

Determinants of American Public Attitudes toward China: Evidence from the Pew Global Attitudes Survey

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Abstract

Against the backdrop of globalization and profound adjustments in the international landscape, the attitude of the American people towards China, as a “barometer” of Sino-US relations, is increasingly becoming a key factor in understanding the cognitive differences between the two sides. This study is based on the data from the **Pew Research Center’s (2023)** Global Attitudes Project survey, and uses a binary logistic regression model to systematically explore the mechanisms by which individual cognition, group identity, and media exposure affect the favorability of the American public towards China. Research has found that factors influencing American attitudes towards China include the comprehensive strength of both China and the United States, media exposure, perception of strategic competition, satisfaction with democracy, and perception of Chinese overseas engagement. Further analysis shows that the American public’s understanding of China’s economic development tends to be positive, and social media has also improved their negative perception of China. However, the strategic competition between China and the United States, ideological biases towards China, and misunderstandings of China’s foreign policy have led to a more negative attitude towards China. Therefore, both China and the United States should strengthen cultural exchanges, enhance mutual understanding, weaken zero sum game thinking with common economic interests, and jointly recommend the return of bilateral relations to the right track.

Keywords

Attitudes toward China, American Polls on China, China-US Relations, Influence Factors, Public Opinions

1. Introduction

At a time when globalization is deepening and the international landscape is rap-

idly evolving, U.S.-China relations—as one of the world’s most important bilateral relationships—not only profoundly affect the interests of both countries but also play a pivotal role in the global landscape of peace and development. In 2023, against the backdrop of unprecedented global changes, finding a “proper way of getting along” became a major challenge for both countries. As Xinhua News Agency pointed out after the meeting between the two heads of state in 2023, the international community faced two drastically different choices: one characterized by solidarity and cooperation in addressing global challenges, and the other by zero-sum thinking and bloc confrontation. This strategic choice highlights that the stability of the world’s most important bilateral relationship is not only a matter of foreign policy, but also deeply rooted in the perceptions and attitudes of the people of both countries.

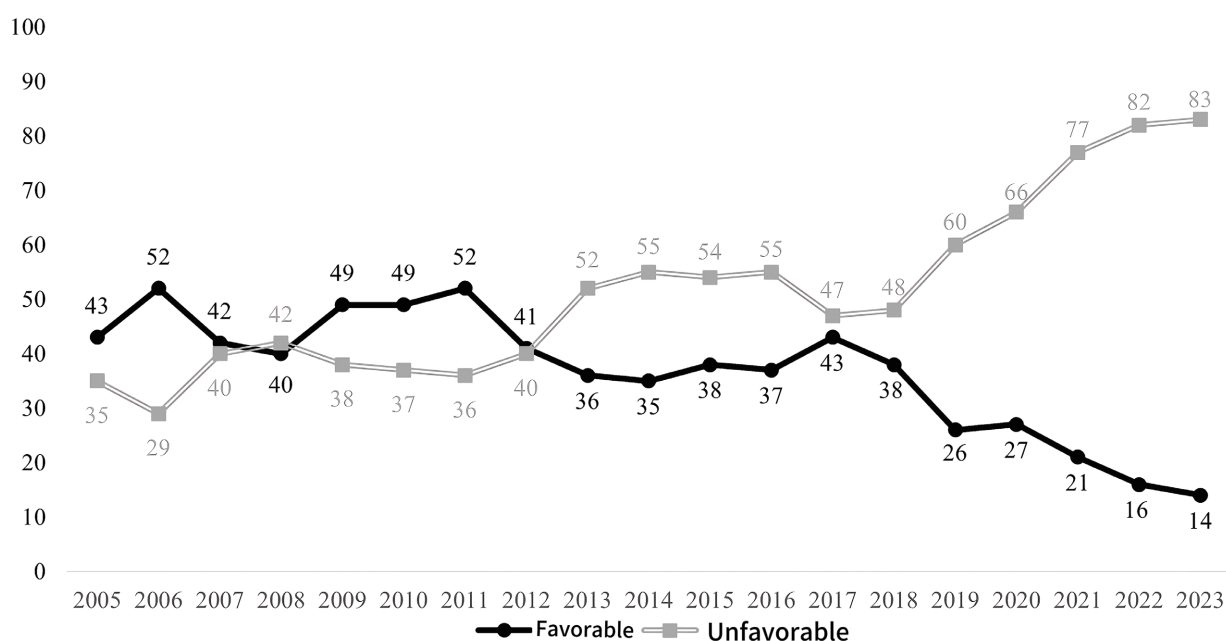


Figure 1. Trends in U.S. public attitudes toward China (2005-2023).

As a “barometer” of international relations, public sentiment in the United States directly influences people-to-people exchanges, policy-making, and international cooperation between the two nations. However, in recent years, data from multiple authoritative public opinion polls have shown a marked downward trend in U.S. public favorability toward China. Data from the Pew Research Center indicates that in 2020, U.S. public favorability toward China stood at just 27%, a 14-percentage-point drop from 2012; by 2023, **Figure 1** had fallen further to 14%. Behind this trend, the continuous escalation of U.S.-China trade frictions, intensified geopolitical rivalry, ideological disputes, and the U.S. media’s long-standing one-sided and even negative coverage of China have all been subtly shaping the American public’s perception of China. However, current academic research on the factors influencing U.S. public favorability toward China has largely focused

on macro-level policy analysis, lacking large-scale empirical tests at the micro-individual level and insufficiently exploring the mechanisms of interaction between individual characteristics and social structural factors. While high-level diplomatic narratives emphasize the macro-level choices between cooperation and confrontation, the micro-foundations of these bilateral relations—the American public’s attitudes—remain complex and multifaceted. Therefore, this study utilizes the 2023 Pew Global Attitudes Project data to address a pivotal research question: How do perceptions of national power, strategic competition, and ideological factors interact to shape the American public’s favorability toward China in this era of significant global transformation?

2. Review of Related Research

2.1. Research on China’s National Image

2.1.1. China’s National Image on a Global Scale

China’s national image represents the international community’s perceptions and evaluations of various aspects of China, including its politics, economy, and culture, while public favorability toward China serves as the emotional projection and quantitative manifestation of these perceptions. Together, they constitute two sides of the same coin in public opinion research. Consequently, existing studies have largely focused on analyzing regional variations in China’s national image across the globe, as well as trends in its evolution over time. Since 2011, the research team at the Institute for Contemporary China and the World has conducted annual global surveys on China’s national image, providing a relatively objective and comprehensive presentation of the latest perceptions and shifts in international public opinion regarding China’s political, diplomatic, and cultural image. On January 10, 2025, the Global Times Institute released the Global Survey Report on China’s International Image, which is the largest-scale, most extensive in sample size, and most comprehensive and in-depth global public opinion survey report conducted in China since the founding of the People’s Republic. From a regional perspective, Wang’s (2023) research suggests that Southeast Asian countries’ perceptions of China are influenced by multiple factors, exhibiting dynamic changes and regional variations; Pan & Xiao (2023) found that Indonesians’ perceptions of China’s national image are contradictory; influenced by negative news coverage of China in the Indonesian media, China’s image has faced stigmatization in Indonesia; Jia (2024), however, found that the Philippine public’s perception of China’s national influence is steadily increasing, and that favorable attitudes toward China exhibit a “U”-shaped pattern in response to fluctuations in Sino-Philippine relations; Regarding other countries in the Asian region, Yoo (2023) indicates that China’s national image in South Korea is influenced by whether South Korea maintains a neutral stance in international relations, as well as by sudden incidents and cultural and trade exchanges. China’s national image in Japan has declined due to Japan’s non-neutral stance—such as its alignment with the United States in U.S.-China relations, territorial disputes, and historical is-

sues—while China’s national image in Russia remains relatively stable and generally positive; In Africa, Li’s (2021) research indicates that perceptions of China’s national image are generally positive, but enhancing China’s national image in Africa still faces challenges; regarding perceptions of China’s national image in developed countries, research by Edney & Turcsányi (2024) reveals that the general public in the Five Eyes countries holds a negative overall attitude toward China, yet there is a significant disparity between the perceptions of the elite and the general public.

