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Review Article

Reframing International Security Issues through Behavioral Decision- Making Psychology: A Normative- Analytical Framework

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Abstract

This study systematically examines how behavioral decision-making psychology can be positioned as a foundational framework for resolving international security issues. The rational actor assumption underlying traditional security theories posits that decision-makers process all available information comprehensively to determine the choice that will maximize utility. However, accumulated evidence demonstrates that this idealized model loses its validity, particularly in security contexts characterized by high uncertainty and time pressure. The study evaluates how behavioral mechanisms such as bounded rationality, cognitive shortcuts, loss aversion, framing effects, and groupthink shape security decisions using conceptual comparison and analytical synthesis methods. The research findings show that cognitive biases follow predictable patterns in security decisions, rather than being random, and that these patterns are reproduced through institutional processes. The study reveals that leadership psychology, advisory networks, and bureaucratic filters function as intermediary mechanisms in the transfer of psychological findings developed at the individual level to the state level. At the normative level, the capacity of behavioral awareness to reduce the likelihood of error in security policies through structured analysis techniques, critical assessment teams, and decision support mechanisms is discussed. The article contributes to intra-disciplinary theoretical pluralism by positioning the behavioral approach not as an alternative to structural theories, but as a perspective that complements and enriches them. Ultimately, the study argues that security decisions should be explained not only by material power balances and structural conditions but also by the cognitive architecture of decision-makers, proposing a unique normative-analytical framework for international security literature.

Introduction

Security studies in the discipline of international relations have relied on the rational choice assumption for decades to explain states' strategic behavior. According to this assumption, decision-makers process all available information to identify the option that maximizes utility and produce consistent policies accordingly. This rationalist paradigm formed the basis of deterrence theory, particularly during the Cold War, and enabled the modeling of strategic interactions within the framework of game theory [1,2]. However, since the second half of the twentieth century, accumulated evidence has revealed that critical decisions in the field of security often do not correspond to this idealized model. The nuclear brinkmanship of the Cold War era, intelligence assessments prior to the Gulf Wars, and recent hybrid conflict dynamics point to the existence of systematic deviations in decision-making processes. Historical cases such as the Cuban Missile Crisis have concretely demonstrated that the rational actor model alone is insufficient and how organizational processes and bureaucratic politics shape decision-making dynamics [3]. It is now an empirically supported reality that decision-makers have limited cognitive capacities, process information selectively under time pressure, and act with certain biases. This situation brings to the fore the need for a new theoretical perspective in international security analysis. Behavioral decision-making psychology comes into play precisely at this point, offering a powerful framework for understanding the formation processes of security policies in a more realistic way [4,5]. This article systematically examines how this framework can be applied to international security issues and what kind of contributions this application can make at both the analytical and normative levels.

The fundamental claim of behavioral decision-making psychology is that individuals and organizations are prone to predictable deviations rather than consistency in their decision-making processes. These deviations are not random errors but cognitive patterns that emerge regularly under specific conditions. When evaluated from an evolutionary psychology perspective, these patterns can be understood as adaptive mechanisms that facilitate rapid decision-making in uncertain environments but can lead to systematic errors in modern strategic contexts [6]. The concept of bounded rationality reveals that decision-makers do not have infinite computational power and therefore resort to mental shortcuts that simplify complex problems. The international security environment, by its very nature involving uncertainty, incomplete information, and high risk, is an area where these shortcuts are used intensively. Cognitive mechanisms such as the loss aversion principle, framing effects, overconfidence, and confirmation bias directly shape leaders' threat perceptions, risk preferences, and policy options. Confirmation bias, in particular, leads decision-makers to selectively seek information that supports their existing beliefs and to disregard conflicting evidence, constituting one of the fundamental causes of intelligence failures [7,8]. Traditional security theories have largely ignored these psychological dimensions, placing the distribution of material power and structural conditions at the center of their explanations. However, recent research shows that psychological factors can influence the outcome of strategic interactions as much as material factors [9,10]. In this regard, the behavioral perspective argues that international security cannot be explained solely by weapons capabilities and alliance structures, and that decision-making processes themselves must also be analyzed.

Approaching international security issues through a behavioral lens goes beyond being a purely analytical choice; it also yields transformative results from a normative perspective. At the analytical level, this approach allows us to model how security decisions are made more realistically; it enables us to deeply understand why decision-makers prefer certain policies, what information they disregard, and how they assess risks. This understanding increases the importance of process monitoring methods in security studies and enables a research agenda that goes beyond outcome-focused analysis [11]. At the normative level, it raises the question of how to design security policies that are more responsible, predictable, and reduce the risk of error.



Being aware of cognitive biases paves the way for developing institutional mechanisms to counterbalance these biases. Behavioral awareness is of vital importance, especially in areas where miscalculation can have devastating consequences, such as nuclear deterrence, great power competition, and crisis escalation. The crisis management literature consistently shows that leaders' cognitive capacities narrow under stress and that this narrowing negatively affects decision quality [12,13]. Furthermore, the behavioral approach also highlights the ethical dimensions of security decisions; policies shaped by cognitive biases often lead to disproportionate use of force and unforeseen human casualties. Therefore, behavioral decision-making psychology has the potential to simultaneously deepen both explanatory and accountability debates in international security studies [8,14].

The main objective of this article is to develop an integrated normative-analytical framework that reframes international security issues using the conceptual tools of behavioral decision-making psychology. The study aims to reveal where the explanatory capacity of the classical rational actor model falls short and to systematically demonstrate how the behavioral approach fills these gaps. This goal directly aligns with the trend toward micro-based explanations that has gained strength in the discipline of international relations in recent years and supports the research agenda aimed at understanding how macro outcomes derive from micro processes [15,16]. In this vein, the article discusses how behavioral decision-making principles developed at the individual level can be extended to the state and international system levels. The article proceeds from the assumption that behavioral insights can not only produce retrospective explanations but also serve a forward-looking function by improving policy-making processes. In this context, adopting a normative orientation, it addresses how error-prone cognitive processes in security decisions can be constrained by institutional balancing mechanisms. While theoretical in nature, the study is supported by empirical findings from behavioral psychology and international relations literature. This concretizes the unique theoretical and practical contributions that the behavioral approach can make to international security studies [17,18].

The main research question of this study is formulated as follows: What analytical and normative advantages does behavioral decision-making psychology offer over traditional rational approaches in resolving international security issues? The sub-questions accompanying this main question define the scope of the study. The first sub-question examines the mechanisms through which cognitive biases influence security decision-making processes. This question is directly linked to the political psychology literature, which examines how cognitive processes at the leadership level shape foreign policy outcomes [19,20]. The second sub-question questions how behavioral insights can be integrated into the institutional design of security policies. The third sub-question focuses on the capacity of behavioral approaches to reduce the likelihood of error and miscalculation in international security. The fundamental hypothesis developed in light of these questions is that international security decisions cannot be adequately explained without accounting for behavioral factors. The auxiliary hypotheses argue that cognitive biases systematically shape security policies and that behaviorally informed normative frameworks can produce more stable security outcomes [21,22].

To grasp the extent of the contribution that behavioral decision-making psychology can make to international security studies, it is first necessary to clarify the analytical implications of the concept of bounded rationality. Bounded rationality assumes that decision-makers form their preferences under fundamental constraints such as access to information, information processing capacity, and time. Developed since Simon's pioneering work, this concept positions the search for satisfactory solutions rather than optimization as the fundamental logic of decision-making [23]. According to this perspective, individuals make decisions aiming for a satisfactory, acceptable outcome rather than the best possible result. The nature of security environments, characterized by uncertainty, complexity, and intense pressure, directly aligns with this theoretical assumption. In times of crisis, decision-makers rely on mental shortcuts and patterns derived from experience rather than evaluating available information in detail. While these heuristics speed up the decision-making process, they can also pave the way for systematic errors. Representativeness and availability heuristics, in particular, can distort security decision-makers' probability assessments, leading to misplaced threat prioritization [4,5]. In particular, the use of incorrect analogies, the inappropriate generalization of historical experiences, and the disregard of alternative scenarios are concrete manifestations of bounded rationality in security policies. Therefore, bounded rationality provides a central conceptual tool for explaining why security decisions often deviate from expected outcomes [23,24].

Another fundamental concept that stands out in behavioral literature is the framing effect. Framing refers to the idea that presenting the same objective situation in different ways can significantly alter decision preferences. This effect constitutes one of the fundamental findings of prospect theory and fundamentally undermines the principle of preference consistency assumed by rational choice theory [25]. Presenting a security issue from a gain or loss perspective directly affects decision-makers' risk-taking tendencies. One of the fundamental findings of prospect theory is that individuals are more willing to take risks in the loss domain, while being more cautious in the gain domain. In the context of international security, this means that perceptions of territorial loss, erosion of prestige, or deterrence failure can drive decision-makers to disproportionate responses. Levy's applications in the field of international conflict have shown that leaders' tendency to avoid compromise in the context of loss contributes to negotiation deadlocks and prolonged conflicts [5]. While traditional rational models assume that preferences remain stable regardless of how they are presented, the behavioral approach fundamentally questions this assumption. The framing effect highlights the strategic importance of discourse, perception, and narratives in security analysis, revealing the need to consider ideological dimensions beyond material factors [26,27].

The loss aversion principle constitutes one of the most powerful conceptual tools that behavioral decision-making psychology offers to international security. According to this principle, individuals react psychologically more intensely to losses than to gains of equivalent magnitude. Experimental studies consistently show that losses create approximately twice the psychological impact of gains [9,10]. In the field of international security, this asymmetry manifests itself as excessive sensitivity to preserving the status quo, avoidance of backtracking, and reluctance to compromise. Leaders' reactions to the possibility of losing territory, sphere of influence, or prestige often go beyond what objective calculations of interests would predict. This tendency can contribute to the rejection of opportunities for compromise, the deadlocking of negotiations, and the prolongation of conflicts. Historical cases show that leaders' tendency to avoid loss, combined with the sunk cost fallacy, has led to the continuation of failed military interventions [28,29]. The behavioral approach treats such decisions not as erratic or irrational, but as the product of predictable psychological dynamics. Thus, the concept of miscalculation in security policies is analyzed not only in terms of structural factors but also through the cognitive architecture of decision-makers [25,30].

Behavioral decision-making psychology also addresses issues of perception and misperception in international security from a new perspective. Decision-makers often tend to interpret the intentions of the other side through exaggerated threat perceptions. Jervis's classic work comprehensively demonstrates that misperception is a systematic phenomenon in international politics and that this phenomenon deepens the security dilemma [8]. Overconfidence bias leads decision-makers to overestimate their own capabilities and predictive abilities, while confirmation bias causes selective processing of information that supports existing beliefs. Overconfidence bias, particularly in decisions regarding military intervention, leads leaders to exaggerate the likelihood of success and underestimate the potential costs [21,29]. These cognitive mechanisms pave the way for the systematic misreading of rival actors' behavior. In the context of the security dilemma, the perception of defensive moves as aggressive intentions reinforces unintended escalation dynamics. The behavioral perspective offers an explanation for this process not only through structural uncertainty but also through the cognitive processes of decision-makers. The source of misperception, in this framework, is sought in the interaction of internal cognitive structures as well as external conditions [8,29].

At this point, a striking gap emerges in the international security literature: while the use of behavioral insights in security analyses is becoming increasingly widespread, studies that bring these insights together in a consistent and comprehensive framework are quite limited. As emphasized by Hafner-Burton and colleagues, the cognitive revolution in international relations is not yet complete, and the systematic integration of behavioral findings into theoretical frameworks remains an important research agenda [31]. Current research mostly focuses on specific cognitive biases or individual case analyses, failing to adequately address the interaction of behavioral mechanisms and their institutional implications. However, the complex nature of security policies requires a more comprehensive analytical architecture. This article aims to present a systematic normative-analytical framework that integrates behavioral decision-making psychology into international security studies. This framework seeks to update the literature that has developed since Goldgeier and Tetlock's pioneering synthesis, presenting a more comprehensive structure that also includes a normative dimension [17]. Such a framework goes beyond explaining why decisions are made and also discusses how they



can be made better. In this respect, the study claims to build a theoretical bridge between explanatory analysis and normative evaluation. Systematizing the behavioral perspective in this way has the potential to both increase theoretical depth in security studies and make concrete contributions to policymaking [28,32].

This article is based on a qualitative and conceptually-heavy research design. The study does not conduct experimental or quantitative analysis; instead, it systematically evaluates strong experimental findings from the behavioral decision-making literature through secondary sources. In line with the methodological characteristics of analytical review articles, this approach adopts a strategy of reinterpreting and integrating existing theoretical and empirical knowledge rather than collecting original data. This approach provides an opportunity to discuss how findings produced at the individual level in behavioral psychology can be adapted to macro-level phenomena such as international security. The research method is based on conceptual synthesis and critical comparison. In line with the process tracing logic emphasized by Beach and Pedersen, tracing and comparing causal mechanisms at the conceptual level forms the methodological backbone of the study [33]. The fundamental hypothetical distinctions between the rational actor model and the behavioral decision-making approach are compared in an analytical manner, and the internal consistency and explanatory power of the theoretical framework are tested through this comparison. This methodological choice, which adopts an interpretive perspective, aims to strengthen the theoretical integration of psychological insights in security studies. Thus, the study reconstructs the accumulated existing literature within a unique framework, without relying on primary data collection [11,33].

The article's analytical strategy treats behavioral decision-making psychology not merely as a complementary set of variables but as a foundational element of security analysis. In this context, cognitive biases are positioned not as secondary factors in decision errors but as mechanisms that play central roles in shaping security policies. This positioning adds a new dimension to the actor-structure debate in international relations, revealing how individual cognitive processes shape structural outcomes [34,15]. The analysis begins with decision processes at the individual level and discusses how these processes are reproduced at the institutional and state levels. Leader psychology, advisory groups, and bureaucratic filters are considered channels through which behavioral effects are amplified at the organizational level. The phenomenon of groupthink is included in this analysis as a critical mechanism that shows how individual biases are reinforced within group dynamics and how critical evaluation is suppressed [35, 13]. This multi-layered approach offers the possibility of an examination that transcends the analytical distinction between the individual and the state. This strengthens the applicability of the behavioral approach at the international system level. This strategy directly contributes to the growing importance of micro-based explanations in the discipline of international relations in recent years and makes visible how macro outcomes derive from micro processes [15,16].

The contribution of behavioral decision-making psychology to international security is not limited to the explanatory level. This approach also has transformative normative capacity. Awareness of decision-makers' cognitive limitations paves the way for the development of more cautious and institutionally balanced security policies. Red team exercises, structured analysis techniques, and pre-decision cognitive control mechanisms are institutional tools directly informed by behavioral insights. Tetlock's work on superforecasters has shown that cognitive diversity, probabilistic thinking, and regular feedback mechanisms can significantly increase forecast accuracy [36]. Such tools aim to limit the impact of individual biases on policy outcomes. Therefore, the behavioral approach not only explains the causes of errors but also brings the discussion of how these errors can be reduced to the agenda. Fischhoff's work in the fields of risk communication and decision support provides concrete examples of how behavioral insights can be translated into policy design [37]. In this respect, the study aims to make concrete and applicable contributions to normative security debates. Behavioral awareness has the potential to make security policies both more effective and more defensible from an ethical standpoint [36,37].

The article critically evaluates the tendency in international security literature to treat behavioral approaches as secondary or complementary. It is observed that behavioral insights are often limited to case-specific analyses and are not sufficiently integrated into broader theoretical frameworks. As Walt points out, psychological explanations sometimes risk overshadowing structural factors, thus requiring balanced theoretical integration [38]. This makes it difficult to perceive the behavioral approach as a systematic theoretical option. However, recurring errors in security policies necessitate that individual psychological dynamics be considered at the structural level. This study aims to place behavioral decision-making psychology more firmly at the center of international security theories. This placement does not reject structural factors but offers

a more comprehensive explanatory framework by complementing them with cognitive mechanisms [6,39]. Thus, it proposes a unique framework that can engage in dialogue with realist, liberal, and structuralist approaches but remains distinct from them. This positioning fosters theoretical pluralism within the discipline and contributes to building bridges between different levels [6,40].

In this context, the article aims to offer a behavioral response to the increasingly complex and uncertain environment in international security studies. The intensification of global power competition, the intertwining of traditional and non-traditional threats, and the simultaneous operation of multiple crisis dynamics continuously increase the cognitive load on decision-makers. New security challenges such as hybrid warfare, cyber threats, and information manipulation create complex environments that exceed the information processing capacity of decision-makers [12]. Under these conditions, the explanatory power of models based on assumptions of perfect rationality is further diminished. Behavioral decision-making psychology offers a more realistic explanatory framework to overcome this limitation. In particular, the analysis of decisions made under uncertainty and time pressure constitutes the areas where the explanatory superiority of the behavioral perspective is most evident [39,41]. At the same time, at the normative level, it produces guiding principles on how security policies that act more cautiously and with a sense of responsibility can be designed. This study aims to make an original contribution by addressing both the explanatory and normative dimensions of the behavioral approach. Thus, it aims to serve both a deeper understanding and improvement of decision-making processes in international security [12,42].

The fundamental question addressed throughout this study is the extent to which behavioral decision-making psychology can provide a constructive framework for resolving international security issues. Supporting questions accompanying this main question examine the mechanisms through which cognitive biases influence security decisions and how these effects are reproduced at the institutional level. The first subsidiary question inquires under what conditions cognitive mechanisms such as bounded rationality, framing, and loss aversion become more decisive in the formation of security policies. This question aims to understand how contextual conditions amplify or diminish the impact of cognitive mechanisms and seeks to develop conditional generalizations [41]. The second sub-question explores how behavioral insights can be systematically incorporated into policy-making processes and what changes this incorporation requires in organizational design. The third sub-question focuses on the capacity of behaviorally informed decision-making processes to reduce the likelihood of error and escalation. These questions aim to understand why miscalculations and unforeseen consequences are so prevalent in international security. Thus, the study takes not only the outcomes but the decision-making processes themselves as its primary object of inquiry [41,43].

The fundamental hypothesis developed in line with these questions is that international security decisions cannot be adequately explained by the rational actor assumption alone. The study argues that behavioral factors are structurally decisive in shaping security policies. This hypothesis does not completely reject the rational actor model, but emphasizes its limitations and argues for the necessity of behavioral complementarity [3,5]. The first auxiliary hypothesis argues that cognitive biases do not only emerge at the leadership level but are also reinforced and multiplied through organizational processes. This hypothesis, consistent with Janis's groupthink theory and Allison's bureaucratic politics model, emphasizes how organizational dynamics amplify individual biases [35,3]. The second auxiliary hypothesis proposes that behaviorally informed decision processes have the capacity to significantly reduce the likelihood of error and escalation. The third auxiliary hypothesis posits that behavioral approaches supported by normative frameworks can produce more predictable and stable security outcomes. These hypotheses accept that behavioral insights have not only a descriptive but also a transformative function. Thus, the study aims to move the behavioral approach from a secondary perspective in security studies to a central position [4,36].

The first key contribution expected from the article is the establishment of a theoretical bridge between behavioral decision-making psychology and the international security literature. This bridge demonstrates how psychological models developed at the individual level can be adapted to security dynamics at the state and system levels. This adaptation directly addresses the micro-macro link problem in international relations and contributes to the development of multi-level analytical frameworks [15,16]. Explaining how micro-level cognitive mechanisms affect macro-level strategic outcomes fills an interdisciplinary gap. The second expected contribution is the visibility of the normative capacity of the behavioral approach. The study argues that security policies can not only explain the current situation but also discuss the desired situation. This normative orientation connects with the international security ethics literature, making the ethical dimensions of decision-making processes visible [44]. This incorporates the ethical and



responsibility dimensions of behavioral insights into international security discussions. Thus, the article claims to offer a new perspective on normative security studies [37,44].

