



DEPARTMENT OF JOURNALISM, MEDIA AND COMMUNICATION

# The Red, White and Biased?

Media Framing of the U.S. Opioid Epidemic Based on News Outlets' Political Partisanship – A Comparative Analysis of California and Texas

**Henriette Schulte**

**Master's Thesis in Media and Communication**

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| Supervisor:            | Bengt Johansson                                      |
| Examiner:              | Jesper Strömbäck                                     |

## Abstract

**Objective:** This thesis investigates potential differences and similarities in media framing of the U.S. opioid epidemic in regard to partisan media bias in 16 liberal, centrist and conservative news outlets in the country's two most populous states, California and Texas. It takes state-level differences related to demographics, state governments and laws, prescription policies or health insurance into account. The results of the hypothesis testing will then be assessed in the context of the two contrasting states. The aim of this procedure is to be able to draw conclusions whether one or both of the above-mentioned factors can be ruled out as an explanation for possible patterns in media coverage, possibly hinting towards a potential impact of partisan media bias or state differences on framing and thus opening up a debate for further research.

**Theory:** The analysis is based on the framing theory by Robert Entman (1993), which states that issues can be viewed from a range of perspectives and that individuals arrive at opinions or reconsider their attitudes based on the way a matter is portrayed in the media. Individuals are often guided towards pre-determined evaluations of issues by the media's focus on specific issue attributes. Frames are thus tools helping human beings to grasp the world and their surroundings (Lecheler & de Vreese, 2019:7).

**Method:** A comparative quantitative content analysis was conducted using five generic frames established by Semetko and Valkenburg (2000) and four issue-specific frames identified through the review of previous research on media narratives in the opioid crisis. The collected data was analyzed using the statistical tests of Pearson's  $\chi^2$ , Cramér's V and cross-tabulations. Intracoder reliability was ensured through Cohen's kappa values.

**Material:** The data was collected from March 30<sup>th</sup>, 2024 to April 12<sup>th</sup>, 2024 and retrieved through a search of pre-defined keywords from the news outlets' respective websites and archives. The sample (n=401) includes articles published between March 1<sup>st</sup>, 2023 and July 31<sup>st</sup>, 2023, the time frame around the mortality peak of the crisis to date, May 2023. Only news items, no other journalistic text types, making clear reference to the current opioid crisis in the United States, were coded. The analysis focused on the textual parts of the articles only.

**Results:** During the hypothesis testing, significant variations in media framing were found between newspapers of different political leanings. Conservative media use the criminalization narrative more frequently than liberal ones, while those make use of the medicalization, human interest and conflict frame more often than their conservative counterparts. Liberal and

conservative news outlets do not differ in the use of the stigma frame and their portrays of victims and perpetrators within the crisis. When contextualizing these results in the Californian and Texan samples, the outcomes remain the same, indicating that the differences found may be due to the media's partisan bias and that state-level contrasts investigated in this thesis can be dismissed as an explanation for the patterns in this case.

**Word count:** 26,481

**Keywords:** opioid epidemic, opioids, crisis, framing, media frames, media bias, newspapers, United States, California, Texas

## Foreword

“I had a career in sales in the automobile business. I was making a lot of money, upwards of \$100,000 a year. Then I started up with the *OxyContin*s. It’s an amazing feeling, that warm hug from Jesus. It started as a once-in-a-while thing. But I began telling myself, ‘Well, if I can feel this good on Friday and Saturday, why shouldn’t I feel this good on Tuesday and Wednesday?’ And then the price started going up, and all of a sudden they’re \$80 a pill. At this point, I’ve got a six- or seven-pills-a-day habit. I wouldn’t get out of bed without one. I always knew about heroin, but it was a line I didn’t want to cross. But, you know, the ship had already sailed. An opiate’s an opiate. I’m not trying to die, contrary to people’s belief. I’m not trying to kill myself. I’m just an addict.”

- *John, an active user from Massachusetts*<sup>1</sup>

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<sup>1</sup> From: Moakley, P. & Nachtwey, J. (2017). The Opioid Diaries. *TIME*. <https://time.com/james-nachtwey-opioid-addiction-america/>.

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# I Introduction

The United States find themselves in the middle of the deadliest drug crisis in the country's history. What started as a large-scale public health issue has long advanced to a continent-wide North American epidemic. Each year, drugs kill more Americans than two Vietnam wars would have, reaching its current peak in 2023 (Welch, 2017; Mann & Pattani, 2023). Opioids are responsible for 80% of overdose deaths, and 90% of those involve the highly potent illicit substance fentanyl (Centers for Disease Control and Prevention, 2023; United Nations Office on Drugs and Crime, 2023). In 2023 alone, the Drug Enforcement Administration seized more than 376 million lethal doses of fentanyl, a fraction of the actual amounts entering the United States (Drug Enforcement Administration, n.d.-a). Every 15 minutes, a baby is born in the U.S. physically dependent on opioids (National Institutes of Health, n.d.). Drug crises are no novelty in the United States, the opioid epidemic, however, is a phenomena, which has never been witnessed before.

This thesis aims to investigate differences or similarities in media framing of the opioid epidemic potentially based on partisan media bias through a comparative quantitative content analysis, while additionally contextualizing the results by taking into account the possible impact societal and political state differences may have. The analysis will assess frames in sixteen liberal-leaning, conservative-leaning and centrist U.S. newspapers in the country's two most populated states, California and Texas. The sample includes articles published between March 1<sup>st</sup>, 2023 and July 31<sup>st</sup>, 2023, the time frame around the mortality peak of the crisis to date, May 2023 (National Vital Statistics System, 2024). The objective of this thesis is to evaluate if one of the two factors, the newspapers' political leaning or state-level differences, can be rule out as an explanation for possible patterns in media framing. If so, this can have implications for future research as to which aspect should be investigated further.

The analysis' societal and academic relevance will be discussed in chapter III. The hypotheses and the research question are specified in chapter VI.

## II Background

### 2.1 Clarification of Vocabulary

In order to approach this subject in the most objective manner possible, the correct use of vocabulary concerning those affected by the opioid crisis is crucial. The National Institute on Drug Abuse offers a guideline providing information on appropriate and inappropriate terms when talking about addiction, which I will follow in this thesis to avoid further solidifying

stigmatizing language. The guide is targeted towards health care providers for the sake of enabling them to set positive examples, “[a]lthough some language that may be considered stigmatizing is commonly used within social communities of people who struggle with substance use disorder (SUD)” (National Institute on Drug Abuse, 2023). Non-stigmatizing language includes science-based, accurate vocabulary with a neutral tone. Instead of ‘addict’ or ‘junkie’ I will be using terms such as ‘substance user’, ‘drug user’ or ‘person with a substance use disorder’ and ‘abuse’ will be substituted for ‘use’ or ‘misuse’. ‘Clean’ or ‘dirty’ will be referred to as ‘testing negative’ or ‘testing positive’. Inadvisable vocabulary might, however, be quoted in direct citations from sources. As the research review in chapter four demonstrates, stigmatizing media frames play an essential role in hampering public support for harm reduction policies, even though “[f]or people with an SUD, stigma may stem from antiquated and inaccurate beliefs that addiction is a moral failing, instead of what we know it to be — a chronic, treatable disease from which patients can recover and continue to lead healthy lives” (National Institute on Drug Abuse, 2023).

For this occasion, I would also like to clarify the terms dependence and addiction, as it is essential to differentiate them. Drug dependence refers to the physiological consequences of long-term use “causing the neurons to adapt so they only function normally in the presence of the drug. [...] Some chronic pain patients are [physically] dependent on opioids and require medical support to stop taking the drug” (National Institute on Drug Abuse, 2022). Addiction, on the other hand, “is a chronic disease characterized by compulsive, or uncontrollable, drug seeking and use despite harmful consequences and long-lasting changes in the brain” (National Institute on Drug Abuse, 2022) and thus describes the psychological effects of repeated substance use. The two terms will be used according to these definitions.

The topic of the opioid epidemic involves many U.S. institutions, may it concern their direct role in the crisis or their function as information sources. As nearly all names are relatively wordy, and will be used repeatedly, I must explain their common abbreviations: CDC - Centers for Disease Control and Prevention, DEA - Drug Enforcement Administration, FDA - Food and Drug Administration, NIDA - National Institute on Drug Abuse and WHO - World Health Organization.

## 2.2 What Are Opioids?

First used as medication in the 1800s and having its natural origin in the poppy plant, opium functioned as an effective painkiller and treatment for severe diseases such as cancer and veterans’ war injuries, as well as for minor illnesses like cough and diarrhea (Lyden & Binswanger, 2019). Commonly used types of opioids in the United States include fentanyl,

heroin, morphine, codeine, oxycodone and hydrocodone. Codeine is used for the treatment of mild to moderate pain and often a constituent of medications like cough syrup (Food and Drug Administration, 2018). Morphine is a non-synthetic narcotic used to treat intense pain (National Health Service, n.d.). Heroin, in turn, is processed from morphine, highly addictive and triggers a state of euphoria and relaxation (Drug Enforcement Administration, n.d.-b). The most common drugs involved in prescription opioid overdose deaths include oxycodone and hydrocodone, which have been proven to be effective when treating cancer-related pain, but are increasingly used in the medical care of chronic non-cancer pain (Centers for Disease Control and Prevention, 2017). While oxycodone and hydrocodone are semi-synthetic narcotics, fentanyl is a purely synthetically produced substance. Despite its use in medicine, it is also made and oftentimes used illicitly (National Institute on Drug Abuse, 2023).

Not just the illegal street drug heroin, but also all types of legally prescribed opioids are highly addictive and users can experience intense withdrawal symptoms and develop a substance misuse disorder (Johns Hopkins Medicine, n.d.).

An important term to be familiar with when assessing media coverage of the opioid crisis is naloxone, also referred to by its brand name *Narcan*. This medication is an over-the-counter opioid antagonist, which can rapidly reverse an overdose and has saved thousands of lives up to this point. It is commonly administered in the form of nasal spray (National Institute on Drug Abuse, 2022).

## 2.3 How Millions of Americans Became Dependent on Opioids

The root of the vast majority of substance misuse issues lies within the profit-driven U.S. medical system and the overprescription of opium based medicine decades ago. Being effective pain killers, opioids have always been widely used in the medical field, but tightly controlled due to their severe addictiveness. In the late 1990s, the narrative shifted. Physicians started prescribing opioid pain relievers under the false impression they were much less addictive than previously thought (Liu & Singer, 2023). Manufacturers, such as Purdue Pharma, the then market leader and company behind *OxyContin*, employed aggressive marketing techniques to convince doctors of prescribing far stronger opioid medications than before and funded thousands of educational programs in order to gain control over the field (Jones et al., 2018). As billions of dollars were to be made, sales representatives were sent all across North America. The marketing strategies worked: from 1997 to 2002, *OxyContin* prescriptions increased from 670,000 to more than six million (Bryant, 2022). Naturally, consumers became dependent. During the following decade, not only drug overdose deaths increased fourfold, but opium

prescriptions did as well. Substance overdoses have now advanced to be the dominant cause of accidental death in the country (Jones et al., 2018).

The true opioid crisis, however, did not erupt until the early 2010s, when authorities started prosecuting overprescribing doctors. Millions of Americans, who were dependent or addicted to opioid medications, were suddenly cut off by their providers and had to turn to the black market for the purchase of heroin to counteract the withdrawal symptoms. The street value of prescription opioids like oxycodone and hydrocodone skyrocketed and users found a far cheaper, more potent, but also deadlier substitute in heroin. As a result, some of the users began dying of overdoses and heroin death numbers started rising (Dickson-Gomez et al., 2022). Yet, the crisis had not even peaked yet. Assuming no substance worse than heroin could pain the American society, fentanyl entered the drug market.

Originally developed by the Belgian scientist Paul Janssen in the 1960s as an alternative to morphine, this rapidly spreading substance is easily produced for a cheap price. Fentanyl is not just highly addictive, but simultaneously 50 times more potent than heroin and 100 times more potent than morphine (World Health Organization, 2023). Two milligrams, which is the amount of a few grains of salt, can be fatal. Considering one pound of fentanyl is equivalent to 50 pounds of heroin, drug traffickers have found a lucrative business in this substance. Millions of (deadly) doses of fentanyl can be smuggled in just a shoebox (Drug Enforcement Administration, n.d.-c).

The DEA seized almost 80 million fentanyl-laced counterfeit pills and 12,000 pounds of fentanyl powder in 2023. In the first two months of 2024 alone, over 90 million lethal doses of fentanyl were confiscated. The vast majority of fentanyl imports, and an even larger number of analogs and precursor chemicals, remains undetected (Drug Enforcement Administration, n.d.-c).

The issue is not just consciously consumed fentanyl, but also forged medication pills, which are laced with fentanyl, and usually non-lethal party drugs diluted with fentanyl to achieve a cheaper and more intense high. Consumers unknowingly ingest oftentimes deadly doses of synthetic opioids and, consequently, people unpredictably die at raves or pass away thinking they took harmless *Advil* or *Xanax* (National Institute on Drug Abuse, 2023).

## 2.4 Mortality

After a rising number of deaths related to heroin in the 2010s, the United States now experience an upsurge of deceases caused by fentanyl overdoses. More than 75 percent of opioid overdose deaths since 2020 have involved fentanyl (Liu & Singer, 2023). According to the U.S. National Center for Health Statistics, drug overdose deaths nationwide exceeded 100,000 in

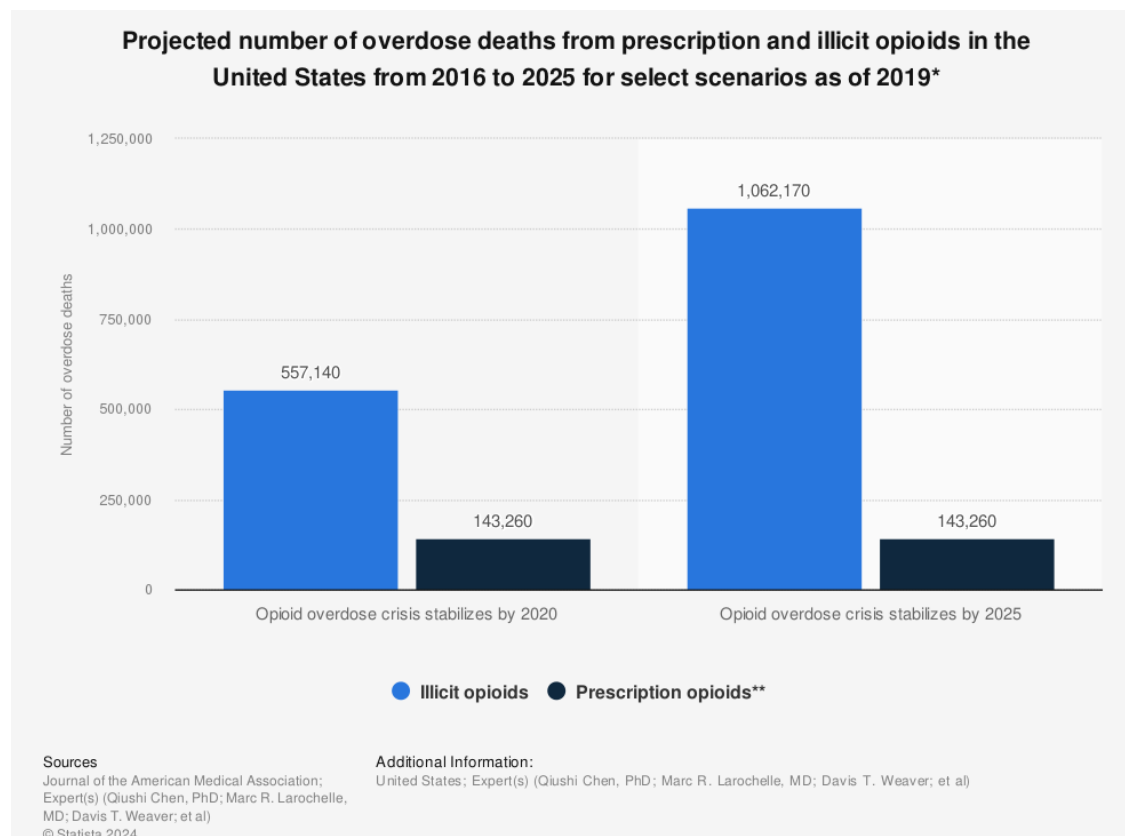
2022, almost 80,000 of whom are attributable to opioids generally and 70,000 of those having involved fentanyl (Centers for Disease Control and Prevention, 2023; United Nations Office on Drugs and Crime, 2023). Overdose deaths kept rising and hit another all-time high in 2023: "For the first time in U.S. history, fatal overdoses peaked above 112,000 deaths [...]. Drug policy experts, and people living with addiction, say the magnitude of this calamity now eclipses every previous drug epidemic" (Mann & Pattani, 2023).

Not only illicit drugs fuel the skyrocketing numbers of death, but also the prescribed painkillers hydrocodone, oxycodone and codeine. U.S. citizens utilize respectively 90 percent and 80 percent of the hydrocodone and oxycodone worldwide, despite only making up five percent of the world's population. Non-prescribed opium overdose numbers shoot up even with prescriptions decreasing by 20 percent within the last eleven years (Jones et al., 2018).

As seen in figure 1, a 2019 report of the American Medical Association predicted more than half a million opioid overdose deaths in the United States from 2016 to 2025, had the crisis stabilized by 2020. As became evident, the epidemic has not subsided and a single year of overdose deaths already accounts for a seventh of the total predicted number in the better case scenario. Providing the crisis stabilizes by 2025, more than 1.2 million Americans will have lost their lives to opioids in less than a decade.

**Figure 1**

*Projected Number of Opioid Overdose Deaths from 2016 to 2025*



*Note.* From *Projected number of overdose deaths from prescription and illicit opioids in the United States from 2016 to 2025 for select scenarios as of 2019\**, by Journal of the American Medical Association, 2017 (<https://www.statista.com/statistics/1058544/projected-opioid-overdose-deaths-under-select-scenarios-us/>). In the public domain.

## 2.5 From a Public Health Crisis to a Nation-Wide Epidemic

As the overdose death tolls are equivalent to two Vietnam wars every year and a 9/11 every two weeks, the opioid crisis has been labeled an epidemic (Jones et al., 2018). Former U.S. president Donald Trump declared the deadliest drug crisis in the country's history a Public Health Emergency on October 26, 2017 (Haffajee & Frank, 2018). "Crises create an intense and immediate need for information" (Schwarz et al., 2016) and communication, as well as the media, play indispensable roles in information distribution. According to Schwarz et al. (2016) "crises are becoming more frequent and more severe [and therefore] communication is central to the management of risks and mitigation of harm". It is also essential to persevere the institutional processes of crisis management and its variety of functions, one of which is framing (Schwarz et al., 2016). Audience perceptions can shift depending on frames of crises in news stories and media outlets hold power to shape how a crisis is portrayed (Schwarz et al., 2016).

## 2.6 California and Texas

California and Texas were chosen as part of the comparative approach for a multitude of reasons. Aiming to provide intriguing findings through quantitative content analysis, it was considered salient to compare two states differing in the most major aspects proven to influence the opioid epidemic: health insurance (Bell & Strang, 2020; Wakeman et al., 2020), ethnicity (Kresovich et al., 2023; Shachar et al., 2020; Welhausen, 2023), homelessness (Yamamoto et al., 2019) and prescription guidelines (Liu & Singer, 2023). These four factors will be further elaborated in chapter seven. At the same time, it was crucial that, despite these differences, the two states are demographically similar, in order to avoid biases caused by population size or the presence and absence of large metropolitan areas. Several U.S. states are similar in their demographic composition, but only California and Texas fulfill these criteria, while simultaneously being large enough to provide a diverse media landscape capable of supplying a sufficient sample size of newspaper articles.

The U.S. Census Bureau (2023) states that California and Texas are the country's two most populated states with respectively 38,9 million and 30,5 million inhabitants. They are also the only two states with a population size larger than 30 million and, since they are demographically similar, they are comparable for this thesis. Additionally, both states share a

border with Mexico, one of the main routes for drug trafficking into the United States. According to the U.S. Department of Homeland Security, precursor chemicals for illicitly made opioids are shipped from China to Mexican clandestine labs, where they are then manufactured into fentanyl. The authority estimates that 90 percent of all heroin in the U.S. is smuggled across the Southern border, as well as large quantities of fentanyl (Pergolizzi et al., 2021).

Now that it is ensured that the comparison consists of two demographically similar states, the severity of the crisis in each of them needs to be taken into account. As reported by the National Vital Statistics System, which provides data on births and deaths in the United States, the peak of drug overdose death counts was reached in May 2023, with more than 110,000 victims in the country within the past year. In that same month, 12,216 people died of overdoses in California, which is equivalent to 31.4 victims per 100,000 inhabitants. It is thus one of the states, which are most severely affected by the crisis. Texas recorded 5,531 victims total in May 2023, 18.1 victims per 100,000 inhabitants, and is therefore significantly less affected than California (National Vital Statistics System, 2024). The U.S. National Center for Health Statistics records that 80 percent of drug overdose deaths are attributable to opioids (Centers for Disease Control and Prevention, 2023). Assessing two regions experiencing the crisis to significantly different degrees, despite resembling each other in population size, promises alluring results. If drastic differences in media frames are identified, these could be attributed to the respective severity of the crisis in each state, or if news reporting proves to be primarily alike, it can be discussed how these results came about.

## **III Relevance of the Thesis**

### **3.1 Societal Relevance**

The media are capable of impacting public opinion and citizens' evaluations of contemporary matters through several mechanisms, including framing. News media frames thus need to be analyzed in order to get ahold of the role they play in a crisis as extreme as North America's opioid epidemic.

Assessing media frames in the opioid epidemic in the United States is of societal relevance for a number of reasons, one of which naturally is the severity of the crisis and the hundreds of thousands of lives lost to opioids. Drug misuse does not only damage individuals' health, career, housing and economic situation, but also strongly impacts families and friends of those affected. Communities suffer from grief, security concerns and exhausted first responders, while neighborhoods become stigmatized as opioid hotspots, ultimately worsening the social divide.

Another major reason for the societal relevance of this analysis are the economic consequences for the United States. In 2020, the cost added up to a staggering \$1.5 trillion, seven percent of the country's GDP. Back then, the U.S. Congress Joint Economic Committee predicted the cost would rise if fatal overdoses did too, which they undoubtedly have. The number includes loss of workforce, law enforcement activities and a long list of health care efforts (Klobucista & Ferragamo, 2023). A graph illustrating the increase in cost of opioid use disorder and fatal overdoses from 2017 to 2020 can be found in appendix A.

If the United States fails to mitigate the opioid crisis in the near future, it might also have drastic consequences for its geopolitical relations to China. The U.S government claims China is the main provider of precursor chemicals, which are being synthesized into fentanyl in Mexican cartels. Beijing denies the accusation and insist the opioid epidemic is an American domestic issue caused by the harboring of a drug use culture (Swanson & Brasher, 2023). This thesis is therefore socially relevant as this backlash for Chinese-American diplomacy further increases international geopolitical tensions.

Although the opioid crisis might seem like an entirely North-American issue, it has far-reaching global consequences. A worldwide exploratory study conducted by Robert et al. (2022) has shown similar worrying developments of opioid misuse in other Anglo-Saxon countries and across Europe. The countries prone to an upcoming drug crisis are Germany, France, the United Kingdom and Australia. This content analysis is therefore not only socially relevant in the context of the U.S., but also cross-culturally. Foreign countries' media outlets can draw learnings from the assessment of media frames in the United States and approach coverage of potential similar epidemics more efficiently. Since media coverage is proven to have the ability to increase stigma towards substance users and stigma, in turn, restrains harm reduction policy support, less stigmatizing frames might lead to better crisis management in the respective countries (Kresovich et al., 2023).

Previous research has also demonstrated that news media impact politicians and those in power generally. A study by Helfer (2016) concerned with the "immediate individual-level reactions to media content by politicians when they first learn about an issue through the media" found a reciprocal relationship between journalists and politicians. The media are more likely to cover negatively connoted issues, while at the same time triggering political reactions from leaders more frequently than positive news reports. This joint emphasis on negative stories fosters a spiral of negativity, ultimately impacting journalists and voters (Helfer, 2016). Taking reactions from political elites to negative reporting further, past studies point out that a common reaction to unfavorable stories regarding leaders themselves are attacks on the concerned news outlet. These attacks, in turn, reinforce public perceptions of the source's media bias.

Experiments prove that attacks coming from both, the Democratic Party and the Republican Party increase public awareness of media bias (Smith, 2010).

Research agrees on the existence of a dynamic relationship between journalists, news media and politicians. It is therefore crucial to investigate media coverage of the socially all-encompassing opioid epidemic, as politicians are not just in charge of legislative responses to crises, but also determine executive harm reduction interventions through law enforcement and the judiciary's approach to, for instance, drug traffickers or substance users in court trials.

### 3.2 Academic Relevance

News frames of present and past drug crises have been widely researched within the field of media and communication. As the following chapter will show, narratives relating to stigma, racism, criminalization, medicalization, humanized portrayals of victims and attribution of responsibility, along with several other frames, have been identified by previous scholars. However, the literature review in this thesis reveals a research gap concerning the impact of media outlets' political leaning on frames. Although coverage of this particular opioid epidemic has been assessed, a comparative approach acknowledging newspapers' political bias has been neglected. Research has nonetheless demonstrated that partisanship does in fact matter for media framing (Kresovich et al., 2023; Gollust & Miller, 2020). Moreover, the contextualization of framing in socially and politically contrasting states is entirely missing from the academic discourse. This thesis aims to fill the research gap by adding two more dimensions to the discussion: media bias and state context.

Investigating this topic is also relevant to media and communication research, as crises are increasingly present in societal processes and have the ability to reshape institutions, including the mass media. Harm and threats can be reduced through dynamic processes of mutual meaning-making between stakeholders, for instance the media and its audience (Sellnow & Seeger, 2013).

Politically differently leaning newspapers in two contrasting states were chosen since frames are proven to oftentimes be dependent on the news outlet's media bias. A previous study has, for instance, demonstrated differences in media framing of the Tea Party in liberal and conservative media. While MSNBC portrayed the movement as racist and extremist, Fox News highlighted its importance for the allegedly dissatisfied silent majority in opposition of the Obama administration. The scholars also found that newspapers differed in their framing of the Tea Party in regard to thematic priorities and the weight ascribed to certain issue attributes (Rafail & McCarthy, 2018). Further, Mokhberian et al. (2020) demonstrate that political ideology correlates with automatic emotional reactions to social situations, such as feelings of concern

for others, fairness and purity, or group loyalty and respect for authority. Cross-culturally, liberals emphasize the importance of fairness and concern for others, while conservatives assign more weight to group loyalty, authority and purity. These findings argue for the academic relevance of this thesis, as the frames investigated, which will be explained in detail in the upcoming chapters, can be linked to the above-mentioned factors. Feelings of the importance of authority, for example, may be mirrored in the criminalization frame through law enforcement interventions, and concern for others might be reflected in the victim frame. The study does not only reveal “systematic differences across liberal and conservative media” (Mokhberian et al., 2020), but also emphasizes the correlation between partisan media consumption and political polarization, as well as the impact of framing on human decision making.

