators of National Capabilities” (Singer 1987). Military Capabilities is included to control for the possibility that the realist theories discussed above, such as the offense-defense theory, have an impact on the number of events a state will pursue. The final

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<sup>9</sup>News conferences were obtained from The American Presidency Project.

<sup>10</sup>Profiler Plus may be obtained from Social Science Automation, Inc.

<sup>11</sup>Misery index numbers can be obtained from <http://www.miseryindex.us/>.

control variable, Presidential Party, is a dichotomous variable that captures which political party a president is affiliated with. The variable is coded 0 for the Democratic Party and 1 for the Republican Party. Presidential Party is included to control for any effect that party politics may have, such as the assumption that “hawks” are both more assertive and more likely to be associated with the Republican Party.

## 4 Results

In order to test each of the hypotheses presented in the above sections, this part of the paper will proceed in two parts. The first section tests the hypotheses relating to the main focus of this paper: how does a leader’s self-confidence and conceptual complexity affect the number of events the US pursues. The second section tests the hypotheses relating to the combinations of self-confidence and conceptual complexity. Before turning to the analysis of the results, however, a brief examination of the descriptive statistics for the examined variables is useful in order to provide a bit of context for the analysis. Table 1 shows the results of these descriptive statistics.<sup>12</sup>

[Insert Table 1 here]

Table 1 shows that the mean number of events is 75.39 per month, with a standard deviation of 37.40 events. The Self-Confidence of U.S. Presidents ranges from 0.339 to 0.749, with a mean and standard deviation of 0.498 and 0.066, respectively. Conceptual Complexity has a mean of 0.615 with a standard deviation of 0.060 and ranges from 0.437 to 0.749. While these results provide some context for the variables, the results in Table 2 shows the results of the psychological variables per president, which allows for a more in-depth look at the variables.

[Insert Table 2 here]

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<sup>12</sup>Please note that all tables are placed at the end of the paper.

The descriptive statistics in Table 2 show that Kennedy has the highest mean levels of Self-Confidence, with a score of 0.636. Nixon shows the highest levels of Conceptual Complexity, with a score of 0.677. Kennedy’s maximum score on Self-Confidence, 0.748, also places him as the leader with the highest levels of Self-Confidence. A maximum score of 0.749 indicates that Ford is the president who reaches the highest levels of Conceptual Complexity. One final interesting finding is that Reagan’s scores on Self-Confidence have a very large range (.257). Additionally, Ford’s Conceptual Complexity scores range dramatically, with scores ranging from 0.575 to 0.749. With the descriptive statistics providing some additional information and context to the variables, I now turn to the examining what causal role these psychological variables play in driving the number of events the U.S. pursues in a given month.

## 4.1 Psychology and the Number of Events

Table 3 shows the results for the bivariate regressions testing the hypotheses relating to psychology and the total number of events.

[Insert Table 3 here]

The results in Table 3 show support for the first two hypotheses given in this paper: higher levels of Self-Confidence lead to a higher number of events due to a leader’s assertive tendencies, and higher levels of Conceptual Complexity lead to a higher number of events due to an extensive information search on the part of the leader.<sup>13</sup> The results in model one show that for every one-unit change in Self-Confidence there is about a 1.28 unit change in the log of the number of events. In other words, going from the theoretical minimum (0) on Self-Confidence to the theoretical max (1) causes a leader to pursue around 19 more events per month. This relationship is statistically significant with a  $p$ -value of  $< 0.01$ . Model two shows the results for the bivariate regression of Conceptual Complexity and Total Events. In this model, Conceptual Complexity has a  $\beta$  coefficient of 1.83. This indicates that a one-unit change in Conceptual Complexity causes a leader to pursue around 67 more events per

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<sup>13</sup>This is the “finger on the pulse” hypothesis for Conceptual Complexity.

month. As with Self-Confidence, this relationship is statistically significant with a  $p$ -value of  $< 0.01$ .

