



BLAME GAME

U.S. PUBLIC OPINIONS ON OPIOIDS,
RESPONSIBILITY, AND CHINA



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About PAX

PAX *sapiens* is a U.S.-based 501(c)(3) non-profit philanthropic foundation with a mission to prevent predictable global catastrophes by creating new systems of collective coordination. Research produced by PAX *sapiens* aims to provide empirical evidence to policymakers and stakeholders interested in global issues, helping to develop evidence-based approaches for resolving these challenges.

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We affirm that this research did not receive any external grant funding. All data collection and analysis were conducted in strict accordance with established ethical guidelines and principles of research integrity. Details of the analyses are provided in the Technical Appendix of this report, and raw data are available upon request.

SUMMARY

To help understand American experiences with opioid overdose and perceptions about who should be blamed for synthetic opioid issues in the United States, PAX *sapiens* commissioned a YouGov poll of 3,000 American adults to assess American experiences with opioids and how these experiences may affect attitudes about China.

Key Findings

Below are our key findings from the survey as presented by topic:

1. Opioid Crisis Exposure:

- **Prevalence:** Nearly one-third (31%) of respondents reported knowing someone who died from opioid overdoses or knowing someone who knew someone who died. Of these, 59% personally knew someone who died due to opioid overdose. About 5.2% of Americans believe they have experienced an opioid overdose themselves.
- **Demographic Predictors:** Middle-aged individuals report higher incidences of knowing someone who died from an opioid overdose, while personal overdose experiences are most prevalent among younger cohorts aged 33 and under. Exposure rates were higher among women compared to men, and significantly higher among White respondents than other racial groups. Educational attainment and income levels also influenced exposure rates, with lower levels of both correlating with higher exposure to opioid-related deaths.
- **Geographic Predictors:** The survey revealed pronounced regional differences in opioid exposure. New Hampshire, Pennsylvania, and West Virginia reported the highest levels of exposure, significantly above the national average. In contrast, Montana, Hawaii, and Idaho reported the lowest levels. The Northeast region was found to be the most severely impacted, while the West exhibited the lowest levels of exposure.

2. Attribution of Accountability:

- **Blame Distribution:** When asked to identify who is to blame for the opioid crisis, respondents distributed blame across several actors, including the users themselves, the U.S. federal government, pharmaceutical companies, doctors, and international entities such as China and Mexico. When asked to select a single group most responsible other than users, criminal cartels were most frequently identified followed by pharmaceutical companies and the federal government.

- **Perceived responsibility for solving the issue:** When asked to identify who is responsible for solving the problem, the majority of participants (51.2%) said the U.S. federal government was responsible for the solution. A minority (20.1%) selected state and local governments, and no other entity was selected by more than 7% of the respondents.

3. Perceptions of China:

- **Role in the Opioid Crisis:** Nearly half of the respondents (49%) identified China as a significant contributor to the opioid crisis, but only 11% considered China the most responsible entity. The survey highlighted a general skepticism towards China, with 61.4% of respondents holding a negative view of the country.
- **Sociodemographic Predictors of Blame:** Younger generations, especially those born between 1991 and 2010, along with Black and Hispanic respondents, are less likely to view China as responsible for the opioid crisis compared to older and White respondents. Conversely, those who are more engaged in politics, conservative ideologies, and Republican leanings are more likely to attribute blame to China.
- **Knowledge Predictors of Blame:** Respondents without direct experience or with limited knowledge of China are more likely to attribute responsibility to China for the opioid crisis. Individuals with direct experience, such as living or working in China or being raised in a Chinese-speaking household, are less likely to attribute blame to China. Interestingly, having friends of Chinese ethnicity slightly increases the tendency to assign responsibility. Media consumption is influential: following U.S. news on China raises the likelihood of blame, while engaging with Chinese outlets reduces it.
- **Predictors of Effectiveness of China's Actions:** Younger respondents, Black Americans, and those with professional experience in China are less likely to see Chinese intervention as the best solution to the opioid crisis, while those with higher levels of political interest and personal exposure to opioid-related deaths are more likely to be supportive of Chinese proactive actions.
- **Impact on Overall Opinion from China-Opioid Link:** The survey revealed that attributing responsibility for the opioid crisis to China is a predictor of a significant decline in Americans' overall favorable opinion of the country. On the other hand, respondents who believed that the best solution to the crisis involved action by the Chinese government tended to report a more positive overall opinion of China.

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INTRODUCTION

By 2022, the impact of fentanyl grew significantly in the United States, with the substance being responsible for 23 times more deaths compared to 2013. In 2022 alone, 73,654 people in the U.S. died from a fentanyl overdose—more than double the number from 2019.¹ Furthermore, since 2019, fentanyl has been implicated in over half of all drug overdose deaths, and by 2022, it was identified as the primary cause of nearly 70% of these deaths. Synthetic opioids have permeated the illicit drug market across the United States, driven by “a strong domestic demand and increasing polysubstance use,” according to the 2022 report of the U.S. Commission on Combating Synthetic Opioid Trafficking.² The relative ease of their production, using both controlled and non-controlled precursor chemicals, when compared to heroin, has further fueled their widespread availability and dissemination. This unlimited availability underscores their significance as a cross-border issue which is further complicated by global supply chains that are used to obfuscate their movement.

The majority of foreign-produced illicit substances consumed in the U.S. undergo a three-step process of production, transportation, and distribution. Mexican transnational criminal organizations (TCOs) that market fentanyl in the U.S. follow the same distinct sequence however, prior to the production of fentanyl they first acquire the necessary chemicals—both regulated and unregulated—from countries with a large-scale chemical industry. The People’s Republic of China (PRC), has been identified as a primary source for most of the precursors used in fentanyl production. In an effort to address this, China expanded its drug control authority in 2019, banning all fentanyl-related substances. This action caused the Mexican cartels to adapt by diversifying their supply sources for fentanyl precursors. India is now also recognized as a significant exporter, second only to China, of both finished fentanyl powder and its precursor chemicals. While continuing to source chemicals from China, traffickers have had to adjust their procurement methods, resorting to smuggling and other means to move the chemicals from China to laboratories in Mexico.

1 USA Facts, “Are fentanyl overdose deaths rising in the US?” USA Facts, Last updated September 27, 2023, <https://usafacts.org/articles/are-fentanyl-overdose-deaths-rising-in-the-us/>.

2 Commission on Combating Synthetic Opioid Trafficking, *Final Report* (RAND Corporation, 2022), vii, <https://www.rand.org/hsrd/hsoac/commission-combating-synthetic-opioid-trafficking.html>.

In the context of increasing tensions between the U.S. and China, fentanyl has emerged as a key point of contention. In recent years, U.S. media outlets, politicians, and pundits have increasingly portrayed the role of the PRC as threatening and disruptive to U.S. public health and national security at all levels. For example, a special House Committee recently found that the PRC government subsidizes the manufacturing and export of illicit fentanyl, fails to prosecute traffickers, allows open online sales, and strategically benefits from the fentanyl crisis despite acknowledging its illegality.³ Besides precursor flow, records from U.S. Treasury and Justice Department also note that Chinese money launderers are progressively collaborating with Mexico-based TCOs to employ a broad array of innovative methods that circumvent international wire transfers and facilitate laundering drug proceeds.⁴

While this issue has become a significant aspect of the bilateral relationship between the U.S. and China, and a focus for both governments, it is unclear to what extent the discussion has penetrated U.S. public discourse. Opioid-related harm is widespread in the U.S., and many Americans experience it as a direct, local issue. In this context, it is unclear how Americans perceive the relationship between the geopolitics of opioid supply and their personal experiences of harm.

To understand Americans' experience with opioids and the impact this has on their perceptions of responsibility generally and China's role specifically, we partnered with YouGov to conduct a survey with a nationally representative sample of 3,237 U.S. adults, subsequently narrowing it to 3,000 to finalize the panel dataset. This national opioid survey aims to capture the current experiences and attitudes of the American population regarding the rising opioid deaths and to understand the reasons behind these perceptions. The survey also aims to identify which national and international entities are perceived as most responsible for the escalation of the crisis, who should address it, and how these views are intertwined with attitudes towards China-related affairs.

Our poll sampling and weighting frame, survey design, and detailed statistical results from survey data analyses are all available in the Technical Appendix.

3 U.S. Select Committee on the Strategic Competition Between the United States and the Chinese Communist Party, *The CCP's Role in the Fentanyl Crisis* (2024), 9.

4 See U.S. Department of the Treasury, *2024 National Money Laundering Risk Assessment* (2024), 29-30, <https://home.treasury.gov/system/files/136/2024-National-Money-Laundering-Risk-Assessment.pdf>; "Federal Indictment Alleges Alliance Between Sinaloa Cartel and Money Launderers Linked to Chinese Underground Banking," U.S. Department of Justice, June 18, 2024, <https://www.justice.gov/opa/pr/federal-indictment-alleges-alliance-between-sinaloa-cartel-and-money-launderers-linked>.

SURVEY RESULTS: KNOWLEDGE, EXPOSURE, AND ACCOUNTABILITY IN OPIOID OVERDOSE

As noted in the previous chapter, there is limited up-to-date information about the general public’s knowledge and perceptions of synthetic opioids and their specific associations with China. In this chapter, we present results from a nationally representative survey to gauge U.S. public opinion on the first of two focused topics—also the domestic dimension: illuminating respondents’ baseline knowledge of the opioid crisis and the variation in their vulnerability to substance overdose.

Awareness About Opioid Deaths

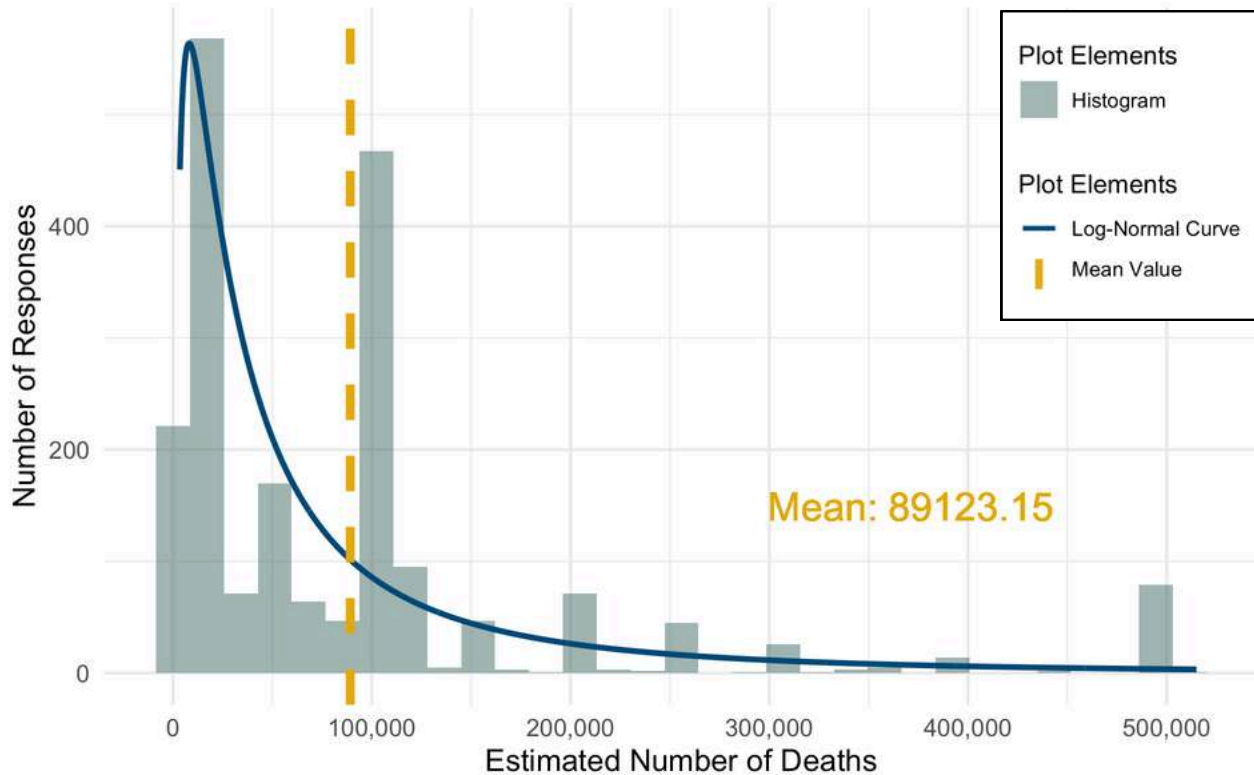
Respondents were asked to estimate the number of Americans who died from an opioid overdose in 2023 to assess their awareness of the severity of the U.S. fentanyl crisis. The mean estimate, excluding outliers, was found to be 89,123.15, which closely resembles the actual reported number of fatalities in 2023—105,384 within a 12-month period by November 2023.⁵ Nevertheless, Figure 2.1 also reveals a concentrated group of population estimates far below 50,000, indicating that a significant portion of the population lacks accurate awareness of the true impact and lethality of the opioid crisis.

