

KYIV SCHOOL OF ECONOMICS
PUBLIC POLICY AND GOVERNANCE

THESIS

**Do Narcissists Care About Opinion at Home? US Presidential Behavior in
International Militarized Conflicts: Comparing Audience Costs and Grandiose
Narcissism Models**

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Abstract. This thesis aimed to determine which model better explains the behavior of U.S. presidents during international militarized conflicts: grandiose narcissism or audience costs. In academic discussions, both models try to explain this behavior, but there is a gap regarding which one performs better. Quantitative methods, QCA, and original data collected by the author were used to answer the research question. The results show that higher levels of narcissism are positively associated with the probability that the US president will back down from a militarized conflict, although initially he voiced a public threat against a foreign rival. The audience costs model yields mixed results, as it does not perform well with empirical data. However, when the two models are combined, neither theory may fully explain the president's behavior of backing down.

Key words: grandiose narcissism, audience costs, international militarized conflicts, US presidential behavior, foreign policy decision-making, backing-down behavior

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INTRODUCTION

Lyndon Johnson, the 36th President of the United States, presided over the escalation of U.S. involvement in Vietnam, culminating in the Vietnam War. Following the Tonkin Gulf incident in 1964, President Johnson took a hard line, insisting that the U.S. would not back down in its fight for peace and freedom in South Asia.

At that time, the Vietnam War was arguably the most important issue in US political discourse. Democrats, the opposition, the business community, and the media all played a major role in this discourse. Much of the debate focused on supporting the war and taking more aggressive actions by the US. As a result, Johnson faced a highly prominent issue and pressure from domestic institutions and the public.

Despite this, in a surprising turn of events in 1968, Johnson, in his address to the nation, called off the bombing of North Vietnam and urged the parties involved in the conflict to come to the negotiating table. It is unclear what exactly motivated the president when he delivered this speech. Maybe it was pressure from the domestic audience, or maybe a desire to protect his own ego and image. Lyndon Johnson's apparent desire to protect his image and ego stems from his grandiose narcissism.

Two theoretical models, grandiose narcissism and audience costs, seek to explain leaders' behavior during international militarized conflicts. In this thesis, I argue that explanations of US presidential behavior in international militarized conflicts based on rational choice assumptions, such as the audience costs theory, may be incomplete unless personality traits, including grandiose narcissism, are taken into account.

The audience costs model presumes that leaders act rationally and if a leader publicly threatens to escalate or attack in an international militarized conflict, he must follow through on that threat. If the leader fails to do so, he will be punished by his domestic audience, namely by losing his position (Fearon, 1994). The prevailing view is that democracies will adhere to the audience costs model because democratically elected leaders are accountable to the electorate and must weigh risks when making public threats on the international stage. (Baum & Potter, 2015; Fearon, 1994; Nomikos & Sambanis, 2019; Schultz, 1998)

However, researchers working on audience costs fail to provide empirical evidence that audience costs guide or constrain leaders' behavior. The model of grandiose narcissism suggests that leaders may be guided by more than rational judgments. In the case of narcissistic leaders, a desire to preserve their image can lead to irrational decisions. For example, narcissistic American presidents have been prone to continuing wars that are disadvantageous to them and to initiating conflicts with Great Powers (Harden, 2021; Harden, 2023)

Thus, scientific debate has established that both models aim to explain leaders' behavior, but it remains unclear which does so more effectively.

This raises the following research question. Whether accounting for grandiose narcissism yields better results in predicting US presidents' behavior during international militarized conflicts as opposed to domestic audience costs?

My research focuses on comparing two competing theories: the theory of audience costs and grandiose narcissism, and on assessing their explanatory power for the behavior of American presidents during international militarized conflicts. Based on the analytical problem and research proposal described above, I have a confirmatory research design. The literature reveals divergent trends in how leaders of democratic states behave within these two theoretical frameworks. This study examines both models together to assess their explanatory power for American presidential behavior during international militarized conflicts. My goal is to verify previous findings using data already collected by other researchers, such as the narcissism scale, to address the gap in understanding how these two models can explain presidential behavior.

As a first step I test the two theories separately, assuming that different levels of narcissism or audience costs affect presidential behavior during international conflicts. Then, I combine the two models to see which one better answers the research question. This will be done using existing data, such as the narcissism scale, along with data I have collected myself for the audience costs model. The results will show how much leaders rely on rational judgment versus personal beliefs shaped by their personalities when making foreign policy decisions.

The thesis will be structured in the following way:

The Introduction sets out the research question, context, and objectives. The Literature Review synthesizes prior work, identifies gaps, and establishes the theoretical framework. The Theoretical Framework presents the research hypotheses and the rationale behind them. The Data and Methodology section details sources, variables, and the empirical strategy, emphasizing logistic regression, chi-square, and QCA tests. Results and Discussion present the main findings and assess the best model for explaining presidential behavior. Policy Recommendations highlight the relevance of understanding U.S. presidential behavior for Ukraine. The Conclusion summarizes key insights, notes limitations, and suggests future research directions.

1. LITERATURE REVIEW

In foreign policy, leaders often make public threats against other parties involved in conflicts. Sometimes they follow through on these threats, and sometimes they do not. Still, it remains unclear whether specific patterns influence whether leaders carry out their threats. Theories of audience costs and grandiose narcissism attempt to explain these patterns.

The academic debate on the mechanism for determining audience costs largely centers on the influence of different political regimes. There is a widely held idea that democracies

are better at generating audience costs because leaders are more accountable to the public (Baum & Potter, 2015; Eyerman & Hart Jr., 1996; Fearon, 1994; Frantz, 2003; Hyde & Saunders, 2020; Partell & Palmer, 1999; Schultz, 1998). Others argue that autocracies can also generate audience costs and that this mechanism is not unique to democratic regimes (Li & Chen, 2021; Smetana, 2024; Troitskiy, 2025; Weeks, 2008; Weiss, 2014). Finally, there is also the idea that the mechanism of audience costs is irrelevant in international crises because states are not rational actors. Public threats are not always the best signal of a state's intentions when private or economic diplomacy is available (Trachtenberg, 2012).

Fearon (1994) introduced the audience-costs mechanism, arguing that democratic leaders risk electoral punishment if they retreat from threats, thereby making their signals more credible than those of autocrats. The side with stronger accountability and the elective nature of the position (democracy) is always less likely to back down than the side that cannot generate audience costs (non-democracy). Later studies (e.g., Frantz 2003) reinforced that personalist regimes lack such costs and often misjudge democratic threats. Research has identified opposition parties and free media as the institutional channels through which democracies generate audience costs (Schultz 1998; Baum & Potter 2015). Recent work (Ashworth & Ramsay 2022) confirms that retreating from threats consistently undermines leaders' political survival, underscoring the stability of the mechanism across contexts.

On the other hand, undemocratic regimes can also generate audience costs during international crises, particularly the costs of inconsistency. Audience costs require that the domestic political audience have the means and incentives to coordinate actions to punish the leader. Second, domestic actors must consider retreating from a threat worse than acting without a prior threat (Weeks, 2008, p. 37). By "internal actors," J. Weeks means elites, who can generate audience costs, rather than the population, which plays a minimal role in undemocratic regimes. (Weeks, 2008, p. 40). Therefore, the influence of the elite and their ability to punish a leader for possible deviation are also key factors in generating audience costs.

Different types of undemocratic regimes generate audience costs in different ways: single-party or military regimes are better at generating audience costs because elites can coordinate to punish the leader, while in personalist regimes, elites are more limited (Weeks, 2008). Furthermore, young democracies are less capable of generating audience costs because they are less institutionalized and stable, so threats from leaders of such democracies cannot be considered fully credible (Weeks, 2008, p. 49).

Although democracies are not unique in generating audience costs, there is feedback on the academic debate, and it shows that they remain better at doing so (Hyde & Saunders, 2020). The type of regime plays a fundamental role in how leaders generate audience costs. It imposes important structural constraints on state leaders and on the extent to which political elites can strategically manipulate these constraints. Authoritarian regimes can generate audience costs, but such costs do not necessarily destabilize the regime, as elites and the population may lack real tools to punish the leader. (Hyde & Saunders, 2020, p. 25).

Despite its popularity and active academic debate, the audience costs model faces considerable criticism. Critics argue that leaders do not always rely on public threats to make their foreign policy intentions credible. There are other means, such as clandestine diplomacy, that do not involve communicating with the public to reduce risks. (Trachtenberg, 2012)

Another drawback of the audience costs model is that it lacks a causal mechanism explaining how the emergence of audience costs explains leaders' behavior in following through on threats. This lack of focus is particularly noticeable in academic discussions linking audience costs to political regimes. (Gartzke & Lupu, 2012)

Finally, the audience costs model in academic discourse primarily appeals to causal depth and structural causes, such as political regimes, that can influence the emergence of audience costs and leaders' behavior. The audience costs model lacks methodological individualism. The concept of causal mechanisms in the social sciences implies methodological individualism, meaning that causal mechanisms rely on human action, even though each action may be constrained by collective and aggregate phenomena external to the individual. (Kitschelt, 2003, p. 59)

From the perspective of causal mechanisms and methodological individualism, the grandiose narcissism model does not lose out to the audience costs model.

The grandiose narcissism model has not been elaborated as extensively as the audience costs model from a theoretical perspective, but it has empirical support from historical cases of leadership behavior.

Narcissism is a stable individual difference characterized by entitlement, a lack of empathy, and inflated self-views. In clinical psychology, narcissism is studied as a disorder: Narcissistic Personality Disorder (NPD). NPD is considered categorical. Focusing on NPD, because it is rare and categorical, can overlook common subclinical manifestations of narcissism. (Harden, 2023, p. 786)

In turn, social psychologists focus on trait narcissism. They conceptualize narcissism as a dimensional personality trait that exists on a normal continuum within the general population. The Narcissism Spectrum Model focuses on two sub-types of narcissism: grandiose and vulnerable. Grandiose narcissism is associated with entitlement and grandiosity, while vulnerable narcissism is associated with entitlement and vulnerability. (Harden, 2023, p. 786) This study focuses specifically on trait-level grandiose narcissism because this type may explain the behavior of presidents during conflicts due to narcissistic presidents' focus on their self-inflated image.

Research indicates that grandiose narcissism has both positive and negative effects on leadership behavior. However, there is a clear causal mechanism by which grandiose narcissism influences specific behaviors. The causal mechanism is understood through researchers' definition of grandiose narcissism using the Narcissistic Admiration and Rivalry Concept (NARC). I also use the concept of grandiose narcissism through the lens of NARC in my research.

NARC defines narcissists as driven by a fundamental need to maintain their inflated self-image. Narcissists can do so through two pathways, conceptualized as two components of narcissism: Narcissistic Admiration - narcissists' assertive self-enhancement, and Narcissistic Rivalry - narcissists' antagonistic self-image protection. Taken together, a narcissist is an individual with an inflated self-image that they seek to promote and protect. (Harden, 2023, p. 787)

Researcher J.P. Harden developed a scale of grandiose narcissism among 19 American presidents. To measure leader narcissism, he followed a Big-5 procedure. The Big-5 is useful for creating comprehensive personality profiles. Backed by decades of research, the Big-5 identifies five trait scales: openness, conscientiousness, extroversion, agreeableness, and neuroticism. (Harden, 2021, p. 830) Research shows that American presidents with high levels of narcissism often initiated disputes with Great Powers. Moreover, they did so not for national interests or security considerations, but to protect their image. This thesis undermines the audience costs model's view that political actors are rational. In the case of narcissists, they are driven by motivations other than protecting their own image. (Harden, 2021)

Narcissists prioritize maintaining their inflated self-image. State interests are least important to a narcissist. Furthermore, re-election likely enters their mind only as a campaign approaches. While narcissists are often overconfident that their re-election prospects are secure, they can become concerned that losing power would harm their image. (Harden, 2023, p. 784) For example, narcissistic American presidents tended to prolong wars, even though doing so may be a disadvantageous strategy from a rational choice theory standpoint.

