

## We're WEIRD and Our Adversaries Know It: Psychological Biases Leave the United States Vulnerable to Cognitive Domain Operations

### Description

The US Department of Defense [originated](#) the concept of a cognitive warfare domain, but the United States is already well behind on defending against others' cognitive operations and campaigns<sup>1</sup> let alone effectively countering them or conducting offensive activities. To succeed in the cognitive domain, one must understand the psychological weaknesses, patterns, behaviors, and motivations of the target population in order to effectively disrupt decision-making and other activities in one's own favor<sup>2</sup> or at least, against the target's interests. Not all societies are easy to understand, and by extension, target. Unfortunately, the United States is.

In recent decades, developments in the field of psychology have created a bias toward studying western, educated, industrialized, rich, and democratic ([WEIRD](#)) populations<sup>3</sup> and particularly their college students<sup>4</sup> even though they are not representative of most of the global population. This bias leaves the United States and other psychologically similar nations significantly more vulnerable to targeted cognitive operations than their adversaries. In response, US researchers and decisionmakers must better understand and form defenses around their own population's psychological weaknesses while simultaneously expanding the scope of psychology research to better defend non-WEIRD partners and allies and to counter non-WEIRD adversaries such as China.

### Defining the Threat through an Adversary's Eyes

To unpack the nature of the threat, we must first consider what the terms cognition and cognitive domain mean from the perspective of the people we are interacting with. Because China poses the most urgent adversarial threat to the United States and openly seeks to exploit its enemies' vulnerabilities and weaknesses, this analysis will focus on the threat of Chinese cognitive warfare.

Josh Baughman's recent [translation brief](#) provides important insights on how the People's Liberation Army (PLA) understands cognitive operations. An article in the *PLA Daily*<sup>5</sup> the PLA's official publication<sup>6</sup> titled "A Perspective on the Evolving Trend of Cognitive Warfare"<sup>7</sup> defines cognition as "the process by which people acquire, process, and apply information and knowledge."<sup>8</sup> According to a [Chinese definition](#) published in the *PLA Daily* in September 2022, cognitive domain operations "take the human brain as the main combat space, and focus on

striking, weakening, and dismantling the enemy's will to fight, using human psychological weaknesses [â?i] and increasing their internal friction and decision-making doubts.â?•

The original document Baughman summarizes was produced in China's Academy of Military Sciencesâ?one of China's premiere defense-thinking incubatorsâ?and contains a few important points for the present discussion. The document openly declares that cognitive domain operations â?blur the lines between wartime and peace, across battlefields and national boundaries, and widely permeate political, economic, diplomatic, and other social fields.â?• Chinese cognitive domain operations thus run the gamut across societal sectors, and they do so regardless of whether or not one is â?at warâ?• with China. According to Chinese security analysts, the time for cognitive domain operations is always now.

Next, the ultimate aims of the cognitive domain are made plain. According to the document, in cognitive warfare the PLA seeks to gain and maintain â?a superior cognitive capabilityâ?• in order to â?shape how an adversary acts and the decisions they make.â?• Shaping actions and decisions requires a basic understanding of human behavior and can be more effective when it is culturally informed.

The totality of the PLA's intentions behind the cognitive domain is clear. Baughman's translation shows that for China, â?At a deeper level, no matter the type of war or its purpose, [conflict] is â?ultimately a contest of human will.â?â?• Human will is generated and affected by various psychological and cultural factors. Since human will is the â?ultimate contest,â?• for the PLA, all roads run through the cognitive domain.

### **The Field of Psychology Has a WEIRD Bias**

Success in the cognitive domain requires close study and analysis of the target population's psychological make-up. To increase a target's decision-making doubts, one needs to understand how its decision-making processes function and maintain confidence. To leverage psychological weaknesses, one needs to identify and assess vulnerabilities for exploitation or exacerbation. Likewise, â?dismantling the enemy's will to fightâ?• requires a deep understanding of the psychological and cultural factors that coalesce to form and reinforce its â?will to fight.â?• Psychology and its sister fields in the social sciences and humanities produce surveys, experiments, close observations, questionnaires, and other [methods](#) designed to reveal the specific psychological dataâ?including patterns of thought, behavior, and cognitionâ?required to design successful cognitive operations against an enemy or to understand oneâ?s own psychological vulnerabilities.

