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Threat, Distract, and Discredit:
cannabis industry rhetoric to defeat regulation of high THC cannabis products in Washington
State, USA.

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ABSTRACT

Objective Washington state legislators have attempted to regulate high THC cannabis to reduce cannabis-related harms. Historically, industry actors of other health compromising products have influenced governments' adoption of evidence-based regulation policies. A better understanding of the industry rhetoric can be used by public health advocates to develop counter arguments and disseminate alternative narratives that protect the public's health. We analyzed the arguments used by cannabis industry actors opposing regulations to de-incentivize the availability and use of high THC products in Washington State.

Method We analyzed 41 testimonies transcribed from 33 cannabis industry actors in 3 public bill hearings and one legislative work session that occurred between 2020 and 2023. Using a deductive thematic analysis, informed by industry actors' arguments opposing regulation of alcohol, tobacco, and high-sugar beverages, we developed a codebook to analyze and identify themes within cannabis industry rhetorical strategies.

Results We identified three main rhetorical strategies used by cannabis industry actors to oppose THC content regulation: threat, distract, discredit. The most frequently used rhetorical strategy was threats to economic benefits, public health, and the will of the people. The other two most apparent strategies were distracting from the bill's focus by introducing a tangential topic and discrediting the science that supported regulation of cannabis products with high THC concentration or its advocates.

Conclusion Cannabis industry actors have leveraged several arguments employed by industry actors of other health compromising products to undermine initiatives to advance public health. They have also adapted rhetoric from other industries to the unique conditions of the cannabis regulatory landscape.

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INTRODUCTION

In the last 40 years, cannabis has become progressively more potent, defined by the concentration of Delta 9 THC, the main intoxicating agent in the cannabis plant (National Institute on Drug Abuse Potency Monitoring Program). In the U.S., the average THC content of herbal cannabis has increased from 4% in 1996 to 17% in 2017 (Chandra et al., 2019; ElSohly et al., 2000; Mehmedic et al., 2010).

Cannabis legalization for non-medical purposes has potentialized this trend further. In WA state, cannabis production, processing, commercialization, and adult use was legalized in 2012. Commercial legalization created a robust industry that has centered on a profitable model of exponentially increasing Delta 9 THC levels in products: the average THC concentration in WA cannabis flower is 21%, while manufactured concentrated cannabis products such as rosin, honey, wax, and others average 69% (Pacula et al., 2022). These concentrates represented 35% of the market in 2020, up from 9% in 2014 (Nordhorn, 2020).

The health effects of consuming cannabis with higher THC content are still emerging. Existing literature describes a dose-response relationship between THC content and detrimental health effects (Prevention Research Subcommittee Cannabis Concentration Workgroup, 2020). The use of high THC products, particularly if frequent, increases the risk of developing cannabis use disorder (CUD), and can make symptoms of CUD more severe (Freeman & Winstock, 2015; Petrilli et al., 2022). Similarly, using high THC cannabis products increases the risk of experiencing psychotic symptoms, developing psychotic disorders, and relapse for those already diagnosed with psychotic disorders (Petrilli, et al., 2022). Research

suggests short- and long-term negative effects particularly for young people (Freeman & Winstock, 2015; Hines et al., 2020; Jeffers et al., 2021), people with lower-income (Hasin et al., 2019; Jeffers, et al., 2021), racial and ethnic minorities (Hasin, et al., 2019; Jeffers, et al., 2021), and those reporting poor mental health (Hall et al., 2018; Rup et al., 2022).

Washington State legislators have attempted to regulate high THC cannabis. Between 2019 and 2023, four bills (HB 1463, 2021; HB 1641, 2023; HB 1642, 2023; HB 2546, 2020) proposed measures such as potency caps, potency-based taxation, and age-based potency restrictions. One of these bills included a comprehensive public health package led by legislatively mandated research gathering stakeholder policy recommendations (Washington State Health Care Authority & University of Washington Addictions, Drug, and Alcohol Institute, 2022). These bills “died” (i.e., they were not considered for voting) after legislative committee hearings that had strong participation of cannabis industry actors providing testimonies opposing the bills. To date, except for edibles, THC content is not regulated in Washington state (WA).