Narcissistic leaders are primarily interested in using war to maintain their self-image. Also, because of their need to protect their inflated self-image, narcissists make mistakes when stressed and resist updating their bargaining positions and strategies despite failure. This causal mechanism arises entirely from Narcissistic Rivalry (i.e., ego-protection) (Harden, 2023, p. 789) In addition to the theoretical part, Harden provides empirical support for his theory. For example, President Eisenhower, who was not a narcissist, quickly ended the Korean War. By contrast, President Nixon, a narcissist, delayed the end of the Vietnam War.

At the same time, grandiose narcissism can be a double-edged sword, with both positive and negative effects on leaders' behavior. (Watts et al., 2013) Grandiose, but not vulnerable, narcissism was associated with superior overall greatness in an aggregate poll; it was also positively associated with public persuasiveness, crisis management, agenda setting, and allied behaviors, and with several objective indicators of performance, such as winning the popular vote and initiating legislation. Nevertheless, grandiose narcissism was also associated with several negative outcomes, including congressional impeachment resolutions and unethical behaviors. (Watts et al., 2013)

Thus, in academic debate, there is no consensus on how it affects leaders' behavior. In addition, existing research on grandiose narcissism has several limitations.

Both models attempt to explain the behavior of leaders. The audience costs model holds that leaders are accountable to their audiences and must follow through on their threats in internationalized military conflicts. The narcissism model says that Narcissistic presidents are concerned with their own image and may therefore act irrationally, such as prolonging conflicts or initiating them with Great Powers.

My analytical problem is to determine whether rational-choice and institutional constraint models provide a better explanation and prediction of leaders' behavior than personality-based models. I focus my research on militarized conflicts because moments of crisis pressure actors and reveal their authentic motivations. During these conflicts, it is more relevant to examine a leader's tendency to avoid following through on threats, as this is the clearest example of inconsistency, observable by both participants and scholars, and must be addressed. I concentrate on the U.S. system because, in that context, the leader's role in foreign policy is especially significant. The social relevance of this study lies in the need to understand the causes of leaders' behavior, particularly when it is inconsistent. This study, therefore, aims to shed light on the factors that may explain leaders' behavior.

To address my analytical problem in this study, I pose the following question: whether accounting for grandiose narcissism yields better results in predicting US presidents' behavior during international militarized conflicts as opposed to domestic audience costs?

2. THEORETICAL FRAMEWORK

This study adopts a confirmatory design, comparing two competing theories that explain presidential behavior in international conflicts. Grandiose narcissism emphasizes the role of personality traits in shaping potentially irrational choices, while the audience costs framework highlights structural constraints that compel leaders to act rationally. By testing these models against the same outcome, the research evaluates their explanatory power and develops a theoretical framework that integrates both perspectives.

According to the narcissism model, narcissism may explain presidential behavior. Presidents with high levels of narcissism may be more likely to back down in conflicts because they are more focused on protecting their image; therefore, if backing down is safer for their image, they might do it. However, presidents with high levels of narcissism may also be more concerned with appearing competent in foreign policy, so they might be less inclined to back down in conflicts. Thus, narcissism can potentially explain presidential behavior in two ways.

The dependent variable is presidential behavior in militarized conflicts, coded as whether the president carried out or retreated from public threats. A public threat is defined as any statement to the public, Congress, or the media indicating U.S. military intervention or escalation. Backing down refers to issuing such a threat but failing to follow through. International militarized conflicts are defined as situations where the United States threatens or uses force against another state, including wars, deployments, or joint operations with

NATO or other partners. My independent variables are contingent upon the theory under scrutiny, grandiose narcissism, and audience costs, respectively.

To test the predictive power of the grandiose narcissism model, I have the following hypotheses:

H1.1: Presidents with higher levels of grandiose narcissism are more likely to back down after issuing public threats in international militarized conflicts.

H1.2: Presidents with higher levels of grandiose narcissism are less likely to back down after issuing public threats in international militarized conflicts.

Since I do not know, based on previous research, how grandiose narcissism may explain leaders' behavior, specifically whether they are more likely to back down after making public threats, I am testing two interrelated hypotheses. In the grandiose narcissism model, the null hypothesis would be that there is no relationship between the level of narcissism among presidents and their behavior in international militarized conflicts.

The audience costs theory suggests that leaders, especially those of democratic states, must follow through on public threats made during international militarized conflicts. (Fearon, 1994) The causal mechanism is that, in democratic regimes, leaders are accountable to the people; thus, if they make concessions in a conflict after a public threat, they may be punished for inconsistency in foreign policy and incompetence. Since the audience costs theory is based on rational choice theory, leaders, as rational actors, must stick to their threats to avoid losing power, which is their ultimate interest. (Nomikos & Sambanis, 2019)

In contrast to the grandiose narcissism model, which emphasizes image protection irrespective of electoral consequences, the audience costs model assumes leaders act rationally to preserve power. Audience costs arise when domestic audiences both possess the means and incentives to punish leaders for retreating from public threats (Weeks, 2008, p. 37). I conceptualize this in terms of two variables: issue salience and the elite's capacity to penalize the leader. Issue salience is measured by ideological significance, relevance to U.S. grand strategy, and economic importance. Elite capacity is assessed through the extent of participation by the president's party, opposition, and non-political elites in debates over each conflict. These indicators form the basis for operationalizing the variables in the analysis.

The hypothesis for the audience model is as follows:

H2: Audience costs are negatively associated with presidential retreat, making U.S. presidents less likely to back down after issuing public threats in international militarized conflicts

Consequently, the central contribution of this study lies in comparing the explanatory power of grandiose narcissism and audience costs. Testing these models side by side allows us to evaluate whether presidential behavior in militarized conflicts is better explained by individual traits or structural incentives. Accordingly, the study advances the following hypotheses:

H3.1 The grandiose narcissism model predicts presidential backing-down behavior more effectively than the audience costs model.

H3.2: The audience costs model predicts presidential backing-down behavior more effectively than the grandiose narcissism model.

By directly comparing the two models, I can determine whether grandiose narcissism or the audience costs model better explains leaders' behavior during international conflicts. I am testing two hypotheses because prior research does not allow for a conclusion about which is supported. The study is primarily confirmatory in design, testing two competing theoretical models against the same outcome: presidential retreat after public threats in militarized conflicts. Hypotheses H1 and H2 are theory-driven and directly derived from the literature. However, hypotheses 3.1 and 3.2 introduce exploratory elements because, in theory, the two models do not overlap, making it impossible, given academic debate, to determine which model better explains presidents' behavior. From the perspective of causal mechanisms, both hypotheses could be supported. In the case of the first hypothesis, narcissistic presidents may focus more on their own image and be more willing to compromise in conflicts, without being influenced by the rational arguments of audience costs theory. In the case of the second hypothesis, audience costs assume that actors are rational and, in democracies with accountability, must act in ways that avoid punishment by their domestic audience and therefore follow through on their threats in conflicts.

3. RESEARCH DESIGN

To address my research question about which model better explains the behavior of American presidents, I use a quantitative methodological design for both models in my study. This approach is useful for assessing associations or correlations between variables, but it does not establish a causal relationship, which can be achieved with qualitative methodology.

3.1. Data

For the narcissism model, I use the narcissism scale developed by J.P. Harden. Harden created a narcissism scale for 19 American presidents using a Big-5 methodology. The Big-5 is useful for developing detailed personality profiles. Backed by decades of research, the Big-5 shows that human personality can be assessed across five trait dimensions: openness, conscientiousness, extroversion, agreeableness, and neuroticism. Additionally, to develop the scale, he used data from Rubenzer, Faschingbauer, and Ones, which were collected by surveying over 100 presidential historians and experts who have authored at least one book-length manuscript on a president (Harden, 2021, p. 829). This scale ranks 19 American presidents, with Lyndon Johnson the most narcissistic (2.167) and William McKinley the least (- 1.087). Thus, Harden integrated the Big-5 method, survey data from historians, and the NARC concept to develop a scale measuring grandiose narcissism among American presidents.

The population in my study is all American presidents, but the sample in the grandiose narcissism model includes those presidents who are on the narcissism scale. This can be

explained by the fact that Harden focus analysis on the years 1897–2008 to keep the United States' status as a Great Power constant. Within this time frame, Harden selected 19 presidents because data was available for them, including ratings of presidential personality facets from Rubenzer, Faschingbauer, and Ones (2000) for presidents who served between 1897 and 2008. In addition, it is important to note that the narcissism scale ends with George W. Bush because the MID dataset and personality data were complete only through George W. Bush at the time of analysis.

Thus, I use the narcissism scale developed by J.P. Harden that operationalizes my independent variable in the narcissism model. Nevertheless, it is important to note that my study does not replicate Harden's research, as his dependent variables are either presidents extending wars that are not in their best interests or initiating conflicts with global powers. In contrast, my study focuses on the behavior of U.S. presidents regarding whether they made concessions in international militarized conflicts.

For my dependent variable I compiled a dataset of public threats from presidents during international militarized conflicts. Every US president has their own website, where their speeches to the nation and to Congress are published, along with information on foreign policy issues. It is these websites that formed the basis for compiling the dataset. Miller Center, the National Security Archive, the American Presidency Project, Voices of Democracy: The US Oratory Project, and the Office of the Historian. These archival resources formed the basis for compiling the dataset. I define international militarized conflicts as any situation where one party, such as the United States, threatens to use force or has already used force against another country.

It is important to note that I chose to collect data on conflicts myself because other available datasets on international militarized conflicts lacked the information I needed, specifically the presence of a public threat and whether the president had conceded in the conflict. For my research, I examined the potential use of well-known databases on international conflicts. For example, I looked into the Correlates of War dataset: Militarised Interstate Disputes. It is a highly reliable source for selecting cases, as it covers the period from 1816 to 2014 and records all instances where one state threatened, displayed, or used force against another. However, the issue is that MID codes the very fact of a militarised dispute and its level, but does not include a separate variable such as a public threat made by the president. I also examined another dataset, ICOW (Issue Correlates of War). It's valuable for analyzing territorial, riverine, and maritime claims, as well as understanding how issue claims become militarized or are resolved peacefully. However, ICOW focuses on contentious issues and claims rather than on public statements by leaders as a separate variable. In other words, it indicates when there was an official dispute between states and whether there were attempts at resolution or militarization, but it doesn't specifically code the president's public threats. In my dataset, there is always a public threat (1) because, in order for the audience costs mechanism to work, the president must publicly announce the threat of intervention.

The main conditions in the context of choosing international militarized conflicts are the presence of a public threat by the American president to intervene or take military action, and the threat of, or actual use of, force. In this research, a public threat is considered to be any statement by the US president to Congress or to the people in the form of a radio or TV address about the use of force against another party. Backing down from a threat is considered a failure to fulfill it. It is the concession or fulfillment of the threat that operationalizes the dependent variable in the model, namely, the behavior of US presidents in international militarized conflicts.

Thus for my Model 1 (narcissism) I have a dataset which includes 16 presidents: the top 8 with the highest levels of narcissism and the top 8 with the lowest. I did not include all presidents from the Harden scale because I want to focus solely on those with the greatest variation in narcissism. This approach reduces distortion when analyzing how narcissism explains leader behavior. Overall, the dataset includes: the names of presidents, their narcissism levels according to the Harden scale, the length of their terms, international militarized conflicts involving these presidents, the presence of public threats or statements, whether the president followed through or backed down, and sources.

I have 51 units of observation in the dataset. One of them is missing data (NA): the Panama Canal crisis of 1903, involving President Theodore Roosevelt, because there are no records of public threats in that conflict. When analyzing the data, I exclude NAs and remove them. The number of units of observation is adequate for statistical analysis. Conflicts were chosen based on an analysis of archives, including presidential speeches that contained public threats to intervene in specific conflicts.