Enhancing China’s national image is a critical strategic imperative for the country to achieve sustainable development in the era of globalization; its importance permeates every dimension of international relations. A wealth of existing research has proposed pathways for enhancing China’s national image from a communication studies perspective. Qi (2023) argues that the construction of China’s national image must be achieved through a two-way interaction between self-shaping and external shaping; Meanwhile, Yin & Fang (2023), from the perspective of cross-cultural communication and dissemination, argues that the key to breaking the binary opposition between “self-shaping” and “other-shaping” lies in achieving “trans-cultural” intersubjective communication through multicultural dialogue and integration; Ye (2023) points out that the construction of China’s national image must draw on lessons from historical patterns to address the challenges of the digital age; In the era of new media, Xing & Zhao (2021) argue that the construction of China’s national image requires breakthroughs across dimensions such as the communication landscape, discourse systems, aesthetic emotions, technological applications, and traffic guidance. These approaches are interrelated and collectively serve to comprehensively enhance China’s national image and optimize the effectiveness of its international communication. Together, they provide systematic practical guidance and theoretical support for addressing the complex international public opinion environment and advancing the development of national soft power.

2.1.2. The U.S. Public’s Perception of China’s National Image

U.S.-China relations are among the most important bilateral relationships in the world. Therefore, in addition to analyzing how other countries perceive China’s national image, existing research has sought to identify pathways for improving mutual understanding between the two nations by examining the U.S. public’s views and attitudes toward China. Other scholars have stated (Wang, 2006) that the U.S. perception of China’s national image is influenced by multiple factors, including historical traditions, the nature of the state, state behavior, and international status; Li & Li (2020) found that the American public’s perception of China remains influenced by ideology and media framing, presenting a stereotype dominated by the notion of “competitor”; Through a comparative analysis of public perceptions of China’s national image in both China and the United States, Yu & Huang (2021) point out that Chinese public perceptions are primarily influenced by national power and Sino-U.S. relations, whereas American public perceptions

are more influenced by Sino-U.S. relations, specific images, and media consumption.

However, China's national image ultimately falls more within the realm of communication studies, and the perceptions of China's national image by various countries constitute a complex, multidimensional concept. Although, generally speaking, a positive perception of a nation's image tends to foster higher favorability toward that country, while a negative perception may lead to lower favorability, this relationship is not absolute and is subject to the influence of various factors. Therefore, this paper adopts a perspective from the field of international relations, using the cognitive dimension as the independent variable and emotional orientation as the dependent variable, to conduct an empirical analysis examining how U.S. citizens' evaluations of China's technological capabilities and political system influence their favorability toward China.

2.2. Research on Factors Influencing U.S. Public Perceptions of China

Scholars have examined the factors influencing U.S. public attitudes toward China from various disciplinary perspectives, including political science, communication studies, and social psychology. Research by Xie & Jin (2021) indicates that U.S. favorable attitudes toward China are shaped by the combined influence of multiple factors, including socioeconomic development, perceptions of democratic values, the nature of economic ties (an export-oriented structure), and individual educational backgrounds, exhibiting distinct characteristics of negativity and ideological bias. The research findings of other scholars have also primarily focused on these aspects. Regarding bilateral political relations, Hall & Smith (2013) note that the public tends to rationally assess state-to-state relations from the perspective of national interests, and the quality of bilateral relations profoundly influences public attitudes. Research by Wang & Xiao (2015) indicates that the U.S. public's attitude toward China is shaped by their perception of China's comprehensive national power, particularly when they perceive significant shifts in the relative balance of power between the two countries. Regarding the role of the media in shaping public opinion, some scholars believe that media coverage influences U.S. public favorability toward China in a manner that is both medium-specific and predominantly negative (Xu et al., 2011). In contrast, people-to-people exchanges combine the strengths of both official state diplomacy and unofficial public diplomacy. They can significantly enhance favorable perceptions through firsthand experiences, indicating that the negative impact of media discourse can be partially offset through exposure to diverse information. Wu's (2018) research demonstrates that the High-Level Consultation Mechanism on People-to-People Exchanges between China and the United States has effectively enhanced American society's understanding of China, particularly improving favorable perceptions of China's image among young people. Cross-cultural exchanges among young people from both countries constitute a vital component of people-

to-people exchanges between China and the United States and exert a significant influence on bilateral relations. Research has shown that American youth pay greater attention to China's practical contributions to global governance, and that their trust in China is built upon a dual logic of interest calculation and value resonance (Chen et al., 2025), providing a reference framework for fostering trust, dispelling doubts, and optimizing cross-cultural exchanges among Chinese and American youth.

Of course, existing research has analyzed the factors influencing changes in U.S. public sentiment toward China based on poll data. Wu (2020) employed a polynomial model to find that factors such as economic strength, security dilemma, political cycles, and people-to-people exchanges significantly influence attitudes toward China; Liu Tingting, drawing on survey data from the Pew Research Center and other institutions, analyzed the evolution of U.S. public attitudes toward China and their influencing factors from both individual and national perspectives. However, based on the available literature, these studies primarily rely on data from 2000 to 2020. In recent years, U.S.-China relations have undergone significant changes, including the escalation of the trade war, the impact of the pandemic, and intensified technological competition, making it difficult for past data to accurately reflect the current situation. Therefore, this study incorporates data from the U.S. segment of the 2023 Pew Research Center Global Attitudes Survey to address the limited explanatory power of existing research regarding U.S. perceptions of China in the post-pandemic era. Consequently, this paper proposes the following seven hypotheses:

Hypothesis 1: Individuals who perceive U.S. national power more positively are more likely to hold a favorable view of China (reflecting a sense of national confidence);

Hypothesis 2: Individuals who perceive China's national power as a major concern are less likely to hold a favorable view of China;

Hypothesis 3: Compared to the U.S. public leaning toward the Democratic Party, the U.S. public leaning toward the Republican Party holds a more negative attitude toward China;

Hypothesis 4: The higher the U.S. public's media exposure, the more positive its attitude toward China;

Hypothesis 5: The stronger the U.S. public's perception of strategic competition, the more negative its attitude toward China;

Hypothesis 6: The higher the U.S. public's satisfaction with domestic democracy, the more positive their attitude toward China;

Hypothesis 7: The stronger the U.S. public's perception of Chinese overseas engagement, the more negative their attitude toward China.

3. Data Selection and Study Design

3.1. Sample Description

The data for this empirical study is primarily drawn from the 2023 Global Atti-

tudes Project conducted by the Pew Research Center. Since 2021, the Pew Research Center has conducted its annual Global Attitudes Project survey using the American Trends Panel (ATP), which was established in 2014. The panel recruits members through a nationwide random sample of residential addresses and employs an online survey method. The 2023 survey collected data from 3576 respondents, further enhancing the sample's timeliness and coverage.

The study includes one dependent variable and seven independent variables. The dependent variable is the U.S. public's attitude toward China, as measured by the questionnaire item "What is your view of China?" The independent variables are U.S. national power, China's national power, political orientation, media exposure, perception of strategic competition, satisfaction with democracy, and perception of Chinese overseas engagement. Control variables include gender, age, education level, household income, religious affiliation, and region.

This study utilized data from the 2023 Pew Global Attitudes Project. After cleaning and handling missing values (including "Don't know" and "Refused" responses) via listwise deletion, the final analytical sample size for the binary logistic regression was $N = 2499$. While the Pew American Trends Panel (ATP) provides sampling weights, this analysis was conducted using unweighted data. This decision was made to prioritize the internal validity of the psychological and cognitive mechanisms being tested, as unweighted models are often preferred when the research objective is to explore relationships between variables rather than providing exact population point estimates. To ensure robustness, a comparison between the full sample and the analyzed sub-sample showed no significant systematic bias.

3.2. Variable Selection and Coding

3.2.1. Dependent Variable

Determining the U.S. public's attitude toward China is the key focus of this paper, specifically the selection of the dependent variable. Here, the question "What is your view of China?" is used to measure the U.S. public's attitude toward China. In the questionnaire, "Very favorable" is coded as 1, "Somewhat favorable" as 2, "Somewhat unfavorable" as 3, and "Very unfavorable" as 4. While the questionnaire design includes a potential continuous dimension, this study adopts a dichotomous approach. Following binary logic, positive responses—namely "Very favorable" and "Somewhat favorable"—are categorized as 1, while negative responses—namely "Somewhat unfavorable" and "Very unfavorable"—are categorized as 0. This establishes a binary opposition between "positive" and "negative."

3.2.2. Independent Variables

1) U.S. Comprehensive National Power

There is a complex relationship between U.S. citizens' perceptions of their country's comprehensive national power and their attitudes toward China. These perceptions often indirectly shape their views on China by influencing their sense of security, competitive mindset, and perception of the U.S.-China relationship.