This thesis does not only aim to uncover potential differences or similarities in media frames of the opioid epidemic based on media outlets’ political leaning, but additionally adds the contextual perspective of a state comparison and thus gives a more thorough understanding of the importance of the political and societal context the frames are published in. The contextual differences between California and Texas are explained in the background chapter (2.6) and its own chapter (VII).

## **IV Previous Research**

Frames operate through salience and selection. Certain elements of a matter are selected to be attributed more salience in order to evoke a specific interpretation, evaluation, solution proposal or moral judgement of the issue at hand. Frames propose problem definitions, recognize causes and causal actors and determine forces causing the issue. Within the communication process, frames can be identified at the communicator, the text, the receiver and the culture.

Communicators evaluate framing, consciously or subconsciously, in line with their personal values. The presence or absence of particular keywords, images or stock phrases indicate the existence of frames in a text and these frames, in turn, impact the receivers evaluation of the matter. These evaluations can be mirrored in the culture surrounding the communication process, where shared belief systems influence issue interpretations. In conclusion, the roles of framing can be summarized as selection, accentuation and proposals for assessments, remedies or moral judgements (Entman, 1993:52-53). They will be further explained in the following chapter.

An important work in the field of media and communication studies is the content analysis by Semetko and Valkenburg (2000), who investigated the prevalence of five news frames, namely attribution of responsibility, human interest, economic consequences, conflict and morality. These five frames are considered generic frames in contemporary framing research

and, as opposed to issue-specific frames, go beyond just a single subject (Lecheler & de Vreese, 2019:3-4). Issue-specific and generic frames will be further explained in the following theoretical background chapter.

Gronemeyer, del Pino and Porath (2020) emphasize the importance of testing these generic frames outside the cultural context they were established in, by assessing the prevalence of these five frames in Chilean mainstream newspapers and elite press. They found that the conflict frame and the attribution of responsibility frame dominated journalism in Chile. These results are relevant to this thesis since it, too, will be based on the frames identified by Semetko and Valkenburg (2000) and will apply them in the U.S. context instead of its original European context. It was therefore crucial to ensure that this framework can be, and has been, applied cross-culturally.

## 4.1 Media Frames in Drug Crises

Before moving on to reviewing how the opioid epidemic is presented in news media, a first look should be taken at media coverage of drug crises in general. Past drug crises have been much less researched than the opioid epidemic, showing that the current crisis is not just unique in its severity, but also its omnipresence in the North American media.

Cameron Wild et al. (2019) conducted a content analysis and investigated Canadian newspaper articles on drug harm reduction from 2000 to 2016. The results state that media coverage about harm reduction efforts was hardly ever negative and primarily discussed from a health care perspective. The most interesting aspect found in this study was the much less frequent use of the criminal justice frame in Canadian harm reduction reports than in their U.S. counterparts (Cameron Wild et al., 2019). Criminalization narratives will play a major role in the further course of this literature review, just like in the content analysis of Orsini (2017), who examined heroin and cocaine news coverage in the United States, in order to identify patterns in media frames over time. She found that the discussion of these two drugs in the context of crime, violence, addiction and tragedy prevailed from 2000 to 2015. Harm reduction and medicalization narratives were absent from the media discourse. This stands in contrast to the following literature on media coverage of the opioid epidemic, which puts an emphasis on a shift from criminalization to public health framing of drug crises starting much earlier than 2015 (Wu, 2023; Shachar et al., 2020; Ferguson & Eliasson, 2022). As heroin and powder cocaine are both considered 'White American drugs', Orsini's results might be an example of the effect of drug users' ethnicity on the way they are displayed in the media. Orsini (2017) further argues that a normalization theme is entirely missing from the discourse about heroin and cocaine.

Contrasting studies have, however, proven that opioid use has indeed become normalized and embedded into everyday activities, especially on social media (Cherian et al., 2018).

In line with other previous research stand Orsini's findings that the human interest frame was employed in heroin and cocaine coverage by underlining the negative consequences, such as damage to reputation, career or life, drug use might have on individuals (Orsini, 2017). According to Orsini (2017), an overall narrative of drug-related violence, addiction and prosecution prevails. The following studies concerning media coverage specifically of the opioid epidemic will largely counter argue these three assumptions. They support, nevertheless, Orsini's comment that "traditional news media [...] reproduce existing inequalities" (Orsini, 2017).

## 4.2 Media Frames in the Opioid Epidemic

### 4.2.1 Stigmatized and Racialized Frames

The media's role in the opioid epidemic was investigated by Kresovich et al. (2023), who conducted a cross-sectional survey of a nationally-representative sample of 6,515 U.S. adults in order to examine how partisan media consumption and stigma towards individuals experiencing opioid use disorder may correlate and, additionally, how this stigma may shape the population's support for health care policies. The study indicates that interviewees leaning towards Republican sources for health information experience a higher opioid use disorder stigma than their Democrat counterparts, as well as heightened backing for discriminatory anti-drug policies. These findings demonstrate that media outlets' political leanings do in fact influence public opinion and citizens' evaluations of this drug epidemic, making it an interesting topic for analysis in this thesis.

Stigma towards opioid users also affects the "availability of life-saving drugs" (Kresovich et al., 2023) and lawmakers' capability for gaining the public's support on harm-reducing policies. Generally, mainstream media exposure, with the exception of Fox News, weakens stigma and increases support related to healthcare policies.

The study further suggests that indicators for racism are found in the consumption of Republican-leaning news outlets and racism is proven to heighten stigma, while reducing policy backing. Racism thus mediates the relationship between harm reduction policy support and partisan media consumption (Kresovich et al., 2023).

Partisanship and racism are proven to be closely linked to each other. White Republicans are, for instance, much less aware of individual and societal-level racism than White Democrats (Zell & Lesick, 2022). Political partisanship and partisan media consumption therefore impact

both, stigma towards opioid users and perceptions of racism, which, in turn, affect each other, making this a socially relevant issue to investigate.

The role of stigma and racism is also significant in the research of Shachar et al. (2020), who compared media frames in the crack cocaine epidemic of the 1980s and the current opioid epidemic. They investigated word frequencies in seven major U.S. newspapers during two time frames: 1988-1989, the peak of the crack cocaine epidemic, and the display of the opioid epidemic from 2016-2017, in order to assess how each epidemic was framed in the news media. According to the results, the criminal justice frame is predominant in media coverage of the crack cocaine crisis, which is associated with African American drug users. News on the opioid epidemic, largely linked to White users in the public eye, show a medicalization and public health focus. The controlling variable of news coverage on heroin misuse from both time periods suggests, however, that the public health framing had already been present in the 1980s. The example of heroin being an opioid and thus considered a 'White American drug' displays that racial cues fuel public judgement concerning the level of sympathy for drugs users and the severity of perceived violence that accompanies substance misuse (Shachar et al., 2020).

Welhausen (2023) conducted a further analysis of racialized media frames, departing from Shachar's results and following the same methodology. Instead of evaluating word frequencies, Welhausen focused on 140 graphic visualizations published in mainstream media articles during the crack cocaine and opioid crisis. The results suggest that, for the latter crisis, the most mentioned categories were related to a health-context or the Centers for Disease Control and Prevention, while the fewest mentions were found for the criminal justice context. Consequently, the results align with Shachar's findings that the opioid crisis is framed by the media as a public health issue and that these media portrayals contribute to humanizing substance misuse by White citizens (Welhausen, 2023).

Contrary to Shachar et al. and Welhausen, Russell et al. (2019) did not only investigate frames in media coverage, but additionally studied audience reactions to articles of 42 Ohio newspapers through the respective Facebook comments and put those in relation to each other. The frame most frequently detected emphasized awareness of the opioid epidemic and the affected people. The most noteworthy results state that Facebook users displayed support and emotion towards those concerned when the media reported personal stories of addiction and thus employed a humanized episodic frame. This contrasts the finding that citizens expressed a desire for increased public policy and crime intervention when the opioid crisis was presented within a frame of law enforcement and punishment. News organizations can therefore actively influence the population's perceptions and boost or reduce public support towards drug users by employing specific narratives (Russell et al.,

2019).

Although not investigated by the studies mentioned above, one could make the assumption that the visible presence of racism in public discourse, political discussions and society in general fuel racialized perceptions of drug users and stigma towards them. Societal and political polarization further contribute to partisan media consumption and selective exposure, which, in turn, intensifies the conflict between Liberals and Conservatives, reflecting their beliefs and values in their evaluation of public issues. Political polarization then further increases selective exposure to media outlets in accordance with one's beliefs (Kim, 2015) and the cycle consolidates. Assessing how media outlets with different political leanings in two states with contrasting governments frame the opioid crisis will thus give an impression of how much influence the news media's partisanship may have on journalistic frames.

As shown by Kresovich et al., Shachar et al. and Welhausen, citizens' consumption of traditional media outlets contribute to public opinion regarding anti-drug policies and health care interventions, as well as potential stigma towards opioid users, and therefore proof Orsini's (2017) assumption that traditional news media reflect extant inequalities in drug crises generally, not just in the opioid epidemic.

Gollust and Miller (2020) pick up this notion and discuss the impact of stereotypical portrayals of drug users on political consequences. They surveyed more than 1,500 White Americans who were exposed to either frames displaying absolute numbers of opioid mortality among them or frames comparing those numbers to numbers of Black victims. The aim of this experiment was to test whether White Americans, classifying themselves on the losing side of public health, leads to less empathetic evaluations of the crisis and increased stigma towards opioid users, which the results proved to be true. This outcome was to a great extent triggered by the comparative frame rather than the absolute frame. Gollust and Miller's (2020) concept was based on a study by the PewResearchCenter from 2018, stating that the majority of both, Democrats and Republicans, perceive their respective political camp to be politically losing, even when their party is in control of all three federal government branches. This demonstrates the impact of partisanship on the intake and the unconscious cognitive processing of media frames in the opioid epidemic and leads to the assumption that a media outlet's political leaning does in fact matter for citizens' policy support and, ultimately, the implementation of harm reduction efforts to combat overdose deaths. This aligns with the findings of Kresovich et al. (2023) that Conservatives experience higher stigma towards opioid users than Liberals. Reflections of this stigma are found in racialized news reports in Republican-leaning media outlets. For this reason, comparing liberal and conservative leaning newspapers in one traditionally Democratic and one traditionally Republican state seems to be an appropriate choice of analysis in this thesis.

The opioid crisis has not just hit the United States severely, but generally the North American continent (Jannetto, 2021). According to Johnston (2020), Canadian media extensively cover this public health emergency in the light of biased stereotypes towards the country's Indigenous population. The results of the critical discourse analysis align with those of the previously mentioned studies dealing with stigmatizing media frames of ethnic minorities (Shachar et al., 2020; Welhausen, 2023; Gollust & Miller, 2020). Coverage of White, and especially young, drug users' overdose deaths outnumbered the coverage of Indigenous victims 30:1, although the numbers of opioid related deaths among First Nations are significantly higher than those of White Canadians. Johnston (2020) concludes that White opioid users are mainly depicted as conscientious and innocent, while personal stories about drug users of the Indigenous population were avoided or they were generally portrayed as weak and susceptible to addiction.

The fact that mainstream media coverage primarily focuses on White users, and largely overlooks the impact the crisis has on ethnic minorities (Johnston, 2020), raises the question whether this might be related to a general shift in drug epidemic narratives from criminalization to medicalization and concern for the victims. Among other frames, the analysis in this thesis will test news articles for these presence or absence of the criminalization and medicalization narrative and will afterwards either allow us to attribute the predominance of these two frames to differences in political leaning of the investigated media outlets or make implications for future research to assess a potential narrative shift within the course of the crisis in longitudinal studies. Additionally, the contextualized comparison between California and Texas will permit state differences to either be ruled out as a cause for variance in results concerning the criminalization and medicalization frame or again hint towards the necessity of further research on this topic.

In line with the research of Johnston stand the results of another discourse analysis, conducted by Webster et al. (2020), who also failed to identify the opioid crisis' impact on Indigenous people as a major theme in Canadian newsprint media, despite proof for disproportionate harm in these communities. Instead, they found portraits of White middle class opioids users as innocent victims, a result which aligns with the other research discussed in this section (Shachar et al., 2020; Welhausen, 2023; Johnston, 2020; Ferguson & Eliasson, 2022). However, Webster et al. (2020) argue that opioid users are dichotomized as either naively following prescriptions or as drug-seeking addicts associated with street crime. While it is true that the rapid emergence of illicit fentanyl has led to media narratives putting increasingly more emphasis on street use of opioids (National Institute on Drug Abuse, 2023; Liu & Singer, 2023), the vast majority of previous research discussed in this chapter contests the findings by Webster et al. (2020), stating that news media coverage is progressively characterized by

stigmatized frames towards opioid users. According to the authors, Canada experiences a slow transition from a public discourse about prescription opioids and clinical pain towards criminalization. Other researchers, namely Wu (2023), Shachar et al. (2020), Welhausen (2023) and Russell et al. (2019), state the opposite. They agree that the overall media narrative in the current opioid epidemic is rather sympathetic towards the victims and the public discourse has shifted from criminal justice frames, in past drug crises, to a humanized medicalization focus. Instead, blame is attributed to pharmaceutical companies for dishonest marketing campaigns and to physicians for overprescribing opioid-based medication. Webster et al. (2020) disagree and claim that physicians, as a group of actors, are not held responsible, but are rather being presented as honest and benevolent practitioners, who themselves became victims of the profit-oriented pharmaceutical industry. The authors thus present contradictory results to the majority of previous research concerning stigma towards substance users and attribution of responsibility for the crisis.

One might argue that the differences in Canadian news frames found by Webster are due to geographical differences, as all the contradicting research mentioned above was conducted in the United States. Yet, Ferguson and Eliasson (2022) refute this assumption. Their content analysis of Canadian news articles found the same results as the U.S. studies: public health frames dominated the media coverage of the opioid crisis, while harm reduction approaches and treatment were favored over criminalization with an overall empathetic tone. The authors provide an interesting potential explanation for these results: “the opioid crisis is a unique drug-related issue because the population involved are 90% white, 75% are from rural areas, and 75% of users become addicted to drugs from consuming prescription opioids [...]. However, race/ethnicity was not the focus of many news articles, indicating that race/ethnicity is not an issue typically covered by news media when those affected are predominantly white. This is contrary to other drug epidemics and historical drug narratives” (Ferguson & Eliasson, 2022). The statement conforms to the results of Shachar et al. (2020), Welhausen (2023), Johnston (2020) and Webster et al. (2020), who all identified racialized media frames, but only when comparing the opioid epidemic to past drug crises linked to ethnic minorities, such as the crack cocaine epidemic and African Americans (Shachar et al., 2020) or the methamphetamine crisis and First Nations in Canada (Lavalley et al., 2018). Racialized narratives then again increase stigma towards drug users and, as stated above, stigma towards opioid users hinders public support for harm reduction efforts, which, in turn, keeps policymakers from passing laws and codes designed to assist substance users on their road to recovery. This stigma is closely linked to conservative partisanship (Gollust & Miller, 2020; Kresovich et al., 2023) and ultimately has impact on political decision-making.

Raychaudhuri et al. (2023) investigated this relationship further, by assessing racially selective sympathy and its effects on policy support. They found that sympathetic media frames raise treatment policy support in both cases, when portraying Black or White users. However, the effect is stronger when White users are shown. Unsympathetic frames, regardless of the users' ethnicity, on the other hand, do not impact political opinion. These results are interesting, as the media mainly present the opioid epidemic, unlike previous drug crises, as a public health issue affecting White Americans who deserve treatment over punishment (Raychaudhuri et al., 2023). Circling back to Shachar et al. (2020), this underlines once more how the media narrative shift from criminal justice to public health was not just subject to increasing progressive perceptions of drug users over the course of time, but also largely based on the fact that the current opioid crisis has penetrated every sphere of the American society.

Bluntly put, the public discourse saw crack cocaine as a drug for urban African Americans, methamphetamine for Native Americans or rural criminals and heroin for poly-substance users with a history of drug consumption. For decades, it seemed unrealistic a national drug crisis would hit the White American elite or middle-class, but with the emergence of highly potent synthetic opioids like fentanyl, this is precisely what happened. Keeping the racialized media frames found by the previously mentioned studies in mind, White suburban neighborhoods being the centerstage of this epidemic may have significantly contributed to a media narrative shift from criminalization to medicalization.

The following content analysis will not directly code radicalized frames, but instead, among other variables, investigate the predominance of the criminalization and medicalization frames, as well as actors within the stigma and victim frame, such as 'substance users regardless of ethnicity', 'substance users of an ethnicity other than White', 'White substance users' or 'members of the homeless population' (see the codebook in appendix C). The coding of subcategories in line with the media outlets' differing partisanship will imply whether the focus on certain actors contributes to a bigger picture of racialized drug user portrayals or not. These potential inferences will be debated in the discussion.

#### **4.2.2 A Narrative Shift in Opioid Frames**

Wu (2023) is one of the scholars acknowledging this development from criminal justice to public health frames in his research. Through a content analysis of 517 New York Times articles, he finds a major shift in news frames of opioid use from 1995 to 2016. The narrative transformed from criminalization over decriminalization to medicalization. In the mid 1990s, when the opioid painkiller *OxyContin*, often regarded as the epidemic's trigger, was first approved by the FDA, the public discourse blamed drug users for their dependence and addiction. In the following years, the narrative moved on to a focus on prescription drug misuse and innocent *OxyContin*

users. In the early 2010s, physicians were denounced for overprescribing opioid medications and lastly, opioids users were no longer perceived as dangerous and weak-minded, but rather as victims of a profit-oriented health care system and failed intervention policies. Media frames transformed from crime and punishment to medicalization and harm-reduction. Just like Webster et al. (2020), Wu (2023) put a large emphasis on the investigation of the attribution of responsibility frame. This, however, contradicts Shachar et al. (2020), who have shown that the public health framing was already present in the 1980s, as long as drug crises associated with White users were covered. Ultimately, Wu's findings circle back to the beginning of this research review and once more highlight the importance of assessing the role of ethnicity and racialized media frames in the opioid epidemic.

### 4.3 Concluding Remarks on Previous Research

The roles of stigma, ethnicity and racism in regard to the opioid crisis were also mirrored in the search for this research review, as the vast majority of studies about media coverage in the opioid epidemic focused on stigmatizing frames and the different portrayals of White drug users and those of ethnic minorities.

The five major generic news frames (attribution of responsibility, human interest, economic consequences, conflict and morality), constituted by Semetko and Valkenburg (2000), were discussed throughout the retrieved articles covering the opioid crisis. Most prevalent in this review were the human interest frame and the attribution of responsibility frame. The former was, for instance, applied in personalized stories of addiction (Russell et al., 2019) or the sympathetic portrayal of innocent White American victims who deserve treatment over punishment, a portrayal that was proven to be racially selective (Raychaudhuri et al., 2023). Altogether, more than half of the studies in this review found frames linked to racially motivated stereotypical portrayals of drug users, even when their major focus laid on other issues. The attribution of responsibility frame correlates with ethnicity-based (un)sympathetic frames, as all the studies agree that blame was either directed towards allegedly weak-minded drug users themselves, when they were non-White, or towards pharmaceutical companies and overprescribing physicians having dragged innocent White Americans into addiction (Gronemeyer et al., 2020; Wu, 2023; Shachar et al., 2020; Welhausen, 2023; Russell et al., 2019).

What has been largely overlooked in previous research is the effect of the political leaning of media outlets on the opioid-related frames they present. Additionally, no research contextualizing the topic by analyzing two socially and politically contrasting states was found. Yet, the studies by Kresovich et al. (2023) and Gollust and Miller (2020) have shown that

partisanship has a significant effect on frames in the opioid epidemic and on how affected citizens are portrayed and perceived in the public discourse. Conservative media consumption raises public stigma towards opioid users, which, in turn, impedes the implementation of harm-reduction policies. Stigma is also increased by racialized media coverage, for which evidence was found in Republican-leaning news media (Kresovich et al., 2023; Gollust and Miller, 2020).

Furthermore, the search for this literature review revealed no research on media frames conducted from a comparative perspective between U.S. states generally, neither between California and Texas specifically. No previous studies on the coverage of drug crises in these two states in general was found, nor in relation to the opioid epidemic in particular. I can thus conclude that a research gap concerning the impact of media outlet's political-leaning on their opioid-related coverage has been identified, as well as a gap in whether or not differences in liberal or conservative state governments and societal contrasts influence both of these factors. The following content analysis aims to fill this research gap.

The methodology used in the reviewed research also clearly indicates that a content analysis is the most suitable method for assessing media frames. Eight of the studies mentioned above (Shachar et al., 2020; Welhausen, 2023; Russell et al., 2019; Ferguson & Eliasson, 2022; Orsini, 2017; Semetko & Valkenburg, 2000; Cameron Wild et al., 2019; Wu, 2023) conducted their analyses this way, hence justifying the applicability and suitability of quantitative content analysis for this thesis.

## **V Theoretical Framework**

### **5.1 Framing Theory**

Issues, matters or topics cannot only be viewed from one standpoint, but rather from a range of perspectives. Individuals can arrive at a specific perception of a subject from a certain angle or even reconsider their attitude towards the matter at hand due to the way an issue is portrayed in the media. This process is called framing. Framing is a notable theory in political and health communication, as well as in journalism. Its roots lie in sociology, psychology and communication science. Generally, "frames are useful devices for human beings to make sense of the world" (Lecheler & de Vreese, 2019:7). The way someone assesses issues is based on the individual's array of viewpoint, the so-called 'frame in thought'. By directing the focus on specific aspects of an issue, individuals can be guided towards evaluating the issue in a pre-determined way (Chong & Druckman, 2007).

As one of the major recognized media effects, framing theory has become one of the most common concepts in media and communication studies. Research, however, does not

agree on just one central definition of framing, which is why Entman (1993) characterizes it as a “fractured paradigm”. A common conceptualization is one by Gamson and Modigliani, referring to framing as “a central organizing idea [...] that provides meaning to an unfolding strip of events, weaving a connection among them. The frame suggests what the controversy is about, the essence of the issue” (1987:143).

## 5.2 Journalistic News Frames

The frameworks set by the media are tools helping the audience make sense of the reported issues. Frames do not only systematize the public discourse for media consumers, but also for journalists creating the news stories. Although media frames establish everyday reality, they remain mostly unacknowledged by the public (Scheufele, 1999:105-106).

According to Entman (1993:52-53), frames operate through salience and selection. When emphasizing certain issue attributes, the salience of an issue increases and leads individuals to render the information more valuable and relevant. Information can increase in salience through repetition or connotation with “culturally familiar symbols” (Entman, 1993:53). Salience increase works best when the information aligns with an individual’s pre-existing values and beliefs. Selection, in the context of framing, refers to the highlighting of some issues, while others are pushed to the background. Attention is being called to some aspects of reality, while being diverted from other aspects (Entman, 1993:53-54). Journalists therefore take on an active role in the process of news framing (Lecheler & de Vreese, 2019:7-8).

## 5.3 Frame Building and Frame Setting

When applying the concept of framing, it is crucial to distinguish between frame building and frame setting. Frame building relates to the dispute of several actors over how an issue ought to be framed and how it eventually comes to be framed in the media. Actors are not just journalists, but, for instance, political elites, stakeholders, citizens, interest groups or social movements, who might exert influence over the way journalists select or adjust frames (Lecheler & de Vreese, 2019:11-13). “The frame-building process takes place as a continuous interaction between journalists and non-media actors (Lecheler & de Vreese, 2019:19). Frame setting, on the other hand, relates to the interplay between frames and the audience’s pre-existing beliefs, values and knowledge. Potential outcomes of frame setting are changes in attitude and issue interpretation on the individual level, and collective action or political socialization on the societal level (Lecheler & de Vreese, 2019:13). A result of both, frame building and frame setting, can be framing effects: “When a frame in communication affects an individual’s frame in thought, it is called a framing effect” (Lecheler & de Vreese, 2019:13).

## 5.4 Equivalency Frames and Emphasis Frames

Framing primarily takes on two major forms: equivalency or emphasis frames. Logically similar content, which is phrased differently, is considered an equivalency frame. By receiving the same information either presented favorably or unfavorably, individuals adjust their standpoints towards the issue covered (Chong & Druckman, 2007:114). Another way of explaining equivalency frames is the contrast between loss and gain, such as in the idiom of a glass which is either half empty or half full. A surgery with a 90 percent chance of survival sounds more promising than one with a 10 percent chance of mortality, just as the purchase of a \$5 raffle ticket with a 10 percent chance of winning \$100 sounds more optimistic than one with a 90 percent chance of losing \$5. People's assessment of an issue thus depends on the information attribute highlighted.

While equivalency frames employ objectively equal information, emphasis frames present information qualitatively different (Chong & Druckman, 2007:114). The most prominent example of an emphasis frame is the portrayal of a rally in the light of free speech or public order. Since these two frames do not encompass each other, they cannot be regarded as equal (Chong & Druckman, 2007:114). Emphasis frames are considered more similar to actual journalistic practice. Small differences in the wording of questions or statements according to equivalency frames might lead to significant variations in the outcome, which is why they do not sufficiently represent the complexity of communicative and political processes (Lecheler & de Vreese, 2019:3).

The analysis in this thesis will not make a distinction between equivalency and emphasis frames, this aspect of framing theory is, nevertheless, essential to elaborate to understand all dimensions of frames before diving into a detailed examination of those. The theory needs to be grasped in its entirety to ensure the correct application of the codebook.

A differentiation highly relevant for this thesis is, however, that between issue-specific and generic frames. Five generic frames, established by Semetko and Valkenburg (2000), will be assessed in addition to four issue-specific frames regarding the opioid epidemic. A detailed explanation of these nine frames can be found in chapter eight.

## 5.5 Issue-Specific Frames and Generic Frames

A further distinction of frames can be made through issue-specific and generic frames by acknowledging the content's essence. Issue-specific frames only relate to certain matters or affairs, while generic frames go beyond just a single subject and might even endure over time. The most frequent generic frames include the human interest, conflict, morality, economic

consequences and attribution of responsibility frame (Semetko & Valkenburg, 2000), which have been discussed in the preceding literature review and identified in news media coverage of the opioid crisis. The advantage of analyzing generic frames, rather than issue-specific frames, lies within the better generalizability of the results (Lecheler & de Vreese, 2019:3-4).

The research of Semetko and Valkenburg (2000) on generic media frames is especially important for this thesis, as it applies framing theory to newspaper and television news stories and has become an important guideline for further framing analyses. The frames used by Semetko and Valkenburg will therefore serve as the foundation of the codebook for the following content analysis on news media frames in California and Texas.

The authors give detailed explanations of each of the five frames. The responsibility frame relates to the attribution of blame to either an individual, a group or the government (Semetko & Valkenburg, 2000). As “[t]he U.S. news media have been credited (or blamed for) shaping public understanding of who is responsible for causing key social problems” (Semetko & Valkenburg, 2000), the attribution of responsibility frame was most frequently identified in their analysis. In this regard, it is important to keep in mind that the work by Semetko and Valkenburg (2000) was conducted in the European context, while the analysis in this thesis will focus on media in the United States, which is why results may differ.