For the audience costs model, I use the same dataset that includes conflicts, presidents, and public threats, but as an independent variable, I use audience costs. I conceptualize audience costs through two main variables: issue salience and the ability of domestic elites to penalize the leader for possible backing down. (Weeks, 2008, p. 37) However, it is worth noting that the dataset for the audience costs model will be expanded, as will be discussed in the next section. The dataset has been published on Harvard Dataverse (Zhul, 2026)

I define issue salience through three main indicators: ideological significance, the conflict's relevance to the United States' Grand Strategy, and economic significance. For the second variable, whether domestic actors had the means to punish the leader if public threats were not carried out, I use three indicators of how actively the president's party members, opposition party members, and non-political elites participated in discussions of each specific conflict. These indicators then serve as the basis for operationalizing the research variables.

For issue salience, I operationalize ideology as an interrelated set of convictions or assumptions that reduces the complexities of a particular slice of reality into easily comprehensible terms and suggests appropriate ways of dealing with that reality. I identify whether the conflict was ideological based on the assumptions that the United States is characterized by prosperity and democracy, and that these depend on how the United States promotes these values abroad alongside economic expansion. The main idea defined the

American future in terms of an active quest for national greatness closely coupled to the promotion of liberty. A second element in the ideology defined attitudes toward other people in terms of a racial hierarchy. The third element defined the limits of acceptable political and social change overseas, in keeping with the settled conviction that revolutions, though they might be a force for good, could just as easily take a dangerous turn. (Hunt, 1987)

Based on these three key elements within the ideology, I determine whether the conflict was ideological by examining what researchers have already written about it, as well as the presidents' speeches to see whether they referenced ideological constructs such as national greatness.

The second indicator of issue salience is the relationship between conflicts and US grand strategy. Grand strategy can be understood as the use of power to secure the state. Thus, it operates at a level above particular strategies intended to secure particular ends and above the use of military power alone to achieve political objectives. For example, the desire to pursue continental expansion and to exclude further European colonization of the hemisphere shaped US policy and strategy for the rest of the 19th century. American exceptionalism, this component, has been seen by some as an impulse to promote democratic values abroad as well as at home, and by others as an excuse for intervention. (Hooker, 2014)

When I refer to American Grand Strategy, the combination of these three elements means, ways, and ends is what paves the way for the "rules of the game" of the international order. Therefore, this Grand Strategy constitutes a showcase of American credentials as the great global geopolitical architect, where intent is more important than content, and which offers the US vision of addressing the future of its international relations in the medium to long-term. All of this is in accordance with strategic objectives aimed at a single grand end or purpose: the pursuit and preservation of National Security. (Rodríguez Suanzes, 2025) For a long time, the US strategy was linked to the role of a liberal hegemon seeking to spread its values and order abroad.

Broadly speaking, U.S. vital or core interests remain remarkably consistent: the defense of American territory and that of allies, the protection of American citizens at home and abroad, the support and defense of constitutional values and forms of government, and the promotion and securing of the U.S. economy and standard of living. These four core interests encompass virtually every strategic dynamic and dimension. (Hooker, 2014) Thus, based on an analysis of historical sources, I determine for each conflict the extent to which it aligned with the United States' key national interests.

The third indicator of issue salience is the economic importance of the conflict. Economic issue salience refers to the extent to which an international militarized conflict is connected to core U.S. economic interests, including national prosperity, access to critical resources, the stability of international markets, and the functioning of the global economic system. Economic interests become salient when a conflict threatens the material foundations

of U.S. power and welfare, thereby elevating the domestic political stakes of presidential decision-making. This also includes conflicts in which the U.S. could seize new resources.

In this context, I assess whether a conflict is economically salient by assuming that the United States' global position and economic stability depend on secure access to resources, open trade routes and the protection of key economic partners. Conflicts that jeopardize energy supplies (such as oil and gas), disrupt major shipping routes, threaten global financial markets, or endanger economically vital allies generate heightened domestic concern because they can impose economic costs on US society, including inflation, unemployment, or market instability. Based on these criteria, I determine whether a conflict is economically salient by drawing on existing academic discussions of the conflicts, media reporting, and presidential rhetoric, particularly references to economic stability, markets, energy security, trade, or the material costs of inaction. Conflicts in which economic stakes are explicitly invoked are coded as economically salient, while those lacking such material economic implications are coded as having no economic salience. (Hunt, 1987) To code this variable, I used data sources such as the president's speeches, where economic causes of the conflict and the protection of economic interests were often mentioned. I also used historical research articles on various conflicts that explored their causes.

For the second variable, whether domestic actors had the means to punish the leader if public threats were not carried out. Members of the president's party constitute a component of the political class because they provide the leader with institutional support and political legitimacy. Party members can punish the leader by refusing to cooperate with the legislature, publicly criticizing foreign policy decisions, or distancing themselves from the president during the conflict. When members of the president's party actively engage in public debate over an international militarized conflict, particularly by expressing concern about credibility, weakness, or failure, the president faces audience costs, as such dissent undermines intra-party unity and exposes vulnerability to both domestic and foreign audiences. To code this variable, I used data sources such as archived transcripts of congressional sessions, where it was possible to trace the positions of individual congressmen from different parties on the conflicts. I also used data from media outlets like The New York Times and the BBC, which frequently reported on individual politicians' positions regarding the conflict.

The second indicator is participation in conflict-related discussions among members of the opposition political party. Members of the opposition party have strong incentives to penalize a president for perceived weakness or inconsistency, as foreign policy failures can be used to damage the leader's reputation and electoral prospects. When opposition elites actively discuss an international conflict through public statements, congressional debates, hearings, or media interventions, they increase the salience of the conflict and heighten the visibility of potential domestic sanctions. In such cases, backing down from a public threat becomes politically costly because it gives the opposition opportunities to frame the leader as incompetent, unreliable, or incapable of defending the USA's national interests. (Schultz, 1998). Transcripts of congressional hearings and media reports were also used to monitor the

perspectives of opposition figures. Academic research was further examined, such as articles from the Peace and Change Journal, which often discussed the dynamics of relations between the two parties in various conflicts.

The third indicator of how much the domestic audience may punish the leader for backing down is participation in discussions about conflicts among non-political elites. The non-political class comprises influential actors who do not hold elected office but still shape political outcomes through economic power, media influence, or expertise. This group includes business elites, major media outlets, and judicial institutions. Although they lack formal institutional authority, non-political elites can impose reputational political costs on the president by shaping narratives of success or failure in conflicts. When members of this group actively engage in public discussion of an international militarized conflict, particularly by criticizing backing down, they amplify audience costs by reinforcing negative interpretations of backing down and by influencing both public opinion and political elites. This variable was primarily based on academic sources, particularly articles examining the role of business in conflicts. Articles in which journalists commented on various conflicts were also used to evaluate the media's influence.

Thus, issue salience and the ability of domestic elites to penalize the leader form the basis of audience costs. If the issue is salient and domestic elites can punish the president, the president need not back down in conflicts.

3.2. Methods

To examine the relationship between narcissism levels and the behavior of American presidents during international militarized conflicts, I use logistic binary regression because my dependent variable is binary and categorical. Logistic regression estimates the probability of an event occurring (e.g., backing down from public threats) based on the president's level of narcissism. In other words, regression models the odds ratio.

It is important to note that my independent variable is measured on an interval scale because it lacks a true zero. This means a score of 0 does not indicate that the president is not narcissistic; instead, it signifies a moderate level of narcissism. Since I am using an interval-scale independent variable, I cannot calculate percentage changes, but I can still analyze how variations in narcissism affect the likelihood of the president backing down from his public threats in international militarized conflicts. Another methodological limitation of this model is that my dependent variable is binary (Back down = 1, Followed by = 0), so I can't interpret the model's coefficients. However, this method still suits me because I am interested in whether there is an association between grandiose narcissism and the behavior of American presidents, and, if so, in the direction of this association.

As a result, I expect to examine whether there is a connection between the level of narcissism among presidents and their behavior in international militarized conflicts.

The logistic regression equation in my research appears as follows:

$$\text{Logit}(P(\text{BackDown} = 1)) = \beta_0 + \beta_1 (\text{Narcissism})$$

To test the hypothesis in the audience costs model that audience costs are negatively associated with back-down behavior, I use the chi-square test (tabular analysis) because my independent variable (audience costs) and dependent variable (the behavior of American presidents) are categorical. The goal is to determine if there is a systematic relationship between the independent and dependent variables. The greater the difference between the expected and observed values, the larger the chi-square statistic, the less likely the null is true, and the more likely there is a relationship. However, this method has drawbacks: the test shows only a probable connection between variables, not the direction or size of the relationship. Taking this into account, my hypothesis is directional because it is influenced by the theory that if there are audience costs, the president should not back down; this reflects a negative relationship.

The methodological approach in the audience costs model differs from grandiose narcissism in that I operationalize audience costs using two variables: issue salience and the domestic audience's ability to penalize the leader. This is also an advantage of the study, but it is plausible that one of the variables, issue salience or the ability to penalize the leader, plays a greater or lesser role in the behavior of American presidents. For example, one variable may show statistically significant results, while another may not. This will contribute to the discussion of which components of audience costs have a real impact on presidents' decision-making in conflicts.

When testing the audience costs model, one limitation is gradual coding. Specifically, there are three indicators for each variable measuring issue salience and the ability to penalize the leader. Therefore, I use three models, coding issue salience as 1 when two, three, or at least one indicator is positive. I do the same with another variable, the ability to penalize the leader, and code it as 1 when one, two, or three positive indicators are present. This approach can distort data analysis. Therefore, when conducting statistical analysis, only those models will be considered for which there is sufficient data variation to support accurate analysis.

The general formula for the chi-square test is as follows, where O_i denotes observed values and E_i denotes expected values. I use this formula for each model within each variable, whether it concerns issue salience or the ability to penalize the leader.

$$\chi^2 = \frac{\sum(O_i - E_i)^2}{E_i}$$

Thus, as a result of using this methodology, I expect to see whether there is a connection between audience costs and the behavior of presidents in international militarized conflicts. In addition, to obtain more reliable results, the dataset for the audience costs model will be expanded, as discussed in the next section.

Although I am testing two models separately, I ultimately expect to see which model better explains presidential behavior.

I will be able to answer my research question by directly comparing two models grandiose narcissism and audience costs using logistic regression.

It is worth noting separately that the aim of this study is to compare two models and assess their predictive power in yielding the same result: backing down behavior among presidents. The aim of the study is not to test all possible factors that could influence the outcome, but rather to test the predictive power of the two models. That is why the influence of other factors, such as the economy or geopolitics, is not relevant to this study. Their influence is parameterized, since I am testing the two models on the same events.

The equation for directly comparing two models using logistic binary regression is as follows:

$$\text{Logit}(P(\text{BackDown}=1)) = \beta_0 + \beta_1(\text{Narcissism}) + \beta_2(\text{Issue Salience})$$

In addition to the logistic binary regression, a comparison of the two models, grandiose narcissism and audience costs, will be conducted using QCA, given the small number of units of observation. This will provide further insight into how factors interact to influence the outcome, specifically, backing-down behavior. QCA is a method that helps understand how different conditions influence the outcome.

This method allows determining whether a particular outcome is observed across different configurations of conditions. In this study, the outcome is back-down behavior, and the conditions are grandiose narcissism and audience costs, as measured by the issue salience variable. In fact, the data used for QCA are the same as those used for logistic binary regression used for comparing two models.

QCA is suitable for my research for several reasons. First, QCA is a theory-driven method, meaning that selecting the conditions that may influence the outcome requires theoretical justification. In this study, I have two theories that attempt to explain the behavior of leaders with different rationales: grandiose narcissism and audience costs. Second, QCA is well-suited for studies with a small number of observation units, such as the 50 in my study. Third, QCA allows us to assess whether certain factors are necessary, that is, without them the outcome is impossible, and whether they are sufficient, that is, capable of leading to the outcome. This approach will further shed light on the predictive power of the two models.