Based on a quantitative analysis of cross-national data, Lai (2019) found that U.S. comprehensive national power (particularly economic and technological strength) is positively correlated with the public's favorable attitude toward China; Research by Huang et al. (2020) indicates that when the United States maintains an advantage in hard power domains such as military and technology, it is more inclined to adopt an open attitude toward China's development; MacDonald & Parent (2018) used a game theory model to demonstrate that U.S. hard power advantages can reduce public sensitivity to China's rise. The measurement of the independent variable "U.S. comprehensive national power" comprises four questions: "How would you describe the current economic situation in the United States?"; "Please compare the United States with other wealthy nations in terms of living standards. How do you think the United States performs?"; "Please compare the United States with other wealthy nations in terms of military strength. How do you think the United States performs?"; and "Please compare the United States with other wealthy nations in terms of technological achievements. How do you think the United States performs?" Given the differences in measurement between the economic-related question and the latter three questions, adjacent rating levels were merged to align their structures. Consequently, the questions were scored as follows. First, for the latter three questions, based on the perceived level, "Best" and "Above Average" were assigned a score of 3, "Average" was assigned a score of 2, and "Below Average" and "Worst" were assigned a score of 1. Second, for the economic questions, based on the level of perception, "very good" and "good" were assigned a value of 3, while "poor" and "very poor" were assigned a value of 1. Finally, the scores from the four questions were summed to yield the value for the independent variable "U.S. Comprehensive National Power," with a range of 4 to 12. A higher score for this variable indicates that respondents perceive the U.S.'s comprehensive national power as more significant.

2) China's Comprehensive National Power

The composite variable "Perception of China's Combined National Power" is operationalized by aggregating items regarding China's global economic standing and its military capabilities. The inclusion of these specific items is based on the theoretical framework that national power is a multidimensional construct. As the 2023 Pew survey prompts respondents to evaluate whether China's growing economy and military are "a good thing" or "a bad thing" for the U.S., combining these reflects the holistic "China-related security concerns" or "China Opportunity" perception. This approach ensures the variable captures not just isolated economic anxiety, but a comprehensive cognitive assessment of China's structural power in the international system. Furthermore, a study by the American Studies Institute of the Chinese Academy of Social Sciences indicates that since the beginning of the 21st century, the American public has increasingly perceived China's gradual rise, heightened their awareness of China's significance, and exhibited complex attitudes and divisions regarding China (Yuan, 2013).

The U.S. public's perception of China's comprehensive national power is a ma-

major factor influencing their attitudes toward China. Referring to the previous discussion on the measurement of U.S. comprehensive national power, we first consider the following three questions to measure this independent variable: “How would you describe the current economic situation in the United States?”; “Please compare China with other wealthy countries in terms of living standards. How do you think China performs?”; “Please compare China with other wealthy nations in terms of military strength; how do you think China performs?”; and “Please compare China with other wealthy nations in terms of technological achievements; how do you think China performs?” Based on the level of perception, “best” and “above average” are assigned a value of 3, “average” is assigned a value of 2, and “below average” and “worst” are assigned a value of 1. Furthermore, since the 2023 Global Attitudes Survey did not directly ask about perceptions of China’s economic situation, this study selected the question “Which of the following do you consider to be the world’s leading economic power today?” to indirectly gauge U.S. citizens’ perceptions of China’s economic strength. To minimize the impact of measurement differences, based on the response options, “China” is assigned a value of 3, while “the United States,” “Japan,” and “EU countries” are each assigned a value of 1. Finally, the scores from the four questions are summed to yield the value for the independent variable “U.S. Perception of China’s Comprehensive National Power,” with a range of 4 to 12. A higher score for this variable indicates that respondents perceive China’s comprehensive national power as more significant.

3) Political Orientation

Political orientation and party affiliation do indeed influence American public perceptions of China (Gries & Crowson, 2010). Survey data from the Pew Research Center shows that, overall, Republicans hold more negative views of China than Democrats. In the U.S. two-party system, differing political orientations exert a certain influence on American citizens’ attitudes toward China. In recent years, Republicans have increasingly leaned toward a form of domestic-focused nationalism, placing relatively greater emphasis on practical interests than on ideology. Meanwhile, the populist undertones in some Democratic foreign policy positions have led certain Democrats to recognize the importance of U.S.-China cooperation; relatively speaking, Democrats pay more attention to ideology and emphasize human rights issues in China. Therefore, “Republican/leaning Republican” is assigned a value of 1, and “Democrat/leaning Democrat” is assigned a value of 2.

4) Media Exposure

The “unfiltered” nature of social media communication allows the American public to see the real China. Generation Z in the United States deconstructs political narratives in its own unique way, breaking down the stereotypes shaped by mainstream American media. Existing research using Twitter data to measure U.S.-China relations indicates that as individuals gain more experience with Twitter and increase their usage, their attitudes toward China improve (Wang et al.,

2015). Therefore, U.S. citizens' social media exposure influences their attitudes toward China to a certain extent. For "Media Exposure," we utilized Pew's original items measuring the frequency of news consumption and the specific usage of social media platforms as primary information sources. The rationale for merging these items into a single scale is rooted in the "information flow" theory: the intensity of exposure and the nature of the medium jointly determine the volume and slant of information an individual receives about China. By consolidating these items, the study can better control for the "echo chamber" effect and the overall salience of China-related narratives in the respondent's daily information environment.

The measurement of this independent variable includes two questions: "Do you use TikTok?" and "How often do you obtain news and information from social media sites (such as Facebook, Instagram, or YouTube)?" As mentioned earlier, there is a measurement discrepancy between these two questions. To better ensure that this variable reflects U.S. citizens' media exposure, the adjacent response categories of the second question were appropriately merged based on the number of commonly used mainstream media outlets, to align with the structure of the corresponding question. Therefore, for the first question, "Yes" is assigned a value of 1 and "No" a value of 0. For the second question, "Very frequently" and "Fairly frequently" are assigned a value of 3, "Sometimes" a value of 2, "Rarely" a value of 1, and "Never" a value of 0. Finally, the scores from both questions are summed, resulting in a range of 0 to 4. A higher score on this variable indicates greater media exposure among respondents.

5) Perception of Strategic Competition

U.S. citizens' perception of strategic competition tends to foster a zero-sum mindset, amplifying the adversarial nature of competition and undermining their recognition of the complementary relationship between the United States and China. The measurement of this variable includes two questions: "Do you think 'tensions between Chinese mainland and the Taiwan region' are a problem for the United States? If so, how serious is this problem?" and "Do you think 'economic competition with China' is a problem for the United States? If so, how serious is this problem?" Assign a value of 1 to "not a problem," 2 to "not very serious," 3 to "somewhat serious," and 4 to "very serious." Finally, the scores from these two questions are summed to yield the value for the independent variable "Perception of Strategic Competition," which ranges from 2 to 8. A higher score on this variable indicates a stronger perception of strategic competition among respondents.

6) Satisfaction with Democracy

Satisfaction with democracy primarily reflects respondents' trust in their country's political system and, to a certain extent, influences their attitudes toward China. This independent variable is primarily measured through the following three questions: "How satisfied are you with the functioning of the U.S. democratic system?"; "Which of the following statements best reflects your view of U.S. political parties?"; and "Which of the following statements is closest to your own

view?”. As mentioned earlier, there are measurement differences between these two questions; therefore, adjacent response categories in the latter question were appropriately merged to align with the structure of the corresponding questions. Therefore, for the first question, “Very satisfied” and “Somewhat satisfied” are assigned a value of 2, while “Somewhat dissatisfied” and “Very dissatisfied” are assigned a value of 1. For the second question, “At least one political party represents my views well” is assigned a value of 2, while “None of these political parties represent my views well” is assigned a value of 1. For the third question, assign a score of 2 to “Most elected officials care about the views of people like me” and a score of 1 to “Most elected officials do not care about the views of people like me.” Finally, the scores from the three questions are summed to yield the value for the independent variable “democratic satisfaction,” which ranges from 3 to 6. A higher score on this variable indicates a higher level of democratic satisfaction among the respondents.