A humanized and emotional perspective is brought to media coverage through the human interest frame, for instance by reports of personalized stories (Semetko & Valkenburg, 2000). In the case of the opioid epidemic, these could involve accounts of individuals experiencing drug dependence or families affected by addiction.

The economic consequences frame emphasizes the repercussions a matter might have on a country or institution (Semetko & Valkenburg, 2000). The opioid crisis has drastic effects on the U.S. economy through issues such as skyrocketing health care costs and loss of workforce. Disputes between “individuals, groups or institutions as a means of capturing audience interest” (Semetko & Valkenburg, 2000) are highlighted by the conflict frame, while the morality frame relates to the embedding of the issue in a context of moral principles.

The four issue-specific frames used in this thesis’ content analysis are the criminalization, medicalization, stigma and victim frame, which have been identified in previous research on media frames of the opioid epidemic, as discussed in the preceding chapter. Since they were proven to be relevant in this particular drug crisis, they were included in the analysis and the coding process. A more detailed description of all nine frames can be found in the method section and in the codebook in the appendix.

## 5.6 Framing Devices

Media frames are usually identified through so-called framing devices, which bundle information about an issue. Framing devices include, but are not limited to, metaphors, catch-phrases, exemplars, depictions or visual images (Gamson & Modigliani, 1987). Depending on the type of content analysis conducted, both, textual and visual aspects of media coverage can be assessed, this thesis will, however, focus on the written parts of news articles only. Visuals can nevertheless provide a context for analysis and hint towards certain frames. When excluding visual images, frames can be recognized by the presence or absence of pre-determined key words, stock phrases or “reinforcing clusters of facts or judgments“ (Entman, 1993:52).

## 5.7 Concluding Remarks on Framing Theory and Point of Departure

In conclusion, frames use salience and selection and frankly help humans grasp their surroundings (Lecheler & de Vreese, 2019:7; Entman, 1993:52-53). Through increased salience, repetition or culturally connoted patterns, they encourage specific interpretations and evaluations of issues and prompt media consumers to perceive certain material as relevant (Entman, 1993:53). Actors debate the framing of a matter at hand during continuous and interactive frame building, while the interaction between the audience’s belief systems and the actual frames is referred to as frame setting (Lecheler & de Vreese, 2019:19). Equivalency frames describe differently worded, but logically similar content and emphasis frames concern the qualitatively different presentation of information (Chong & Druckman, 2007:114). An important differentiation needs to be made between issue-specific frames, concerned with particular issues, in this case the opioid crisis, and generic frames, which transgress the single subject niche and can be applied across topics over longer periods of time (Semetko & Valkenburg, 2000). Framing devices can be helpful tools in the identification of media frames and include keywords, catch-phrases, metaphors or visuals (Gamson & Modigliani, 1987). The following content analysis focuses on the presence and absence of the nine predefined frames in textual elements only, but visual images may be used as hints for the news items’ main frame. Furthermore, it is crucial to mention that the analysis focuses on both, issue-specific and generic frames.

The generic frames employed in the analysis are the attribution of responsibility, human interest, conflict, economic consequences and morality frame, adapted from the previous research of Semetko and Valkenburg (2000). Four issue-specific frames, namely the criminalization, medicalization, stigma and victim frame, were identified through the review of previous studies on the precise case of media framing in the opioid epidemic, and then defined and operationalized to fit the following content analysis.

## VI Aim, Research Question and Hypotheses

This thesis aims to provide a comparative analysis regarding media framing of the opioid epidemic in politically differently leaning newspapers in the context of politically and socially contrasting U.S. states. In order to assess if the political leaning of the media outlets could be a factor influencing drug crises coverage, and for the purpose of contextualizing the results, several liberal, centrist and conservative daily newspapers will be investigated from California and Texas. This design may suggest the exclusion of one of these factors as an explanation for potential patterns in media coverage, it does not, however, allow a conclusion as to which factors are in fact responsible for possible patterns. This is a limitation to the study, implying that future research might be interested in extending the analysis to a design, which can provide precise explanations for differences or similarities in media framing of this crisis. The study's limitations will be further elaborated in chapter 10.4.

Previous research has found that media frames of the current opioid epidemic differ from past drug crises in regard to criminalization, medicalization, stigma and victim narratives. This narrative shift was traced back to the role of racism, as the opioid epidemic is the country's first drug crisis which is primarily associated with White Americans. Despite these findings, earlier research has not assessed how media bias comes into play in this issue, although it is recognized that stigmatized and racialized perceptions of drug users differ based on individuals' partisanship and the political leaning of the media outlets they consume (Kresovich et al., 2023; Zell & Lesick, 2022). What is missing from the academic discourse as of now, is a comparative approach to framing analysis of the opioid crisis between newspapers of different political leaning. Further, previous research is lacking the contextualization of framing in contrasting states, whose disparities on the societal and political level may affect media portrayals of drug crises. A liberal Texan newspaper may differ in its use of frames in comparison to a liberal newspaper in California. Research has shown that U.S. liberal- and conservative-leaning newspapers do in fact vary in their use of frames. A study by Fryberg et al. (2011) revealed that both, the geographical location of a newspaper and its political partisanship, affect framing of the immigration debate by highlighting either economic, safety-, ethnicity- or civil rights-related aspects of a bill. Newspapers were also proven to generally express their political affiliation through tonality. In the case of same-sex marriage, U.S. liberal newspapers presented the issue significantly more favorably than their conservative counterparts (Zheng & Chan, 2022).

The potential nuances in regard to the opioid epidemic, possibly uncovered by taking non-media related circumstances into account, have been neglected in academia. The upcoming content analysis aims to fill this research gap by testing the following hypotheses and by answering the following research question.

As previous studies have proven the existence of a relationship between racialized media frames of drug crises and levels of racism in connection to partisanship, more precise assumptions can be made concerning the impact of newspapers' political leaning on framing. Consequently, this variable will be investigated through the following hypotheses:

- H<sub>1</sub> Conservative newspapers use the criminalization frame more frequently than liberal newspapers.
- H<sub>2</sub> Liberal newspapers use the medicalization frame more frequently than conservative newspapers.
- H<sub>3</sub> Liberal newspapers use the human interest frame more frequently than conservative newspapers.
- H<sub>4</sub> The conflict frame is used to approximately the same extent in liberal, centrist and conservative newspapers.
- H<sub>5</sub> Conservative newspapers use the stigma frame more frequently than liberal newspapers.
- H<sub>6</sub> Liberal and conservative newspapers' use of the victim frame differs in the subcategory of who is presented as the victim and the perpetrator.

The issue-specific criminalization, medicalization, stigma and victim frames were identified in the review of previous research and proven to be applicable to the current opioid crisis. They are therefore mirrored in the hypotheses. The five generic frames established by Semetko and Valkenburg (2000) are partially represented in the hypotheses, as preexisting studies regarding the drug epidemic only allowed specific assumptions to be made concerning the human interest frame and the conflict frame. The economic consequences frame and the attribution of responsibility frame are expected to be present in media coverage of the opioid crisis, but no evidence-based related hypotheses could be put forward. The morality frame was not prevailing in previous research and is therefore not mirrored in the hypotheses. It was, however, included in the coding process, in order to draw a holistic picture of the interplay between the five established generic frames and the four issue-specific frames. With regard to the scope of this thesis, the assumptions promising the most intriguing results, based on evidence from pre-existing studies, were selected.

California and Texas were selected for the comparison on the basis of multiple salient factors proven to be closely linked to opioid use and thus the predominance of overdose deaths in each state. The factors will be explained in detail further down below. Since it will be difficult to reliably determine which exact factor or factors are decisive for similarities or differences in media framing, the variable of state characteristics' potential effect will be explored through the following rather-open ended research question:

RQ: How do Californian and Texan newspapers differ or resemble each other in their framing of the opioid epidemic?

## **VII Reasoning for the State Comparison**

As explained in chapter two, California and Texas differ in the respective severity of the crisis, but are demographically similar in order to avoid biases due to population size. Health insurance, ethnicity, homelessness and prescription guidelines are proven to affect numbers of opioid users and opioid-related overdoses. Apart from the reasons mentioned in the background chapter, the two states were selected as they vary in each of these factors, hinting towards a compelling analysis outcomes.

As mentioned before, the purpose of the inclusion of a state comparison is the contextualization of the results. The results will be able to highlight if the media outlets' political leaning has an effect on framing of the opioid crisis. These findings the hypothesis testing will then be embedded into the context of California and Texas in order to enlarge the picture, possibly hinting towards the presence or absence of the impact of state differences, giving room for discussion and suggesting implications for future research.

### **7.1 Health Insurance**

Apart from the crisis severity and demographics, another difference between California and Texas, which makes for an interesting comparison, are the number of people owning health insurance. 7.5 percent of Californians under the age of 65 do not have health insurance, while the number is remarkably higher in Texas with 18.9 percent (United States Census Bureau, n.d.-b). A study by Meinhofer and Whitman (2018) demonstrates that the expansion of Medicaid resulted in substantial gains concerning the utilization of opioid use disorder treatment. These gains were due to admissions of Medicaid beneficiaries to opioid treatments. This is supported by Wettstein (2019), proving that insurance coverage significantly decreases the risk of opioid-related deaths among young adults, with every percentage point of coverage reducing death rates by almost 20 percent. Opioid use disorder treatments with methadone or buprenorphine

(medications used in opioid maintenance therapy or withdrawal management) for a period of three months reduced overdoses by 76 percent and 59 percent at twelve months. Individuals receiving these medications for more than half a year experience less overdoses and opioid-related acute care in comparison to individuals with shorter or no treatment (Wakeman et al., 2020). This is in line with findings by Bell and Strang (2020) providing evidence for the effectiveness of the commonly used opioid agonists buprenorphine and methadone, as well as the opioid antagonist naltrexone (a medication blocking the effects of opioids). Healthcare thus grants more substance users access to treatment, which, in turn, reduces overdoses and overdose deaths. The fact that Texas has a far larger share of population without healthcare than California, yet less relative opioid-related overdose deaths, shows that the two states will potentially provide an interesting discussion following the analysis.

## 7.2 Ethnicity

Several past studies have proven the existence of racialized media frames in the coverage of drug crises. As mentioned in chapter four, Kresovich et al. (2023) found that individuals leaning towards Republican sources for health information experience a higher opioid use disorder stigma than their Democrat counterparts, as well as heightened backing for discriminatory anti-drug policies. Stigma towards opioid users affects the “availability of life-saving drugs” (Kresovich et al., 2023) and lawmakers’ capability for gaining the public’s support on harm-reducing policies. Considering that Texas has been under Republican governance for decades, while California is a traditionally Democratic state, this suggests the existence of racialized and stigma-related media frames due to the political landscape of each state. The study further suggests that indicators for racism are found in the consumption of Republican-leaning news outlets and racism is proven to heighten stigma while reducing policy backing (Kresovich et al., 2023).

The results of Shachar et al. (2020) and Welhausen (2023) state that the criminal justice frame is predominant in media coverage of the crack cocaine epidemic, who is associated with African American drug users. News on the opioid epidemic, largely linked to White users in the public eye, show a medicalization and public health focus, while simultaneously portraying White substance users in a humanized light.

Both, California and Texas, are states with high levels of immigration, they differ, however, in the composition of their population. 70.7 percent of Californians are considered White, while only 6.5 percent African Americans citizens live there (United States Census Bureau, n.d.-a). 77.4 percent of Texans are White and 13.4 percent are African Americans (United States Census Bureau, n.d.-b).

### 7.3 Homelessness

A population group specifically vulnerable to substance use disorder, and overdose deaths resulting from it, are homeless individuals. Yamamoto et al. (2019) found that these citizens have a significantly higher risk of opioid overdoses and hospital admission than housed patients, even when being compared to low-income individuals. More than one in ten homeless individuals has experienced an opioid-related emergency visit. As the homeless population is disproportionately more affected by the opioid crisis than the housed population, this has a considerable effect on overdose death numbers in the country. With 44 people experiencing homelessness out of every 100,000 people, California had the highest homelessness-rate in the United States in 2022. Meanwhile, the numbers for Texas (eight homeless individuals for every 10,000 people) were below the national average of 18 individuals per 10,000 citizens (U.S. Department of Housing and Urban Development, 2022). Since both states have similarly large populations, this remarkable difference in homelessness shows that these two states present an intriguing comparison.

### 7.4 Prescription Guidelines

Millions of Americans got dependent on opioids through excessive prescriptions in the 1990s and turned to illicit street drugs and illicitly made fentanyl when their prescriptions ran out, further contributing to the skyrocketing numbers of accidental deaths (Liu & Singer, 2023). This suggests that, for an accurate comparison, it is crucial to look into potential differences in state laws concerning regulations for opioid prescriptions. The California Business and Professions Code §741 states that prescribers need to offer a naloxone prescription to their patients when prescribing an opioid or benzodiazepine medicine dosage equivalent to 90 or more morphine milligrams per day. The code does not require an actual prescription of naloxone, but physicians need to propose it to their patients as a safety mechanism for reversing a potential overdose when handling high doses of opioids (California Business and Professions Code, 2023). Texas law also aligns with the Centers of Disease Control and Prevention's recommendation of a morphine equivalent dose limitation of 90 milligrams a day per patient (Office of Inspector General, 2019). Texas, however, is not one of the 18 states which have enacted laws requiring a naloxone prescription or offer (The Network for Public Health Law, 2023), making this a remarkable difference in prescription practices in contrast to California and an interesting aspect to keep in mind throughout the analysis due to the crucial role naloxone plays in the opioid crisis. Even when being administered by a layperson, an overdose reversal through naloxone is effective in 75 to 100 percent of the cases (Rzasa Lynn R. & Galinkin J., 2018).

## VIII Methodology

### 8.1 Research Design

The research in this thesis was performed through a quantitative content analysis, which is based on the five generic frames by Semetko and Valkenburg (2000) and four additional issue-specific frames identified through the review of previous research on news media framing of the opioid crisis. The attribution of responsibility, human interest, economic consequences, conflict and morality frame were adopted from the framing analysis of European politics conducted by the two authors. Gronemeyer, del Pino and Porath (2020) emphasize the importance of testing these generic frames outside the cultural context they were established in and since their study was carried out more than two decades ago in the European context, the literature review in chapter four was used to determine whether or not research on the current opioid epidemic suggests the applicability of the generic frames in the context of drug crises in North America.

The criminal justice frame (Cameron Wild et al., 2019; Orsini, 2017; Shachar et al., 2020; Welhausen, 2023; Russell et al., 2019; Wu, 2023), medicalization frame (Ferguson & Eliasson, 2022; Shachar et al., 2020; Cameron Wild, 2019; Wu, 2023; Welhausen, 2023), stigma frame (Orsini, 2017; Kresovich et al., 2023, Gollust & Miller, 2020) and victim frame (Russell et al., 2019; Johnston, 2020; Webster et al., 2020; Raychaudhuri et al., 2023) were repeatedly identified in research concerning framing of the opioid epidemic and thus added to the content analysis.

A major theme identified by the vast majority of previous research concerns racialized depictions of drug users, which are not directly present in media frames using clearly racist vocabulary, but rather in the different portrayals of drug crises associated with ethnic minorities or White Americans. This analysis will therefore not investigate immediate racialized frames, but rather code narratives related to stigma towards substance users, their presentation as victims or in the light of criminalization and medicalization. If these frames are found in media coverage in California and Texas, the results can draw a bigger picture of the novelty of the current opioid epidemic in contrast to the classic criminal justice dominated narratives of past drug crises. The findings can have implications for future research looking into a potential upcoming narrative shift within the course of the epidemic.

### 8.2 Classification of the News Outlets

The 16 investigated news outlets have been classified as liberal, centrist or conservative based on the positions expressed in their editorials. The assessment of the editorials is not just limited to the newspapers' past presidential endorsements, since these might have been especially

polarized in the last election of 2020, where even some conservative-leaning media endorsed Joe Biden rather than Donald Trump. Instead, overall editorial positions concerning political endorsements and national, as well as state-level governance and policies, have been taken into account.

The Los Angeles Times, San Francisco Chronicle and The Mercury News have been classified as liberal Californian newspapers, since they have all expressed clearly Democratic stances in their past editorials. From endorsements of Joe Biden, Hilary Clinton and Barack Obama as presidential candidates over liberal stances concerning drug policies, law enforcement and policies aimed at combatting homelessness (Editorials, n.d.-a; Editorials, n.d.-b; Editorials, n.d.-c).

Orange County Register, Los Angeles Daily news and The San Diego Union-Tribune are considered more conservative-leaning Californian newspapers. According to own reports, the Californian Orange County Register is known for its conservative editorials and endorsements of Republican candidates or positions (The Orange County Register, n.d.), just like Los Angeles Daily News (Cisneros, 2017). In its editorials, the San Diego Union-Tribune expresses unfavorable opinions towards the Biden administration on a national level, as well as towards the Democratic Californian Governor Gavin Newsom on a state-level (Editorials, n.d.-d).

The Californian media outlets classified as centrist are CalMatters and The Fresno Bee. According to the news outlet itself, CalMatters is a nonpartisan and nonprofit news organization aimed at holding leaders accountable by providing Californians with transparent information regarding the government (CalMatters, 2022). The Fresno Bee has published both, more liberal- and conservative-leaning editorial positions on its website. The editorial team does, for instance, support that small public protests should not be guarded by law enforcement's riot squad, that community schools should be named after leaders of ethnic minorities and that poverty should be combatted by monthly financial distributions without any strings attached. On the other hand, the paper criticizes warming fires lit by the homeless population, states that liberals should not block harsher punishments for buyers of child sex and takes a stance against gender-neutral toy aisles (Editorials, n.d.-e).

Austin American-Statesman, San Antonio Express-News and El Paso Times have been categorized as liberal-leaning Texan newspapers. On its editorial page, Austin American-Statesman, for example, recommends its reader to vote for an adjustment of the cost-of-living for retired teachers, as they struggle to cover rent and groceries. The paper also recommends to vote against an increase of the retirement age for state judges and for an increase in the state park budget, as "they improve our quality of life and serve important needs such as preservation" (Editorials, n.d.-f). These are just some of the rather liberal, welfare-state positions expressed by the Texan newspaper. San Antonio Express-News recommends both, the

Republican candidate Nikki Haley (instead of Donald Trump) and Joe Biden for this year's presidential elections. For the U.S. Congress, the paper endorses two Democrats and two Republicans and in the case of Texan legislature, San Antonio Express-News favors Democrats in four out of the five recommended candidates (Election recommendations for the 2024 Texas primary, n.d.; Opinion, n.d.). The editorial team of El Paso Times takes a stance against mass deportations and supports a women veterans day, as well as innovative green technology in the electricity industry. In 2016, El Paso Times endorsed Hillary Clinton as presidential candidate (El Paso Times, n.d.).

Houston Chronicle and Fort Worth Star-Telegram have been classified as conservative Texan newspapers. The editorial team of Houston Chronicle supports a transgender treatment ban, anti abortion bills and states that Biden's asylum order was copied from the former president Donald Trump (Editorials, n.d.-g). Fort Worth Star-Telegram's editorial page highlights criticism of Biden's immigration politics for not being harsh enough in guarding the border and leading to an asylum disaster, and states that local schools should protect students without being 'woke' (Editorials, n.d.-h). These are just some examples of the position taken by the two magazines, but they do reflect classic conservative or Republican narratives.

Lastly, The Texas Tribune, Dallas Express and Corpus Christi Caller-Times have been classified as centrist Texan news outlets. Both, the Texas Tribune and Dallas Express, just like CalMatters, are nonprofit and nonpartisan media organizations (The Texas Tribune, 2024; Dallas Express, 2023-b). The Texas Tribune is the only digital-first, member-supported news outlet in the state, predominantly covering statewide public policy, politics and governmental issues (The Texas Tribune, 2024). Dallas Express aims to provide its readers and the Dallas metropolitan with factly, unbiased information (Dallas Express, 2023-b). While Corpus Christi Caller-Times has, in the very vast majority of cases, endorsed Republican candidates in the past local elections, its editorial page features several stances which can be considered more leftist. The editorial team criticizes dehumanizing border policies and demands balancing security with compassion, as well as humane solutions to the state's homeless crisis. It also disapproved of the Republican party's ignorance of climate change (Opinions, n.d.).

Further explanations concerning the investigated media outlets, their ownership and circulation can be found in Appendix B.

### 8.3 Strengths and Weaknesses of Quantitative Content Analysis

Quantitative content analysis is widely used in the study of media and communication. In this research method, coders systematically categorize and record textual, visual or aural information for the purpose of analysis (Coe & Sacco, 2017). The collected data is then used for

the description and interpretation of patterns or relationships between the variables (Riffe et al., 1998:2). Krippendorff (1980, as cited in Riffe et al., 1998:18) emphasizes that “quantitative content analysis is a research technique for making replicative and valid inferences from data to their context”, pointing out the reliability and validity of this method. Therein lie the strengths of this study design: “[...] it is a nonobtrusive, nonreactive, measurement technique“ (Riffe et al., 1998:30), from which researchers can draw conclusions independent from access to communicators. Further, quantitative content analysis is suitable for longitudinal studies, as it can rely on archived material and allows for the analysis of larger numbers of data than a qualitative approach, contributing to better replicability and generalizability of the results. Lastly, due to the significance of communication in societal processes, this method is applicable to a multitude of disciplines and research questions (Riffe et al., 1998:31).

Quantitative content analysis, nonetheless, has weaknesses and limitations too, one of which is the fact that “[...] quantitative indicators are insufficient to capture the social meaning or impact of media messages (Newbold et al., 2002 in Webster et al., 2020). In order to bypass this weakness as extensively as possible, the results will be contextualized through the consideration of the potential impact of societal and political differences between California and Texas. Other critics claim that this research method ascribes too much weight to the “comparative frequency of different symbols’ appearances“ (Holsti, 1969:10 as cited in Riffe et al., 1998:11), although the sole presence or absence of an individual crucial symbol might significantly affect the message’s content (1998:11).

For the purpose of best avoiding this bias in this thesis’ content analysis, frames will be investigated in-depth and manually through a thorough assessment of all textual parts in a news item. Visuals will not be a central aspect of the analysis, but, if present, will be used as hints in the identification of the main frame. A quantitative content analysis is a suitable approach for comparing a range of news media outlets with different political leanings in two politically contrasting states, as it allows to draw generalizable conclusions for the impact of partisanship on framing in the opioid epidemic.

## 8.4 Sampling

News articles were retrieved from the websites of three liberal-, centrist- and conservative-leaning daily newspapers for California and Texas each. The liberal newspapers investigated were The Los Angeles Times, The San Francisco Chronicle and The Mercury News in California, and Austin American-Statesman, San Antonio Express-News and El Paso Times in Texas. The conservative Californian newspapers included in the analysis are Orange Country Register, Los Angeles Daily News and The San Diego Union-Tribune, while the Texan ones

were Houston Chronicle and Fort Worth Star-Telegram. As a control variable, the category of centrist newspapers was added to the analysis. The Fresno Bee (California) and Corpus Christi Caller-Times (Texas) were the most politically neutral newspapers with the largest daily and monthly circulation in each state. Additionally, nonpartisan and nonprofit news media organizations, CalMatters (California), The Texas Tribune and The Dallas Express (both Texas), who cover public policy and government issues, were selected to diversify the control variable.

Although only news articles published online were taken into account for the analysis, the media outlets were selected based on their print circulation, their number of digital subscribers and monthly website visits combined, as this is the most reliable method to determine the most influential newspapers (Harvard University, 2021). Within the three categories of political leaning, the daily newspapers with the largest circulation were selected for California and Texas, which, in the vast majority of cases, also mirrored the respective state's largest newspapers generally. In order to avoid a bias due to the structure of the U.S. media market, it was ensured that the chosen media outlets are diverse in ownership and that newspapers within the same category in the same state are owned by different media companies or individuals. For instance, the three selected liberal Californian newspapers are owned by Patrick Soon-Shiong (L.A. Times), the Hearst Corporation (San Francisco Chronicle) and Digital First Media (Mercury News) and the three conservative Texan newspapers are in ownership of the A. H. Belo Corporation (Dallas Morning News), the Hearst Corporation (Houston Chronicle) and the McClatchy Company (Fort Worth Star-Telegram) (Harvard University, 2021; McClatchy, n.d.-a). This procedure was done to ensure a sample as representative as possible. A detailed explanation of the U.S. media landscape can be found in appendix B.

The sample was collected from March 30<sup>th</sup>, 2024 to April 12<sup>th</sup>, 2024 among news articles published within the time frame of March 1<sup>st</sup>, 2023 to July 31<sup>st</sup>, 2023 and thus a total of five months was coded. The time frame was chosen, as it represents the peak of the severity of the crisis as of now. As mentioned in chapter seven, the all-time high of drug overdose death counts was reached in May 2023 and the months leading up to it. In the twelve months preceding May 2023, more than 110.000 victims total are recorded across the country, a new tragic record in death tolls (National Vital Statistics System, 2024). Once all articles published in May 2023 were coded, the month leading up to it, April 2023 and the subsequent month, June 2023 were added to the analysis. Since the sample size was still insufficiently large afterwards, articles published in March 2023 and July 2023 were also coded. The sample now represents the current peak of the opioid epidemic, as well as the two months leading up to it and the two following months, in which the death tolls of May became public and were discussed in the media discourse.

The articles were retrieved from the newspapers' respective online websites and databases after a search of the following keywords: opioid, opium, fentanyl, heroin, morphine, codeine, hydrocodone, buprenorphine, oxycodone, *OxyContin*, naloxone and *Narcan*. All articles generated through the search of these keywords, and published in the 16 media outlets within the aforementioned time frame, were included in the sample.

Only news items, no editorials, opinion pieces or other journalistic text types, making clear reference to the current opioid crisis in the United States, were coded. Articles referring to the opioid epidemic in countries other than the United States were excluded from the sample. The analysis focused on the textual parts of the article only, visual or acoustic material was not recorded. If present and relevant, visuals, especially the main featured images, were used as hints for the identification of the main frame. An article was considered a full news item and only coded when it consisted of at least two full sentences of text published within the defined sample period.

## 8.5 Data and Data Limitations

The data was recorded in a code sheet in Excel and transferred to Stata for further statistical testing after the sampling period. The code sheet contains all information related to the nine frames investigated (presence, absence and subcategories of actors), as well as basic data concerning the article's headline, the story identification number, publication and sampling date, the newspaper's name and political leaning, as well as the state the newspaper is published in. This information was recorded for each news item in line with general guidelines for media analysis (Orsini, 2017). The complete codebook can be found in appendix C.

As no data had to be removed during the process of the analysis, the sample size remained the same at the beginning and the end of the study with a total of 401 coded news articles. 224 of those were retrieved from Californian newspapers and 177 from Texan ones.

**Table 1***Descriptive Data Sample Size*

|              | California | Texas | Total |
|--------------|------------|-------|-------|
| Liberal      | 130        | 38    | 168   |
| Centrist     | 48         | 71    | 119   |
| Conservative | 46         | 68    | 114   |
| Total        | 224        | 177   | 401   |

*Note.* The table shows the quantities of news items differentiated by the state they were published in and the respective newspaper's political leaning.

