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A qualitative framing analysis of how firearm manufacturers and related bodies communicate to the public on gun-related harms and solutions

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ABSTRACT

There is a growing understanding that the producers and sellers of harmful products directly and indirectly affect population health and policy, including through seeking to influence public understanding about the nature of harms and their solutions. However, the firearm industry and related organisations have not to date been the subject of this type of enquiry. This study sought to address this evidential gap through examining the ways in which the firearm industry and industry-associated organisations frame firearms, firearm-related harms and possible solutions to gun violence. This was a thematic qualitative documentary analysis of materials from 7 of the largest firearm manufacturers and associated organisations. Two authors independently extracted textual material from web articles, press releases, annual reports and shareholder communications between 1st April 2019 to 1st April 2020 (302 documents). A hybrid approach combining both deductive and inductive coding was adopted, guided by the literature on the commercial determinants of health and using NVivo version 12. The firearm industry and firearm industry-funded organisations use framings about the safety and role of guns, evidence on associated harms and solutions that align with the industry's business interests, consistent with evidence on other harmful product manufacturers. This study identified framing strategies employed by the firearm industry and related organisations. These included attempts to undermine evidence, linking regulation to a dystopian future, minimising some of the most common harms, placing the responsibility for harms on individuals, and attempting to foster a heightened sense of risk to personal safety.

1. Introduction

Firearm-related violence is a global problem (Werbeck et al., 2021), and one that continues to impart a particularly heavy burden of death and disability in the US, which remains the largest market for civilian-owned firearms in the world. In 2019, there were a reported 39,707 gun deaths in the US, over half of which were suicides. There is a strong evidence base on the links between firearm availability and firearm related harm (Monuteaux et al., 2015; Bangalore and Messerli, 2013; Dahlberg et al., 2004; Knopov et al., 2019; Miller et al., 2002; Miller et al., 2007), and firearm ownership is associated with an increased risk of gun-related homicide or suicide at home (Anglemyer et al., 2014; Richardson and Hemenway, 2011). The latest data suggest that firearms are now the leading cause of death by injury for children in the US, overtaking road traffic accidents (Lee et al., 2022). While many high-

income countries have banned or highly regulate gun ownership, the US remains an outlier both in terms of policy and levels of personal ownership. Despite public health measures to increase awareness of the risks of gun ownership, the rate of gun ownership in the US has been trending upwards (Smith and Son, 2015). Some 28.8% of Americans reported personally owning a firearm in 2021, and an additional 10% reported living in a household with a gun they did not personally own (Miller et al., 2021). During early 2020 in the wake of the COVID-19 pandemic, there was an increase in purchases among first time gun owners. As of May 2021, an estimated 10% of all gun owners had purchased their first gun in the previous 28 months, exposing an additional 11.7 million people to firearms in the home, including more than 5 million children (Miller et al., 2021). As of 2021, a total estimated 345 million firearms were in civilian ownership in the US (Miller et al., 2021).

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The firearms industry and its allies exert significant political influence in the US, expending considerable resources to establish and maintain minimal regulation of gun ownership and counter efforts to strengthen firearm regulation or better understand the impacts of firearms (Diaz, 2000; Diaz, 2013), even though opinion polls show a majority of Americans are in favor of stronger legislation (Newport, 2021). It has therefore been argued that the firearm industry, whose profits and survival depend on the promotion and sale of harmful products intended for civilian use, should be considered a commercial determinant of health (Maani et al., 2020a). The commercial determinants of health is an emerging field of scholarly research that, in part, seeks to understand, and explain the ways in which corporations through their corporate strategies and production, promotion and sale of harmful products, can have detrimental impacts on health and equity, both directly and indirectly (Kickbusch et al., 2016; Maani et al., 2020b; Freudenberg et al., 2021).

Corporate activities that influence health extend beyond designing and marketing products in ways that increase harm, to non-market activities such as corporate social responsibility activities (or campaigns), lobbying, and funding research and third-party organisations to dispute the links between products and harm, improve the reputation of companies and products, and in doing so, pre-empt regulation (Madureira Lima and Galea, 2018). This can include efforts to shape social, legal and political norms, values and ideas in ways that de-emphasize the role and responsibility of the industry in question in relation to harm, and that cast the industry as part of the solution while shifting the blame and responsibility for harms onto individual consumers. A notable early account of these activities was the lead industry's efforts to shift responsibility for the harms incurred through the production and use of their products onto workers and consumers respectively (Markowitz and Rosner, 2013) with a similar approach being adopted by the fossil fuel industry (Supran and Oreskes, 2021).

Greater understanding of the ways in which industries, whose products and practices are potentially harmful to health and the environment, undermine the production and use of evidence, policymaking processes, and distort public debate and understanding, has provided important insights into the causes of and potential solutions to other major public health problems. Analyses of the activities of tobacco, alcohol, asbestos, lead, fossil fuel and opioid manufacturers reveal how corporate entities undermine understanding of product harms and society's ability to act upon them to protect and promote health. Common threads running through these strategies are efforts to cast doubt on the harms related to their products and their business practices, to fund and promote industry-friendly education and research, to prescribe how a problem is to be understood, to constrain legitimate policy responses, to shift blame on to individuals and away from the industry, and to portray the industry as part of the solution and a defender of consumer freedom (Oreskes and Conway, 2011; Michaels, 2020; Maani et al., 2022a).

To date the firearm industry and related organizations have largely escaped such close analysis. This may be in part because of a lack of funding for firearm-related research in the US until very recently (Galea et al., 2018). This represents a significant gap in the research literature, and an area in which methodologies developed to examine the influence of other harmful product industries could be brought to bear (Maani et al., 2020a). A substantial contribution to the literature has been made by scholars who provide detailed accounts of the history, structure, and conduct of the US gun industry and its lobby, often with a focus on the National Rifle Association (NRA). Diaz has noted similarities between the firearm and tobacco industries in their appeals to freedom of choice and civic duty, and product design efforts to ensure product appeal and sales, for example (Diaz, 2000). However, despite the size and power of the US gun industry and its lobby, there has been limited systematic research on how its current practices and strategies align with what is known about other harmful product industries, and the ways in which they may undermine public health and regulation of guns to protect the

public good.

In order to start addressing this gap, this study aimed to analyse firearm industry and industry-related organisations' public-facing communications on gun related-harm, to assess how these issues were described, and what policy solutions were proposed or alternatively disputed.

2. Methods

This study used established qualitative documentary analysis methods to examine publicly available texts (Lee et al., 2016), including annual reports, press releases, magazines and websites from firearm manufacturers and firearm industry-related organisations. All materials were coded iteratively using NVivo (version 12, released 2020 by QSR International), and analysed using an analytical framework informed by framing theory (Entman, 1993; van Hulst and Yanow, 2016) and the literature on corporate political activity (Mialon et al., 2015).