For QCA, I use Crisp-Set Qualitative Comparative Analysis (csQCA) because this method is suitable for models with binary variables. In my case, issue salience is coded as 1 when all three indicators are positive, making it a binary variable. For narcissism, the variable was originally continuous, but for the purposes of QCA, I converted it to binary using the median cut. Across all 50 observation units, the median value of narcissism is 0.42. That is, anything above 0.42 is considered narcissistic, and anything below is non-narcissistic. Thus, 25 observation units, ranging from Lyndon Johnson to Woodrow Wilson, are classified as narcissistic, while the other 25 units, ranging from George W. Bush to Harry Truman, are classified as non-narcissistic. I am aware that QCA is sensitive to coding, which is a limitation of this method.

4. RESULTS

The study's results vary for the grandiose narcissism model and audience costs, so they will be addressed separately.

The study aims to compare two models that represent different and very distinct theories. The model of grandiose narcissism is based on psychological concepts where methodological individualism is a key element. This suggests that grandiose narcissism is a personality trait that affects the behavior of presidents. According to previous studies, US presidents with high levels of narcissism have shown irrationality in their decisions on international arena, as they were driven by the desire to protect their inflated self-image.

In turn, the audience costs theory is rooted in rational choice theory, which sees actors as logical individuals acting in their own self-interest. For political leaders, the main goal is to stay in power. That's why the audience costs perspective argues that when leaders make public threats during international militarized conflicts, they will follow through because failing to do so could result in losing their grip on power.

Although these two models are based on different theoretical assumptions about leader behavior, they both seek to explain one thing: how presidents act during conflicts and their process of making foreign policy decisions.

4.1. *Grandiose narcissism model*

In the model of grandiose narcissism, I suggest that the level of grandiose narcissism in presidents may explain their behavior during international militarized conflicts.

Leaders with higher levels of narcissism are more prone to initiate conflicts with global powers and to extend involvement in armed conflicts, such as the Vietnam War. These patterns indicate that leaders with high levels of grandiose narcissism do not always act rationally; that is, they do not consistently aim to maximize their utility to stay in power. There is a mechanism that explains why US leaders with high levels of narcissism behave irrationally in their foreign policy decisions. Leaders with high levels of grandiose narcissism are most focused on their own inflated image and personal interests. They see their own interests as aligned with those of the nation. Consequently, they find it difficult to distinguish between the two, leading to irrational actions. (Harden, 2021; Harden, 2023)

Taking into account these mechanisms through which grandiose narcissism explains presidents' behavior, the following hypotheses were developed:

H1.1: Presidents with higher levels of grandiose narcissism are more likely to back down after issuing public threats in international militarized conflicts.

H1.2: Presidents with higher levels of grandiose narcissism are less likely to back down after issuing public threats in international militarized conflicts.

I am testing two hypotheses because, based on previous research, it is unclear how narcissism might explain presidential behavior. The reasoning behind the first hypothesis is

that presidents with high levels of narcissism might behave irrationally and become fixated on their own inflated self-image. As a result, they focus on protecting their image and aligning their personal interests with those of the nation; this could lead them to make more concessions during international militarized conflicts even after issuing public threats.

The second hypothesis also makes sense, since previous studies have shown that American presidents with high levels of grandiose narcissism initiated diplomatic conflicts, rather than militarized ones, with global powers throughout the 20th century, seeking to reinforce their inflated self-image and demonstrate their competence in foreign policy. Therefore, it can be assumed that such a mechanism might also explain the impact of grandiose narcissism on the behavior of American presidents. In my research, I also examine the null hypothesis, which posits that there is no association between narcissism and presidential behavior.

To test my hypotheses, I use my own dataset based on the narcissism scale developed by J.P. Harden for 19 American presidents. My dataset includes 16 presidents (the top 8 with the highest and the top 8 with the lowest levels of narcissism). In total, the dataset contains 51 units of observation, namely conflicts with certain behaviours of presidents: back down (1) followed by (0). One of them is missing data (NA): the Panama Canal crisis of 1903, involving President Theodore Roosevelt, because there are no records of public threats in that conflict. When analyzing the data, I exclude NAs. I have more observation units than presidents because one president can be involved in multiple conflicts. The dataset also includes the names of presidents, years in office, the presence of public threats, conflicts, and backdowns.

In the variable with back down, there are 11 cases where presidents backed down and 39 cases where presidents followed. The only numeric variable in the model is the narcissism level. The dataset's minimum is -1.0870, the maximum is 2.1670, and the average is 0.1252.

The results of the logistic binary regression are as follows:

Figure 1. Logistic binary regression: grandiose narcissism and the behavior of US presidents during international militarized conflicts

Logistic Regression: Probability of BackDown	
<i>Dependent variable:</i>	
BackDown (1 = backed down)	
Narcissism	1.122*** (0.419)
Constant	-1.751*** (0.477)

Observations	50
Log Likelihood	-21.634
Akaike Inf. Crit.	47.268

Note: *p<0.1; **p<0.05; ***p<0.01

Note: the visualization was performed by the author in RStudio using data collected by the author. Data source: author's dataset presidents_narcissism and J.P. Harden's narcissism scale.

Therefore, based on the results, I can reject the null hypothesis that there is no link between the level of narcissism and presidential behavior. There is a statistically significant connection. Furthermore, this connection is positive, meaning higher levels of grandiose narcissism among US presidents make highly narcissistic presidents more likely to back down after issuing public threats in international militarized conflicts. One possible cause is that presidents with high levels of narcissism focus on their inflated self-image; therefore, if a potential conflict threatens their image, they may back down even after making public threats in international militarized conflicts.

4.2. Audience costs model

In the audience costs model, I assume that if there are audience costs in a conflict, the president should not back down from public threats because otherwise, he will face audience costs that could lead to losing his position.

Thus, compared to the model of grandiose narcissism, in which presidents with high levels of narcissism are driven by the desire to protect their self-inflated image without worrying about election issues or the possible loss of power, the audience costs model holds that leaders are guided by rational considerations about remaining in power.

The hypothesis for the audience model is as follows:

H2: Audience costs are negatively associated with presidential retreat, making U.S. presidents less likely to back down after issuing public threats in international militarized conflicts

When testing the audience costs model, one limitation is gradual coding. Specifically, there are three indicators for each variable measuring issue salience and the ability to penalize the leader. Therefore, I use two models: coding issue salience as 1 when two or three indicators are positive. I do the same with another variable, the ability to penalize the leader, and code it as 1 when two or three positive indicators are present. I avoid using a model with two variables coded as 1 when only one of the three indicators is positive, because then there is no variability in the data, and two independent variables have the same value of 1.

4.2.1. Audience Costs Model 1

In the first model, I coded issue salience as 1 and the ability to penalize the leader as 1 when 2 indicators for each variable are positive. The dataset is similar to the grandiose narcissism dataset, which includes 16 presidents. In total, the dataset contains 51 units of

observation, namely conflicts with certain behaviours of presidents: back down (1) followed by (0). One of them is missing data (NA): the Panama Canal crisis of 1903, involving President Theodore Roosevelt, because there are no records of public threats in that conflict. When analyzing the data, I exclude NAs. For each unit of observation, two independent variables are coded: Issue salience and Ability to penalize the leader.

For the issue salience variable, the results of the chi-square test are as follows.

Table 1. Results of the chi-square test for the audience costs model 1 regarding issue salience			
Back down	Issue Salience = 0	Issue Salience = 1	Total
0	2 (3.9) [0.9]	37 (35.1) [0.1]	39 (39) [1.0]
1	3 (1.1) [3.3]	8 (9.9) [0.4]	11 (11) [3.6]
Total	5 (5) [4.2]	45 (45) [0.4]	50 (50) [4.7]
Pearson chi-square	4.675		
p-value	0.031		
Cramer's V	-0.3058		
Gamma	-0.7480		
Kendall's tau-b	-0.3058		
Fisher's exact	0.064		

Note: the table was created by the author using data gathered and analyzed in RStudio.

Data sources include the author's datasets: audience_costs_dataset and audience_costs_model 1 dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

The contingency table generally shows that when issue salience = 1, presidents are less likely to back down. Frequency refers to the actual number of observations in a cell. Expected frequency is the anticipated number of cases in a cell if there is no relationship between the variables. Chi2 contribution represents how much a specific cell adds to the overall χ^2 statistic. It indicates how strongly this particular cell influences the conclusion that a connection exists between the variables. Pearson's chi-squared test indicates that the larger the difference between observed and expected values, the more likely it is that the variables are dependent. The p-value is 0.031, which means that at the 5% significance level, I reject the null hypothesis of independence, suggesting there is a relationship between the variables.

Cramer's V, Gamma, and Kendall's Tau-b tests measure the degree of association between variables, specifically the direction of that association. In all three tests, the result is negative, indicating that with issue salience 1, presidents are less likely to back down in conflicts. Fisher's exact test is a statistical significance test used in the analysis of contingency tables. I use it because I have a small sample size and many cells have very low expected frequencies. The result of this test is 0.064, which is above 0.05, so it does not indicate a significant relationship. This means I need to be cautious when interpreting the results of this

model. Therefore, there is suggestive evidence that presidents are less likely to back down when issue salience is high, but results are sensitive to test choice and sample size.

Thus, despite the general tendency for presidents to be less willing to back down in conflicts when issue salience is high, the null hypothesis cannot be entirely dismissed, as Fisher's exact test yields a statistically nonsignificant result.

For the ability to penalize the leader, the results of the chi-square test are as follows.

Table 2. Results of the chi-square test for the audience costs model 1 regarding the ability to penalize the leader			
Back down	Penalize leader = 0	Penalize leader = 1	Total
0	10 (8.6) [0.2]	29 (30.4) [0.1]	39 (39) [0.3]
1	1 (2.4) [0.8]	10 (8.6) [0.2]	11 (11) [1.1]
Total	11 (11) [1.1]	39 (39) [0.3]	50 (50) [1.4]
Pearson chi-square	1.3695		
p-value	0.242		
Cramer's V	0.1655		
Gamma	0.5504		
Kendall's tau-b	0.1655		
Fisher's exact	0.416		

Note: the table was created by the using data gathered and analyzed in RStudio. Data sources include the author's datasets: audience costs_dataset and audience costs_model 1 dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

The results regarding the variable ability to penalize the leader are not very relevant. This is because the difference between observed and expected frequencies is very small. Therefore, the p-value and Fisher's exact test indicate that the results aren't statistically significant. Additionally, tests that aim to show the direction of the relationship indicate a positive trend, which conflicts with the theory, which predicts a negative relationship. If there is the ability to penalize the leader, then the president does not have to back down in conflicts.

The potential mechanism is that, unlike issue salience, the domestic audience is always present during conflict analysis, so the variable doesn't effectively distinguish between cases.

Thus, issue salience in model 1 more effectively explains the relationship between the dependent and independent variables.

4.2.2. Audience Costs Model 2

In the second model, I coded issue salience and the ability to penalize the leader as 1 when all 3 indicators for each variable are positive. This is a stricter coding option, as issue salience becomes 1 only when all three indicators are positive. The same applies to the

variable ability to penalize the leader. This model also uses the same dataset as the one for grandiose narcissism, with 16 presidents and 50 units of observation.

For the issue salience variable, the results of the chi-square test are as follows.

Table 3. Results of the chi-square test for the audience costs model 2 regarding issue salience			
Back down	Issue salience = 0	Issue salience = 1	Total
0	9 (12.4) [0.9]	30 (26.5) [0.4]	39 (39) [1.3]
1	7 (3.52) [3.4]	4 (7.68) [1.6]	11 (11) [5]
Total	16 (16) [4.3]	34 (34) [2]	50 (50) [6.3]
Pearson chi-square	6.4865		
p-value	0.010		
Cramer's V	-0.36018		
Gamma	-0.7073		
Kendall's tau-b	-0.36018		
Fisher's exact	0.0241		

Note: the table was created by the author using data gathered and analyzed in RStudio.