Statistical calculations, including cross tabulations and chi<sup>2</sup> tests, were performed on the generated data set, in order to assess the content analysis' reliability and validity, investigate the presence and absence of the frames and their subcategories, and identify the predominant frames. Additionally, descriptive data for each news outlet was reported. No collected data was excluded from the analysis.

The data is limited in one primary aspect: although the media outlets with the largest audience were selected for each state and category, some newspapers, namely The Los Angeles Times, The San Francisco Chronicle, Dallas Express and Fort Worth Star-Telegram, inevitably dominate the media discourse due to their national outreach and readership. All selected newspapers are based in the states of California and Texas, but some can be considered more regionally focused (e.g. The San Diego Union-Tribune or The Corpus Christi Caller-Times), while others are national players (e.g. The Los Angeles Times or Houston Chronicle). Despite attention having been paid to a distribution of articles within the sample as evenly as possible, and an even number of eight newspapers from each state, a restricted bias cannot be fully precluded.

## 8.6 Codebook and Measures

In the content analysis, nine frames are determined through a total of 19 questions, nine of which are dichotomous variables and ten are measured on nominal scales. The questions concern the presence and absence of the aforementioned frames, as well as subcategories focused on the main actors within the frame. A potential mention of the actors involved was measured for all frames except the morality, criminalization and medicalization frame, which

were only measured through presence or absence, as previous research did not suggest the investigation of actors to be relevant in these three cases.

The coding framework was refined after a pretest and can be found in its entirety, including the complete questions and measurements, in the codebook in appendix C.

In addition to the nine frames and basic descriptive data, a main frame and up to two possible subframes were recorded, as well as the main source mentioned in the news item and the main opioid or opioid antagonist referred to. The latter two variables were included in order to contribute to a multifaceted discussion concerning the state contextualization later on. For instance, a predominant use of the state government as the primary source might hint towards the effect of differing state governments or laws on the use of media framing. The mention of buprenorphine, methadone or naloxone, all three medications used to treat opioid use disorder and overdoses, in combination with a criminalization frame, might imply a more nuanced and balanced use of the criminal justice narrative in line with a medicalization narrative.

### **8.6.1 Attribution of Responsibility Frame**

The attribution of responsibility frame “[...] presents an issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual or group. [...] the U.S. news media have been credited with (or blamed for) shaping public understanding of who is responsible for causing or solving key social problems” (Semetko & Valkenburg 2000:96).

With regard to the opioid epidemic, responsibility could be attributed to several kinds of actors for either causing the outbreak of the crisis or for insufficiently resolving it. This includes political actors on different levels, who have not intervened early enough to contain harm or who have passed insufficient or failed policies in relation to the crisis. Examples are the Reagan administration’s War on Drugs in the 1980s, which ultimately worsened the situation, the implementation of a profit-driven health care system over decades and the Trump administration’s reversal of the Affordable Care Act, or the prescription cut-offs for patients receiving opioid-based medication, who then turned to the black market to purchase harmful illicit drugs and fueled the skyrocketing numbers of accidental overdose deaths. Another potentially responsible actor often mentioned in previous research are pharmaceutical companies, who, in the 1990s, marketed their opioid medications as allegedly being non-addictive and ran huge campaigns in order to have physicians prescribe their products. The most well-known example is Purdue Pharma, the company behind *OxyContin*, the drug which is often blamed for triggering the opioid epidemic (Liu & Singer, 2023; Jones et al., 2018). Lastly, accountability can be ascribed to physicians, and other health care personnel, for giving into the pressure from the pharmaceutical industry and overprescribing strong painkillers.

### **8.6.2 Human Interest Frame**

This frame “[...] brings a human face or an emotional angle to the presentation of an event, issue, or problem. [...] Such a frame refers to an effort to personalize, dramatize or “emotionalize” the news, in order to capture and retain audience interest” (Semetko & Valkenburg, 2000:95-96). In the case of the opioid crisis, this frame often focuses on the families and friends of drug users, especially on parents whose children are dependent on or addicted to controlled or illicit substances. The frame might also highlight personal stories of drug users who became dependent due to opioid prescriptions or emphasize their long way to recovery.

### **8.6.3 Economic Consequences Frame**

The economic consequences frame “[...] reports an event, problem, or issue in terms of the consequences it will have economically on an individual, group, institution, region, or country” (Semetko & Valkenburg, 2000:96). This frame could relate to the costs of loss of workforce due to citizens’ addiction, time spend in recovery treatment or jail and ultimately the impact on the U.S. economy. The economic consequences frame might also highlight public spendings for law enforcement, street workers or health care.

### **8.6.4 Conflict Frame**

This frame “[...] emphasizes conflict between individuals, groups or institutions as a means of capturing audience interest” (Semetko & Valkenburg, 2000:95). The conflict frame emphasizes disagreement or confrontation between at least two parties involved in the issue. Potential conflicts in the opioid epidemic could be different approaches of the U.S. federal government and the Californian or Texan state governments on whether or not to litigate drug users, how to best prosecute drug traffickers and how to approach the crisis generally (e.g. criminalization versus medicalization). There might also be conflicts between affected citizens and their prescribers (for overprescribing opioid-based medication) or pharmaceutical industries (for marketing their pain killers under false impressions). When several conflicts were identified, the most prominent one was coded.

### **8.6.5 Morality Frame**

The morality frame “puts the event, problem, or issue in the context of religious tenets or moral prescriptions” (Semetko & Valkenburg 2000:95). The frame might suggest a moral behavior in line with societal norms or religious values. A morality frame in the opioid crisis can have a

broad range; it might recommend drug users to “just say no“, like Nancy Reagan’s campaign in the 1980s as part of the Reagan administration’s War on Drugs (Lilienfeld & Arkowitz, 2018), encourage them to sign up for recovery treatment, make use of syringe service programs or to not use openly in public. The morality frame may also be targeted towards drug users’ friends and family and encourage them to respond with kindness and offers for help rather than stigmatizing judgement. Besides codes of conduct targeted towards citizens, this frame could suggest specific actions expected of the government and policy makers (for instance to pass certain laws or to provide funding for harm reduction interventions), police officers (to carry naloxone with them) or health care institutions (to extend their services). An important aspect of the morality frame is also the emphasis on solidarity within society.

Since earlier literature indicates that this frame is less significant than the other generic frames in the particular context of the current crisis, it was investigated through one question, solely aimed at capturing the presence or absence of the morality frame in current media coverage, but excluding detailed subcategories.

#### **8.6.6 Criminal Justice Frame**

The criminal justice frame was added to the content analysis after several previous studies (Orsini, 2017; Welhausen, 2023; Cameron Wild, 2019; Shachar et al., 2020; Wu, 2023; Russell et al., 2019) have identified it as salient in the opioid crisis, one of which are Shachar et al. (2020: 213-214): “[The] media often construct a narrative of drug use that presents substance use as a criminal act rather than one that arises from a medical disorder. [...] By linking substance use and crime, the criminalization model drives draconian and drastic solutions to the use of illicit substances”. A criminal justice frame in the opioid epidemic might include mentions of law enforcement activities aimed at combatting the flow of illicit drugs into the country, the prosecution of drug dealers and users or stories of court trials.

#### **8.6.7 Medicalization Frame**

The medicalization frame can be considered a counterpart of the criminal justice frame and was also found in multiple previous studies on drug crises framing (Cameron Wild et al., 2019; Shachar et al., 2020; Welhausen, 2023; Ferguson & Eliasson, 2022; Wu, 2023). “Instead of adopting a “tough on crime” stance, policy makers influenced by the medicalization model respond with offers of help, including resources for treatment and prevention.[...] There is an understanding under this model that substance users are victims of their own biology [...]”. Overall, the medicalization model is kinder to substance users in that it encourages policy makers to provide health care resources to support recovery rather than harsher criminal justice

interventions” (Shachar et al., 2020:214-215). A news item employing the medicalization frame in the opioid epidemic might provide information on where to receive naloxone and how to administer it, where and how to find recovery treatment, how to react when experiencing or witnessing an overdose or even imply health care interventions expected from policy makers.

### **8.6.8 Stigma Frame**

According to Gollust and Miller (2020), Kresovich et al. (2023), Orsini (2017) and Webster et al. (2020), another frame, which is common used in news coverage of drug crises, is concerned with the portrayal of substance users in stigmatizing light. “News has the power to shape public perception through heavy coverage and sensationalization of selected events, and often creates stigmatizing and stereotypical representations of particular groups (Johnston, 2020:126). With regard to Webster et al. (2020:4) articles employing the stigma frame draw a moral distinction “between so-called legitimate users of opioids, and stigmatized groups such as poor, street-affected drug-users”. Stigma is often associated with individuals of “lower socio-economic status, poverty, lack of adequate housing [or] education” (Webster et al., 2020:6), for whom society has less sympathy than their ‘innocent’ counterparts. The National Institute on Drug Abuse (2023) defines stigma towards people with substance use disorder as “inaccurate or unfounded thoughts like they are dangerous, incapable of managing treatment, or at fault for their condition”.

### **8.6.9 Victim Frame**

The last significant frame identified in the literature review is the so-called victim frame (Russell et al, 2019; Johnston, 2020; Webster et al., 2020; Raychaudhuri et al., 2023). “[P]eople who are members of certain higher status groups who become addicted, such as those who are white and middle class, are often portrayed as innocent victims” (Webster et al., 2020:6). The victim frame engages narratives of “individuals trapped in a vicious cycle of emotional or physical pain and trauma, self-medication with opiates and unwitting dependency” (Webster et al., 2020:7), who deserve to be portrayed as innocent and naive victims of the crisis. Research has found that the media often point out that White and middle-class substance users had no preexisting issues leading to drug misuse (Johnston, 2020:130) and that “in order to register [someone] as a victim, the person [...] in question must be innocent and constructed as blameless, and part of this construction involves creating distance between victims and perpetrators” (Johnston, 2020:131). In the victim frame, actors might be presented as having suffered physical, mental, societal or even economic consequences related to opioid consumption, which was ultimately

triggered by another party or circumstance. This could include sports injuries, car accidents, unethical doctors and pharmaceutical companies or drug dealers and traffickers.

## 8.7 Pretest

Since not only the five generic frames, which have been applied in previous research, are used in this analysis, but also four newly identified issue-specific ones, it is crucial to test whether these are present in the sample. The pretest also has the purpose of evaluating if the coding process needs to be altered, whether subcategories need to be added or deleted or if any other adjustments need to be made in the codebook. A sample size of 80 news articles were coded and, within the process, the codebook was modified in line with the results of the pretest. It revealed that the subcategories of actors needed to be altered in some cases, for instance through the addition of 'children/teenagers/students' as affected individuals in the human interest and victim frame or the deletion of conflicting actors proven to not be relevant for the sample. No frames which were not initially part of the codebook were identified. The number of coded frames, subcategories and questions frankly remained the same after the pretest. Adjustments were only made within the lists of actors in three of the seven subcategories. Although the morality frame was rarely detected in the pretest, it was kept as a variable in the final analysis to provide a holistic picture of all five generic frames rather than excluding just one. No noteworthy challenges were encountered during pilot testing.

## 8.8 Reliability and Validity

The five investigated generic frames were adapted from Semetko and Valkenburg (2000), which have been applied in a range of further research in diverse topics and circumstances, and the four additional issue-specific frames were repeatedly applied in previous frame analyses of the opioid epidemic. Concurrent validity of the methodological approach is thus ensured.

The codebook aims to render the coding process as objective and standardized as possible, however, a quantitative content analysis is still partially subjective due to the coders' personal cognitive bias. In order to guarantee as much objectivity of the analysis as viable, an intracoder reliability test was performed four weeks after the initial coding period. Ten percent of the total sample size, 40 of 401 articles, was coded once again and Cohen's kappa was recorded for each of the 21 variables. Descriptive data, such as the newspaper, its political leaning or the state, was excluded from the test as these values are not subject to cognitive bias and would thus distort the outcome of the test. The average Cohen's kappa value for the intracoder reliability was 0.84, with individual variables reaching from a minimum of 0.75,

substantial agreement, to a maximum of 1, perfect agreement. A table containing all Cohen's kappa values can be found in appendix D.

The five generic frames can be considered to have high external validity, as they have been applied cross-culturally and cross-thematically, the four issue-specific frames might, however, be limited to the U.S. context. Future research could investigate whether or not the criminalization, medicalization, stigma and victim frame are also present in media coverage of drug crises globally, while acknowledging differences in media systems. Nevertheless, it needs to be considered that in its severity and predominance in the public discourse, the opioid epidemic is currently unique in North America. The sample used in this content analysis comprises a wide range of news items from 16 media outlets in the two most populated states, while also taking the political leaning of the newspapers into account. It thus draws a holistic picture of media coverage during the peak of the crisis and can be regarded as representative in the U.S. context.

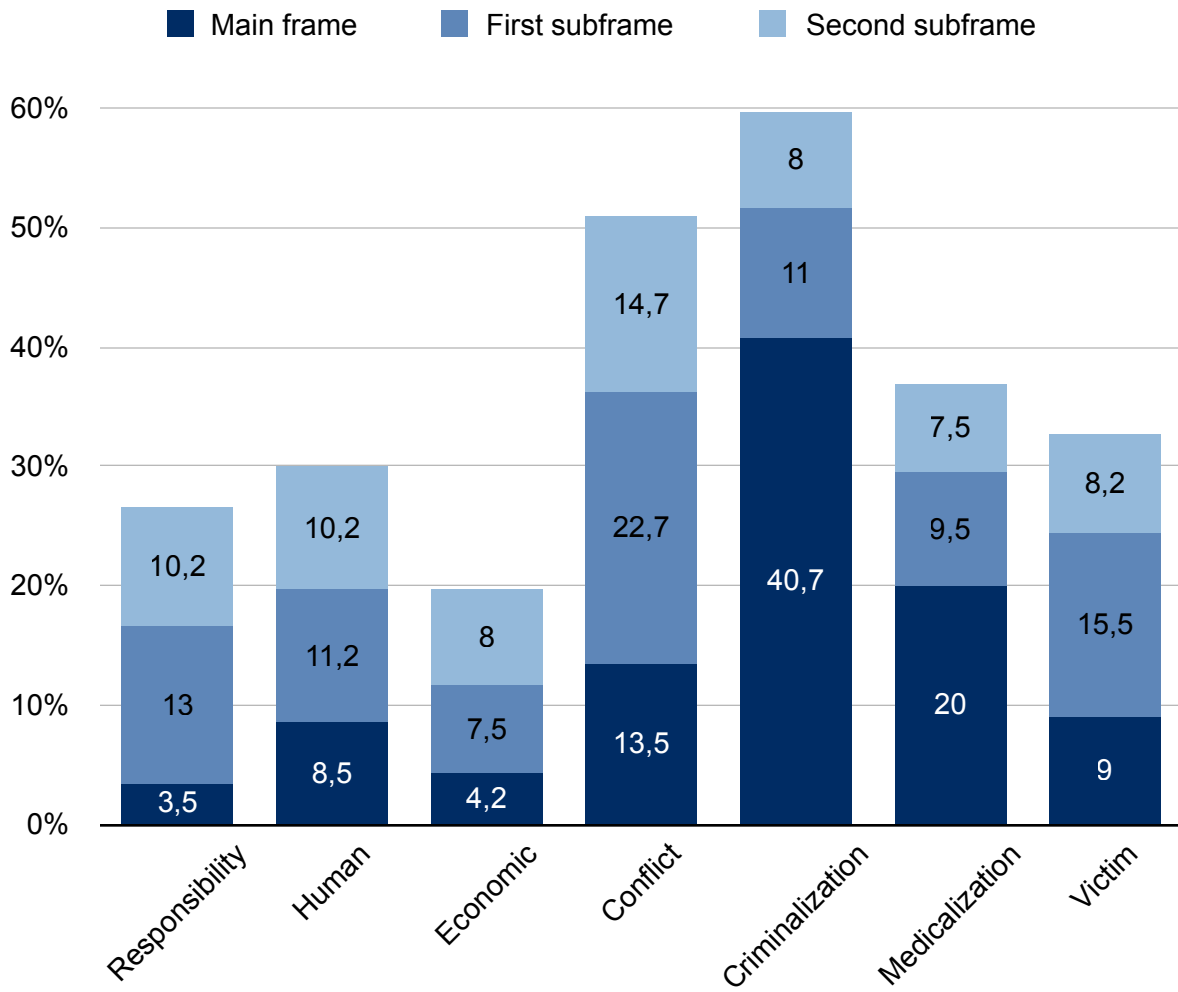
## **IX Results**

The six hypotheses concerning the impact of news outlets' political leaning, as well as the overarching research question regarding the contextualization of the results through a comparison of California and Texas, were investigated using the statistical methods of cross tabulations and chi<sup>2</sup>-tests.

To get a general overview of U.S. media's frame use during the peak of the opioid epidemic, regardless of the political leaning and the state, the newspapers were defined as independent variables and the frames were defined as dependent variables. Figure 2 down below visualizes the frames predominantly identified in the sample. The individual frames are shown on the x-axis and the percentage by which they were used, as the main frame and as subframes, is demonstrated on the y-axis.

**Figure 2**

*Predominant News Frames in Californian and Texan Newspapers*



*Note.* The chart shows the predominance of media frames in Californian and Texan newspapers, regardless of political leaning, in percent and rounded to one digit right of the decimal. The frame titles are abbreviated for better visibility. The morality frame and the stigma frame were excluded from the visualization, as the values were too low to be clearly arranged. The morality frame was used in 0.5% of the sample as the main frame, in 0.3% as the first subframe and in 0.5% as the second subframe. The stigma frame was the main narrative in 0.3% of the cases, the first subframe in 1.5% and the second subframe in 4%. Sampled time period: March 1<sup>st</sup>, 2023 until July 31<sup>st</sup>, 2023. n=410. Author's own calculations.

As shown in figure 2, the percentages of the main frame use add up to 100%, since a predominant narrative was coded for each article. The percentages of the first and second subframe do not add up to 100%, as not every article made use of those. Some articles only

employed a main frame without any supplementary narratives. In those cases, the variables of the first and second subframe were coded as 0=no subframe found.

The 16 selected Californian and Texan newspapers predominantly covered the opioid epidemic in a criminalization (59.7% total) and conflict (50.9% total) narrative. The medicalization frame (37%), human interest frame (29.9%), victim frame (32.7%) and attribution of responsibility frame (26.7%) were used approximately to the same extent, followed by the economic consequences frame (19.7%). The stigma frame (5.8%) and morality frame (1.3%) were not frequently enough detected to be included in the graph. The latter two low numbers may be explained by the rather subjective and judgmental connotation encompassing the two frames. Professional journalism aims to report objective information in a neutral manner. Referring to morally desirable behavior or religious tenets and stigmatizing specific actors in a news item might counteract these standards and could thus be consciously refrained by journalists and editorial teams working at the investigated newspapers.

Although figure 2 shows a predominance of the criminalization and conflict frame in media coverage of the opioid crisis generally, potential differences due to the media outlets' political leanings are still open to debate and will thus be investigated through the testing of the six hypotheses in the following sections.

## 9.1 Hypothesis Testing

In order to assess frame usage based on media outlet's political leaning, all liberal newspapers<sup>2</sup>, regardless of the state they are published in, are grouped together in a new variable. The same procedure was performed for the centrist<sup>3</sup> and conservative<sup>4</sup> news outlets. A cross tabulation containing the aforementioned three variables and the nine frames was used in the assessment of all six hypotheses and is presented in table 2 down below. The table demonstrates the use of each frame as the main frame in either liberal, centrist or conservative media outlets and will be referred to in the following subsections 9.1 to 9.5. The use of the frames as subframes can be seen in figure 2 above.

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<sup>2</sup> The Los Angeles Times, The San Francisco Chronicle, The Mercury News, Austin American-Statesman, San Antonio Express-News and El Paso Times

<sup>3</sup> The Fresno Bee, CalMatters, Corpus Christi Caller-Times, The Texas Tribune and Dallas Express

<sup>4</sup> Orange County Register, Los Angeles Daily News, The San Diego Union-Tribune, Houston Chronicle and Forth Worth Star-Telegram

**Table 2***Main Frame Use Differentiated By Political Leaning*

|                       | Liberal | Centrist | Conservative | Total % | Quantity |
|-----------------------|---------|----------|--------------|---------|----------|
| Criminalization       | 31.6    | 38.7     | 56.1         | 40.7    | 163      |
| Medicalization        | 24.4    | 16.8     | 16.7         | 20      | 80       |
| Conflict              | 15.5    | 16       | 7.9          | 13.5    | 54       |
| Victim                | 8.3     | 10.9     | 7.9          | 9       | 36       |
| Human interest        | 11.3    | 8.4      | 4.4          | 8.5     | 34       |
| Economic consequences | 4.8     | 4.2      | 3.5          | 4.2     | 17       |
| Responsibility        | 3.6     | 3.4      | 3.5          | 3.5     | 14       |
| Morality              | 0.6     | 0.8      | 0            | 0.5     | 2        |
| Stigma                | 0       | 0.8      | 0            | 0.3     | 1        |
| Total %               | 100     | 100      | 100          | 100     |          |
| Quantity              | 168     | 119      | 114          |         | 401      |

*Note.* The table shows the use of each of the nine investigated frames as the main frame of news articles published in Californian and Texan media outlets, differentiated by political leaning. The numbers are presented in percent and rounded to one digit after the decimal. The total quantities and the total percentages are also portrayed. Author's own calculations.

Pearson's  $\chi^2$  tests and Cramér's  $V$  calculations were performed to test the existence and potential strength of associations between the independent variables liberal, centrist and conservative media, and the dependent variables, the nine frames. The results are presented in table 3 down below.

Firstly, the hypotheses will be answered including all newspapers to provide a basis for the detailed subsequent contextualization. In the next step (chapter 9.2), the results of the hypothesis testing will be put into the context of California and Texas, in order to complete the picture. If differences in media framing of the opioid epidemic are found when assessing the outlets' political leanings, the same differences should be found in California and Texas. In case other differences are found when comparing Californian and Texan newspapers, a discussion will be needed to debate which state-level factors might have impacted the outcomes.

**Table 3***Pearson's Chi<sup>2</sup> and Cramér's V Calculations for Frame Use and Political Leaning*

| Frame                         | Chi <sup>2</sup> | p-value | Cramér's V |
|-------------------------------|------------------|---------|------------|
| Attribution of responsibility | 1.50             | 0.47    | 0.06       |
| Human interest                | 17.54            | 0.00    | 0.21       |
| Economic consequences         | 2.40             | 0.30    | 0.08       |
| Conflict                      | 6.43             | 0.04    | 0.13       |
| Morality                      | 0.00             | 1.00    | 0.00       |
| Criminalization               | 7.31             | 0.03    | 0.14       |
| Medicalization                | 16.50            | 0.00    | 0.20       |
| Stigma                        | 2.26             | 0.32    | 0.08       |
| Victim                        | 1.00             | 0.61    | 0.05       |

*Note.* The table shows the statistical calculations for each of the nine frames in regard to the media outlets' political leaning and regardless of the state they are published in. The p-value for the morality frame is 1 and Cramér's V is 0, as the frame was only detected in 7 out of 401 news items. Author's own calculations.

As mentioned earlier on, not all nine frames are mirrored in the hypotheses, due to the scope of this thesis. Instead, the frames promising the most intriguing results and those, which were proven by previous research to show differences based on political leaning of the media, were included.

Table 2 and table 3 are the basis for the following assessment of the hypotheses one through five. Hypothesis six will rely on separate calculations of the victim frame, which will be shown in chapter 9.1.6.

### **9.1.1 Use of the Criminalization Frame (H<sub>1</sub>)**

H<sub>1</sub> estimates that conservative newspapers use the criminalization frame more frequently than liberal newspapers. Thus H<sub>0</sub> states that conservative newspapers do not use the criminalization frame more frequently than liberal newspapers. As seen in table 3, the Pearson's chi<sup>2</sup> value when investigating this frame is 7.31 with a p-value of p=0.03, which is smaller than the significance level of p<0.05. H<sub>0</sub> can therefore be rejected and we can conclude that there is a

statistically significant relationship between the two variables political leaning of the media outlets and their use of the criminalization frame. The Cramér's V value is 0.14 and thus demonstrates a weak relationship. The statistical significance indicates that the assumed effect exists, but is rather weak. The practical results mirror that liberal newspapers use the criminalization frame as the main frame in 31.6% of the sample, centrist newspapers in 38.7% and conservative newspapers in 56.1%, thus underlining a clear difference in frame use based on the media's political partisanship. Conservative media outlets use the criminal justice frame more frequently than centrist and liberal ones.

### **9.1.2 Use of the Medicalization Frame (H<sub>2</sub>)**

The use of the medicalization frame was investigated through H<sub>2</sub>, stating that liberal newspapers use it more frequently than conservative newspapers. The chi<sup>2</sup> value of 16.5 with a p-value of p=0.00 lets us reject the corresponding null hypothesis H<sub>0</sub> indicating that liberal newspaper do not use the frame more frequently than their conservative counterparts. The association between the political leaning of the media outlets and the use of the medicalization narrative is thus statistically significant. The Cramér's V value of 0.2 indicates a moderate relationship between the two variables. When looking at the practical results, the accuracy of H<sub>2</sub> is reflected; liberal newspapers use the medicalization frame in 24.4% of the sample, while conservative ones use it in 16.7% and centrist newspapers in 16.8%. The medicalization frame is used more frequently in liberal media outlets than in centrist and conservative ones.

### **9.1.3 Use of the Human Interest Frame (H<sub>3</sub>)**

Similar statistical values have been detected when assessing H<sub>3</sub>, stating that liberal newspapers use the human interest frame more frequently than conservative newspapers. The chi<sup>2</sup> result of 17.54 with a p-value of p=0.00 again requires the rejection of H<sub>0</sub> specifying that liberal newspaper do not use the human interest frame more frequently than conservative ones. The relationship is statistically significant and, according to the Cramér's V value of 0.21, moderate. Since the investigated liberal media outlets use the frame in 11.3% of the news items and conservative ones in 4.4%, the statistical results are also mirrored in the practical outcomes. Centrist newspapers gave articles about the opioid epidemic a human face in 8.4% of the cases. Liberal media outlets thus use the human interest frame more frequently than centrist and conservative ones.

#### **9.1.4 Use of the Conflict Frame (H<sub>4</sub>)**

As seen in table 2, the conflict frame was the third most frequently detected frame overall. H<sub>4</sub> expects it to be used approximately to the same extent in liberal, centrist and conservative newspapers. The statistical tests demonstrate a chi<sup>2</sup> value of 6.43 with a p-value of p=0.04, thus letting us reject H<sub>0</sub>, which states that the conflict frame is not used to approximately the same extent in each group of newspapers. The Cramér's V value of 0.13 indicates a weak relationship between the political leaning of the media outlets and the use of the conflict frame. The statistical results, however, need to be put in relation to the practical results when looking at this hypothesis. The conflict frame was indeed used to almost the same extent in liberal (15.5%) and centrist (16%) newspapers, yet only half as frequently in conservative newspapers (7.9%). We can therefore conclude that a statistically significant association between political leaning and conflict frame use exists, but the premise that the frame is used similarly frequently in all three groups of newspapers does not hold up in the sample. Instead, a deviation of conservative media outlets in comparison to liberal and centrist ones can be documented. Hence, H<sub>4</sub> is rejected.