7) Perceptions of Chinese Overseas Engagement

The 2021 report noted that 45% of Americans view China as their “greatest enemy,” double the figure from 2020. Research found that perceptions of China’s “economic penetration” through the Belt and Road Initiative were a key factor driving this shift. The public’s negative interpretation of China’s efforts to secure resources in Africa and the Middle East has further eroded favorable views. Differences in U.S. citizens’ perceptions of Chinese overseas engagement may lead U.S.-China relations into a vicious cycle of “perceptual confrontation—policy confrontation—public opinion confrontation,” which to some extent influences American attitudes toward China. This independent variable is measured using the question: “Overall, to what extent (if at all) do you think China engages in the affairs of other countries?” Based on the response options, “a lot” is assigned a value of 4, “moderately” a value of 3, “not very much” a value of 2, and “not at all” a value of 1. A higher score for this variable indicates that the respondent has a stronger perception of Chinese overseas engagement.

3.2.3. Control Variables

1) Gender

Research indicates that there are significant differences between the two genders in terms of political perceptions, willingness to express political views, and political preferences. Data from the “[Pew Research Center \(2023\)](#)” survey shows that American women have a higher average perception of the concern posed by China than men. Furthermore, differences exist between the two genders in terms of cognitive perspectives, political participation, and influence. Here, “male” is assigned a value of 1, and “female” is assigned a value of 2.

2) Age

Inglehart’s theory of generational shift in values suggests that changes in social values exhibit distinct generational characteristics. Older groups, driven by a prioritization of material security and traditional nationalist values, tend to adopt more confrontational attitudes toward China, while younger groups, influenced

by post-materialist values, are more inclined toward pragmatic cooperation and pluralistic perspectives. For this control variable, “18 - 29 years old” is assigned a value of 1, “30 - 49 years old” a value of 2, “50 - 64 years old” a value of 3, and “65 years and older” a value of 4.

3) Educational Level

Bruner’s theory of cognitive development emphasizes that education influences the depth of an individual’s understanding by increasing the complexity of their symbolic system. Generally speaking, individuals with higher levels of education tend to possess stronger critical thinking and discernment skills and exhibit greater political engagement. For this control variable, “high school or below” is assigned a value of 1, “undergraduate degree (including current students)” is assigned a value of 2, and “graduate degree or higher (including current students)” is assigned a value of 3.

4) Household Income

To a certain extent, American society faces the reality that “economic anxiety exacerbates political polarization.” Furthermore, groups at different income levels differ in their perspectives, ways of thinking, and fundamental goals. At the same time, household income is correlated with the educational attainment of subsequent generations, which has a profound impact on individuals’ intellectual independence and cognitive abilities. For this control variable, assign a value of 1 to “less than \$30,000,” 2 to “\$30,000 to \$50,000 (excluding \$50,000),” 3 to “\$50,000 to \$100,000 (excluding \$100,000),” and 4 to “\$100,000 or more.”

5) Religious Affiliation

Religion occupies a significant position in American culture and exerts a major influence on U.S. politics. Religious affiliation shapes the political views of the American public through the formation of values, political mobilization, and information filtering. For this variable, “Protestant” is assigned a value of 1, “Catholic” a value of 2, “Jewish” a value of 3, “Other Denominations” a value of 4, and “Non-religious” a value of 5.

6) Regional Type

The type of region in which U.S. citizens reside may influence their favorable attitude toward China through multiple factors, including economic structure, sociocultural characteristics, and channels of information access. This independent variable is measured by “self-identified urban, suburban, or rural (USR)” areas. For this control variable, “urban” is assigned a value of 1, “suburban” a value of 2, and “rural” a value of 3.

3.2.4. Summary

Table 1. Operationalization and coding of variables.

Category	Variable Name	Symbol	Coding/Assignment Scheme
Dependent Variable	Attitudes toward China	Y	1 = Favorable (Very/Somewhat); 0 = Unfavorable (Somewhat/Very)

Continued

Independent Variables	U.S. National Power	X ₁	Scale: 4 - 12
	China's National Power	X ₂	Scale: 4 - 12
	Political Affiliation	X ₃	1 = Republican/Lean Republican; 2 = Democrat/Lean Democrat
	Media Exposure	X ₄	Scale: 0 - 4
	Strategic Competition Perception	X ₅	Scale: 2 - 8
	Satisfaction with Democracy	X ₆	Scale: 3 - 6
	Perception of Chinese overseas engagement	X ₇	1 = Not at all; 2 = Not much; 3 = Moderate; 4 = A great deal
Control Variables	Gender	X ₈	1 = Male; 2 = Female
	Age Group	X ₉	1 = 18 - 29; 2 = 30 - 49; 3 = 50 - 64; 4 = 65+
	Educational Attainment	X ₁₀	1 = High school or less; 2 = Bachelor's degree (incl. current students); 3 = Graduate degree or above (incl. current students)
	Household Income	X ₁₁	1 = <\$30,000; 2 = \$30,000 - \$49,999; 3 = \$50,000 - \$99,999; 4 = ≥ \$100,000
	Religious Affiliation	X ₁₂	1 = Protestant; 2 = Catholic; 3 = Jewish; 4 = Other; 5 = None/Atheist
	Residential Area	X ₁₃	1 = Urban; 2 = Suburban; 3 = Rural

As mentioned earlier, all variable names, mathematical expressions, and assignment statements are listed by category in **Table 1**.

4. Data Analysis and Results

4.1. Descriptive Statistics of Variables

The descriptive statistics for each variable are shown in **Table 2** below. The dataset consists of a total of 3576 samples. Regarding missing values, since the variable “China’s Comprehensive National Power” contains a significant number of missing values, the median was used to impute them. For the other variables, however, excessive imputation of missing values could potentially affect the final results due to underlying interdependencies; therefore, missing values in these variables were treated by discarding them.

Table 2. Descriptive statistics for each variable.

Variable Name	Number of Cases		Mean	Variance	Standard Deviation	Minimum	Maximum
	Valid	Missing					
Attitudes toward China	3512	64	0.15	0.126	0.355	0	1
U.S. National Power	3425	151	9.31	3.370	1.836	4	12
China's National Power	2774	802	8.54	3.068	1.752	4	12
Political Affiliation	3421	155	1.56	0.246	0.496	1	2
Media Exposure	3566	10	2.05	1.491	1.221	0	4
Strategic Competition Perception	3497	79	6.56	1.588	1.260	2	8
Satisfaction with Democracy	3447	129	4.07	0.836	0.914	3	6

Continued

Perception of Chinese overseas engagement	3517	59	3.10	0.634	0.796	1	4
Gender	3534	42	1.40	0.240	0.490	1	2
Age Group	3556	20	2.58	0.965	0.982	1	4
Educational Attainment	3565	11	2.16	0.670	0.819	1	3
Household Income	3423	153	2.72	1.153	1.074	1	4
Religious Affiliation	3547	29	2.59	2.593	1.610	1	5
Residential Area	3563	13	1.90	0.487	0.698	1	3

4.2. Correlation Analysis

Correlation analysis primarily examines the degree of association between variables. Only when variables are significantly correlated does it make practical sense to use regression analysis to investigate specific issues. The correlation coefficient is a measure of the linear relationship between two variables. Here, we use Pearson's correlation coefficient to reflect the degree and direction of correlation between variables, facilitating subsequent analysis.

Table 3. Correlation matrix among variables.

	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂	X ₁₃
Y	1													
X ₁	.061**	1												
X ₂	.121**	-.096**	1											
X ₃	.082**	.107**	0.012	1										
X ₄	.109**	-.073**	.050**	.055**	1									
X ₅	-.267**	.051**	0.014	-.118**	-.106**	1								
X ₆	.093**	.388**	-.040**	.172**	0.008	-0.010	1							
X ₇	-.218**	.115**	-.056**	-.107**	-.110**	.332**	-0.013	1						
X ₈	0.007	-.226**	.107**	-0.012	.034*	-.076**	-0.023	-.107**	1					
X ₉	-.138**	.160**	0.003	-.083**	-.312**	.272**	.112**	.201**	-0.019	1				
X ₁₀	-.047**	.148**	-.065**	.074**	-0.027	.050**	.045**	.081**	-.071**	-.078**	1			
X ₁₁	-.134**	.149**	-.102**	-.071**	-.134**	.106**	0.017	.111**	-.110**	0.006	.428**	1		
X ₁₂	.046**	-.063**	-0.027	.168**	.060**	-.133**	-.070**	-.099**	0.003	-.239**	.055**	0.005	1	
X ₁₃	-.082**	-.053**	-.016**	-.194**	-.104**	.036*	-.065**	.055**	.124**	.092**	-.129**	.048**	-.099**	1

Note: ** indicates a significant correlation at the 0.01 level (one-tailed); * indicates a significant correlation at the 0.05 level (one-tailed).

