

Exploring Multi-Actor Collaboration and Its Value Resonance in Universities' National Security Education: Based on Actor-Network Theory

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Abstract: National security education in higher education institutions acts as a crucial instrument for fully applying a holistic approach to national security. Its effective implementation depends on the synergistic involvement of multiple actors. Drawing on Actor-Network Theory, this paper constructs a theoretical analytical framework for multi-actor collaboration and its value resonance in university national security education, and systematically identifies the composition and interaction mechanisms of human actors (e.g., governments, universities, educators, students) and non-human actors (e.g., institutions, technologies, cultures, value orientations). The research indicates that establishing obligatory passage points through "problematization", fostering equal interactions among elements on the basis of the principle of generalized symmetry, and relying on the translation process to accomplish enrolment and mobilization are three primary pathways to achieving inter-subjective value resonance. Rather than being manifested in the establishment of a consensus on interests, value resonance unfolds as a dynamic process that generates synergy precisely through and across differences. This perspective, we contend, offers great significance for enhancing the effectiveness of national security education in universities.

Keywords: Institutions of Higher Education; National Security Education; Multi-Actor; Collaborative Engagement; Value Resonance; Actor-Network Theory

1. Introduction

Today, China is navigating the profound changes unseen in a century. Frictions, confrontations, and even conflicts among major powers are

increasingly aggravating, while traditional and non-traditional security issues intertwine and reinforce each other, posing grave challenges to China's national security. Officially enacted on July 1, 2015, the National Security Law of the People's Republic of China mandates that the state strengthen publicity and public opinion guidance on national security, carry out national security education and publicity activities in various forms, integrate national security education into both the national schooling system and civil service training system, and foster national security awareness among all citizens. In September 2020, the Ministry of Education issued a document that clarified requirements for strengthening national security education at primary, secondary, and tertiary levels, further integrating such education into the national education system.

Serving as a pivotal platform for national security education, higher education institutions encompass a wider array of participants [1], span multi-layered innovations across talent cultivation, disciplinary development, and scientific research systems, and have thus become central to the broader national security education system. Therefore, exploring the collaborative mechanisms among diverse stakeholders in university-based national security education and the underlying value resonance mechanisms serves as an essential safeguard for effectively enhancing the quality of national security education for university students, as well as a necessary requirement for safeguarding national security and social and political stability; this endeavor should be situated within the broader context of the entire education system and the national security agenda [2].

2. Literature Review and Theoretical

Framework

The concept of "national security" was first proposed in 1943 by American international affairs scholar Walter Lippmann; since then, scholars have engaged in extensive discussions regarding its definition and implications. For instance, Luciani Giacomo defined national security as "the capacity to resist foreign aggression" [3]. Li argued that national security refers to "the state and capability of a nation to remain free from various forms of interference, erosion, threat, or subversion" [4], while Liu described "national security" as an objective state in which a nation is free from both external threats and attacks, as well as internal chaos and disorders [5]. Accordingly, national security education constituted a crucial instrument for safeguarding national security, forging nationwide awareness of national security, and fostering collaborative governance synergy in this domain. Grygiel J contended that national security education was more than the acquisition of technical expertise and academic credentials. It demanded the study and comprehension of one's own national culture and historical traditions so as to clearly identify what was worthy of defense [6]. Wu Wenbin emphasized the necessity of establishing an integrated assessment-and-evaluation system for national security education within higher education institutions, in order to improve the effectiveness of national-security-related talent cultivation and attain the goals of national security governance [7]. Han focused on the dimensions of curriculum development for national security education in higher education institutions and explored specific pathways for collaborative curriculum development [8]. Ke and colleagues developed a scientific set of evaluation indicators to assess the overall quality of national security education for university students, thereby improving the quality of national security education in higher education institutions [9].