This discrepancy suggests potential gaps in public knowledge and underscores the need for improved educational and informational efforts to enhance public understanding and engagement regarding the severity and extent of the opioid epidemic.

⁵ See Technical Appendix for an elaboration on how the mean estimate is calculated. For the reported fatality rate, see “Provisional Drug Overdose Death Counts,” Centers for Disease Control and Prevention, last modified April 4, 2024, <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>.

FIGURE 2.1

Distribution of Public Estimates for Opioid-Related Deaths in 2023 with Normal Curve



Opioid Deaths Exposure by Demographics and Regions

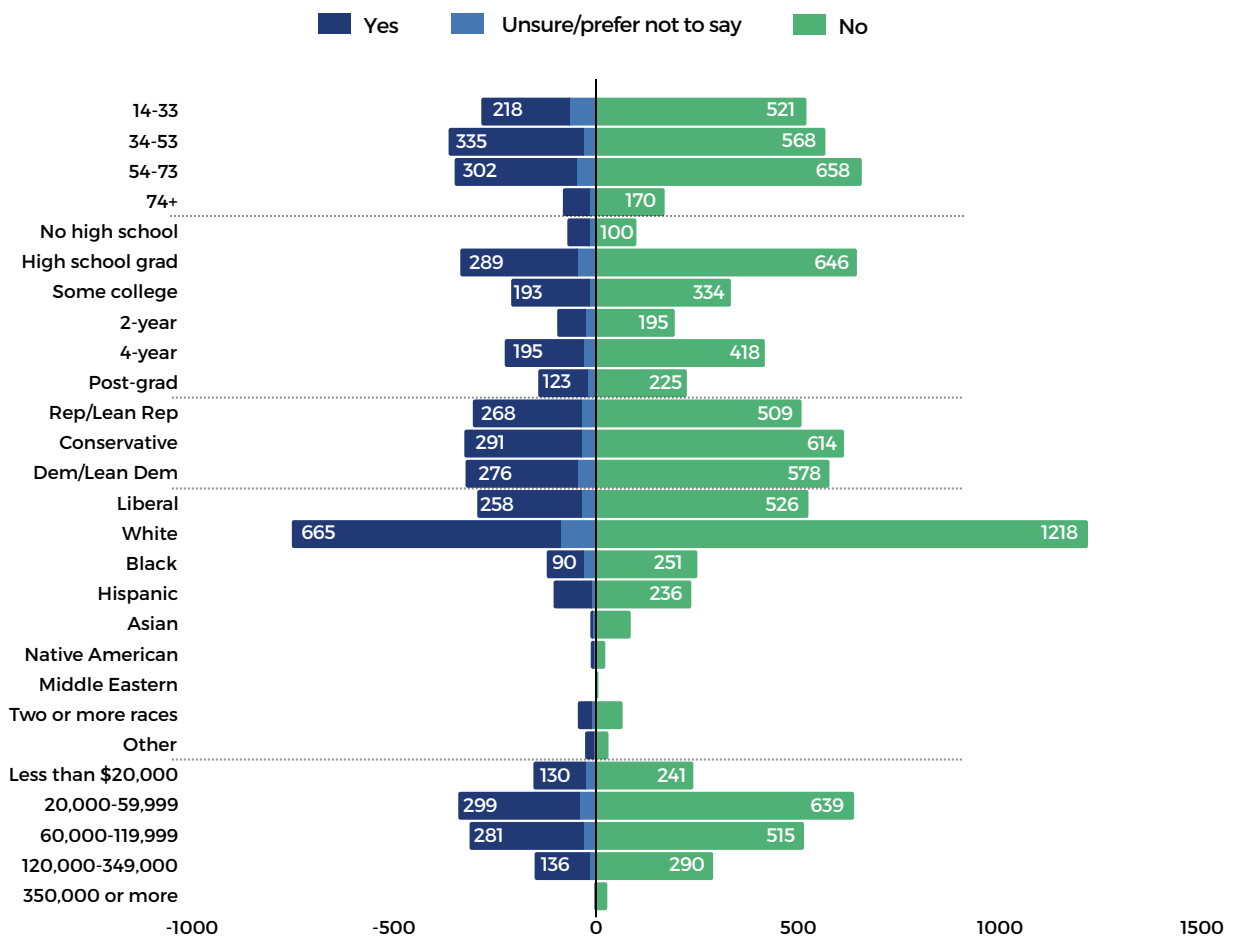
Our weighted survey results indicate a significant prevalence of exposure to opioid-related deaths across all major sociodemographic groups. Nearly one-third (31%) of respondents reported either knowing someone who died from an opioid overdose or knowing someone who knew someone who died. Of this group, 59% reported that they personally know someone who died from an opioid overdose. Regarding direct experiences with what they believe to be an opioid overdose, one-in-twenty Americans (5.2%) think they have experienced an overdose themselves.

Figure 2.2 presents the results of these exposures broken down by demographics. Broadly speaking, middle-aged cohorts report higher incidences of knowing someone who died from an opioid-related death, whereas personal overdose experiences are most prevalent among individuals aged 33 and younger. Although women in the U.S. are less likely than men to die from drug overdoses, a slightly higher percentage of women report witnessing opioid-related deaths in their surroundings.⁶

6 Holly Hedegaard, Arialdi M. Miniño, Merianne R. Spencer, and Margaret Warner, “Drug Overdose Deaths in the United States, 1999–2020,” NCHS Data Brief, no. 428 (Hyattsville, MD: National Center for Health Statistics, 2021), <https://dx.doi.org/10.15620/cdc.112340>.

A higher proportion of White respondents report exposure to opioid-related deaths compared to other racial groups. Exposure rates decrease as educational attainment increases. Among Americans without a high school degree, 10.6% believe they have experienced an overdose themselves, which is twice the rate among adults with a college education (4.9%), including those with some college, two-year, and four-year degrees. Exposure generally decreases with family income, except for the middle-income group earning between \$100,000 and \$119,999, who report the highest rate of connection to opioid overdose-related deaths (37.2%). Republicans (31.7%) and Republican leaners (34.1%) reported higher levels of exposure than Democrats (29.4%) and Democratic leaners (31.9%) on average, although both are lower than among Americans who are unsure of their partisanship (39.4%). Very liberal Americans are particularly vulnerable, with about three-in-ten (33.9%) having some connection to opioid-related deaths.

FIGURE 2.2
 Number of Respondents Reporting Opioid Overdose Connections by Demographics (Weighted)



NOTE: Out of 3,000 samples, 922 responded "Yes," 1,918 "No," and 160 were "Unsure" or chose not to answer.

We also explored the potential for regional differences in opioid experiences. Respondents answered two progressive questions about their acquaintance with opioid overdoses: first, “Do you personally know someone who died due to an opioid overdose, or know someone who knows someone who has?” and, if yes, “Do you personally know someone who has died of an opioid overdose?” Based on their answers, we quantified the magnitude of opioid exposure into three numerical levels (0-2), corresponding to no exposure, secondhand exposure, and firsthand exposure, respectively.

FIGURE 2.3
Tree Map of Average Opioid Exposure by U.S. State



The average opioid exposure by region was then calculated and reported (Figures 2.3 and 2.4). Among the 50 states and the District of Columbia, 28 are above the national average value of 0.539, with New Hampshire (0.915) being the most affected by the opioid crisis, followed by Pennsylvania (0.885) and West Virginia (0.862). In contrast, Montana (0.228), Hawaii (0.247), and Idaho (0.312) are the three least affected states.

FIGURE 2.4

Geographic Differences of Average Opioid Exposure by U.S. State

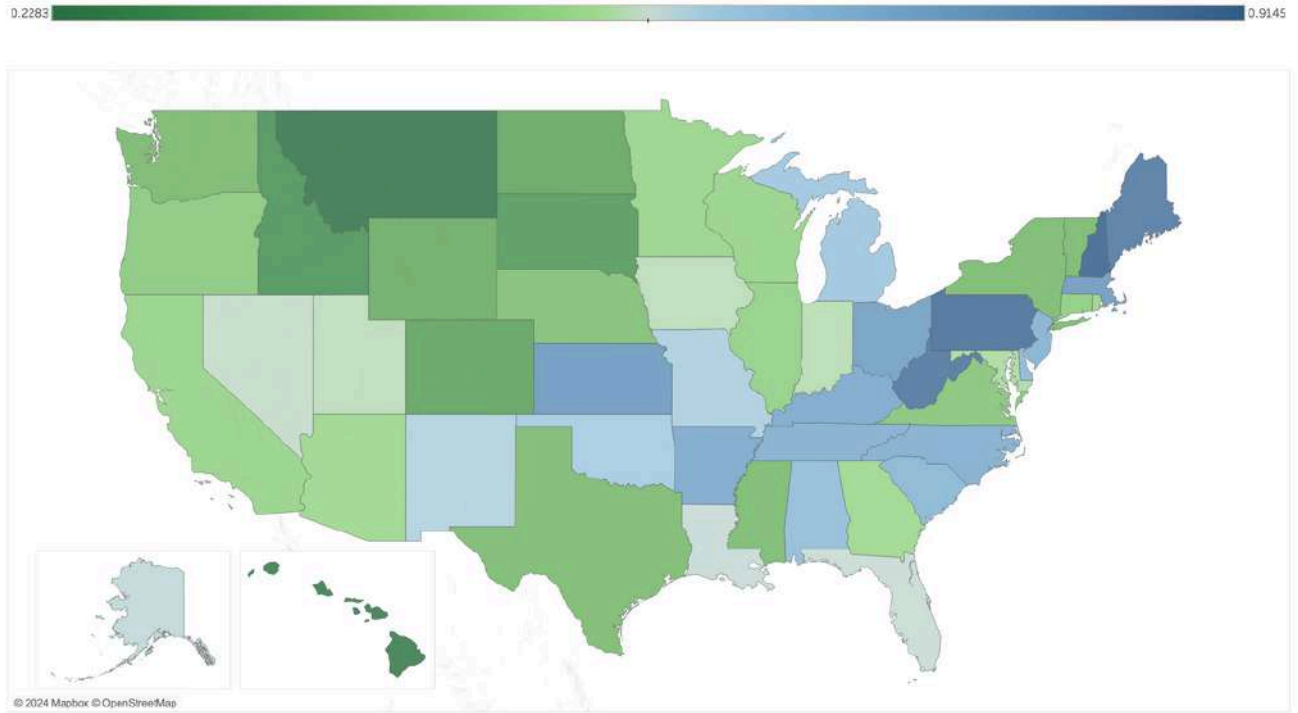
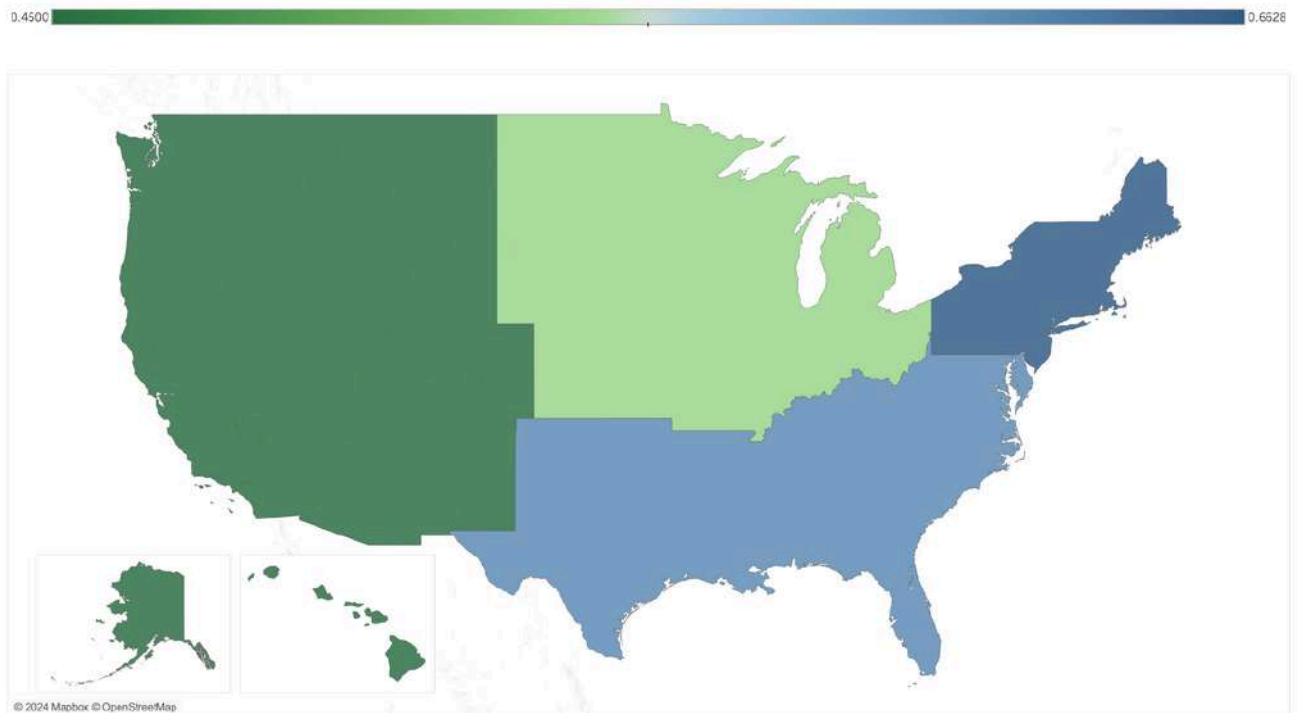