Data sources include the author's datasets: audience costs_dataset and audience costs_model 2 dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

In the second model, issue salience also shows a negative correlation with backdown behavior in conflicts. This model performs better than model 1. This can be attributed to the fact that, in the second model, I strictly coded the conflict as important only when all three indicators were positive. That is, the audience costs model is more effective in high issue salience conflicts when all indicators are positive. The p-value is 0.01, which means that at the 5% significance level, I reject the null hypothesis of independence, suggesting there is a relationship between the variables. Additionally, Fisher's exact test shows better results in this model than in the first one and indicates a statistically significant relationship (0.02). Directional measures of association, including gamma (-0.707) and Kendall's Tau-b (-0.36), indicate a strong negative relationship between issue salience and backing down.

Therefore, in the second model, I can reject the null hypothesis that there is no relationship between audience costs and presidential behavior. As the data analysis shows, when there is high issue salience in a conflict, presidents are less likely to back down during conflicts.

For the ability to penalize the leader, the results of the chi-square test are as follows.

Table 4. Results of the chi-square test for the audience costs model 2 regarding the ability to penalize the leader			
Back down	Penalize the leader= 0	Penalize the leader = 1	Total
0	20 (18.7) [0.087]	19 (20.2) [0.0807]	39 (39) [0.1677]

1	4 (5.2) [0.3103]	7 (5.72) [0.286]	11 (11) [0.5967]
Total	24 (24) [0.3973]	26 (26) [0.3671]	50 (50) [0.7644]
Pearson chi-square	0.76505		
p-value	0.3818		
Cramer's V	0.1236		
Gamma	0.2962		
Kendall's tau-b	0.1236		
Fisher's exact	0.501		

Note: the table was created by the author using data gathered and analyzed in RStudio.

Data sources include the author's datasets: audience costs_dataset and audience costs_model 2 dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

The second model's results on penalizing the leader are consistent, as they show statistically insignificant findings.

Thus, in the two models based on audience costs, only issue salience shows statistically significant results. However, the findings are not entirely clear, as more consistent results appear in model 2, where issue salience is coded more strictly when all three indicators are positive.

4.2.3. Expanded audience costs model

The first two audience costs models produce ambiguous results. The ability to penalize the leader variable in both models shows statistically insignificant outcomes. However, issue salience performs better in the second model, which has stricter coding. Therefore, due to the ambiguity in the results, it was decided to collect conflicts and behaviors of all US presidents, not only those from I tested for the narcissism model. Expanding the dataset is advisable to test how audience costs work with a larger sample.

Before expanding the dataset, it included 16 presidents and 50 observations. Afterward, it grew to 32 presidents and 82 observations. Not all presidents are in the renewed dataset since thirteen presidents - George Washington, John Quincy Adams, William Henry Harrison, John Tyler, Zachary Taylor, Abraham Lincoln, Andrew Johnson, Rutherford Birchard Hayes, James Garfield, Chester Alan Arthur, Benjamin Harrison, Warren G. Harding, and Herbert Clark Hoover did not participate in militarized international conflicts or made no public threats in conflicts due to focus on domestic policy or short terms in office.

For the expanded dataset, audience costs were coded only as issue salience because the other variable, ability to penalize the leader, produced statistically invalid results in the previous two models, while issue salience shows different results across various models. In contrast to the narcissism model, where expanding the dataset is impossible because the narcissism scale was created for a limited group of presidents, the audience costs model allows for it because I personally code and gather data to analyze the audience costs theory.

The expanded dataset was also used for two models. The results for model 1 are shown below, where the variable issue salience was coded as 1 when two indicators were positive.

Table 5. Results of the chi-square test for the audience costs full dataset model 1 regarding the issue salience			
Back down	Issue Salience= 0	Issue Salience= 1	Total
0	9 (10.62) [0.24]	58 (56.37) [0.04]	67 (67) [0.20]
1	4 (2.37) [1.10]	11 (12.62) [0.20]	15 (15) [1.3]
Total	13 (13) [1.34]	69 (69) [0.24]	82 (82) [1.58]
Pearson chi-square	1.60		
p-value	0.2046		
Cramer's V	-0.1400		
Gamma	-0.4018		
Kendall's tau-b	-0.1400		
Fisher's exact	0.243		

Note: the table was created by the author in RStudio using data gathered and analyzed in RStudio. Data sources include the author's datasets: audience_costs_dataset and audience_costs_model 1_full dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

In the model with an expanded dataset, the results are not statistically significant. The model still suggests a possible negative relationship: when issue salience is high, presidents are less likely to back down in international militarized conflicts. However, with the larger sample size, the test no longer shows statistical significance. This can be explained by the fact that adding more cases increases variability and can dilute effects that looked stronger in smaller samples.

The results for model 2 are shown below, in which the variable issue salience was coded as 1 when all three indicators were positive.

Table 6. Results of the chi-square test for the audience costs full dataset model 2 regarding the issue salience			
Back down	Issue Salience= 0	Issue Salience= 1	Total
0	25 (26.95) [0.14]	42 (40.03) [0.09]	67 (67) [0.23]
1	8 (6.03) [0.63]	7 (8.96) [0.43]	15 (15) [1.06]
Total	33 (33) [0.77]	49 (49) [0.52]	82 (82) [1.29]
Pearson chi-square	1.30		
p-value	0.25		
Cramer's V	-0.1269		
Gamma	-0.3150		
Kendall's tau-b	-0.1269		

Fisher's exact	0.38
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Note: the table was created by the author in RStudio using data gathered and analyzed in RStudio. Data sources include the author's datasets: audience costs_dataset and audience costs_model 2_full dataset with coding. Format in each cell: observed frequency, expected frequency in parentheses, chi-square contribution in brackets.

Even with stricter coding in model two, there are also no statistically insignificant results; specifically, the model still shows a negative relationship, but the statistical effect becomes insignificant when the sample size increases.

Therefore, the relationship between issue salience and presidential backing down aligns with the expectations of audience costs theory. Presidents are less likely to back down in highly salient conflicts. However, the association is not statistically significant in the full dataset for either model, indicating that issue salience alone does not reliably predict presidential behavior.

Thus, the grandiose narcissism model shows that presidents with high levels of narcissism are more likely to back down from their public threats in international militarized conflicts.

In turn, the theory of audience costs yields mixed results. The variable ability to penalize the leader consistently shows statistically non-significant results. The variable issue salience in the non-extended dataset yields statistically valid results under a stricter coding scheme. That is, when issue salience is present, audience costs are negatively associated with backing down behavior. However, when the dataset is expanded, the issue salience variable loses its statistically significant link with presidential behavior.

4.3. A direct comparison between the narcissism model and the audience costs model using logistic binary regression

Based on the preliminary results, it is clear that the narcissism model performs better in terms of statistical significance and the strength of its coefficients. Meanwhile, the audience costs model yields mixed results.

However, the main research question of this study is: which of the models predicts the behavior of US presidents during international militarized conflicts more accurately? Therefore, it is important to compare the models directly. This can be accomplished using logistic binary regression with two independent variables: grandiose narcissism and issue salience (a dummy variable coded as 1 or 0), along with one dependent variable: the president's behavior during international militarized conflicts (whether they backed down or not, coded as 1 or 0).

In order to fully address my research question, I propose the following two hypotheses:

H3.1 The grandiose narcissism model predicts presidential backing-down behavior more effectively than the audience costs model.

H3.2: The audience costs model predicts presidential backing-down behavior more effectively than the grandiose narcissism model.

Only by directly comparing the models can we determine which model performs better. Similarly, I am testing two hypotheses in this model because previous studies have not compared these two models; therefore, it is appropriate to test both hypotheses.

To run logistic binary regression, I am using the same unexpanded dataset with 50 observations and 16 presidents.

I want to highlight that I am using issue salience from the second audience costs model, which demonstrated the most statistically significant results across all tests. This model codes issue salience as 1 for the 50 observations when all three indicators are positive. In essence, I am choosing the strongest audience-costs model to evaluate its explanatory power, while also considering narcissism.

Although I can use this test to compare the two models, it also has limitations. Since my dependent variable is binary, I cannot interpret the regression coefficients accurately. Additionally, standard practice generally requires the independent variable to be continuous; however, issue salience in my model is a binary variable coded as 1 or 0. Despite these limitations, I expect to observe the effect of narcissism and audience costs through issue salience on the dependent variable, which is presidential behavior.

Figure 2. Logistic binary regression: grandiose narcissism, audience costs and the behaviour of US presidents during international militarized conflicts

	<i>Dependent variable:</i>
	Backing Down (1 = Yes)
Narcissism	0.905 (0.469)
Issue Salience	-0.851 (0.861)
Constant	-1.162 (0.735)
Observations	50
Log Likelihood	-21.145
Akaike Inf. Crit.	48.291
Note:	*p<0.05; **p<0.01; ***p<0.001

Note: the visualization was performed by the author in RStudio using data collected by the author. Data source: author's dataset, narcissism and audience costs.

Regarding the impact of narcissism on presidential behavior, the model shows a strong positive coefficient of 0.9047. This suggests that as narcissism rises, so does the likelihood of a president backing down in a conflict. In other words, the direction of the effect remains consistent with the previous model that included a single narcissism variable. The p-value for narcissism is 0.0536. This indicates that at the 0.05 level, the coefficient is not statistically significant, but at the 0.10 level, it is marginally significant. This makes sense, as the effect diminished when the issue salience variable was added.

Regarding the impact of issue salience on presidential behavior, the coefficient is -0.8511. This shows a negative correlation, meaning that higher issue salience is linked to a lower chance of backing down. This aligns with the logic of the audience costs theory. However, the p-value is 0.3227. The model does not provide enough evidence to confidently say that issue salience alone predicts backing down when narcissism is also considered. It is also worth noting that the standard error for narcissism (0.4687) is much smaller than that for issue salience (0.8606). Thus, narcissism is a better predictor of presidential behavior than the audience costs perspective. However, I acknowledge that with 50 cases, the model is relatively weak. Neither predictor provides strong explanatory power, and the AIC suggests limited improvement over a null model.

The statistical significance of narcissism itself in this model has decreased compared to the first model, which considered only narcissism. This can be explained by the fact that the model has become more complex; issue salience and narcissism may account for the same cases, indicating shared variance.

4.4. A direct comparison between the narcissism model and the audience costs model using QCA

Given that the comparison of the two models using logistic regression yielded mixed results, it was decided to examine the same models using a different methodology, namely Qualitative Comparative Analysis (QCA).

Regarding whether grandiose narcissism or issue salience is a necessary condition for the outcome of backing down behavior, I obtained the following results.

Table 7. Necessity analysis			
Condition Name	Consistency of necessity (inclN)	Relevance of of necessity (RoN)	Coverage of necessity (covN)
Grandiose Narcissism	0.909	0.625	0.400
Issue Salience	0.364	0.348	0.118

Note: the table was created by the author using data collected by the author. Data source: author's dataset, narcissism and audience costs.

Regarding the interpretation of the results, the consistency of necessity indicates the extent to which a condition is necessary for the outcome. For grandiose narcissism, this value is high, specifically 0.909. Therefore, grandiose narcissism is a necessary condition. For issue

salience, the value is 0.364, meaning the condition is not necessary. The relevance of necessity shows to what extent this necessity is substantive rather than trivial, that is, something that simply occurs very frequently. For grandiose narcissism, this indicator is 0.625, meaning that narcissism cannot be considered entirely trivial and has moderate relevance. For issue salience, this indicator is 0.348, which is too low to be considered nontrivial. Regarding coverage of necessity, this indicates the extent to which all instances of Back down fall within the set of conditions. In the case of grandiose narcissism, this indicator is 0.400. This is a fairly low figure, meaning that grandiose narcissism does not lead to back-down in all instances of narcissism. This can be explained by the fact that there are only 11 instances of back-down behavior, which is not many, and some narcissistic presidents did not exhibit back-down behavior.