Actor Network Theory (ANT) was proposed in the 1980s by the French sociologist Bruno Latour. Its core approach involves tracing the action trajectories of actors to reveal how the complex network formed around a specific issue or project is constructed [10]. This theory is grounded in the "General Symmetry Principle" [11] and comprises four key elements: "Actor," "Operational Point of Passage" (OPP), "Translation," and "Heterogeneous Network"

[12]. ANT is realized through the interactive participation of both human actors and non-human actors with both groups holding equal status. Actors employ the method of "Translation" to achieve network-building objectives, which primarily involves four key processes: problematization, interest generation, member recruitment, mobilization, and resolution [13]. Due to the heterogeneity among actors, this theory is also known as the Heterogeneous Construction Theory [14]. It manifests in three key aspects: First, replacing the concept of the "Subject" with that of the "Actor" transcends anthropocentrism by incorporating non-human factors-such as technology, institutions, and ideology-into the actor-network; it posits that anything that alters the state of things through the creation of distinctions can be classified as an actor [15]. Second, it emphasizes that all actors also serve as "Mediators"; through the process of "Translation," they transform information and conditions into forms that can interact with other actors, focusing on meaning-making and interest negotiation. The Translation process is characterized by uncertainty, as the collective actions of the actors are not entirely predictable [16]. Third, the community of actors linked together through this process of Translation and endowed with specific functions constitutes the "Actor-Network"; this is not a static structure but a dynamic process involving a series of transformations, Translations, and conversions. Value resonance, in terms of its substance, requires clarity on both the connotation of "value" and the mechanism of "resonance" [17]. Philosophically, value belongs to the category of relations, encompassing the utility relationship between the subject and the object, as well as the normative values that ground inter-subjective relations in equality, justice, and cooperation [18]. As for resonance, it denotes a physical phenomenon where the amplitude peaks when the frequency of an external force aligns with the inherent frequency of a physical system. At its heart is the synergistic effect that the whole becomes greater than the sum of its parts [19]. The German scholar Hartmut Rosa regards resonance as a relational process in which a subject encounters and interacts with the external world [20]. His conception moves beyond the traditional sociological focus on human-to-human interaction alone, extending non-human entities into the relational domain

[21]. Resonant subjects are active actors, while their frequency is not a fixed passive parameter but a collective consensus dynamically constructed by multiple actors through cognition, emotion, values, and other dimensions. Consequently, resonance has developed into a theoretical tool for interpreting how diverse actors can balance their interests and interact collaboratively amid differences. Value resonance represents an extension of resonance into the dimension of value, encompassing shared values and meanings [22], and emphasizes how diverse actors can foster the healthy development of relationships and enhance their sense of value through dialogue and interaction.

Building upon the aforementioned theoretical framework, this study aims to construct a theoretical analytical framework for the collaborative engagement of multiple stakeholders in national security education within higher education institutions, thereby enabling an in-depth examination of the value resonance mechanism that emerges during the implementation of this educational process, as illustrated in Figure 1 below.

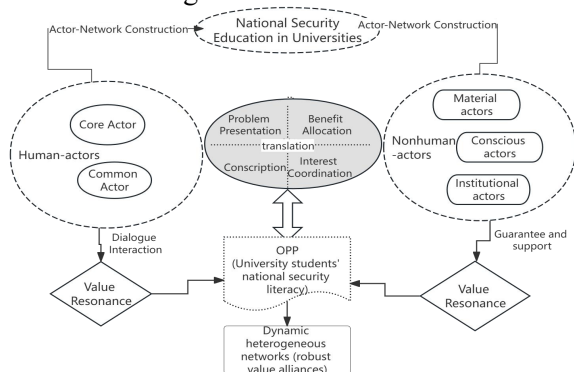


Figure 1. Theoretical Analysis Framework for the Collaborative and Value Resonance Approach among Multiple Actors in University National Security Education

3. Analysis of the Collaborative Mechanism among Multiple Actors and the Value Resonance Mechanism in University National Security Education

Conducting in-depth national security education in higher education institutions is crucial for advancing the integrated reform of the systems and mechanisms governing education, science and technology, and talent development, as well as for helping university students establish a correct outlook on national security and

strengthen their awareness of potential risks and responsibility. Currently, national security education in Chinese higher education institutions primarily falls into two categories: general education and specialized education. General education focuses on integrating national security education into ideological and political courses at universities to shape and enhance young people's outlook on national security and their awareness of national defense; in contrast, specialized education primarily involves the systematic cultivation of national security professionals from the perspective of disciplinary development. In 2021, China's Ministry of Education officially established the first-level discipline of "National Security Studies," which has become an important foundation for cultivating specialized national security professionals in higher education institutions.