FIGURE 2.5

Geographic Differences of Average Opioid Exposure by U.S. Census Region



To ensure comparability and clarity in reporting the geographic impact of opioids, states were further grouped into four census regions—Northeast, Midwest, South, and West—according to the U.S. Census Bureau’s regional classification system (Figure 2.5).⁷ Most regions reported similar levels of opioid exposure, with three out of four clustered around the value of 0.6. The Northeast is the most severely affected on average (0.663), significantly higher than the West, which has the lowest impact (0.450). Among the top 10 states with the highest average values identified in Figure 3.1, 40% are in the Northeast, 40% in the South, and 20% in the Midwest. These findings suggest pronounced regional variations in opioid exposure levels despite its broad penetration.

These findings together suggest pronounced regional variations in opioid exposure levels despite its broad penetration. The highest exposure level, in New Hampshire, exceeds the national average by one and a half times and is nearly four times that of Montana. This extreme disparity necessitates further investigation into the specific drivers of opioid exposure in highly affected states compared to those with lower exposure levels. Understanding these differences is crucial for tailoring public health responses to effectively address the unique challenges confronting each state.

Predictors of Opioid Loss

We conducted statistical analyses of the unweighted survey data to identify specific predictors of the extent to which Americans are exposed to opioid-related losses, considering sociodemographics, ideology, political partisanship, and other background variables.⁸ The results presented below include those predictors that reached statistical significance ($p < 0.05$):

- Generational differences are evident in direct connections with opioid overdoses. The 1971-1990 birth cohort is significantly more likely to report direct losses compared to other age groups. The 1951-1970 and 1991-2010 cohorts also show an increased likelihood, though their results are less statistically robust.
- Women are more likely to report personally knowing someone who died due to an opioid overdose than men.

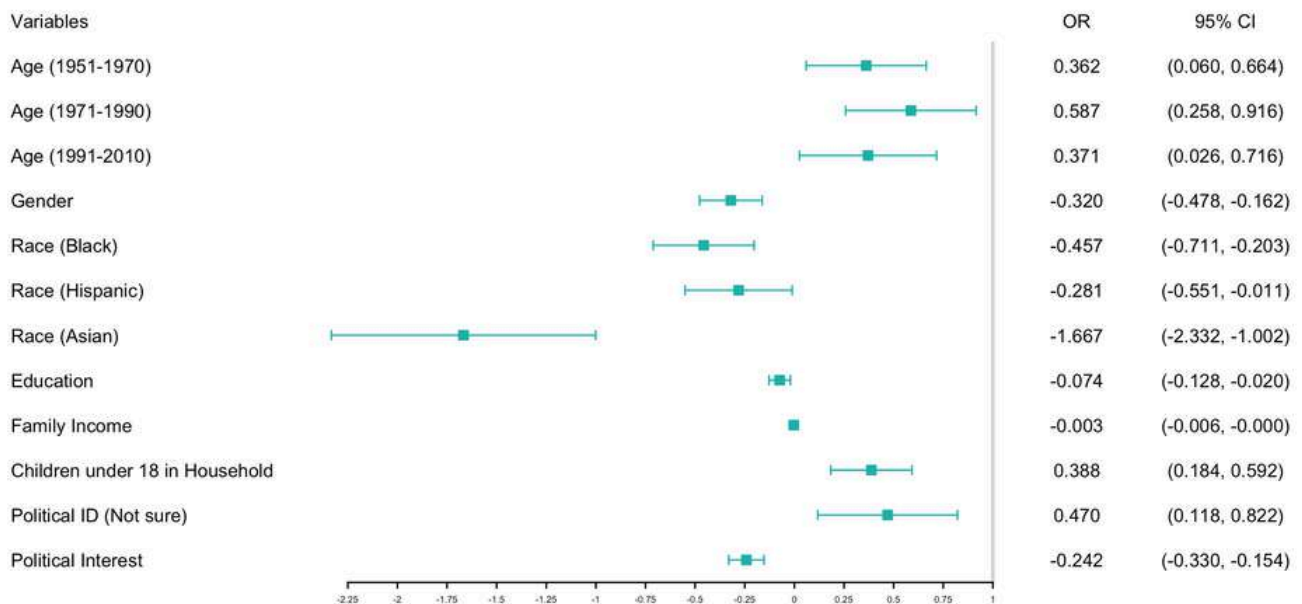
7 The Census Bureau delineates sub-national areas into a two-tiered system: four census regions, further divided into nine census divisions. For more details on how are they categorized, see “Geographic Terms and Definitions,” U.S. Census Bureau, <https://www.census.gov/programs-surveys/popest/about/glossary/geo-terms.html>.

8 The results are based on logistic regression. See Appendix Table 1.

- Significant racial disparities are clear in the direct experience of opioid exposure: Asians report the lowest levels of opioid-related loss, followed by Blacks and Hispanics, compared to Whites.
- Higher educational attainment is associated with slightly fewer personal losses because individuals with higher education levels experience fewer opioid overdoses within their social networks.
- As family income rises, the odds of knowing someone who has died from an opioid overdose decrease modestly.
- As political interest increases, the likelihood of reporting personal awareness of someone who has died from an opioid overdose grows.
- Having children under the age of 18 in the household is significantly associated with an increased likelihood of being personally connected to someone who has died from an opioid overdose.
- Individuals unsure of their party affiliation are significantly more likely to have firsthand exposure to opioid-related deaths compared to Democrats, showing a higher vulnerability within this group. Lesser, non-significant increases in exposure are observed among “independents,” “others,” and “Republicans,” in descending order of effect size.

FIGURE 2.6

Forest Plot of Selected Regression Results for Opioid-Related Loss Exposure Among Americans

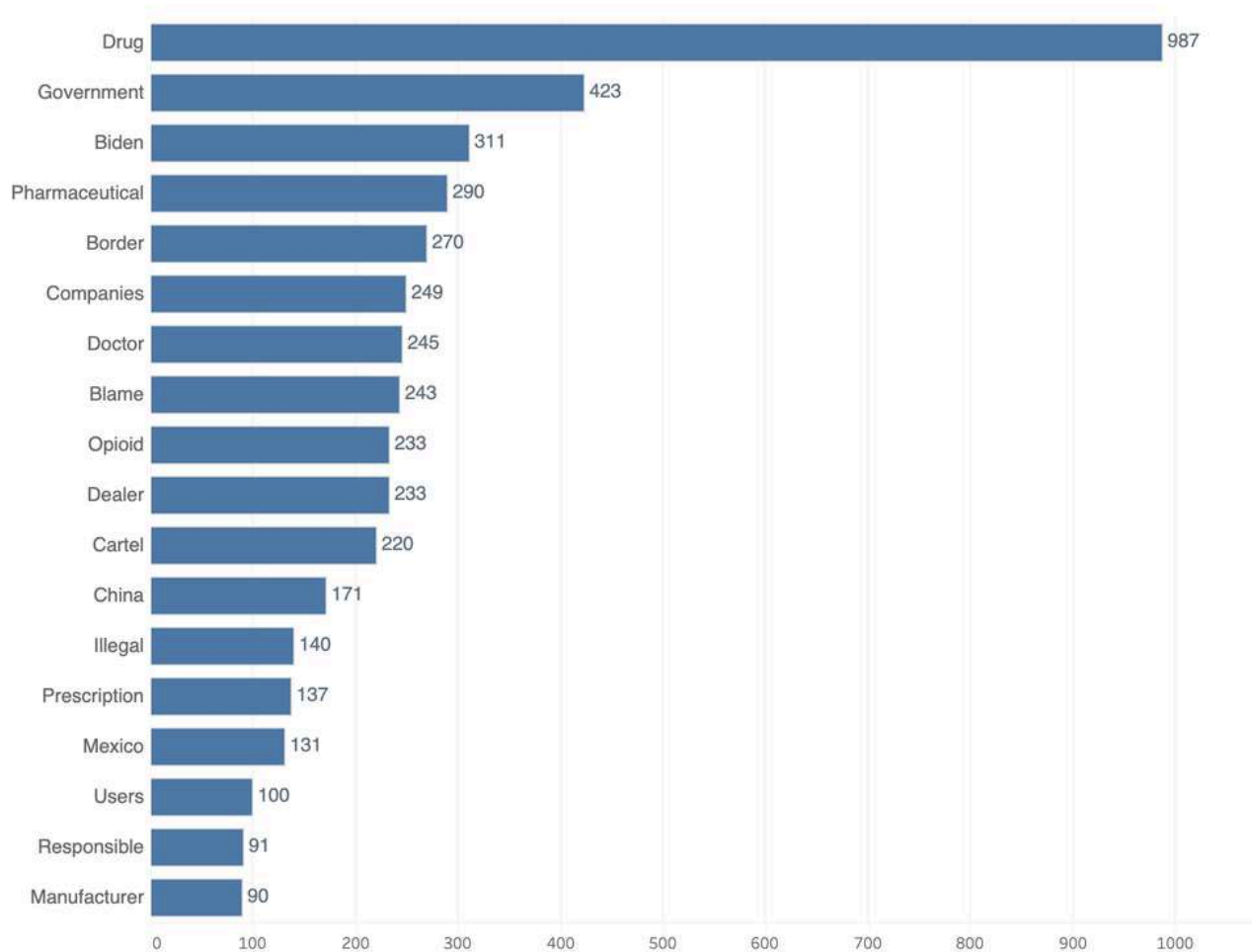


Attribution of Accountability

The poll asked participants to describe in an open-ended way who they felt was to blame for rising opioid deaths in the United States. Analyses of these responses revealed that “drug” was still the most frequently used term as expected (Figure 2.7 and 2.8).