2.1. Ethical approval

This study was based on publicly available documentation, ethical approval was not required.

2.2. Data

Data were extracted from the websites, press releases, and annual reports of two of the largest firearm manufacturers (American Outdoor Brand Corp., and Sturm, Ruger and Co.) and five firearm-manufacturer associated groups (National Rifle Association (NRA), National Shooting Sports Foundation (NSSF), Second Amendment Foundation, Project Childsafe and Doctors for Responsible Gun Ownership (DRGO)). These groups were chosen based on their national prominence in traditional or social media spaces or the wider literature on the US firearms industry, and due to their demonstrated links to the firearm industry through disclosed funding sources, partnerships or other agreements. The NRA receives funding from the firearm industry in a variety of ways, including through industry advertising in NRA publications, subsidies to NRA memberships as part of firearm sales for some manufacturers, and through the NRA Ring of Freedom sponsor programme. As part of the NRA data sampling, we included all content from the NRA publication "America's First Freedom", a news outlet of the NRA that focuses on firearm regulation and second amendment rights. The Second Amendment Foundation acknowledges a range of firearm industry sponsors, and in turn provides logistical support to Doctors for Responsible Gun Ownership, which states on its website that it is "a project of the Second Amendment Foundation" (Doctors for Responsible Gun Ownership, 2022). The National Shooting Sports Foundation is the main American national trade association for the firearms industry, and Project Childsafe is one of its programs.

2.3. Data collection

Two authors independently extracted all available data from web articles, press releases, annual reports and shareholder communications covering the period 1st April 2019 to 1st April 2020 by accessing the relevant sections of the websites and systematically extracting each article chronologically in PDF form. This time span is of particular interest given that it captures a period in which there was political campaigning ahead of a presidential election that featured heated debates about firearm regulation, meaning communication on this topic may have been especially frequent or coordinated. All publicly available documents from the organisations' websites were included, with one exception. Due to the volume of material across all publications for the NRA compared to all other source organisations, we included all press releases that were given "featured" status on the main NRA website for the predefined study period, but limited the extraction of non-"featured"

press release to a three month period (January–April 2020) in which discourse on firearm related harms and potential solutions was most common (see [Tables 1 and 2](#)). We also chose to extract data from the NRA publication “America’s 1st Freedom as this was judged as focusing more on issues relating to firearm harm and regulation. We excluded other NRA publications, as these (for example American Hunter and Shooting Illustrated) were judged to focus more on product features and reviews, hunting, or shooting sports, than on the subject of this analysis. This allowed for the inclusion of a large volume of textual data from which to identify framing strategies and inform this exploratory analysis, consistent with previous analyses ([Lim et al., 2019](#); [Maani Hessari and Petticrew, 2018](#)), without the sample being unmanageable or unduly skewed in favor of a single organisation.

2.4. Sampling within organisations

For annual and shareholder reports, the most recent available report at the time was extracted. Articles and press releases with information relating to gun manual or technical guidelines rather than firearm-related harms were excluded during the initial search as they were technical in nature and lay outside the scope of our analysis.

2.5. Analysis

The analysis sought to identify the framings employed by the firearms industry and its allies, explore how their framing serves corporate interests, and what is concealed by their framing ([Bacchi and Goodwin, 2016](#)). Framing theory details the ways in which frames serve as conceptual structures that shape how issues or phenomena come to be understood and perceived, guiding the emergence and adoption of certain ideas about how issues should be defined, their causes, proposed solutions and the assignment of moral aspects and obligations to an given issue ([Entman, 1993](#); [Carters-White et al., 2021](#)). Different policy actors engage in framing strategies and compete to shape how and why a given problem comes to be understood and prioritised, what policy responses are accepted as legitimate, and the roles and responsibility assigned to different actors ([van Hulst and Yanow, 2016](#)). There are multiple ways in which framing theory is interpreted and operationalised for analytical purposes ([Braun, 2015](#)).

Our analysis is guided by an understanding of framing as part of struggles over meaning, possibility and in this way the execution of power. Our analysis therefore aligns with research paradigms, including the commercial determinants of health field, in which framing analysis is commonly used as a way of explaining and critiquing social and political practices and power dynamics – the ‘narrative’ approach ([Braun, 2015](#)).

Initial thematic coding was guided by a conceptual framework informed by framing theory and the literature on the commercial determinants of health ([Oreskes and Conway, 2011](#); [Michaels, 2020](#); [Michaels, 2008](#)). Specifically, we drew on the growing number of studies documenting the ways in which corporations employ framing strategies to advance commercial aims as part of their corporate political strategies ([Madureira Lima and Galea, 2018](#); [Carters-White et al., 2021](#); [Moodie et al., 2013](#); [Savell et al., 2016](#); [Savell et al., 2014](#); [Uluçanlar et al., 2016](#)). In this way, particular attention was given to exploring the ways in which the framing strategies of the firearms industry and associated organisations serve to (1) define the issue of firearms harms and safety, and the causes and drivers of these harms, (2) the responsibility and role

Table 1
Firearm manufacturers.

Firearm manufacturers	Number and timeline
American Outdoor Brand Corp. (AOBC)	8 Documents: Annual Reports and Shareholder Communications (April 2019–20)
Sturm, Ruger & Co	10 Documents: Press releases (April 2019–20)

Table 2
Third party organisations.

Third party organisations	Number and timeline
National Rifle Association (NRA) America’s 1st freedom	139 documents: 27 “Featured”/Highlighted news reports (April 2019–20), 111 news articles (1 January 2020–1 April 2020) and 1 Financial Report (2018).
National Shooting Sports Foundation (NSSF)	34 Documents: Press releases (April 2019–20), Annual Report (2018)
Second Amendment Foundation (SAF)	8 Documents: Annual Reports, Shareholder Communications (2019–2020), Press releases (2020) ^a
Project ChildSafe	13 Documents: Press releases (April 2019–20), Annual Report (2019)
Doctors for responsible gun ownership (a project of the Second Amendment Foundation) (DRGO)	90 Documents: Blog articles (April 2019–2020), Annual Report (2019)

^a No press releases were publicly available from 2019 for the Second Amendment Foundation at the time of data collection.

of individuals and various bodies and agencies, (3) prescribe what are to be viewed as legitimate solutions, and (4) undermine evidence and public health measures unfavourable to the industry’s interests. We also examined how the industry used evidence and rhetorical strategies to construct and rationalise the adopted frames and persuade audiences of their legitimacy and alignment with their own values and interests.