The implementation of national security education in higher education institutions involves a multitude of stakeholders — such as government agencies, university administrators, faculty members, students, social organizations, and other entities. These stakeholders possess diverse backgrounds, objectives, and capabilities; to some extent, they exhibit characteristics of fragmentation and individualization, thereby forming a heterogeneous yet stable community for national security education in higher education. Consequently, to achieve the goal of cultivating integrated talent pools in higher education institutions, applying Actor-Network Theory to analyze the distinct relationships and functional roles among the various actors involved in national security education — and thereby elucidate the process of their value resonance mechanism — holds both practical theoretical feasibility and real-world significance.

3.1 The Composition of the Multilateral Actor Network in University National Security Education

Relying on different types of national security education delivered within universities, we can dissect the components of its multi-actor network. Specifically, these comprise human actors (including core actors and collaborative actors) as well as non-human actors (including material actors, cognitive actors, and institutional actors).

Within the category of human actors, national

and regional government authorities constitute the core actors. These bodies formulate and carry out relevant policies and regulations, and mediate relations with other stakeholders, granting them considerable influence and discursive power across the actor network. Collaborative actors consist of institutional entities like schools, social groups, enterprises and communities, together with individuals ranging from government officials and teachers to students and social practitioners. All of these parties engage directly or indirectly in each phase of actor-network construction.

Turning to non-human actors, we can distinguish three types. Material actors cover funding support for national security education, technical

apparatus, relevant curricula, disciplinary systems, and teaching resources. Cognitive actors involve national-security-education-related concepts and cultural perspectives. As for Institutional actors, they take in policies, laws and regulations, institutional arrangements, social norms, and value orientations linked to national security education. These non-human actors provide a solid material foundation and technical support for university-level national security education; simultaneously, they influence the conceptual approaches and behavioral norms of human actors, serving as crucial vehicles and tools for implementing national security education. See Table 1 below for details.

Table 1. National Security Education Actor Composition

Type	Category	Content
Actors	Core Actor	National and regional government administrative authorities, particularly education authorities and administrators
	Common Actor	Organizations such as higher education institutions, social organizations, enterprises, and media platforms; individuals including higher education administrators, faculty members, university students, government officials, and members of the professional community
Actants	Material actors	Educational and instructional technologies, funding, platforms, teaching materials, etc.
	Conscious actors	The Overall National Security Concept, cultural concepts, etc.
	Institutional actors	Policies and regulations, systems, social norms, value orientations, etc.

3.2 The Process of Collaborative Engagement and Value Resonance among Multiple Stakeholders in Higher Education Institutions' National Security Education

The involvement of multiple stakeholders provides a rich array of perspectives and resources for the university-based national security education system, while simultaneously increasing the complexity of coordination and collaboration. The achievement of national security education objectives at universities can, to some extent, be understood as the attainment of a state in which these diverse stakeholders achieve effective synergy and value alignment. Accordingly, this study employs an Actor-Network Theory framework to analyze the process of synergy and value alignment among these multiple stakeholders, as detailed below.

(1) The process of aligning problem-based approaches with shared value propositions

The key to fostering collaboration among diverse actors and achieving value resonance in university-level national security education lies in the adoption of a problem-based approach — where core actors must accurately identify the

issues that concern other actors and transform these issues into objectives that converge shared interests, thereby establishing an "Obligatory Passage Point" (OPP), which essentially represents the "greatest common divisor" of the diverse interest claims within university national security education. Subsequently, leveraging this Obligatory Passage Point and the translation mechanism enables heterogeneous actors involved in national security education to form interest-based alliances, consolidate shared value propositions, and ultimately achieve alignment in value resonance frequency (value consensus). Within the national security education framework at higher education institutions, government authorities at all levels are committed to implementing the Overall National Security Concept through national security education and strengthening the national security governance system. Higher education institutions and their educators focus on optimizing teaching strategies for national security education to maximize instructional effectiveness. Meanwhile, social organizations and professionals across various industries are exploring optimal ways to support the

implementation of national security education initiatives at universities; for example, enterprises can collaborate with universities to conduct employee national security education training or establish practical training bases for such programs, while communities can engage university student volunteers to carry out legal awareness campaigns on national security education for local residents. The primary challenge facing national security education resources — such as information technology and curricula — at higher education institutions is how to ensure these resources are more targeted

and innovative in order to meet the learning needs of university students. The main challenge for relevant policy and institutional frameworks is how to guarantee their binding force and the correctness of their implementation direction, thereby providing a solid foundation for national security education in higher education institutions. Ultimately, these key issues converge at the "mandatory entry point" of enhancing the national security literacy of university students — this point also serves as the basis for fostering value alignment among diverse stakeholders, as shown in Figure 2 below.