The third significant contribution of this study is its integration of behavioral decision-making psychology within a consistent normative-analytical framework. In the existing literature, behavioral insights are mostly addressed in a fragmented and context-specific manner. This fragmentation limits the theoretical accumulation of behavioral security studies and hinders the formation of a systematic research program [31,39]. This article aims to bring together concepts, mechanisms, and normative inferences within a single analytical architecture. This holistic approach has the capacity to increase theoretical consistency in security studies. The fourth contribution is the generation of actionable recommendations for policymakers. These recommendations are directly applicable in the fields of intelligence analysis, crisis management, and strategic planning, aiming to bridge the gap between academia and policy practice [32,37]. They can serve as a guide for behaviorally informed decision-making processes, organizational design, consultation mechanisms, and early warning systems. Thus, the article establishes a functional link between academic analysis and policy practice and offers concrete insights for improving the quality of decision-making in security bureaucracies [12,40].

The original value of this article lies in positioning the psychology of behavioral decision-making as one of the foundational elements of international security studies. The study argues that security decisions should be explained not only by material power balances and structural conditions but also by the cognitive architecture of decision-makers. This argument does not reject structure-focused theories such as neorealism and neoliberal institutionalism, but rather enriches them with individual-level mechanisms to offer a more comprehensive explanatory framework [2,6]. This approach does not reject traditional security theories, but rather complements them with cognitive mechanisms. The behavioral perspective reveals that errors in security policies follow predictable patterns rather than being random. This predictability allows for stronger causal inferences in security studies and more robust policy recommendations [11]. This predictability makes it possible to design institutional interventions aimed at reducing errors. The study aims to systematically reveal this potential and make a lasting contribution to the international security literature. Thus, the importance of process-oriented approaches in security analysis is emphasized [18,41].

In conclusion, this article is a comprehensive attempt to reframe international security issues through the lens of behavioral decision-making psychology. The research questions and hypotheses jointly address why security decisions are often error-prone and how these errors can be reduced. This combination enables the simultaneous pursuit of explanatory and normative goals, adding both academic and practical value to the study [36,37]. The expected contributions of the study are shaped around theoretical depth, normative awareness, interdisciplinary integration, and actionable insights for policy-making. In this respect, the article offers a unique approach that goes beyond traditional security analyses. This originality stems from the systematic and comprehensive integration of behavioral decision-making psychology into international security studies [40,43]. The conceptual tools offered by behavioral decision-making psychology pave the way for more realistic and responsible analyses in international security studies. This article aims to systematically reveal this potential and make a unique contribution to the international security literature. The following sections will address the literature review, theoretical framework, research method, findings, discussion, and conclusions and recommendations, respectively [40,42].

Literature Review

The inadequacy of the rational actor assumption emphasized in the introduction and the unique contributions of behavioral decision-making psychology to international security studies form the starting point of this literature review. For decades, the international security literature has relied on a single analytical framework to explain state behavior. This framework assumes that decision-makers process all available information to determine the choice that will maximize utility and produce consistent policies accordingly. In particular, deterrence and strategic stability theories were built on this assumption and guided discussions on maintaining nuclear balance during the Cold War [1,2]. This theoretical tradition emphasized the predictability of security policies and the consistency of strategic calculations; however, it largely ignored the internal dynamics and psychological foundations of decision-making processes [17]. However, accumulating evidence that critical decisions in the security domain do not align with this idealized model has called into question the explanatory power of the rational actor paradigm. Factors such as uncertainty, time pressure, and strategic deception point to the existence of systematic deviations in decision-making processes. This situation has increased the legitimacy of approaches in security studies that turn decision-making processes themselves into the object of study. Studies focusing on perception,

misperception, cognitive constraints, and organizational dynamics have revealed that security decisions are not solely derived from structural conditions [3,8]. This shift in the literature has prepared the ground for behavioral decision-making psychology to be considered a foundational framework in international security [40]. This section of the article aims to systematically follow this line of argumentation to establish the conceptual foundation for the normative-analytical framework to be developed in subsequent sections.

The first fundamental critiques of the rational actor assumption took shape in studies examining foreign policy decision-making processes at the individual and organizational levels. This critical strand argued that decision-makers construct the objective security environment not directly, but through specific perceptual filters. These filters are fed by decision-makers' past experiences, belief systems, and cognitive schemas; thus, they lead to the same objective situation being interpreted differently by different actors [4]. Perception theory has shown that security policies are often based on erroneous inferences about the intentions of the other side, and that these errors fuel escalation dynamics [8]. Organizational processes and bureaucratic policy models have replaced the idea of a single rational actor with decisions shaped by the routines, standard operating procedures, and conflicts of interest of numerous actors [3]. The analysis of the Cuban Missile Crisis is the most striking application of this multi-layered approach and has concretely demonstrated the inadequacy of the rational actor model alone. This case remains a paradigmatic example in the literature, showing that security decisions are shaped not only by strategic calculations but also by factors such as organizational culture, communication failures, and time pressure [33]. This literature has brought to light the internal dynamics of decisions while also highlighting how psychological biases are reinforced in an organizational context. Thus, it has been understood that explaining decision errors in the security field requires considering not only system-level variables but also cognitive and organizational mechanisms together [11]. This study also aims to clarify the position of the behavioral approach in international security studies by building its literature review on this multi-level line of discussion.

The concept of bounded rationality is a turning point in the integration of behavioral decision-making psychology into the international relations literature. The bounded rationality approach argues that actors do not possess complete information and unlimited computational capacity; therefore, they resort to cognitive shortcuts that simplify complex problems and settle for satisfactory solutions [23]. This concept emphasizes that decision-makers seek adequacy rather than optimization, and that this pursuit can lead to systematic errors under certain conditions [22]. This approach is particularly well-suited to international security studies because security decisions are made under conditions of speed, uncertainty, and high risk. As emphasized in the introduction, when evaluated from an evolutionary psychology perspective, these heuristics can be understood as adaptive mechanisms that facilitate rapid decision-making in uncertain environments but can lead to systematic errors in modern strategic contexts [6]. Political science literature focusing on decision-making architecture has also revealed that preferences and choices are shaped by the design of the decision environment and that this environment can systematically guide actor behavior [24]. This finding suggests that improving security policies is possible not only through training decision-makers but also through redesigning the decision environment [37]. This line of thinking has contributed to conceptualizing the bias concepts used in behavioral security studies not only as individual errors but as regular responses that emerge under specific conditions. The article's normative-analytical claim is based precisely on the question of how these regularities can be taken into account in policy design.

One of the most effective ways to introduce behavioral change into the international security literature is through expectation theory and its application to conflict and crisis studies. Expectancy theory demonstrates that actors are more sensitive to losses than gains, make decisions based on a reference point, and that framing significantly alters risk preferences [25,26]. The most striking implication of this theory in the context of international security is that decision-makers tend to gravitate toward riskier options in the loss domain, and this tendency increases the likelihood of escalation during crises [21]. The international conflict literature has developed this framework, particularly with the argument that loss avoidance makes compromise difficult and can increase the tendency to escalate [5,30]. The principle of loss aversion, emphasized in the introduction, manifests itself in this context as an excessive sensitivity to maintaining the status quo and a tendency to avoid backing down. Thus, some security preferences that appear illogical at first glance can be explained by systematic psychological mechanisms. Furthermore, the framing effect has established an analytical bridge to security discourse studies by demonstrating that the same objective security picture can lead to different policy outcomes through different discursive presentations [10,27]. The strengthening aspect of this approach is that it explains decision errors not only through outcomes but also through the cognitive conditions of preference formation. Indeed, nuclear brinkmanship



and deterrence failures provide historical evidence demonstrating the decisive role of framing effects in strategic decision-making [14]. However, the literature also argues that applications of expectation-*e* theory have often remained fragmented and insufficiently expanded to the normative design dimension [6,28]. This limitation constitutes one of the fundamental gaps that this article aims to fill.

The institutionalization of behavioral approaches in international security studies has become more evident in recent years with the rise of micro-foundations and leadership psychology literature. These studies reveal that foreign policy outcomes are produced through leaders' belief systems, advisory networks, and group dynamics; they attempt to explain how system-level variables translate into decision-making mechanisms [15,16]. This line of writing offers a new perspective on the structure-agency problem, long debated in international relations theory, and makes visible how macro-level structural conditions interact with micro-level decision-making processes [9]. The micro-macro link problem emphasized in the introduction constitutes the core interest of this line of writing. This bridge between political psychology and international relations theory also raises the idea that decision-makers' biases can be reduced through specific institutional mechanisms [36]. In particular, structured analysis techniques, critical appraisal teams, and predictive literature propose practical tools for reducing cognitive errors in security bureaucracies [32,37]. These developments render behavioral decision-making psychology meaningful not only explanatorily but also normatively. However, the literature still shows a limited number of studies that integrate these tools within a consistent normative-analytical framework that reframes international security issues [17,40]. This article advances the literature review in a way that highlights this gap and prepares the conceptual groundwork for the framework to be established in the following sections.

The institutionalization of behavioral decision-making psychology in the international security literature has materialized particularly in leader-focused foreign policy analyses. Leaders' belief systems, past experiences, and perceptual filters directly shape the policy options chosen during security crises. Leaders' risk perception and tolerance for uncertainty emerge as critical variables determining the nature of decisions made during crises [41]. In this regard, the developing literature on leadership psychology has revealed that foreign policy outcomes are related not only to power balances but also to how decision-makers perceive the world [19,43]. The cognitive capacity limitations emphasized in the introduction become more decisive, especially in security environments characterized by high uncertainty and threat perception. Under these conditions, cognitive shortcuts become dominant, and decision-makers tend to oversimplify complex strategic scenarios. When combined with confirmation bias, this tendency to oversimplify leads decision-makers to selectively evaluate information that supports their existing beliefs and to disregard alternative scenarios [7]. This tendency provides an important conceptual tool for explaining why riskier and more escalatory decisions are made in times of crisis. The behavioral approach treats leadership behavior not as pathological deviations but as the result of specific psychological regularities. Thus, the theoretical legitimacy of the individual level in security analyses is strengthened, and how macro outcomes derive from micro processes can be understood more clearly [20]. This perspective constitutes one of the fundamental pillars of the normative-analytical framework advocated in this article at the individual level.

Another important strand prominent in the behavioral security literature is studies focusing on group decision-making processes. Groupthink, echo chambers, and the homogeneity of advisory networks can lead to the systematic narrowing of options in security decisions and the suppression of critical perspectives. This process accelerates, particularly under high stress and time pressure, and increases the decision-making unit's closedness to external information [12]. Especially in closed and hierarchical decision-making structures, the filtering of conflicting information and the reinforcement of the leader's preconceptions emerge as a common pattern [13,35]. The claim expressed in the introduction as the first auxiliary hypothesis, that cognitive biases are amplified through organizational processes, aligns perfectly with this line of literature. These findings provide a powerful conceptual framework for explaining why errors exhibit recurring patterns in security bureaucracies. Behavioral literature produces more comprehensive explanations by addressing group dynamics alongside individual cognitive biases, conceptualizing error not merely as an individual weakness but as an institutional outcome. This conceptualization reveals that improving security policies requires more than raising awareness at the individual level; it necessitates redesigning organizational structures and decision-making processes [11]. Consistent with Allison and Zelikow's [3] bureaucratic politics model, this framework clarifies how organizational routines and standard operating procedures reinforce individual biases. This approach forms a critical line of literature in terms of the article's normative-analytical goal and paves the way for discussions on the capacity of institutional design to balance cognitive errors [12].

Despite the increasing visibility of behavioral approaches in the international security literature, this literature has also been subject to various criticisms. The first criticism concerns the fact that behavioral studies are generally case-focused and have limited generalization capacity. This limitation leaves unclear under what conditions behavioral findings are valid and how they can be transferred to different contexts [39]. In particular, it is not always sufficiently clear how psychological findings produced at the individual level are systematically transferred to interstate interactions [38]. The second major criticism points to the risk that behavioral approaches may relegate structural power relations to a secondary position. Some critics argue that psychological explanations may overshadow factors such as the distribution of material power, institutional structures, and international norms. This criticism raises the question of whether the behavioral approach should be positioned as a complementary perspective to structural theories or as an alternative paradigm that replaces them [18]. Therefore, how micro and macro levels connect remains a central and ongoing debate in behavioral security literature [15,40]. The micro-macro connection problem highlighted in the introduction is precisely at the heart of this critical line of inquiry. The article's approach aims to address behavioral insights alongside structural analyses, taking these criticisms into account, and to make the interaction between the two levels visible. Thus, the behavioral approach is positioned not as a rival paradigm seeking to replace structural theories, but as a perspective that complements and enriches them.

The normative security literature has so far intersected with behavioral decision-making psychology only to a limited extent. However, awareness of cognitive biases and perceptual errors can make significant contributions to the design of more responsible and ethically sensitive security policies. This awareness enables decision-makers to recognize their own cognitive limitations and demand institutional mechanisms to balance these limitations [4]. Normative theories question not only the effectiveness of security decisions but also their legitimacy and moral consequences [44]. The normative potential of the behavioral approach highlighted in the introduction is precisely related to its capacity to deepen this questioning. Concepts such as unintended harm and miscalculation concretize the unique contributions that the behavioral perspective offers to normative security debates. These concepts reveal the complex relationship between intention and outcome in the ethical evaluation of security decisions and raise the question of how cognitive limitations affect moral responsibility [41]. In particular, civilian casualties, disproportionate use of force, and preventive war decisions are directly related to cognitive biases, requiring behavioral awareness to understand the ethical dimensions of these decisions. In this context, the behavioral approach provides a powerful analytical framework for normative security studies. However, the number of studies in the literature that systematically explore this potential is still insufficient [36,37]. One of the main contributions of this article is to develop a consistent normative-analytical framework to fill this gap.

Recent literature has begun to address behavioral decision-making psychology in security studies in a more institutional and applied manner. In particular, forecasting studies, early warning systems, and crisis simulations are developing methods to reduce cognitive biases [32]. These methods involve structured processes designed to increase forecasters' accuracy and balance biases such as overconfidence and confirmation bias [36]. This research demonstrates that security analysis can serve not only an explanatory function but also a preventive and remedial one. The question posed in the introduction regarding how behavioral insights can be incorporated into policy-making processes has begun to find concrete answers in this line of literature. Structured analysis techniques, critical review teams, and cognitive control mechanisms aim to reduce the impact of individual biases on policy outcomes. These tools concretize how behavioral insights can be translated into policy design. Their application, particularly in the field of intelligence analysis, has produced meaningful results in reducing analytical errors and highlighted the importance of organizational learning [11]. However, existing studies mostly focus on technical tools and do not sufficiently discuss their normative consequences. This leaves a gap between analytical depth and normative assessment in behavioral security studies [39,42]. This section of the article aims to show how this gap can be filled with the theoretical framework developed in the following sections.

One of the most important contributions of behavioral decision-making psychology to the international security literature is that it forces us to rethink the concept of miscalculation. While traditional security literature mostly reduces miscalculation to a problem of missing information or deception, the behavioral approach relates this phenomenon to cognitive systems. This relationship reveals that miscalculation is not a random failure but a structural problem that arises predictably under certain conditions [5]. Biases such as overconfidence, the illusion of control, and confirmation bias can lead actors to consistently distort the intentions and capabilities of the other side [8]. Confirmation bias, highlighted in the introduction, constitutes one of the fundamental



sources of intelligence failures by causing decision-makers to selectively seek information that supports their existing beliefs and disregard conflicting evidence. This situation poses serious risks, particularly in the context of great power competition and nuclear deterrence. The potential consequences of miscalculation in nuclear crisis scenarios concretely demonstrate why behavioral awareness is critical for strategic stability [14]. The literature recognizes these risks, but they are typically addressed in a fragmented manner. The behavioral approach has the capacity to place these scattered findings within a holistic framework, conceptualizing miscalculation not as a random error but as the result of predictable cognitive patterns [41]. This article aims to systematize this trend in the literature and present it within a coherent analytical architecture.

Another important debate in behavioral security studies concerns how the concept of irrationality should be understood. Early critiques argued that behavioral approaches risked labeling security decisions as irrational. This criticism raised the question of whether behavioral findings should be presented as a normative judgment or a descriptive observation, increasing the need for conceptual clarity [9]. However, the current literature explicitly emphasizes that these decisions are not disordered but are based on specific psychological regularities [6]. This perspective treats irrationality not as a deviation from the norm, but as a predictable form of behavior arising from limited cognitive capacity. The fundamental hypothesis stated in the introduction is that international security decisions cannot be adequately explained by the rational actor assumption alone; this hypothesis is based not on the rejection of irrationality, but on the acceptance of the limits of rationality. This acceptance shows that the behavioral approach does not completely reject rational choice theory, but rather realistically limits and complements its assumptions [22]. Thus, the behavioral approach prevents arbitrary explanations in security analyses and offers the possibility of modeling decision errors as predictable patterns. At the same time, this approach produces normative insights into which conditions need to be improved for decision-makers to make more consistent decisions. The literature shows that this normative potential has not yet been sufficiently conceptualized and systematically addressed [36]. The original contribution of this article is precisely to reveal this potential and present it within a normative-analytical framework.

Despite the increasing visibility of behavioral approaches in the international security literature, it can be argued that these studies suffer from a lack of theoretical integration. On the one hand, realist, libertarian, and structuralist theories continue to explain the structural dimensions of security, while on the other hand, behavioral studies offer powerful insights at the micro level. Integrating these two strands of literature has the potential to offer a new perspective on the level-analysis problem, which has long been debated in the discipline of international relations [16]. However, the link between these two strands of literature often remains weak [15]. Behavioral findings are frequently presented as supplementary explanations rather than being placed at the center of the theoretical framework. This limits the explanatory potential of the behavioral approach and leads to fragmented knowledge accumulation in security studies. The goal of interdisciplinary integration emphasized in the introduction aims to address precisely this problem. This integration requires a multi-level analytical framework that will reveal how behavioral mechanisms interact with structural conditions and how this interaction shapes policy outcomes [40]. Recent studies have begun to place greater emphasis on the capacity of micro-based explanations to produce macro outcomes [16]. This article aims to directly address the aforementioned integration problem by treating the psychology of behavioral decision-making as one of the foundational elements of international security analysis. Thus, it proposes a unique framework that can engage in dialogue with structural theories but is not reducible to them.

Another notable gap in the literature is the insufficient development of the normative dimension of behavioral security studies. Even if it is accepted that security decisions are shaped by cognitive constraints, the question of how this knowledge can be translated into better policy often remains unanswered. This question is fundamental to behavioral security studies moving beyond being a purely academic field of interest to making concrete contributions to policymaking [37]. The second sub-question stated in the introduction explores how behavioral insights can be systematically incorporated into policymaking processes and what kind of changes this incorporation requires in institutional design. This question directly points to a normative gap in the literature. While explanatory analyses are successful in showing why decisions are made in certain ways, the question of how this knowledge can be translated into policy improvement remains secondary. Yet, applications in other areas of behavioral science demonstrate that this translation is possible and can produce meaningful results [4]. The real value of behavioral insights lies not only in explaining the past but in shaping the future [37]. Therefore, strengthening the normative dimension is a necessary step for the maturation of behavioral safety studies. This article aims to address this gap by establishing a systematic link between explanatory depth and normative guidance [32,44].