A hybrid approach combining both deductive and inductive coding was adopted allowing for the emergence of novel framings and refinement of our conceptual framework ([Fereday and Muir-Cochrane, 2006](#)). The approach consisted of an initial close reading of the data by the lead researcher (ZH) to support understanding of the meanings of individual texts and to identify themes. This was conducted using an iterative approach meaning comparison and triangulation between documents and across organisations was conducted. The entire dataset was constructed by the lead researcher (ZH), and a second researcher (NM) checked the data from the same sources, prior to coding of the textual data. An initial coding framework was developed by ZH and NM based on close reading, and the codes were then applied to the entire dataset, while allowing for further themes to emerge and inform refinement of the code framework. The coded data was then analysed using our conceptual framework to identify framing strategies employed by the firearm industry using NVivo version 12. Any disagreements in coding or relevance were resolved by a third researcher (MvS). Both NM and MvS applied the initial coding framework to a subset of the data to agree on the final coding framework through open discussion. The research team met regularly as the research progressed to discuss emerging themes and identify the framing strategies and their relation to each other and agreement with previous literature.

3. Results

A total of 302 documents were analysed which enabled a number of related frames, arguments, and voices to be identified. Their content and inter-related nature allowed for the development of an overarching conceptual framework (see [Table 3](#)). In following sections, we present the key frames and associated exemplar quotes (additional quotes are presented in [Table 3](#)). While the framings are presented as unique entities, it is important to recognise the synergistic and overlapping nature of framings which serve to construct a coherent discourse on firearms harms, evidence, and policies.

3.1. Firearm harm as an issue of personal responsibility

Firearm-related harm was often framed as a question of personal responsibility rather than being a consequence of firearm availability. Through such framing, the industry attempts to illustrate how the

Table 3
Key elements, frames and arguments identified in this analysis, with example quotes.

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
Normalising guns, legitimising the gun industry as expert authority, alignment with safety and American values	Firearm harms are an issue of personal responsibility for the majority to act upon individually. Harms arise form a minority of pathologized individuals or criminals who are the problem and. Gun ownership saves lives. Gun ownership as the answer to wider social issues and inequalities.	Assigning responsibility for gun safety	<p>The series reflects that more Americans—especially women—are buying guns for many different reasons, ranging from personal protection to recreational shooting. The central message is that while there are many different reasons why someone would choose to buy a gun, the common thread among them must be a commitment to store firearms responsibly when not in use so they can't be picked up by a child, stolen or accessed by someone who may want to harm themselves.</p> <p>BJA Unveil New Videos On Firearms Safety: "Many Paths to Firearm Safety" Series Focuses on Gun Owners' Responsibilities, NSSF, 16th April 2019</p> <p>We remind consumers on our website and in their instruction manuals that it is their responsibility to store firearms unloaded in a safe condition, with firearms, ammunition, and keys separate and secure, away from children and careless or irresponsible adult</p> <p>Sturm Ruger co Shareholder Report 2019</p> <p>"More parents are assuming the role of educators in their homes, so it's a good to time have a talk with your kids about gun safety, even if you don't own a gun," Bartozzi said. "If you do own a firearm, be sure your family understands the safety rules regarding firearms in your home, and always store guns responsibly when not in use."</p> <p>Retailers Emphasize Gun Safety As Sales Rise And Families Stay Home, NSSF, 20th March 2020</p> <p>In your day, your school's rifle team rode the bus to school with</p>

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p>their rifles cased, and nobody thought a thing about it. People treated firearms with the same healthy respect they would any tool that could be dangerous if misused. In short, you grew up without any cultural stigmas relating to gun ownership. The key here is that your attitude of calm, healthy respect will come through when you talk to your grandkids about guns. Kids are smart; they pick up on nonverbal communication as well as they do verbal communication. Getting older isn't so bad. Sure, your knees may ache more in bad weather, but there's always one compensation: grandchildren. After all, they're all of the fun and none of the fuss of raising kids. But one thing you may not have considered is that you might actually be the perfect person to teach some important life lessons to your grandkids, including the basics of gun safety and handling.</p> <p>4 Reasons Grandparents Are Awesome Gun Safety Mentors, NRA Family, March 2020</p> <p>Virginia's government needs to be guided by facts, not ideology. Violent crime using guns is endemic to inner city areas where gangs and the drug trade thrive. Disarming law abiding law-abiding citizens will puts them at greater risk. The risk of suicide by gun (or any means) requires mental health interventions, because disarmed persons with suicidal ideation can find other means.</p> <p>No, Virginia, There is No Santa Claus – Doctors for Responsible Gun Ownership, 3rd January 2020</p> <p>Instead of focusing on guns, I ask that you focus on the causes of</p>
		Explanations for gun harms - people are the problem not guns	(continued on next page)

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p>violence: untreated mental illness, and gang and drug violence that is endemic in impoverished inner cities. Please increase mental health funding to address the 2/3 of Virginia gun-related deaths that are suicides by providing evidence-based treatments such as crisis support and therapy, and please support. Project Ceasefire legislation that targets the great majority of the remaining 1/3 of gun related deaths in the Commonwealth, criminal homicides.</p> <p>Virginia's Fact-Free Gun Zone – Doctors for Responsible Gun Ownership, 14th January 2020</p> <p>On July 16, a San Diego, Calif., homeowner was assaulted and stabbed by a burglar. While the victim's wife called 911, his 20-year-old son retrieved a firearm and shot the attacker, who stumbled from the home and died. After authorities arrived, paramedics took the wounded homeowner to the hospital where he was admitted in stable condition.</p> <p>A greater tragedy for the homeowner and his family was likely averted because of quick thinking by the son and quick access to a firearm.</p> <p>Armed Citizens Save Lives, America's 1st Freedom, NRA, August 2019</p> <p>The gun-ban community has long opposed right-to-carry laws. But in June, a good guy with a gun (and a carry permit) stopped two armed criminals in Chicago from what was clearly an attempt to murder another man.</p> <p>A June 7 Chicago Sun-Times story reported that two armed men approached a 22 year-old male and began firing at him. A carry-permit holder seated in his car exited his vehicle</p>
		Anecdotes about guns saving lives and ownership as protection	