The absolute value of the correlation coefficient r reflects the strength of the relationship between variables, with r ranging from $0 \leq r \leq |1|$. As $|r|$ approaches 1, the correlation becomes stronger; as $|r|$ approaches 0, the correlation becomes weaker; when $|r| = 1$, it indicates a perfect linear correlation; and when $r = 0$, it indicates that there is no linear correlation between the two variables. The sign of the correlation coefficient indicates the direction of the relationship: if $r > 0$, the

two variables are positively correlated; if $r < 0$, the two variables are negatively correlated.

As shown in **Table 3**, the independent variables—“U.S. comprehensive national power,” “China’s comprehensive national power,” “political orientation,” “media exposure,” “perception of strategic competition,” “satisfaction with democracy,” and “perception of Chinese overseas engagement”—all passed the correlation test with the dependent variable, “U.S. public attitudes toward China.” At the 0.01 significance level, there is a significant positive correlation between U.S. comprehensive national power, China’s comprehensive national power, political orientation, media exposure, and satisfaction with democracy, and U.S. public attitudes toward China; conversely, there is a significant negative correlation between perceptions of strategic competition and perceptions of Chinese overseas engagement, and U.S. public attitudes toward China. Among the control variables, aside from gender, there is a significant positive correlation at the 0.01 significance level between religious belief and U.S. public attitudes toward China, while age, educational attainment, household income, and regional type show significant negative correlations with U.S. public attitudes toward China.

In light of the hypotheses presented earlier, it is evident that there is divergence in the analysis of the independent variable “China’s comprehensive national power.” These findings do not fully align with the expectations of some mainstream international relations theories. A possible explanation for this is that, as emphasized by liberalism and interdependence theory, economic interdependence, international institutions, and shared values can promote cooperation and peace among nations, reduce conflict, and foster mutual understanding and goodwill. From an economic perspective, China’s economic growth implies a larger market, more investment opportunities, and stronger purchasing power, which directly benefits U.S. exporters, investors, and U.S. companies operating in China, thereby influencing the attitudes toward China among these beneficiary groups. When analyzing the data, one must first consider the potential influence of individual sample characteristics on the results. For instance, the survey did not impose restrictions on participants regarding their occupations, trade with China, or cultural exchange experiences, making it highly likely that the sample included individuals with hidden common characteristics. Furthermore, it is inappropriate to attempt to analyze a monotonic relationship between “U.S. comprehensive national power” and “China’s comprehensive national power” through correlation analysis, as the relationship between the two is not a simple monotonic one. Therefore, when analyzing the two independent variables—“U.S. comprehensive national power” and “China’s comprehensive national power”—it is evident that U.S. citizens rate their own country’s comprehensive national power higher; the mean score is positioned further to the right compared to the rating of China’s comprehensive national power, yet they still hold a relatively high level of recognition for China’s comprehensive national power. In summary, overall, U.S. citizens have a high level of recognition of their country’s national power; conse-

quently, they tend to adopt an optimistic, positive, and more inclusive attitude toward other nations—that is, they are more inclined toward the phenomena described in the theory of interdependence (Figure 2).

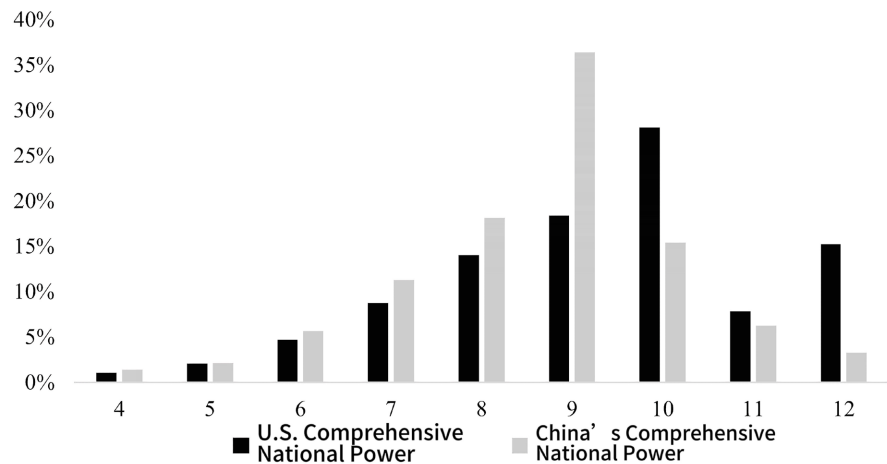


Figure 2. Statistical analysis of U.S. and Chinese comprehensive national power scores.

4.3. Multicollinearity Test

Table 4. Statistical results of the VIF multicollinearity test.

Variable	Tolerance	VIF
U.S. National Power	0.760	1.316
China's National Power	0.972	1.029
Political Affiliation	0.906	1.103
Media Exposure	0.875	1.143
Strategic Competition Perception	0.846	1.181
Satisfaction with Democracy	0.815	1.227
Perception of Chinese overseas engagement	0.865	1.156
Gender	0.928	1.078
Age Group	0.782	1.278
Educational Attainment	0.803	1.245
Household Income	0.788	1.269
Religious Affiliation	0.918	1.089

Before conducting regression analysis, it is necessary to test for multicollinearity among the variables. Multicollinearity refers to a situation where two or more independent variables are highly correlated, which may result in unreliable regression coefficients. If the tolerance is greater than 0.1 or the variance inflation factor (VIF) is less than 10 (the strict standard is 5), this indicates that there are no serious multicollinearity issues among the independent variables in the model. Table 4 presents the statistical results of the VIF multicollinearity test. The tolerance for

all variables is greater than 0.1, and the VIF values are all less than 5. This indicates that there are no serious multicollinearity issues among the variables in this example, and regression analysis can proceed to the next step.

4.4. Regression Analysis

Given that the dependent variable, “U.S. Public Attitudes toward China,” is binary, this study employs a binary logistic regression model for analysis. Before conducting the multivariate analysis, the internal relationships between variables were preliminarily examined. It is important to emphasize that the inclusion of predictors in the final model was strictly guided by the theoretical frameworks of international image construction and political psychology, rather than being contingent upon bivariate statistical significance (e.g., Pearson’s r). This theory-driven approach ensures that the model captures the independent effects of cognitive and media factors while maintaining the logical integrity of the causal mechanisms.

Table 5 presents the results of the binary logistic regression. The model yielded a p -value of 0.575 in the Hosmer-Lemeshow goodness-of-fit test. Since this satisfies the criterion of $P > 0.05$, we accept the null hypothesis that the model fits the observed data well, indicating that the logistic regression model provides a reliable fit for the analysis.

Table 5. Variables in the binary logistic regression equation.

	B	S.E.	Wald	df	Sig.	Exp (B)	95%C.I. for EXP (B)	
							Lower Bound	Upper Bound
U.S. National Power	0.193	0.038	26.395	1	0.000	1.213	1.127	1.306
China’s National Power	0.250	0.039	40.670	1	0.000	1.284	1.189	1.387
Political Affiliation (1)	0.085	0.127	0.445	1	0.505	1.089	0.848	1.398
Media Exposure	0.155	0.052	8.724	1	0.003	1.167	1.053	1.293
Strategic Competition Perception	−0.448	0.047	89.252	1	0.000	0.639	0.582	0.701
Satisfaction with Democracy	0.184	0.069	7.190	1	0.007	1.202	1.051	1.375
Perception of Chinese overseas engagement	−0.568	0.076	55.458	1	0.000	0.567	0.488	0.658
Gender (1)	−0.194	0.127	2.339	1	0.126	0.823	0.642	1.056
Age Group			16.708	3	0.001			
Age Group (1)	−0.167	0.164	1.036	1	0.309	0.846	0.613	1.167
Age Group (2)	−0.573	0.193	8.834	1	0.003	0.564	0.387	0.823
Age Group (3)	−0.762	0.225	11.464	1	0.001	0.467	0.300	0.725
Educational Attainment			4.337	2	0.114			
Educational Attainment (1)	−0.323	0.161	4.030	1	0.045	0.724	0.528	0.992
Educational Attainment (2)	−0.108	0.162	0.446	1	0.504	0.898	0.654	1.233
Household Income			22.422	3	0.000			