#### **9.1.5 Use of the Stigma Frame (H<sub>5</sub>)**

The stigma frame was investigated through H<sub>5</sub> stating that conservative newspapers use the stigma frame more frequently than liberal newspapers. The corresponding H<sub>0</sub> therefore expresses that conservative newspaper do not use the stigma frame more frequently than liberal newspapers, which we fail to reject based on the chi<sup>2</sup> value of 2.26 with a p-value of p=0.32, which exceeds the threshold value of p<0.05. The results in table 2 reflect this finding, as liberal and conservative newspapers use this frame so rarely that it accounts for 0% of the sample size in the two cases. Centrist newspapers use the stigma frame in only 0.8% of the articles. The Cramér's V value of 0.08 equals a weak relationship and almost complete independence of the two variables political leaning and stigma frame use. Neither a statistically significant association between the two variables, nor a representation of the stigma frame in the practical results could be found. H<sub>5</sub> is therefore rejected.

#### **9.1.6 Actors Presented as Victims or Perpetrators (H<sub>6</sub>)**

H<sub>6</sub> is concerned with actors involved in the use of the victim frame. It states that liberal and conservative newspapers' use of the victim frame differs in the subcategory of who is presented as the victim and the perpetrator. The corresponding null hypothesis H<sub>0</sub> thus indicates that

liberal and conservative newspapers' use of the victim frame does not differ in the two subcategories.

The opioid epidemic claims more than a hundred thousand victims each year (Centers for Disease Control and Prevention, 2023; Mann & Pattani, 2023; United Nations Office on Drugs and Crime, 2023) and previous research has found that, based on their political leaning, media outlets differ in which populations groups are framed as victims of the crisis and which ones are regarded as perpetrators harming other U.S. citizens.

Before looking at the subcategories within the frame, light should shortly be shed on the general presence of the victim frame in news items published within the sampled period of March 1<sup>st</sup> 2023 to July 31<sup>st</sup> 2023. As seen in table 2, the victim frame was used in a total of 9% of the investigated articles, in 8.3% of the liberal newspapers, 10.9% of the centrist newspapers and 7.9% of the conservative newspapers. It was hence used to approximately the same extent in all three groups of media outlets.

In order to investigate the hypothesis, cross tabulations were created for the variable of actors presented as victims (table 4) and the variable of perpetrators (table 5). The former variable highlights which population group is regarded to be mainly suffering from the opioid epidemic as a whole or from harmful actions of other citizens within the crisis. The latter variable underlines which actors are portrayed to be at fault for the harm experienced by the victims.

**Table 4***Actors Presented as Victims, Differentiated by Political Leaning*

|  | Liberal | Centrist | Conservative | Total % | Quantity |
|--|---------|----------|--------------|---------|----------|
| Teenagers/<br>students/<br>children              | 31.9    | 43.2     | 39.1         | 37      | 60       |
| Substance<br>users<br>regardless of<br>ethnicity | 20.8    | 25       | 19.6         | 21.6    | 35       |
| The U.S.<br>society                              | 15.3    | 9.1      | 17.4         | 14.2    | 23       |
| Local<br>communities                             | 9.7     | 2.3      | –            | 4.9     | 8        |
| Homeless<br>individuals                          | 4.2     | 2.3      | 4.4          | 3.7     | 6        |
| Non-White<br>substance<br>users                  | 2.8     | 2.3      | –            | 1.9     | 3        |
| White<br>substance<br>users                      | 1.4     | –        | 2.2          | 1.2     | 2        |
| Substance<br>user's families/<br>friends         | –       | –        | 2.2          | 0.6     | 1        |
| Other  | 12.5    | 15.9     | 15.2         | 14.2    | 23       |
| No information                                   | 1.4     | –        | –            | 0.6     | 1        |
| Total %  | 100     | 100      | 100          | 100     |          |
| Quantity   | 72      | 44       | 46           |         | 162      |

*Note.* The table shows the portrayal of actors presented as victims in Californian and Texan articles, in which the victim frame was detected, differentiated by the outlets' political leaning and regardless of the state the news item was published in. The numbers are presented in percent and rounded to one digit after the decimal. Additionally, the total percentages and the total quantities of each category are shown. Author's own calculations.

As shown in table 4 above, the most frequently emphasized victim in all three groups of news outlets are teenagers, students or children. Liberal newspapers presented them in 31.9% of the

articles, centrist newspapers in 43.2% and conservative ones in just slightly less, 39.1%. Young people are thus presented as victims in a total of 37% in the articles, in which a victim frame was detected. The second and third most frequent groups are substance users regardless of their ethnicity, totaling 21.6%, and the U.S. society as a whole, totaling 14.2%. Differences based on the media outlets' political leaning can also be seen within those two groups. Liberal newspapers (20.8%) presented substance users as victims slightly more frequently than conservative ones (19.6%), yet they were most often portrayed in centrist newspapers (25%). Both liberal media outlets (15.3%) and conservative ones (17.4%) portrayed the U.S. society as a victim in the opioid epidemic more often than centrist ones (9.1%).

In order to test whether the portrayal of victims is related to political leaning, Pearson's  $\chi^2$  and Cramér's  $V$  tests were performed. The Cramér's  $V$  value of 0.22 indicates a moderate relationship between the two variables, which is, however, statistically insignificant, due to the  $\chi^2$  value of 15,28 with a  $p$ -value of  $p=0.64$ .

Table 5 down below shows the frequency in which actors were identified as perpetrators within the articles making use of the victim narrative. The by far most commonly detected group presented as causing harm to other individuals were drug dealers, drug traffickers and cartels with almost half (48.8%) of the articles naming them as perpetrators. Liberal newspapers (55.6%) displayed this group to be at fault for the opioid epidemic substantially more frequently than centrist (40.9%) and conservative (45.7%) ones. The second most frequent category, substance users themselves, was only named in a total of 12.4% of the news items using the victim frame. What also stands out is the fact that prescribers, physicians and pharmaceutical companies are only blamed in a total of 9.3% and 6.8% of the cases, despite having had tremendous impact on the U.S. society's opioid dependency through excessive prescriptions and misleading marketing (Jones et al. 2018; Liu & Singer, 2023). Conservative newspapers (15.2%) blamed prescribers and physicians considerably more often than liberal ones (5.6%).

**Table 5***Actors Presented as Perpetrators, Differentiated by Political Leaning*

|  | Liberal | Centrist | Conservative | Total % | Quantity |
|--|---------|----------|--------------|---------|----------|
| Drug dealers/<br>traffickers/<br>cartels | 55.6    | 40.9     | 45.7         | 48.8    | 79       |
| Substance<br>users                       | 12.5    | 9.1      | 15.2         | 12.4    | 20       |
| Prescribers/<br>physicians               | 5.6     | 9.1      | 15.2         | 9.3     | 15       |
| Pharmaceutical<br>companies              | 8.3     | 6.8      | 4.4          | 6.8     | 11       |
| Policymakers                             | 1.4     | 2.3      | –            | 1.2     | 2        |
| Other                                    | 2.8     | 2.3      | 13           | 5.6     | 9        |
| No information                           | 13.9    | 29.6     | 6.5          | 16.1    | 26       |
| Total %                                  | 100     | 100      | 100          | 100     |          |
| Quantity                                 | 72      | 44       | 46           |         | 162      |

*Note.* The table shows the portrayal of actors presented as perpetrators in Californian and Texan articles, in which the victim frame was detected, differentiated by the outlets' political leaning and regardless of the state the news item was published in. The numbers are presented in percent and rounded to one digit after the decimal. Additionally, the total percentages and the total quantities of each category are shown. Author's own calculations.

The same statistical tests as for the victim variable were conducted for the variables of perpetrators and political leaning. They revealed a statistically insignificant association between the two variables. The Crámer's V value of 0.25 suggests a moderate relationship, but the chi<sup>2</sup> value of 20.77 with a p-value of p=0.05 again lies above the threshold level of p<0.05. These results let us fail to reject the null hypothesis, which states that liberal and conservative newspapers' use of the victim frame does not differ in the subcategory of who is presented as the victim and the perpetrator.

Hence, the statistical findings contradict the practical results from the coding process, which have, in fact, revealed a discrepancy between liberal, centrist and conservative newspapers in the portrayal of actors as victims or perpetrators. When assessing the use of the victim frame in the particular cases of news items published between March 1<sup>st</sup>, 2023 and July 31<sup>st</sup>, 2023 in Californian and Texan media outlets of different political leaning, the content

analysis itself revealed that liberal, centrist and conservative newspapers do in fact vary in the frequencies in which they present victims and perpetrators, but resemble each other in the actors generally named. A visualization in the shape of a graph of the victim and perpetrators variables can be found in appendix E.

When relating the results of the hypothesis testing to previous research, those concerning the criminalization frame mirror pre-existing studies stating that conservatism, racialized perceptions of drug users and the use of the criminal justice narrative are closely linked to each other (Kresovich et al., 2023; Shachar et al., 2020; Welhausen, 2023; Zell & Lesick, 2022). As Conservatives experience higher stigma towards opioid users than Liberals, which entails the demand for law enforcement interventions, and this stigma is often found in Republican-leaning media, the results concerning H<sub>1</sub> align with preexisting studies (Gollust & Miller, 2020; Orsini, 2017; Kresovich et al., 2023). Since studies have mostly been concerned with the assessment of the medicalization and criminalization frame in comparative approaches, the findings regarding the medicalization narrative in H<sub>2</sub> again mirror those of the previous research mentioned above. The medicalization narrative is predominant in less racialized news items, which, according to research, are Democratic or generally liberal-leaning ones (Shachar et al., 2020; Welhausen, 2023). Portraying the opioid crisis in a health context also leads to increased sympathy towards drug users (Shachar et al., 2020), just like the use of a humanized narrative does. We know from previous research that stigmatizing frames are found more frequently in conservative-leaning media. Articles diminishing stigma by increasing compassion through personalized stories are therefore more frequently detected in liberal media (Russell et al., 2019). The results concerning the human interest frame reflect this. When looking at the stigma frame itself, however, statements made by previous researchers are not mirrored, as this frame was statistically and practically proven to be insignificant in all three types of media outlets in the sample.

In conclusion, we can state that liberal, centrist and conservative U.S. newspapers in the sample differ in their use of the criminalization, medicalization and human interest frame. Conservative media outlets make use of a criminal justice narrative more frequently than their liberal counterparts, while those shed more light on aspects of medical procedures and humanized stories of those affected by the crisis. The conflict frame was expected to be used to approximately the same extent in all three groups of newspapers. The practical results prove this assumption to be true for liberal and centrist ones, while the conservative ones make use of it less frequently. The relationship between the stigma frame and the media's political leaning is, however, statistically significant. No significant association could be found for the stigma frame and the actors within the victim frame in relation to media bias. Conservative and liberal

newspaper do not vary in their use of the stigma narrative. They do, nevertheless, present victim and perpetrator groups in different frequencies in the actual sample.

These results will serve as the foundation for the following contextualization of potential state differences between California and Texas, which will then be considered in the face of a bigger picture in the discussion chapter. The aim of this procedure is to test if the outcomes of the hypothesis testing, which prove a difference in media framing based on media outlets' partisanship, actually only build on political leaning or if they are context-bound in terms of state differences.

## 9.2 Contextualization

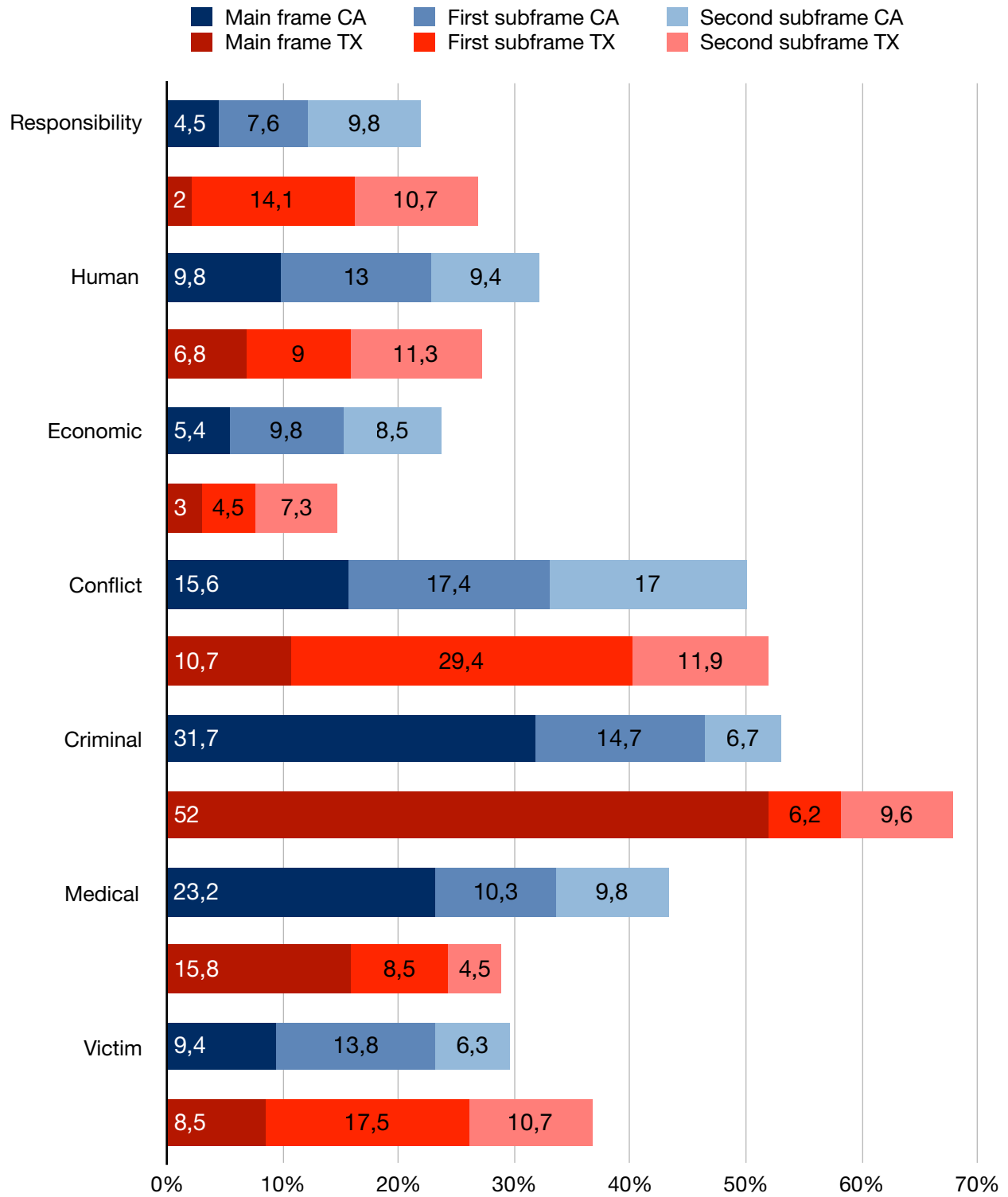
This thesis does not only aim to assess media framing of the U.S. opioid epidemic in relation to media outlets' political leaning, but also intends to fill the research gap of lacking contextualization within contrasting states. This will provide a more holistic overview of potential political- and societal-level factors, purposely or subconsciously, coming into play with media reporting on this particular drug crisis. As described in chapter XII, these factors include, for instance, state governance, state laws related to prescription practices, health insurance and demographics.

Figure 2 in chapter IX and figure 3 down below have the purpose of showing overviews of the general frame use in newspapers of different political leaning and in different states. These two figures therefore include both, the main frame and up to two potential subframes found in the articles. All other tables and analyses are based on the main frame use only, to assess which narrative is dominant in the specific cases. This is important since not every article presented subframes, the main narrative was, however, coded for each news item.

A comparative overview of the main frame and subframes used in Californian and Texan news outlets, regardless of their political leaning, is provided in figure 3 down below. This figure aims to provide a first general overview of state difference in media framing. A more detailed analysis will follow in the next subchapters.

**Figure 3**

*Predominant News Frames, Differentiated by State*



*Note.* The chart shows the use of the respective frames as the main frame or as subframes, differentiated by state, shown in percent and rounded to one digit right of the decimal. Californian newspapers are presented in shades of blue, Texan ones in shades of red. The frame titles and states are abbreviated for better visibility. The morality frame and the stigma frame were excluded from the visualization, as the values were too low to be clearly arranged. The values for the morality frame are the following: 0.5% as the main frame, first subframe and second subframe each in the Californian sample; 0.6% as the main frame and second subframe in Texan newspapers and 0% as the first subframe. The values for the stigma frame are the following: California – 0% (main frame), 0.9% (first subframe), 4.5% (second subframe); Texas – 0.6% (main frame), 2.3% (first subframe), 3.4% (second subframe).

Both, Texan and Californian newspapers predominantly use the criminalization and the conflict frame, in a total of at least half of the investigated articles. A clear difference can be seen in the criminal justice narrative, which was used almost 15% more frequently in Texan news reporting than in Californian and, particularly noteworthy, in 20% more cases as the news item's main frame. The conflict frame was utilized to approximately the same extent. A remarkable contrast can also be observed in the use of the medicalization frame. Californian newspapers used this narrative in almost 15% more articles than Texan newspapers.

When testing whether the two variables main frame use and state are related, the  $\chi^2$  value of 19.80 with a p-value of  $p=0.01$  revealed a statistically significant association, which is moderate according to the Cramér's V value of 0.22. The values for the relationship between the variables first subframe and state are similar ( $\chi^2=21.48$ ,  $p=0.01$ , Cramér's  $V=0.23$ ), thus also indicating a statistically significant association. The relationship between the second subframe and the state is insignificant ( $\chi^2=10.02$ ,  $p=0.35$ , Cramér's  $V=0.16$ ). The most relevant variable for this analysis is, however, the main frame use, which will be investigated more detailed in the next section.

## 9.2.1 Main Frame Use and Political Leaning in California and Texas

**Table 6**

*Main Frame Use in Californian Newspapers, Differentiated by Political Leaning*

|                       | Liberal | Centrist | Conservative | Total % | Quantity |
|-----------------------|---------|----------|--------------|---------|----------|
| Criminalization       | 26.9    | 33.3     | 43.5         | 31.7    | 71       |
| Medicalization        | 26.9    | 8.3      | 28.2         | 23.2    | 52       |
| Conflict              | 16.2    | 20.8     | 8.7          | 15.6    | 35       |
| Human interest        | 10      | 14.6     | 4.4          | 9.8     | 22       |
| Victim                | 10.8    | 10.4     | 4.4          | 9.4     | 21       |
| Economic consequences | 5.4     | 6.3      | 4.4          | 5.4     | 12       |
| Responsibility        | 3.1     | 6.3      | 6.5          | 4.5     | 10       |
| Morality              | 0.8     | 0        | 0            | 0.5     | 1        |
| Stigma                | 0       | 0        | 0            | 0       | 0        |
| Total %               | 100     | 100      | 100          | 100     |          |
| Quantity              | 130     | 48       | 46           |         | 224      |

*Note.* The table shows the use of each of the nine investigated frames as the main frame of news articles published in Californian media outlets, differentiated by political leaning, and the total percentages regardless of political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.

The most predominant main frame in Californian newspapers was the criminalization narrative, which was used in a total of 31.7% of the articles, followed by the medicalization frame (23.2%) and the conflict frame (15.6%). The human interest frame and the victim narrative were used to approximately the same extent, just like the economic consequences and attribution of responsibility frame. The morality and stigma narratives both played an irrelevant role in the Californian sample.

**Table 7***Main Frame Use in Texan Newspapers, Differentiated by Political Leaning*

|                       | Liberal | Centrist | Conservative | Total % | Quantity |
|-----------------------|---------|----------|--------------|---------|----------|
| Criminalization       | 47.4    | 42.3     | 64.7         | 52      | 92       |
| Medicalization        | 15.8    | 22.5     | 8.8          | 15.8    | 28       |
| Conflict              | 13.1    | 12.7     | 7.4          | 10.7    | 19       |
| Victim                | 0       | 11.3     | 10.3         | 8.5     | 15       |
| Human interest        | 15.8    | 4.2      | 4.4          | 6.8     | 12       |
| Economic consequences | 2.6     | 2.8      | 2.9          | 2.8     | 5        |
| Responsibility        | 5.3     | 1.4      | 1.5          | 2.3     | 4        |
| Morality              | 0       | 1.4      | 0            | 0.6     | 1        |
| Stigma                | 0       | 1.4      | 0            | 0.6     | 1        |
| Total %               | 100     | 100      | 100          | 100     |          |
| Quantity              | 38      | 71       | 68           |         | 177      |

*Note.* The table shows the use of each of the nine investigated frames as the main frame of news articles published in Texan media outlets, differentiated by political leaning, and the total percentages regardless of political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.

The three most predominant main frames in Texan newspapers mirror the order of the Californian ones, they were, however, used to different extents. The criminalization frame dominates much more in the Texan sample (52%) than it does in the Californian sample (31.7%), as the second most frequently used narrative, the medicalization frame, was applied in 15.8% of the Texan articles, showing a considerable gap between the criminalization frame and all others. The conflict frame, the third most common narrative, was used in 10.7% of the news items published in Texan media outlets. Just like in the Californian sample, the victim frame and the human interest frame were applied in approximately the same amount of cases, just like the economic consequences and the attribution of responsibility narratives. Again, the morality frame and the stigma frame were rarely detected.

Newspapers in California and Texas thus use the same narratives as the main frame and do so in nearly the same amount of articles. A difference can be, however, noted in the use of the criminal justice frame, which was the dominant narrative in both states, but used in more than half of the Texan articles, while it was only used in a little more than a third of Californian

news items. Californian media outlets applied the medicalization frame notably more often than their Texan counterparts. Overall, the frame use, disregarding the newspaper's political leanings, is mostly similar in both states, especially in the order of prevalence in which they appear. This finding hints towards the conclusion that the differences in frame use detected in chapter 9.1 may be due to media partisanship rather than state differences. This implication will be further debated in the following discussion chapter.

### **9.2.2 Relating Contextualization and Hypothesis Testing**

As mentioned above in chapter 9.2, the  $\chi^2$  tests revealed a significant association between main frame use and state ( $\chi^2 = 19.80$ ,  $p = 0.01$ , Cramér's  $V = 0.22$ ). When putting the hypothesis testing and the contextualization in relation to each other, we can note that the differences in main frame use based on political leaning remain, even when the state context is considered. The test of  $H_1$  concerning the criminalization narrative found that conservative newspapers use it more frequently than centrist and liberal ones. As seen in tables 6 and 7, this contrast remains present when assessing California and Texas specifically. Californian conservative media outlets make use of the frame in 43.5% of the articles (centrist: 33.3%, liberal: 26.9%), while Texan ones do so even more frequently, in 64.7% of news items (centrist: 42.3%, liberal: 47.4%).

The findings confirming  $H_2$  that the medicalization frame is used more commonly in liberal newspapers than in conservatives ones hold up in the Texan sample. Liberal Texan media (15.8%) use it noticeably more frequently than the conservative counterparts (8.8%). In the Californian context, the hypothesis testing is not sustained, as liberal news media (26.9%) and conservative media outlets (28.2%) use the medicalization narrative to approximately the same extent. The differences in the usage of this narrative hint towards an effect of political leaning in the context of Texas, they are, however, due to more factors in the Californian context. Potential reasons for this will be debated in the discussion chapter.

The differences found when assessing partisanship during the testing of  $H_3$ , concerned with the human interest frame, are still present when contextualizing them. The hypothesis' results stated that liberal newspapers use the narrative more frequently than conservative ones, which is mirrored in the Texan (liberal: 15.8%, conservative: 4.4%) and Californian sample (liberal: 10%, conservative: 4.4%).

$H_4$  states that the conflict frame was used to the same extent in all three newspaper types. Although the p-value indicated statistical significance, the hypothesis was rejected, as the practical results did not reflect it in the sample. Liberal and centrist newspapers used the frame approximately to the same degree, but conservative ones made use of it in only half as many articles. This finding is partially mirrored in the Californian (liberal: 16.2%, centrist: 20.8%,

conservative: 8.7%) and Texan context (liberal: 13.1%, centrist: 12.7%, conservative: 7.4%), where the three types of media outlets did not employ the conflict narrative to the same extent.

Likewise, the results of H<sub>5</sub> concerning the stigma frame are still relevant when considering the contextualization. They stated that, contrary to the hypothesis, conservative newspapers do not use the stigma frame more frequently than liberal ones. Instead, the frame was almost equally absent from all media outlets. The stigma narrative was missing from all Californian articles and only present in 1.4% of Texan centrist ones.

The last hypothesis, H<sub>6</sub>, stating that liberal and conservative newspapers differ in the subcategory of who they present as victim and perpetrators, was rejected. When contextualizing the findings by looking at the distribution of the actor categories within the victim frame in Californian and Texan articles, the order of frequencies remain the same in all four cases: victims in Californian media, victims in Texan media, perpetrators in Californian media and perpetrators in Texan media. Tables 10, 11, 12 and 13 in appendix F show the percentages of victims and perpetrators differentiated by political leaning and state.

The most commonly named victims, in both states, persist to be teenagers/students/children, substance users regardless of their ethnicity and the U.S. society as a whole. However, in the Californian sample, liberal newspapers portray teenagers/students/children as victims more often than conservatives ones do, while those present substance users as victims more frequently than their liberal counterparts. What is noteworthy in the Texan sample is that substance users are not at all presented as victims in conservative media. Nevertheless, this category still remains the second most commonly detected one when including the state variable, just like the results of H<sub>6</sub> found.

When contextualizing the outcomes of the perpetrator variable, the most frequently named actors when testing political leaning remain in the same order when adding California and Texas to the analysis. Conservative Californian media surpass liberal ones in the portrayals of drug dealers/traffickers/cartels as perpetrators, while substance users are not at all considered in conservative media in California. The opposite is true for the Texan sample; drug dealers are most commonly named as perpetrators in liberal and centrist media rather than in conservative media, while the latter portray substance users and prescribers more frequently as causing harm than liberal and centrist newspapers.

Although some percentages change when adding the state context, the general findings of the hypothesis testing, stating that conservative and liberal media do not differ in the subcategories of victims and perpetrators, are mirrored in the contextualization. All three types of media outlets in both states present the same actors, they simply do so in slightly differing frequencies. Therefore, we can conclude that, overall, no differences in the victim frame due to

political leaning could be found, but that some small variations between different media types in California and Texas were detected.

In conclusion, the results found when assessing the criminalization (H<sub>1</sub>), human interest (H<sub>3</sub>), conflict (H<sub>4</sub>) and stigma frame (H<sub>5</sub>) are fully mirrored in the contextualization. The differences and similarities found in the analysis of political leaning's effect on media frames remain the same when embedding them in the context of California and Texas. The outcomes regarding the medicalization (H<sub>2</sub>) and victim frame (H<sub>6</sub>), too, stay present in the state samples with some of the values increasing or decreasing, which, nevertheless, has no impact on the total proportions. We can therefore summarize that the hypothesis testing may hint towards a potential impact of the media's political leaning contrasts on framing and the contextualization has proven that these are not based on state differences.