This study analyzes the arguments used by cannabis industry actors opposing regulation of the availability of high THC products in WA. We hypothesized that their political rhetoric overlapped with the oppositional framing used by tobacco, alcohol, and unhealthy food industries’ actors (Adams et al., 2021; Brandt, 2012; Cardador et al., 1995; Friedman et al., 2015; Givel & Glantz, 2001; Kearns et al., 2019; Mariath & Martins, 2022; Martino et al., 2017; McCambridge et al., 2018; Moodie et al., 2013; Savell et al., 2016; Subritzky et al., 2016; Waa et al., 2017). For instance, in their review of the alcohol industry’s political tactics to influence marketing regulations and policies, Savell et al. found the alcohol industry argued that public

health marketing policies would have both direct and indirect negative unintended consequences (2016). They depicted policies as harmful to manufacturers, associated industries, public revenue, or even public health (Savell, et al., 2016). In another study analyzing content of tobacco industry smokers' rights publications, the industry framed any actions to prevent secondhand smoke as a threat to a smokers' rights to smoke and the freedom to smoke where they want (Cardador, et al., 1995). Peer-reviewed scientific evidence presenting the risk of cigarette smoking, especially the causal linkage to lung cancer, threatened the corporate tobacco industry's profits so they countered with discrediting and eroding the findings (Brandt, 2012). Under the direction of the leading public relations firm at the time, the tobacco industry would position themselves as great supporters of science by offering funding, demanding more science, and stating the benefits of scientific skepticism (Brandt, 2012). This created doubt and uncertainty in academic literature, ultimately influencing policies that would have effectively responded to the public health crisis.

To the best of our knowledge, there are no other studies analyzing the rhetoric of the cannabis industry in the legislative setting. A better understanding of the industry rhetoric can be used by public health advocates to develop counter arguments and disseminate alternative narratives that protect the public's health.

METHODS AND PROCEDURES

The WA State Legislature is made up of two houses (or chambers), the Senate and the House of Representatives. Prior to being considered in the full house, a bill proposal is assigned to a smaller legislative committee. Typically, in this committee, public testimony is invited,

followed by a decision of the designated committee to move a bill forward to be voted on by the House or Senate (depending on where the bill originated). Besides public hearings, legislative committees can also hold work sessions, where chosen topics can be reviewed and discussed. These often include invited presenters considered “experts” in the area under consideration. This study utilized recordings of three bill hearings (House Commerce & Gaming Committee, 2021; House Commerce & Gaming Committee, 2023; House Commerce & Gaming Committee, 2020a) and one work session (House Commerce & Gaming Committee, 2020b) about THC concentration/potency held in the House Regulated Substances & Gaming Committee. Public testimonies were transcribed from video recordings available on WA State government websites by members of the study team. The content of slides presented during the House Committee work session was included in this analysis.

Unit of analysis. Individual testimonies were the unit of analysis. Testimonies were defined as all comments from an individual within a bill hearing session or work session. Individuals who testified at more than one bill hearing or work session were included separately each time they spoke.

Inclusion criteria. Most speakers identified themselves at the beginning of their testimony. All testimonies from cannabis industry actors were included. If a person was opposed to the bill under consideration and reported not having ties with the industry a Google search was performed to assure that such links did not exist, given that historically corporations have sponsored social movements and/or individuals to defend their interests without openly reporting financial ties (Apollonio & Bero, 2007; Bero & Parker, 2021; Cardador, et al., 1995; Smith & Malone, 2007). Non-industry testimonies were excluded.

Definition of cannabis industry actors. Individuals or organizations who have a stake in policy, based on their financial dependence on the sale of cannabis. Cannabis producers, distributors, retailers, and trade associations have the most direct interests. Other industry actors include organizations and individuals who have indirect interests in the sale of cannabis via the goods and services they provide to primary interest holders, and include advertisers, media, and lab services. This definition was adapted from the alcohol industry actor definition of Stafford, Kypri, & Pettigrew (2020).