Continued

Household Income (1)	-0.539	0.181	8.836	1	0.003	0.583	0.409	0.832
Household Income (2)	-0.594	0.166	12.772	1	0.000	0.552	0.399	0.765
Household Income (3)	-0.911	0.200	20.760	1	0.000	0.402	0.272	0.595
Religious Affiliation			1.053	4	0.902			
Religious Affiliation (1)	0.155	0.165	0.884	1	0.347	1.168	0.845	1.615
Religious Affiliation (2)	0.146	0.581	0.063	1	0.802	1.157	0.371	3.612
Religious Affiliation (3)	0.103	0.165	0.388	1	0.533	1.108	0.802	1.533
Religious Affiliation (4)	0.030	0.165	0.032	1	0.857	1.030	0.745	1.424
Residential Area			3.397	2	0.183			
Residential Area (1)	-0.203	0.133	2.331	1	0.127	0.816	0.629	1.059
Residential Area (2)	-0.289	0.184	2.477	1	0.115	0.749	0.523	1.073
Constant	-1.374	0.627	4.808	1	0.028	0.253		

It should be noted that in the process of performing binary logistic regression, the reference category for each categorical covariate is the first category of that variable. The “Significance (Sig.)” column in **Table 5**, which corresponds to the P -value, represents the hypothesis test for the regression coefficient B . When $P < 0.05$, it indicates that the variable has a statistically significant impact on the results, meaning that the variable is a factor influencing the U.S. public’s attitude toward China. Based on this, it can be concluded that in this regression model, apart from political orientation, gender, education, religious belief, and regional type, the influence of other factors on attitudes toward China reaches a statistically significant level.

First, we will analyze each variable. Regarding U.S. comprehensive national power, it significantly influences favorable attitudes toward China. The regression coefficient for U.S. comprehensive national power ($B = 0.193$) is positive, indicating that the stronger the U.S. public’s perception of their country’s comprehensive national power, the more favorable their attitude toward China. Furthermore, the OR value for this variable is 1.213, indicating that a one-unit increase in the U.S. public’s perception of their country’s comprehensive national power leads to a 21.3% increase in their favorable attitude toward China. Social identity theory suggests that pride in one’s own national power may translate into an open attitude toward external groups. When the public perceives U.S. economic resilience and institutional flexibility, they are more inclined to downplay zero-sum game thinking based on the belief that “strong nations need cooperation even more.” Regarding China’s comprehensive national power, it has a significant impact on the U.S. public’s attitude toward China. A comprehensive analysis of its regression coefficients and OR values shows that for every one-unit increase in the U.S. public’s perception of China’s comprehensive national power, their favorable attitude toward China increases by 28.4%, and this influence is slightly stronger than that of

the United States. During the U.S.-China Economic Track II Dialogue in January 2023, both sides discussed cooperation prospects in sectors such as semiconductors and new energy, signaling that “competition is manageable and cooperation is achievable.” This institutional interaction has led the public to associate China’s national strength with their own economic well-being. Furthermore, the exemption of certain goods from U.S.-China tariff adjustments in 2022, as well as China’s cooperation in global public health initiatives such as influenza surveillance programs, has further reinforced the perception that “China’s development can bring opportunities to the United States,” thereby driving an improvement in U.S. attitudes toward China. Regarding political orientation, its significance indicates no significant difference between the two major parties, further suggesting that its influence on the U.S. public’s attitude toward China did not reach a statistically significant level—that is, it was statistically insignificant. As for media exposure, it has a significant impact on the U.S. public’s attitude toward China; specifically, for every one-unit increase in media exposure, the U.S. public’s favorable view of China rises by 16.7%. When the American public is exposed more frequently to media coverage of issues related to U.S.-China cooperation—such as the clear renewable energy installation targets for China outlined in the 2022 Climate Cooperation Agreement or the discussions on cooperation prospects in the semiconductor and new energy sectors during the January 2023 Economic Track II Dialogue—and when they learn about China’s cultural and technological achievements through platforms like TikTok, they tend to form a more objective perception of China. Furthermore, traditional media coverage of the economic benefits resulting from the 2022 U.S.-China tariff adjustments reinforced positive associations between China’s development and the American public through a “cooperation-interest linkage” narrative, driving a structural improvement in U.S. citizens’ attitudes toward China. Regarding perceptions of strategic competition, these have a significant impact on the American public’s attitude toward China; a one-unit increase in the public’s perception of strategic competition leads to a 36.1% decrease in favorable sentiment toward China, indicating a significant negative impact. When the public perceives competition between China and the U.S. in areas such as technology (e.g., sanctions against Huawei), military affairs (e.g., tensions across the Taiwan Strait (China) triggered by Pelosi’s 2022 visit to the Taiwan region), and trade (e.g., the tariff standoff over \$500 billion worth of goods), the security dilemma in realist theory reinforces a zero-sum mindset regarding the perceptions of China’s rising influence. Media coverage focusing on technology blockades and military developments similarly further solidifies the public’s hostile perception of strategic competition. As for satisfaction with democracy, it has a significant impact on the U.S. public’s attitude toward China; for every one-unit increase in satisfaction with democracy, the U.S. public’s favorable view of China rises by 20.2%. Following the 2021 Capitol Hill riot, trust in U.S. democracy plummeted to a historic low, and this institutional anxiety exacerbated negative projections toward China. Furthermore, a 2022 Pew survey revealed that

among groups with higher satisfaction with democracy, the proportion viewing China as an enemy was 18% lower than among those with lower satisfaction. High satisfaction with democracy reinforces the perception of “in-group legitimacy,” making the public more receptive to objective facts about China’s development and reducing hostility stemming from factors such as institutional comparisons. Regarding perceptions of Chinese overseas engagement, these have a significant impact on the U.S. public’s attitude toward China. Empirical analysis reveals that public perceptions of Chinese Overseas Engagement significantly correlate with a 43.3% decrease in favorable sentiment toward China. From the perspective of agenda-setting theory, intensified media framing of regional maritime affairs and cross-strait dynamics has contributed to a public perception characterized by divergent interpretations of international norms. Furthermore, external governmental narratives often characterize specific policy measures as “unilateral,” which, coupled with ongoing bilateral trade frictions, has intensified economic skepticism among the public. These externally constructed narratives reinforce in-group identities within the American public, ultimately shaping the observed negative perceptual trends.

Second, an analysis of control variables was conducted. Regarding gender, its influence on the U.S. public’s attitude toward China did not reach statistical significance, meaning it is statistically insignificant. Regarding age, it has a significant impact on the U.S. public’s attitude toward China. Using Group 1 (ages 18 - 29) as the reference group, a comprehensive analysis of significance (*P*-value) and odds ratios (OR) reveals that Group 2 (ages 30 - 49) has a favorable attitude toward China that is 84.6% of that of the youngest group, Group 3 (ages 50 - 64) is 56.4% of Group 1’s level, and Group 4 (ages 64 and above) is 46.7% of Group 1’s level. This indicates that there are relatively pronounced generational differences in the U.S. public’s attitudes toward China. Generation Z and Millennials grew up during a period of deepening globalization; their formative years coincided with China’s rapid rise, leading to a more objective perception of the balance of power between China and the U.S. Furthermore, younger demographics access diverse information through social media platforms like TikTok, effectively countering negative coverage of China in traditional media and challenging the “China-related discourse” in Western media, thereby further improving young Americans’ favorable views toward China. Regarding educational attainment, its influence on the American public’s attitude toward China did not reach a statistically significant level, meaning it is statistically insignificant. Regarding household income, it has a significant impact on the American public’s attitude toward China. Using Group 1 (less than \$30,000) as the reference group, and through a comprehensive analysis of its significance (*P*-value) and OR value, it is evident that Group 2 (US\$30,000 to US\$50,000) has a favorable attitude toward China at 58.3% of Group 1’s level, Group 3 (ages 50 - 64) at 55.2%, and Group 4 (64 and older) at 40.2%. This indicates that high-income groups are more likely to hold negative attitudes toward China than low-income groups. Higher-income groups typically

enjoy greater social status and broader social networks, providing them with more extensive exposure to social and political issues, which helps shape their own perspectives and reasoning. Furthermore, they tend to have higher expectations for social development. However, the narrowing gap in power between China and the U.S. and the occurrence of Sino-U.S. trade frictions have slowed or even stalled these expectations, leading them to adopt more negative attitudes toward China. As for religious beliefs and regional background, neither factor had a statistically significant impact on the U.S. public's attitude toward China, meaning the results were statistically insignificant.