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p>with his firearm and shot both assailants. The 22-year-old survived, and the permit holder was uninjured. Without that permit holder's lawfully carried firearm and quick action, the attack would have surely ended quite differently—and likely tragically.”</p> <p>Armed Citizens Save Lives, America's 1st Freedom, NRA, August 2019</p> <p>As we've seen in the past with other national events, our citizens often seek to exercise their Second Amendment rights during times of uncertainty. This is important to protect, as states and localities are considering measures that seek to shut non-essential businesses. There is nothing more essential than our constitutional right to protect ourselves, our families and our property.</p> <p>What FFLS Need To Know Right Now, NSSF, 19th March 2020</p> <p>“In February, Americans celebrate Presidents Day to pay tribute to the leaders of our great nation—heir lives and achievements. It is also a special day for members of the NRA as we recall the sacrifices our first president, George Washington, and other Founding Fathers made to create this United States of America and endow us with our cherished Second Amendment right to keep and bear arms.</p> <p>President's Column, America's 1st Freedom, NRA, 21st January 2020</p> <p>Which is to say that, while the British have indeed been heavily armed at various points in their history, they have never developed quite the same democratic attachment to the ownership of guns as did their American cousins. In his famous treatise on Blackstone's</p>
	Guns embody the American way of life	Conflating guns with freedom, the constitution, national identify	
		Accounts and construction of loss of rights/freedom elsewhere	

(continued on next page)

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
		Undermine / vilify public health and others	<p>Reporter, 3rd Quarter, Second Amendment Foundation, 2019</p> <p>The biggest reason we don't have an astronomical rate of gun deaths is simple: people generally choose the best option for their own circumstances without orders from the nanny state. This "self-selection" contradicts the idea that we need to be micro-managed for our own safety. As a result of self-selection much of what the anti-gun lobby claims they want to accomplish has already been done individually by the people themselves at zero cost. No tax money expended, no freedoms restricted, no need for state-mandated mental health exams. This theory of self-selection is one of several important reasons that gun control laws have no measurable effect. It's been ignored in the gun control debate, probably because it can't be weaponized in the war on liberty and our civil rights.</p> <p>An Overlooked Factor in the Gun Debate, Doctors for Responsible Gun Ownership, 18th June 2019</p> <p>The Founding Fathers held that man's constitutional rights were natural, God-given and inalienable. The role of the government was to be the guarantor of those rights, though it was ultimately on the people themselves to keep them. Informed citizenry were to be the ultimate enforcers, and the Second Amendment itself was to be the vehicle by which this right was to safeguard and secure all others.</p> <p>Guns, Women and the Medical Literature, Doctors for Responsible Gun Ownership, 25th February 2020</p> <p>This opinion writer is terrified of normal, everyday Americans, as are many other</p>
		Gun control as threat to freedom, rights and national identity	

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p>members of the mainstream media who've expressed similar sentiments. These media members don't trust you and me and other normal, law-abiding Americans with our freedom. They find American freedom to be so terrifying that they want it controlled to death. This isn't an enlightened sort of opinion; it is the expression of fear rooted in ignorance of guns, of true liberty and even of statistics related to crime.</p> <p>A Very Revealing Reaction, America's 1st Freedom, NRA, January 2020</p> <p>Here, Democrats and Republicans should agree. Bloomberg's eagerness to suppress freedom should be disqualifying for reasonable people on both sides of the political aisle. The fact that Bloomberg's first decision as a candidate for president was to muzzle the press should give any freedom-loving American pause. If candidate Bloomberg was so willing to restrict press freedom on day one, how far will President Bloomberg be willing to go in his war on our civil rights?</p> <p>Bloomberg Sets Presidential Sights Upon Second Amendment, America's 1st Freedom, NRA, January 2020</p> <p>Should Congress and the President settle on a federal law promoting red flag laws, at least that is all they could do. Presumptively, the federal government can't require all jurisdictions to intervene identically in cases of potential risk and confiscation of weapons. It can, as Graham's bill provides, encourage states to pass these laws and provide grants funding their expenses. Yet this is another slippery slope of federal government control to be wary of.</p> <p>(continued on next page)</p>
		Convert agendas and slippery slope to overpowering government and/or loss of democracy	

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p><i>GVROs, ERPOs and Red Flag Laws, Doctors for Responsible Gun Ownership, 6th August 2019</i></p> <p>There is no practical definition of an “assault weapon” that distinguishes it meaningfully from most other types of firearms. The attempt to do so would lead down the slippery slope to outlawing all semi-automatic firearms. But it’s politically and practically impossible to confiscate the ubiquitous semi-auto long gun in America, while handguns have already been defined by the Supreme Court as in common use and therefore inviolable. In fact, none of the supposedly “reasonable”, “common sense” gun controls proposed stand up to political or practical scrutiny. Gun control advocates know this and refuse to debate the effectiveness or economics of implementation and enforcement. When challenged they always retreat immediately behind the shield of “We have to do SOMETHING!”</p> <p><i>Lies, Damned Lies & Politicians, Doctors for Responsible Gun Ownership, 12th September 2019</i></p> <p>Many of the Democrat’s big donors hold fundraisers in places like Beverly Hills and New York City’s Upper East Side. These far-left donors have pushed the Democratic Party further left—especially on issues like Second Amendment rights. These wealthy Democratic donors live behind walls and have armed security—they live separate, elite lives—and they look out over America and think that all those little people between the coasts should not have the Constitutional right to own a firearm nor</p>
		Reference to wealthy elites who seek to deny ‘normal’ or ‘poor’ people the security they enjoy themselves	

Table 3 (continued)

Conceptual structure and functioning of frame	Frames_f	Argument / rhetorical tactic	Exemplar quotes
			<p>should they be entitled to the same level of self-protection they themselves enjoy.</p> <p><i>Standing Guard - Why the Democratic Party turned against your freedom, America’s 1st Freedom, January 2020</i></p> <p>The Second Amendment protects the right of “the people,” not just the privileged few, to keep and bear arms. Yet, far too often, government-imposed barriers to this right—like outrageous “sin” taxes on gun and ammunition purchases, expensive permit fees and burdensome application processes—have the direct effect of disarming peaceable, law-abiding citizens simply because they are poor.</p> <p><i>Disarming the Poor, America’s 1st Freedom, NRA, February 2020</i></p> <p>Meanwhile, the elites—just think Michael Bloomberg—would still have exemptions for their private security details while average Americans live in helpless dependence. Is that the future any of us wants?</p> <p><i>What If?, America’s 1st Freedom, NRA, February 2020</i></p>

responsibility for gun harm lies with individuals and how they (mis)use them, rather than with guns themselves, their ownership or the ways they are designed, promoting, sold and licenced.