FIGURE 2.7

Frequency of Terms on Opioid Responsibility by Respondents

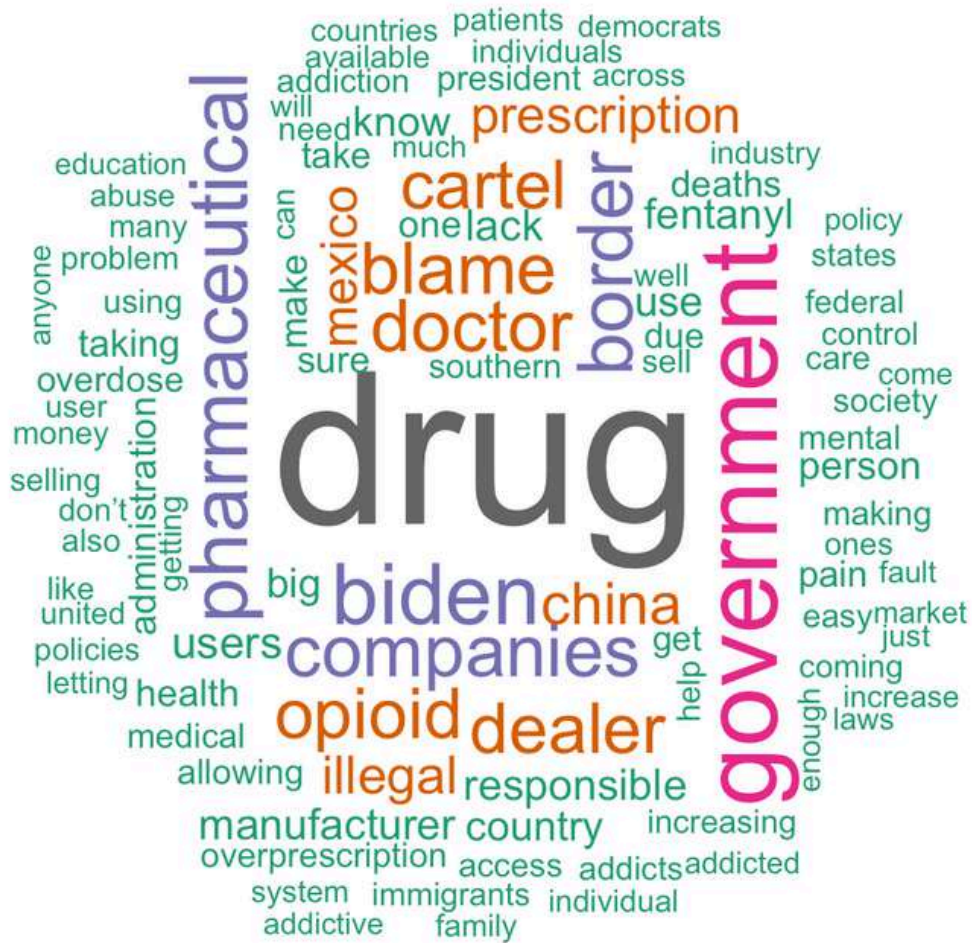


Following this, the predominant theme identified was the term “government” (423), accompanied by references to President Joe Biden, collectively emphasizing the centrality of the incumbent administration. The pharmaceutical industry also comes under scrutiny, with terms like “pharmaceutical” (290), and “companies” (249) pointing to a pronounced blame placed on the role of pharmaceutical sectors in manufacturing and marketing opioids. Healthcare providers are not spared either, as “doctor” (245) and “prescription” (137) are frequently cited, likely due to their involvement in prescribing practices that have been critically discussed in relation to the origins of the epidemic.

The illegal drug trade is another major theme, with “dealers” (233), “cartels” (220), and “illegal” (140) highlighted, underscoring the censure on illegal drug trafficking and the potent synthetic opioids linked to a surge in overdose deaths.

The results also reveal notable international dimensions for the illegal drug supply chain. “China” and “Mexico”, specifically, are identified as key players. “China” is mentioned 171 times, suggesting concerns about the role of Chinese entities in the global drug trade, particularly in the supply of fentanyl precursors. This reflects broader geopolitical challenges and complexities of international regulation and cooperation in curbing the supply of illegal drugs. “Mexico” shows up 131 times, primarily associating it with the drug cartels who control drug trafficking across the U.S.-Mexico border.

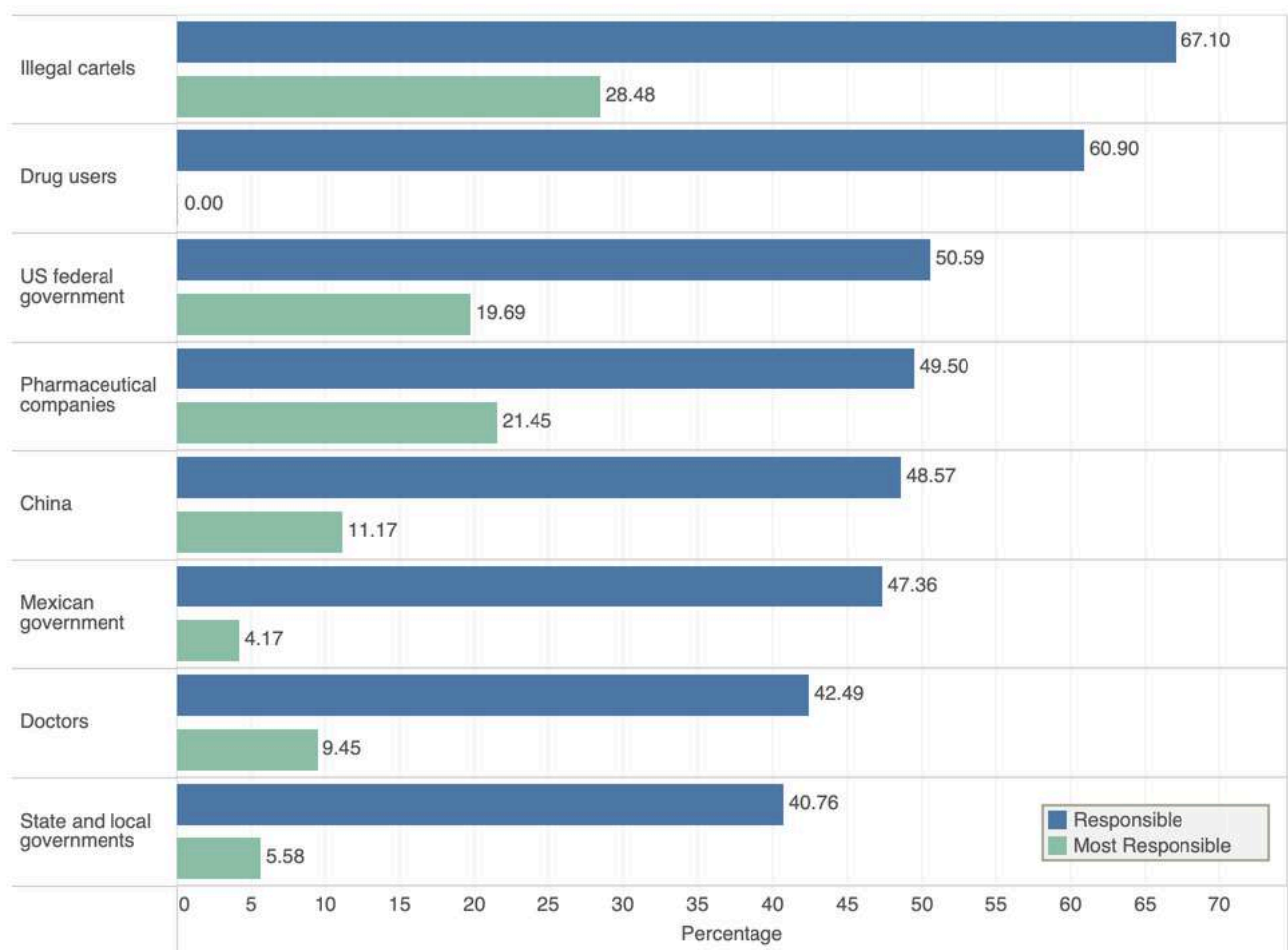
FIGURE 2.8
 Word Cloud of Highlighted Terms



Participants were asked which entity or group they felt was to blame for the opioid crisis and to specify a single institution, other than users themselves, most at fault. The results are presented in Figure 2.9 by overall percentage. When asked who was responsible for the increase in deaths due to substance misuse in the country, the largest group of respondents criticized criminal cartels and drug users themselves. Respondents equally blamed the U.S. federal government, pharmaceutical companies, and China, each at about 50%. Other entities blamed included the Mexican government, doctors prescribing opioids, and state and local governments.

FIGURE 2.9

Percentage of Respondents Reporting Groups Responsible vs. Most responsible for Opioid Deaths

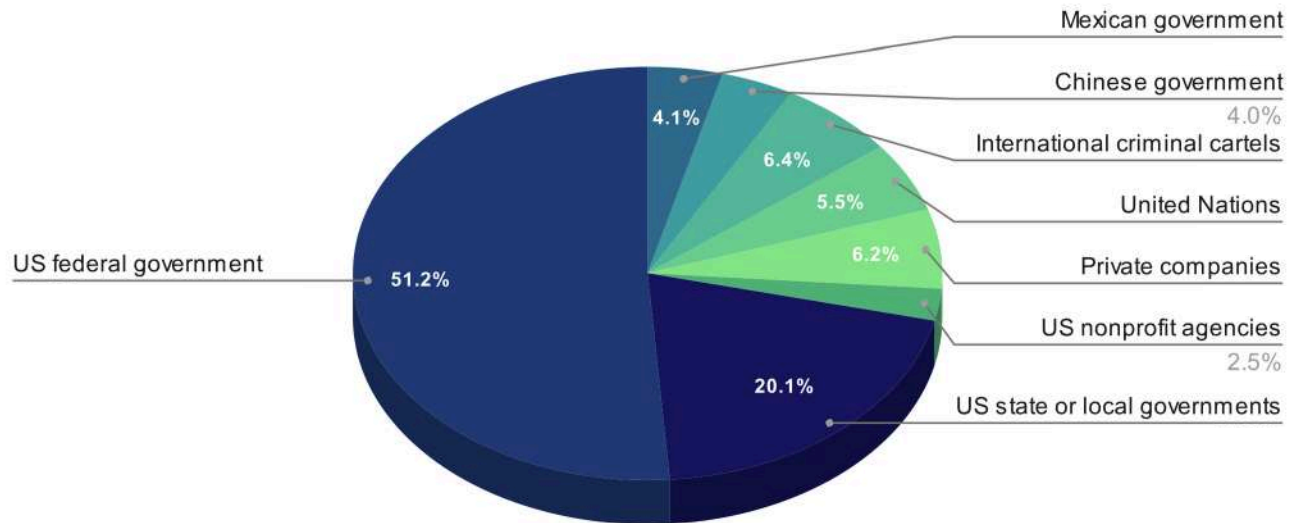


When asked specifically to pick a single actor *most* to blame, other than the users, the largest proportion of respondents continued to believe that cartels ought to be held responsible. Pharmaceutical companies and the U.S. federal government were the next most blamed, each being identified by around 20% of respondents.

Preferred Stakeholders and Actions for Resolution

Respondents were subsequently prompted to identify the single institution they believe is *most* responsible for *addressing* the opioid crisis (Figure 2.10).

FIGURE 2.10
Group Most Responsible for Solution, by Percentage



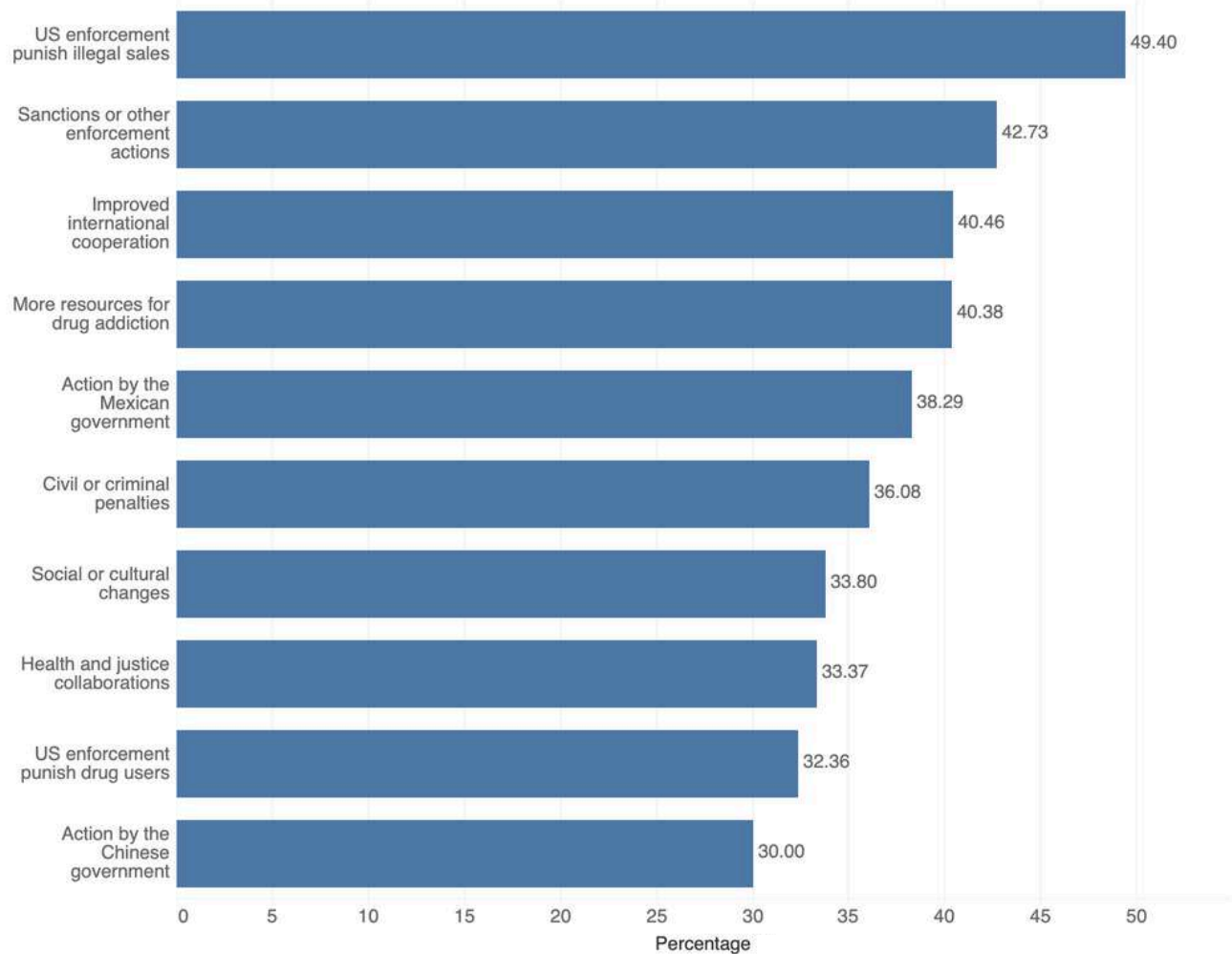
More than half of the respondents (51.2%) indicated a belief that the federal government should be responsible for addressing the crisis, with state and local governments identified as the second most responsible actors. No other group was identified as the key entity by more than 7% of the respondents.