4.5. Existing Issues and Attempts at Improvement

The most significant issue with the data sample used in this study's analysis is the sample imbalance in the statistical results regarding favorable attitudes toward China. Although a binary regression model can provide some insight into the relationship with a specific category, the significant sample imbalance remains a factor that requires further consideration.

In the sample used in this study, the number of U.S. citizens expressing negative attitudes toward China far exceeds the number expressing positive attitudes. This leads the model to place greater emphasis on the characteristics of the “dislike” samples, potentially sacrificing the learning of “like” samples and resulting in a one-sided and blind overfitting of the “dislike” samples. Consequently, the model sacrifices the prediction accuracy for “like” samples in an attempt to unilaterally improve that for “dislike” samples, which negatively impacts the model's interpretability. In terms of prediction accuracy, a reasonable approach to address this is to reset the threshold to compensate for the model's insufficient predictive performance on minority classes; however, this approach does not improve the interpretability of the regression model's variables. Another commonly used method for this is oversampling. Therefore, the following section will attempt to analyze the changes in the interpretability of the regression model and its associated variables brought about by oversampling methods. It is important to note that oversampling a certain amount of data may carry the risk of overfitting. Therefore, to mitigate and avoid the impact of overfitting on model results, the volume of oversampled data must be strictly controlled, and methods such as regularization may be incorporated into the regression task.

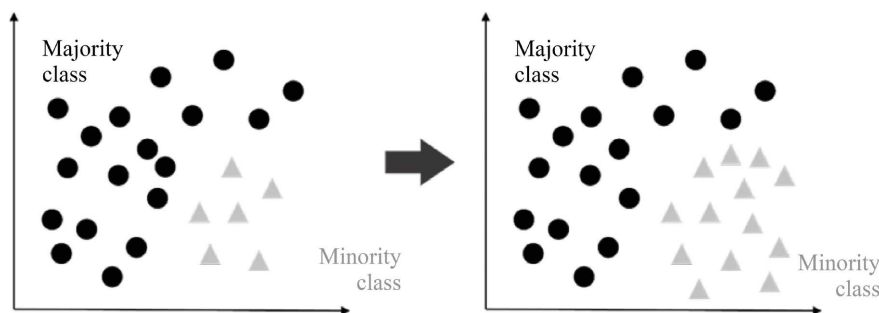


Figure 3. Schematic diagram of the SMOTN oversampling method.

Here, we consider applying the SMOTN method to perform a small-scale oversampling of the original sample data. As illustrated in **Figure 3**, the principle of this method is to moderately improve the prediction accuracy for positive examples without significantly reducing the prediction accuracy for negative examples, thereby enhancing the model structure and the interpretability of the variables. After oversampling the dataset, as mentioned earlier, we perform correlation analysis on each variable again to assess the impact of oversampling on the correlations among variables.

Table 6. Correlation analysis after oversampling.

	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂	X ₁₃
Y	1													
X ₁	.078**	1												
X ₂	.099**	-.069**	1											
X ₃	.101**	.114**	0.002	1										
X ₄	.129**	-.099**	0.020	.066**	1									
X ₅	-.342**	.063**	0.019	-.086**	-.108**	1								
X ₆	.044**	.393**	-.032*	.164**	0.011	.041**	1							
X ₇	-.292**	.090**	-.062**	-.098**	-.108**	.356**	0.006	1						
X ₈	-.137**	-.227**	.093**	-.027	.046**	-.032*	-0.018	-.053**	1					
X ₉	-.207**	.177**	-0.002	-.073**	-.316**	.283**	.122**	.209**	-0.019	1				
X ₁₀	-0.027	.134**	-.074**	.037*	-0.025	.036*	.036*	.054**	-.047**	-.060**	1			
X ₁₁	-.199**	.132**	-.116**	-.110**	-.152**	.143**	0.011	.120**	-.068**	.057**	.416**	1		
X ₁₂	0.003	-.062**	-.041**	.132**	.034*	-.147**	-.092**	-.095**	0.008	-.202**	.052**	0.005	1	
X ₁₃	-.189**	-.039*	-0.023	-.199**	-.101**	.081**	-.050**	.059**	.142**	.108**	-.095**	.113**	-.088**	1

Note: ** indicates a significant correlation at the 0.01 level (one-tailed); * indicates a significant correlation at the 0.05 level (one-tailed).

A comparative analysis of **Table 6** and **Table 3** reveals that, aside from differences in numerical values, the nature of the correlations among the independent variables—whether positive or negative—remains unchanged. Furthermore, regarding the dependent variable, a notable difference is that there is a significant negative correlation between gender and the U.S. public's attitude toward China, whereas educational level and religious belief no longer show a significant correlation with the U.S. public's attitude toward China. This demonstrates that the distribution of data influences the conclusions of correlation analysis to a certain extent, meaning that data preprocessing and analysis are inseparable from the data itself. Before conducting binary logistic regression, we also tested for multicollinearity among the variables, as shown in **Table 7**. The tolerance for all variables is greater than 0.1, and the VIF values are all less than 5, indicating that there is no

severe multicollinearity among the variables in this case, and we can proceed to the next step of regression analysis.

Table 7. Statistical results of VIF multicollinearity test after oversampling.

Variable	Tolerance	VIF
U.S. National Power	0.754	1.325
China's National Power	0.969	1.032
Political Affiliation	0.897	1.115
Media Exposure	0.872	1.147
Strategic Competition Perception	0.809	1.236
Satisfaction with Democracy	0.810	1.234
Perception of Chinese overseas engagement	0.843	1.186
Gender	0.912	1.096
Age Group	0.776	1.288
Educational Attainment	0.790	1.266
Household Income	0.755	1.325
Religious Affiliation	0.922	1.084
Residential Area	0.898	1.113

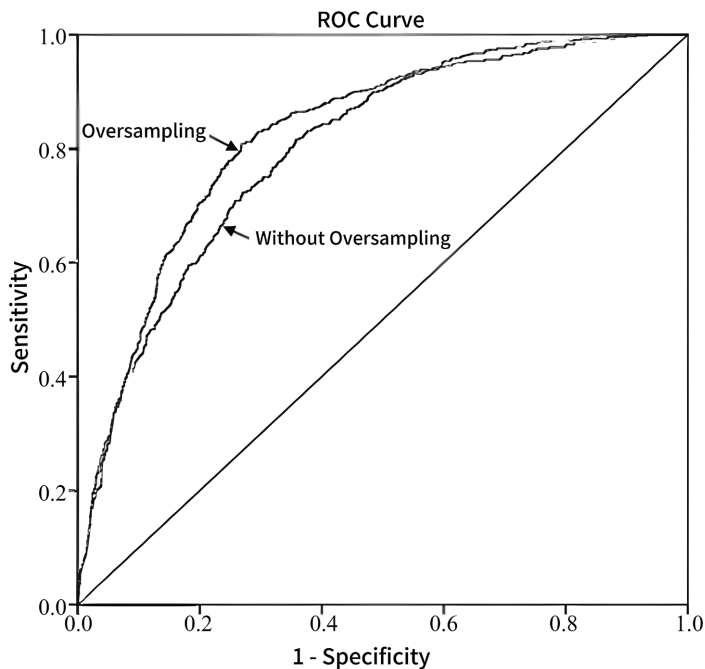


Figure 4. Comparison of ROC curves.

The results obtained by performing binary logistic regression on the over-sampled data are shown in **Table 8**. Furthermore, from the perspective of the ROC

curve, the plotted ROC curves are shown in **Figure 4**. It can be seen that the area under the ROC curve (AUC) is larger for the oversampled data, indicating that the model's ability to distinguish between positive and negative classes is stronger after oversampling. This forces the model to focus on the positive class, enhancing its recognition capability for positive instances and mitigating the negative impact of class imbalance.

Table 8. Variables in the oversampled binary logistic regression equation.