This framing enables the firearm industry to promote an interpretation which suggests that when gun violence and harms occur, they are due to the fault of individuals who are lacking in control, skills, or experiencing mental health issues. This deflects attention from the role played by gun marketing, availability, ownership, design, or laws governing these aspects. This in turn helps support their framing that increased gun ownership and availability equates to safety, as “normal” and “informed” citizens need to protect themselves at all times from a minority of irresponsible, dangerous individuals who are innately violent or ‘bad’ irrespective of their access to and use of guns, and who cannot be stopped by existing laws or their enforcement. Evidence of this argument was identified across the NSSF, SAF and the DRGO. For example:

“Being responsible for your own personal defense is not a when-I-alone proposition. It is not a when-I-think-it’s-dangerous choice. It is a

24/7/365 condition of being a responsible human being.” (*America's First Freedom: Women need to develop a concealed carry mindset. There are approximately 500,000 police officers in the United States. (7) Assuming three 8-h shifts every day and other circumstances (vacations, leaves, etc.), there can only be 125,000 police on duty at any time to protect a population of 250 million. (Doctors for Responsible Gun Ownership; Guns, Women and the Medical Literature; 25-02-20).*

3.2. Gun ownership saves lives

These organisations frame gun ownership as a means of protecting oneself, family and fellow citizens. Gun ownership and access to firearms are thus presented as mechanisms through which safety and protection from harm are increased and ensured, with the implication being that had a personal gun not been present in certain situations, much greater harm would have transpired. The evidence offered to support these arguments is typically in the form of individual narratives or anecdotes. Those legally carrying or owning firearms are therefore portrayed as heroes and saviours of fellow citizens and family members. Those who promote further restrictions on gun ownership and use are thus framed as denying fellow citizens of this means of ensuring safety, protection, and social order. This notion of firearms as saving lives is promoted in a number of narratives presented by the firearm industry and was utilised across the NSSF, SAF and the DRGO, which in some examples state that the association between guns and safety is clear:

“This worst-case-scenario showed what good guys and gals can do with their freedom. It exhibited this so clearly, in fact, that even most mainstream-media outlets were forced to report that an armed good guy had undoubtedly saved lives by killing a bad guy. (A Very Revealing Reaction, America's 1st Freedom)”.

Further examples were observed in the “Armed Citizens Save Lives” series presented by America’s 1st Freedom, a magazine produced by the NRA, which utilises anecdotal accounts of shootings to argue that citizens save the lives of others when they have the best access to firearms (see Table 3 for example anecdotes). Further examples were observed across firearm industry documentation, most commonly in press releases or news items on firearm-industry related websites.

This framing also appears to promote a particular understanding of the problem whereby criminality is sufficiently common and unavoidably dangerous that civilians/victims will be vulnerable if they do not have firearm access as a means of harm reduction. Increasing firearm access is proposed as the logical solution, as is evidenced by the accounts in which the presence of a gun (and someone willing and able to use it) is said to have saved lives and averted tragedy.

3.3. Firearms as a means of redressing harms associated with social inequalities

At times, these narratives are combined with narratives from other contemporary social movements and discourses, such as that of violence against women. For example, from American’s 1st Freedom:

“Yet, the women reading these stories should also be aware of an equally important demographic: those who have been the victims of crimes because they weren’t able to defend themselves by using a firearm. The latest Department of Justice crime statistics shows that while crime overall has declined, rape and other sexual crimes have increased.” (America's First Freedom, We need a “National Crime Survivor Week”).

Another example of the conflation with other contemporary issues is in regard to socioeconomic inequality, where a lack of firearm availability is linked in the documents to greater vulnerability to crime:

“...the people least likely to overcome financially restrictive and time consuming gun-control barriers are also the people who are most likely to

benefit from the ability to defend themselves and their livelihoods with firearms.” (America's First Freedom, Disarming the Poor).

Together these examples show that firearms are presented as solutions to personal safety threats, including those linked to other social problems and to wider inequalities. However, the framing of these threats in each case suggests that the specific problem is severe, common and uncontrolled enough that firearm ownership should be the primary solution.

3.4. Gun regulation as harmful, ineffective and counterproductive

Accompanying individualistic framings of firearms as a matter of personal responsibility and benefit, we identified counterpart narratives and lines of reasoning claiming that there were substantial unintended harms linked to firearm regulation.

For example, this excerpt from an article in America’s 1st Freedom (“How gun owners must mobilise to defend freedom”, 08-19), published following a special session on gun control legislation by the Virginia General Assembly on 9th July 2019, provides an insight into this framing, through the examples of gun-free zones:

“Another gun-free zone sign would not have prevented the unhinged employee with keycard access from covertly bringing a firearm into the Virginia Beach Municipal Center. However, had Virginia Beach municipal employees been allowed to exercise their right to carry on the job, things might have turned out differently.” [America's 1st Freedom; How gun owners must mobilise to defend freedom; 08-19].

And from the Second Amendment Foundation:

“FACT: The evidence shows that gun-free zones are not the answer. Truth is, they are an added danger because they prevent legally armed citizens from defending themselves and their neighbors. It's time to get rid of gun-free zones. The U.S. has tried them for more than 20 years and evidence shows that gun-free zones actually increase the danger. Nobody wants to be a sitting duck in a maniac's shooting gallery”.

This framing extends to industry discussion of firearm related suicide prevention, where industry narratives again frame this as a question of responsible ownership, rather than a consequence of firearm availability:

“SUICIDE PREVENTION — The NSSF works with the Veterans Administration, the State of Utah, and mental health agencies to help educate firearm owners and the public on how to keep firearms out of reach of those who, during a period of despair, might do themselves harm. We join the NSSF in supporting the American Foundation for Suicide Prevention's Project 2025, an initiative to reduce the annual suicide rate.” (AOBC Annual Report).

Conversely, firearm-related harm is framed as being due to a minority of “irresponsible” individuals, who engage in criminal activity or acts of mass violence. The example below (Gun Control for Gilroy, 01-08-19) uses rhetorical structures to promote the argument that dangerous individuals will be dangerous, irrespective of gun availability or gun control laws:

“Bear in mind that mass shooters, gang killings and suicides are vastly different in character. An argument can be made for saving a few lives in a population of 10,000 gang bangers by reducing their gun inventories from 9000 to 8000. However, no such case seems plausible for a population of 10 deeply disturbed mass killers who plan and prepare for their attacks for months. How do we find any of those 10? How do we disarm them or keep them from accessing the black market? America has suffered relatively few mass public venue shootings, from unbalanced people with a variety of motives (and some with no explicable one). Who are the greatest threats? What if other kinds of threats change the whole battlefield? [DRGO; Gun Control for Gilroy; 01-08-19].