However, the way the fields of psychology and cognitive science have developed explanations of human psychology over the past 50 years potentially represents a massive vulnerability in the cognitive domain of warfare. This is because experts have not studied the psychology of humans, per se; largely, they have examined the psychology of western, educated, industrialized, rich, and democratic people: [WEIRD](#) populations. This demographic makes up a mere five to six percent of the world's [population](#)—hardly a universal representation of humans.

While there are some debates as to how severely the field is impacted by this bias and whether this bias even is a bias, it is nonetheless the case that most experimental, empirical research data in the fields of psychology and cognitive science [concern WEIRD populations](#), and especially college students from those populations. From these same fields and from the bits of non-WEIRD data that exist, we know that cognition is [uniquely shaped](#) by our culturally informed belief systems and that human psychology is often [not universal](#), either over time or [across cultural boundaries](#).

Because of the biased history of the field, non-WEIRD populations have access to [at least](#) several [generations](#) of specific, validated, and verified psychological research on WEIRD populations—emotions, habits, motivations, and behaviors. In other words, the field of psychology has laid bare the desires, cognitive processes, and social psychology that inform decision-making and both individual and group behavior in the United States and similar countries. The United States' non-WEIRD adversaries are thus extremely well equipped to build and act upon predictive models of US behavior and decision-making and apparently [successfully so](#). They are also better equipped to develop psychological operations profiles and plans that will continue to be effective at influencing and co-opting US behavior.

By contrast, there is very little non-WEIRD psychological research data, and such populations are less well understood by those outside of their [culture groups](#). As a result, the United States is not only more vulnerable to cognitive domain operations, but is also disadvantaged in planning such operations of its own.

### **Separating WEIRDness from Weakness**

While the WEIRD bias in psychological understanding is cause for concern, it is also a call to action. This analysis yields three key recommendations for US defense thinkers and decision makers, which may also be individualized for anyone concerned about their own susceptibility to foreign influence.

First, it is imperative that we take stock of the serious vulnerabilities represented by WEIRD psychology data and research. What exactly has been validated about how the US population thinks, and how well? Areas to inventory could be selected based on the PLA's stated target areas and

should include:

- *Behavior modification and decision-making influence*, which can be used to influence publics and the decisions of policy makers;
- *Social identity, belonging, and disenfranchisement*, which can be used to better divide a population in pursuit of any number of malign ends;
- *Cross-cultural understanding, rejection, and acceptance*, which can be leveraged to prevent cross-cultural unity or to design narratives that paint a dishonestly rosy picture of the would-be adversary, thus gaining unwitting supporters;
- *Motivators of guilt and shame*, which can be weaponized to induce malign disillusionment with oneâ??s own country or culture; and
- *Motivation in general*, which can be leveraged toward any number of malign ends.

US defense analysts should take stock of what validated and replicated (that is, reliable) data already exist about US cognition to strengthen the weaknesses that could benefit adversaries. Categories of immediate concern include strong desires that override rational thought, the psychology of group identity and rejection, decision-making processes of organizational leaders, and sources of individual agency in oneâ??s life, social groups, and professional position. These represent some of the most easily exploitable areas of cognition within the United States.

Second, security-focused decision makers should build preemptive defenses around identified hotspots of accumulated, replicated psychological data. Chinese defense thinkers have made plain that they seek to undermine US group cohesion and political will to even exist. It is not a matter of naÃ¯ve peace-seeking to look for ways to drive the cognitively diverse US population to common understanding, or at least towards respectful compassion, as a bulwark against malign cognitive operations. Given the recent increase in political polarization in previously stable countries, including the United States, one should pay special attention to repairing damages to US social ties and to both the critical histories and hypothetical futures that stand to drive the nation apart without appropriate acknowledgment.

Lastly, researchers should take inventory of, and remedy, the gaps in psychology research about non-WEIRD populations, including allies and partners. If US researchers and decisionmakers better understand the ways their friends and near-allies think and behave, the US government can better leverage existing capacity-building programs to help them build defenses against the kind of existential undermining that adversaries are implementing across the globe. In the meantime, researchers might be able to lean on existing field data of humanities and social sciences scholarsâ??such as sociolinguists, ethnographers and cultural anthropologists, and behavioral interviewersâ??to begin remedying this gap.

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*The views expressed are those of the author and do not reflect the official position of the United States Military Academy, Department of the Army, or Department of Defense.*

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