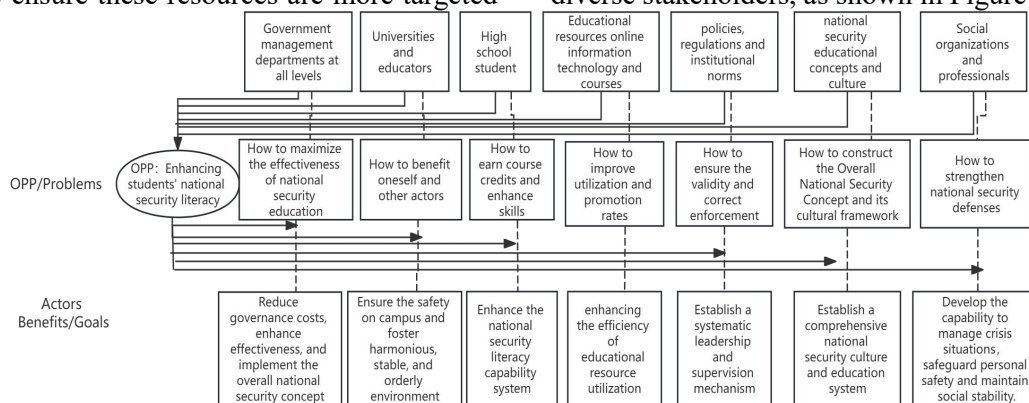


Figure 2. Actors and Enforcement Points in University National Security Education

(2) The broad symmetry of the actor facilitates the value resonance among various elements. The generalized symmetry principle of Actor-Network Theory posits that all actors occupy an equal position; this framework facilitates a comprehensive analysis of the collective role played by various actors—including government administrators, university administrators, educators, university students, communities, enterprises, technologies, institutions, and culture—within the context of value resonance during the national security education process at higher education institutions. This process, in essence, also serves to generate interest and endow the actors with potential benefits that motivate them to proceed through the "OPP" stage.

The education authorities at all levels of government, as core actors, lead, supervise, and ensure the implementation of national security education in higher education institutions. Based on the practical demands of national security and the interests arising from social development, they formulate relevant policies and regulations, guide the conduct of national security education and teaching activities in higher education institutions, and provide operational guidelines for other stakeholders. For example, the

"Guidelines for National Security Education in Primary, Secondary and Higher Education Institutions" identifies 17 categories of security concerns — including traditional security, non-traditional security, and emerging security domains — and specifies the corresponding academic disciplines, thereby facilitating the integration and cross-disciplinary application of national security education within higher education institutions. Additionally, through a tiered accountability system, these authorities coordinate with relevant departments to regularly monitor and inspect schools and social organizations in fulfilling their primary responsibility for national security education; they also allocate special funds and pool high-quality educational resources to support the development of other stakeholders. This process lays the groundwork for achieving a synergistic effect among diverse stakeholders.

Other stakeholders, on the other hand, are characterized by a state of mutual coordination and collaborative development throughout this process. University campuses serve as the primary venues for implementing national security education; university administrators and educators take the responsibility for teaching and learning activities — including the development

of national security education curricula and the provision of supporting teaching facilities — thereby ensuring the effective delivery of national security education. Simultaneously, they integrate various social resources — such as social organizations, enterprises, and communities — to regularly organize practical national security education activities. Through continuous dialogue and interaction during the implementation of national security education, these heterogeneous actors can cultivate an experiential value rooted in a sense of belonging, intimacy, and mutual understanding, thereby maximizing the resonance amplitude — achieving a peak state of resonance and synergy among diverse actors — and generating positive educational outcomes that ultimately enhance university students' national security literacy.