Analysis. A deductive thematic analysis was conducted (Braun & Clarke, 2008), informed by industry actors' arguments opposing regulation of alcohol, tobacco, and high-sugar foods (Adams, et al., 2021; Brandt, 2012; Cardador, et al., 1995; Friedman, et al., 2015; Givel & Glantz, 2001; Kearns, et al., 2019; Mariath & Martins, 2022; Martino, et al., 2017; McCambridge, et al., 2018; Moodie, et al., 2013; Savell, et al., 2016; Subritzky, et al., 2016; Waa, et al., 2017). The initial codebook was based on a PubMed review of relevant articles using the keywords: tobacco industry, alcohol industry, food, lobby, rhetoric, industry rhetoric, framing, corporate political activity, and public policy. A deductive approach is useful when comparing previous theories to new contexts (Elo & Kyngäs, 2008), such is the case here. A constant comparative analysis was utilized throughout the analysis (Glaser, 1965) which allowed for the identification of themes not otherwise captured by the initial codes that emerged across all four legislative sessions, allowing for observation of new strategies employed by the relatively nascent cannabis industry.

All four authors coded eight testimonies independently and met in an iterative process consisting of three rounds (3, 3, and 2 testimonies each round). After each round, codes were

compared and honed, and additional codes were added that were deemed unique to the context of legal cannabis. Final codes were agreed upon by all four members of the team and are presented in **Table 1**. Statements could receive more than one code when applicable. Once general reliability had been achieved, the remaining 33 testimonies were coded in pairs matched across all possible coder combinations. Each coding pair met to compare codes and to resolve any inconsistencies to reach consensus before finalizing the codes. In instances where a pair could not agree on a code, the full team reviewed the discrepancy and discussed until consensus was achieved. In addition, the full team met to discuss coding nuances and to refine coder skills midway through coding. Analysis occurred between June 20th and July 10th, 2023.

RESULTS

From a total of 46 testimonies against measures to regulate high THC cannabis, 36 were from individuals who reported professional identities that defined them as cannabis industry actors and were therefore eligible for analysis. The individuals of the remaining ten testimonies presented themselves as private citizens, medical cannabis providers or members of medical cannabis consumers associations, and so were screened for eligibility. Online searches revealed that five of them also had identities consistent with cannabis industry actors (marketing professionals, managers of stores, cannabis industry sponsored media, owners of extract companies) and were included in the analysis. The remaining five were excluded. The final sample totaled 41 testimonies from 33 people, representing the following sectors of the cannabis industry: lobbyist (9), processors (9), producers (7), retailers (5), marketing/media (5), testing lab (1), and industry member, not specified (1). Some industry actors represented multiple sectors and were included in each respectively. Those who provided testimony at

more than one bill hearing were primarily lobbyists (5 out of 7). No testimonies in favor of regulating high THC cannabis were given by cannabis industry actors.

The arguments used by cannabis industry actors to oppose regulations to their products utilized 3 main rhetorical strategies (Table 1):

- Threat- conveyed that regulating THC content (capping, taxing) was a threat to the economy, to the health and safety of people, or to the will of the people, by equating regulation to cannabis prohibition, a policy rejected by popular vote in WA State.
- Distract – brought issues tangentially related to the bills in an attempt to change focus. They included statements emphasizing cannabis industry corporate behavior (great compliance with rules), suggesting non-policy solutions to the topic (education, better enforcement), or expressing concern with another topic (e.g., lack of regulation of hemp-derived cannabis products that existed outside the regulated market at the time of the testimonies.)
- Discredit – questioned the validity of research or people who presented research by questioning methodology, design, and results or denouncing public health and other professionals as biased and untrustful.

Threat

The threat strategy was the most frequently used to defeat legislative attempts to regulate THC levels or tax cannabis per THC concentration. Select quotes illustrate threat rhetoric of the cannabis industry actors:

Economic threat

I urge you to vote against this bill or for any limits on concentrates. This bill will significantly impact my business operations by shutting my doors as well as decreasing tax revenue and creating a significant public safety issue. Processor, HB 2546, 2020)

“... we will go out of business. We have twenty employees, they're all going to be on the street, most of them are parents, most of them have families. I don't know how to look them in the eye and tell them that because you can't make an extract at ten percent if the marijuana is thirty percent....” Producer, HB 2546, 2020.