The same article also challenges and questions the premise of the gun control argument, by making it appear illogical and contrasting it with more contentious scenarios:

America was asleep at the wheel with respect to the prospect of an attack by Japan before World War II. How about today? Could an unexpected attack come from some other Asian, Middle Eastern, African or Latin American country? If Americans are concerned about the minuscule risk of being shot in a public venue by a domestic mass killer, then we should also be concerned by the potential for such an attack by foreign-influenced terrorists again. How could gun control possibly reduce this risk?" [DRGO; Gun Control for Gilroy; 01-08-19].

It is notable that firearm harm is disproportionately described as being related to mass shootings (even though the vast majority of US firearm deaths are not mass shootings), and mass shootings are used as a justification against laws limiting firearm availability. In this way, firearm-related harm is portrayed as rare, as external from "normal" everyday people, and the threat of harm is almost inevitable as in it will emerge whether through guns or some other form of violence "disturbed" individuals are able to gain access to.

Indeed, they are even used to contrast the US with Europe, where firearm-related harms are orders of magnitude lower:

"Gottlieb referred to a report from the Crime Prevention Research Center that 98 percent of mass public shootings since 1950 occurred in places where citizens are prohibited from having firearms. He noted that in Europe, "every mass public shooting has occurred in a gun-free zone." [SAF Reporter 3rd Quarter 2019].

3.5. Guns as the American way of life

Another framing strategy portrayed guns as representing the "American" way of life. Rhetorical tactics employed here include advocating for gun ownership as an identity, and ensuring it is linked to patriotism/nationalism. A notable example equated gun ownership with the law of nature:

"...Circumstances such as these provide a perfect illustration of the timeless relevance of the right to keep and bear arms. As John Locke put it in his Two Treatises of Government, "self-defence" is not a contingent idea that is limited to a particular moment, but "is a part of the law of nature," and so cannot be "denied the community, even against the king himself." "[America's 1st Freedom; The Great Second Amendment Awakening; 03-20].

However, firearms were also linked to civil rights more broadly, including at times, rights for disadvantaged groups explicitly, with increasing uptake of firearms claimed as a way to ensure minorities can protect themselves from discriminatory violence:

"Gun rights are civil rights. That's why there have been people of color protesting draconian new gun-control laws here in Virginia. That's why there are increasing numbers of pro-Second Amendment groups arising in minority communities. That's why concealed carry permits for women rose 101% faster than for men, and black women made up the fastest-growing group of concealed carriers in the states that report permits by race. That's why the numbers of Asian and Native Americans seeking to arm themselves are rising as well, as the same study shows. And that's why Orthodox Jews have started carrying firearms in response to violent racism." [America's 1st Freedom; Shannon says only white, middle-aged men care about the Second Amendment; 2-20].

A core recurrent theme linked to rights and the American way of life was the reference to constitutional arguments when responding to gun control measures and pushing the notion that all other rights are dependent on the protection of the Second Amendment:

"A ban on gun ownership would not only be unconstitutional but also impossible to execute. Americans know that they have a right to self-protection, and understand that the right embodied in the Second Amendment is the right that secures all others. (Doctors for Responsible Gun Ownership; Guns, Women and the Medical Literature; 25-02-20).

An excerpt from the Second Amendment Foundation's magazine demonstrates the use of anecdotal evidence to reinforce a common narrative – that opposing the second amendment, gun ownership and gun laws would lead to severe consequences for the public:

"If there is a national crisis," Gottlieb said, "trampling the rights of millions of healthy gun owners is not the cure. Demonizing guns and gun owners amounts to practicing voodoo during brain surgery. You'll make a lot of noise and get plenty of attention, but the patient dies..."

Beginning by stating that gun regulation is not only ineffective but harmful, the passage proceeds to assert that Americans' rights are under threat and "new tactics" are being used to undermine people's ability to exercise their constitutional right to "bear arms":

...The Second Amendment is under attack. This is not "fear mongering" this is the truth. What we have been seeing are new tactics designed to not just restrict your rights but to discourage the American people from exercising their constitutional right to keep and bear arms." [Second Amendment Foundation; SAF 3rd Quarter Newspaper 2019].

We also found gun ownership to be commonly conflated with the concept of freedom and democracy, with the loss of legalised gun ownership in other countries, including the UK, described as leading to the loss of freedom and an undermining of democratic stability. An example of this is found in America's 1st Freedom:

"The Second Amendment is, in all of human history, one of the only liberty preserving provisions that has been partially lost and then mostly restored in the United States. Its renaissance serves as an inspiring example of what can be done politically when real grassroots movements push back. Nevertheless, we must consider the chances of a second comeback to be extremely slim indeed. Happily, not only are Americans the heirs to the greatest charter of freedom the world has ever seen, they have also inherited a wealth of knowledge about the playbooks that have been used elsewhere. How does a people fall into abject ruin? We know, thanks to the evidence from Russia, China and Germany. How is free speech slowly chipped away, even in a stable democracy? We know, thanks to the evidence from Canada and France. How does a country go from enjoying a de facto gun culture to passing an all-out ban? We know, thanks to the evidence from Britain." [America's First Freedom; How England Gave up its Freedom; 01-20].

3.6. Disputing the evidence on harms and regulation

Another framing strategy employed by the industry, is to portray gun control as ineffective, and gun harms as overstated or the evidence otherwise flawed. Specifically, we find that organisations employed the following tactics:

1. Manipulating evidence to cast doubt on impact of firearm regulations

The excerpt from the AOBC shareholder report below demonstrates how the organisation focuses only on accidental deaths from firearms, does not mention overall mortality, and minimised the scale of the problem by drawing comparisons with other issues:

"In 2016, in the United States, there were 495 fatalities from accidental discharges of all firearms from all causes (including mishandling) compared with 40,327 fatalities from motor vehicle accidents, 34,673 fatalities from accidental falls, and 58,335 fatalities from accidental poisoning. In short, fatal accidents regrettably do happen, but what is

notable is the infrequency of fatal firearm accidents.” [AOBC Shareholder report 2019].

According to the CDC, in 2016, there were just over 38,000 gun-related deaths (which includes 495 accidental deaths). This total excludes deaths where gun-related injuries were contributors but did not play a principal role in the death. The harms are further downplayed by framing non-fatal injuries as somehow of less concern due to their difference from fatal injuries and using the phrase “accidents regrettably do happen” introduces a perception of inevitability.

2. Seeking to undermine public health research

We identified examples of arguments seeking to undermine epidemiological research, or the discipline of public health itself as relevant to firearm-related harm, akin to efforts by the tobacco industry to undermine epidemiology as the evidential links between lung cancer and smoking became clearer (Proctor, 2012). The example below in America’s 1st freedom attempts to discredit public health research into firearm violence, and proposes that funding be distributed to criminologists instead to study criminal use of firearms. This is linked to a narrative prevalent in the data – that it is criminals who are responsible for firearm harm, therefore reducing gun availability will not reduce crimes, but instead increasing access will ensure safety:

“What’s really happening here is that the current House leadership wants medical professionals to use the same tools and methodology they’ve developed to study heart disease, cancer and more to study gun violence. If they can get gun violence treated as a virus or disease, they can then argue that we need to reduce the risk factors (in this case gun ownership) to control the problem.