(3) Value Resonance Pathways in the Construction of Actor-Dynamic Networks

From the perspective of Actor-Network Theory, value resonance refers to the process through which heterogeneous actors translate their respective positions and interests into a goal-aligned interest alliance; this translation process reveals the core of the value resonance phenomenon. Since the various actors involved in university-level national security education hold distinct positions and interest demands, dynamic interactions, shifts in roles, and evolving demands emerge among them; thus, translation serves as a pivotal process in constructing the actor network. Only through translation can the actors within the national security education community unite to achieve their shared objectives.

Recruitment and mobilization refer to the process through which core actors employ diverse strategies to attract other actors to join their alliance and act as network ambassadors to coordinate resources and interests in maintaining the stable operation of the network; this process aligns with the notion of reaching consensus on an equal footing as advocated by the theory of inter-subjectivity and represents an important pathway for fostering value resonance. Resonance is frequently marked by tension between external inputs and the damping forces embedded within physical systems. This forms an inevitable phase where heterogeneous actors voice their disagreements, and it can be translated into a tug-of-war between motivating factors and restraining factors during the coordination of diverse interest-bearing parties.

The motivating factors include policy steering and economic rewards, while restraining factors cover cultural frictions and resource-related competition. To illustrate, government administrative bodies and universities may hold divergent epistemological standpoints on national security education. Government agencies maintain that universities ought to take on voluntary obligations to deliver, publicize and popularize national security education. By contrast, universities may point out that rolling out such educational programs would cut into the time reserved for conventional courses and place extra workloads on teaching staff and students. Furthermore, value-based frictions can emerge between universities and social groups or business entities. Universities pursue national security education chiefly for public-interest goals and knowledge diffusion. In comparison, enterprises and social organizations tend to follow economic rationality and aim to secure self-serving gains from national security education activities.

Accordingly, the realization of value resonance among diverse actors relies on well-designed enrolment and mobilization approaches. In terms of policy-based enrolment, governments can formulate relevant policies and deliver financial support to motivate schools, enterprises and social organizations to take an active part in constructing the actor-network for national security education. Meanwhile, the establishment of supervision mechanisms and behavioral norms can effectively regulate the actions of all participating actors. Cultural and environmental enrolment primarily eliminates practical obstacles that hinder actors from achieving their individual goals. By enabling participants to foresee potential benefits of joining the network alliance, this approach facilitates their recognition and acceptance of new roles assigned within the network. Under the guidance of the holistic approach to national security, it integrates multiple educational elements including life safety awareness, national identity, social responsibility, and international understanding, thereby forging a close bond between personal development and national security.

Similarly, demonstration-based enrolment can be realized through the construction of national security education demonstration zones, which serve as experimental bases and display platforms for innovative educational practices.

4. Conclusion and prospect

Grounded in Actor-Network Theory, this study centers on the underlying mechanisms of multi-actor cooperation and value resonance in university national security education. It unpacks the building-blocks of actor networks together with how collaboration and resonance unfold in such educational practices. With “enhancing college students’ national security literacy” as the obligatory passage point, multiple actors participating in university national security education can eventually achieve collaborative resonance across cognition, interest and value dimensions.

Future research can further focus on the empirical level, combining case studies to examine the differences in actor-network construction and resonance effects within national security education practices across diverse universities, construct indicator systems for quality evaluation of national security education in universities, and explore the specific applicable conditions for policy-based enrolment, culture-based enrolment, and demonstration-based enrolment. At the same time, the growing role of non-human actors — against the backdrop of rapid digital transformation and expanding new security domains — merits particular attention. How to effectively align technological platforms, data resources, and institutional rules to improve dynamic actor-network governance is a question that deserves deeper exploration.

Acknowledgments

This paper is supported by the Second Batch of 14th Five-Year Plan Provincial Teaching Reform Projects for Undergraduate and Postgraduate Education in Zhejiang Province: Research on the Collaborative Development and Effectiveness Evaluation of National Security Education Courses in Higher Education Institutions (No. JGBA2024225) & College of Humanities and Foreign Languages Teaching Reform Project (2026): A Study on Ethical Risks and Mitigation Strategies in the Application of Large AI Models for MPA Talent Development

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