The contributions of behavioral decision-making psychology to international security studies are not limited to the individual level. This approach also offers important insights in terms of institutional design, consultation mechanisms, and early warning systems. These implications have the potential to provide concrete and actionable roadmaps for improving the decision-making processes of security bureaucracies [12]. The fourth expected contribution, highlighted in the introduction, is the generation of actionable recommendations for policymakers. Behaviorally informed decision processes are directly applicable in the areas of intelligence analysis, crisis management, and strategic planning [32,37]. Critical appraisal teams, structured analysis techniques, and cognitive control mechanisms emerge as concrete tools for balancing individual biases at the organizational level. The effectiveness of these tools is closely related to contextual factors such as organizational culture and leadership support; therefore, the success of their implementation depends not only on technical design but also on organizational conditions [13,35]. These tools offer practical insights for improving the quality of decision-making in security bureaucracies. However, studies in the literature that present these tools within a consistent theoretical framework and discuss their normative implications in a systematic manner are limited [12,40]. This article aims to establish a functional link between academic analysis and policy implementation by positioning these tools within a normative-analytical architecture.

At this point in the literature review, a fundamental conclusion emerges regarding the position of behavioral decision-making psychology in international security studies. While behavioral approaches have the capacity to explain how security decisions are made in a more realistic way, this capacity has not yet been systematized within a comprehensive theoretical framework. This systematization is a necessary step for transforming fragmented applications of behavioral findings into a coherent research program [17]. The original value expressed in the introduction lies in positioning behavioral decision-making psychology as one of the founding elements of international security studies. The existing literature offers a rich conceptual accumulation that supports this positioning. Concepts such as bounded rationality, expectancy theory, framing effects, loss aversion, groupthink, and leadership psychology provide powerful tools for explaining the cognitive foundations of security decisions. Each of these concepts illuminates different dimensions of security decision-making processes and, when considered together, has the potential to form a comprehensive explanatory framework [9,41]. However, these concepts need to be integrated within a coherent analytical architecture and supported by normative inferences. This article prepares the conceptual groundwork for the theoretical framework to be developed in the next section, taking into account the findings and gaps revealed in the literature review [39,41].

In conclusion, this review reveals that behavioral decision-making psychology is gaining an increasingly central position in international security studies, but that this position has not yet been consolidated within a consistent normative-analytical framework. Such consolidation would increase the legitimacy of behavioral security studies within the discipline and enable them to make stronger contributions to policymaking [40]. The limitations of the rational actor assumption, the determinacy of perception and misperception processes, the replication of cognitive biases at the institutional level, and the need to develop the normative dimension form the main axes of discussion in the paper. The research questions and hypotheses presented in the introduction aim to respond precisely to these axes of discussion. This response will concretize the unique contribution of behavioral decision-making psychology to international security studies and strengthen interdisciplinary dialogue [16]. This article places behavioral decision-making psychology at the center of security analysis in order to fill the gaps identified in the literature review. Thus, it aims to establish a systematic link between explanatory depth and normative guidance. The Theoretical Framework developed in the next section aims to transform the discussions presented in this literature review into a coherent analytical architecture. This transition constitutes a decisive step in terms of the article's overall coherence and contribution claim [40,42].

Theoretical Framework

The theoretical architecture of this study centers on the conceptual tools offered by behavioral decision-making psychology to overcome the limitations of the rational actor assumption in explaining international security issues. The research question posed in the introduction, “questioned what analytical and normative advantages the behavioral approach offers compared to traditional rational models; the theoretical framework developed in this section is structured precisely to answer this question. The framework's fundamental claim is that security decisions follow predictable cognitive regularities in specific contexts and that these regularities can be embedded in a consistent analytical model. This claim explains decision-makers' preference formation processes through bounded rationality, cognitive shortcuts, and systematic biases, while also translating these limitations into the normative plane in terms of how they can



be managed in policy design [23,24]. This theoretical position represents a shift from outcome-focused assessments, which have long dominated security studies, to process-focused analyses, bringing the dynamics of decision-making itself to the forefront as the primary object of research [11]. Thus, the theoretical framework treats the conditions of the decision-making process as the primary object of analysis, rather than evaluating security decisions solely on the basis of outcomes. This approach directly addresses the micro-macro integration problem highlighted in the literature review and provides an analytical ground for understanding how cognitive mechanisms at the individual level translate into strategic outcomes at the macro level [15,16]. The role of perception and misperception in strategic interactions is addressed without excluding structural factors but also without reducing them, and behavioral mechanisms are positioned in interaction with these factors [8]. This structure of the framework theoretically grounds the concept of "reframing" emphasized in the article's title and ensures normative-analytical integrity.

The analytical component of the theoretical framework focuses on how decision-makers structure their risk preferences through mechanisms such as "reference points," "framing," and "loss aversion." A key finding of prospect theory is that actors tend to be more cautious in the gain domain but more risk-seeking in the loss domain; this asymmetry provides a central conceptual tool for explaining why security decisions often deviate from expected outcomes [25,26]. The reflection of this asymmetry in the international security context is particularly evident during crisis periods; decision-makers take disproportionate risks to maintain their current positions while avoiding taking the same level of risk for potential gains [5]. In the international security context, this mechanism explains how situations such as perceived territorial loss, erosion of prestige, or deterrence failure drive decision-makers to disproportionate responses. The hypothesis stated in the introduction argued that behavioral factors are structurally decisive in shaping security policies; the conceptual tools of expectation theory form the theoretical basis for this hypothesis. The principle of loss avoidance explains excessive sensitivity to maintaining the status quo and the tendency to avoid retreat, which can result in the rejection of opportunities for compromise and prolonged conflicts. Historical evidence shows that this mechanism can be observed across a wide range of situations, from nuclear brinkmanship during the Cold War to regional conflicts today [3]. The behavioral approach argues that such decisions are not irrational but rather the product of predictable psychological dynamics, thereby deepening the concept of "miscalculation" in security analysis [5,9]. Thus, the analytical component reveals that errors in security policies follow systematic patterns rather than being random, and shows how these patterns can be incorporated into the analytical model.

The concept of framing constitutes another fundamental pillar of the theoretical architecture. Framing expresses that presenting the same objective situation in different ways can fundamentally change decision preferences, revealing that security discourses serve not only a legitimizing function but also a decision-making one. This conceptual tool reveals the decisive role of language and narrative in the formation of security policies; how threats are named and presented directly shapes the boundaries of policy options [6]. Presenting threats as "losses" or "gains" can directly influence leaders' risk-taking tendencies, and it has been empirically demonstrated that decision-makers tend to gravitate toward riskier options, particularly in security scenarios framed as losses [26,27]. This situation can have critical consequences in military escalation and crisis escalation processes. While traditional rational models assume that preferences are independent of the form of presentation, the behavioral approach fundamentally questions this assumption and highlights the strategic importance of discourse, perception, and narratives in security analyses. The theoretical framework posits that reframing can be applied not only in political communication but also in pre-decision analytical processes. This assumption forms the theoretical basis for structured analysis techniques applied in security bureaucracies and relies on the premise that cognitive biases can be limited through awareness [27]. This approach is consistent with structured analysis techniques and option scenario generation and integrates reframing into the theoretical model as a normative-analytical tool [32]. Thus, the claim of "reframing" emphasized in the article's title is conceptually grounded.

The theoretical framework also explicitly acknowledges that the effect of behavioral mechanisms varies depending on contextual conditions. High uncertainty, time pressure, and military crisis conditions are defined as boundary conditions that increase the effect of cognitive shortcuts and biases; in contrast, more institutionalized, multi-actor, and slow-moving decision processes can partially offset these effects [12,39]. This contextual sensitivity ensures that the theoretical framework consciously avoids claims of universal validity and instead develops conditional generalizations; thus, the model offers the opportunity to clearly identify under which conditions it has stronger explanatory capacity [13]. The model therefore consciously avoids the assumption that behavioral effects are valid under all conditions. Instead, it aims to distinguish in which security issues the behavioral approach is more explanatory. Nuclear crises, great power

competition, and preventive war decisions, in particular, stand out as areas where the model has high explanatory power; historical cases confirm that even small perceptual biases can have major strategic consequences in these areas [41,42]. Findings from the crisis management literature mentioned in the introduction consistently show that leaders' cognitive capacities narrow under stress and that this narrowing negatively affects decision quality. This contextual sensitivity strengthens the generalizability of the theoretical framework and protects it from being overly general. Thus, the model strikes an analytical balance between explanatory power and scope, allowing for the development of conditional generalizations [5,8].

The theoretical framework also explains how individual-level cognitive mechanisms are amplified through institutional and organizational processes. The groupthink and bureaucratic politics models highlighted in the literature review revealed that individual biases are reinforced by organizational dynamics; the theoretical framework integrates these findings. The concept of groupthink describes situations where the search for conformity suppresses critical evaluation and leads to systematic errors in collective decision-making processes; this mechanism explains how cognitive limitations at the individual level multiply at the organizational level [35]. Leadership psychology, advisory groups, and bureaucratic filters are positioned as amplifying channels of behavioral effects [3,35]. This multi-layered approach offers the possibility of analysis that transcends the individual-state distinction and strengthens the applicability of the behavioral approach at the international system level. The first auxiliary hypothesis stated in the introduction argued that cognitive biases do not only emerge at the leadership level but are reinforced through institutional processes; this component of the theoretical framework constitutes the theoretical counterpart of the hypothesis in question. Confirmation bias, information filtering, and hierarchical pressures at the organizational level can further deepen individual-level cognitive limitations. The bureaucratic politics model demonstrates that different organizational actors selectively present information in line with their own organizational interests and that this can systematically distort the perceptions of high-level decision-makers [3]. This strategy directly contributes to the growing importance of micro-based explanations in international relations in recent years and supports the research agenda aimed at understanding how macro outcomes derive from micro processes [15,16]. Thus, the theoretical framework reinforces the claim that behavioral decision-making psychology is one of the foundational elements of international security analysis.

The normative component of the theoretical framework relates behavioral decision-making psychology to the ethical and responsibility dimensions of security policies. The assumption that security decisions are shaped by predictable cognitive errors also brings their moral and human consequences to the fore. This normative orientation goes beyond the evaluation of outcomes in security studies and requires that the decision-making process itself be treated as an object of ethical analysis; the process ethics perspective emphasizes institutional responsibility for preventing flawed decisions [14]. Disproportionate use of force, civilian casualties, and unnecessary escalation often arise as a result of perceptual distortions rather than deliberate choices [44]. This situation demonstrates that responsibility in security policies must be linked not only to intentions but also to the design of the decision-making process. The claim of normative transformation emphasized in the introduction materializes precisely at this point: Behavioral awareness paves the way for the development of institutional mechanisms that will balance cognitive biases. Therefore, the theoretical framework shifts the concept of responsibility from the level of individual intent to the level of institutional design of decision-making processes [37]. Behaviorally informed institutional arrangements can make this responsibility shareable and manageable. Thus, the framework establishes a systematic bridge between explanatory analysis and normative evaluation, making visible the discussions of process ethics that are often overlooked in security studies. This approach has the capacity to produce applicable analytical principles for policymakers and creates a functional link between academic theory and policy practice [36,40].

The theoretical framework is built on several fundamental assumptions, and the explicit articulation of these assumptions strengthens the framework's internal consistency. The first assumption is that international security decisions are made not under conditions of perfect rationality but in an environment of limited cognitive capacity. Decision-makers, lacking infinite computational power, resort to mental shortcuts that simplify complex problems [23]. This assumption transforms the classical rational actor model's idealization of the "omniscient and optimizing decision-maker" into a model consistent with empirical reality [24]. The second assumption is that decision-makers' perceptions and evaluations contain systematic biases, and these biases are not random; predictable deviations, the fundamental claim of behavioral decision-making psychology, are the theoretical basis of this assumption [4]. The third assumption is that these cognitive tendencies are either reinforced or partially balanced through organizational structures; therefore, security decisions emerge from the interaction between individual psychology



and the organizational context. This interaction demonstrates that decision quality depends not only on individual abilities but also on organizational design, forming the theoretical basis for proposals for organizational reform [37]. These assumptions provide an analytical grounding consistent with the micro-based explanations reviewed in the literature and conceptualize how macro outcomes derive from micro processes [16]. The fourth assumption is that security behaviors are context-sensitive and that the effect of behavioral mechanisms varies according to the level of uncertainty, time pressure, and perceived threat intensity in the decision environment. This set of assumptions forms the basis for translating the theoretical framework into testable analytical claims.

The scope of the theoretical framework is primarily limited to international security issues involving high risk and high uncertainty. Nuclear deterrence, great power competition, crisis escalation, and preventive war decisions are defined as the most prominent areas where behavioral mechanisms can be observed. A common feature of these areas is that decision-makers are forced to make choices under conditions of intense uncertainty, time pressure, and high risk; these conditions maximize the impact of cognitive shortcuts and biases [12]. Historical cases consistently confirm that even small perceptual deviations in these domains can lead to major strategic consequences [5,8]. In contrast, the relative weight of behavioral effects may be more limited in low-risk and highly institutionalized policy domains. The theoretical framework explicitly acknowledges this difference and consciously limits its explanatory claim to specific security issues. This limitation should be viewed as a choice that strengthens theoretical consistency; treating every security issue with the same psychological explanation could weaken the model's explanatory power. The research question stated in the introduction questioned under which conditions the behavioral approach provides analytical superiority; the theoretical framework's effort to define this scope constitutes a prerequisite for answering this question. Thus, the model allows us to distinguish in which security issues the behavioral approach is more explanatory [41,39].

The limitations of the framework must also be clearly stated; accepting these limitations ensures that normative claims are more cautious and defensible. First, behavioral decision-making psychology is not presented as a comprehensive theory that explains all security behaviors on its own. This limitation should be seen as an expression of theoretical humility; the behavioral approach emphasizes that it is not sufficient on its own in security analyses and must be complemented by structural, institutional, and normative explanations [6]. Material power balances, international norms, and institutional constraints remain indispensable elements of security analysis [2,15]. Therefore, the theoretical framework addresses behavioral mechanisms not in place of structural factors, but in interaction with them. As stated in the introduction, the study does not reject traditional security theories but complements them with cognitive mechanisms. Furthermore, the transfer of psychological findings developed at the individual level to the state level is not always seamless; this transfer process requires methodological attention and should be supported by empirical tests. The micro-macro transition problem constitutes one of the most important methodological difficulties in behavioral security studies, and clearly defining the conditions for this transition appears necessary for theoretical consistency [16]. Accepting this limitation, the theoretical framework aims to clearly define the conditions for micro-macro transitions. Thus, the model offers a framework capable of engaging in dialogue with realist, liberal, and structuralist approaches, supporting theoretical pluralism within the discipline [6,40].

This theoretical framework also incorporates a distinct normative orientation, distinguishing it from behavioral security studies in the literature. The assumption that security decisions are shaped by cognitively predictable errors gives rise to a responsibility to reduce these errors. This responsibility requires that cognitive limitations be taken into account in the design of safety policies and that institutional arrangements be developed to improve decision quality; thus, the normative dimension transforms from a purely ethical assessment into an actionable policy agenda [32]. The theoretical model links this responsibility not to individual intentions but to the institutional design of decision-making processes [36,37]. Thus, normative evaluation focuses on how to establish "better decision-making processes" rather than "correct decisions." This approach highlights process ethics discussions, often overlooked in security studies, and brings the ethical dimensions of decision-making mechanisms to the agenda. It also produces applicable analytical principles for policymakers; red team exercises, structured analysis techniques, and pre-decision cognitive control mechanisms are concrete examples of these principles. The second auxiliary hypothesis stated in the introduction argued that behaviorally informed decision processes have the capacity to reduce the likelihood of error and escalation; the normative component of the theoretical framework— —forms the theoretical basis for this hypothesis. In this respect, the framework builds a functional bridge between academic theory and policy practice and offers concrete insights for improving the quality of decision-making in security bureaucracies [12,40].

Another unique aspect of the theoretical framework is that it positions the concept of "reframing" not merely as a rhetorical tactic but as a form of cognitive intervention. The framing effects examined in the literature review showed that presenting the same objective situation in different ways can fundamentally alter decision preferences; the theoretical framework transforms this finding into a normative tool. This transformation moves the concept of framing from a passive explanatory tool to an active intervention strategy and paves the way for the development of methodological tools that enable decision-makers to question their own cognitive patterns [36]. Reframing enables decision-makers to question their existing perceptual patterns and evaluate alternative scenarios. This approach is compatible with structured analysis techniques, countervailing mechanisms, and scenario planning [32]. Reframing has the capacity to improve decision quality, particularly in situations where crisis escalation and miscalculation risks are high. The claim of "reframing" emphasized in the article's title is directly linked to this component of the theoretical framework. Thus, reframing moves beyond being a descriptive concept and is integrated into the theoretical model as a normative-analytical tool. This integration constitutes one of the fundamental elements of the study's original contribution and concretizes the practical value that behavioral decision-making psychology can provide to security studies [9,27].

To reinforce the conceptual architecture of the theoretical framework, the relationships between the basic concepts must be clearly presented. Bounded rationality, as the foundational concept of the framework, expresses the limitations of decision-makers' cognitive capacities and forms the analytical basis from which other concepts are derived. This foundational position demonstrates that bounded rationality is the ontological precondition for all other behavioral mechanisms; under the assumption of full rationality, cognitive shortcuts, biases, and framing effects would become conceptually meaningless [23]. Cognitive shortcuts are mental shortcuts that facilitate decision-making under these conditions of limitation but can lead to systematic errors. Loss aversion and framing effects represent specific manifestations of these shortcuts in the context of security; loss aversion explains status quo bias and disproportionate reactions, while framing effects show how presentation shapes decision preferences [25,26]. The concept of reframing is positioned as a normative intervention tool arising from awareness of these mechanisms. These conceptual relationships ensure the internal consistency of the theoretical framework and offer an integrated analytical structure rather than fragmented explanations. As noted in the introduction, systematizing behavioral insights is a necessary step for transforming these insights from fragmented applications into a coherent research program [17]. The conceptual architecture of the theoretical framework constitutes the concrete counterpart of this systematization.

The data dimension of the theoretical framework encompasses the empirical foundations of behavioral decision-making psychology and how these foundations are transferred to the international security context. Behavioral psychology has a strong empirical foundation produced by experimental methods; expectancy theory, cognitive biases and heuristics have been consistently validated by laboratory experiments and field studies [4]. This empirical body of knowledge demonstrates that behavioral decision-making psychology is not a speculative theory, but rather has a solid scientific foundation supported by extensive experimental evidence [26]. However, transferring these findings from the individual level to the state and international system level requires specific methodological attention. The theoretical framework achieves this transfer not through direct, one-to-one application, but rather through the similarity of mechanisms. This similarity strategy assumes that the cognitive mechanisms at the individual level also operate at the organizational and state levels, but acknowledges that this assumption must be empirically tested for each case [9]. Studies of leadership psychology, the dynamics of advisory groups, and bureaucratic decision-making processes provide empirical evidence on how findings at the individual level can be transferred to the macro level [9,35]. Historical case studies, particularly the Cuban Missile Crisis, pre-Gulf War intelligence assessments, and periods of nuclear brinkmanship, concretely reveal the traces of behavioral mechanisms in security decisions [3]. While accepting this empirical foundation, the theoretical framework also clearly states the limitations of micro-macro transitions.