Public Health threat

“Our biggest concerns with this legislation center around the negative impact this bill would have on public health. This legislation would cause cannabis producers to use large quantities of additives to dilute and achieve that ten percent THC cap, so this would make Washington's legal cannabis consumers guinea pigs to find out what other additives are hazardous to health and life”. Lobby, HB 2546, 2020.

Will of the People threat

“It has been ten years since cannabis was recreationally legal in Washington, we have collected the maturity that prohibition doesn't work. This bill is a prohibition bill.” Producer, HB 1641 & 1642, 2023.

Distract

Distract the audience by introducing a tangential topic was the second most frequent strategy (“red herring”). Some examples of such rhetoric are below:

Defending youth education and enforcement as replacements for THC regulation

“In the end, dramatically restricting THC potency does not really solve the problem presented. However, a robust education program, and stiff financial penalties for adults selling to minors would have an impact.” Lobby, HB 1463, 2021.

“Sorry I'm out of time...focus on enforcement! Like it or not, go after family members and friends who are giving this to kids, there should be sentencing enhancements, that's where the access problem is, not in the type of products...” Media, HB 2546, 2020.

Industry record on protecting the public.

“Over the past 5 years this industry has evolved largely in a positive direction and guided by good policies reflecting the general safety of the products that we represent.” Industry member, not specified, HB 2546, 2020.

“Our members unequivocally agree that no minor should have access to or ingest products created in the regulated marketplace. In fact, as was stated, our retail locations have the highest percentage of compliance with not selling to minors.” Lobby, HB 1463, 2021.

Bringing up unregulated hemp-derived cannabis products that may include Delta-8 and Delta-10 compounds.

“We have a lot of concerns about those types of products. These novel cannabinoids and synthesized compounds with artificial ingredients, those are real concerns that we need to get in front of and the broad brush that this bill is painting things with is not the way to get there.”

Lobby/Producer, HB 1641 & 1642, 2023.

Discredit

Discredit science that supported regulation of cannabis products with high THC concentration or its advocates was also common, as the testimonies below illustrate:

“My understanding and opinion on that is that it lumps a lot of different things into the same categories and then combines the effects of distinct issues into one big category. It misunderstands the detail in the nuance of the situation and as a result puts forward some policies that I don't think are going to effectively address the issue.” Lobby/Producer, HB 1641 & 1642, 2023, referring to the results of a comprehensive WA stakeholder concept mapping study (Carlini et al, in press) that indicated stakeholder support for regulating THC.

“My comments are more to the process and intention of the way this bill was introduced. I think there's been an awful lot of misinformation referenced in the opening statement about this bill, a lot of outdated studies, and a lot of just factual inaccuracies” Lobby/Producer, HB 2546, 2020.

“A 2019 study found that the use of marijuana with THC potency above 10% “modestly increased the odds of a psychotic disorder” compared to a group that never used.” Testing Lab, Presentation Slide, Work Session, 2020, referring to the seminal case-control study conducted

by Forti et al. (2019) that found that people who used high potency cannabis daily were five-times more likely to have a psychotic disorder than never users.

“We’re just beginning to grapple with that question [increased risk of high THC products], and we believe that presuming otherwise at this point puts the cart before the horse and risks a solution that causes more harm than good.” Testing Lab, Work Session, 2020.

Secondary themes (Table 1) also emerged, with less frequency and emphasis. They included expressing desire from the industry to collaborate with scientists, legislators, and prevention communities to explore solutions to possible problems, stating that the bill proposal was ineffectively and poorly written, or that exercising personal responsibility and not enacting legislation should be the focus, among others.

DISCUSSION

This study’s findings corroborate our hypothesis that cannabis industry actors leverage several arguments employed by industry actors of other health compromising products to undermine initiatives to advance public health.

The commonalities between cannabis and other health-compromising industry actors’ rhetoric have already been suggested elsewhere (Subritzky, et al., 2016) and it is not surprising, considering the historical interest of such companies in potentially investing in cannabis (Barry et al, 2014). Research has identified similarities of cannabis industry behavior and tobacco, alcohol, pharmaceutical and food industries as they attempted to influence policy decisions with political contributions (Rotering, et al., 2023) and lobbying (Rotering & Apollonio, 2022.)