... This is why this study from Lott, Mauser and Berg is so interesting. Instead of earmarking the money for criminologists to study these crimes, Democratic leadership in the House wants public-health workers, who are much more in favor of gun-control policies than criminologists, to get the money so they can produce research that will push for more gun control.” [America’s 1st Freedom; Why Democratic Leadership wants Public Health Officials to Do Gun Research; 01-20].

Another example of this can be found in an excerpt from the DRGO which seeks to frame public health evidence as “junk science” or “wish-craft”:

“Expert opinion and ‘scientific studies’ don’t necessarily reveal whether a common sense proposition is truth or nonsense. The public health community holds a virtual consensus that every conceivable gun law is effective. Criminologists and economists who have studied the topic from their disciplines’ perspectives remain unconvinced. The ‘science’ of gun control is not settled as public health professionals wish. It can only be settled by logic and facts—and at this point in the debate the evidence for gun control effectiveness is wish-craft... Most ‘gun violence’ research published in public health journals is junk science and doesn’t stand up to scrutiny. If it did, researchers from other fields would produce similar analyses and come to similar conclusions.” [DRGO; What is “Common Sense” About Guns; 24-03-20].

At times discrediting public health extends to discrediting the perspectives and skills of physicians themselves: *“Medical doctors are unqualified by their training to advise anyone—patients or politicians—about gun policy or gun safety or anything else concerning guns. This is self-evident, but some doctors seem to believe that a desire not to see people injured with firearms makes them experts on firearm tactics, mechanics, ethics, safety, and laws.” [DRGO; Stay in Your Lane; 10-09-19].*

This example is ironic, as this is authored by the DRGO, an organisation that explicitly frames itself as portraying the perspectives of physicians on gun-related issues.

3. Allusions to a dystopian future

We also identified “slippery slope” rhetoric, akin to the policy dystopia model used in reference to the tobacco industry (Ulucanlar et al., 2016), in which industry frames potential regulation of their products as being on the path to a dystopian future. In the case of the firearm industry and related organisations, the dystopic elements ranged from gun confiscation, to the erosion of wider rights, and totalitarianism:

“Can it happen here? Sure, it can. The good news is that the United States has none of the aforementioned gun-control provisions at the federal level, and only a few of them in a handful of states. So if we are on that slippery slope, we are still at the far end of it eyeing it skeptically. The bad news is that there are many powerful people in the United States who would like desperately to see most—if not all—of these laws passed here, and that, as history shows, there is nothing magical about America that renders it immune to precisely the sort of “salami” tactics (slice by slice) that have led to the decline in freedom elsewhere. As is the case with free speech, freedom of conscience, freedom of religion and so forth, one of the most powerful arguments wielded by the advocates of more government is “well, we already require a pistol license!”; “we’ve already imposed conditions”; “we’ve already banned rifles....”“.

In the following example, reference to dystopian futures are more overt, linking to totalitarian police states, and linking US Democrats to these ideologies:

“Civilian disarmament is not only harmful to one’s freedom and potentially deadly to one’s existence, but also counterproductive in achieving safety. During the twentieth century, more than 100 million people were exterminated by their own repressive— police states bent on destroying liberty and building communism, socialism, collectivism, and other utopias that turn out to be hells on earth. Some of the deceptive promises made to the people by the authoritarian governments of these ‘people’s democracies’ were eerily similar to the promises Progressives are currently making to American voters: Free higher education, making the rich pay, free health care (‘Medicare for all’), gun control, etc. Governments that trust their citizens with guns are governments that sustain and affirm individual freedom. Governments that do not trust their citizens with firearms tend to be despotic and tyrannical. We Americans should heed history and keep our guns.” [DRGO; Civilian Disarmament and Tyranny - A Tale of Three Cities; 14-11-19].

This dystopian narrative is further strengthened by the other framings presented above in which gun control would undermine personal rights, the alleviation of social inequalities, and the opportunity to save the lives of ‘ordinary’ fellow Americans, which the industry’s framing suggests are all threatened by the public health community and left-wing extremists.

4. Discussion

This study found that firearm industry and firearm-industry-related organisations sought to frame firearms and firearm ownership as being a matter of personal responsibility, as central to individual safety, including in the context of wider socioeconomic inequalities, and as a fundamental American civil right. Potential regulatory approaches were framed as ineffective, harmful, and a step toward a dystopian future. Firearm harms were largely framed in the context of unavoidable criminal use and mass shootings, rather than in the context of suicides (which constitute the majority of firearm related deaths) or injuries (fatal and non-fatal) to others. The nature of the evidence on firearms harm was itself called into question, with medical and public health perspectives framed as being inapplicable to firearm harms compared to perspectives from disciplines such as criminology.

A number of common rhetorical arguments used by other harmful product industries were present in the context of firearms. Framing product harms as a matter of personal responsibility rather than one of industry accountability is a foundational rhetorical argument used by

of the tobacco industry, beginning in the 1970s (Mejia et al., 2014). While apparently grounded in the context of personal freedom in public relations materials, in the context of the courtroom and potential liability, the tobacco industry used such arguments to position individuals as being solely responsible for smoking-related injuries, which peaked in the 1980s in response to mounting consumer lawsuits (Mejia et al., 2014; Benson, 2010). Rhetoric regarding personal responsibility for harms has also been used by industry representatives on sugar-sweetened beverages and obesity (Elliott-Green et al., 2016), and fossil fuels and climate change (Supran and Oreskes, 2021). Often, this framing serves strategic business goals by deflecting responsibility and possible liability for harms from producer to the consumer who is portrayed as exercising their right to choose in the face of ‘known’ uncertainty about the risks of harm. This is especially notable in the context of firearms, where lethality is often a marketed feature of product design.