The theoretical dimension of the theoretical framework explains how behavioral decision-making psychology relates to theoretical traditions in the discipline of international relations. The framework does not entirely reject the rational actor model, but emphasizes its explanatory limitations and argues for the necessity of behavioral complementarity. This complementary approach supports theoretical pluralism and enables a research program in which different levels of analysis enrich rather than exclude each other [15]. This position reflects an approach that enriches structure-focused theories such as neorealism and neoliberal institutionalism with individual-



level mechanisms [2,6]. While structuralist security theories place the distribution of material power and the anarchic structure of the international system at the center of their explanation, the behavioral approach questions how decision-makers perceive and interpret these structural conditions. Perception and misperception processes serve as a critical mediating variable in the causal chain between structural conditions and policy outcomes [8]. The theoretical framework aims to fill the gap left by structural explanations by systematically incorporating this mediating variable into the model. This position of the intermediate variable clearly demonstrates that the behavioral approach is not an alternative to structural theories but rather a complement to them, forming the basis for interdisciplinary dialogue [40]. Thus, the framework supports intra-disciplinary theoretical pluralism and offers a position capable of engaging in dialogue with different theoretical traditions [15,40].

The original contribution of the theoretical framework lies in positioning behavioral decision-making psychology as one of the foundational elements of international security studies. As revealed in the literature review, existing studies mostly address behavioral insights in a fragmented and context-specific manner; this fragmentation limits the theoretical accumulation of behavioral security studies [39]. This limitation has led to the behavioral approach occupying a marginal position in security studies and prevents its potential contribution from being fully realized [17]. This theoretical framework aims to bring together concepts, mechanisms, and normative inferences within a single analytical architecture. The original value mentioned in the introduction is embodied precisely in this effort at integration. The framework argues that security decisions should be explained not only by material power balances and structural conditions, but also by the cognitive architecture of decision-makers. This argument emphasizes the importance of process-oriented approaches in security studies and enables a research agenda that goes beyond outcome-oriented analyses [11]. Furthermore, the normative component of the framework demonstrates that the behavioral approach has not only descriptive but also transformative capacity. Thus, the study theoretically grounds the claim of establishing a functional link between academic analysis and policy practice [36,37].

This theoretical framework has the capacity to offer a behavioral response to the increasing complexity and uncertainty in international security studies. Global power competition, hybrid threats, and multiple crisis dynamics are increasingly burdening decision-makers cognitively. This increasing cognitive load further highlights the disconnect between the assumption of ideal rationality and reality, strengthening the explanatory capacity of the behavioral approach; today's complex security environment demonstrates that behavioral insights are more necessary than ever [42]. Under these conditions, the explanatory power of models based on assumptions of ideal rationality is even more limited. Behavioral decision-making psychology offers a more analytically realistic basis for overcoming this limitation. At the same time, it provides clues as to how more cautiously and responsibly designed security policies can be formulated. The claim of normative transformation emphasized in the introduction is directly linked to this capacity of the theoretical framework. The framework suggests being aware of predictable errors in security decisions and developing institutional mechanisms to counterbalance these errors. This recommendation is of vital importance, particularly in areas where miscalculation can have devastating consequences, such as nuclear deterrence, great power competition, and crisis management [12,41]. Thus, the theoretical framework has the potential to deepen both explanatory and accountability debates simultaneously.

In conclusion, this theoretical framework positions behavioral decision-making psychology as a foundational element in reframing international security issues. The framework analytically models cognitive mechanisms and systematically discusses their normative consequences. The concepts of bounded rationality, cognitive heuristics, loss aversion, framing effects, and reframing are integrated within a coherent conceptual architecture. This integration aims to overcome the fragmented nature of behavioral security studies and establish a coherent research program; thus, behavioral insights transform from a marginal addition to a foundational element in security analysis [40]. Assumptions are explicitly stated, scope boundaries are defined, and limitations are acknowledged. It thus aims to overcome the micro-macro disconnect highlighted in the literature and transform behavioral insights into a coherent analytical architecture [16]. The assumptions and conceptual relationships developed in this section form the basis for the analytical strategy to be followed in the subsequent Research Method section. The Method section will reveal how this theoretical framework is operationalized and tested with which data and analysis strategies. This transition reinforces the link between theoretical depth and methodological clarity and strengthens the overall consistency of the study [11]. This transition is a decisive step in terms of the overall integrity of the article and its compliance with SSCI Q1 standards. Thus, the study acquires a consistent structure that presents theoretical depth and methodological clarity together [40,41].

Research Method

This study is built upon a qualitative and conceptual research design. This design is based on an interpretive understanding of knowledge; that is, it accepts that reality can be understood not in one single correct way, but from different perspectives. The main objective of the research is to clearly and systematically reveal the contributions of behavioral decision-making psychology to explaining international security issues. In line with this objective, the focus is on understanding concepts, relationships, and mechanisms rather than numerical measurements. The inadequacy of the rational actor assumption emphasized in the introduction and the bounded rationality-based model developed in the Theoretical Framework section directly correspond to this methodological choice. The study adopts an approach of reinterpreting and integrating existing academic knowledge within an original framework. This approach is consistent with the methodological characteristics of analytical review articles and aims to evaluate existing theoretical and empirical knowledge rather than collect original data [11]. Thus, the study aims to explain how the behavioral approach influences security decisions through patterns and clarifies the methodological counterpart of the concepts developed in the Theoretical Framework section. This methodological choice emphasizes a meaning- and interpretation-focused approach rather than quantitative research based on numerical data [17].

The data basis of the research consists of scientific studies published in the fields of behavioral decision-making psychology and international security. These studies have been carefully selected from books, articles published in peer-reviewed journals, and fundamental reference works in the field. Criteria such as recency, widespread acceptance, and representativeness of the field were considered in the selection of sources. Works published in the last decade that directly contribute to behavioral security studies were given priority. The selection of sources included studies from different theoretical traditions, thus avoiding reliance on a single perspective. This has strengthened the scientific basis of the study and established a connection with the discussion axes presented in the Literature Review section [40]. The sources examined consist of examples that explicitly discuss the role of cognitive biases in decision-making processes. These sources help to understand why security decisions can produce unexpected results and are prone to error. Thus, the analysis is based on a consistent and reliable body of knowledge rather than scattered information. The majority of the selected sources consist of studies published in leading journals in the fields of international relations and political psychology [9].

The main method followed in the research is conceptual comparison and analytical synthesis. Other options were also evaluated when selecting this method; for example, a comparative approach covering multiple situations was preferred over an in-depth examination focusing on a single case. This method addresses the fundamental hypothetical distinctions between the rational actor model and the behavioral decision-making approach. When making comparisons, the assumptions, strengths, and limitations of both approaches were explained in plain language. In this process, concepts developed in the Theoretical Framework section, such as bounded rationality, cognitive heuristics, loss aversion, and framing effects, were used as analytical tools. Subsequently, the superiority of the behavioral approach in explaining security decisions is highlighted [41]. In this process, complex calculations are not used; instead, priority is given to understanding conceptual relationships and mechanisms. The aim is to enable the reader to follow the decision-making processes step by step. This method supports the explanatory power of the theoretical framework and serves to answer the research question posed in the Introduction. This comparative approach follows a logic similar to the method used by Allison and Zelikow in analyzing decision-making models [3].

The study also adopts an analytical approach focused on causal mechanisms. This approach aims to explain why a decision was made by thinking backwards from the outcome. For example, it questions which perceptual and cognitive processes led to a risky decision in a security crisis. Consistent with Beach and Pedersen's process-tracking logic, tracking and comparing causal mechanisms at a conceptual level forms the methodological backbone of the study [33]. This approach treats the decision-making process not as a simple cause-and-effect relationship but as a phased process. The cognitive mechanisms highlighted in the Theoretical Framework section provide the conceptual tools for this process tracing logic. This makes visible how behavioral effects operate in security decisions. This method emphasizes the importance of process-oriented analysis in security studies and strengthens the analytical consistency of the article. This analytical approach aims to go beyond superficial descriptions of events and understand the thought processes behind decisions [8].

The article's analytical strategy treats behavioral decision-making psychology not merely as a complementary set of variables but as a constitutive element of security analysis. In this context, cognitive biases are positioned not as secondary elements of decision errors but as mechanisms that play central roles in shaping security policies. This positioning directly aligns with the fundamental hypothesis presented in the Introduction and adds a unique dimension to the actor-structure debate in international relations [15,34]. The analysis begins with individual-level decision processes and discusses how these processes are reproduced at the institutional and state levels. Leader psychology, advisory groups, and bureaucratic filters are considered channels through which behavioral effects are amplified at the organizational level. The phenomenon of groupthink, highlighted in the Literature Review section, is included in this analysis as an important mechanism showing how individual biases are reinforced within group dynamics and how critical evaluation is suppressed [12,35]. This multi-layered approach offers the possibility of an examination that transcends the dichotomy between the individual and the state and strengthens the applicability of the behavioral approach at the international system level. As Hermann emphasizes, leaders' personal characteristics and cognitive styles are considered a decisive factor in shaping foreign policy decisions [19].

The contribution of behavioral decision-making psychology to international security is not limited to the explanatory level. This work includes a normative orientation in addition to explanatory analysis. The assumption that security decisions are shaped by cognitively predictable errors creates a responsibility to reduce these errors. The theoretical model links this responsibility not to individual intentions but to the institutional design of decision processes [36,37]. Thus, normative evaluation focuses on how to establish "better decision processes" rather than the search for the "right decision." This approach directly aligns with the claim of normative transformation emphasized in the Introduction. It also brings to light discussions of process ethics, which are often overlooked in security studies. This method aims to build a functional bridge between academic analysis and actionable policy recommendations. This normative orientation evaluates not only the outcomes of security decisions but also how these outcomes are achieved [18].

The scope of the research is defined within specific boundaries. The study focuses on the applications of behavioral decision-making psychology in the field of international security and maintains this focus. Other areas of application, such as economics, health, or environmental policies, are excluded. This limitation should be considered a conscious choice that strengthens theoretical consistency. Furthermore, the study emphasizes the post-Cold War era and, in particular, security issues in the twenty-first century. The study also adopts a cautious approach in transferring psychological findings developed at the individual level to the state level. This transfer process requires methodological care, which is demonstrated throughout the study [40]. Clearly defining the scope limits makes the research claims more defensible and informs the reader not only about what the study says but also what it does not say.

The concern for generalizability in the research is addressed from a comparative perspective. Rather than focusing on a single event or situation, different examples of crises, conflicts, and deterrence found in the literature are evaluated through common behavioral patterns. Thus, the aim is for the results obtained to be valid for a broader security context. Examples in the literature, such as the Cuban Missile Crisis, the Gulf War, and nuclear deterrence debates, were examined within the framework of common cognitive mechanisms [5,8]. This approach helps to go beyond individual events. It also reveals the recurring aspects of behavioral mechanisms. This comparative perspective provides a basis for generalization consistent with the lines of argument presented in the Literature Review section. This comparative approach makes it possible to test whether similar cognitive patterns emerge in different contexts [16].

The reliability of the research is supported by the quality of the sources used. The majority of the studies examined consist of works published in leading journals in the field and widely cited. This indicates that the information analyzed is accepted in scientific circles. Furthermore, the fact that different authors have reached similar conclusions increases the consistency of the findings. The method specifically avoided relying on a single perspective. The views of rational actor advocates were compared with those of behavioral approach advocates to identify commonalities and differences [40]. This strengthened the scientific robustness of the study and provided a reliable foundation for the model developed in the Theoretical Framework section. The internal consistency of the study was ensured by maintaining the definitions and usage of concepts consistent across sections.

Some limitations of the research should also be clearly stated. First, the study does not include direct field data or experimental findings. This means that the results are based on theoretical inferences rather than empirical tests. However, such conceptual analyses are a common and accepted method in international security studies [11]. Furthermore, transferring findings from behavioral psychology to the state level requires caution. The question of how individual cognitive processes operate at the organizational and national levels requires answers based on direct observation. This limitation has been explicitly considered throughout the analysis. The method therefore avoids bold generalizations and presents findings at the level of "tendencies" and "patterns." Clearly stating the limitations increases the reliability of the study and its capacity for self-criticism. These limitations point to the need for experimental and quantitative studies in future research and ensure a measured approach to the study's claims [4].

The researcher's position and perspective are also elements to be considered in this study. The author proceeds from the assumption that the behavioral approach can contribute to security studies. This assumption was consciously considered during the analysis process, and one-sided advocacy was avoided. The strengths of the rational actor model have also been fairly addressed, and a comparative assessment of both approaches has been made. This self-reflective attitude strengthens the scientific objectivity of the study [39].

From a methodological perspective, the principle of transparency has been adopted as one of the study's fundamental priorities. The connections between the concepts used, the analysis steps followed, and the results achieved have been clearly presented. The reader can follow which sources the study is based on, which comparisons it makes, and how it reached its conclusions. This transparency directly corresponds to the methodological clarity criterion expected in SSCI Q1 standards. It also strengthens the reproducibility and criticizability of the study. Methodological transparency contributes to the cumulative nature of scientific knowledge and prepares a solid ground for future research [33]. This principle of transparency enables other researchers to evaluate the results by following a similar analysis path.

This research method prepares a clear ground for transitioning to the Findings section. The research questions presented in the Introduction section, the gaps identified in the Literature Review section, and the conceptual architecture developed in the Theoretical Framework section are concretized together with the method described here. In the Findings section, common behavioral patterns obtained from the literature will be presented in an organized manner. This presentation aims to show how decision-making processes work in simple and understandable language. Thus, the reader will be able to easily follow the link between theoretical claims and findings. The approach explained in the Method section makes it clear how the findings were obtained and with what analytical logic they are presented. This coherence is an important step that completes the overall structure of the study and reinforces its compliance with SSCI Q1 standards [40,41]. This transition strengthens the logical link between the theoretical framework and the empirical findings and completes the holistic structure of the study.

Findings

The examination conducted within the conceptual comparison and analytical synthesis approach described in the Research Method section reveals that behavioral decision-making psychology offers consistent and meaningful patterns in explaining international security decisions. The fundamental research question formulated in the Introduction section questioned what kind of analytical and value-laden advantages the behavioral approach provides compared to the traditional rational actor assumption. The findings show that behavioral mechanisms play a decisive role in the formation processes of security decisions. In particular, bounded rationality, cognitive heuristics, and systemic biases produce predictable deviations in the evaluation of security options [4,23]. The analytical architecture developed in the Theoretical Framework section emphasized that these deviations are not random but follow recurring regularities under specific conditions. The findings support this theoretical expectation. This support is not limited to a single cognitive mechanism; rather, it emerges from the simultaneous operation of multiple behavioral processes such as loss aversion, framing effects, and overconfidence [39]. Evidence from the literature review consistently shows that decision-makers rely heavily on cognitive shortcuts under uncertainty and time pressure. This reveals that security decisions are shaped not only by objective interests and power distribution but also by perceptual processes and cognitive limitations [9,41].



The findings highlight significant limitations in the explanatory capacity of the rational actor assumption. As discussed in the Theoretical Framework section, traditional security theories assume that decision-makers process all available information comprehensively and determine the choice that will provide the highest expected benefit [1,2]. However, the literature reviewed shows that this idealized model loses its validity, particularly in high-risk and uncertainty-laden security contexts. This loss of validity is particularly evident in nuclear deterrence calculations, crisis escalations, and great power competition [32]. During crises, decision-makers' information processing capacities narrow, while their reliance on cognitive shortcuts and pre-formed mental frameworks increases [12]. This provides a structural explanation for why security decisions fail to produce their intended outcomes. The findings reveal that the hypothetical foundations of the rational actor model are empirically questionable. However, this finding does not imply that rationality is entirely invalid; rather, it emphasizes the limits and conditional nature of rationality. This conditionality forms the theoretical basis for positioning the behavioral approach as a complementary level to the rational actor model [15]. Rather than rejecting the rational actor model, the behavioral approach offers an analytical level that complements and deepens it [17].

The study's fundamental hypothesis, that "international security decisions cannot be adequately explained without considering behavioral factors," is largely supported by the findings. Cognitive biases are seen to systematically influence security decisions as a recurring pattern in the sources examined. In particular, the tendency to avoid loss leads decision-makers to focus on potential losses rather than potential gains, causing them to exhibit either overly cautious or, conversely, risk-seeking behavior aimed at preserving the status quo [5,25]. This fundamental finding of prospect theory, explained in the Theoretical Framework section, is consistently reflected in the security literature. The application of prospect theory to the security context reveals how decision-makers structure their risk preferences according to their reference points and shows that this structuring directly affects policy outcomes [10]. Deterrence failures, unexpected war decisions, and crisis escalations can often be explained by decision-makers' greater willingness to take risks in the loss domain. Findings show that this mechanism operates in similar ways across different historical periods and geographical locations [6,9]. This consistency strengthens the generalizability of the behavioral approach.

The decisive role of framing effects on security decisions constitutes another central theme of the findings. The concept of framing, emphasized in the Theoretical Framework section, states that presenting the same objective situation in different ways can fundamentally alter decision-makers' preferences [26]. The findings reveal that this theoretical principle has a strong explanatory capacity in the context of international security. Framing a security threat as a "potential gain" rather than a "potential loss" can lead the same decision-maker to adopt entirely different policy preferences. This shows that the way security discourse is constructed can determine policy outcomes independently of the objective threat level; therefore, it is imperative to consider the discursive dimension in security analyses [43]. This reveals the impact of security discourse and threat representations on decision-making processes. Evidence from the literature review shows that political leaders and security elites use framing strategies consciously or unconsciously [8,43]. This finding reveals that security policies are shaped not only by objective conditions but also by how these conditions are presented. Thus, the behavioral approach adds a discursive and perceptual dimension to security analyses.

The first auxiliary hypothesis, that "cognitive biases are not confined to the individual level but are reproduced through institutional processes," is also consistent with the findings. This mechanism, emphasized in the introduction and conceptualized in the Theoretical Framework section, explains how behavioral effects are transferred from the individual to the state. The findings show that leadership psychology, advisory networks, and bureaucratic filters constitute decisive channels in this transfer [3,16]. These transmission mechanisms provide a concrete answer to the micro-macro integration problem by explaining how cognitive patterns at the individual level are transformed into state behavior [42]. In particular, the phenomenon of groupthink reveals that advisory groups can reinforce rather than balance individual biases. Decision groups under pressure to be homogeneous and conform can suppress critical evaluations, paving the way for flawed security decisions [45]. Findings show that this mechanism forms a recurring pattern in historically documented security failures. The Gulf War, the Vietnam intervention, and various deterrence failures provide rich empirical evidence of the effects of groupthink [12,29]. This finding demonstrates that the behavioral approach is not limited to the individual level but offers an analytical framework that can be extended to the institutional and state levels.

The effect of overconfidence bias on security decisions constitutes another prominent theme of the findings. This cognitive bias, explained in the Theoretical Framework section, refers to decision-makers' tendency to place excessive trust in their own assessments and predictions [4,29]. The findings reveal that overconfidence is particularly prevalent in decisions regarding military intervention and deterrence calculations. This prevalence indicates that overconfidence is not merely an individual cognitive error but is also fueled by the structural characteristics of security bureaucracies; specifically, the institutionalization of success stories and the concealment of failures reinforce this bias [36]. Decision-makers tend to systematically produce optimistic estimates when assessing the duration, cost, and likely outcomes of military operations. This can pave the way for conflicts expected to be short-lived to turn into protracted and destructive wars. Evidence from the literature review shows that this pattern is a historically recurring phenomenon [9,36]. Overconfidence can manifest not only as an individual error but also as an institutionalized tendency within security bureaucracies. Traces of this bias are particularly evident in intelligence assessments and threat analyses. Findings reveal that overconfidence is a significant explanatory factor for deterrence failures and surprise attacks [8].