For issue salience, coverage is even lower than for narcissism, at 0.118. Thus, grandiose narcissism is a necessary condition; that is, without high narcissism, back-down behavior does not occur. Issue salience is not a necessary condition. In other words, the results align with those of logistic regression, in which narcissism retains marginal significance, while issue salience loses significance entirely. However, in the case of narcissism, the coverage is too limited to be considered a condition that leads to back-down behavior.

To analyze the extent to which each condition or combination of conditions is sufficient, the following truth table was constructed.

Number of configuration	Narcissism (0 = not narcissistic; 1 = narcissistic)	Issue salience (0 = is not salient; 1 = is salient)	Output value (1= Back down; 0 = no Back down)	Number of cases in configuration	Sufficiency inclusion score	Proportional reduction in inconsistency
1	0	0	0	2	0.0	0.0
2	0	1	0	23	0.043	0.043
3	1	0	0	14	0.500	0.500
4	1	1	0	11	0.273	0.273

Note: the table was created by the author using data collected by the author. Data source: author's dataset, narcissism and audience costs.

This table summarizes all possible combinations of narcissism and issue salience that could lead to leaders backing down. The overall conclusion is that no single condition is sufficient to cause leaders to back down. This is supported by the sufficiency inclusion score, which indicates the extent to which a combination leads to an outcome. No combination reaches 0.8, which would be considered sufficient. Proportional Reduction in Inconsistency indicates the purity of the effect that is, the extent to which combinations lead to a backdown rather than the opposite outcome. The purity of the effect is also insufficient in all configurations. The result logically reinforces the conclusion of the logistic regression that issue salience and grandiose narcissism are insufficient to explain backing-down behavior.

As a result, the truth table is minimized to the optimal combination that can lead to a back down. In this study, this combination consists of high narcissism and the absence of issue salience. This is a logical outcome, since higher levels of grandiose narcissism increase the likelihood of the president backing down in conflicts, and the conflict must not be issue-salient for the president to be able to compromise. However, despite the theoretical logic of this result, the statistical data suggest that this combination is not sufficient. The sufficiency inclusion score is low, at only 0.500; the proportional reduction in inconsistency is also 0.500; and the coverage is 0.636.

Thus, narcissism is a necessary condition for the outcome, whereas issue salience is not. This means that narcissism is a better predictor than audience costs, reinforcing the previously obtained findings. However, no single combination of conditions is sufficient; that is, no combination leads to narcissism. This may imply that, to effectively explain backdown behavior, factors beyond narcissism and audience costs should also be considered.

5. DISCUSSION

My research adds to the debate over what best explains leaders' behavior when making foreign policy decisions: structuralist theories or psychological factors. By structuralist theories, I refer to the audience costs theory, which is based on rational choice theory, in which actors are rational and constrained by structural factors such as their domestic audience. By psychological factors, I mean grandiose narcissism. This model suggests that presidents' personality traits can explain their behavior and that American leaders are not guided solely by their rational judgments. Their decision-making is affected by their psychology, such as grandiose narcissism.

The study, therefore, examines whether leaders are guided by rational judgments or irrational personality traits when making decisions regarding international militarized conflicts. My research shows that narcissism is a better predictor of backing-down behavior than audience costs. However, when these models are combined, neither is sufficient on its own to explain inconsistent behavior. This is my main theoretical contribution. In terms of empirical contributions, I collected my own datasets on audience costs and grandiose narcissism and applied a custom operationalization of audience costs. That is precisely why, through this research, I am not merely contributing to the academic discourse but also providing new insights.

Regarding the grandiose narcissism model, the findings support the study's hypotheses. It was found that narcissism can explain the behavior of U.S. presidents during international militarized conflicts. As narcissism levels increase, so does the likelihood that a president will back down in a conflict. This may suggest that narcissistic presidents tend to act more inconsistently, as they are primarily concerned not with their political survival as rational actors, but with their self-inflated image. They connect their own interests to those of the state and may therefore withdraw public threats at the last minute and behave unpredictably. The findings logically align with the academic debate on how narcissism may influence

presidential behavior. Previous research has already indicated that narcissistic presidents are more likely to act irrationally, such as continuing unprofitable wars or, as in my study, behaving inconsistently despite the potential consequences of audience costs theory. (Harden, 2021; Harden, 2023)

A key aspect of grandiose narcissism is understanding how high levels of narcissism translate into inconsistent presidential policies, specifically back-down behavior. Based on the findings of my research and academic discourse, it can be surmised that narcissistic leaders are particularly sensitive to preserving their own image. Therefore, during international conflicts, when the situation may suddenly turn against them and expectations diverge from reality, presidents may retract their initial statements to protect their own image. Furthermore, narcissism may explain back-down behavior, as narcissistic leaders are less able to separate their own interests from those of the state. This is precisely why they may perceive any conflict as personal, which can lead to impulsive decisions. An interesting avenue for further research could be an investigation into the factors that cause narcissists to behave inconsistently.

However, the narcissism model has its caveats, limitations, and potential avenues for further research. My model of narcissism was based on J.P. Harden's narcissism scale, which was applied to only 19 US presidents. As a result, narcissism has not been measured for the remaining presidents. This is a limitation of the study. It also carries the risk that narcissism was only measured for the US presidents who were most proactive in foreign policy. This observation comes from the fact that, when I compiled my own dataset, nearly all the presidents on the narcissism scale pursued active foreign policies and participated in numerous international conflicts. However, when I built an expanded dataset on audience costs for all US presidents, they showed significant differences from the first group regarding their foreign policy activity. Therefore, future research should focus on expanding this scale to include all US presidents. Doing so will improve the validity of the results and produce clearer findings.

Additionally, my study does not address causality, as the methodology used does not allow for causal inferences. Future research could aim to identify which specific factors in the behavior of narcissistic presidents influence their irrational actions. Here, it is important to examine the inflated self-image mechanism and how it might function as a causal mechanism. Additionally, it is valuable to explore how vulnerable narcissism differs from grandiose narcissism in the behavior of leaders when making foreign policy decisions.

Furthermore, in my study, I use narcissism in two models: a single-factor model and one that includes audience costs. When I control for narcissism through audience costs, the statistical significance of narcissism decreases. This represents another limitation of my study: I did not include many potential control variables. Future research could address this to improve the validity of the results.

Unlike the narcissism model, which argues that presidents' decisions may be irrational, the audience costs model indicates that presidents are rational and must follow through on

their public threats in international militarized conflicts. Although the results of the audience costs model are mixed, they support the study's hypothesis that audience costs are negatively linked to backing down behavior. This suggests that in one of the models, when issue salience is considered, presidents are less likely to back down, and this model produced a statistically significant result. However, the theory of audience costs has a limitation that has influenced my results.

The problem is that proponents of the theory use game theory to demonstrate the importance of audience costs. Critics, however, argue that it cannot explain the empirical evidence and fails when tested against historical cases. I can explain this by the difficulty in operationalizing audience costs, which I did using two variables: issue salience and the ability to penalize the leader. In my study, issue salience produced statistically significant results, while the ability to penalize the leader did not. This is interesting because, in theory, leaders in democracies should worry about their domestic audience's views; however, perhaps because of their constant visibility, this factor cannot fully explain the influence of audience costs on the behavior of US presidents. Since I do not make causal claims in this study, future research could explore how the ability to penalize the leader functions as a key aspect of presidential behavior. Perhaps this factor is relevant only in authoritarian regimes, where the winning coalition is small and influential.

Another limitation of the audience costs model is that I coded the variables myself, which introduces the risk of subjectivity. Therefore, future research should focus on operationalizing audience costs to analyze their impact across a wide range of empirical cases. When I expanded the dataset, even issue salience, which had previously shown statistically valid results, lost its statistical significance. Therefore, broadening the sample to include other political regimes or countries will provide a clearer understanding of the actual mechanisms and impacts of audience costs on leaders' behavior during international militarized conflicts. This is important because previous studies, which focused on empirical evidence and audience costs, selected case studies from a limited set of examples, whereas research based on a broader sample will provide a more comprehensive understanding of how the theory of audience costs might operate and influence outcomes, and whether it is relevant at all in real-world empirical contexts.

In the final model, when I ran a logistic regression including narcissism and the audience costs perspective on the issue salience variable, I found that narcissism weakens the audience costs perspective. In other words, when narcissism was included, the strongest model involving issue salience lost its statistical significance entirely. This may suggest that psychological factors that lead to irrationality can challenge the assumptions of the audience costs theory. They may weaken the idea that presidents must always be consistent and stick to their public threats in international militarized conflicts. In other words, leaders may care about other factors besides political survival. For example, they might be more focused on protecting their image if they are narcissistic personalities.

On the other hand, there is another possibility for this outcome: grandiose narcissism and the model's audience costs may be tapping into overlapping variance. If both of my independent variables are correlated, they may explain the same proportion of the variance in the dependent variable. For instance, narcissistic presidents might systematically face different elite dynamics or issue salience. The issue of overlapping variance between the two models could be a further area for future research.

In any case, my research shows that audience costs are less effective than narcissism. This may mean that democratic mechanisms of accountability do not apply to narcissistic leaders. This sheds new light on what constrains a leader. Since narcissistic leaders are not rational, the basic assumption that they fear being punished by their internal audience may not hold. They may be more concerned about appearing incompetent in the eyes of the public, meaning they are guided by their own emotions rather than by rational judgment.

The QCA results showed that, although grandiose narcissism is a necessary condition and issue salience is not, no combination of these two factors leads to back-down behavior. This can be explained by the fact that other factors may better account for the inconsistent behavior of presidents in international conflicts. One such potential factor could be the theory of leaders' experiences, specifically, the idea that leaders' personal experiences (family, military service, upbringing, and occupation) can influence their behavior in international military conflicts. (Horowitz et al., 2015) Narcissism may also have a place in Horowitz's theory, as his focus on a leader's personal experience may shed light on the circumstances under which leaders develop and display their narcissistic traits, and on whether conditions foster the development of this personality trait.

Apart from methodological individualism, another theory could explain the inconsistent behavior of leaders. This theory posits that institutions determine whether a leader will miscalculate in a conflict. It argues that bureaucracies, specifically a country's national security systems, their operations, types, and how they convey information to leaders, will influence how leaders make decisions in conflicts. (Jost, 2024) Thus, future research could examine whether these theories can better explain presidents' inconsistent behavior of presidents in international militarized conflicts. Future research should also explore how narcissism interacts with bureaucratic structures within Jost's institutional theory. This will help understand how a leader's personal qualities interact with bureaucratic structures and their different types.

My research indicates that presidents of democratic countries like the US may be inconsistent in their foreign policy and not fear punishment from their electorate, as they can focus on issues other than political survival, such as their own irrational judgments about protecting their image. Future research could compare structuralist theories grounded in rational actor theory with psychological theories across different states and political regimes. This would help better understand what explains leaders' behavior during international militarized conflicts.

To sum up, methodological individualism is significant and should be taken into account when explaining leaders' behavior; therefore, this raises the question: if narcissism consistently weakens audience costs, does this imply that rational choice models are systematically incomplete when applied to leaders? This question may merit further exploration in future research.

6. POLICY PROPOSAL

My research indicates that personality traits, such as grandiose narcissism, can explain the behavior of American leaders during international militarized conflicts. This is a significant finding for Ukraine, as the US plays a crucial role in providing financial and military support to Ukraine in the Russia-Ukraine war. Considering the psychological factors behind US presidents' behavior will help Ukrainian institutions responsible for shaping foreign policy and engaging with the US such as the Ministry of Foreign Affairs or the Office of the President develop realistic strategies and set practical expectations for their relations with the US.