### **9.2.3 Main Frame Use Excluding the Largest News Outlets**

Before discussing potential reasons for the impact of political leaning on media frames and the insignificance of state differences, it needs to be ensured that these outcomes are not biased through the dominance of large newspapers in the sample. The analysis includes a broad range of 16 Californian and Texan newspapers, in order to draw a picture as holistic as possible of media framing in the opioid epidemic. Some of the investigated media outlets can, nevertheless, be considered national players, while others have a strong regional focus. Additionally, these large newspapers contribute larger numbers of articles to the total sample size, which makes it essential to assess main frame usage when excluding those. The following subchapter aims to investigate if the results of the previous framing analysis change when only media outlets are included, which mostly focus on reporting within each state.

Table 8 down below demonstrates the results when precluding the two largest newspapers from each state. The Los Angeles Times, which makes up 12.2% of the total sample, and San Francisco Chronicle (11%) were removed from the Californian sample. Fort Worth Star-Telegram (13.7%) and Dallas Express (13.2%) were excluded from the Texan sample.

**Table 8***Main Frame Use Excluding the Four Largest Newspapers*

|                       | California all | California excluding L.A. Times & S.F. Chronicle | Texas all | Texas excluding Dallas Express & F.W. Star-Telegram |
|-----------------------|----------------|--|-----------|---|
| Criminalization       | 31.7           | 36.6   | 52        | 44.9  |
| Medicalization        | 23.2           | 18.3   | 15.8      | 17.4  |
| Conflict              | 15.6           | 13.7   | 10.7      | 17.4  |
| Human interest        | 9.8            | 10.7   | 6.8       | 11.6  |
| Victim                | 9.4            | 9.2  | 8.5       | 0   |
| Economic consequences | 5.4            | 6.1  | 2.8       | 4.4   |
| Responsibility        | 4.5            | 5.3  | 2.3       | 4.4   |
| Morality              | 0.5            | 0  | 0.6       | 0   |
| Stigma                | 0              | 0  | 0.6       | 0   |
| Total %               | 100            | 100  | 100       | 100   |
| Quantity              | 224            | 131  | 177       | 69  |

*Note.* The table shows a comparison between main frame use in all Californian and Texan newspapers and in Californian newspapers excluding the Los Angeles Times and the San Francisco Chronicle, as well as Texan newspapers excluding the Dallas Express and the Fort Worth Star-Telegram. The numbers are presented in percent and rounded to one digit after the decimal. Additionally, the total quantities are portrayed. Author's own calculations.

As seen in row one, the percentages do in fact change, specifically when looking at the criminalization frame. When excluding the L.A. Times and San Francisco Chronicle, the frame use increases from 31.7% to 36.6% in the Californian sample. Meanwhile, the opposite occurs in the Texan sample, where the criminal justice narrative decreased from 52% to 44.9% when excluding Fort Worth Star-Telegram and Dallas Express. Similar developments can be noted for the medicalization and conflict frame, which all decreased in the Californian sample and increased in the Texan sample. What is particularly striking is the victim frame's drop from 8.5% to 0% when excluding the two largest newspapers in Texas, thus demonstrating that this narrative was only employed in Dallas Express and Fort Worth Star-Telegram articles. Consequently, the smaller Texan media outlets are not at all concerned with portraying actors as victims within the crisis.

The four large media outlets mentioned above nonetheless represent important parts of the media landscapes in the two states and the United States generally, as they reach an estimated combined audience of more than 40 million citizens monthly (Harvard University, 2021; McClatchy, n.d.-b). The results including all investigated newspapers are thus critical when answering the research question concerning the contextualization of the hypotheses: How do Californian and Texan newspapers differ or resemble each other in their framing of the opioid epidemic?

Ensuring that the results concerning the hypothesis testing are not majorly impacted by the predominance of the above-mentioned four large newspapers, and that the findings do not significantly change when excluding them, is, nevertheless, crucial to be able to conclude that the differences in framing can be traced back to the media's political leaning and not to state differences.

#### **9.2.4 Sources and Opioids**

The last variable, which might hint towards the significance of contrasts in state governance, could be the sources referred to in the articles. A look should thus be taken at the use of the main sources, in order to possibly and ultimately rule out the chance that the variations in media frames found in the hypothesis testing are based on state differences.

Both, Californian (31.7%) and Texan (29.4%) media outlets used either the state government or local governments as their main source in the majority of news items and did so to approximately the same extent. Since California is a traditionally Democratic state and Texas has been under Republican rule for decades, the information the contrasting state governments share with the media might vary, which could ultimately impact framing effects. As mentioned in chapter 4.2, previous research has proven that individuals relying on Republican sources for health information experience higher opioid use disorder stigma and increased backing for discriminatory anti-drug policies than those do who turn to Democratic sources. Stigma towards substance users then, in turn, impacts lawmakers capability to gather public support for harm-reduction policies and life-saving medications, such as naloxone (Kresovich et al., 2023). The predominance of Republican sources in media reporting may therefore have indirect, but ultimate impact on the crisis' severity and harmful consequences for the U.S. society as a whole.

The second most frequently named source in both states was the police, which was referred to in 20.5% of the Californian articles and 26% of the Texan ones. A noteworthy difference is the use of the Drug Enforcement Administration as the third most predominant source (13.6%) in Texan media reporting, while it was only referred to in 5.4% of the Californian cases. The DEA is a law enforcement authority, which aims at "combating criminal drug

networks bringing harm, violence, overdoses, and poisonings to the United States” (Drug Enforcement Administration, n.d.-a). Unlike the police, whose remit goes beyond criminal prosecution, operations conducted by the DEA are almost exclusively linked to law enforcement and criminal charges, thus inevitably contributing to a criminalization narrative when being discussed in the media.

The federal government was named as the main source in approximately 8% of both, Californian and Texan newspapers. Health departments and other health care related institutions, such as the CDC, the FDA, pharmaceutical companies and non-profit organizations, only played minor roles in both states and did so to nearly the same extent.

Both states therefore predominantly make use of the same sources, indicating that, once again, framing of the opioid epidemic is not based on state differences, but rather on the media’s political leaning.

The main opioid mentioned in 64.3% of the Californian articles and 79.7% of Texan articles was fentanyl. These clear majorities once more highlight its lethality and the chokehold this illicit substance has on the country. The opioid antidote naloxone was mentioned in 13.8% of the Californian sample and in 7.3% of the Texan one, hinting again towards a larger emphasis on medicalization in Californian news coverage. The third most frequently named opioids were oxycodone in California (5.4%) and heroin in Texas (4.5%). Other types of narcotics were rarely mentioned.

### **9.2.5 Answer to the Research Question**

We recall the research question we aim to answer in order to contextualize the results concerning differences in media framing based on news outlets’ partisanship: How do Californian and Texan newspapers differ or resemble each other in their framing of the opioid epidemic?

California’s and Texas’ reporting on the opioid crisis largely resemble each other. The same three narratives are used as the predominant main frames in both states. In the same descending order concerning frequency, these are the criminalization, medicalization and conflict frame. Californian and Texan newspapers do not only mirror one another in these top three narratives, but in the use of all nine investigated generic and issue-specific frames, such as the economic consequences and attribution of responsibility narrative. A slight difference can be noted, as the victim frame is the fourth most frequent and the human interest frame the fifth most frequent frame in the Texan sample, while the order is reversed in the Californian sample. The percentage share of the two frames are nevertheless rather similar, ranging in all four cases from 6.8% to 9.8%. The morality and stigma narratives are almost equally rare in both states.

Further resemblance could be found in the sources mentioned in the articles. The two most commonly mentioned sources in both states were the state or local government and the police. California and Texas differ, however, in their frequency of references to the DEA, which was named in only 5.4% of the Californian sample, but in 13.6% of the Texan one.

This distinction might explain the variation in the predominance of the criminal justice narrative, which was the major difference between the two states found in the analysis. News media in Texas used the criminalization frame as its main narrative in 52% of the articles, a staggering 20% more than in Californian media (31.7%). The latter, in turn, used the medicalization frame more commonly (23.2%) than newspapers in Texas (15.8%). This finding in state differences concerning these two narratives aligns with the results of H<sub>1</sub> and H<sub>2</sub>, which demonstrated that conservative media use the criminal justice frame more frequently than liberal ones, while those use the medicalization frame more often. It can be argued that the conservative Republican influence in Texas and the more liberal Democratic influence in California impact each state's media reporting on the opioid crisis. This might partially be explained by the use of the respective state governments as the main source in the majority of articles.

Overall, we can nevertheless conclude that media frames of the current drug epidemic in California and Texas resemble each other in almost all measured aspects and that the framing differences found in chapter 9.1 cannot be traced back to the state context.

## **X Discussion**

### 10.1 Summary of the Results

This thesis aimed to assess if media frames of the opioid epidemic differ or resemble each other in news outlets of different political leaning and from two contrasting states, California and Texas. The potential impact of partisanship on framing was investigated through hypothesis testing, the results of which were then contextualized by adding the two state variables to the statistical analyses. The results indicate that liberal and conservative media differ in their use of the five generic and four issue-specific frames. I proposed two explanations for the potential differences: the media's partisan bias and societal and political contrasts between California and Texas. The contextualization of the outcomes concerning the hypotheses proved that the differences may be traced back to political leaning, although we cannot conclude which factors exactly have resulted in the patterns. We can, however, rule out state differences as a potential explanation for differences in media framing of the opioid crisis.

In summary, the results of the hypothesis testing found significant differences in media framing of the opioid crisis when assessing the media's political leaning, especially regarding the most frequently used narratives criminalization, medicalization and human interest. These results indicate a potential role of partisan media bias, but do not allow the conclusion that the patterns are in fact based on it, they only may be. This will be further discussed in chapter 10.3.1. When contextualizing the findings, in order to assess whether state level contrasts might alter them, the outcomes concerning four (H<sub>1</sub>, H<sub>3</sub>, H<sub>4</sub> and H<sub>5</sub>) of the six hypotheses fully hold up. Even when taking the four largest newspapers out of the analysis, the differences found when investigating political leaning remain the same, suggesting the geographical locations of the newspaper do not matter for media framing of the opioid crisis.

The assumption that liberal newspapers use the medicalization narrative more frequently than conservative ones was proven in the hypothesis testing of H<sub>2</sub>. When adding the state context, however, the order was reversed for the Californian sample. Californian right-leaning news outlets using this frame more often than left-leaning ones conflicts previous research stating that conservative media commonly display drug crises in the light of criminal justice and public safety rather than health care interventions (Kresovich et al., 2023; Orsini, 2017; Shachar et al., 2020). The overall predominant use of the medicalization frame in the analysis, nonetheless, confirms the common consent of previous studies that the opioid epidemic generally marks a unique narrative shift from criminal justice to public health in comparison to past drug crises (Ferguson & Eliasson, 2022; Orsini, 2017; Wu, 2023; Shachar et al., 2020; Welhausen, 2023).

The outcomes of H<sub>6</sub>, asserting that newspapers of different political leaning vary in which actors they present as victims and perpetrators, is mostly reflected in the contextualization, yet the exact percentages slightly shift. The order of the most predominant victims and perpetrators remains unchanged in both, California and Texas.

## 10.2 Predicted Outcomes and Actual Outcomes

After a thorough review of previous research, I predicted to find significant differences in media framing of the opioid epidemic when taking the news outlets' political leaning into account, but I also expected the impact of state differences to be much more significant, since California and Texas generally reflect liberalism and conservatism, and studies have shown that partisanship does in fact matter for citizens' support of harm reduction efforts (Gollust & Miller, 2020). Studies have also shown that Conservatives experience higher stigma towards opioid users than Liberals, which is reflected in stigmatizing news reports (Kresovich et al., 2023). The hypothesis testing and the contextualization have both, however, proven the absence of the stigma frame

from all types of media outlets in both states. This challenges previous research stating that stigmatizing frames were continuously detected in the form of racialized portrayals of substance users (Cameron Wild et al., 2019; Gollust & Miller, 2020; Johnston, 2020; Kresovich et al., 2023; Shachar et al., 2020; Webster et al., 2020; Welhausen, 2023). No significant presence of the stigma narrative was identified in this thesis' analysis. This might be due to a continuous narrative shift in media reporting on drug issues. Past drug crises, such as the crack cocaine one, have been presented in the light of weak-minded substance users much more frequently than the current opioid epidemic. A broad shift in narratives surrounding drug use can be acknowledged, focusing progressively more often on treatment, harm reduction and health care (Orsini, 2017). The previous studies concerned with stigmatizing frames are only several years old, yet the opioid crisis is a quickly advancing phenomenon and the fast-paced media environment might quickly catch up to changes in the public discourse. Additionally, prescription opioids play a major role in today's substance misuse, possibly leading to public perceptions of opioid users as innocent victims of profit-driven pharmaceutical companies and ruthless prescribers, rather than stigmatized individuals using illicit street drugs.

Generally speaking, however, this analysis confirms previous studies in their main findings: the opioid crisis is predominantly framed as a public health issue showing empathy for substance users (Ferguson & Eliasson, 2022; Raychaudhuri et al., 2023; Russell et al., 2019; Shachar et al., 2020; Welhausen, 2023; Wu, 2023) or in the light of criminal justice (Cameron Wild et al., 2019; Orsini, 2017), dependent on the news outlet's political leaning.

## 10.3 Potential Reasons for the Results

### 10.3.1 Editorial Pages and News Pages

The results of the analysis indicate that state-level differences between California and Texas do not impact media framing of the opioid crisis. They rather hint towards a potential impact of the newspapers' political leaning on the different patterns found between liberal, centrist and conservative newspapers, regardless of the state. We cannot, however, conclude that this factor actually explains the differences, only that it might play a part in it.

It is arguable whether or not the results represent the newspapers' true political affiliation, as a publication's news section may not necessarily fully reflect the political stances expressed on the editorial page. Although editorials are primarily used to endorse political candidates during times of election campaigns, past research has shown that "the editorial column sets the tone for the rest of the newspaper" (Firmstone, 2019), regardless of whether the effect is intentional or not. Researchers have highlighted the role of editorial pages on newspapers' internal news agendas (Firmstone, 2019). For this reason, the results, based on

the categorization of the newspapers according to their editorial positions, are interpreted under the premise that they reflect the newspapers' political leaning.

Overall, it is crucial to take into account that there are other aspects apart from the newspapers' political leaning and the investigated state-level differences which might influence how the opioid crisis is portrayed in the news, especially in today's fast-paced, diverse media environment. Future research may be interested in extending this analysis by deep-diving into the role of media partisanship in framing of drug crises and by taking

One could also consider that 11 of the 16 newspapers investigated in this analysis are owned by the large national media organizations Gannett, Hearst, Digital First and The McClatchy Company, who dominate the U.S. media industry and might push their political agendas onto their local newspapers, potentially resulting into differences in media framing between their publications. The Mercury News, Orange County Register and Los Angeles Daily News are in ownership of Digital First Media (MediaNews Group, n.d.), while The San Francisco Chronicle, Houston Chronicle and San Antonio Express-News belong to Hearst (Hearst, n.d.). The McClatchy Company owns the Fresno Bee and Forth Wort Star-Telegram (McClatchy, n.d.) and Gannett is in ownership of Austin American-Statesman, Corpus Christi Caller-Times and The El Paso Times (Gannett, 2023). The influence of owners over long periods of time may trigger the outlets to have political agendas themselves. Years, or even decades, of liberal or conservative ownership might form perceptions of drug regulations, public health policies and government intervention within the newspapers themselves, leading them to emphasize certain aspects or solutions in line with their corporate ideological positions.

### **10.3.2 Audience Preferences**

Conservative and liberal ideologies often reflect societal values, which, in the United States, are often influenced by religious beliefs. These underlying differences may naturally create differing portrayals of issues around addiction, individual responsibility of substance users, health care and law enforcement. Left-leaning and right-leaning media often cater to different audiences with different preferences. They might therefore frame issues in ways resonating with their respective audience to maintain readership loyalty and trust. Since the same differences were found in Californian and Texan newspapers, the results may indicate that both states serve similar audience demographics with comparable interests, concerns, and ideological values, leading to similar framing of the opioid epidemic in ways that echo their shared audiences' positions. Despite variations in state policies, there might be a broader regional consensus or common understanding of opioid use disorder and substance users within the Southwestern United States, including California and Texas. The two states may share certain cultural beliefs and attitudes concerning opium dependency, health care interventions and public safety. This

regional consensus could influence how the epidemic is perceived in both states and how local media outlets frame the crisis, resulting in similarities in news reporting. Furthermore, despite any differing policy approaches, local newspapers within each state might focus predominantly on regional or community-specific aspects of the opioid epidemic, as it was also recognized during the coding process. These localized factors could overshadow broader state-level administrative divergences, leading to the insignificance of state differences for media framing.

### **10.3.3 Polarization**

A progressively worsening issue in the United States is societal and political polarization. Polarized audiences choose media in line with their predispositions. Selective exposure and political polarization then mutually prompt each other, leading to a continuous cycle (Kim, 2015; Mokherian et al., 2020). This may somewhat align with audience preferences, as liberal readers choose and expect liberal news reporting, while conservatives want to read more conservatives articles. This might then again raise the impact of political leaning on media frames.

### **10.3.4 National Trauma**

One might argue that media reporting is similar in California and Texas, as it reflects a national trauma concerning the opioid epidemic. However, as just elaborated, the vast majority of articles focuses on local stories, which objects this assumption and again hints in favor of the conclusion that the contrasts in frames may be due to political leaning. Moreover, the fact that Californian and Texan articles are similar, although the stories are locally focused, might underline the severity of the crisis and proves that it has penetrated all social strata, all states and every local community.

### **10.3.5 Sources**

The analysis of sources has found that the most predominantly used one is the state government in both, California and Texas. Considering the contrasts in government and state laws concerning prescription guidelines mentioned in chapters two and seven, one might argue that relying on information of the state government leads to differences between Californian and Texan articles, which, nevertheless, the results have disproven. This again favors the potential importance of political leaning on media framing.

### **10.3.6 Journalistic Norms and Practices**

Lastly, journalistic norms and practices can shape how news stories are reported and framed regardless of geographical location. Journalists in California and Texas may adhere to similar professional standards, leading to consistent framing of the opioid epidemic based on objective criteria rather than regional biases. Local newspapers in both, California and Texas, may comply to similar journalistic norms regardless of state-level policy differences. Professional standards, editorial priorities and ethical guidelines within the profession of journalism could contribute to consistent media framing across both states.

## 10.4 Limitations of the Analysis and Implications for Future Research

A major limitation of this study is the fact that its design does not allow the conclusion of which factors actually do impact the differences found in liberal, centrist and conservative newspapers and the similarities found between Californian and Texan media. It only permits the exclusion of the above-mentioned state-level factors as an explanation. Future research could therefore dive deeper into a content analysis aimed at detecting mechanisms of newspapers' political leaning responsible for differences in media framing of the opioid epidemic. Research departing from the findings of this analysis, indicating that the patterns cannot be explained by the state-level factors investigated in this thesis, could primarily focus on an extended assessment of the media's political leaning in relation to framing and look into other potential state differences between California and Texas or even other U.S. states. Another limitation to the analysis is the possibility that differences in media framing due to political leaning within newspapers may have been more pronounced and easily detectable in my study, while factors influencing similarities between California and Texas might not have been fully captured or examined. This leads to the implication for future research that a more detailed analysis, focusing specifically on regional dynamics, audience preferences and journalistic practices within each state, could provide further insights. The results are interpreted under the premise that they correctly reflect the newspapers' political leaning, a categorization which has been made based on the editorial positions expressed. Although previous research suggests that the publications' new pages reflect the partisanship of the editorials (Firmstone, 2019), it cannot be guaranteed that this is precisely the case for all the investigated newspapers.

Additionally, the sample size of  $n=401$  articles can be viewed to be on the smaller end of the spectrum. The number was chosen due to the scope of this thesis and because it includes all news items retrieved from the search of all keywords within the sampled time frame. The aim of the analysis was to provide an insight to media framing during the peak of the crisis in May 2023, including the two following months and the two months leading up to it. Adding another four weeks on each side of the timeline would have distorted the desired picture. Furthermore, a

large number and broad range of news outlets was chosen to create a sample as representative as possible.

A natural limitation to the method of quantitative content analysis is the inevitably subjective evaluation and interpretation of frames, despite closely following the guidelines defined by the codebook. The intracoder reliability with an average Cohen's kappa value of 0.84 showed an almost perfect agreement, yet future research could assess the codebook's applicability through an additional intercoder reliability test. Robert Entman (1993), too, names limitations to the method of content analysis, as, according to him, coders may neglect the salience of frames. "Often, coders simply tote up all messages they judge as positive and negative and draw conclusions about the dominant meanings. [They] fail to gauge the relationships of the most salient clusters of messages [...] to the audience's schemata. Unguided by a framing paradigm, content analysis may often yield data that misrepresent the media messages that most audience members are actually picking up" (Entman, 1993:57).

## 10.5 Concluding Remarks on the Results and Generalizability

Through the hypothesis testing, we can conclude that liberal and conservative media differ in their use of the most frequent frames criminalization, medicalization, human interest and conflict, while they do not differ in the stigma and victim narrative. Left-leaning newspapers make use of the medicalization, human interest and conflict frame more commonly than conservative ones, while the latter predominantly use the criminal justice frame in their articles. These differences remain present when embedding the results in the context of California and Texas. The contextualizing research question 'How do Californian and Texan newspapers differ or resemble each other in their framing of the opioid epidemic?' can clearly be answered by stating that they resemble each other in the frequency of frame use, as well as in the subcategories of actors presented as victims or perpetrators, main sources and opioids mentioned. Therefore, the variations identified in framing of the opioid epidemic in liberal and conservative U.S. news media may be traced back to the the impact of the outlets' partisanship. State-level societal and political differences do not have an impact on frame use in the cases of California and Texas.

The geographical location of California and Texas was proven to be irrelevant for media reporting on the current drug crisis in the case of the 16 investigated newspapers. In order to be able to generalize the results to the overall U.S. context, further research in the two states, as well as in a large number of other states, would need to be conducted. The generalizability in the international context cannot be guaranteed, as the opioid epidemic is unique in its severity in the United States and similar developments have not yet been detected in other Western

countries. Additionally, this analysis should not be generalized outside the North Atlantic/Liberal media system to avoid biases due to the structure of the media landscape in other systems.

## **XI Conclusion**

The opioid epidemic has hit every sphere of the U.S. society and penetrated all social strata, with currently no end in sight. The media are powerful institutions with great responsibility to do everything in their power to frame the crisis in ways which enhance public support for harm reduction interventions.

Just a few years ago, the public thought no drug worse than heroin could pain the American people, until fentanyl entered the market. The consequences experienced in every local community due to this illicit substance are no longer unthinkable, but everyday reality. The opioid epidemic reached a devastating peak in May 2023, having taken more lives than all U.S. wars combined (Gomes et al., 2023). The horrors may not stop here. With a new, even more lethal substance on the rise, drug experts are alarmed: “Xylazine is making the deadliest drug threat our country has ever faced, fentanyl, even deadlier”, says the DEA administrator Anne Milgram (Chaves, 2023). If the media do not live up to their obligation of informing the public in the most objective manner possible, the extent this crisis could take on might worsen even more.

In 2016, the U.S. rapper Macklemore sang about his struggles with drug addiction:

“They said it wasn't a gateway drug. My homie was takin' subs and he ain't wake up. The whole while, these billionaires, they kicked up, paying out congress so we take their drugs. Murderers who will never face the judge. And we dancin' to a song about our face goin' numb. But I seen homies turn grey, noses draining blood. I could've been gone, out 30's, faded in that tub. That's Prince, Michael and Whitney, that's Amy, Ledger and Pimp C. That's Yams, that's DJ AM, god damn they're making a killing. Now it's getting attention cause Sara, Katey and Billy, but this shit's been going on from Seattle out to South Philly. It just moved out about the city and spread out to the 'burbs. Now it's everybody's problem, got a nation on the verge. Take Actavis off the market, jack the price up on the syrup, but Purdue Pharma's 'bout to move that work. [...]

I wanna forge a prescription, 'cause doctor, I need some more of it. When morphine and heroin is more of your budget. I said I'd never use a needle, but sure, fuck it. [...]

Walking carcass, I lost everything I wanted. [...]

My drug dealer was a doctor, had the plug from Big Pharma. He said that he would heal me, but he only gave me problems. [...] I think he trying to kill me. He tried to kill me for a dollar.” (Lyle, 2016)

Macklemore found his way to sobriety. May millions of Americans, too, get the treatment they deserve.

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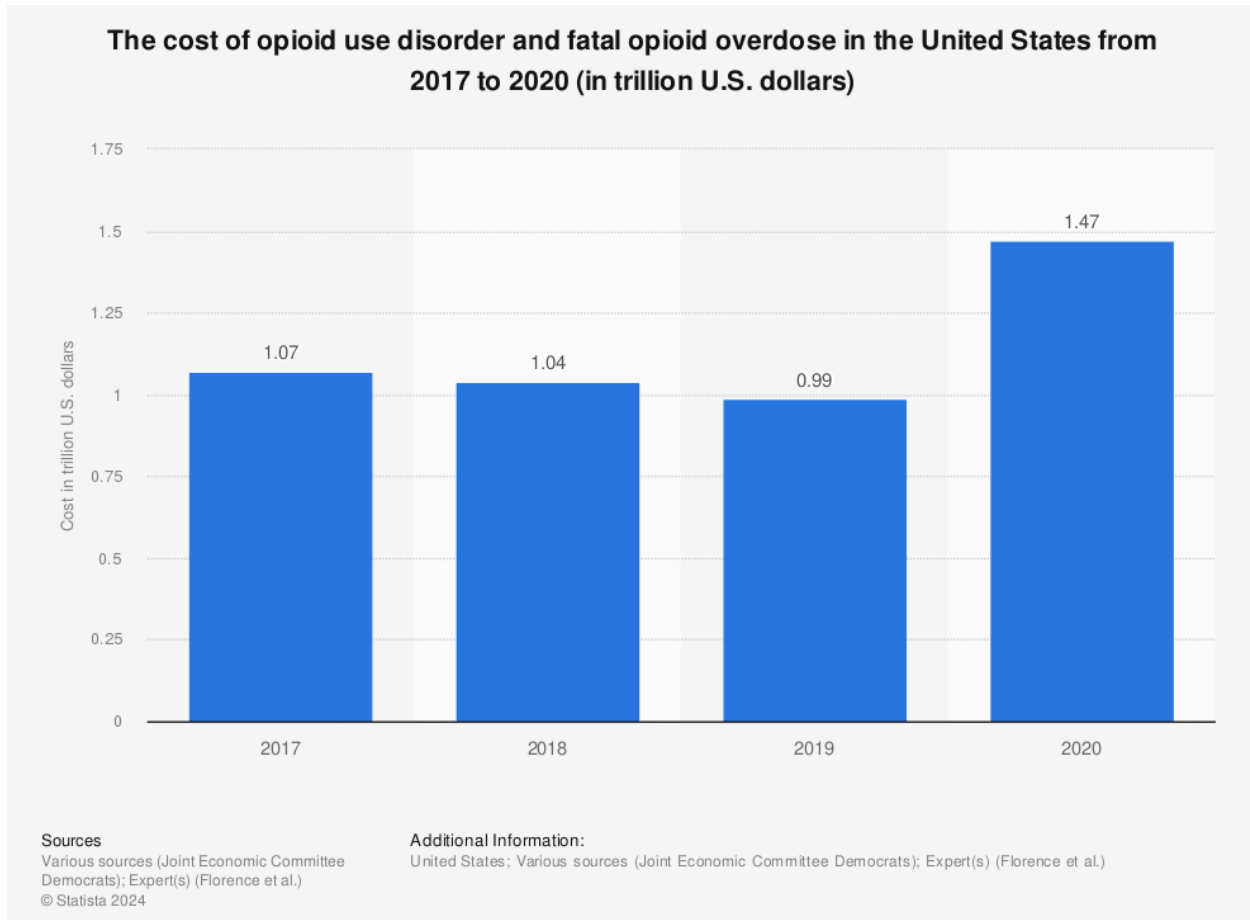
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# XIII Appendix

## Appendix A: Cost of the Opioid Epidemic

**Figure 4**

*The cost of opioid use disorder and fatal opioid overdose in the United States from 2017 to 2020 (in trillion U.S. dollars)*



*Note.* From *The cost of opioid use disorder and fatal opioid overdose in the United States from 2017 to 2020*, by Preeti Vankar, 2023 (<https://www.statista.com/statistics/1425519/opioid-use-disorder-and-fatal-opioid-overdose-cost-us/>). In the public domain.