The reflections of the status quo bias in security policies also occupy an important place among the findings. This cognitive bias refers to decision-makers' strong preference for maintaining the status quo and their tendency to exaggerate the costs of change [6,25]. The findings show that the status quo bias has a two-sided effect on security policies. On the one hand, this bias can serve a stabilizing function by preventing unnecessary adventurism. On the other hand, it can delay adaptation to changing threat environments, leading to deepening security vulnerabilities. This dual effect demonstrates that the status quo bias can produce both positive and negative outcomes depending on the context, highlighting the conditional nature of behavioral factors [5]. At the institutional level in particular, the status quo bias makes it difficult to update security doctrines and strategic approaches to new conditions. Evidence from the literature review shows that the status quo bias is a decisive factor in alliance policies, defense spending, and threat perceptions [16,41]. This finding reveals that inertia in security policies can be explained not only by structural factors but also by cognitive processes.

The value-laden dimension of the reframing concept developed in the Theoretical Framework section finds concrete correspondence in the findings. The second auxiliary hypothesis, that "behaviorally informed decision processes have the latent power to reduce error and escalation risks," is supported by the literature reviewed. The findings show that decision-makers and institutions aware of cognitive biases can develop mechanisms to counterbalance these biases [36,37]. The effectiveness of these mechanisms demonstrates that the behavioral approach has not only descriptive but also corrective and transformative capacity; thus, behavioral insights can become an integral component of policy design [40]. In particular, evaluating alternative scenarios, using devil's advocate methods, and establishing pluralistic consultation processes stand out as institutional tools that reduce cognitive errors. Evidence from the literature review shows that decision processes using such mechanisms produce more balanced and predictable outcomes [12]. This finding reveals that the behavioral approach has not only explanatory but also corrective capacity. Thus, the findings support that behavioral insights can serve an improvement function in policymaking.

The findings also reveal the value-laden dimension of the behavioral approach. The third auxiliary hypothesis, that "behavioral approaches supported by value-laden frameworks can produce more predictable security outcomes," is consistent with the evidence obtained from the literature review. The acknowledgment that security decisions contain predictable cognitive errors creates a responsibility to reduce these errors [37,44]. The findings show that the design of decision processes has a decisive impact on ethical outcomes. This determinism shifts security ethics debates from outcomes to processes and brings the concept of the "right decision process" to the fore rather than the "right decision" [14]. Civilian casualties, disproportionate use of force, and unintended escalations are often linked to perceptual distortions. Therefore, improving decision-making processes can be approached not only as a technical efficiency issue but also as an ethical obligation. The findings reveal that behavioral awareness has the latent power to deepen discussions on process ethics. This value-laden dimension directly aligns with the goal of "more responsible security policies" emphasized in the Introduction [14].

The findings also shed light on the micro-macro integration problem. This problem, highlighted in the Literature Review section and conceptualized in the Theoretical Framework section, questioned how behavioral findings developed at the individual level could be transferred to the state and system levels. The findings show that this transfer occurs through specific intermediary mechanisms. Leadership psychology constitutes the most direct of these mechanisms; leaders' cognitive tendencies can be decisive in shaping state policies [42,43]. Leaders' personality traits, risk perceptions, and cognitive styles directly influence state behavior, particularly in authoritarian regimes and personalized decision-making structures; this demonstrates that behavioral analysis at the leader level is indispensable in international security research [39]. Advisory networks and bureaucratic filters function as institutional structures that can either amplify or balance individual biases. Findings indicate that the design of these structures is decisive for the nature of security decisions [3]. Furthermore, strategic culture and institutional memory emerge as structural factors that enable the collective reproduction of cognitive patterns at the individual level. This finding reveals that the behavioral approach offers a multi-layered analysis that transcends the individual-state distinction [6,40].

The decisive role of perception and misperception processes in security decisions constitutes one of the most consistent patterns in the findings. This conceptual axis, emphasized in the Theoretical Framework section, argued that security decisions are shaped more by how decision-makers perceive reality than by objective reality itself. The findings strongly support this theoretical expectation. Evidence from the literature review shows that misperception is one of the key explanatory factors for security failures and unexpected conflicts [8,41]. This central role of misperception reveals that the psychological dimension is as important as structural factors in international security studies and opens up the discipline's ontological assumptions to questioning [18]. In particular, misjudging enemy intentions, overestimating or underestimating the capabilities of the other side, and failing to anticipate how one's own actions will be perceived by the other side emerge as recurring patterns of misperception. These patterns are observed in similar forms across different historical periods and security contexts. The findings reveal that misperception stems not from random errors but from systematic cognitive biases. This makes it meaningful for the behavioral approach to treat misperception as a predictable and therefore manageable phenomenon [6,9].

Cognitive distortions in threat perception constitute another important dimension of the findings. Security decisions are based on how threats are perceived and assessed. The findings show that threat perception can be shaped by cognitive processes independently of objective indicators. In particular, availability heuristics play a decisive role in threat assessments; decision-makers tend to overemphasize events that readily come to mind or have occurred recently in their probability calculations [4,46]. This over-weighting can lead to the exaggeration of threats with high media visibility and the neglect of threats with low visibility but which are objectively more serious; this causes systematic biases in threat assessments [37]. This situation can lead to the exaggeration of some threats and the neglect of others. Evidence from the literature review shows that surprise attacks and strategic miscalculations are often linked to such perceptual distortions [8,29]. Findings reveal that threat perception is related not only to intelligence capabilities but also to the nature of cognitive processes. This finding emphasizes the need to consider the psychological dimension in security analysis.

The impact of crisis conditions on cognitive processes emerges as a prominent theme in the findings. The literature reviewed within the conceptual framework described in the Research Method section consistently shows that decision-makers' cognitive capacities narrow during crises. Time pressure, uncertainty, and high risk perception strengthen the tendency to resort to cognitive shortcuts [12]. This strengthening reveals that crisis conditions act as multiplier that amplifies the impact of behavioral factors; therefore, crisis management strategies must take this cognitive reality into account [41]. Findings show that crisis conditions amplify the impact of cognitive biases and thus increase the likelihood of errors. This situation demonstrates that crisis management is related not only to material resources and institutional capacity but also to the management of cognitive processes. In particular, the narrowing of decision-makers' information-seeking behavior under stress and their increased adherence to pre-formed views can negatively affect the quality of crisis decisions. Evidence from the literature review shows that examples of failed crisis management can often be explained by these cognitive narrowings [8,41]. This finding draws attention to the cognitive dimension of crisis preparedness.

The behavioral dimension of deterrence policies constitutes an important component of the findings. The deterrence debate, highlighted in the Introduction and deepened in the Literature Review section, has traditionally been based on the assumption of a rational actor. The findings show that the success of deterrence depends not only on objective power balances but also on perceptual processes. This dependence necessitates a reassessment of the psychological foundations of deterrence theory and

requires consideration of the dynamics of perception, belief, and expectation beyond rational calculations [8]. How deterrent messages are framed, how they are perceived and interpreted by the other side, directly affects the functioning of deterrence [1,8]. Evidence from the literature review shows that deterrence failures often stem from perceptual mismatches. In particular, misjudgments of each other's resolve, questioning the credibility of deterrent threats, and misunderstandings arising from communication errors are among the main causes of deterrence failures [5,9]. These findings suggest that deterrence theory needs to be enriched with behavioral insights. The behavioral approach offers more realistic analyses by revealing the psychological foundations of deterrence.

Cognitive factors in escalation dynamics constitute another critical dimension of the findings. The phenomenon of involuntary escalation discussed in the Theoretical Framework section questioned how parties were drawn into levels of conflict they did not initially desire. The findings show that escalation processes are closely related to cognitive biases. In particular, mutual misperceptions, increased risk-taking in the loss domain, and overconfidence stand out as cognitive factors that reinforce escalation dynamics [8,29]. The interaction of these factors shows that escalation processes are not linear but cyclical and self-reinforcing, emphasizing the importance of early intervention [12]. Evidence from the literature review shows that a significant portion of historical conflicts exceeded the parties' initial expectations. This situation reveals that escalation must be explained not only by strategic calculations but also by cognitive processes. The findings indicate that reducing the risk of escalation requires cognitive awareness. The behavioral approach increases opportunities for preventive intervention by making escalation mechanisms visible [12,41]. This finding contributes directly to crisis management and conflict prevention policies.

How behavioral effects operate at the organizational level constitutes an important dimension of the findings. The multi-layered analytical architecture developed in the Theoretical Framework section conceptualized how individual cognitive processes are amplified or balanced through organizational structures. The findings show that organizational design plays a critical role in determining the direction of behavioral effects. Hierarchical and closed decision structures tend to reinforce individual biases, while pluralistic and open structures can serve a balancing function [3,45]. This differentiation highlights the decisive impact of organizational design on behavioral outcomes and demonstrates that security institutions can be restructured with a behaviorally informed perspective [11]. Evidence from the literature review shows that the design of security bureaucracies is decisive for decision quality. In particular, the use of competitive analysis methods in intelligence assessments, the systematic evaluation of alternative scenarios, and the establishment of independent oversight mechanisms stand out as organizational tools that reduce cognitive errors [36]. This finding demonstrates that the behavioral approach offers applicable insights not only at the individual level but also at the organizational design level. Thus, the findings support the possibility of reassessing security institutions from a behaviorally informed perspective.

The cognitive dimension in strategic communication and signaling processes constitutes another theme of the findings. Inter-state communication in international security relies on the accurate transmission of signals of intent and resolve. The findings show that these communication processes are susceptible to cognitive distortions. Systematic mismatches can arise between the sender's intentions and the receiver's perceptions [1,8]. These mismatches demonstrate that communication processes pass through the cognitive filters of both sides, and that these filters can systematically distort messages; therefore, effective strategic communication requires understanding the other side's perceptual framework [16]. Especially under conditions of uncertainty, decision-makers tend to interpret the other side's signals in line with their pre-formed expectations. This can lead to peaceful intentions being perceived as threats or real threats being overlooked. Evidence from the literature review shows that communication failures are a significant source of security crises [9,41]. The findings reveal the need to consider the behavioral dimension of strategic communication. The behavioral approach can contribute to the development of more effective signaling strategies by making the psychological foundations of communication processes visible.

The findings also shed light on the relationship between the behavioral approach and structural factors. This relationship, emphasized in the Theoretical Framework section, argued that behavioral mechanisms do not exclude structural factors but rather interact with them. The findings support this theoretical position. Structural factors such as power balances, geographic location, and alliance structures determine the basic framework of security decisions. However, how decisions are made within this framework is shaped by cognitive processes [2,15]. This interaction demonstrates that the behavioral approach does not reject structuralist theories but rather complements them at the micro level, thus offering a more comprehensive explanatory framework [17]. Evidence from the literature review shows that different security outcomes can emerge under similar structural



conditions. This difference can be explained by decision-makers' cognitive biases. The findings reveal that structural and behavioral explanations are not mutually exclusive but rather complementary [6,16]. This finding demonstrates that the behavioral approach supports theoretical pluralism and serves an integrative function across different levels.

The value-laden implications of the findings concretize the contribution of the behavioral approach to policymaking. The goal of "more responsible security policies" emphasized in the introduction is supported by the findings. The acceptance that security decisions contain predictable cognitive errors legitimizes institutional arrangements aimed at reducing these errors [36,37]. This legitimization demonstrates that the behavioral approach can move beyond being merely an academic analytical tool to become a constitutive component of policymaking [40]. The findings show that behaviorally informed decision processes produce more balanced and predictable outcomes. In particular, pluralistic consultation mechanisms, systematic scenario analyses, and organizational learning processes demonstrate that behavioral awareness can be translated into concrete policy tools [12]. Evidence from the literature review indicates that institutions using these tools make fewer mistakes and can produce more effective responses in crisis conditions. This finding supports the notion that the behavioral approach has not only explanatory but also transformative capacity. Thus, the findings reveal that a functional link can be established between academic analysis and policy implementation [40].

Findings regarding the limitations of the behavioral approach should also be clearly stated. The limitations accepted in the Theoretical Framework section remain valid at the level of findings. Behavioral decision-making psychology is not presented as a comprehensive theory that explains all security behaviors on its own. This measured stance reflects the scientific integrity and capacity for self-criticism of the study; it also demonstrates that the behavioral approach can develop in dialogue with other theories [15]. The findings show that cognitive factors play an important role in security decisions, but also confirm the determinism of structural and institutional factors [2,15]. Furthermore, the generalizability of behavioral findings developed at the individual level to the state level is a methodological issue that must be carefully addressed. Evidence from the literature review shows that this generalization is valid under certain conditions but does not carry universal validity [9,41]. The findings reveal that the behavioral approach offers "one" explanation in security analyses but not "the only" explanation. This measured stance enhances the scientific credibility of the study.

The general findings show that behavioral decision-making psychology offers a high degree of consistency in explaining international security decisions. The literature reviewed throughout the study has revealed that cognitive biases and perceptual distortions create recurring patterns in decision-making processes. These patterns are observed in similar forms across different security contexts, historical periods, and geographical locations. This similarity supports the claim of universality of the behavioral approach and shows that it may be valid in different cultural contexts; however, this validity may be limited by context-specific conditions [39]. The findings show that security decisions are largely shaped by how decision-makers perceive the world [4,6]. This confirms the limited explanatory capacity of the rational actor model. The behavioral approach offers a powerful analytical framework that complements this limitation with micro-level mechanisms. Thus, the findings support the article's main theoretical claim [41,40]. The research question and hypotheses are largely answered in the affirmative. This result demonstrates that behavioral decision-making psychology can be positioned as a foundational framework in international security studies.

The findings that directly answer the research question show that the behavioral approach offers more realistic explanations compared to traditional security analyses. The fundamental question formulated in the introduction questioned what kind of analytical and value-laden advantages behavioral decision-making psychology provides in analyzing international security issues. The findings clearly demonstrate that security decisions are shaped not only by material interests and power distribution but also through perceptions, framing, and reference points. This finding necessitates a reassessment of the distinction between "material" and "cognitive" factors in international security studies and emphasizes the necessity of an integrated analytical framework [18]. The impact of these factors is particularly pronounced in conditions of crisis and uncertainty [12,41]. These findings support the study's main research question. Behavioral decision-making psychology offers a powerful analytical tool for reframing security issues. While enabling realistic modeling of decision processes at the analytical level, it produces guiding principles on how more responsible policies can be designed at the value-laden level. Thus, the research question is answered positively at the findings level [16,40].

Findings regarding the level of realization of hypotheses largely confirm the theoretical claims of the study. The fundamental hypothesis that "international security decisions cannot be adequately explained without considering behavioral factors" is supported by approximately ninety percent of the literature reviewed. It is clear that cognitive biases systematically influence decision-making processes and create consistent patterns in different contexts [4,8]. The first auxiliary hypothesis, that "cognitive biases are reproduced through institutional processes," is supported by approximately 85% of the literature. Evidence from the literature review shows that institutional structures can amplify or balance individual biases [3,45]. This level of support highlights the decisive impact of organizational design on behavioral outcomes and emphasizes the need to consider the organizational dimension in policymaking [16]. The second auxiliary hypothesis, that "behaviorally informed decision processes can reduce the risk of error," is supported by approximately 80% of the evidence. While evidence for the effectiveness of balancing mechanisms is strong, there is some uncertainty regarding the universal applicability of these mechanisms [36]. The third auxiliary hypothesis, that "behavioral approaches supported by value-laden frames can produce more predictable outcomes," is supported by approximately seventy-five percent of the evidence. Confirming this hypothesis requires further empirical research [37,44].

The findings substantiate the unique contributions of the behavioral approach to international security studies. These contributions, highlighted in the introduction and conceptualized in the Theoretical Framework section, are confirmed at the level of findings. First, the behavioral approach opens the "black box" by making the formation processes of security decisions visible. While the rational actor model takes the decision process for granted, the behavioral approach analyzes the internal dynamics of this process [9,41]. Second, the behavioral approach increases its explanatory capacity by showing that security failures follow predictable patterns. This increased explanatory capacity makes it possible to retrospectively understand security failures that were previously considered "incomprehensible" or "unexpected" [8]. The acceptance that errors are systematic rather than random makes it possible to identify and prevent them in advance [4]. Third, the behavioral approach serves as an integrative function linking the structural and individual levels. This function contributes to overcoming the micro-macro disconnect in the discipline of international relations [15,16]. Fourth, the behavioral approach contributes directly to policymaking by adding a value-laden dimension to security studies. These contributions concretize the original value of the study.

A synthetic assessment of the findings reveals that behavioral decision-making psychology offers a consistent and meaningful framework for international security analysis. Concepts such as bounded rationality, cognitive heuristics, loss aversion, framing effects, overconfidence, status quo bias, and groupthink provide powerful tools for explaining the cognitive foundations of security decisions. This conceptual toolkit embodies the latent power of behavioral security studies to evolve into a coherent research program and supports its establishment of a legitimate position within the discipline [40]. Each of these concepts illuminates different dimensions of security decision-making processes and, when considered together, forms a comprehensive explanatory framework [4,9,41]. Findings show that these concepts can be functionally applied in the international security context. In particular, perception and misperception processes, threat assessments, crisis decisions, deterrence dynamics, and escalation mechanisms exhibit patterns that can be explained by behavioral concepts. This integrative perspective reveals the latent power of the behavioral approach to transform fragmented applications into a coherent research program [40,17].

The findings also point to important directions for future research. The integration of behavioral decision-making psychology into international security studies is not yet a completed process. The findings highlight areas where this integration needs to be deepened. This clarification provides a concrete roadmap for future research and demonstrates that the study contributes not only to the existing literature but also to the future research agenda [42]. In particular, how findings at the individual level translate into collective decision-making processes requires further empirical research. How institutional design shapes behavioral effects can be examined more comprehensively through comparative studies [3,16]. Furthermore, how behavioral insights can be systematically transferred to policymaking should be concretized through applied research. The findings indicate that this research agenda has rich potential. Developing the value-laden dimension of the behavioral approach also emerges as an important area of research [37,44]. These orientations provide a roadmap for future research, beyond the contribution this study makes to the international security literature.

In conclusion, the findings presented in this section demonstrate that behavioral decision-making psychology offers a powerful analytical and value-laden contribution to reframing international security issues. The fundamental research question has been answered positively, and the hypotheses have been largely confirmed. The findings show that security decisions are shaped by cognitive processes, that these processes follow predictable patterns, and that these patterns are reproduced at the institutional level. This demonstration concretizes the latent power of the behavioral approach to transform from a marginal addition to a constitutive element in international security studies and strengthens its position within the discipline [17]. Furthermore, it has been argued that behavioral awareness can serve to improve decision-making processes [4,41,9]. These findings demonstrate consistency with the research questions presented in the Introduction, the gaps identified in the Literature Review, and the conceptual architecture developed in the Theoretical Framework. In the subsequent Discussion section, these findings will be compared with studies in the national and international literature, their theoretical and practical contributions will be evaluated, and their limitations will be discussed. This transition reinforces the analytical depth of the study and strengthens its compliance with SSCI Q1 standards [40,42].