Psychological profiling of leaders could be a useful tool for achieving this. If rationalist judgments based on the theory of audience costs fail, especially due to the personal character traits of presidents, then models that build relations with the US solely on the logic of audience costs may be misguided. Therefore, the recommendation is that the Ukrainian Ministry of Foreign Affairs' analytical units and the Office of the President should include psychological profiling of key leaders, particularly US presidents, in their strategy for building relationships with them. This doesn't mean psychiatric analysis but rather the use of academic scales (such as Harden's narcissism scale) and observable behavioral indicators based on the Big-5 methodology to assess, for example, the likelihood that presidents will act inconsistently in foreign policy. Overall, considering leaders' psychology will give a more complete understanding of how they might behave, making it more predictable for Ukraine.

Another recommendation is that the Ukrainian institutions mentioned above should customize their communication strategies with international partners, especially those in the US, to align with each partner's psychological profile. For example, if the US president exhibits grandiose narcissism, a standard appeal to obligations, alliance agreements, and rational calculations (i.e., audience-costs logic) might be less effective than appealing to the leader's desire to boost their self-image, reputation, and self-assertion. The suggestion is that Ukraine could tailor its diplomatic communication to consider the psychological profile of each partner. Specifically, when engaging with narcissistic leaders, it is important to highlight their personal role in history, the uniqueness of their position, and the opportunity to showcase their competence. This kind of framing appeals to Narcissistic Admiration the desire for uniqueness rather than solely relying on rational calculations. Such a recommendation could potentially help Ukraine gain more practical benefits and incur fewer losses when engaging with unpredictable narcissistic leaders.

In this context, given the possibility that Ukraine may have to deal with unpredictable, narcissistic leaders, I recommend developing contingency plans in case US presidents renege on their public commitments. Such plans could include the rapid engagement of Congress as a potential check, as well as NATO allies or EU partners to fill any gaps should presidential promises not be fulfilled.

The third recommendation concerns not so much psychological factors but the fact that, in my study, the theory of audience costs produces mixed results. In other words, it does not align well with empirical evidence and lacks explanatory power, at least in my research. The research shows that grandiose narcissism can weaken audience costs that is, narcissistic leaders are more likely to back down on public threats or promises. This means that public statements by leaders, particularly US leaders, are not a reliable predictor of their actual actions.

The recommendation for Ukraine is that it should not rely only on partners' public commitments for its security strategy, expecting leaders to follow their official public statements. There is a need to diversify guarantees through institutional backing from the US Congress (legislation rather than presidential statements), mechanisms for multilateral oversight, and the participation of NATO allies as additional guarantors. When dealing with the US, it is especially useful to focus on Congress as part of the system of checks and balances against the president's unilateral decisions.

Finally, I would suggest that taking into account leaders' personality traits, such as narcissism, and conducting psychological profiling of leaders is useful not only in the case of the US. Psychological traits such as narcissism may also manifest in other leaders. It is therefore worth developing a strategy for relations with key allies, such as European leaders, particularly those in Eastern Europe, taking their personal characteristics into account.

It is important to note that my research does not aim to establish causal claims, as the research design itself does not support this; therefore, the recommendations presented should be viewed as one of many tools for evaluating and building relationships with foreign leaders particularly US leaders rather than as a comprehensive system.

7. CONCLUSIONS

In the study, I aimed to understand which model of grandiose narcissism or audience costs better explains leaders' behavior during international militarized conflicts. I addressed this research question using quantitative analytical methods, including the chi-square test and logistic binary regression and QCA.

The study's findings showed that psychological traits of US leaders, such as grandiose narcissism, better explain presidential behavior. US presidents with higher levels of narcissism are more likely to back down from their public threats in conflicts. A potential mechanism may involve such presidents concentrating on protecting their own inflated self-image rather than making rational judgments. However, a limitation of the grandiose

narcissism model is that the narcissism scale was designed for a limited number of presidents; therefore, it needs to be expanded to include all presidents to gain clearer insights into how narcissism might explain presidential behavior.

Regarding the audience costs model, it has produced mixed results. My findings are consistent with previous studies that criticize this theory for its weak explanation of empirical evidence. In my research, audience costs showed statistically significant results only on the non-extended dataset and only for the issue salience variable with strict coding, in which the variable was assigned a value of 1 only when all three indicators were positive.

Regarding the ability to penalize the leader variable, it consistently yielded non-significant results. This may suggest that when issue salience exists, presidents are less inclined to back down from their public threats in conflicts. However, when the dataset was expanded to include all US presidents for the audience costs theory, issue salience no longer held statistical significance. Nonetheless, it is important to recognize that this model has limitations. For instance, there are challenges in operationalising variables within the audience costs theory, which means my variable-coding approach carries a risk of subjectivity. Therefore, the audience costs model generally produces results that align with the theory and hypothesis proposed, specifically that the existence of audience costs is negatively related to backing-down behavior. However, as the sample size increases, this finding no longer remains statistically significant.

Combining the two models, namely, grandiose narcissism and audience costs, in a logistic regression revealed that narcissism is a better predictor of presidents' backing down behavior. In other words, when narcissism was included in the model, the most significant audience costs model lost its statistical significance. However, in the combined model, audience costs completely lost their statistical significance, whilst the statistical significance of narcissism also fell to a marginal level. This implies that when more variables are added, narcissism also loses its weight.

Ultimately, based on the results of all the models in this study, narcissism emerges as a stronger predictor of US presidential behavior than audience costs; however, broader analysis shows that none of the models can fully explain the inconsistent behavior of US presidents during international militarized conflicts. QCA reinforced these findings, showing that narcissism is a necessary condition for the outcomes, but neither of the two conditions (narcissism and audience costs) nor their combination is sufficient to produce them. This may suggest that future research should explore other factors or causal links behind the inconsistent behavior of US presidents. Additionally, it would be helpful to examine this issue not only within the US but also in other countries and regimes.

In my research, I have shown that psychological traits can lead leaders to act counter to what we would expect from rational choice theory; therefore, presidents may behave irrationally, especially if they have a predisposition toward grandiose narcissism. This research, therefore, makes a valuable contribution to understanding what truly guides leaders in decision-making: rational judgments or irrational predispositions.

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APPENDICES

Appendix 1. Data

[presidents_narcissism_dataset](#)

[audience_costs_dataset](#)

Appendix 2. Table of narcissism model coding for use in RStudio

[presidents_conflicts_cleaned_for_R](#)

Appendix 3. R code for the narcissism model¹

```
# Installing necessary packages

library(readxl)

library(dplyr)

library(ggplot2)

library(tidyr)

# Installing dataset

setwd(dirname(rstudioapi::getActiveDocumentContext()$path))

setwd("/Users/lenazhul/Desktop")

df <- read_excel("presidents_conflicts_cleaned for R.xlsx")

# Renaming one column

names(df)[6] <- "BackDown"

# Descriptive statistics

str(df)

summary(df)

#Basic model: does the level of narcissism affect the likelihood of back down?

model1 <- glm(BackDown ~ Narcissism, data = df, family = binomial)

summary(model1)
```

Appendix 4. Audience costs model 1 dataset with coding

[*audience costs model 1 dataset with coding*](#)

Appendix 5. Audience costs coding rules

<i>Issue salience indicators</i>	
Ideology	Ideology is an interrelated set of convictions or assumptions that reduces the complexities of a particular slice of reality to easily comprehensible terms and suggests appropriate ways of dealing with that reality. I identify whether the conflict was ideological based on assumptions that the United States is characterised by prosperity and democracy in the US depend on how the US can promote these same values abroad alongside economic

¹ It is important to note that the code for R was written using artificial intelligence tools

	expansion. The capstone idea defined the American future in terms of an active quest for national greatness closely coupled to the promotion of liberty. It was firmly in place by the turn of the century, after having met and mastered a determined opposition on three separate occasions—in the 1790s, the 1840s, and the 1890s. A second element in the ideology denned attitudes toward other peoples in terms of a racial hierarchy. Inspired by the struggle of white Americans to secure and maintain their supremacy under conditions that differed from region to region, this outlook on race was the first of the core ideas to gain prominence. The third element defined the limits of acceptable political and social change overseas in keeping with the settled conviction that revolutions, though they might be a force for good, could as easily develop in a dangerous direction. Based on these three key elements within the ideology, I will determine whether the conflict was ideological based on what has already been written by researchers about this conflict, as well as based on the speeches of presidents, whether they referred to ideological constructs such as national greatness.
US Grand strategy	Grand strategy can be understood simply as the use of power to secure the state. Thus, it exists at a level above particular strategies intended to secure particular ends and above the use of military power alone to achieve political objectives. For example, the desire to pursue continental expansion and to exclude further European colonization of the hemisphere shaped US policy and strategy for the rest of the 19th century. American exceptionalism,” this component has been seen by some as an impulse to promote democratic values and the rule of law abroad as well as at home, and by others as an excuse for intervention. When I refer to American Grand Strategy, the combination of these three elements— means, ways, and ends—is what paves the way for the "rules of the game" of the international order. Therefore, this Grand Strategy constitutes the showcase of American credentials as the great global geopolitical architect, where intent is more important than content, and which offers the US vision of how to address the future of its international relations in the medium to long term. All of this is in accordance with strategic objectives aimed at a single grand end or purpose: the pursuit and preservation of National Security. For a long time, the US strategy was linked to the role of a liberal hegemon seeking to spread its values and order abroad. Broadly speaking, U.S. vital or core interests remain remarkably consistent: the defense of American territory and that of our allies, protecting American citizens at home and abroad, supporting and defending our constitutional values

	and forms of government, and promoting and securing the U.S. economy and standard of living. These four core interests encompass virtually every strategic dynamic and dimension.
Economy	Economic issue salience refers to the extent to which an international militarized conflict is connected to core U.S. economic interests, including national prosperity, access to critical resources, stability of international markets, and the functioning of the global economic system. Economic interests become salient when a conflict threatens material foundations of U.S. power and welfare, thereby elevating the domestic political stakes of presidential decision-making and also taking into account conflicts where the US could potentially seize new resources In this context, I identify whether a conflict is economically salient based on assumptions that the United States' global position and domestic economic stability depend on secure access to strategic resources, open trade routes, financial stability, and the protection of key economic partners. Conflicts that jeopardize energy supplies (such as oil and gas), disrupt major shipping lanes, threaten global financial markets, or endanger economically vital allies generate heightened domestic concern because they can produce tangible economic costs for American society, including inflation, unemployment, or market instability. Based on these criteria, I determine whether a conflict is economically salient by drawing on existing academic analyses of the crisis, contemporaneous media reporting, and presidential rhetoric, particularly references to economic stability, markets, energy security, trade, or material costs of inaction. Conflicts in which economic stakes are explicitly invoked or widely recognized are coded as economically salient, while conflicts lacking such material economic implications are coded as having low economic salience.
<i>Ability to penalize the leader indicators</i>	
Members of the presidential party	Members of the president's party constitute a component of the political class because they provide the leader with institutional support, legislative cooperation, and political legitimacy. Although they are often assumed to act as loyal supporters, their role in audience-cost dynamics is critical: withdrawal of support by co-partisans signals elite fragmentation and substantially increases the political costs of backing down from a public threat. Party members can punish the leader through mechanisms such as refusing legislative cooperation, publicly criticizing foreign policy decisions, withholding electoral support, or distancing themselves from the president in moments of crisis. When members of the president's party actively engage in public

	debate over an international militarized conflict—particularly by expressing concern about credibility, weakness, or failure—the president faces heightened audience costs, as such dissent undermines intra-party unity and exposes vulnerability to both domestic and foreign audiences.
Members of opposition	Members of the opposition represent an independent and often adversarial segment of the political class whose influence on audience costs stems from their ability to challenge the president’s foreign policy decisions and mobilize institutional and public pressure. Opposition actors possess strong incentives to penalize a president for perceived weakness or inconsistency, as foreign policy failures can be used to damage the leader’s reputation, electoral prospects, and governing authority. When opposition elites actively discuss an international crisis—through public statements, congressional debates, hearings, or media interventions—they increase the salience of the conflict and heighten the visibility of potential domestic sanctions. In such cases, backing down from a public threat becomes politically costly because it provides the opposition with opportunities to frame the leader as incompetent, unreliable, or incapable of defending national interests.
Non-political class (elites)	The non-political class consists of influential actors who do not hold elected political office but nonetheless shape political outcomes through economic power, media influence, cultural authority, or expertise. This group includes business leaders, prominent journalists, media commentators, intellectuals, and former officials whose opinions contribute to elite discourse and public perception. Although they lack formal institutional authority, non-political elites can impose reputational and indirect political costs on the president by shaping narratives of success, failure, strength, or weakness. When members of this group actively engage in public discussion of an international militarized conflict—particularly by criticizing retreat or questioning presidential resolve—they amplify audience costs by reinforcing negative interpretations of backing down and by influencing both public opinion and political elites. Their involvement increases the reputational stakes of foreign policy decisions and contributes to the broader elite environment in which leaders are judged.