While these results are interesting, and provide support for the first two stated hypotheses in this paper, further analysis is possible. In order to fully discern the causal processes at work in driving the number of events a leader pursues it is necessary to add in control variables. Table 4 shows the results of the multivariate regressions, which include the control variables discussed above.

[Insert Table 4 here]

Table 4 shows some interesting results. Model 1 includes both Self-Confidence and Conceptual Complexity. The result of this is that, when controlling for the effects of Conceptual Complexity, Self-Confidence has a  $\beta$  coefficient of 0.79, and achieves statistical significance with a  $p$ -value of 0.02. This indicates that, when controlling for Conceptual Complexity, a one-unit change in Self-Confidence causes a country to pursue around 6 more events per month. Next, when controlling for the effects of Self-Confidence, a one-unit change in Conceptual Complexity causes a 1.47 change in the log of the dependent variable, Total Events, which equals around 29.35 more events per month. This relationship is statistically significant with a  $p$ -value of  $< 0.01$ .

Model 2 includes all control variables discussed above. This model also shows a positive correlation between Self-Confidence and Total Events. The  $\beta$  for Self-Confidence is 1.01, which indicates that for every one-unit increase in Self-Confidence there is a 10 unit increase in the number of events. This relationship is significant, with a  $p$ -value of  $< 0.01$ . The model also shows that higher levels of Conceptual Complexity lead to a *lower* number of Total Events. This is opposite of the sign from model one. Upon further examination, however, it becomes clear that this sign change is likely the result of multicollinearity; Conceptual Complexity and Military Capabilities are highly correlated, with an  $r$ -value of -0.79. Thus, the final model presented, model 3, removes Military Capabilities from the analysis.

Model 3 shows results similar to model 1 for the psychological variables. Self-Confidence has a  $\beta$  coefficient of 0.99 with a  $p$ -value  $< 0.01$ , giving the relationship statistical significance. Conceptual Complexity is positively correlated with Total Events, with a one-unit change in Conceptual Complexity leading to about 6 more events per month. The relationship is significant with a  $p$ -value of .04.

Models 2 and 3 include the control variables for this paper. In model 2, Military Capabilities is negatively correlated with Total Events, with a one-unit change in Military Capabilities causing a -1.7 unit change in the log of Total Events, or 50 less events per month. This relationship is significant with a  $p$ -value of .01. In models 2 and 3, a higher score on the Misery Index leads to a higher number of total events, and obtains significance in model 3 but not model 2. The other variable, Presidential Party, shows that Republican leaders tend to engage in more events per month than Democratic leaders. Presidential Party obtains significance in model 3 with a  $p$ -value of 0.02.

## 4.2 Combining Complexity and Confidence

In order to discern the impact of *both* of these variables, Self-Confidence and Conceptual Complexity, on Total Events I generate quantities of interest for the dependent variable when both of these variables are varied at their mean, maximum, and minimum. For example, Self-Confidence is set at its maximum, while Conceptual Complexity is set at its minimum and a quantity is generated for this combination. In addition, the percent change for each of these variations from a baseline model with each variable held at its mean is calculated. Table 5 shows the results of this analysis. The model used to estimate these quantities of interest is the same regression model as shown in Table 4, model 1.

[Insert Table 5 here]

Table 5 shows that when Conceptual Complexity is held at its mean and Self-Confidence is at its maximum the predicted number of events is 86.47, which is a 20.19% increase in

the number of events. When Self-Confidence is put to its minimum value, there is a -13.76% change from the baseline model. This puts the predicted number of events at 62.04. When Conceptual Complexity is set at the maximum and minimum, with Self-Confidence held at its mean, the predicted numbers of events are 87.96 and 56.81, for changes of 22.27% and -21.03% respectively. This shows that Self-Confidence has a stronger effect on the upside than on the downside, but Conceptual Complexity has about the same effect regardless of direction. When Self-Confidence is set at its maximum and Conceptual Complexity is at the minimum, the effect of Conceptual Complexity overpowers any positive effects of a leader's Self-Confidence, causing a negative percent change from the baseline model. This is also shown when Conceptual Complexity is set at its maximum and Self-Confidence is put to its minimum; the change for this combination is 10.11%. These results show that the effect of Conceptual Complexity overpowers that of Self-Confidence.