Next, we prompted respondents to specify the actions they deemed most effective for addressing the issue from an expanded list of proposals, with the option to select multiple responses. The percentage of respondents indicating that a particular approach was among their perception of the paramount methods employed by different actors is presented in Figure 2.11.

“U.S. enforcement [to] punish illegal sales” and “sanctions or other enforcement actions” clearly and consistently represent the two approaches perceived as most important by nearly half the sample. They together reveal a strong demand for punitive state-led solutions to compel foreign entities to stop selling opioids or precursor chemicals. The perceptions of “improved international cooperation” and “more resources for drug addiction” were also shared by a significantly large proportion of respondents. On the contrary, “drug legalization and regulation” consistently received the least support.

FIGURE 2.11

Most Useful Approach for Solving the Problem, by Percentage



Consistent with the significant role played by smugglers moving drugs through Ports of Entry at the U.S.-Mexican border,⁹ more people considered the Mexican government crucial compared to the Chinese government (38.3% versus 30.0%). However, about a third of the respondents indicated that action by the Chinese government would be a positive step in addressing the opioid crisis.

9 Christian Penichet-Paul, "Illicit Fentanyl and Drug Smuggling at the U.S.-Mexico Border: An Overview," National Immigration Forum, October 25, 2023, <https://immigrationforum.org/article/illicit-fentanyl-and-drug-smuggling-at-the-u-s-mexico-border-an-overview/>.

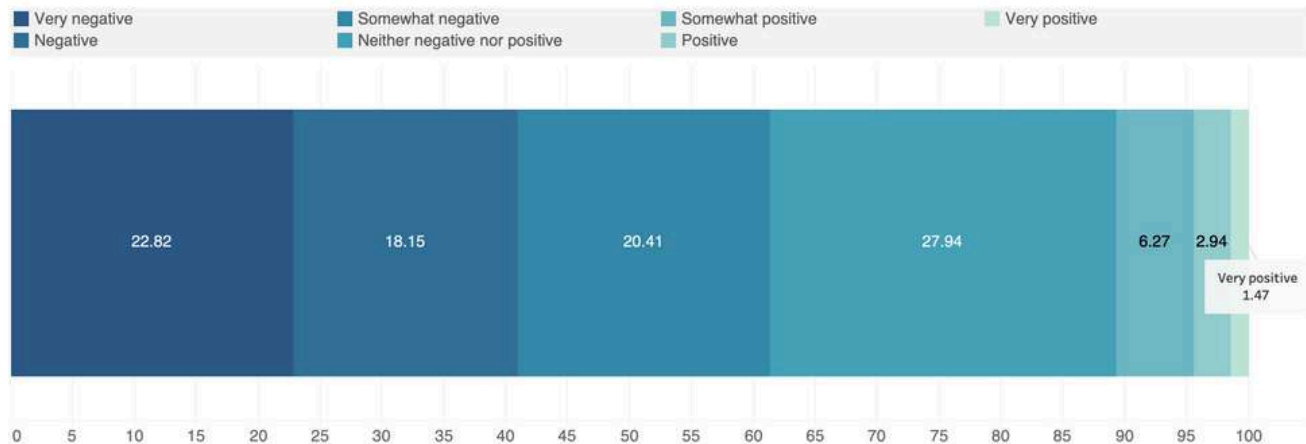
SURVEY RESULTS: PERCEPTIONS OF CHINA AND RELEVANCE TO OPIOID SUPPLY CHAIN

In order to understand how the perceptions of China are influenced by the opioid crisis, and how the perceptions of the opioid crisis may affect perceptions of China, we asked several questions relating to how respondents saw China overall and their perceptions of the current and ideal bilateral relationships between China and the United States.

Opinions of China and its Role in the World

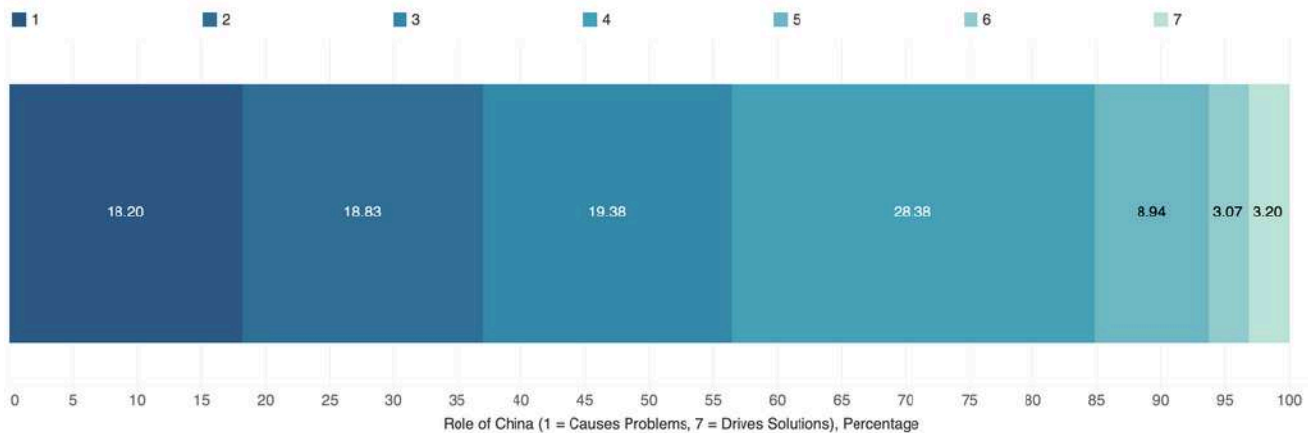
Unfavorable views of China prevail among American adults within the survey timeframe. Most respondents hold a negative view of the country (61.4%), including 22.8% who say their opinion is *very* negative. On the contrary, only 10.6% see China positively (Figure 3.1).

FIGURE 3.1
Different Views of China, by Percentage (Weighted)



Participants were also asked about their overall opinion of China’s role on the global stage. Figure 3.2 illustrates respondents’ perceptions of China’s role in global affairs, with scores ranging from 1 (indicating the view that China “causes global problems and undermines problem-solving”) to 7 (indicating the view that China “drives solutions to global problems”).

FIGURE 3.2
Perception Spectrum of China’s Global Influence, by Percentage (Weighted)



Over half of the respondents (56.41%) rated China below 4 (reflecting a perception that China caused problems more than solving them), whereas only 15.21% selected above 4. Interestingly, 28.38% chose a neutral score of 4, indicating a substantial portion of the population holds a balanced or ambivalent view of PRC’s global impact. The mean score of 3.09 falls just below the midpoint, revealing a general tendency towards a more critical assessment of China’s influence, with fewer respondents viewing China as predominantly constructive to world affairs.

Together, these patterns suggest that most respondents see China’s global role as more problematic than beneficial, though the presence of neutral opinions indicates that skepticism is common, but not universal.

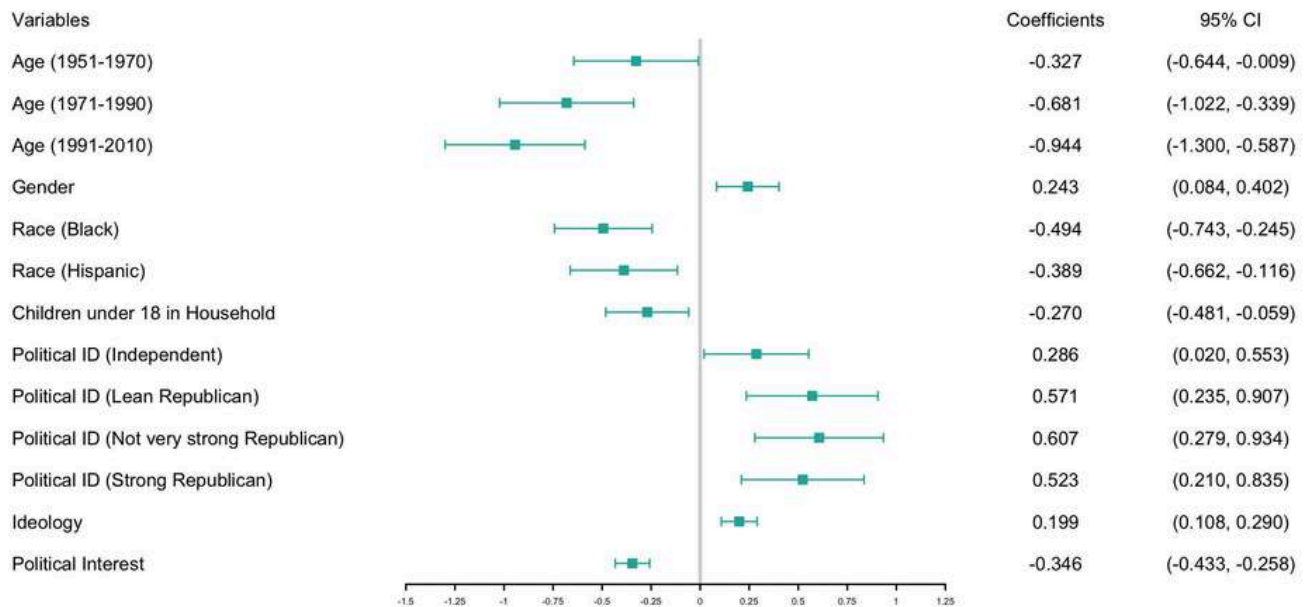
Demographic Predictors of Perceived China-Opioid Link

To determine how these attitudes vary by demographic factors, we conducted statistical analyses to identify predictors of holding China responsible.¹⁰

¹⁰ Through a generalized regression. See Appendix Table 2.

FIGURE 3.3

Forest Plot of Selected Regression Results for China-Opioid Link, by Demographics



The statistically significant results ($p < 0.05$) are reported in Figure 3.3:

- There is a clear age-related downward trend: younger people, particularly those born between 1991 and 2010, are significantly less likely to view China as responsible compared to older generations.
- Gender differences are evident, on average males are statistically more inclined to attribute responsibility to China than females on average.
- Racial identity matters, with Black and Hispanic respondents being less likely than White respondents to view China as responsible. In contrast, Asians, Native Americans, those identifying with multiple races, and “other” categories, including Middle Eastern, show no significant differences from White participants.
- Having children under the age of 18 in the household is associated with a reduced possibility of holding China responsible for the opioid crisis in the United States.
- Individuals engaged in politics are more likely to attribute blame to China for the opioid issues. This suggests that more politically interested individuals might rely more on popular narratives in forming opinions about the crisis.
- There is a clear ideological gradient in attributing responsibility for the opioid crisis to China. More conservative individuals are more likely to attribute blame to China for the opioid issues.