Moreover, emerging network analysis research has documented an ongoing and steady flow of investments and top management professionals from alcohol, pharmaceutical, and tobacco industries to cannabis industry positions in Canada, the U.S., and other countries (Ongenaert, 2023). It is likely that these job transitions have brought swift expertise to cannabis industry actors in many areas, including how to shape industry rhetoric against public health policies that would limit their profitability.

Cannabis industry actors' testimonies attempted to distract legislators from the evidence-based regulatory measures to cap or tax THC in cannabis products by labelling them as *ineffective* and *unnecessary*. Their rhetoric focused on youth, to distract from the risks that adult legal cannabis consumers face in a market saturated by increasingly concentrated products. They defended continuation of existing regulations, emphasizing the local cannabis industry record on not selling to minors and education of youth and parents as a replacement for THC regulation.

These rhetorical approaches have been used exhaustively by other industries to undermine attempts to regulate industry practices (Giesbrecht, 2000; Mosher, 2012; Savell, et al., 2016). For instance, the tobacco industry has defended education as the central strategy to oppose tobacco control measures since 1980 and has implemented innocuous and even counterproductive youth educational campaigns (Farrelly, et al, 2002) focusing on peer pressure and lack of proper parental guidance as the problems, absolving their corporate practices of any role in youth tobacco use (Landman et al., 2002). In a systematic review, Savell et al. identified forty studies where the argument of "regulatory redundancy" was utilized by the alcohol industry to deter marketing regulations, using the narrative that existing regulations

were satisfactory, highlighting their alleged practice to only market alcohol to those of legal age and stating their opposition of minors using their products (2016).

It should also be noted that cannabis industry actors have not merely copied but also adapted rhetoric from other industries to the unique conditions of cannabis regulatory landscape. The most salient example of this adaptation is to emphasize some dire consequences if the regulations proposed were to be approved (coded as “threat”). Other industry actors have used threat arguments before, equating regulatory measures to a threat to individual rights (Cardador, et al., 1995; Givel & Glantz, 2001), to the economy (Savell, et al., 2016), and public health (Savell, et al., 2016). In our data, these threats were made front and center and articulated around the narrative of a responsible, compliant, and beneficial industry that acts as a protector against the unruly, illegal, and unsafe market. Arguments included THC potency regulation will cause mass migration of cannabis consumers to the illegal market, close down businesses, cut jobs, harm people’s health because of contaminants and additives added in illegal products, and cause a surge in fires and explosions from illicit labs producing high THC products without proper equipment. Regulation would, they claim, ultimately bring prohibition back, threatening the will of voters.

Spreading fear and apprehension, this narrative has been convincing to some stakeholders and policy makers, even when this possibility is not supported by evidence. As stated by Prieger et al., based on a literature review on this topic requested by the Washington State Liquor & Cannabis Board, “Microeconomic theory suggests that a potency tax would likely be effective in shifting consumer purchasing habits away from products that are targeted for additional taxation, and towards products that are not targeted” (2019). The same expert

opinion was expressed by Dr. Jonathan Caulkins in 2022, in a Symposium organized to discuss policy solutions for high THC products in WA State (Caulkins, 2022). It should also be noted that legal cannabis products in WA state are some of the cheapest of the country and cost less than the cannabis found in the (small) illegal market in the state (Hammond et al., 2022; Washington State Health Care Authority, 2023). Price, convenience, and safety are likely to ultimately uphold consumer participation in the legal market if high THC content were to be regulated but may incentivize purchase of lower THC products.