Another common firearm industry argument is that of regulations leading to a future dystopia. This has been conceptualised in the Policy Dystopia Model, which was based on a review of the evidence of tobacco industry’s corporate political activities. The model shows how the tobacco industry uses a range of discursive and instrumental strategies to construct and disseminate a “metanarrative” in which regulations would result in a dystopic future in the form of large adverse social, economic, or political consequences (Ulucanlar et al., 2016). This included narratives around unintended costs of regulation falling disproportionately on vulnerable or marginalised groups. The findings of our analysis are strongly reminiscent of these narratives, with statements about regulation leading to undemocratic forms of government, and firearms being protective of social rights for disadvantaged groups. This is at odds with the epidemiological evidence from the CDC, which suggests US firearm-related homicide victims are disproportionately made up of African American males aged 15–34, who represent/constitute 2% of the US population, but 37% of all gun homicides, in 2019 (*The Educational Fund to Stop Gun Violence and Coalition to Stop Gun Violence. A Public Health Crisis Decades in the Making: A Review of 2019 CDC Gun Mortality Data: The Educational Fund to Stop Gun Violence and Coalition to Stop Gun Violence*, 2021).

Attempts to discredit the epidemiological evidence, or public health or medical data or perspectives more broadly, were also identified. Again, such strategies are similar to those used by other harmful product industries to cast doubt on the extent of harms by emphasising doubt, discrediting certain disciplines, or using the language of scientific uncertainty (Oreskes and Conway, 2011; Landman and Glantz, 2009). Reference was also made by the gun lobby to public health research being a form of “junk science” which is notable given that the junk science movement emerged out of the tobacco industry’s efforts to discredit certain forms or uses of evidence. This has developed into an approach used by powerful corporate actors to undermine research threatening to their interests by designating it as flawed or inconclusive and intended to forward certain regulatory and public health “agendas” (Michaels and Monforton, 2005).

There are however important differences in firearm industry framing of firearm-related harms and potential solutions. We noted selective emphasis on particular harms. Suicides are a leading cause of firearm related harms in the US, but were rarely framed as a primary harm associated with firearms. By contrast, mass shootings, which represent a small minority of overall firearm deaths, were more frequently referenced, particularly in the context of justifying wider firearm ownership to prevent them. The emphasis on the second amendment in particular is also unique to the US firearm industry. There is a need to examine the growth and use of second amendment arguments in legal and public discourse by the firearm industry and associated organisations over time, as has been done for other harmful product industries (Hilton et al., 2020; Katikireddi and Hilton, 2015; Brandt, 2012; Maani Hessari et al., 2018). The heavy reliance on the use of emotive framings with appeals to fear and notions of defending the American identity, civil rights and democracy is perhaps in part explained by the specific nature

of the firearms industry’s product: namely, a weapon designed to maim or kill *versus* a personally consumed product designed to stimulate pleasurable sensations or states of mind. The firearm industry must therefore rely on associating the meaning, function, and ownership of firearms with deeply held values, beliefs and identifies (Diaz, 2000; Diaz, 2013). The use of rhetorical strategies that seek to articulate an industry’s interests with those of the American public through references to the protection of rights, freedom, identify and country, while portending doom if the industry was to be regulated or phased out, is also well documented in relation to the corporate communication strategies of the coal industry (Schneider et al., 2016).

Another key difference is in the higher stakes, and potential consequences associated with firearm industry and industry-related rhetoric on firearm harms, as compared to those used by harmful product manufacturers when describing dystopian consequences of regulation. By emphasising a high level of background risk to individuals health through criminality, including sexual or racial violence, or government overreach as a prerequisite for firearm ownership, these organisations, which include the physician-led Doctors for Responsible Gun Ownership, are propagating messages of fear and insecurity, and may be reinforcing wrongly held stereotypes regarding levels of criminality or risk. It appears that these materials emphasize a dystopic view of US society as it currently stands, which then justifies wider availability of firearms in order to maintain individual security. The articles convey a sense of inevitability and emphasis on individual responsibility about firearm-related accidents and suicides, which is notable considering how uniquely high the burden of harms such as suicide are in the US compared to other peer countries (Tikkanen and Abrams, 2020). These framings may help propagate stigmatising and harmful narratives as well as prevent public support for evidence-based regulation. Further research could examine the use of such arguments across a wider range of materials, over longer time periods, and across a wider range of stakeholders. Understanding how discourse regarding such important policy issues becomes “polluted” (Maani et al., 2022b) with spurious or misleading claims and frames may aid health charities devise suitable alternative frames that take these into account to better inform the public. Further conceptualising the firearm industry as a commercial determinant of health may also allow for the development of counter-marketing initiatives (Palmedo et al., 2017), as developed for tobacco and proposed for alcohol and ultraprocessed food manufacturers.

4.1. Strengths and limitations

As a thematic analysis of publicly available material, this study has several important limitations. In contrast to tobacco, and to a lesser extent chemical, alcohol, and food industries, few internal industry documents are available, meaning it is not possible to identify the strategic intentions of such arguments with any certainty. Yet, the absence of such evidence does not lessen the problematic and harmful nature of the results presented, or their implications for public health policy and public understanding. Furthermore, this study examined materials produced over a relatively short time period (a necessity due to the disproportionate volume and range of material produced by organisations such as the NRA), and so is not able to identify longer-term changes or trends in the framing of harms by firearm industry and firearm-industry-related organisations. Future analyses could incorporate quantitative textual analysis to examine larger such data sets. Finally, this study did not examine social media content produced by these organisations, which could be an important source of triangulating data in future studies, as has been the case in studies involving other harmful product industries (Burton et al., 2013; Maani Hessari et al., 2019). Strengths of this study include the novel data sources used, the use of multiple data coders, the range of firearm companies and related organisations used to identify common framings, and the relatively large size of the final coded dataset.

5. Conclusions

Knowledge and understanding of the role of the tobacco industry in influencing evidence, policy and public opinion was a critical precursor to advancing evidence-based policy to reduce smoking-related harms. However, while firearm-related harms remain a substantial public health problem in the US, very little research has been conducted on the firearm industry as a vector of this harm, or as an influencer of evidence or public understanding regarding firearm-related harms and their causes (Maani et al., 2020a). This study is the first to examine the framing strategies adopted by the firearm industry and related organisations. We identify significant parallels to other industries, but also unique features. In each case, future research could do much to explore the breadth, nature, scope and impact of the activity of the firearms industry and related organisations, and their impact on public policy, leveraging the methods from a range of disciplines such as epidemiology, sociology, anthropology, history, law and medicine that have been successfully applied to other harmful product manufacturers. Understanding such framings, and the fundamental conflicts of interest driving their strategic use, could help public health actors and officials to predict and preempt these strategies and develop realistic assessments of industry claims.

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CRedit author statement

NM, ZH, SG, MvS and MP conceptualised the study and chose the methodology. ZH collected the data and led on the formal analysis, with input from NM and MvS. ZH wrote the first draft along with NM and MvS. All authors contributed to subsequent iterations.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data for this manuscript is publicly available, as it consists of firearm-industry related documents obtained in the public domain.

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