

**A Content Analysis of Hemp-Derived, Euphoric Cannabinoids in Newspaper Media:
Unanticipated Impacts from the 2018 Farm Bill**

Anna Zoretic

Undergraduate Student
Agricultural Leadership, Education and Communications
University of Tennessee-Knoxville
azoreti2@vols.utk.edu

Dr. Blake C. Colclasure

University of Tennessee-Knoxville
321D Morgan Hall
Knoxville, TN 37996
865.974.7255
bcolclas@utk.edu

Introduction

The 2018 Farm Bill legalized the production, manufacturing, and consumption of hemp in the United States, distinguishing it from marijuana by a 0.3% or lower content of Δ -9 THC, the major cannabinoid causing a euphoric effect or ‘high’ when consumed (USDA, 2019). In 2019, hemp farmers across the United States began cultivating hemp, with most producers growing floral hemp to produce cannabidiol (CBD), a major non-euphoric cannabinoid used for health and wellness products (Wheeler et al., 2020). However, it has been discovered the CBD can be synthesized into Δ -8 THC, which does have euphoric effects when consumed, despite milder effects compared to Δ -9 THC. A surplus of CBD accompanied by state laws that prohibit marijuana but allow the sale and consumption of hemp-derived products, led manufacturers to identify a ‘loophole’ to create federally legal, hemp-derived products that cause euphoric effects. A surge in the popularity of Δ -8 THC products and similar hemp-derived euphoric products was seen, especially in states where marijuana is illegal. A 2023 study on Δ -8 THC use found that 8% of 12th graders reported using Δ -8 THC products where adult marijuana use was legal compared to 14% in states where adult marijuana use was banned (Abrams, 2024). While further research is needed to understand the long-term effects of these synthesized cannabinoid products, they present economic benefits. For example, the total hemp-derived cannabinoid market exceeded \$28 billion in 2023 (Whitney, 2023). Throughout the United States, multiple viewpoints toward cannabis products are apparent, particularly across political ideologies (Cruz et al., 2016). In Tennessee (TN), where marijuana is prohibited, the TN Farm Bureau Federation (TFBF) has supported the production of legal industrial hemp but has opposed recreational marijuana and products with psychoactive THC due to their effects. As news media covers controversial issues and can influence public understanding and policy maker decisions, we explored national and TN newspaper media coverage on hemp-derived, euphoric cannabinoids. The two research objectives guiding this study were: (1) Identify frames used in newspaper media discussing Δ -8 THC and other hemp-derived, euphoric cannabinoids; and (2) Compare the media coverage between TN and national newspapers.

Theoretical Framework

We used framing theory and agenda setting theory (McCombs & Shaw, 1972) to guide this study. Framing is the way that media emphasizes some issues while ignoring others. This allows the audience to filter large amounts of information and to gain certain perspectives. In agenda setting, mass media decides or controls what viewers and readers are thinking about and when certain topics should be published (Nelson et al., 1997). Due to the emergence of hemp-derived, euphoric cannabinoids, their connection to agriculture, and their contentious nature, agricultural communicators should understand how the media is framing these products to inform the public.