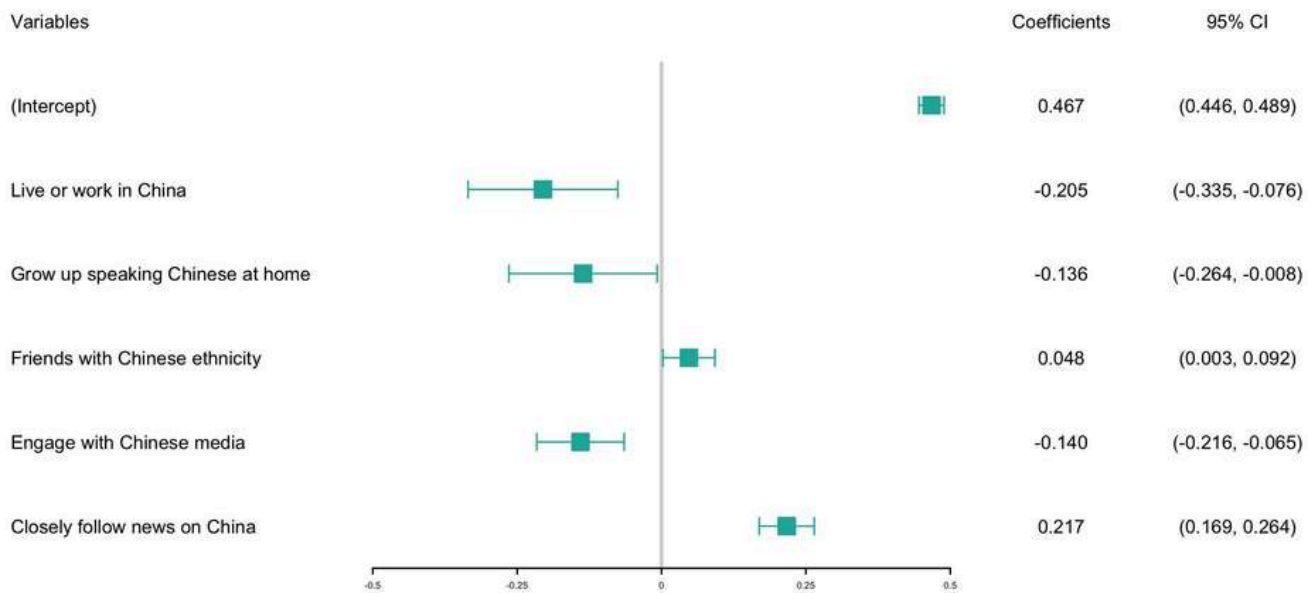
- Considering partisanship, the likelihood of attributing blame greatly increases as respondents’ political alignment shifts from Democrat to Republican. Notably, Republican-leaning and independent individuals are more likely to blame China than those affiliated with the Democratic Party, with “lean Republican” and “not very strong Republican” groups showing particularly stronger statistical significance in their positions.

Knowledge Predictors of Perceived China-Opioid Link

We asked respondents to report their experiences related to China, categorized into direct engagement, linguistic and cultural background, media and information exposure, and the absence of relevant experience. These levels of experience served as independent variables in our analysis to explore their impact on public perceptions of China’s role in the opioid crisis.¹¹ Figure 3.4 presents the selected results.

FIGURE 3.4

Forest Plot of Selected Regression Results for China-Opioid Link, by Knowledge of China



¹¹ See Appendix Table 3 for the full result of a generalized regression.

- Respondents with no experience or knowledge of China begin with a baseline likelihood of holding China responsible for the opioid crisis.
- Individuals who have lived or worked in China, or who grew up exposed to the Chinese language, are less likely to blame China for the opioid crisis. Conversely, having friends of Chinese ethnicity slightly increases the likelihood of attributing responsibility to China.
- Media framing holds significant sway over Americans' perceptions of China's role in the opioid crisis. Specifically, those who closely follow news about China are more likely to hold China accountable, whereas engagement with Chinese media leads to a reduced likelihood of attributing blame.

Effectiveness of China's Actions: Predictors from Demographics, Exposure, and China Knowledge

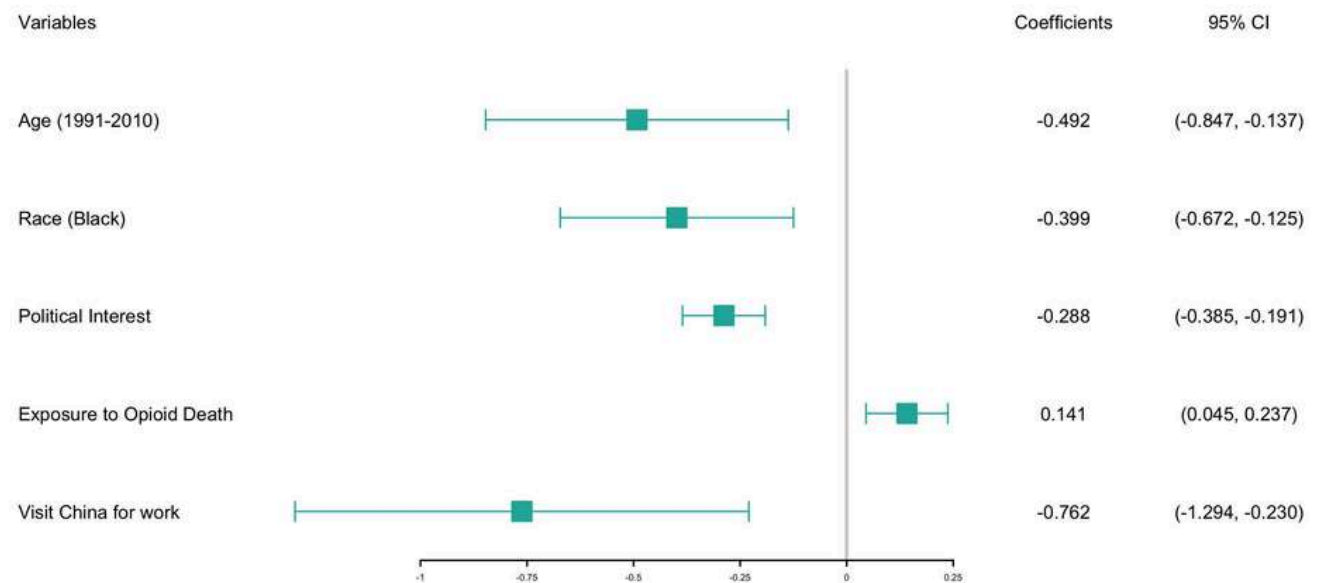
As reported above, one item in the survey asked participants what kinds of actions they think might be useful in addressing the crisis, including potential actions taken by the Chinese government.¹² The analyses as illustrated by Figure 3.5 report on statistically significant ($p < 0.05$) predictors of endorsing this item.

- Respondents born between 1991-2010 are less likely to believe that action by the Chinese government is the optimal approach for solving the problem.
- Trust levels or experiences with foreign governments vary by racial lines. Compared to White Americans, Black Americans are less likely to trust the Chinese government as the most effective approach.
- Respondents who are more engaged in politics are more likely to view interventions by the Chinese government as the most useful. This suggests that these individuals tend to recognize China's role in the U.S. fentanyl crisis—not only as a key player to blame but also as a potential solution.
- Respondents affected by opioid-related deaths in their community are increasingly likely to consider the Chinese government's actions as the most effective solution.
- Respondents who have traveled to China for professional purposes are notably less likely to view the Chinese government's actions as the best approach.

¹² Derived from a generalized regression; refer to Appendix Table 4.

FIGURE 3.5

Forest Plot of Selected Regression Results for Perceived Effectiveness of China's Actions



How China's Role in the Opioid Crisis Shapes Overall Opinion

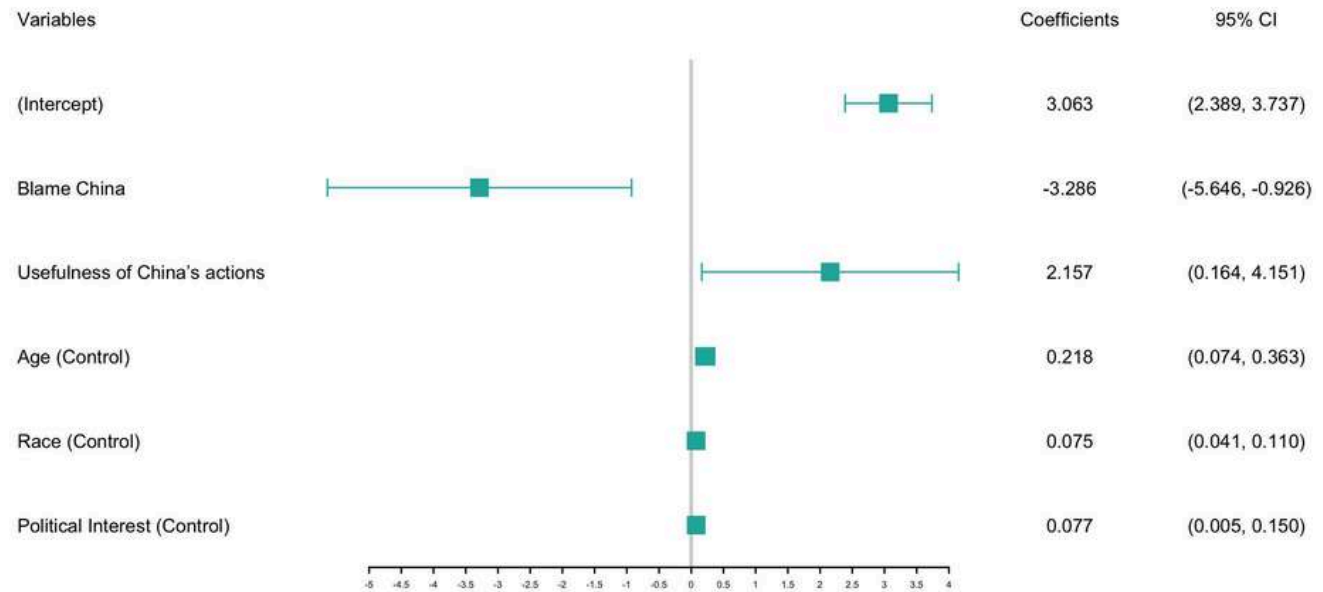
Understanding how Americans attribute responsibility for the opioid crisis to China and view China's role in addressing it provides valuable insights into broader public opinion dynamics. To examine these links, a two-stage least squares (2SLS) regression was used, controlling for a common set of sociodemographic variables. To better operationalize public perceptions of China's involvement in the opioid epidemic, this analysis focuses on two key predictors: (1) whether respondents hold China responsible for opioid deaths in the U.S., and (2) whether they consider actions by the Chinese government to be the most useful solution to the crisis.¹³

The findings reveal a complex interplay between blame attribution and the recognition of effective interventions, illustrating how these perceptions can significantly shape public opinion towards China.

¹³ See the full analytic approach through a causal inference regression in Appendix Table 5.

FIGURE 3.6

Forest Plot of Impact of Perceived China's Opioid Role on Overall Views of China



Public opinion about China is directly tied to perceptions around the cause of opioid deaths, as well as to demographic control variables. When Americans attribute responsibility for opioid-related deaths to China, that perception is associated with a significantly more negative perception of China. At the same time, those people who see China as having a strong potential role in solving the problem tend to have more positive views on China overall.

Although the detailed mechanisms between these positions are not definitively clear due to the limitations of survey data and require a granular exploration, the analyses here were specifically designed to establish causal links through statistical modeling. This suggests a connection between perceptions of China's activities—particularly in relation to opioid issues—and broader opinions of the country. It also implies that issue-specific sentiments can extend beyond their immediate context, indicating that broader opinions of China are not static but are rather malleable. Therefore, more proactive and positive interventions by China may likely hold a profound impact on American attitudes towards the country.

DISCUSSION AND CONCLUSION

The goal of this poll was to better understand and document American experiences with opioids, their attitudes about who is to blame, what is needed to respond, and specifically how China factors into these attitudes.

According to prior literature, the U.S. drug overdose crisis, particularly involving fentanyl, cocaine, and methamphetamine, has disproportionately affected young and middle-aged White and American Indian males, as well as middle-aged and older Black males. Geographically, the highest overdose rates have been concentrated in Appalachia and the desert Southwest. However, the crisis has increasingly spread to both urban and rural areas nationwide.¹⁴ Building on these findings, this research focuses on the current main contributor to this national public health disaster—synthetic opioids—and examines the demographic and geographic differences impacted by this specific subcategory of polysubstance overdose.