Another interesting effect seen in Table 5 is when both variables are set at their respective maximums. For this combination there is over a 50% change from the baseline model, or a prediction of 108 events per month. For the inverse, both variables at the minimum, there is a -32.89% change from the baseline model. These two combinations show that, when taken in combination with each other, these two variables can have a large impact on the foreign-policy choices a leader pursues.

In addition to testing the hypothesis relating to the combination of the variables, the quantities of interest show that the variables have a significant, substantive impact on the Total Events. The results in Table 5 show that Conceptual Complexity and Self-Confidence have a definite impact on the policy decisions. These results provide further support for the hypotheses of this paper, specifically those relating to the combinations of variables.



## 5 Discussion

My goal was to determine what role, if any, a leader's psychological traits played in driving foreign-policy decision making. Specifically, I was interested in what impact these variables had on driving a leader's choice of how many events, both cooperative and conflictual, to pursue in a given month. Towards this end, I made use of Hermann's (1999) Leadership Trait Analysis framework to derive quantitative measures of a leader's Conceptual Complexity and Self-Confidence. I found support for my hypotheses relating to these two variables, specifically that higher levels of each variable will have a significant impact on Total Events. Also, by using simulated quantities of interest I was able to rank which combinations of variables have the most, least, and middling amounts of events.

The findings of this paper have interesting and exciting implications for future research in both political psychology and international conflict. The relationship between Conceptual Complexity and Total Events is one that had, as yet, received little to no exploration. The finding that higher levels of complexity lead to a higher number of events can serve as an important base for further research. It is difficult to discuss conflict decisions without first understanding the foundations of policy choice. It is incorrect to make causal claims regarding the choice of a conflictual action without knowing how a certain variable causes a leader to act in more general terms. It is possible that without the knowledge of how Conceptual Complexity impacts these choices, other findings in the field could be incorrectly interpreted. In other words, without fully understanding the full range of effects Conceptual Complexity has one cannot draw accurate causal claims. This paper has shown that leaders with high levels of complexity pursue high numbers of events likely due to their extensive information search. Thus, it is possible that these leaders pursue more conflictual events than their less complex counterparts, not due to any proclivity for conflict, but instead because they pursue more events in general.

The same general ideas also apply to Self-Confidence. As the examination of the confidence literature showed, Self-Confidence is a variable with a highly complex and complicated

theoretical grounding. As with complexity, it is difficult to make accurate causal claims without a full understanding of the possible effects Self-Confidence has on policy choice. This paper has shown that higher levels of confidence lead to a higher number of events. The theorized reason for this relationship is that highly confident leaders are more sure in their ability to assert themselves into a given situation. This finding should add to the existing literature on Self-Confidence and aid in developing a richer picture of what role confidence has in driving foreign-policy decision making. Further research should integrate these findings in order to expand the Self-Confidence literature.

In the final set of tests, I found that differing combinations of Conceptual Complexity and Self-Confidence have distinct impacts on Total Events. The four step ranking of hypotheses by predicted number of events<sup>14</sup> was supported by the quantities of interest generated. These results show that these two variables cannot be considered in a vacuum; each of these variables relies on another in some way to generate specific outcomes. As the literature demonstrates, it should be an exercise in futility to consider information processing (complexity) without also examining how a person orients him or herself in the face of this information (self-confidence). Thus, the findings relating to the combinations of variables are important for two reasons. First, they aid in illuminating the causal processes that underly foreign-policy decision making. Second, they give an important lesson for further research in political psychology: rather than exploring one variable in isolation, or many variables thrown into a "kitchen sink" model, care should be given to exploring how the different psychological variables relate to each other and how a thoughtful model can be constructed based on these relationships.