Methods

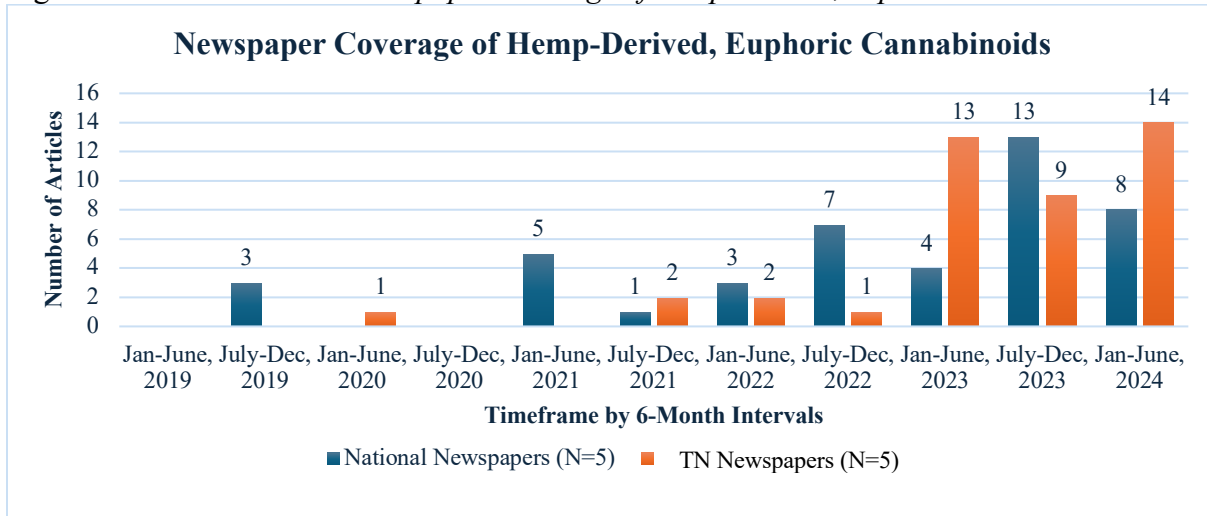
We used a quantitative content analysis, a research technique used to draw inferences from content to answer research questions (Krippendorff, 2004), to conduct our study. The population selected for this study was the top five largest national newspapers and the top five largest TN newspapers from 2019 to June 2024. We used the Academic Search Complete Database to screen articles from our newspaper outlets using the search query “Delta-8 THC”, “Delta 8,” “THC-A” and 17 other similar terms using Boolean logic. We identified a total of 174 articles but removed 88 due to keyword advertisements or non-relevancy. The remaining 86 articles were analyzed for tone (negative, neutral, positive) toward hemp-derived, euphoric cannabinoids and coded from a framing codebook containing eight frames that was developed *a priori*. To improve reliability, a

second coder analyzed 10% of the data set and inter-coder reliability was achieved (Krippendorff's alpha > .70; Krippendorff, 2004).

Results

From January 2019 to June 2024, the top five largest national newspapers published 44 articles on hemp-derived, euphoric cannabinoids, while the top five largest TN newspapers published 42 articles. Article frequency continually increased from 2019 to mid-2024 (see Figure 1).

Figure 1. *National and TN newspaper coverage of hemp-derived, euphoric cannabinoids.*



Most articles contained a neutral tone ($f=52$; 60.5%) and little variation was observed between articles from national ($f=25$, 56.8%) and state-level ($f=27$, 64.3%) media. The tone of half of the remaining articles was positive ($f=17$, 19.8%) and the other half negative ($f=17$, 19.8%) with no major differences between national and state articles. The most mentioned hemp-derived, euphoric cannabinoid was Δ -8 THC ($f=79$, 91.9%) followed by THCa ($f=12$, 14%) and Δ -10 THC ($f=7$, 8.1%). The most frequently observed frame was *laws* ($f=77$, 89.5%), and more state articles ($f=40$, 95.2%) than national articles ($f=37$, 84.1%) contained this frame. The *accessibility* of hemp-derived, euphoric cannabinoids was used as a frame in 55.8% of articles ($f=48$) and was used slightly more in state newspapers compared to national papers. The largest difference in frame frequency was *health*, used in 68.2% ($f=30$) of national articles but only 28.6% ($f=12$) of TN articles. Similarly, *products* were discussed more often in national newspapers ($f=28$, 63.6%) compared to state newspapers ($f=17$, 40.5%). The least commonly used frame was *agricultural production* ($f=14$, 16.3%; TN, $f=8$, 19.0%; national, $f=6$, 13.6%).

Conclusions/Implications/Recommendations

We can conclude that the largest national and TN newspaper outlets increased coverage on hemp-derived, euphoric cannabinoids during the timeframe of our study, showing a spike in news communication in 2023 and 2024. The increase in communication is likely due to these hemp-derived, euphoric products increasing in popularity. Thus, policy makers, health practitioners, cannabis business owners, law enforcement, and concerned public are debating the next steps to address the merits of hemp-derived, euphoric cannabinoids. Therefore, it was no surprise that the legal frame (laws) was most used. Our findings indicated that a neutral tone was used in most articles, which may be beneficial to inform the public as opposed to persuading the public on this contentious issue. Future research should compare state coverages to determine if regional differences exist.

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