The results show that opioid-related loss is also a significant, widespread phenomenon. Nearly a third of Americans in our sample reported either being directly affected or knowing someone who had lost someone due to opioids. Almost one in five reported directly knowing someone who had died as a result of overdose. Younger generations, females, Whites, and individuals with lower income and educational attainment are more likely to have connections to opioid-related deaths.¹⁵ Regionally, New Hampshire, Pennsylvania, and West Virginia report the highest levels of exposure, while Montana, Hawaii, and Idaho are the least affected. The Northeast region is the most severely impacted, with exposure levels significantly higher than in the West.

Americans in our sample were relatively divided on who to blame for the opioid crisis, attributing responsibility to a range of actors. While a significant portion of respondents identified the U.S. federal government as primarily responsible for addressing the crisis, blame for the crisis was widely distributed among pharmaceutical companies, healthcare providers, criminal cartels, and international

14 Shannon M. Monnat, “Demographic and Geographic Variation in Fatal Drug Overdoses in the United States, 1999–2020,” *The ANNALS of the American Academy of Political and Social Science* 703, no.1 (2022): 50-78, <https://doi.org/10.1177/00027162231154348>.

15 Although opioid-related overdoses have primarily impacted rural and suburban White, Non-Hispanic populations, recent years have witnessed a significant increase in fatalities within Black and Hispanic minority communities. See more details from Jasmine Drake et al., “Exploring the impact of the opioid epidemic in Black and Hispanic communities in the United States,” *Drug Science, Policy and Law*, no. 6 (2020): 1-11, <https://doi.org/10.1177/2050324520940428>.

actors such as China and Mexico. Even when asked to single out the most responsible entity, respondents' choices were spread relatively evenly, with criminal cartels receiving the most blame, followed by pharmaceutical companies and the federal government.

When asked who should address the opioid crisis, there was a more significant consensus among respondents. A majority of Americans view the federal government as primarily responsible for fixing the problem, with a substantial minority also looking to state and local governments. Other actors, such as international institutions, NGOs, and foreign countries, are not widely seen as responsible for solving the issue. Similarly, Americans see the utility in actions the federal government can take: they reported a desire to see increased enforcement, enhanced international cooperation, pressure on source countries, and more support for addiction treatment. The data also revealed a strong preference for punitive measures, such as U.S. enforcement and sanctions, as the most effective responses to the crisis. Additionally, the Mexican government was perceived as more crucial and practical than PRC in addressing the issue, likely due to the strategic importance and prominence of the U.S.-Mexico border in the drug trade.

In response to the recent concerning increase in opioid overdoses, this survey suggests that Americans want to see effective action from the federal government as the key step in addressing the opioid crisis. This includes close monitoring and the provision of tailored services to different social groups.

In considering the role of China, the poll suggests that China is not thought of well by the average American. However, for most Americans, China is neither the primary entity to blame for opioid issues nor is it the entity most responsible for solving the problem. This perception varies based on political orientation, demography, and interest in China broadly and politics more generally. While the data indicate that China is part of the system contributing to the opioid crisis in the U.S. and can play an important role in addressing the problem, it is not the dominant focus of American concerns about the opioid crisis.

TECHNICAL APPENDIX

Description of Sample

The survey was conducted between March 12-20 2024 by YouGov as part of their online panel. A total of 3,237 respondents aged 18 or older at recruitment were interviewed and subsequently matched to a sampling frame of 3,000. This frame was adjusted for gender, age, race, and education attainment to represent a “modeled frame” of U.S. adults, which is based on several sources: the American Community Survey (ACS) public use microdata file, public voter file records, the 2020 Current Population Survey (CPS) Voting and Registration supplements, the 2020 National Election Pool (NEP) exit poll, and the 2020 CES surveys, including demographics and 2020 presidential vote. Results from the survey have a margin of error of +/- 1.94 %.

The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, home ownership, and region. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. The weights were then post-stratified on the 2020 presidential vote choice as well as a four-way stratification of gender, age (4-categories), race (4-categories), and education (4-categories), to produce the final weight.

Survey Design and Statistical Results

Developed by PAX *sapiens* foundation in consultation with YouGov, the questionnaire comprises three main sections: demographic distribution of the U.S. opioid crisis, public opinion regarding accountability for synthetic opioid issues, and perceptions of China related to these issues and more broadly. The project management team also rigorously populated test data on both PC and mobile devices to ensure the logic and randomizations were functioning as intended before launching the official survey.

Statistical deliverables then are explored through generalized linear models (GLM), ordinal logistic regression (OLR) models, and two-stage least squares (2SLS) regression analysis. They included demographic and other predictors entered in a series of bloc-

ks and were carried out using RStudio 2024.04.0+735 for Mac installed with multiple packages. The following statistical and analytical approaches are introduced by sections in detail.

1. Opioid Deaths Estimate

Following a careful data cleansing procedure, outliers were identified and removed to ensure the robustness of the mean estimate. The upper and lower limits, set at 533,495 and 3,370 respectively, were chosen based on the historical data spanning the last 20 years. This decision was guided by a prudent approach, considering a generous margin of five times the actual extreme values observed during this period, thus safeguarding against the influence of anomalies and preserving the integrity of the dataset. Subsequently, the mean was recalculated to yield a revised estimate of 89,123.15, under a methodological rigor towards the accuracy and reliability of the result.

2. Predictors of Opioid Loss Across Demographics

Data were analyzed using OLR. Demographic variables, including age, gender, race, family income, educational attainment, political interest, ideology, and partisanship, were treated as either categorical (nominal or ordinal) or numeric variables and entered as a block in various configurations. The outcome variable, exposure to opioid death, was coded as an ordinal variable with three categories: “none,” “secondhand,” and “firsthand.” Models were compared using the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) to balance model fit and complexity, along with Log Likelihood and Deviance to evaluate overall goodness-of-fit and explained variation. The metrics indicate that Model 3 is the best choice, having the lowest AIC (5051.003) and Deviance (5001.003), and the highest Log Likelihood (-2500.502). Significant predictors were carried forward and reported in the main body of the report. The complete model is detailed below.

TABLE 1

Full Results of Logistic Regressions for Opioid-Related Loss Exposure by Demographics

| | Level of Exposure to Opioid Loss | | | |
|-----------------|----------------------------------|--------------------|--------------------|--------------------|
| | (1) | (2) | (3) | (4) |
| Age (1951-1970) | 0.327 * (0.152) | 0.320 * (0.153) | 0.362 * (0.154) | 0.375 * (0.154) |

TABLE 1 – Continued

| | | | | |
|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Age (1971-1990) | 0.618 *** (0.153) | 0.502 ** (0.164) | 0.587 *** (0.168) | 0.609 *** (0.167) |
| Age (1991-2010) | 0.379 * (0.160) | 0.266 (0.172) | 0.371 * (0.176) | 0.389 * (0.176) |
| Gender | -0.276 *** (0.077) | -0.250 *** (0.078) | -0.320 *** (0.080) | -0.319 *** (0.080) |
| Race (Black) | -0.457 *** (0.125) | -0.473 *** (0.127) | -0.457 *** (0.130) | -0.448 *** (0.129) |
| Race (Hispanic) | -0.269 * (0.135) | -0.298 * (0.136) | -0.281 * (0.138) | -0.264 (0.137) |
| Race (Asian) | -1.767 *** (0.338) | -1.746 *** (0.338) | -1.667 *** (0.339) | -1.685 *** (0.339) |
| Race (Native American) | -0.489 (0.416) | -0.516 (0.417) | -0.442 (0.421) | -0.407 (0.419) |
| Race (Two or more races) | 0.091 (0.200) | 0.064 (0.202) | 0.058 (0.203) | 0.078 (0.202) |
| Race (Other) | 0.201 (0.260) | 0.241 (0.261) | 0.206 (0.265) | 0.246 (0.262) |
| Race (Middle Eastern) | -0.222 (0.844) | -0.136 (0.846) | -0.255 (0.846) | -0.256 (0.845) |
| Education | -0.038 (0.025) | -0.040 (0.026) | -0.074 ** (0.027) | -0.077 ** (0.027) |
| Family income | -0.003 ** (0.001) | -0.003 ** (0.001) | -0.003 ** (0.001) | -0.003 ** (0.001) |
| None Secondhand | 0.630 *** (0.171) | 0.742 ** (0.222) | 0.149 (0.270) | 0.189 (0.269) |
| Secondhand Firsthand | 1.189 *** (0.173) | 1.303 *** (0.223) | 0.716 ** (0.270) | 0.755 ** (0.269) |

TABLE 1 – Continued

| | | | | |
|-----------------------------|-----------|----------------------|-----------------------|-----------------------|
| Marital status | | 0.020 (0.024) | 0.022 (0.024) | 0.025 (0.024) |
| Employment | | 0.016 (0.017) | 0.016 (0.017) | 0.018 (0.017) |
| Child under 18 in household | | 0.345 *** (0.103) | 0.388 *** (0.104) | 0.384 *** (0.104) |
| State of residence | | -0.001 (0.002) | -0.001 (0.002) | -0.001 (0.002) |
| Ideology | | | -0.052 (0.042) | -0.67 (0.045) |
| Political interest | | | -0.242 *** (0.045) | -0.215 *** (0.043) |
| Party ID-3 (Republican) | | | 0.051 (0.124) | |
| Party ID-3 (Independent) | | | 0.094 (0.108) | |
| Party ID-3 (Other) | | | 0.285 (0.212) | |
| Party ID-3 (Not sure) | | | 0.470 ** (0.180) | |
| Party ID-7 | | | | 0.020 (0.024) |
| <hr/> | | | | |
| AIC | 5077.441 | 5073.722 | 5051.003 | 5052.365 |
| BIC | 5167.537 | 5187.843 | 5201.162 | 5184.505 |
| Log Likelihood | -2523.721 | -2517.861 | -2500.502 | -2504.183 |

TABLE 1 – Continued

| | | | | |
|--------------|----------|----------|----------|----------|
| Deviance | 5047.441 | 5035.722 | 5001.003 | 5008.365 |
| Observations | 3000 | 3000 | 3000 | 3000 |

NOTE: *** p < 0.001; ** p < 0.01; * p < 0.05

3. Holding China Accountable Across Demographics

Data were analyzed using GLM. Demographic variables were entered as a block in various configurations. The outcome variable was coded as a binary dependent variable with 1 (YES) or 0 (NO) to the inquiry of whether China should be responsible for opioid deaths. Considering the lowest AIC and Deviance values and the highest Log Likelihood value, Model 4 performs the best across these metrics.

TABLE 2

Full Results of Generalized Regressions for China-Opioid Link by Demographics

| | China Opioid Responsibility | | | |
|-----------------|-----------------------------|-----------------------|-----------------------|-----------------------|
| | (1) | (2) | (3) | (4) |
| (Intercept) | 0.827 *** (0.175) | 0.769 *** (0.225) | 0.238 (0.277) | 0.292 (0.278) |
| Age (1951-1970) | -0.469 ** (0.155) | -0.422 ** (0.157) | -0.324 * (0.162) | -0.327 * (0.162) |
| Age (1971-1990) | -1.145 *** (0.157) | -0.979 *** (0.167) | -0.676 *** (0.174) | -0.681 *** (0.174) |
| Age (1991-2010) | -1.415 *** (0.163) | -1.267 *** (0.174) | -0.941 *** (0.181) | -0.944 *** (0.182) |
| Gender | 0.383 *** (0.077) | 0.385 *** (0.078) | 0.245 ** (0.081) | 0.243 ** (0.081) |
| Race (Black) | -0.705 *** (0.121) | -0.696 *** (0.123) | -0.515 *** (0.127) | -0.494 *** (0.127) |