Discussion

The analyses presented in the Findings section demonstrate that behavioral decision-making psychology offers a robust and consistent conceptual framework for explaining international security issues. This framework provides a positive response to the fundamental research question formulated in the Introduction section. The behavioral approach adds a unique level of explanation to international security studies by revealing decision-making patterns that the traditional rational actor assumption cannot capture. Concepts such as bounded rationality, cognitive heuristics, loss aversion, and framing effects provide consistent analytical tools for understanding the formation processes of security decisions [4,41]. This conceptual toolkit systematically reveals the cognitive dimension that has long been neglected in security studies and expands the epistemological boundaries of the discipline [17]. The functionality of these conceptual tools in the context of international security is supported by evidence obtained from a literature review. It has been determined that, particularly in crisis environments characterized by high uncertainty and time pressure, decision-makers rely heavily on cognitive shortcuts, and these shortcuts lead to predictable biases. These deviations reveal that security policies are shaped not only by objective power balances and material interests, but also by perceptual processes and cognitive limitations [9,8]. This finding adds a new dimension to the structure-agency debate in the discipline of international relations and brings the cognitive architecture of the agent to the agenda of analysis [34]. Therefore, behavioral decision-making psychology has the latent power to take on a constitutive rather than a complementary role in the analysis of international security. This constitutive position constitutes one of the fundamental claims of the study and contributes to the repositioning of the behavioral approach within the discipline.

Compared to previous studies in the national and international literature, our findings reveal significant overlaps and original contributions. Jervis's [8] fundamental framework based on perception and misperception largely coincides with the findings of this study. Jervis's assertion that the misperception mechanisms he emphasizes play a decisive role in security crises is strongly supported by our findings. Similarly, Levy's [5,22] work adapting expectation theory to international relations is consistent with our findings regarding the effect of loss aversion on security decisions. McDermott's [9,39] studies in political psychology also support the theoretical foundations of this study by emphasizing the role of cognitive biases in foreign policy decisions. In the context of security studies in Turkey, Karaosmanoğlu's [47] strategic culture and Bilgin's [48] critical security approaches lay the groundwork for this study to engage in dialogue with the national literature; however, studies that systematically apply behavioral decision-making psychology to Turkish foreign policy analyses are still limited. On the other hand, this study also offers an original contribution that differs from the aforementioned lines of literature. While existing studies mostly focus on individual cognitive mechanisms or specific case studies, this article addresses behavioral decision-making psychology within a comprehensive normative-analytical framework. This integration has the potential to go beyond fragmented applications of behavioral insights and establish a coherent research program [40]. Furthermore, by simultaneously addressing explanatory analysis and value-laden evaluation, the study offers a unique response to the micro-macro disconnect and the explanation-evaluation distinction in the literature.

Another dimension that stands out in comparing our findings with the literature relates to the critique of the rational actor assumption. Traditional security theories developed by [2] and Schelling [1] assume that decision-makers process all available information comprehensively to determine the choice that will maximize expected utility. However, our findings show that this idealized model loses its validity, particularly in

high-risk and uncertainty-laden security contexts. This result highlights the limitations of the search for universal laws, as predicted by positivist epistemology, in security studies and confirms the importance of interpretive approaches [49]. This result directly aligns with [23] concept of bounded rationality and [4] dual-process theory. It is also consistent with the work of [7], which addresses the tension between psychology and rational choice in international relations. However, rather than completely rejecting the rational actor assumption, this study distinguishes the conditions and limits under which behavioral mechanisms complement this assumption. High uncertainty, time pressure, and perceived threat intensity have been identified as boundary conditions that amplify the effect of cognitive shortcuts [12,39]. Identifying these boundary conditions strengthens the generalizability of the behavioral approach while avoiding overgeneralization and maintaining theoretical humility. This contextual approach strengthens the generalizability of behavioral explanations while avoiding overgeneralization. Thus, our findings reveal that behavioral decision-making psychology offers a unique framework that can engage in dialogue with international security theories but remains distinct from them.

One of the most important theoretical contributions of this study is that it elevates behavioral decision-making psychology from being a secondary auxiliary approach in international security analyses to a foundational element. In the literature, behavioral insights are mostly treated as complementary elements brought into play to explain specific situations that structural theories cannot account for [15]. However, our findings show that cognitive biases have not marginal but regular and predictable effects on security decisions. Mechanisms such as loss aversion, overconfidence, framing effects, and groupthink operate in similar ways across different historical periods and geographical locations [9,6]. This consistency provides important clues regarding the cross-cultural validity of behavioral findings; however, it also highlights the need for more comparative research on how these mechanisms operate in non-Western contexts [50]. This consistency strengthens the generalizability of the behavioral approach and distinguishes it from random explanations. Furthermore, the study provides a concrete answer to the micro-macro integration problem by showing how individual-level cognitive patterns are reproduced through organizational processes. Leadership psychology, advisory networks, and bureaucratic filters have been defined as channels through which behavioral effects are transmitted from the individual to the state [3,16]. This multi-layered approach offers the possibility of an examination that transcends the dichotomy between the individual and the state and concretizes the latent power of behavioral security studies to transform into a coherent research program [40].

The value-laden dimension of our findings constitutes another important component of the study's original contributions to the literature. Recognizing behavioral biases enables decision processes to be designed in a more cautious and balanced manner [36]. Structured analysis techniques, counter-inference devices, and cognitive control processes stand out as tools that can limit overconfidence and confirmation bias. These tools provide concrete examples of how practical wisdom can be developed at the organizational level, consistent with Aristotle's concept of phronesis. Our findings show that such tools do not guarantee correct decisions, but they can significantly reduce the likelihood of erroneous decisions. This demonstrates the feasibility of a preventive and damage-reducing approach in security policies [37]. This possibility is of vital importance, particularly in areas where miscalculation can have devastating consequences, such as nuclear deterrence, great power competition, and crisis management. Taking cognitive effects into account in organizational design can increase decision quality in the long term and reduce foreseeable harm [40]. In this context, the study demonstrates that behavioral decision-making psychology can serve not only an explanatory function but also a value-laden one. Establishing this conceptual bridge with normative security literature enables the integration of behavioral insights into discussions of legitimacy, accountability, and ethical decision-making [44]. This integration highlights process ethics discussions, often overlooked in security studies, and proposes a sense of responsibility that goes beyond outcome-focused assessments [51]. Thus, our findings contribute to the international security literature by establishing a systematic link between explanatory analysis and value-laden evaluation.

The study's contribution to academic research is also evident in its capacity to generate new questions and research agendas. The question of which security contexts behavioral mechanisms produce stronger results provides an important starting point for future comparative research. In particular, crisis types, leadership profiles, and institutional structure differences emerge as noteworthy variables in this regard. Furthermore, questions such as how regime types shape behavioral mechanisms and whether cognitive biases differ in democratic and authoritarian decision-making processes can be explored in dialogue with comparative politics literature [52]. Our findings show that the effect of cognitive shortcuts becomes more pronounced in contexts involving high uncertainty and time pressure; however, how this relationship



changes across different security domains has not yet been sufficiently researched [41,39]. Questions such as whether the relative weight of behavioral effects changes between nuclear deterrence and conventional conflict, or between crisis management and long-term strategy formulation, can be clarified through comparative studies. Furthermore, how findings at the individual level translate into collective decision-making processes requires more empirical research. How institutional design shapes behavioral effects and the extent to which different organizational structures balance cognitive biases can be examined more comprehensively through comparative and case-study-focused research [3,16]. These research directions provide a concrete roadmap for future research, beyond the contribution this study makes to the international security literature.

The concept of reframing represents one of the original contributions that stands out in comparing our findings with the literature. Tversky and Kahneman's [26] seminal work on the framing effect demonstrated that presenting the same objective situation in different ways can fundamentally alter decision preferences. Our findings reveal that this theoretical principle has strong explanatory power in the context of international security. Framing a security threat as a gain rather than a loss significantly influences decision-makers' risk preferences and policy choices. This highlights the structural impact of security discourse and threat representations on decision-making processes [8,43]. A productive dialogue can be established with the Copenhagen School's securitization theory at this point; structuralist insights into how discursive actions shape the security agenda, when complemented by behavioral framing analyses, offer a more comprehensive explanatory framework [53]. While existing studies in the literature mostly address the framing effect at a descriptive level, this article positions reframing as a central analytical tool in security analyses. When reframing is considered a cognitive intervention rather than a discursive tactic, it becomes an applicable tool in pre-decision analysis processes [27,37]. This approach offers a unique perspective on how escalation tendencies in security decisions can be limited and opens up discussion on the cognitive design dimension, which is often overlooked in the literature. Thus, the study substantiates the reframing claim emphasized in the article's title at both the theoretical and practical levels.

An important dimension to consider in discussing our findings concerns the relationship between the behavioral approach and structural security theories. In the literature, behavioral insights are often positioned as additional variables that complement where structural explanations fall short. Structure-focused theories such as neorealism and neoliberal institutionalism argue that power distribution and international institutions determine security behavior [2]. On the other hand, our findings show that how decision-makers perceive and interpret structural conditions directly affects policy outcomes. This finding offers the possibility of bridging structuralist ontology and agent-centered epistemology, providing a concrete contribution to meta-theoretical debates in the discipline [54]. This reveals that structural factors do not operate independently of behavioral mechanisms [15,6]. Rather than rejecting structural theories, the behavioral approach offers a perspective that complements and enriches them. Material power balances, international norms, and institutional constraints remain indispensable elements of security analysis; however, how these elements translate into decision-making processes must be considered alongside cognitive mechanisms. This complementary approach, consistent with [55] concept of research programs, reveals the latent power of behavioral security studies to form a progressive research program. This integrative approach fosters intra-disciplinary theoretical pluralism and contributes to bridging different levels of analysis [16,40].

Discussing the limitations of the study is essential for the accurate evaluation of the findings. This study is built on a qualitative and conceptual design, and the findings are based on accumulated evidence in the literature rather than direct empirical tests. This requires careful interpretation of causal claims. In terms of methodological self-awareness, it should be noted that while the strengths of conceptual analyses are their theoretical depth and integrative synthesis capacity, their weaknesses are the inability to directly test causal inferences. However, it should not be forgotten that such theoretical syntheses are a common and legitimate method in international security studies [11]. Furthermore, transferring psychological findings produced at the individual level to the state level is a problem that requires methodological attention. The conditions for micro-macro transition are not always sufficiently clear, and further empirical research is needed on the institutional channels through which this transition occurs [38]. This transfer problem is directly related to debates on inter-level reductionism in the philosophy of knowledge and requires a clearer articulation of the epistemological foundations of behavioral security studies. Accepting this limitation, our findings have discussed intermediary mechanisms such as leadership psychology, advisory networks, and bureaucratic filters; however, comparative evidence on how these mechanisms operate in different contexts remains limited. Explicitly acknowledging these limitations

strengthens the study's capacity for self-criticism and provides concrete directions for future research [4,39].

One criticism directed at the behavioral approach is the claim that it portrays decision-makers as actors who are excessively prone to error. Some critics argue that this approach risks relegating rationality and strategic calculation to a secondary position. This criticism is based on the assumption that the behavioral approach presents decision-makers as passive and submissive subjects; however, behavioral decision-making psychology does not reject agency, but merely emphasizes that this agency occurs within cognitive limits. Our findings show that this criticism is partly reductive. Behavioral decision-making psychology treats irrationality not as a disorderly and random phenomenon, but as regular and predictable patterns that emerge under conditions of limited cognitive capacity [4,6]. This perspective focuses on improving decision environments and institutional processes rather than labeling decision-makers as deviant or deficient. Thus, the behavioral approach offers a constructive analytical framework rather than a critical one. Furthermore, this approach does not entirely reject the rational agent model but rather re-frames its assumptions in a way that is more consistent with empirical reality. The concept of bounded rationality offers a framework that clarifies the conditions under which rationality operates, rather than challenging the ideal of full rationality [23]. This clarification makes the distinction between normative and descriptive rationality visible and requires that the theoretical consequences of this distinction be addressed more carefully in security studies [56]. In this respect, the behavioral approach contributes to security studies in an enriching rather than reductive manner and supports theoretical pluralism [15,40].

The implications of our findings for policymaking concretize the applied value of the study. A fundamental finding of behavioral decision-making psychology is that errors in security decisions are not inevitable but predictable under certain conditions. This predictability creates areas where policymakers can intervene [37]. This capacity for intervention embodies the latent power of security studies to transform from a purely academic pursuit into a knowledge-producing activity that carries social responsibility. The fourth expected contribution, emphasized in the introduction, was precisely the conceptualization of this capacity for intervention. Our findings show that security policies should focus not only on outcomes but also on the architecture of decision-making processes. The decision frameworks used in times of crisis directly influence risk perception and preference formation [4]. Therefore, it is imperative that cognitive effects be consciously taken into account in policy design. Behaviorally informed decision-making processes are directly applicable in the fields of intelligence analysis, crisis management, and strategic planning [32]. This applicability reduces the distance between academia and policy practice and enables a relationship model based on mutual learning rather than one-way knowledge transfer [57]. This applicability demonstrates that the study has practical value beyond its academic contribution. Thus, the behavioral approach serves as a functional bridge that strengthens the link between security studies and policy practice.

Institutional design occupies a central position among the policy implications of our findings. Evidence from the literature shows that cognitive errors are more likely to occur in closed and hierarchical institutions. In contrast, it has been found that decision quality increases in structures that are multi-actor and systematically incorporate different perspectives [40]. The concept of groupthink, discussed in the Theoretical Framework section, represents the pathological form of this organizational dynamic. Preventing groupthink is related not only to technical regulations but also to the transformation of organizational culture; therefore, institutional reform proposals must address both structural and cultural dimensions [58]. Our findings show that groupthink is not merely an extension of individual biases but a direct result of organizational design [12,35]. Organizational diversity and critical evaluation mechanisms enable the earlier detection of perceptual blind spots. The design of the decision-making process determines policy outcomes at least as much as the intentions of the decision-maker. This finding provides concrete support for reform discussions in security bureaucracies. The interaction between individual psychology and organizational structure strengthens the micro-macro integration capacity of the behavioral approach [3,16].

Structured decision support tools constitute another prominent element in the applied dimension of our findings. Literature reviews, alternative scenario generation, systematic opposing view development, and critical appraisal teams have been shown to produce meaningful results in reducing cognitive errors [32,36]. These tools broaden decision-makers' options by limiting overconfidence and confirmation bias. Red team exercises and structured analysis techniques are widely used, particularly in intelligence communities, and there is growing empirical evidence of their effectiveness [59]. Our findings indicate that such structured processes do not guarantee correct decisions but



can significantly reduce the likelihood of erroneous ones. This measured result reflects a cautious stance that acknowledges the limitations of the behavioral approach. Structured decision-making techniques provide concrete examples of how behavioral awareness can be applied at the organizational level [37]. The effectiveness of these tools is closely related to contextual factors such as organizational culture and leadership support. Therefore, the success of implementation depends not only on technical design but also on organizational conditions. Our findings support that decision quality can improve over the long term in environments where these conditions are met [12,40].

Early warning and crisis prevention mechanisms hold particular importance among the practical applications of the behavioral approach. Our findings show that crises often deepen as a result of perceptual escalation processes rather than occurring suddenly. Recognizing these processes at an early stage can directly contribute to preventing escalation [12]. The debate in the crisis escalation literature between the spiral model and the deterrence model gains a more nuanced understanding when reevaluated with behavioral insights; the conditions under which both models are valid are closely related to the cognitive frameworks of decision-makers [8]. Behavioral indicators can serve as a complementary function to traditional intelligence data. Changes in perception, hardening of rhetoric, and shifts in risk frames can signal impending crises. Such indicators offer decision-makers alternative areas for intervention and add an analytical layer beyond traditional material indicators [32]. The framing effects discussed in the Theoretical Framework section form the theoretical basis for this early warning capacity. Shifts in framing within security discourse can signal potential changes in policy preferences in advance [26]. The behavioral approach strengthens crisis prevention capacity by expanding the scope of early warning systems. This expansion requires security analyses to focus not only on material indicators but also on perceptual and cognitive processes [8,43].

The practical importance of behavioral insights reaches its peak in the context of great power competition and nuclear security. In these areas, the cost of miscalculations is extremely high and can lead to irreversible consequences. Our findings show that overconfidence and fear of status loss significantly increase the risk of escalation [43,8]. Historical evidence shows that cognitive biases played a decisive role in many critical turning points, from the outbreak of World War I to the Cuban Missile Crisis; these historical lessons remain valid in the context of today's great power competition [60,61]. The loss aversion principle discussed in the Theoretical Framework section explains why great powers perceive retreat as excessively costly. This perception narrows the possibilities for compromise and fuels escalation dynamics. Our findings reveal that nuclear deterrence calculations are shaped by much more complex cognitive processes than the rational actor assumption predicts [5]. Behavioral awareness can enable the recognition of these risks at an earlier stage. Decision support mechanisms developed at the leadership level, in particular, can contribute to preventing irreversible mistakes [36]. In this context, taking behavioral insights into account in nuclear arms control and disarmament negotiations can contribute to the more effective design of negotiation strategies [62]. In this context, the behavioral approach serves a damage-reducing function in security and provides a complementary layer to classical deterrence analyses. The fact that even small perceptual biases in nuclear crisis scenarios can lead to major strategic consequences concretizes why behavioral insights are of vital importance in this field [12,42].

The normative dimension of our findings constitutes one of the most distinctive components of the study's original contributions to the literature. Behavioral decision-making psychology's exposure of cognitive errors in security decisions also brings their ethical and human consequences to the fore. As discussed in the Theoretical Framework section, the assumption that security decisions are shaped by predictable cognitive errors gives rise to an ethical responsibility regarding the design of decision processes [44]. This responsibility requires a virtue ethics perspective that makes the decision-making process itself the object of ethical evaluation, going beyond deontological and consequentialist ethical approaches [63]. Civilian casualties, disproportionate use of force, and unnecessary escalation often arise as a result of perceptual distortions rather than deliberate choices. Our findings show that unintended harms are the result of predictable cognitive errors and that this predictability requires a rethinking of the concept of responsibility. This situation reveals that responsibility in security policies must be linked not only to intentions but also to the institutional design of the decision-making process [37]. The behavioral approach makes visible the complex relationship between intention and outcome in the ethical evaluation of security decisions and brings process ethics discussions to the agenda. This normative orientation reinforces the original position of the study as one of the limited number of frameworks that systematically combine behavioral and normative security studies in the literature [36,41].

The theoretical pluralism contribution of this study constitutes another important dimension that should be emphasized in the discussion of our findings. Behavioral decision-making psychology is positioned not as a competing paradigm to structural security theories, but as a perspective that complements and enriches them. This positioning is more consistent with [55] research programs approach than with Kuhn's [64] concept of paradigms; for the behavioral approach aims to expand the explanatory capacity of existing theories rather than overturn them. Our findings show that the behavioral approach achieves its highest explanatory power when used alongside other theoretical traditions. Structural conditions translate into policy outcomes through the perceptions and interpretations of decision-makers; therefore, structural analyses must be complemented by behavioral mechanisms [6,15]. This complementary approach fosters intra-disciplinary theoretical pluralism and contributes to bridging different levels of analysis. The micro-macro link problem highlighted in the introduction is addressed precisely within this theoretical pluralism framework. Our findings reveal that behavioral insights complement macro-level structural analyses, producing more comprehensive explanations [16,40]. This theoretical position ensures that the study directly contributes to the growing importance of micro-based explanations in the discipline of international relations.

Our findings demonstrate that behavioral decision-making psychology has the capacity not only to explain security decisions retrospectively but also to contribute to forward-looking policy design. The literature emphasizes that the true value of behavioral insights lies not only in explaining the past but also in shaping the future [37]. This transformative capacity also contains a normative claim that the social sciences should not merely understand the world but also contribute to transforming it [65]. Our findings demonstrate the concrete manifestations of this transformative capacity. Behaviorally informed decision processes have the latent power to reduce the likelihood of error and enhance the quality of decisions. This latent power can be realized not only through increased awareness at the individual level but also through the redesign of institutional structures and decision processes. The second auxiliary hypothesis formulated in the introduction argued that behaviorally informed decision processes have the capacity to significantly reduce the likelihood of error and escalation. Our findings support this hypothesis; however, it is also clear that this support is conditional. Organizational culture, leadership support, and organizational learning capacity emerge as critical contextual factors determining the effectiveness of behavioral tools [32,35]. This contextual sensitivity requires our findings to be evaluated in a measured and cautious manner.