	B	S.E.	Wald	df	Sig.	Exp (B)	95%C.I. for EXP (B)	
							Lower Bound	Upper Bound
U.S. National Power	0.203	0.030	46.760	1	0.000	1.225	1.156	1.298
China's National Power	0.167	0.029	32.429	1	0.000	1.182	1.116	1.252
Political Affiliation (1)	0.127	0.096	1.740	1	0.187	1.136	0.940	1.372
Media Exposure	0.104	0.041	6.479	1	0.011	1.110	1.024	1.202
Strategic Competition Perception	-0.504	0.039	166.225	1	0.000	0.604	0.559	0.652
Satisfaction with Democracy	0.043	0.055	0.629	1	0.428	1.044	0.938	1.162
Perception of Chinese overseas engagement	-0.659	0.061	115.552	1	0.000	0.517	0.459	0.583
Gender (1)	-0.864	0.106	66.487	1	0.000	0.421	0.342	0.519
Age Group			52.682	3	0.000			
Age Group (1)	-0.058	0.129	0.204	1	0.651	0.944	0.733	1.214
Age Group (2)	-0.567	0.150	14.228	1	0.000	0.567	0.422	0.762
Age Group (3)	-1.053	0.180	34.238	1	0.000	0.349	0.245	0.496
Educational Attainment			20.831	2	0.000			
Educational Attainment (1)	-0.453	0.126	12.825	1	0.000	0.636	0.496	0.815
Educational Attainment (2)	0.035	0.122	0.084	1	0.772	1.036	0.815	1.317
Household Income			75.180	3	0.000			
Household Income (1)	-0.601	0.141	18.281	1	0.000	0.548	0.416	0.722
Household Income (2)	-0.600	0.129	21.702	1	0.000	0.549	0.426	0.706
Household Income (3)	-1.348	0.157	74.141	1	0.000	0.260	0.191	0.353
Religious Affiliation			20.386	4	0.000			
Religious Affiliation (1)	-0.325	0.126	6.601	1	0.010	0.723	0.564	0.926
Religious Affiliation (2)	-0.574	0.482	1.420	1	0.233	0.563	0.219	1.448
Religious Affiliation (3)	-0.438	0.125	12.355	1	0.000	0.645	0.505	0.824
Religious Affiliation (4)	-0.465	0.128	13.266	1	0.000	0.628	0.489	0.807
Residential Area			46.850	2	0.000			
Residential Area (1)	-0.315	0.098	10.320	1	0.001	0.730	0.603	0.885
Residential Area (2)	-1.096	0.161	46.068	1	0.000	0.334	0.244	0.459
Constant	2.144	0.481	19.836	1	0.000	8.531		

As shown in **Table 8**, with the exception of political orientation and satisfaction with democracy, the influence of other factors on attitudes toward China reached statistical significance, which differs somewhat from the results in **Table 5**. A possible explanation for this is that there is a certain degree of interaction among the different variables, as well as implicit correlations between them; therefore, greater emphasis should be placed on the scientific rigor and interpretability of variable selection. Unlike the findings in Section (IV) above, gender, educational level, religious belief, and regional type have a significant impact on the U.S. public's favorable attitude toward China. The results for other variables are consistent with the conclusions drawn in the previous analysis and will not be repeated here. First, in the model presented in **Table 6**, regarding gender, women exhibit higher levels of negative sentiment toward China compared to men. **Nielsen's (2023)** data indicates that older women spend an average of over three hours daily consuming right-wing media such as Fox News, making them more susceptible to the emotional narratives targeting women in right-wing media. Furthermore, U.S. politicians' tendency to link issues related to Xinjiang and Hong Kong, China with "women's rights" has obscured the potential for grassroots cooperation between the two nations. Regarding educational attainment, it is evident that individuals with lower educational levels exhibit higher favorability toward China than those with intermediate levels, while there is no significant difference in favorability between those with higher and lower educational levels. From the perspective of educational attainment, information processing ability exhibits a non-linear relationship across these educational levels, and generational divisions stemming from conflicting values influence shifts in favorability. For instance, a 2025 Chicago Council survey revealed that 42% of undergraduate students held negative views toward China due to the Xinjiang issue, whereas this proportion was only 18% among those with lower educational attainment. Furthermore, the density of higher education institutions is to some extent linked to educational attainment and industrial structure, and the interplay between these factors may reinforce negative perceptions among current college students regarding the narrative of technological competition. Regarding religious beliefs, it is evident that the New Generation holds a higher level of favorability toward China. The 2023 "White Paper on U.S.-China Religious Exchange" released by the U.S. "World Council of Religions" emphasized that progressive Christians are more receptive to the ecological philosophies of Chinese Buddhism and Taoism, believing that "Eastern religious wisdom can provide solutions to the crisis of Western materialism." Furthermore, a 2023 statement by the U.S. "Progressive Christian Network" noted that "China's achievements in public health and inclusive technology reflect God's care for the common good of humanity." This perspective leads them to focus more on China's social progress rather than ideological opposition. Regarding regional demographics, U.S. citizens from urban areas exhibit the highest favorability toward China, while those from rural areas exhibit the lowest. Urban economies are highly dependent on trade and technological cooperation with China,

and urban residents, through platforms such as TikTok and YouTube, are exposed to diverse information, enabling them to deconstruct the “China-related security concerns” narrative and place greater emphasis on win-win cooperation. In contrast, suburban areas are predominantly mixed zones of traditional manufacturing and service industries; 58% of suburban residents attribute unemployment to “China taking away jobs,” yet they are actually less impacted by globalization than rural areas. Suburban residents have dual media exposure, engaging with both urban diverse media and local conservative outlets. In contrast, rural residents face economic hardships and the influence of right-wing media. As rural areas rely on traditional agriculture and manufacturing, the trade war with China has led to a decline in agricultural exports, causing rural residents to project their livelihood anxieties onto China.

As can be seen, the distribution of the data is closely related to the regression results, which in turn affects the final analysis. Furthermore, the selection of variables requires careful consideration. When independent variables are highly correlated, the model may struggle to distinguish the independent effects of each variable on the dependent variable. In such cases, the model may attribute changes in the dependent variable to fluctuations between the two variables, thereby compromising the model’s explanatory power and robustness. Additionally, this can lead to changes in variable significance, as discussed earlier.

5. Conclusions and Reflections

Based on data from the [Pew Research Center’s 2023](#) Global Attitudes Project and drawing on both the Theory of Planned Behavior and Social Identity Theory, this study systematically analyzed the factors influencing U.S. public favorability toward China, revealing a complex interplay between multiple individual characteristics and social structural variables. U.S.-China relations constitute a critical yet complex bilateral relationship, and public perceptions in both countries are key to “correcting the course of this great ship” of bilateral relations, holding significant importance for bringing the relationship back on track. Therefore, the findings of this study provide policy references for the governments of both countries in adjusting bilateral relations.

First, we must precisely break through information silos by incorporating examples of China’s technological contributions into narratives dominated by conservative media, thereby weakening the framework of ideological confrontation. By highlighting shared scientific achievements, both nations can foster a narrative centered on human progress rather than systemic competition. For younger demographics, we should strengthen “micro-cultural diplomacy” on social platforms like TikTok, replacing institutional confrontation with technological cooperation. Second, we must focus on the synergistic construction of economic interests and emotional connections, establishing complementary mechanisms for people-to-people exchanges to enhance economic reciprocity and strengthen mutual trust between the two societies. Collaborative initiatives in education, tour-

ism, and professional training could serve as essential bridges for rebuilding social affinity. Finally, to break down the rigid perception of strategic competition, the study recommends using global governance cooperation as a starting point. By engaging in joint efforts to address universal challenges—such as climate change mitigation, global health security, and food crisis prevention—the two nations can demonstrate the tangible benefits of cooperation to the public. Utilizing visual data to demonstrate these shared interests will help weaken the cognitive foundation of the “zero-sum game” and replace it with a vision of win-win outcomes.

U.S.-China relations constitute a long-term, dynamic process. This study is limited to a specific annual time point and lacks a dynamic examination of the U.S. public’s attitudes toward China; its explanatory power regarding long-term trends still requires support from data spanning longer periods. Additionally, due to the inherent limitations of cross-sectional data, it fails to capture the immediate impact of high-level meetings and sudden events on U.S. public sentiment toward China, as well as their subsequent ripple effects. Future research could conduct a diachronic analysis of the U.S. data from the Global Attitudes Project to enhance the reliability of research conclusions. Furthermore, the scientific rigor of variable selection requires improvement; independent variables could be further refined to reveal the differing sensitivities of various demographic groups toward issues of U.S.-China economic interdependence and ideology.

Contribution/Originality

This study contributes to the existing literature by exploring the multifaceted drivers of U.S. public sentiment toward China using recent Pew 2023 data. It offers new insights into how media exposure and ideological biases shape perceptions, significantly enhancing the understanding of the micro-foundations of public opinion in major-power relations. Furthermore, it provides a constructive framework for de-escalating cognitive tensions, offering strategic foresight into how bilateral relations can be steered toward a more balanced and mutually beneficial path.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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