TABLE 2 – Continued

| | | | | |
|-----------------------------|-----------------------|-----------------------|----------------------|----------------------|
| Race (Hispanic) | -0.532 *** (0.134) | -0.526 *** (0.135) | -0.404 ** (0.139) | -0.389 ** (0.139) |
| Race (Asian) | -0.276 (0.212) | -0.317 (0.213) | -0.108 (0.218) | -0.113 (0.219) |
| Race (Native American) | -0.238 (0.386) | -0.237 (0.386) | -0.094 (0.397) | -0.092 (0.399) |
| Race (Two or more races) | -0.120 (0.204) | -0.124 (0.206) | 0.023 (0.210) | 0.018 (0.211) |
| Race (Other) | -0.292 (0.269) | -0.309 (0.269) | -0.346 (0.279) | -0.339 (0.278) |
| Race (Middle Eastern) | -0.760 (0.850) | -0.793 (0.852) | -0.650 (0.870) | -0.611 (0.867) |
| Education | 0.002 (0.025) | 0.015 (0.026) | 0.002 (0.028) | 0.004 (0.028) |
| Family income | 0.001 (0.001) | 0.001 (0.001) | 0.001 (0.001) | 0.001 (0.001) |
| Marital status | | -0.018 (0.023) | 0.011 (0.024) | 0.013 (0.024) |
| Employment | | 0.026 (0.017) | 0.033 (0.018) | 0.033 (0.018) |
| Child under 18 in household | | -0.255 * (0.105) | -0.261 * (0.107) | -0.270 * (0.108) |
| State of residence | | -0.002 (0.002) | -0.003 (0.002) | -0.003 (0.002) |
| Ideology | | | 0.240 *** (0.043) | 0.199 *** (0.046) |

TABLE 2 – Continued

| | | | | |
|--|-----------|-----------|-----------------------|-----------------------|
| Political interest | | | -0.340 *** (0.044) | -0.345 *** (0.045) |
| Party ID-3 (Republican) | | | 0.444 *** (0.123) | |
| Party ID-3 (Not sure) | | | 0.205 (0.187) | |
| Party ID-7 (Not very strong Democrat) | | | | 0.109 (0.141) |
| Party ID-7 (Lean Democrat) | | | | 0.010 (0.162) |
| Party ID-7 (Independent) | | | | 0.286 * (0.136) |
| Party ID-7 (Lean Republican) | | | | 0.571 *** (0.171) |
| Party ID-7 (Not very strong Republican) | | | | 0.607 *** (0.167) |
| Party ID-7 (Strong Republican) | | | | 0.523 ** (0.159) |
| <hr/> | | | | |
| AIC | 3932.641 | 3930.702 | 3785.168 | 3780.257 |
| BIC | 4016.730 | 4038.816 | 3932.321 | 3936.423 |
| Log Likelihood | -1952.321 | -1947.351 | -1868.584 | -1865.129 |
| Deviance | 3904.641 | 3894.702 | 3737.168 | 3728.257 |
| Observations | 3000 | 3000 | 3000 | 3000 |
| <hr/> | | | | |

NOTE: *** p < 0.001; ** p < 0.01; * p < 0.05

4. Holding China Accountable Across Knowledge

Data were analyzed through GLM. Independent variables, representing various aspects of knowledge about China, were all binary and coded using dummy variables. These variables were entered as a block in different configurations. The outcome variable was binary, indicating whether respondents believed China should be held responsible for opioid-related deaths (1 = YES, 0 = NO). Based on the provided metrics, Model 1 is the best-performing model.

TABLE 3

Full Results of Generalized Regressions for China-Opioid Link by Knowledge

| | China Opioid Responsibility | |
|----------------------------------|-----------------------------|----------------------|
| | (1) | (2) |
| (Intercept) | 0.467 *** (0.011) | 0.447 *** (0.031) |
| Visit for tourism | -0.070 (0.044) | -0.077 (0.045) |
| Visit for work | 0.007 (0.053) | 0.014 (0.054) |
| Live or work in China | -0.205 ** (0.066) | -0.202 ** (0.066) |
| Speak Chinese | 0.021 (0.065) | 0.022 (0.065) |
| Grow up speaking Chinese at home | -0.136 * (0.065) | -0.133 * (0.066) |
| Friends with Chinese in China | -0.051 (0.036) | -0.046 (0.037) |
| Friends with Chinese ethnicity | 0.048 * (0.023) | 0.061 * (0.030) |

TABLE 3 – Continued

| | | |
|----------------------------------|-----------------------|-----------------------|
| Family member adopted from China | -0.048 (0.055) | -0.038 (0.057) |
| Engage with Chinese media | -0.140 *** (0.039) | -0.134 *** (0.040) |
| Closely follow news on China | 0.217 *** (0.024) | 0.231 *** (0.032) |
| None | | 0.023 (0.033) |
| <hr/> | | |
| AIC | 4258.569 | 4260.062 |
| BIC | 4330.645 | 4338.145 |
| Log Likelihood | -2117.284 | -2117.031 |
| Deviance | 720.549 | 720.427 |
| Observations | 3000 | 3000 |

NOTE: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

5. Predictors of Believing China’s Actions as Most Useful

GLM was also employed to explore this data. Independent variables were categorized into three blocks: demographics, opioid crisis exposure, and knowledge of China, and were entered in various configurations. The outcome variable was binary, indicating whether respondents believed China’s actions were the most useful in addressing the opioid crisis (1 = YES, 0 = NO). While Model 3 excels in AIC and BIC, Model 4 demonstrates superior performance in terms of Log Likelihood and Deviance. Given these considerations, Model 4 can be considered the best-performing model overall, especially if the priority is on goodness-of-fit and explained variation. We report the details in the following Table 4.

TABLE 4

Full Results of Generalized Regressions for Perceived Effectiveness of China's Actions

| | Effectiveness of China's Actions | | | |
|--------------------------|----------------------------------|---------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| (Intercept) | -0.675 ** (0.227) | -0.299 (0.283) | -0.331 (0.282) | -0.305 (0.283) |
| Age (1951-1970) | -0.061 (0.147) | -0.032 (0.149) | 0.032 (0.149) | 0.031 (0.149) |
| Age (1971-1990) | -0.487 ** (0.163) | -0.260 (0.167) | -0.257 (0.167) | -0.256 (0.167) |
| Age (1991-2010) | -0.669 *** (0.173) | -0.416 * (0.177) | -0.414 * (0.177) | -0.422 * (0.178) |
| Gender | 0.254 ** (0.082) | 0.141 (0.084) | 0.142 (0.084) | 0.147 (0.084) |
| Race (Black) | -0.466 *** (0.136) | -0.367** (0.140) | -0.365 ** (0.140) | -0.356 * (0.140) |
| Race (Hispanic) | -0.370 *** (0.150) | -0.277 (0.152) | -0.288 ** (0.152) | -0.291 ** (0.152) |
| Race (Asian) | -0.068 (0.229) | -0.071 (0.232) | 0.073 (0.232) | 0.089 (0.233) |
| Race (Native American) | -1.347 * (0.614) | -1.188 (0.620) | -1.205 (0.619) | -1.207 (0.619) |
| Race (Two or more races) | -0.054 (0.217) | -0.030 (0.220) | 0.028 (0.220) | 0.035 (0.220) |
| Race (Other) | -0.110 (0.280) | -0.102 (0.286) | -0.104 (0.286) | -0.066 (0.284) |

TABLE 4 – Continued

| | | | | |
|-----------------------------|-------------------|-----------------------|-------------------|-----------------------|
| Race (Middle Eastern) | -0.852 (1.085) | -0.943 (1.089) | -0.937 (1.089) | -0.860 (1.089) |
| Education | 0.019 (0.028) | -0.022 (0.029) | -0.021 (0.029) | -0.019 (0.029) |
| Family income | 0.001 (0.001) | 0.001 (0.001) | 0.001 (0.001) | 0.001 (0.001) |
| Marital status | 0.019 (0.025) | 0.036 (0.025) | 0.036 (0.025) | 0.034 (0.025) |
| Employment | 0.011 (0.018) | 0.015 (0.019) | 0.015 (0.019) | 0.015 (0.019) |
| Child under 18 in household | 0.031 (0.114) | 0.067 (0.115) | 0.065 (0.115) | 0.058 (0.115) |
| State of residence | -0.001 (0.003) | -0.001 (0.003) | -0.001 (0.003) | -0.001 (0.003) |
| Ideology | | 0.010 (0.045) | 0.017 (0.045) | 0.008 (0.049) |
| Political interest | | -0.313 *** (0.049) | | -0.319 *** (0.049) |
| Party ID-3 (Republican) | | 0.260 * (0.130) | | |
| Party ID-3 (Independent) | | 0.114 (0.114) | | |
| Party ID-3 (Other) | | 0.080 (0.234) | | |
| Party ID-3 (Not sure) | | -0.334 (0.233) | | |

TABLE 4 – Continued

| | | | | |
|-------------------------------------|-----------|-----------|---------------------|----------------------|
| Exposure to Opioid Death | | | 0.145 ** (0.049) | 0.141 ** (0.049) |
| Visit China for tourism | | | | 0.216 (0.197) |
| Visit China for work | | | | -0.762 ** (0.272) |
| Live or work in China | | | | 0.146 (0.307) |
| Speak Chinese | | | | -0.040 (0.317) |
| Grow up speaking Chinese at home | | | | 0.035 (0.316) |
| Friends with Chinese in China | | | | 0.258 (0.162) |
| Friends with Chinese ethnicity | | | | 0.132 (0.106) |
| Family member adopted from China | | | | -0.140 (0.255) |
| Engage with Chinese media | | | | -0.015 (0.185) |
| Closely follow news on China | | | | 0.209 (0.110) |
| <hr/> | | | | |
| AIC | 3622.312 | 3572.806 | 3566.219 | 3568.610 |
| BIC | 3730.426 | 3716.959 | 3692.353 | 3754.807 |
| Log Likelihood | -1793.156 | -1762.403 | -1762.110 | -1753.305 |

TABLE 4 – Continued

| | | | | |
|--------------|----------|----------|----------|----------|
| Deviance | 3586.312 | 3524.806 | 3524.219 | 3506.610 |
| Observations | 3000 | 3000 | 3000 | 3000 |

NOTE: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

6. Percieved China-Opioid Link and Overall Opinion of China

This section aims to explore the causality between U.S. public perception of China’s role in the opioid crisis and their impression of China in general. However, an endogeneity issue arises because public opinion on China’s opioid responsibility may simultaneously influence and be influenced by their overall image of China, and both may be affected by common external shocks. This creates a bidirectional causal relationship and shared external influences. The analysis thus employs the 2SLS estimation technique to address potential endogeneity issues that might bias the causal inferences.

In the first stage, we regressed each endogenous independent variable on the instrumental variables and any other controls (e.g., demographics) to account for their potential confounding effects. These predictors include: (1) whether respondents hold China responsible for opioid deaths in the U.S., and (2) whether they believe that actions by the Chinese government are the most useful solution to the opioid crisis. The chosen instruments are the respondents’ beliefs that improved international cooperation and sanctions or other enforcement actions are the most useful approaches to solving the opioid crisis. This exogeneity is based on the premise that, while these beliefs are likely to influence respondents’ views on accountability and solutions, they do not directly affect their general perception of China. They capture a respondent’s exposure to broader U.S. foreign policy effectiveness—in an either cooperative or coercive way—rather than specific attitudes towards China.

In the second stage, we substituted the endogenous independent variables with their predicted values from the first stage. This allows for estimating the impact on the overall perception of China in a way that corrects for potential biases introduced by endogeneity. Model 3, with the highest R^2 and Adjusted R^2 values, indicates it explains the most variance and provides the best fit among the models while adjusting for the number of predictors. The full models are specified as follows (Table 5).

TABLE 5

Full Results of 2SLS Regressions for Percieved China-Opioid Link and Overall Opinion of China

| | Opinion of China | | |
|-------------------------------|-----------------------|-----------------------|-----------------------|
| | (1) | (2) | (3) |
| (Intercept) | 2.423 *** (0.166) | 2.216 *** (0.149) | 3.063 *** (0.344) |
| Blame China | -0.749 *** (0.139) | | -3.286 *** (1.204) |
| Usefulness of China's actions | | -0.600 *** (0.118) | 2.157 * (1.017) |
| Age | 0.361 *** (0.030) | 0.405 *** (0.028) | 0.218 ** (0.074) |
| Gender | 0.034 (0.049) | 0.009 (0.049) | 0.117 (0.063) |
| Race | 0.089 *** (0.017) | 0.093 *** (0.017) | 0.075 *** (0.018) |
| Education | -0.012 (0.016) | -0.012 (0.016) | -0.011 (0.016) |
| Family income | -0.001 (0.001) | -0.001 (0.001) | -0.001 (0.001) |
| Ideology | -0.168 *** (0.023) | -0.211 *** (0.021) | -0.026 (0.071) |
| Political interest | 0.130 *** (0.028) | 0.148 *** (0.027) | 0.077 * (0.037) |
| R ² | 0.190 | 0.189 | 0.191 |
| Adjusted R ² | 0.188 | 0.187 | 0.189 |

TABLE 5 – Continued

Observations

3000

3000

3000

NOTE: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

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