Another nuanced adaptation is related to strategies to undermine science. It is somewhat easier to undermine science when research is still in development and various unknowns remain, as is the case of the detrimental effects of high THC products. In the case of tobacco and alcohol, the research is solid and decades old. To confront it, alcohol and tobacco industries had used a combination of discrediting sound scientific evidence (Stafford, et al., 2020) with investing in corporate-sponsored studies (Savell, et al., 2016) to support an alternative narrative. In the case of high THC cannabis, and to the best of our knowledge, corporate funded research is incipient. Planting doubt by nit-picking evidence-in-the-making is central, discrediting even the most salient findings. For instance, in 2020, WA state scientists produced a brief report and a consensus statement about health risks of high THC products, given the increasing availability of these products in the state (Prevention Research Subcommittee Cannabis Concentration Workgroup, 2020). They concluded that available research consistently showed a dose-response relationship between THC concentration in cannabis products and adverse health effects. The caveat of this conclusion was that most studies selected were conducted before the recent widespread availability of products with 40-

90% THC and typically compared THC content of less than 10% vs. higher than 10%, defining it as “high potency” cannabis. However, the authors of such report adhered to the precautionary principle that emphasizes that, when serious harms are indicated but scientific uncertainty still exists, decisions must be resolved in favor of prevention of such harms (Goldstein, 2001). Maybe not surprisingly, the limitation of these findings has been repeatedly used by cannabis industry actors to invalidate the dose-response argument that is central to such report, by strangely arguing the comparison of cannabis concentration in these studies are not valid given that current products are much more concentrated than 10% THC.

Lastly, it is worth noting that the rhetoric of personal responsibility and responsible use was rarely present in the data analyzed. Such rhetoric places responsibility for purchase decisions (and possible negative consequences) on the individual, separating these choices from the regulatory and commercial circumstances in which they are made. It has been an argument often used by tobacco, alcohol, and ultra-processed foods and drinks corporations to undermine prevention and control of non-communicable diseases (Moodie, et al., 2013). It is possible that such argument has been sparsely utilized because WA cannabis industry actors have not admitted to date that cannabis use can entail risks to legal consumers, preferring to focus on cannabis benefits for chronically ill individuals and emphasizing that cannabis is dangerous to youth under legal age.

To the best of our knowledge, this is the first study that analyses legislative hearings to identify cannabis industry rhetoric in opposition to product regulations. Its main limitation is that hearings analyzed are focused only on one product/issue (high THC cannabis products) in one U. S. state (WA). Future studies should explore cannabis industry rhetoric in other states

and around other topics, since such knowledge might help public health advocates to develop counter arguments and disseminate alternative narratives that protect the public's health and resonate with legislators and the public.

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Table 1- Codebook themes of adopted in cannabis rhetoric analysis.

Threat	To the economy	Loss of tax revenue
		Impact on the livelihood if business close down
		Job losses
	To public health	Resurgence/ strengthening of illicit unregulated market through consumer migration.
		Consumer safety risk (e.g., pesticides, additives, residues)
		Risk of fires and explosions to produce banned products illegally
To the will of voters	Label regulations as return to prohibition	
Distract	What about cannabis industry performance?	Industry self-regulation is working well, no need of stricter regulations
		Industry high compliance of not selling or marketing cannabis to minors
		Cannabis provides relief to sick people, right to pain free existence
	What about other solutions?	Promote better enforcement of existing laws as opposed to passing new ones
		Promote low public health impact measures such as education
	What about other concerns?	Regulated cannabis is less dangerous than other substances (e.g., opioids, heroin, fentanyl, tobacco, and alcohol).
Delta-8 products that are unregulated, unsafe, and widely available		
Discredit	Research	Question methodology
		Misread, misinterpret, and/or cherry pick data
		Present self as science expert.
		Claim insufficient evidence, health effects remain an open question
		Attack relationship between use and health risk (association not causation)
		Claim science is erroneous and/or simply opinion
	People or movements	Attack integrity/legitimacy of control movements, public health advocates, and policy makers
		Present public health, research, and policy makers as biased, motivated by personal gain, corrupt, and extremist (or neo-prohibitionists) driven by a moral agenda
Secondary themes	Personal responsibility	Most people consume responsibly with no harms
		Question government regulation “scare tactics” and attempts to create “social outcasts”
		Taxation is regressive - general opposition to tax increases
		Collaboration with science.
		Collaboration with prevention/community.

Desire to collaborate with science, legislators, and prevention to find alternative	Shared concern/doing something to address harms attributable to their products
	Compassionate providers
	Present corporate social responsibility activities (CSR) such as charities, role in society, etc.
	Claim bill proposal is ineffectively written