## Appendix B: The Political and Media Systems in California and Texas

### **1 The North Atlantic Model**

Applying the framework for political and media systems by Hallin and Mancini (2004), the United States can be categorized in the North Atlantic or liberal model, which is characterized by commercial press and broadcasting, little public broadcasting, low political parallelisms (the degree to which the media in a system reflect predominant political values), strong professionalization of journalism and weak involvement of the state in the economy, as democracies in this category favor the liberal market over welfare.

It is essential to note that this theoretical conceptualization is twenty years old and that media markets are continuously evolving. It provides nevertheless a useful classification for the interplay of political and media systems in Western countries.

### **2 California's and Texas' Political Systems**

Both states, California and Texas, have a bicameral legislature, consisting of the California State Assembly and the Texas House of Representatives as the lower houses and the respective state senates as the upper houses. With the exception of two years, 1969-1971, both Californian chambers have been governed by the Democratic party since 1959. The state's Democratic trifecta includes control of the governor's office and both houses of the legislature, while the Democratic triplex states that, apart from the position of governor, the party also controls the offices of secretary of state and attorney general in California (California State Legislature, n.d.; Governor of California, n.d.). The Democrat Gavin Newsom serves as Governor of California, the state's highest office, since January 2019 (Governor of California, n.d.). These clear majorities in favor of the Democrats shows the decades-long impact the party had on the Western American state and its political development.

Contrastingly, Texas has a Republican trifecta and triplex (Party control of Texas state government, n.d.; Texas State Legislature, n.d.). The Republican governor Greg Abbott took the Southern state's office in January 2015 (Governor of Texas, n.d.). California and Texas are thus two examples of the most extreme versions of party influences in state governments.

### **3 The United States Media Landscape**

The United States are often regarded as the motherland of large-scale (pop)cultural industries, dating back to the foundation of the penny press in the 1830s. The media started growing drastically and by the mid-twentieth century, newspapers, magazines and broadcasting

companies invested large amounts in newsrooms, leading to growing professionalization in journalism, as well as its autonomy and societal influence (Hallin, n.d.). Nowadays, the U.S. has “the most highly-developed mass media in the world” (BBC News, 2023). Although TV is the country’s most popular medium, the U.S. has a “free, diverse, and constitutionally protected press” (BBC News, 2023), which has grown to be increasingly polarized over time, with strong left- and right-leaning reporting.

U.S. public broadcasting is represented by the two national networks PBS and NPR, which are partially government-funded and partially supported by donations from sponsors or the more than two million members (Hallin, n.d.).

The majority of the more than 1,000 daily newspapers in the country have a regional or local focus (BBC News, 2023). In 2022, the combined print and digital daily newspaper circulation totaled more than 20 million. That same year, the newspaper’s industry estimated circulation revenue was more than \$11 billion and almost \$10 billion in advertising revenue (Barthel, 2024).

The U.S. media industry is largely dominated by four major media companies: Digital First Media, Hearst, The McClatchy Company and Gannett. Digital First Media, which belongs to Alden Global Capital, is in ownership of The Mercury News, Orange County Register and Los Angeles Daily News (MediaNews Group, n.d.). The San Francisco Chronicle, Houston Chronicle and San Antonio Express-News are owned by Hearst (Hearst, n.d.), while the Fresno Bee and Fort Worth Star-Telegram are owned by the McClatchy Company (McClatchy, n.d.). Gannett is in ownership of Austin American-Statesman, Corpus Christi Caller-Times and The El Paso Times (Gannett, 2023).

## **4 The Investigated Media Outlets**

The following section will provide an overview concerning details such as circulation, geographic location, journalistic mission and ownership of each of the sixteen media outlets included in the analysis. Except for the nonpartisan and nonprofit news media organizations CalMatters, Dallas Express and The Texas Tribune, all media outlets are daily newspapers publishing online and print articles. The sixteen news media were selected based on their monthly circulation, representing the largest ones of their kind in each state.

### **4.1 Liberal Californian News Media**

The Los Angeles Times is “one of the largest metropolitan daily newspapers in the United States” (Los Angeles Times, n.d.), with a monthly estimated audience of 30 million people, 360,000 digital subscribers and two million Sunday print readers (Harvard University, 2021).

As Northern California's largest newspaper, The San Francisco Chronicle reaches more than six million monthly users across the country (San Francisco Chronicle, n.d.). It has 173,500 daily readers, more than 210,000 Sunday readers and more than 300,000 digital subscribers (Harvard University, 2021). The West Coast's second largest newspaper has received six Pulitzer Prizes for its journalistic reporting (San Francisco Chronicle, n.d.).

The Mercury News, owned by Digital First Media/Alden Global Capital, is published daily in San Jose, in the San Francisco Bay Area. The readership totals more than 300,000 people daily (Harvard University, 2021; The Mercury News, n.d.).

#### ***4.2 Conservative Californian News Media***

Published in Santa Ana as part of Digital First Media/Alden Global Capital, the three-time Pulitzer Prize-winning Orange County Register is known for its conservative-leaning editorials and endorsements of Republican candidates or positions (The Orange County Register, n.d.). Digital First's subsidiary company Southern California News Group, which oversees the Orange County Register, publishes 11 daily and several weekly newspapers in Southern California (O.C. Register, 2009).

According to own reports, the conservative-leaning Los Angeles Daily News has been operating for more than 105 years with its main focus on the San Fernando Valley in Southern California (Cisneros, 2017). It too belongs to Digital First Media/Alden Global Capital (MediaNews Group, n.d.).

Dating back to the founding of its predecessor newspaper in 1868, The San Diego Union-Tribune refers to itself as the oldest business and the largest media company in San Diego County, having been awarded three Pulitzer Prizes and reaching more than 96 percent of all households in the county (The San Diego Union-Tribune, n.d.).

#### ***4.3 Centrist Californian News Media***

The Fresno Bee is "the primary news source for the central San Joaquin Valley" (McClatchy, n.d.) with a daily circulation of more than 100,000 copies. The paper was founded in 1922 and later transitioned from an afternoon to a morning publication. It is owned by The McClatchy Company (The Fresno Bee, n.d.).

CalMatters is one of the nonpartisan and nonprofit news organization investigated in the analysis in order to compare liberal and conservative-leaning media with centrist ones. According to the news outlet itself, it aims to hold leaders accountable by providing Californians with transparent information regarding the government (CalMatters, 2022). CalMatter's reports are digital only with an average of more than 500,000 monthly visits, having reached one in 20 Californians in 2020 (Harvard University, 2021).

#### **4.4 Liberal Texan News Media**

The Austin American-Statesman, published daily in Austin, Texas, is the state's sixth largest newspaper with a daily circulation of more than 120,000 print copies. Its aim is to provide in-depth coverage of the City of Austin, its educational institutions and law enforcement agencies, as well as investigative reporting meant to hold the government and other institutions of power accountable (Austin American-Statesman, n.d.).

With a slightly larger circulation of more than 130,000 copies, the San Antonio Express-News takes the place as Texas' fifth largest newspaper (San Antonio Express-News, n.d.-a). According to its owner company, Hearst, the media outlet "has been the voice of South Texas since 1865 and provides news and information to a community of more than 2 million people" (San Antonio Express-News, n.d.-b), covering all topics relevant to San Antonians through award-winning journalism.

The third investigated liberal Texan newspaper is the El Paso Times, owned by the USA Today network and founded in 1881, which provides journalistic information to more than 180,000 people in Western Texas and Southern New Mexico (El Paso Times, n.d.).

#### **4.5 Conservative Texan News Media**

The Houston Chronicle, founded in 1901, covers local and state issues, specifically focusing on Texan legislature and culture. Its ownership company Hearst reports an "audience of more than 3 million in Houston, 13 million across Texas and 154 million nationwide" (Houston Chronicle, n.d.). According to the index of U.S. mainstream media by the Harvard University, the newspaper reaches 825,000 daily and 1.4 million Sunday readers (Harvard University, 2021).

Due to its daily print circulation of more than 190,000, the Fort Worth Star-Telegram is the fourth largest Texan newspaper (Star-Telegram, n.d.). Belonging to the McClatchy Company, it provides news reporting to the area of Fort Worth, dating back to a self-proclaimed 150-year long history of "independent, community-focused journalism" (McClatchy, n.d.)

#### **4.6 Centrist Texan News Media**

Apart from CalMatters, other nonprofit and nonpartisan media organizations included in the analysis are The Texas Tribune and Dallas Express, which are both only published digitally. The Texas Tribune is the only digital-first, member-supported news outlet in the state, predominantly covering statewide public policy, politics and governmental issues (The Texas Tribune, 2024). It totals an average of more than six million monthly website visitors (Harvard University, 2021).

The Dallas Express, founded in 2021, self reports a rapid growth in readership, surpassing three million monthly website visitors for the first time in January 2023 (Dallas Express, 2023-a). Its articles cover daily news, events and activities relevant to the citizens of the Dallas metropolitan area with the goal of providing fact-based information for its readers (Dallas Express, 2023-b).

Lastly, the Corpus Christi Caller-Times, a centrist daily Texan newspaper, is owned by the Gannett Company and reports a daily circulation of almost 7,000 print papers (Gannett, 2023; The Texas Newspaper Directory, 2023).

## Appendix C: Codebook

### **Purpose of the study**

This content analysis aims to investigate media framing of the opioid epidemic in a comparative approach of articles published between March 1<sup>st</sup> and July 31<sup>st</sup>, 2023 in Californian and Texan daily mainstream newspapers. Relying on pre-existing research conducted on this topic, the analysis will use nine predefined frames, five of which are based on the generic frames by Semetko and Valkenburg (2000) and four of which have been added after a thorough review of previous literature in order to ensure applicability to the opioid crisis. The study contains news items from liberal, centrist and conservative media in the two states, in order to assess whether or not political leaning plays a role in the use of frames in this particular crisis. Previous research has suggested that frames including criminalization, medicalization, stigma and victim portrayals are impacted by media outlets' and citizens' partisanship.

### **Sampling units**

As described in the method section, this study investigates sixteen different media outlets from California and Texas from each of the three categories of political leaning. The liberal-leaning newspapers will be The Los Angeles Times, The San Francisco Chronicle and The Mercury News for California and Austin American-Statesman, San Antonio Express-News and El Paso Times for Texas. The conservative-leaning Californian newspapers analyzed are Orange County Register, Los Angeles Daily News and The San Diego Union-Tribune, while the Texan newspapers in this category are Houston Chronicle and Fort Worth Star-Telegram. As a reference category, a centrist newspaper from each state will be assessed (The Fresno Bee in California and Corpus Christi Caller-Times in Texas), as well as nonpartisan and nonprofit news media for each state (CalMatters in California and The Texas Tribune and Dallas Express in Texas).

### **Unit of analysis**

The unit of analysis are online news articles covering the opioid crisis on the websites of the sixteen determined media outlets. Editorials, opinion pieces and other non-news items are not included.

## Definition of a relevant news item

Relevant articles on the websites of the sixteen media outlets are retrieved through a search of the following keywords: opium, opioid, fentanyl, heroin, morphine, codeine, hydrocodone, buprenorphine, OxyContin, oxycodone, naloxone and Narcan. An article is only considered a full news item and only coded when it consists of at least two full sentences of text. Ensure that the news item is published within the defined sample period of March 1<sup>st</sup> 2023 until July 31<sup>st</sup>, 2023.

Articles referring to the opioid epidemic in countries other than the United States are not coded. As visuals are not part of the content analysis, their content will not be coded. However, if present, they will be used in the identification of the article's main frame.

## Sampling

As described in the method section, news articles published within the time period of March 1<sup>st</sup>, 2023 to July 31<sup>st</sup>, 2023 and therefore a total of five months are coded. The content is retrieved from the newspapers' databases on the respective websites.

Sampling units: Websites and databases of the aforementioned 16 newspapers.

Sampling period: March 1<sup>st</sup>, 2023 to July 31<sup>st</sup>, 2023.

Selection criteria: News items referring to the opioid crisis in the United States.

Sample: All news articles retrieved through the search of the predefined keywords within a predefined time frame of five months.

### I Formal categories

- 1 Coder
- 2 Story identification number
- 3 Sampling date
- 4 Publication date
- 5 Name of the newspaper
- 6 State of the newspaper
- 7 Political leaning of the newspaper
- 8 Article headline

## II Frame analysis

- 9 Attribution of responsibility frame
- 10 Human interest frame
- 11 Economic consequences frame
- 12 Conflict frame
- 13 Morality frame
- 14 Criminalization frame
- 15 Medicalization frame
- 16 Stigma frame
- 17 Victim frame

## III Main frame and subframes

- 18 Main frame
- 19 First subframe
- 20 Second subframe

## IV Sources and opioids

- 21 Sources
- 22 Opioids

### Attribution of responsibility frame (8)

Does the article suggest an actor is responsible for the issue?

*Description:*

“This frame presents an issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual or group. [...] the U.S. news media have been credited with (or blamed for) shaping public understanding of who is responsible for causing or solving key social problems.” (Semetko & Valkenburg 2000:96)

#### Subcategory

*Who is responsible for the crisis?*

- 0 No attribution of responsibility frame found
- 1 No information on who is responsible given
- 2 Substance users
- 3 Substance users' friends and/or family
- 4 Prescribers/physicians
- 5 Pharmaceutical companies/Health care institutions
- 6 Drug dealers/Drug traffickers/Cartels
- 7 The Democratic party
- 8 The Republican party
- 9 U.S. state governments
- 10 The U.S. federal government
- 11 Foreign governments
- 12 Society as a whole

### **Human interest frame (9)**

Does the article emphasize how individuals and groups are affected by the issue?

*Description:*

"This frame brings a human face or an emotional angle to the presentation of an event, issue, or problem. [...] Such a frame refers to an effort to personalize the news, dramatize or 'emotionalize' the news, in order to capture and retain audience interest." (Semetko & Valkenburg, 2000:95-96)

#### **Subcategory**

*Which actor(s) does the human interest frame focus on?*

- 0 No human interest frame found
- 1 No information on specific actors given
- 2 Substance user(s)/Prescription opioid user(s)
- 3 Substance users' family/friends
- 4 Teenagers/Students/Children
- 5 Member(s) of the homeless population
- 6 Member(s) of an ethnic minority
- 7 Prescriber(s)/Physician(s)
- 8 Actor(s) in non-profit organizations
- 9 Local communities
- 10 Drug dealers/Drug traffickers/Cartels
- 11 Other

### **Economic consequences frame (10)**

Does the article mention financial losses or gains now or in the future due to the crisis?

*Description:*

"This frame reports an event, problem, or issue in terms of the consequences it will have economically on an individual, group, institution, region, or country." (Semetko & Valkenburg, 2000:96)

#### **Subcategory**

*Who will suffer economic consequences?*

- 0 No economic consequences frame found
- 1 No information on affected actors given
- 2 Individual citizens
- 3 Local communities
- 4 Physicians/Prescribers
- 5 Pharmaceutical companies/Health care institutions
- 6 Nonprofit organizations
- 7 Law enforcement authorities
- 8 Drug dealers/Drug traffickers/Cartels
- 9 U.S. state governments
- 10 The U.S. federal government
- 11 The U.S. society as a whole
- 12 Other

### **Conflict frame (11)**

Does the article reflect disagreement between parties/individuals/groups?

*Description:*

“This frame emphasizes conflict between individuals, groups or institutions as a means of capturing audience interest.” (Semetko & Valkenburg, 2000:95)

#### **Subcategory**

*Between whom is there a conflict?*

- 0 No conflict frame found
- 1 No information on specific actors given
- 2 Citizens vs. prescribers
- 3 Citizens vs. pharmaceutical companies/health care institutions
- 4 Citizens vs. government(s)
- 5 Political actor(s) vs. prescribers
- 6 Political actor(s) vs. pharmaceutical companies/health care institutions
- 7 Political actor(s) vs. the public
- 8 Law enforcement/Political actor(s) vs. drug dealers/drug traffickers/cartels
- 9 Federal government vs. state governments
- 10 Political actors against each other generally
- 11 U.S. government vs. foreign countries
- 12 Other

### **Morality frame (12)**

*Description:*

The morality frame “puts the event, problem, or issue in the context of religious tenets or moral prescriptions” (Semetko & Valkenburg 2000:95). The frame might suggest a moral behavior in line with societal norms or religious values.

### **Criminalization frame (13)**

*Description:*

“[The] media often construct a narrative of drug use that presents substance use as a criminal act rather than one that arises from a medical disorder. [...] By linking substance use and crime, the criminalization model drives draconian and drastic solutions to the use of illicit substances.” (Shachar et al., 2020:213-214)

### **Medicalization frame (14)**

*Description:*

“Instead of adopting a ‘tough on crime’ stance, policy makers influenced by the medicalization model respond with offers of help, including resources for treatment and prevention.[...] There is an understanding under this model that substance users are victims of their own biology. [...] Overall, the medicalization model is kinder to substance users in that it encourages policy makers to provide health care resources to support recovery rather than harsher criminal justice interventions.” (Shachar et al., 2020:214-215)

### **Stigma frame (15)**

*Description:*

With regard to Webster et al. (2020:4) articles employing the stigma frame draw a moral distinction “between so-called legitimate users of opioids, and stigmatized groups such as poor, street-affected drug-users”. Stigma is often associated with individuals of “lower socio-economic status, poverty, lack of adequate housing [or] education” (Webster et al., 2020:6), for whom society has less sympathy than their ‘innocent’ counterparts. The National Institute on Drug Abuse (2023) defines stigma towards people with substance use disorder as “inaccurate or unfounded thoughts like they are dangerous, incapable of managing treatment, or at fault for their condition”.

### **Subcategory**

*Who is presented in a stigmatizing light?*

- 0 No stigma frame found
- 1 No mention of specific stigmatized actors given
- 2 Substance users generally regardless of ethnicity
- 3 Substance user(s)/members of an ethnicity other than White Americans
- 4 White substance user(s)/White Americans
- 5 Substance user(s)/members the homeless population regardless of ethnicity
- 6 Substance users’ family/friends
- 7 Prescriber(s)/Physician(s)
- 8 Drug dealers/Drug traffickers/Cartels
- 9 The U.S. society as a whole
- 10 Other

## **Victim frame (16)**

### *Description:*

“[P]eople who are members of certain higher status groups who become addicted [...] are often portrayed as innocent victims.” (Webster et al., 2020:6). The victim frame engages narratives of “individuals trapped in a vicious cycle of emotional or physical pain and trauma, self-medication with opiates and unwitting dependency” (Webster et al., 2020:7), who deserve to be portrayed as innocent and naive victims of the crisis. Research has found that [...] “in order to register [someone] as a victim, the person [...] in question must be innocent and constructed as blameless, and part of this construction involves creating distance between victims and perpetrators” (Johnston, 2020:131).

### **Subcategory 1**

#### *Who is presented as the victim?*

- 0 No victim frame found
- 1 No information on victims given
- 2 Substance users regardless of ethnicity
- 3 Substance user(s) of an ethnicity other than White Americans
- 4 White substance user(s)
- 5 Substance user(s) within the homeless population regardless of ethnicity
- 6 Substance users' family/friends
- 7 Teenagers/Students/Children
- 8 (A) local community/communities
- 9 Prescriber(s)/Physician(s)
- 10 Policy maker(s)
- 11 The U.S. society as a whole
- 12 Other

### **Subcategory 2**

#### *Who is presented as the perpetrator?*

- 0 No victim frame found
- 1 No information on perpetrators given
- 2 Substance user(s) regardless of ethnicity
- 3 Substance users' family/friends
- 4 (A) local community/communities
- 5 Prescriber(s)/Physician(s)
- 6 Policy maker(s)/Government(s)
- 7 Pharmaceutical companies/Health care institutions
- 8 Drug dealers/Drug traffickers/Cartels
- 9 The U.S. society as a whole
- 10 Other

## **I Formal categories**

### **1 Coder**

- 1 Henriette Schulte
- 2 ...

### **2 Story identification number**

This running number (counting up from 1) is designated to all coded news articles. Each new article gets assigned a new number, which is one higher than the previous one, regardless of the newspaper.

### **3 Sampling date**

Insert the date on which the article was sampled in the following format: DDMM.

### **4 Publication date**

Insert the date on which the article was first published on the newspaper's website in the following format: DDMMYYYY.

### **5 Name of the newspaper**

Insert the corresponding number for the newspaper the article was published in.

- 1 The Los Angeles Times
- 2 The San Francisco Chronicle
- 3 The Mercury News
- 4 Austin American-Statesman
- 5 San Antonio Express-News
- 6 El Paso Times
- 7 Orange County Register
- 8 Los Angeles Daily News
- 9 The San Diego Union-Tribune
- 10 Houston Chronicle
- 11 Dallas Express
- 12 Fort Worth Star-Telegram
- 13 The Fresno Bee
- 14 CalMatters
- 15 Corpus Christi Caller-Times
- 16 The Texas Tribune

### **6 State of the newspaper**

- 1 California
- 2 Texas

### **7 Political leaning of the newspaper**

- 1 Liberal
- 2 Centrist
- 3 Conservative

## 8 Article headline

Insert the article's headline. In case of no headline, code 0.

## II Frames

As described in the method section, the frame analysis will be based on the generic frames by Semetko and Valkenburg (2000), which will be complemented by four new frames identified and reasoned in the review of previous research on media frames in the opioid epidemic.

### 8 Attribution of responsibility frame

"This frame presents an issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual or group. [...] the U.S. news media have been credited with (or blamed for) shaping public understanding of who is responsible for causing or solving key social problems" (Semetko & Valkenburg 2000:96).

With regard to the opioid epidemic, responsibility could be attributed to several kinds of actors for either causing the outbreak of the crisis or for insufficiently resolving it. This includes political actors on different levels, who have not intervened early enough to contain harm or who have passed insufficient or failed policies in relation to the crisis. Examples are the Reagan administration's War on Drugs in the 1980s, which ultimately worsened the situation, the implementation of a profit-driven health care system over decades and the Trump administration's reversal of the Affordable Care Act or the prescription cut-offs for patients receiving opioid-based medication, who then turned to the black market to purchase harmful illicit drugs and fueled the skyrocketing numbers of accidental overdose deaths. Another potentially responsible actor often mentioned in previous research are pharmaceutical companies, who, in the 1990s, marketed their opioid medications as allegedly being non-addictive and ran huge campaigns in order to have physicians prescribe their products. The most well-know example is PurduePharma, the company behind OxyContin, the drug which is often blamed for triggering the opioid epidemic (Liu & Singer, 2023; Jones et al., 2018). Lastly, accountability can be ascribed to physicians, and other health care personnel, for giving into the pressure from the pharmaceutical industry and overprescribing strong painkillers.

In the attribution of responsibility frame, actors are not only held responsible for causing the crisis, but their ability of resolving it is also taken into account. This frame can include, but is not limited to, the above mentioned actors and examples.

If, for example, several political actors, such as the Democratic party and the Republican Party, are held responsible, the variable will be coded as either "9 = U.S. state/local governments" or "10 = The U.S. federal government", depending on the national or local context the article mentions. If several civilian actors are named, such as substance users, their friends and family and local communities, code "12 = Society as a whole". If other combinations of actors are mentioned, the most predominant one according to the space and salience of information concerning them, is coded.

(1) Does the article attribute responsibility for the crisis or aspects of the crisis to an actor or several actors?

- 0 No
- 1 Yes

(2) If the previous question is coded "Yes", which actor(s) is/are held responsible for causing the crisis or aspects of the crisis?

- 0 No attribution of responsibility frame found
- 1 No information on who is responsible given

- 2 Substance users
- 3 Substance users' friends and/or family
- 4 Prescribers/Physicians
- 5 Pharmaceutical companies/Health care institutions
- 6 Drug dealers/Drug traffickers/Cartels
- 7 The Democratic party
- 8 The Republican party
- 9 U.S. state/local governments
- 10 The U.S. federal government
- 11 Foreign governments
- 12 Society as a whole
- 13 Other

## 9 Human interest frame

"This frame brings a human face or an emotional angle to the presentation of an event, issue, or problem. [...] Such a frame refers to an effort to personalize the news, dramatize or "emotionalize" the news, in order to capture and retain audience interest" (Semetko & Valkenburg, 2000:95-96). In the case of the opioid crisis, this frame often focuses on the families and friends of drug users, especially on parents whose children are addicted to controlled or illicit substances. The frame might also highlight personal stories of drug users who became dependent due to opioid prescriptions or on their long way to recovery.

The actors in the subcategory 9.2 are considered to be mutually exclusive. If, for instance, minors using drugs are mentioned within the human interest frame, they are coded as "4 = Teenagers/Students/Children" and not as "2 = Substance user(s)/Prescription opioid user(s)". The purpose of this procedure is to investigate if the media puts an emphasis on the age of the affected actors, possibly evoking more sympathy in the readers, since the human interest frame aims to provide a humanized face to reporting (Semetko & Valkenburg, 2000:95-96). Stories of young substance users might be perceived differently than those of adult substance users. This procedure is, however, only necessary, if both categories are mentioned. The vast majority of articles is expected to emphasize how the opioid crisis indirectly impacts the life of teenagers, students or children. Substance users are coded as "2 = Substance user(s)/Prescription opioid user(s)" if no information concerning their housing status is given. If homelessness is mentioned, the variable is coded as "5 = Members of the homeless population", since this information promises the most intriguing results due to the different levels of homelessness in California and Texas, as elaborated in chapter 7.3 (U.S. Department of Housing and Urban Development, 2022). If other combinations of actors are mentioned, the most predominant one, according to the space and salience of information concerning them, is coded.