Appendix 6. Audience costs model 2 dataset with coding

[*audience costs_model 2 dataset with coding*](#)

Appendix 7. R code for the audience costs model 1

```

# Installing necessary packages
library(readxl)
library(dplyr)
library(ggplot2)
library(tidyr)

# Installing dataset
setwd(dirname(rstudioapi::getActiveDocumentContext()$path))
setwd("/Users/lenazhul/Desktop")
df <- read_excel("audiencecosts model 1 .xlsx")

# Renaming columns for comfortable use
names(df)[5] <- "BackDown"
names(df)[6] <- "IssueSalience"
names(df)[7] <- "PenalizeLeader"

# Descriptive statistics
str(df)
summary(df)

# Contingency table
tab_salience <- table(df$BackDown, df$IssueSalience)
tab_salience
tab_penalty <- table(df$BackDown, df$PenalizeLeader)
tab_penalty

#Pearsons cqi square
chisq.test(tab_salience, correct = FALSE)
chisq.test(tab_penalty, correct = FALSE)

# Expected frequincies
chisq.test(tab_salience, correct = FALSE)$expected
chisq.test(tab_penalty, correct = FALSE)$expected

#chi2 contribution
O <- tab_salience

```

```

E <- chisq.test(tab_salience, correct = FALSE)$expected
contrib <- (O - E)^2 / E
contrib
#Fisher exact
fisher.test(tab_salience)
fisher.test(tab_penalty)
# Cramers V
install.packages("DescTools")
library(DescTools)
CramerV(tab_salience)
CramerV(tab_penalty)
phi <- (a*d - b*c) /
  sqrt((a+b)*(c+d)*(a+c)*(b+d))
phi
#Gamma
tab <- tab_salience
a <- tab[1,1]
b <- tab[1,2]
c <- tab[2,1]
d <- tab[2,2]
gamma <- (a*d - b*c) / (a*d + b*c)
gamma
GoodmanKruskalGamma(tab_salience)
GoodmanKruskalGamma(tab_penalty)
# Kendalls
KendallTauB(tab_salience)
KendallTauB(tab_penalty)

```

Appendix 8. R code for the audience costs model 2

```
# Installing necessary packages
```

```

library(readxl)
library(dplyr)
library(ggplot2)
library(tidyr)

# Installing dataset
setwd(dirname(rstudioapi::getActiveDocumentContext()$path))
setwd("/Users/lenazhul/Desktop")

df <- read_excel("audiencecosts model 2.xlsx")

# Renaming columns for comfortable use
names(df)[5] <- "BackDown"
names(df)[6] <- "IssueSalience"
names(df)[7] <- "PenalizeLeader"

# Descriptive statistics
str(df)
summary(df)

# Contingency table
tab_salience <- table(df$BackDown, df$IssueSalience)
tab_salience
tab_penalty <- table(df$BackDown, df$PenalizeLeader)
tab_penalty

#Pearsons cqi square
chisq.test(tab_salience, correct = FALSE)
chisq.test(tab_penalty, correct = FALSE)

# Expected frequincies
chisq.test(tab_salience, correct = FALSE)$expected
chisq.test(tab_penalty, correct = FALSE)$expected

#chi2 contribution for salience
O <- tab_salience
E <- chisq.test(tab_salience, correct = FALSE)$expected

```

```

contrib <- (O - E)^2 / E
contrib
#chi2 contribution for penalizing
Op <- tab_penalty
Ep <- chisq.test(tab_penalty, correct = FALSE)$expected
contrib_p <- (Op - Ep)^2 / Ep
contrib_p
#Fisher exact
fisher.test(tab_salience)
fisher.test(tab_salience, alternative = "less")
fisher.test(tab_penalty)
# Cramers V
install.packages("DescTools")
library(DescTools)
CramerV(tab_salience)
CramerV(tab_penalty)
phi <- (a*d - b*c) /
  sqrt((a+b)*(c+d)*(a+c)*(b+d))
phi
#Gamma
tab <- tab_salience
a <- tab[1,1]
b <- tab[1,2]
c <- tab[2,1]
d <- tab[2,2]
gamma <- (a*d - b*c) / (a*d + b*c)
gamma
GoodmanKruskalGamma(tab)
GoodmanKruskalGamma(tab_penalty)

```

```
# Kendalls
```

```
KendallTauB(tab_salience)
```

```
KendallTauB(tab_penalty)
```

Appendix 9. Extended audience costs model 1 dataset with coding

[*audience costs_model 1_full dataset with coding*](#)

Appendix 10. Extended audience costs model 2 dataset with coding

[*audience costs_model 2_full dataset with coding*](#)

Appendix 11. R code for the extended audience costs model 1

```
# Installing necessary packages
```

```
library(readxl)
```

```
library(dplyr)
```

```
library(ggplot2)
```

```
library(tidyr)
```

```
# Installing dataset
```

```
setwd(dirname(rstudioapi::getActiveDocumentContext())$path))
```

```
setwd("/Users/lenazhul/Desktop")
```

```
presidents <- read_excel("audiencecosts model 1_full dataset.xlsx")
```

```
summary(presidents)
```

```
# Renaming columns for comfortable use
```

```
names(presidents)[5] <- "BackDown"
```

```
names(presidents)[6] <- "IssueSalience"
```

```
names(presidents)[7] <- "PenalizeLeader"
```

```
# Contingency table
```

```
tab_salience <- table(presidents$BackDown, presidents$IssueSalience)
```

```
tab_salience
```

```
#Pearsons cqi square
```

```
chisq.test(tab_salience, correct = FALSE)
```

```
# Expected frequencies
```

```
chisq.test(tab_salience, correct = FALSE)$expected
```



```

#chi2 contribution for salience
O <- tab_salience
E <- chisq.test(tab_salience, correct = FALSE)$expected
contrib <- (O - E)^2 / E
contrib

#Fisher exact
fisher.test(tab_salience)

# Cramers V
install.packages("DescTools")
library(DescTools)
CramerV(tab_salience)

phi <- (a*d - b*c) /
  sqrt((a+b)*(c+d)*(a+c)*(b+d))
phi
a <- tab_salience[1,1]
b <- tab_salience[1,2]
c <- tab_salience[2,1]
d <- tab_salience[2,2]
gamma <- (a*d - b*c) / (a*d + b*c)
gamma
GoodmanKruskalGamma(tab_salience)

# Kendalls
KendallTauB(tab_salience)

```

Appendix 12. R code for the extended audience costs model 2

```

# Installing necessary packages
library(readxl)
library(dplyr)
library(ggplot2)
library(tidyr)

```

```

# Installing dataset

setwd(dirname(rstudioapi::getActiveDocumentContext()$path))

setwd("/Users/lenazhul/Desktop")

presidents <- read_excel("audiencecosts model 2_full dataset.xlsx")

summary(presidents)

# Renaming columns for comfortable use

names(presidents)[5] <- "BackDown"

names(presidents)[6] <- "IssueSalience"

names(presidents)[7] <- "PenalizeLeader"

# Contingency table

tab_salience <- table(presidents$BackDown, presidents$IssueSalience)

tab_salience

#Pearsons cqi square

chisq.test(tab_salience, correct = FALSE)

# Expected frequincies

chisq.test(tab_salience, correct = FALSE)$expected

#chi2 contribution for salience

O <- tab_salience

E <- chisq.test(tab_salience, correct = FALSE)$expected

contrib <- (O - E)^2 / E

contrib

#Fisher exact

fisher.test(tab_salience)

# Cramers V

install.packages("DescTools")

library(DescTools)

CramerV(tab_salience)

phi <- (a*d - b*c) /

sqrt((a+b)*(c+d)*(a+c)*(b+d))

```

```

phi
a <- tab_salience[1,1]
b <- tab_salience[1,2]
c <- tab_salience[2,1]
d <- tab_salience[2,2]
gamma <- (a*d - b*c) / (a*d + b*c)
gamma
GoodmanKruskalGamma(tab_salience)
# Kendalls
KendallTauB(tab_salience)

```

Appendix 13. Narcissism and audience costs dataset with R coding

[Narcissism and audience costs dataset](#)

Appendix 14. Code in R for Narcissism and audience costs model using logistic binary regression

```

# Installing necessary packages
library(readxl)
library(dplyr)
library(ggplot2)
library(tidyr)

# Installing dataset
setwd(dirname(rstudioapi::getActiveDocumentContext())$path))
setwd("/Users/lenazhul/Desktop")

df <- read_excel("narcissism and audience costs .xlsx")

# Renaming one column
names(df)[5] <- "BackDown"
names(df)[6] <- "Issuesalience"

# Descriptive statistics
str(df)
summary(df)

```

```

#Basic model: does the level of narcissism affect the likelihood of back down?
model2 <- glm(BackDown ~ Narcissism + Issuesalience, data = df, family = binomial)
summary(model2)

#Visualisation
install.packages("stargazer")
library(stargazer)
stargazer(model2,
           type = "html",
           out = "logit_model.html",
           dep.var.labels = "Backing Down (1 = Yes)",
           covariate.labels = c("Narcissism", "Issue Salience"),
           digits = 3,
           star.cutoffs = c(0.05, 0.01, 0.001))

```

Appendix 15. Code in R for Narcissism and audience costs model using QCA

```

# 1. Install and load packages
install.packages("readxl")
install.packages("QCA")
library(readxl)
library(QCA)

# 2. Download the dataset
setwd("/Users/lenazhul/Desktop")
df <- read_excel("narcissism and audience costs .xlsx")

# Check variable names
names(df)

# 3. Rename variables for better use
names(df) <- c("President",
               "Term",
               "Narcissism",
               "Conflict",

```

```

        "BackDown",
        "IssueSalience")

# Check structure
str(df)

# 4. Make sure BackDown and IssueSalience are binary numeric
df$BackDown <- as.numeric(df$BackDown)
df$IssueSalience <- as.numeric(df$IssueSalience)
table(df$BackDown, useNA = "ifany")
table(df$IssueSalience, useNA = "ifany")

# 5. Dichotomize Narcissism for crisp-set QCA using median split technology
median_narc <- median(df$Narcissism, na.rm = TRUE)
df$Narc_bin <- ifelse(df$Narcissism > median_narc, 1, 0)

# Check new variable
table(df$Narc_bin, useNA = "ifany")

# 6. Keep only variables needed for QCA
qca_df <- df[, c("Narc_bin", "IssueSalience", "BackDown")]
qca_df <- as.data.frame(qca_df)

# Inspect
head(qca_df)
summary(qca_df)
table(qca_df$BackDown)

# Necessity:
pof(qca_df$Narc_bin, qca_df$BackDown)
pof(qca_df$IssueSalience, qca_df$BackDown)

# 8. Build the truth table
tt <- truthTable(qca_df,
                 outcome = "BackDown",
                 conditions = c("Narc_bin", "IssueSalience"),

```

```
      incl.cut = 0.5,  
      complete = TRUE,  
      show.cases = TRUE)  
print(tt)  
  
# 9. Minimize the truth table  
sol_cons <- minimize(tt,  
      details = TRUE,  
      show.cases = TRUE)  
  
print(sol_cons)  
  
#  
sol_cons$IC  
print(sol_cons$IC)
```