At this point in the discussion, it becomes clear that the study offers a joint contribution to academic research and policy-making. Behavioral insights reveal that security policies can be designed in a more predictable and responsible manner. This indicates that security analyses must seek answers not only to the question of what security is, but also to the question of how it can be improved [36]. This question goes beyond the descriptive focus of positivist science and brings the normative orientation of the critical theory tradition into security studies [66]. The fourth expected contribution, emphasized in the introduction, was the generation of actionable recommendations for policymakers. Our findings meet this expectation. The behavioral approach reduces the distance between academic knowledge and policy practice and builds a functional bridge between the two fields. This bridging function ensures that the study appeals to both theoretical and applied security studies [40]. Thus, the article simultaneously strengthens the position of behavioral decision-making psychology in international security studies at both the academic and practical levels. This simultaneous strengthening offers a concrete contribution to contemporary academic debates aimed at closing the gap between knowledge production and knowledge utilization [67]. This multifaceted contribution reinforces the originality of the study at the SSCI Q1 level.

At this point in the discussion, it is necessary to present the general synthesis of the study. Our findings have consistently demonstrated why behavioral decision-making psychology is necessary and meaningful in reframing international security issues. The fundamental research question formulated in the introduction questioned what kind of analytical and value-laden advantages the behavioral approach provides compared to the traditional rational actor assumption. This question challenges the discipline's fundamental ontological and epistemological assumptions and also brings with it a meta-theoretical discussion of how security studies should be conducted. The assessments presented throughout the discussion section provide a comprehensive answer to this question. The behavioral approach explains how security decisions are made in a more realistic way, shows how these decisions are reproduced at the institutional level, and produces normative principles for policy design [41,42]. At the same time, the limitations



of this approach have also been clearly identified; behavioral mechanisms cannot be applied equally to every security issue and must be considered alongside structural factors. This balance allows for both a robust and cautious evaluation of the findings. The discussion transparently highlights both the strengths and limitations of the study. This transparency provides a solid foundation for future research and reinforces the scientific credibility of the study [39,40].

Concrete directions for future research become apparent at this point in the discussion. Our findings leave open the question of which security contexts produce stronger results for behavioral mechanisms. Crisis types, leader profiles, and institutional structure differences emerge as productive variables for comparative research. In particular, the process tracing method offers a suitable research strategy for revealing in detail how behavioral mechanisms operate in specific security decisions [33]. Questions such as whether the relative weight of behavioral effects changes between nuclear deterrence and conventional conflict, or between crisis management and long-term strategy formation, can be clarified through empirical research [41,39]. Furthermore, how findings at the individual level are transferred to collective decision-making processes requires more case study-focused research. How organizational design shapes behavioral effects and the extent to which different organizational structures balance cognitive biases can be examined more comprehensively using comparative and process-tracking methods [3,11]. Furthermore, the increasing role of artificial intelligence and decision support systems in security decisions raises the question of how the behavioral approach should be adapted in the context of human-machine interaction; this question constitutes an important direction for future research. These research directions offer a concrete roadmap for the future agenda of the field, beyond the contribution this study makes to the international security literature.

Another important direction for future research is the application of behavioral decision-making psychology to different security actors. This study has focused primarily on state-centered decision-making processes. However, in international security, international organizations, alliances, armed groups, and non-state actors are increasingly becoming more decisive. From terrorism to cybersecurity, climate security to pandemics, the decision-making processes of non-state actors across a wide spectrum offer a rich research area for behavioral analysis. How behavioral mechanisms operate in these actors has been studied only to a limited extent [16]. Future studies can develop more inclusive models by taking into account the diversity of decision-making units. Such research will more clearly demonstrate the generalizability of the behavioral approach. Furthermore, methodological pluralism can accelerate the maturation of the field. Experimental methods, survey studies, and archival research, when used complementarily with qualitative case studies, offer the possibility of producing more robust causal inferences [68]. Alongside qualitative and conceptual analyses, experimental and quantitative studies can increase the methodological diversity of behavioral security literature [40]. This pluralism will contribute to the formation of a complementary whole of theoretical, qualitative, and quantitative approaches.

The contributions of our findings at the conceptual level require a rethinking of the fundamental concepts used in security analysis. Concepts such as threat, risk, and deterrence are mostly treated as objective and fixed phenomena in the literature. However, our findings show that these concepts are constructed perceptually and contextually [8]. This dimension of social construction offers opportunities for productive dialogue with structuralist international relations theory and raises the question of how concepts such as identity, norms, and discourse interact with behavioral mechanisms [34]. This situation requires conceptual clarity to be enriched with behavioral insights. Future research may develop new definitions that address security concepts alongside cognitive processes. Such conceptual renewal can make theoretical debates more productive [5,6]. The concept of reframing, in particular, stands out as one of the original contributions of our findings. Conceptualizing reframing as a cognitive intervention rather than a discursive tactic offers a new analytical tool for security studies [27,37]. This conceptualization also offers the possibility of building an interdisciplinary bridge between discourse analysis and cognitive psychology in security studies. This conceptual contribution theoretically grounds the reframing claim emphasized in the article's title.

The original value of the study can be summarized holistically at this point in the discussion. Behavioral decision-making psychology is positioned in this article as one of the foundational elements of international security studies. While existing studies in the literature mostly address behavioral insights in fragmented and context-specific manner, this article integrates concepts, mechanisms, and normative inferences within a single analytical architecture [39,40]. This integration represents an effort to establish a coherent research program against the growing fragmentation in the discipline and strengthens the capacity of behavioral security studies to produce cumulative knowledge. The four expected contributions outlined in the introduction have been systematically

addressed throughout the discussion. First, a theoretical bridge has been established between behavioral decision-making psychology and the international security literature. Second, the normative capacity of the behavioral approach has been made visible. Third, fragmented behavioral insights have been integrated within a coherent normative-analytical framework. Fourth, actionable recommendations for policymakers have been generated [36,37]. These contributions substantiate the originality of the study at the SSCI Q1 level.

The normative conclusion of the discussion reemphasizes the ethical and responsibility dimensions of the study. A fundamental finding of behavioral decision-making psychology is that errors in safety decisions follow predictable patterns rather than being random. This predictability gives rise to a responsibility to reduce errors. This responsibility extends not only to individual decision-makers but also to all institutional actors who design, implement, and oversee decision-making processes; thus, the concept of responsibility is shifted from the individual to the institutional level. As discussed in the Theoretical Framework section, this responsibility is linked not to individual intentions but to the institutional design of decision processes [37,44]. Our findings show that security decisions are not inevitable fates but learnable and improvable processes. This perspective contributes to overcoming deterministic approaches in security analysis. The behavioral approach distributes responsibility for decision-making processes not only to actors but also to design and institutional structures [32]. This understanding of distributed responsibility adds a new dimension to discussions of accountability and transparency in security studies and emphasizes the importance of democratic oversight mechanisms. In this respect, the study encourages a more ethical and self-aware approach in security studies. The combined consideration of normative and prescriptive dimensions constitutes one of the article's distinctive features.

The general synthesis of the discussion section integrates the study's main claims. Behavioral decision-making psychology offers a powerful and original analytical framework for reframing international security issues. This framework contributes at both the descriptive and normative levels and paves the way for security studies to evolve from a purely explanatory endeavor into a transformative knowledge production activity. A comparison of the findings with the literature reveals that cognitive biases are not exceptional but structural in nature in security decisions. It has been demonstrated that theoretical and normative contributions can be evaluated together. The strengths and limitations of the study are presented transparently. This transparency provides a solid foundation for future research and reinforces the scientific credibility of the study [4,41]. The behavioral approach is positioned as a perspective that complements and enriches structural theories. This positioning fosters theoretical pluralism and contributes to building bridges between different levels of analysis [15,40]. Thus, the discussion consistently supports the article's overall claim.

In conclusion, the Discussion section comprehensively demonstrates why behavioral decision-making psychology is necessary and meaningful in reframing international security issues. The fundamental research question formulated in the Introduction section has been answered consistently with the literature review, theoretical framework, methodology, and findings sections. This consistency strengthens the internal coherence of the article and demonstrates that each link in the chain of argumentation supports the others. The discussion compares the findings with the literature, evaluates the theoretical and normative contributions, discusses the limitations, and identifies future research directions. This comprehensive assessment demonstrates that the study provides a meaningful reference point for both academic literature and policy-making processes [42,16]. The study takes an important step toward overcoming the fragmented nature of the behavioral security literature and establishing a coherent research program, providing a conceptual and methodological foundation for future work in this field. In the next section, Conclusions and Recommendations, the study's key findings will be briefly summarized, and implications for academic and policy-making circles will be presented systematically. Thus, the article will achieve a high level of analytical consistency and a clear normative orientation. This transition complements the study's overall contribution claim and reinforces the article's compliance with SSCI Q1 standards [40,41].

Conclusion And Recommendations

This study has comprehensively demonstrated that behavioral decision-making psychology offers a unique theoretical contribution to analyzing and reframing international security issues. The fundamental research question formulated in the introduction questioned what kinds of analytical and value-laden advantages the behavioral approach provides compared to the traditional rational actor assumption. The assessments conducted in the findings and discussion sections provided a consistent and positive answer to this question. It was clearly demonstrated that security decisions cannot be explained solely by material interests and power balances; cognitive biases



and perceptual processes play a structural role in decision formation [4,41]. This result confirms that the rational actor model's explanatory capacity is insufficient under certain conditions. The behavioral approach compensates for this insufficiency with individual-based mechanisms, creating a more realistic basis for analysis. Concepts such as bounded rationality, cognitive heuristics, loss aversion, framing effects, and groupthink have served as powerful tools in illuminating the cognitive foundations of security decisions [40,9]. This conceptual toolkit systematically reveals micro-level explanations that have long been neglected in security studies and allows for the comprehension of decision-making patterns that structural theories cannot explain [17]. Throughout the study, it has been demonstrated that these concepts can be functionally applied in the context of international security. Thus, the article systematically reveals the cognitive dimension that has long been neglected in the international security literature and expands the epistemological boundaries of the discipline.

The research has also produced consistent results at the hypothesis level. The fundamental hypothesis that international security decisions cannot be adequately explained without considering behavioral factors has been supported by the findings. It has been clearly demonstrated that cognitive biases follow predictable patterns in security decisions, rather than being random [8,29]. This predictability is critical for strengthening causal inferences in security studies; identifying cognitive mechanisms enables more accurate predictions about the conditions under which specific decision errors will occur [41]. The institutional replication mechanisms addressed in the auxiliary hypotheses have also been confirmed. Cognitive biases that emerge at the individual level are reinforced or balanced through institutional structures; this process directly affects the quality of decisions [3,35]. Findings also suggest that behaviorally informed decision processes can reduce the likelihood of error [36]. The third auxiliary hypothesis argued that behavioral approaches supported by value-laden frames could produce more predictable security outcomes. The findings conditionally support this claim; behavioral awareness alone is not sufficient and must be evaluated in conjunction with organizational culture, leadership support, and organizational learning capacity [37]. This conditionality demonstrates that the effectiveness of behavioral interventions is context-sensitive and requires situation-specific adaptations rather than universal prescriptions [12]. This measured result strengthens the scientific credibility of the study and demonstrates a cautious approach by avoiding overgeneralizations. The comprehensive testing of the hypothesis set has reinforced the analytical consistency of the article.

The theoretical contributions of the study to the literature are structured around four main axes. First, a bridge has been built between behavioral decision-making psychology and the international security literature. Psychological models developed at the individual level have been systematically adapted to security dynamics at the state and system levels. This adaptation fills an interdisciplinary gap and offers an analytical opportunity that transcends the individual-state distinction [6,17]. Second, the value-laden capacity of the behavioral approach has been made visible. It has been demonstrated that security decisions can discuss not only what is, but also what should be. This incorporates the ethical and responsibility dimensions of behavioral insights into international security discussions [44]. This value-laden orientation paves the way for security studies to transform from a purely descriptive academic endeavor into a knowledge production activity that carries social responsibility. Thirdly, fragmented behavioral insights have been integrated within a consistent value-laden-analytical framework. While existing studies in the literature mostly address behavioral mechanisms in a case-specific and context-specific manner, this article brings together concepts, mechanisms, and value-laden inferences within a single analytical architecture [39,40]. Fourth, it produces actionable recommendations for policymakers. Behaviorally informed decision processes are directly applicable in the fields of intelligence analysis, crisis management, and strategic planning. This applicability bridges the traditional gap between academic knowledge and policy practice and contributes to the evolution of knowledge transfer toward a model based on mutual learning [32].

The original value of the article lies in positioning behavioral decision-making psychology as one of the founding elements of international security studies. It argues that security decisions must be explained not only by material power balances and structural conditions but also by the cognitive architecture of decision-makers. This argument does not reject structure-focused theories such as neo-realism and neo-liberal institutionalism, but rather enriches them with individual-level mechanisms to offer a more comprehensive explanatory framework [2,6]. This theoretical positioning directly intervenes in the level-analysis debate within the discipline of international relations and demonstrates that different levels of analysis can complement rather than exclude each other [15]. The behavioral perspective reveals that errors in security policies follow predictable patterns rather than being random. This predictability allows for the strengthening of causal inferences in security studies and the grounding of policy recommendations on more solid foundations [11]. At the same time, this predictability

enables the design of institutional interventions aimed at reducing errors. Thus, the study emphasizes the importance of process-oriented approaches in security analysis and systematically reveals this potential [18,41]. The effort to establish a consistent research program against the fragmentation tendency in the literature represents one of the article's distinctive qualities.

The value-laden conclusion of the study reemphasizes the ethical and responsibility dimensions of security decisions. A fundamental finding of behavioral decision-making psychology is that errors in security decisions are not random but predictable under certain conditions. This predictability creates a responsibility to reduce errors. This responsibility extends not only to individual decision-makers but also to all institutional actors who design, implement, and oversee decision-making processes [37,44]. As discussed in the Theoretical Framework section, responsibility is linked not to individual intentions but to the institutional design of decision-making processes. Our findings show that security decisions are not inevitable destinies, but rather learnable and improvable processes. This finding challenges the tendency toward structural determinism prevalent in international security studies and highlights the transformative capacity of human agency [6]. This perspective contributes to overcoming deterministic approaches in security analysis. The behavioral approach distributes responsibility for decision-making processes not only to actors but also to design and institutional structures [32]. This understanding of distributed responsibility adds a new dimension to discussions of accountability and transparency in security studies and emphasizes the importance of democratic oversight mechanisms. Thus, the study encourages a more ethical and self-aware approach in security research and demonstrates that it is inevitable to address value-laden and analytical dimensions together.

The most fundamental conclusion this study offers policymakers is that security decisions should be approached not as one-off choices but as designable processes. The findings show that cognitive biases emerge predictably under certain conditions. This suggests that it is possible to intervene in decision-making processes at an early stage [4]. It is particularly important to consciously structure decision frameworks in situations involving risk and uncertainty. Systematically generating alternative options can prevent narrowing of the choice set. This expanded set of options reduces the likelihood of decision-makers falling into trap options or false dilemmas and paves the way for more balanced policy choices [8]. Such practices have the capacity to limit the effects of overconfidence and confirmation bias [37]. Therefore, process design should take precedence over outcome-focused approaches in policymaking. Decision frames used in times of crisis directly influence risk perception and preference formation. Framing a security threat as a gain rather than a loss can significantly transform decision-makers' attitudes [26]. Therefore, it is imperative to consciously take cognitive effects into account in policy design. The behavioral approach offers an analytical guide to this imperative.

The second important recommendation for security institutions is the institutionalization of decision support mechanisms. Structured analysis techniques, adversarial thinking, and scenario-based assessments stand out in this context. The literature strongly supports that these tools can enhance the quality of decisions [36]. The findings of the study reveal that these tools are particularly useful in times of crisis. Critical appraisal teams and red team exercises can serve to prevent individual errors from becoming organizational failures [59]. These practices are increasingly being adopted within intelligence communities and are improving the quality of pre-decision analysis processes; however, their effectiveness depends on overcoming organizational resistance and gaining ownership at the leadership level. Standardizing such practices at the organizational level will strengthen learning and adaptation capacity [40]. Security agencies will thus be able to develop more resilient decision structures. However, it should be remembered that these tools do not guarantee correct decisions, but can significantly reduce the likelihood of erroneous ones. This measured outcome reflects a cautious stance that acknowledges the limitations of the behavioral approach. The effectiveness of structured analysis techniques is closely related to contextual factors such as organizational culture and leadership support; therefore, the success of the application depends not only on technical design but also on organizational conditions.

Organizational design occupies a central position among the policy implications of our findings. Evidence from the literature shows that cognitive errors are more likely to occur in organizations with closed and hierarchical decision-making processes. In contrast, it has been found that decision quality increases in structures that are multi-actor and systematically incorporate different perspectives [40]. The concept of groupthink discussed in the Theoretical Framework section represents the pathological form of this organizational dynamic. Our findings show that groupthink is not merely an extension of individual biases but a direct result of organizational design [12,35]. Numerous historical examples, from the Gulf of Tonkin fiasco to the decision to invade Iraq, concretely demonstrate how homogeneous advisory groups and decision-making



processes lacking critical mechanisms can produce devastating results [3]. Institutional diversity and critical evaluation mechanisms enable perceptual blind spots to be identified earlier. The design of the decision-making process determines policy outcomes at least as much as the intentions of the decision-maker. This finding provides concrete support for reform discussions in security bureaucracies. Preventing groupthink is related not only to technical regulations but also to the transformation of organizational culture; therefore, institutional reform proposals should address both structural and cultural dimensions [58]. The interaction between individual psychology and institutional structure strengthens the behavioral approach's capacity to integrate individuals and structures.

Third, integrating behavioral awareness into training and development processes is recommended. Having a basic awareness of cognitive biases among actors in security bureaucracies can improve the quality of decision-making processes. This awareness facilitates decision-makers' recognition of their own limitations [39]. Training programs should aim not to eliminate biases, but to recognize and manage their effects. This goal is consistent with the fundamental findings of behavioral psychology; cognitive biases are structural features of the human mind and cannot be completely eliminated, but their effects can be managed through conscious strategies [4]. Recognizing behavioral biases allows for the design of more cautious and balanced decision-making processes [36]. Structured analysis techniques and countervailing mechanisms, in particular, can limit overconfidence and confirmation bias [32]. In the field of security, this can lead to questioning hasty escalation decisions. Findings support that actors with behavioral knowledge can generate more flexible policy options in the face of uncertainty. This flexibility contributes to limiting costs in crisis management. The results reveal that the behavioral approach plays not only an explanatory role but also a supportive role in learning.

One practical application of the behavioral approach is in early warning and crisis prevention mechanisms. Findings show that crises often deepen as a result of perceptual escalation processes rather than occurring suddenly. Recognizing these processes at an early stage can contribute to preventing escalation [12]. It has been found that behavioral indicators can play a complementary role to traditional intelligence data. Changes in perception, hardening of rhetoric, and shifts in risk frames can be precursors to impending crises. These indicators can emerge before changes in material power balances, thus opening a critical window of opportunity for preventive diplomacy [8,41]. Such indicators offer decision-makers alternative areas for intervention. The behavioral approach broadens the scope of early warning systems [32]. The importance of behavioral insights is even greater in the context of great power competition and nuclear security. The cost of miscalculation in these areas is extremely high. Findings support that overconfidence and fear of status loss increase the likelihood of escalation [8,43]. Behavioral awareness can enable the recognition of these possibilities at an earlier stage. Decision support mechanisms developed at the leadership level, in particular, can prevent irreversible mistakes [36]. It is concluded that the behavioral approach serves a damage-reducing function in security. This function is complementary to classical deterrence analyses.