(1) Does the article present a human face of the crisis by highlighting how individual actors or groups are affected by the crisis? (E.g. through the use of words generating feelings of sympathy or compassion towards the actors involved)

- 0 No
- 1 Yes

(2) If the previous question is coded "Yes", which actor(s) does the human interest frame focus on?

- 0 No human interest frame found
- 1 No information on specific actors given
- 2 Substance user(s)/Prescription opioid user(s)
- 3 Substance users' family/friends
- 4 Teenagers/Students/Children

- 5 Member(s) of the homeless population
- 6 Member(s) of an ethnic minority
- 7 Prescriber(s)/Physician(s)
- 8 Actor(s) in non-profit organizations
- 9 Local communities
- 10 Drug dealers/Drug traffickers/Cartels
- 11 Other

## 10 Economic consequences frame

“This frame reports an event, problem, or issue in terms of the consequences it will have economically on an individual, group, institution, region, or country.” (Semetko & Valkenburg, 2000:96). This frame could relate to the costs of loss of workforce due to citizens’ addiction, time spend in recovery treatment or jail and ultimately the impact on the U.S. economy. The economic consequences frame might also highlight public spendings for law enforcement, street workers or health care. If several affected actors are mentioned in the article, only the one suffering the largest economic losses or gains in U.S. dollars is coded. If no precise numbers are given, 10.2 is coded as “1 = no information on affected actors given” in order to rule out coding the less predominant one.

(1) Does the article mention financial losses or gains now or in the future due to the crisis?

- 0 No
- 1 Yes

(2) If the previous question is coded “Yes”, who might suffer economic consequences?

- 0 No economic consequences frame found
- 1 No information on affected actors given
- 2 Individual citizens
- 3 Local communities
- 4 Physicians/Prescribers
- 5 Pharmaceutical companies/Health care institutions
- 6 Nonprofit organizations
- 7 Law enforcement authorities
- 8 Drug dealers/Drug traffickers/Cartels
- 9 U.S. state governments
- 10 The U.S. federal government
- 11 The U.S. society as a whole
- 12 Other

## 11 Conflict frame

“This frame emphasizes conflict between individuals, groups or institutions as a means of capturing audience interest” (Semetko & Valkenburg, 2000:95). The conflict frame emphasizes disagreement or confrontation between at least two parties involved in the issue. Potential conflicts in the opioid epidemic could be different approaches of the U.S. federal government and state governments (especially California and Texas) on whether or not to litigate drug users, how to best prosecute drug traffickers and how to approach the crisis generally (criminalization versus medicalization). There might also be conflicts between affected citizens and their prescribers (for overprescribing opioid-based medication) or pharmaceutical industries (for marketing their pain killers under false impressions). If several actors are mentioned in the article, the most predominant one is coded. This is decided based on the article headline, the

main featured image and the amount of space and salient sentences dedicated to the conflicting parties.

(1) Does the article show disagreement between two or more actors?

- 0 No
- 1 Yes

(2) If the previous question is coded “Yes”, between whom is there a conflict?

- 0 No conflict frame found
- 1 No information on specific actors given
- 2 Citizens vs. prescribers
- 3 Citizens vs. pharmaceutical companies/health care institutions
- 4 Citizens vs. government(s)
- 5 Political actor(s) vs. prescribers
- 6 Political actor(s) vs. pharmaceutical companies/health care institutions
- 7 Political actor(s) vs. the public
- 8 Law enforcement/Political actor(s) vs. drug dealers/drug traffickers/cartels
- 9 Federal government vs. state governments
- 10 Political actors against each other generally
- 11 U.S. government vs. foreign countries
- 12 Other

## 12 Morality frame

The morality frame “puts the event, problem, or issue in the context of religious tenets or moral prescriptions” (Semetko & Valkenburg 2000:95). The frame might suggest a moral behavior in line with societal norms or religious values. A morality frame in the opioid crisis can have a broad range: it might recommend drug users to “just say no”, like Nancy Reagan’s campaign in the 1980s as part of the Reagan administration’s war on drugs (Lilienfeld & Arkowitz, 2018), encourage them to sign up for recovery treatment, make use of syringe service programs or to not openly use in public. The morality frame may also be targeted towards drug users’ friends and family and encourage them to respond with kindness and offers for help rather than stigmatizing judgement. Besides codes of conduct targeted towards citizens, this frame could suggest specific actions expected of the government and policy makers (for instance to pass certain laws or to provide funding for harm reduction interventions), police officers (to carry Naloxone with them) or health care institutions (to extend their services). An important aspect of the morality frame is also the emphasis on solidarity within society.

(1) Does the article contain a moral message? (E.g. in the form of references to religious tenets or propositions for (a) specific code(s) of conducts)

- 0 No
- 1 Yes

## 13 Criminalization frame

“[The] media often construct a narrative of drug use that presents substance use as a criminal act rather than one that arises from a medical disorder. [...] By linking substance use and crime, the criminalization model drives draconian and drastic solutions to the use of illicit substances” (Shachar et al., 2020:213-214). A criminal justice frame in the opioid epidemic might include mentions of law enforcement activities aimed at combatting the flow of illicit drugs into the country, the prosecution of drug dealers and users or stories of court trials.

- (1) Does the article mention law enforcement activities in relation to the opioid crisis? (E.g. through the use of language linked to a criminalization narrative such as “public safety”, “crime”, “illegal”, “illicit”, “controlled”, “investigation”, “prosecution”, “forces”, “authorities”, “officials”, “law”, “court” or “tribunals”)

0 No  
1 Yes

#### 14 Medicalization frame

“Instead of adopting a “tough on crime” stance, policy makers influenced by the medicalization model respond with offers of help, including resources for treatment and prevention.[...] There is an understanding under this model that substance users are victims of their own biology [...]. Overall, the medicalization model is kinder to substance users in that it encourages policy makers to provide health care resources to support recovery rather than harsher criminal justice interventions” (Shachar et al., 2020:214-215). A news item employing the medicalization frame in the opioid epidemic might provide information on where to receive Naloxone and how to administer it, where and how to find recovery treatment, how to react when experiencing or witnessing an overdose or even imply health care interventions expected from policy makers.

- (1) Does the article mention health care interventions in relation to the opioid crisis? (E.g. through the use of language linked to a medicalization narrative, such as “naloxone”, “Narcan”, “OxyContin”, “prescription”, “pharmaceutical drugs”, “treatment” or “recovery”)

0 No  
1 Yes

#### 15 Stigma frame

“News has the power to shape public perception through heavy coverage and sensationalization of selected events, and often creates stigmatizing and stereotypical representations of particular groups (Johnston, 2020:126). With regard to Webster et al. (2020:4) articles employing the stigma frame draw a moral distinction “between so-called legitimate users of opioids, and stigmatized groups such as poor, street-affected drug-users”. Stigma is often associated with individuals of “lower socio-economic status, poverty, lack of adequate housing [or] education” (Webster et al., 2020:6), for whom society has less sympathy than their ‘innocent’ counterparts.

The National Institute on Drug Abuse (2023) defines stigma towards people with substance use disorder as “inaccurate or unfounded thoughts like they are dangerous, incapable of managing treatment, or at fault for their condition”.

If several actors are mentioned in the article, the most predominant one, based on the article headline, the main featured image and the amount of space and salient sentences dedicated to the actor is coded. Substance users are coded as “2 = substance users generally regardless of ethnicity” if no additional information concerning their ethnicity or housing status is given. If a specific ethnicity is mentioned or the article underlines the substance users’ homelessness, 15.2 is coded as respectively “3”, “4” or “5”. If both, ethnicity and homelessness, are mentioned in regard to the same actor, the variable is coded as “5 = Substance user(s)/ members of the homeless population”, since this information promises the most intriguing results due to the different levels of homelessness in California and Texas, as elaborated in chapter 7.3. California and Texas differ more drastically in their levels of unhoused citizens than they do in the ethnical composition of their populations (U.S. Department of Housing and Urban Development, 2022; United States Census Bureau, n.d.-a; United States Census Bureau, n.d.-b).

(1) Does the article suggest a group or certain individuals are at fault for their condition? (E.g. through the representation of substance user(s) in the light of moral failing or the use of stigmatizing vocabulary in relation to an actor or multiple actors in the crisis, such as “addict”, “junkie”, “substance abuser”, “street user”, “druggie”, “drug problem” or “drug offender”)

- 0 No
- 1 Yes

(2) If the previous question is coded “Yes”, who is portrayed in a stigmatizing light?

- 0 No stigma frame found
- 1 No mention of specific stigmatized actors given
- 2 Substance users generally regardless of ethnicity
- 3 Substance user(s)/members of an ethnicity other than White Americans
- 4 White substance user(s)/White Americans
- 5 Substance user(s)/members the homeless population
- 6 Substance users’ family/friends
- 7 Prescriber(s)/Physician(s)
- 8 Drug dealers/Drug traffickers
- 9 The U.S. society as a whole
- 10 Other

## 16 Victim frame

“[P]eople who are members of certain higher status groups who become addicted, such as those who are white and middle class, are often portrayed as innocent victims” (Webster et al., 2020:6). The victim frame engages narratives of “individuals trapped in a vicious cycle of emotional or physical pain and trauma, self-medication with opiates and unwitting dependency” (Webster et al., 2020:7), who deserve to be portrayed as innocent and naive victims of the crisis.

Research has found that the media often point out that White and middle-class substance users had no preexisting issues leading to drug abuse (Johnston, 2020:130) and that “in order to register [someone] as a victim, the person [...] in question must be innocent and constructed as blameless, and part of this construction involves creating distance between victims and perpetrators” (Johnston, 2020:131). In the victim frame, actors might be presented as having suffered physical, mental, societal or even economic consequences related to opioid consumption, which was ultimately triggered by another party or circumstance. This could include sports injuries, car accidents, unethical doctors and pharmaceutical companies or drug dealers and traffickers.

If several actors are mentioned in the article, the most predominant one is coded for 16.2 and 16.3. The subcategories of actors are chosen to be mutually exclusive. For instance, “7 = Teenagers/Students/Children” are not considered to be substance users. If the article mentions a substance user who is a minor, it is coded as “2 = Substance users regardless of ethnicity”, unless an ethnicity is also mentioned. If several civilian actors are named, such as substance users, their friends and family and local communities, code “12 = Society as a whole”. If other combinations of actors are mentioned, code “11 = The U.S. society as a whole” for 16.2 and “9 = The U.S. society as a whole” for 16.3.

(1) Does the article make reference to a group or groups of people as victims of the opioid crisis generally or of one of its actors? (E.g. through the use of vocabulary such as “victim”, “innocent”, “naive”, “blameless”, “trapped”, “well-behaved”, “law-abiding”, “respected”, “successful” or “legitimate”)

- 0 No
- 1 Yes

(2) If the first question is coded “Yes”, who is presented as the victim?

- 0 No victim frame found
- 1 No information on victims given
- 2 Substance users regardless of ethnicity
- 3 Substance user(s) of an ethnicity other than White Americans
- 4 White substance user(s)
- 5 Substance user(s) within the homeless population regardless of ethnicity
- 6 Substance users’ family/friends
- 7 Teenagers/Students/Children
- 8 (A) local community/communities
- 9 Prescriber(s)/Physician(s)
- 10 Policy maker(s)
- 11 The U.S. society as a whole
- 12 Other

(3) If the first question is coded “Yes”, who is presented as the perpetrator?

- 0 No victim frame found
- 1 No information on perpetrators given
- 2 Substance user(s) regardless of ethnicity
- 3 Substance users’ family/friends
- 4 (A) local community/communities
- 5 Prescriber(s)/Physician(s)
- 6 Policy maker(s)/Government(s)
- 7 Pharmaceutical companies/Health care institutions
- 8 Drug dealers/Drug traffickers/Cartels
- 9 The U.S. society as a whole
- 10 Other

### III Main frames and subframes

A news article might contain more than one frame and the frames used might have different salience. If more than one frame is identified in the story, this variable will be used to determine the most dominant frame and the main frame. Taking the text and the headline into account, a main frame and a maximum of two potential subframes will be coded. Potential visuals, such as pictures, might be useful indicators for certain frames and can help in identifying the main frame correctly.

If an article only uses one frame, this frame is coded as the main frame. If several frames are employed, the main frame is identified based on the article’s headline, the space and salience dedicated to it in the text. If the article is constructed around the frame and the majority of information is provided within the narrative of this frame, it is coded as the main frame. If several frames are used in the same article, up to two subframes can be coded. The first subframe is the second most frequently mentioned one after the main frame, while the second subframe is mentioned less frequently than the first one. Both of these frames only provide additional information and are not the article’s main focus. An example can be a news item employing the attribution of responsibility frame by explaining the role pharmaceutical companies had in the outbreak of the crisis. The article could talk about Purdue Pharma being held responsible in court trials. The attribution of responsibility frame will then be coded as the

main frame. In the same article, the conflict between political actors and pharmaceutical companies can be emphasized. Since this is not the frame around which the the majority of the information in the text is constructed, it is coded as the first subframe. The article might then also shortly mention actors which are harmed by the wrongdoing of the pharmaceutical industry. The victim frame is thus coded as the second subframe. During the coding process, all frames identified in the article are noted in the code sheet. If several frames are recognized, the coder evaluates the article once more, coding the main frame and the subframes accordingly.

#### **17 What is the article's main frame?**

- 0 No frame found
- 1 Attribution of responsibility frame
- 2 Human interest frame
- 3 Economic consequences frame
- 4 Conflict frame
- 5 Morality frame
- 6 Criminal justice frame
- 7 Medicalization frame
- 8 Stigma frame
- 9 Victim frame

#### **18 What is the first subframe of the article?**

- 0 No subframe found
- 1 Attribution of responsibility frame
- 2 Human interest frame
- 3 Economic consequences frame
- 4 Conflict frame
- 5 Morality frame
- 6 Criminal justice frame
- 7 Medicalization frame
- 8 Stigma frame
- 9 Victim frame

#### **19 What is the second subframe of the article?**

- 0 No subframe found
- 1 Attribution of responsibility frame
- 2 Human interest frame
- 3 Economic consequences frame
- 4 Conflict frame
- 5 Morality frame
- 6 Criminal justice frame
- 7 Medicalization frame
- 8 Stigma frame
- 9 Victim frame

### **IV Sources and opioids**

#### **20 Sources**

This variable aims to capture the main source mentioned in the news item. If an article mentions several ones, the one named within the context of the main frame is coded. If several sources are named as part of the main frame, code the most prominent one based on the amount of

times it is mentioned and the space and salience the information provided by that source takes up in the text.

Which main source does the article refer to?

- 0 No sources mentioned
- 1 Centers for Disease Control and Prevention
- 2 Food and Drug Administration
- 3 Drug Enforcement Administration
- 4 The police/ Other law enforcement authorities
- 5 The federal government
- 6 State/local government(s)
- 7 Health department(s) (federal or state-level)
- 8 Health care institution(s)
- 9 Non-profit organization(s)
- 10 Pharmaceutical companies
- 11 Other

## 21 Opioids

This variable aims to identify which opioid or opioid antagonist is mainly mentioned in the news item. According to previous research and government data stating that fentanyl is most prevailing opioid within the crisis, due to its role in more than 75 percent of opioid overdose deaths since 2020 (Liu & Singer, 2023), in forged medication pills (National Institute on Drug Abuse, 2023) and in the drug imports seized by the DEA (Drug Enforcement Administration, n.d.-c), it is expected to dominate in the articles. If an opioid other than fentanyl is mentioned, code the respective opioid. If several opioids are mentioned, code the most prominent one based on the article headline, the main featured image and the space and salience attributed to it in the news item. If an opioid and the antagonist naloxone are mentioned together, and no clear predominance can be identified, code “10 = Naloxone/Narcan”, as this might hint towards a medicalization narrative and is often mentioned in line with an opioid since its purpose is to reverse an opioid overdose and it is thus expected to be rarely named on its own (National Institute on Drug Abuse, 2022).

Which main opioid/opioid antagonist does the article refer to?

- 0 No specific opioid mentioned
- 1 Fentanyl
- 2 Heroin
- 3 Oxycodone/*Oxycontin*
- 4 Morphine
- 5 Buprenorphine
- 6 Hydrocodone
- 7 Methadone
- 8 Codeine
- 9 Tramadol
- 10 Naloxone/*Narcan*
- 11 Other

## Appendix D: Intracoder Reliability

**Table 9**

*Cohen's Kappa Values for Each Variable When Assessing Intracoder Reliability*

| Variable                    | Observed agreement | Expected agreement | Kappa |
|-----------------------------|--------------------|--------------------|-------|
| Responsibility              | 97.5%              | 63.8%              | 0.93  |
| Responsible actor           | 97.5%              | 60.3%              | 0.94  |
| Human interest              | 92.5%              | 50 %               | 0.85  |
| Human interest actor        | 90 %               | 28.3%              | 0.86  |
| Economic consequences       | 90 %               | 54 %               | 0.78  |
| Economic consequences actor | 90 %               | 44.9%              | 0.82  |
| Conflict                    | 90 %               | 57.5%              | 0.76  |
| Conflict actor              | 87.5%              | 20.3%              | 0.84  |
| Morality                    | 100 %              | 82 %               | 1.00  |
| Criminalization             | 92.5%              | 59 %               | 0.82  |
| Medicalization              | 87.5%              | 50 %               | 0.75  |
| Stigma                      | 97.5%              | 84 %               | 0.84  |
| Stigma actor                | 97.5%              | 83.5%              | 0.85  |
| Victim                      | 92.5%              | 52.3%              | 0.84  |
| Victim actor                | 90 %               | 42.2%              | 0.83  |
| Perpetrator                 | 90 %               | 42.3%              | 0.83  |
| Main frame                  | 90 %               | 35.8%              | 0.84  |
| First subframe              | 82.5%              | 20.8%              | 0.78  |
| Second subframe             | 85 %               | 15.9%              | 0.82  |
| Source                      | 87.5%              | 29.8%              | 0.82  |
| Opioid                      | 95 %               | 51.9%              | 0.90  |
| Average                     |                    |                    | 0.84  |

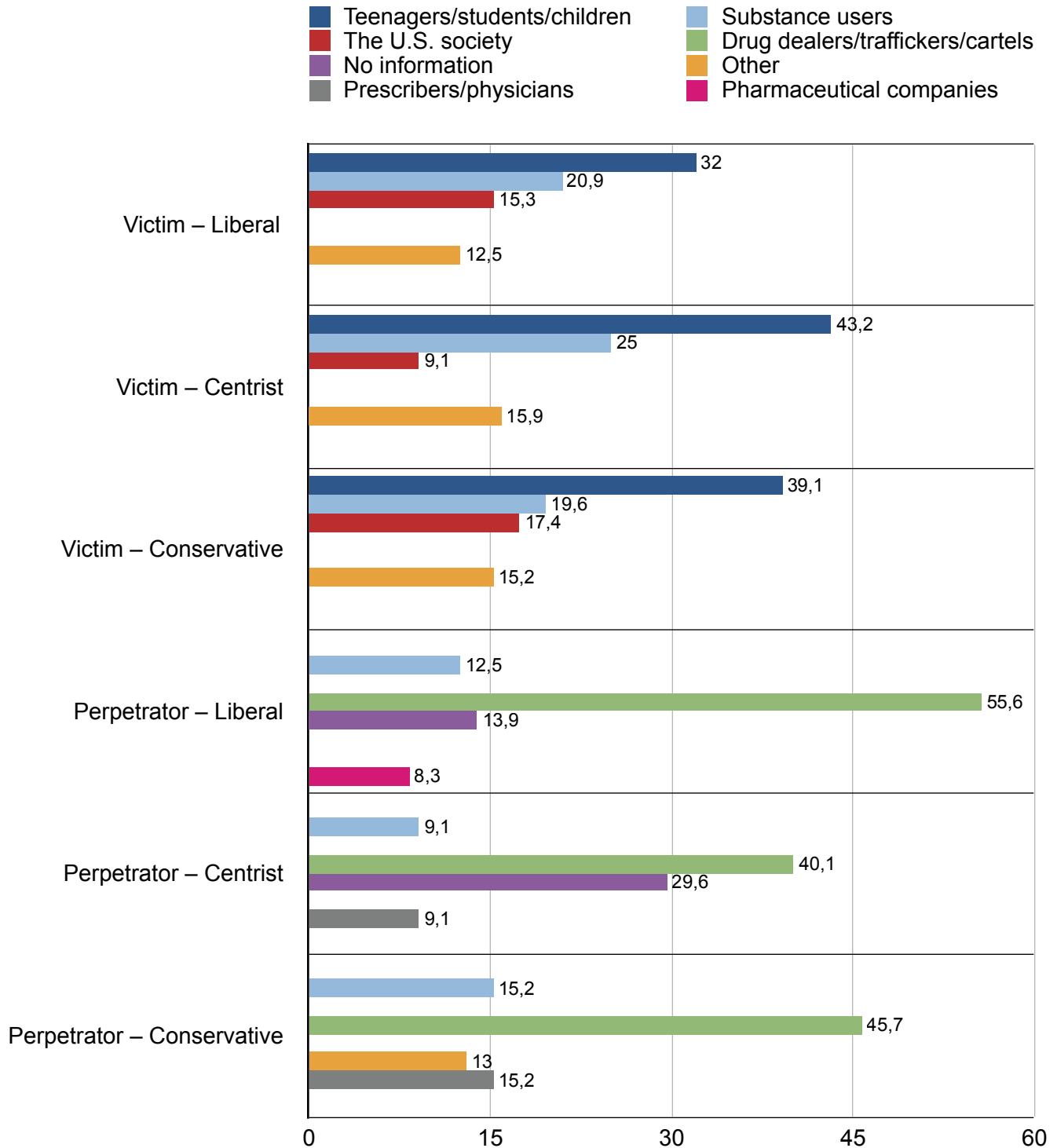
*Note.* The data shown was retrieved through another process of coding after the initial coding period had ended, analyzing 10% (40 articles) of the total sample size (401 articles) once again, in order to assess

the intracoder reliability. Despite the same values in percentages of observed agreement, the Cohen's kappa values differ, as the frames were detected with varying frequency. Author's own calculations.

## Appendix E: Actors Presented as Victims or Perpetrators

**Figure 5**

*Actors Presented as Victims or Perpetrators in News Media Differentiated by Political Leaning*



*Note.* The chart shows actors presented as victims or perpetrators within the victim frame, differentiated by the media outlets' political leaning and regardless of the state they are published in. The numbers demonstrate the percentage share of the four most frequently mentioned actors within each category when the victim frame was detected in news stories, rounded to one digit right of the decimal. Author's own calculations.

## Appendix F: Contextualization of H<sub>6</sub>

**Table 10**

*Actors Presented as Victims in Californian Media, Differentiated by Political Leaning*

|   | Liberal | Centrist | Conservative | Total % |
|---|---------|----------|--------------|---------|
| Teenagers/<br>students/children               | 27.8    | 28.6     | 13.3         | 25.3    |
| Substance users<br>regardless of<br>ethnicity | 18.5    | 14.3     | 60           | 25.3    |
| The U.S. society                              | 18.5    | –        | 6.7          | 13.3    |
| Local communities                             | 11.1    | –        | –            | 7.2     |
| Homeless<br>individuals                       | 5.6     | 7.1      | 13.3         | 7.2     |
| Non-White<br>substance users                  | 3.7     | 7.1      | –            | 3.6     |
| White substance<br>users                      | 1.9     | –        | –            | 1.2     |
| Substance user's<br>families/friends          | –       | –        | –            | –       |
| Other   | 11.1    | 42.9     | 6.7          | 15.7    |
| No information                                | 1.9     | –        | –            | 1.2     |
| Total %                                       | 100     | 100      | 100          | 100     |

*Note.* The table shows the portrayal of actors presented as victims in Californian articles, in which the victim frame was detected, differentiated by the outlets' political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.

**Table 11***Actors Presented as Victims in Texan Media, Differentiated by Political Leaning*

|   | Liberal | Centrist | Conservative | Total |
|---|---------|----------|--------------|-------|
| Teenagers/<br>students/children               | 44.4    | 50       | 51.6         | 49.4  |
| Substance users<br>regardless of<br>ethnicity | 27.8    | 30       | –            | 17.7  |
| The U.S. society                              | 5.6     | 13.3     | 22.6         | 15.2  |
| Local communities                             | 5.6     | 3.3      | –            | 2.5   |
| Homeless<br>individuals                       | –       | –        | –            | –     |
| Non-White<br>substance users                  | –       | –        | –            | –     |
| White substance<br>users                      | –       | –        | 3.2          | 1.3   |
| Substance user's<br>families/friends          | –       | –        | 3.2          | 1.3   |
| Other   | 16.7    | 3.3      | 19.4         | 12.7  |
| No information                                | –       | –        | –            | –     |
| Total   | 100     | 100      | 100          | 100   |

*Note.* The table shows the portrayal of actors presented as victims in Texan articles, in which the victim frame was detected, differentiated by the outlets' political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.

**Table 12***Actors Presented as Perpetrators in Californian Media, Differentiated by Political Leaning*

|                                      | Liberal | Centrist | Conservative | Total % |
|--------------------------------------|---------|----------|--------------|---------|
| Drug dealers/<br>traffickers/cartels | 48.2    | 14.3     | 53.3         | 43.4    |
| Substance users                      | 14.8    | 21.4     | –            | 13.3    |
| Prescribers/<br>physicians           | 7.4     | 28.6     | 6.7          | 10.8    |
| Pharmaceutical<br>companies          | 11.1    | –        | 13.3         | 9.6     |
| Policymakers                         | 1.9     | –        | –            | 1.2     |
| Other                                | 3.7     | 7.1      | 6.7          | 4.8     |
| No information                       | 13      | 28.6     | 20           | 16.9    |
| Total %                              | 100     | 100      | 100          | 100     |

*Note.* The table shows the portrayal of actors presented as perpetrators in Californian articles, in which the victim frame was detected, differentiated by the outlets' political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.

**Table 13***Actors Presented as Perpetrators in Texan Media, Differentiated by Political Leaning*

|                                      | Liberal | Centrist | Conservative | Total % |
|--------------------------------------|---------|----------|--------------|---------|
| Drug dealers/<br>traffickers/cartels | 77.8    | 53.3     | 41.9         | 54.4    |
| Substance users                      | 5.6     | 3.3      | 22.6         | 11.4    |
| Prescribers/<br>physicians           | –       | –        | 19.4         | 7.6     |
| Pharmaceutical<br>companies          | –       | 10       | 4.4          | 3.8     |
| Policymakers                         | –       | 3.3      | –            | 1.3     |
| Other                                | –       | –        | 16.1         | 6.3     |
| No information                       | 16.7    | 30       | –            | 15.2    |
| Total %                              | 100     | 100      | 100          | 100     |

*Note.* The table shows the portrayal of actors presented as perpetrators in Texan articles, in which the victim frame was detected, differentiated by the outlets' political leaning. The numbers are presented in percent and rounded to one digit after the decimal. Author's own calculations.