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<sup>14</sup>As a reminder, the list, with number one predicted to produce the highest number of events, was 1) high Self-Confidence and high Conceptual Complexity 2) low Self-Confidence and high Conceptual Complexity 3) high Self-Confidence and low Conceptual Complexity 4) low Self-Confidence and low Conceptual Complexity.

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Table 1: Descriptive Statistics for Variables

	Mean	Std. Dev.	Min	Max
Self-Confidence	0.498	0.066	0.339	0.749
Conceptual Complexity	0.615	0.060	0.437	0.749
Total Events	75.39	37.40	6	224
Military Capabilities	0.194	0.058	0.131	0.320
Misery Index	9.947	4.047	2.970	21.980
Presidential Party	0.622		0	1

Table 2: Descriptive Statistics for Psychological Variables by President

	Mean	Std. Dev.	Min	Max
Truman				
Self-Confidence	0.422	0.031	0.339	0.474
Conceptual Complexity	0.510	0.028	0.437	0.564
Eisenhower				
Self-Confidence	0.513	0.042	0.416	0.657
Conceptual Complexity	0.572	0.025	0.458	0.631
Kennedy				
Self-Confidence	0.636	0.055	0.540	0.748
Conceptual Complexity	0.667	0.023	0.635	0.723
Johnson				
Self-Confidence	0.473	0.030	0.410	0.543
Conceptual Complexity	0.620	0.025	0.546	0.675
Nixon				
Self-Confidence	0.469	0.052	0.384	0.591
Conceptual Complexity	0.677	0.035	0.614	0.743
Ford				
Self-Confidence	0.524	0.045	0.419	0.625
Conceptual Complexity	0.662	0.043	0.575	0.749
Carter				
Self-Confidence	0.508	0.045	0.373	0.582
Conceptual Complexity	0.654	0.017	0.612	0.685
Reagan				
Self-Confidence	0.524	0.054	0.398	0.655
Conceptual Complexity	0.634	0.023	0.553	0.679
H.W. Bush				
Self-Confidence	0.471	0.025	0.413	0.531
Conceptual Complexity	0.660	0.022	0.615	0.721

Table 3: Bivariate Negative Binomial Regressions of Psychological Traits and Total Number of Events

	Model 1	Model 2
Self-Confidence	1.28*	
	(0.00)	
Conceptual Complexity		1.83*
		(0.00)
$N$	440	440
AIC	4267.60	4259.28
BIC	4316.64	4308.32
$\log L$	-2121.80	-2117.64

$p$  values in parentheses are for one-tailed tests

\* indicates significance at  $p < 0.05$

Table 4: Multivariate Negative Binomial Regressions of Psychological Traits and Total Number of Events

	Model 1	Model 2	Model 3
Self-Confidence	0.79*	1.01*	0.99*
	(0.02)	(0.00)	(0.00)
Conceptual Complexity	1.47*	-0.30	0.75*
	(0.00)	(0.31)	(0.04)
Economic Misery		0.01	0.02*
		(0.09)	(0.00)
Military Capabilities		-1.70*	
		(0.01)	
Presidential Party		0.06	0.09*
		(0.07)	(0.02)
$N$	440	440	440
AIC	4256.35	4241.14	4245.39
BIC	4321.74	4355.57	4343.47
$\log L$	-2112.17	-2092.57	-2098.70

$p$  values in parentheses are for one-tailed tests

\* indicates significance at  $p < 0.05$

Table 5: Quantities of Interest

	Self-Confidence Maximum	Mean	Self-Confidence Minimum
Conceptual Complexity Minimum	67.37 (-6.35%)	56.81 (-21.03%)	48.28 (-32.89%)
Conceptual Complexity Mean	86.47 (20.19%)	<i>71.94</i>	62.04 (-13.76%)
Conceptual Complexity Maximum	108.31 (50.55%)	87.96 (22.27%)	79.21 (10.11%)

Values in the cells are the number of events that a leader would pursue given the specific combination of variables.

Values in parentheses are the percent changes from a model with all variables held at their mean.

The baseline model is in italics in the table, with a predicted number of events of 71.94.