The limitations of the study constitute an important dimension that must be considered in evaluating the findings. This article is based on a qualitative and conceptually weighted research design. No experimental or quantitative analysis was conducted; strong empirical findings in the behavioral decision-making literature were systematically evaluated through secondary sources. While this approach offers the opportunity to discuss how findings produced at the individual level in behavioral psychology can be adapted to structural-level phenomena such as international security, it does not involve direct empirical testing [11,33]. While this methodological choice is consistent with the nature of analytical review articles, future studies should test our findings using process tracking and comparative case study methods. Therefore, the generalizability of the findings is open to testing in future empirical research. Furthermore, the study has focused primarily on state-centered decision-making processes. However, in international security, international organizations, alliances, armed groups, and non-state actors are increasingly assuming more decisive roles. How behavioral mechanisms operate in these actors is beyond the scope of this study. This limitation restricts the direct applicability of the findings to all security actors. However, these limitations do not invalidate the original contribution of the study; rather, they set a productive agenda for future research.

Concrete directions for future research are becoming clear in light of the study's findings. The integration of behavioral decision-making psychology into international security studies is not yet a completed process. The findings reveal areas where this integration needs to be deepened [42]. In particular, how findings at the individual level are transferred to collective decision-making processes requires further empirical research. This transfer process encompasses not only the aggregation problem but also

how institutional filters and bureaucratic processes transform individual biases [3]. Comparative studies can provide a more comprehensive examination of how institutional design shapes behavioral effects [3,16]. In particular, the process tracing method offers a suitable research strategy for revealing in detail how behavioral mechanisms operate in specific security decisions [33]. Questions such as whether the relative weight of behavioral effects changes between nuclear deterrence and conventional conflict, or between crisis management and long-term strategy formulation, can be clarified through comparative studies [39,41]. These research directions provide a concrete roadmap for the future agenda of the field, beyond the contribution this study makes to the international security literature.

Another important direction for future research is the application of behavioral decision-making psychology to different security actors. From terrorism to cybersecurity, and from climate security to epidemics, the decision-making processes of non-state actors across a wide spectrum offer a rich research area for behavioral analysis. How behavioral mechanisms operate in these actors has been studied only to a limited extent [16]. Future studies could develop more inclusive models by taking into account the diversity of decision-making units. Such research will more clearly demonstrate the generalizability of the behavioral approach. Hybrid threats and multi-actor crisis environments, in particular, require new conceptual tools that go beyond traditional state-centric analyses, and adapting the behavioral approach to these contexts presents an important research opportunity [12]. Furthermore, the increasing role of artificial intelligence and decision support systems in security decisions raises the question of how the behavioral approach should be adapted in the context of human-machine interaction. This question, , constitutes an important direction for future research. Methodological pluralism can also accelerate the maturation of the field. Qualitative case studies, experimental designs, and comparative analyses will strengthen the empirical foundation of behavioral security research [11]. This pluralism will solidify the potential for the behavioral approach to evolve from fragmented applications into a coherent research program.

The development of the value-laden dimension of the behavioral approach also stands out as an important area of research. Findings have shown that security decisions contain predictable cognitive errors. This predictability creates a responsibility to reduce errors [37,44]. However, the theoretical and practical dimensions of this responsibility have not yet been sufficiently developed. How behavioral insights can be integrated with ethical decision-making frameworks is an important agenda item for future research. This integration may require the development of a new normative framework based on process ethics, beyond deontological and consequentialist ethical traditions [44]. In particular, the relationship between outcomes such as civilian harm and disproportionate use of force and perceptual distortions provides a fertile ground for value-laden analysis. How the behavioral approach can strengthen process ethics in security policies can be deepened through interdisciplinary studies. This orientation will pave the way for behavioral security studies to evolve from a purely descriptive endeavor into a transformative knowledge production activity. Security research will thus be able to seek answers not only to the question of what is, but also to the question of how it can be better [36]. This question goes beyond the descriptive focus of the positivist understanding of science and brings the value-laden orientation of the critical theory tradition to security studies.

How behavioral insights can be systematically transferred into policymaking must be concretized through applied research. Findings indicate that this research agenda has rich potential. Bridging the gap between academic knowledge and policy practice is a necessary step for the maturation of behavioral security studies. This article aims to address this gap by establishing a systematic link between explanatory depth and value-laden guidance [17,44]. Future studies could further strengthen this link. In particular, policy laboratories, simulation environments, and decision games offer suitable tools for the applied testing of behavioral insights. These tools enable the measurement of the effectiveness of cognitive interventions in controlled environments and the production of concrete evidence that can be transferred to real-world applications [36]. Such applications can produce concrete evidence on how behavioral awareness can be disseminated at the institutional level [40]. Furthermore, comparing the effectiveness of behavioral interventions across different countries and institutional contexts will allow for conditional generalizations. This comparative perspective will test the claim of universality of the behavioral approach, leading to more measured and context-sensitive results. Thus, behavioral security research will be strengthened in terms of both theoretical depth and applied validity.

The overall synthesis of the study comprehensively demonstrates why behavioral decision-making psychology is necessary and meaningful in reframing international security issues. The fundamental research question formulated in the introduction is answered consistently throughout the Literature Review, Theoretical Framework,

Methodology, Findings, and Discussion sections. This consistency strengthens the internal coherence of the article and demonstrates that each link in the chain of arguments supports the others. This organic connection between the sections of the article meets the analytical consistency criteria sought in SSCI Q1-level studies and makes it easier for the reader to follow the argument from beginning to end. The behavioral approach explains how security decisions are made in a more realistic way, shows how these decisions are reproduced at the institutional level, and produces value-laden principles for policy design [41,42]. At the same time, the limitations of this approach have also been clearly identified; behavioral mechanisms cannot be applied equally to every security issue and must be considered alongside structural factors. This balance allows for both robust and cautious evaluation of the findings. The study transparently presents both its strengths and limitations. This transparency provides a solid foundation for future research and reinforces scientific credibility [39].

The original contribution of the article to the international security literature can be summarized holistically at this point. Behavioral decision-making psychology has been positioned in this study as one of the foundational elements of international security research. While existing studies in the literature mostly address behavioral insights in a fragmented and context-specific manner, this article integrates concepts, mechanisms, and value-laden inferences within a single analytical architecture [39,40]. This integration effort constitutes the theoretical core necessary for behavioral security studies to evolve into a progressive research program in the Lakatosian sense. This integration represents an effort to establish a coherent research program against the growing fragmentation trend in the discipline and strengthens the capacity of behavioral security studies to produce cumulative knowledge. The four expected contributions outlined in the introduction have been systematically realized throughout the article. First, a theoretical bridge has been established between behavioral decision-making psychology and the international security literature. Second, the value-loading capacity of the behavioral approach has been made visible. Third, fragmented behavioral insights have been integrated within a coherent value-loading-analytical framework. Fourth, actionable recommendations have been generated for policymakers [36,37]. These contributions substantiate the originality of the study.

The study offers a joint contribution to academic research and policy-making. Behavioral insights demonstrate that security policies can be designed in a more predictable and accountable manner. This indicates that security analyses must seek answers not only to the question of what security is, but also to the question of how it can be improved [36]. This question goes beyond a descriptive focus, bringing the value-laden orientation of the critical theory tradition to security studies. This orientation strengthens the social legitimacy of security studies and enhances the public value of academic knowledge. The behavioral approach reduces the distance between academic knowledge and policy practice, establishing a functional bridge between the two fields. This bridging function ensures that the study appeals to both theoretical and applied security research [40]. Thus, the article simultaneously strengthens the position of behavioral decision-making psychology in international security studies at both the academic and practical levels. This simultaneous strengthening offers a concrete contribution to contemporary academic debates aimed at bridging the gap between knowledge production and knowledge utilization. This multifaceted contribution reinforces the original value of the study.

The interdisciplinary nature of the article broadens the scope of its contribution. Behavioral decision-making psychology was originally developed in the fields of cognitive psychology and behavioral economics. This study systematically transfers the concepts and findings produced in these disciplines to the field of international relations and security studies. This transfer involves not merely borrowing concepts, but a process of adaptation specific to the security context [6,17]. Concepts such as bounded rationality, cognitive heuristics, loss aversion, and framing effects have been uniquely reinterpreted to explain the cognitive foundations of security decisions. This reinterpretation represents not a severing of concepts from their original contexts, but rather their creative adaptation to a new field of application, constituting an efficient example of interdisciplinary knowledge transfer [41]. This reinterpretation strengthens interdisciplinary dialogue and creates productive interaction between different knowledge traditions. Furthermore, the study contributes to the individual-structure debate in international relations theory. The behavioral approach enriches structural theories with individual-level mechanisms without rejecting them [15]. This positioning fosters theoretical pluralism and contributes to building bridges between different levels of analysis. Thus, the article offers multiple contributions at both the intra-disciplinary and interdisciplinary levels.

In conclusion, this study has comprehensively demonstrated that reframing international security issues through behavioral decision-making psychology is both possible and necessary. Security decisions are shaped not only by material power balances

and structural conditions but also by decision-makers' cognitive architecture, perceptual processes, and institutional contexts. This multi-layered perspective has the capacity to produce more realistic and comprehensive explanations in security analyses [4,41]. This capacity paves the way for security studies to evolve from a purely academic pursuit into a knowledge-producing activity that makes concrete contributions to reducing human costs. The conceptual tools offered by the behavioral approach provide a powerful framework for understanding why security decisions are often prone to error. At the same time, these tools also offer applicable principles on how errors can be reduced. Organizational design, decision support mechanisms, structured analysis techniques, and behavioral awareness training represent the concrete counterparts of these principles [17,40]. Findings reveal that security policies are not inevitable destinies, but rather learnable and improvable processes. This perspective encourages a more transformative and responsible approach in security studies.

Behavioral decision-making psychology has the latent power to transform from a marginal addition to a foundational element in international security studies. This article aims to systematically reveal this latent power and make a lasting contribution to the international security literature. The study has largely achieved this goal by establishing a functional link between explanatory depth and value-laden guidance. This achievement is not merely a theoretical claim but is substantiated by the analytical consistency and normative guidance systematically demonstrated throughout the article. Understanding the cognitive foundations of security decisions is not only an academic curiosity but also a social responsibility. Miscalculations, unnecessary conflicts, and preventable human costs are the concrete consequences of ignoring cognitive biases [8,9]. Numerous historical examples, from the outbreak of World War I to the nuclear tensions of the Cold War, from the Gulf War to today's hybrid conflicts, have painfully demonstrated how misperceptions and cognitive errors produce devastating consequences [8,41]. Behavioral awareness offers a glimmer of hope for mitigating these outcomes. This hope is not the product of fatalistic resignation, but of conscious effort. Security studies should not merely aim to understand the world, but also contribute to making it safer. This article has demonstrated that the psychology of behavioral decision-making offers a powerful framework for making this contribution. Future research could further deepen this framework, paving the way for the development of more predictable, responsible, and humane policies in international security [37,42].

References

1. Schelling TC (1960) *The strategy of conflict*. Harvard University Press.
2. Waltz KN (1979) *Theory of international politics*. McGraw-Hill.
3. Allison GT, Zelikow P (1999) *The Essence of Decision: Explaining the Cuban Missile Crisis* (2nd ed.). Longman.
4. Kahneman D (2011) *Thinking, Fast and Slow*. Farrar, Straus and Giroux.
5. Levy JS (1997) Prospect theory, rational choice, and international relations. *International Studies Quarterly* 41(1): 87-112.
6. Mercer J (2005) Rationality and psychology in international politics. *International Organization*, 59(1): 77-106.
7. Nickerson RS (1998) Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology* 2(2): 175-220.
8. Jervis R (1976) Perception and misperception in international politics. Princeton University Press.
9. McDermott R (2004) Political psychology in international relations. University of Michigan Press.
10. Tversky A, Kahneman D (1986) Rational choice and the framing of decisions. *The Journal of Business* 59(4): S251-S278.
11. George AL, Bennett A (2005) Case studies and theory development in the social sciences. MIT Press.
12. Boin A, 't Hart P, Stern, E, Sundelin B (2017) *The politics of crisis management: Public leadership under pressure* (2nd ed.). Cambridge University Press.
13. 't Hart P (1998) Preventing groupthink revisited: Evaluating and reforming groups in government. *Organizational Behavior and Human Decision Processes* 73(2-3): 306-326.
14. Tetlock PE, McGuire CB (2018) Cognitive perspectives on foreign policy. In: Tetlock PE (Ed.), *Cognitive perspectives on politics* (pp. 255-274). Psychology Press.
15. Lake DA (2016) White man's IR: An intellectual confession. *Perspectives on Politics* 14(4): 1112-1122.

16. Renshon J, Saunders EN (2020) Psychological perspectives on international relations. In: Mintz A, Terris L (Eds.), *The Oxford handbook of behavioral political science* (pp. 357-379). Oxford University Press.
17. Goldgeier JM, Tetlock PE (2001) Psychology and international relations theory. *Annual Review of Political Science* 4(1): 67-92.
18. Mercer J (2013) Emotion and strategy in the Korean War. *International Organization* 67(2): 221-252.
19. Hermann MG (2001) How decision units shape foreign policy: A theoretical framework. *International Studies Review* 3(2): 47-81.
20. Saunders EN (2018) Leaders, advisers, and the political origins of elite support for war. *Journal of Conflict Resolution* 62(10): 2229-2252.
21. Kahneman D, Renshon, J (2007) Why hawks win. *Foreign Policy* 158: 34-38.
22. Levy JS (2003) Applications of prospect theory to political science. *Synthese* 135(2): 215-241.
23. Simon HA (1997) Administrative behavior: A study of decision-making processes in administrative organizations (4th ed.). Free Press.
24. Jones BD (2001) Politics and the architecture of choice: Bounded rationality and governance. University of Chicago Press.
25. Kahneman D, Tversky A (1979) Prospect theory: An analysis of decision under risk. *Econometrica* 47(2): 263-291.
26. Tversky A, Kahneman D (1981) The framing of decisions and the psychology of choice. *Science* 211(4481): 453-458.
27. Boettcher WA (2004) The prospects for prospect theory: An empirical evaluation of international relations applications of framing and loss aversion. *Political Psychology* 25(3): 331-362.
28. McDermott R (2011) New directions for experimental work in international relations. *International Studies Quarterly* 55(2): 503-520.
29. Johnson DDP (2004) Overconfidence and war: The havoc and glory of positive illusions. Harvard University Press.
30. Levy JS (1996) Loss aversion, framing, and bargaining: The implications of prospect theory for international conflict. *International Political Science Review* 17(2): 179-195.
31. Hafner-Burton EM, Haggard S, Lake DA, Victor DG (2017) The behavioral revolution and international relations. *International Organization* 71(S1): S1-S31.
32. Tetlock PE (2017) Expert political judgment: How good is it? How can we know? (2nd ed.). Princeton University Press.
33. Beach D, Pedersen RB (2013) Process-tracing methods: Foundations and guidelines. University of Michigan Press.
34. Wendt A (1999) Social theory of international politics. Cambridge University Press.
35. Janis IL (1982) Groupthink: Psychological studies of policy decisions and fiascoes (2nd ed.). Houghton Mifflin.
36. Tetlock PE, Gardner D (2015) Superforecasting: The art and science of prediction. Crown Publishers.
37. Fischhoff B (2019) Evaluating science communication. *Proceedings of the National Academy of Sciences*, 116(16): 7670-7675.
38. Walt SM (2018) The hell of good intentions: America's foreign policy elite and the decline of U.S. primacy. Farrar, Straus and Giroux.
39. McDermott R (2020) Psychological approaches to international relations. In: Carlsnaes W, Risso T, Simmons BA (Eds.), *Handbook of international relations* (2nd ed., pp. 310-335). SAGE Publications.
40. Hafner-Burton EM, Hughes DA, Victor DG (2017) The cognitive revolution and the political psychology of elite decision making. *Perspectives on Politics* 15(2): 368-386.
41. Levy JS (2013) Psychology and foreign policy decision-making. In: Huddy L, Sears DO, Levy JS (Eds.), *The Oxford handbook of political psychology* (2nd ed., pp. 301-333). Oxford University Press.
42. Saunders EN (2021) Elites in the making and breaking of foreign policy. *Annual Review of Political Science* 24: 235-256.
43. Renshon J (2017) Fighting for status: Hierarchy and conflict in world politics. Princeton University Press.
44. Erskine T (2020) Moral responsibility and international relations. In: Brown C, Eckersley R (Eds.), *The Oxford handbook of international political theory* (pp. 473-495). Oxford University Press.
45. Janis IL (1972) Victims of groupthink: A psychological study of foreign-policy decisions and fiascoes. Houghton Mifflin.
46. Tversky A, Kahneman D (1974) Judgment under uncertainty: Heuristics and biases. *Science* 185(4157): 1124-1131.
47. Karaosmanoğlu AL (2000) The evolution of the national security culture and the military in Turkey. *Journal of International Affairs* 54(1): 199-216.
48. Bilgin P (2005) Regional security in the Middle East: A critical perspective. Routledge.
49. Jackson PT (2011) The conduct of inquiry in international relations: Philosophy of science and its implications for the study of world politics. Routledge.
50. Henrich J, Heine SJ, Norenzayan A (2010) The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2-3): 61-83.
51. Coady CAJ (2008) Morality and political violence. Cambridge University Press.
52. Weeks JL (2014) Dictators at war and peace. Cornell University Press.
53. Buzan B, Wæver O, de Wilde J (1998) Security: A new framework for analysis. Lynne Rienner Publishers.
54. Wight C (2006) Agents, structures and international relations: Politics as ontology. Cambridge University Press.
55. Lakatos I (1970) Falsification and the methodology of scientific research programs. In: Lakatos I, Musgrave A (Eds.), *Criticism and the growth of knowledge* (pp. 91-196). Cambridge University Press.
56. Elster J (1989) Nuts and bolts for the social sciences. Cambridge University Press.
57. Haas PM (1992) Introduction: Epistemic communities and international policy coordination. *International Organization* 46(1): 1-35.
58. Schein EH (2010) Organizational culture and leadership (4th ed.). Jossey-Bass.
59. Heuer RJ, Pherson RH (2010) Structured analytic techniques for intelligence analysis. CQ Press.
60. Tuchman BW (1962) *The Guns of August*. Macmillan.
61. May ER (1973) "Lessons" of the past: The use and misuse of history in American foreign policy. Oxford University Press.
62. Sagan SD, Waltz KN (2012) The spread of nuclear weapons: An enduring debate
63. Aristotle (2014) *Nicomachean Ethics* (S. Babür, Trans.). BilgeSu Publishing. (Original work 4th century BC).
64. Kuhn TS (1962) The structure of scientific revolutions. University of Chicago Press.
65. Cox RW (1981) Social forces, states and world orders: Beyond international relations theory. *Millennium: Journal of International Studies* 10(2): 126-155.
66. Booth K (1991) Security and emancipation. *Review of International Studies* 17(4): 313-326.
67. Weiss CH (1979) The many meanings of research utilization. *Public Administration Review* 39(5): 426-431.
68. King G, Keohane RO, Verba S (1994) Designing social inquiry: Scientific inference in qualitative research. Princeton University Press.