

A flavor by any other frame? Examining effects of tobacco product and group cues on support for banning menthol

Cabral A. Bigman, PhD, Department of Communication,
University of Illinois Urbana Champaign

Ashley Sanders-Jackson, PhD, College of Communication
Arts and Sciences, Michigan State University

Lisa A. Henriksen, PhD, Stanford Prevention Research
Center, Stanford University



Disclosures and funding

- The authors have no conflicts of interest to disclose
- Research reported in this presentation was supported by the National Cancer Institute and the National Heart, Lung and Blood Institute of the National Institutes of Health under award numbers R01CA067850 and T32HL007034 respectively.
- The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.



Background

Disparities in menthol use

- Menthol makes cigarettes easier to inhale and menthol cigarettes may contain more harmful chemicals
- Almost 9 of 10 African Americans 12+ use menthol cigarettes when they smoke
- Menthol cigarettes may be more addictive

<https://www.cdc.gov/tobacco/disparities/african-americans/index.htm>

Targeted marketing generally

- Industry support of cultural events, contributing to minority institutions, elected officials, community organizations, etc.
- Extensive advertising expenditures in African American media

<https://www.cdc.gov/tobacco/disparities/african-americans/index.htm>

Targeted marketing geographically

- Menthol marketing at the point of sale is targeted toward African American and low-income neighborhoods (Lee et al., 2015)
 - In African American neighborhoods there is a greater risk of ads being close to the ground (and thus accessible to children) (Widome, 2013)
 - Most popular menthol cigarettes (Newport) cost less in neighborhoods with higher proportion of African American residents and school-age residents (Henriksen et al., 2016; 2011).
- 

Menthol regulation

- All flavors, including menthol, were banned in Brazil in 2012, Ethiopia in 2015 and the European Union in 2016 (though there will be a transition period)
 - Canada bans all flavors except menthol though some territories (e.g. Nova Scotia and Alberta) did ban menthol
 - Menthol is currently the only flavor that has not been banned by FDA in traditional combustible cigarettes
- 

http://apps.who.int/iris/bitstream/10665/205928/1/9789241510332_eng.pdf

MICHIGAN STATE
UNIVERSITY


[Home](#)
[News](#)
[Travel](#)
[Money](#)
[Sports](#)
[Life](#)
[Tech](#)

[News » Health & Behavior](#)
[Fitness & Nutrition](#)
[Your Health: Kim Painter](#)
[Medical](#)



Exclusion of menthol cigarettes in ban worries health experts

Black Health Experts Renew Fight Against Menthol Cigarettes

BUSINESS DAY

Cigarette Bill Treats Menthol With Leniency

Less lighting up in Europe: EU bans menthol cigarettes

AP Published 5:17 p.m. ET Oct. 8, 2013 | Updated 5:29 p.m. ET Oct. 8, 2013

Study: Cigarette makers manipulated menthol to hook teens

Updated 7/16/2008 8:54 PM | Comment  | Recommend 

E-mail | Print | Reprints & Permissions | 

MICHIGAN STATE
UNIVERSITY

Background-Framing

- The way something is framed, including the social group cues used in defining an issue, can sometimes affect policy support (Niederdeppe et al., 2013), including interventions to reduce disparities (Rigby et al., 2010).



Background-Framing

- Differences in beliefs about different kinds of tobacco products may also affect support for regulation.
 - Generally, participants had incorrect perceptions of the risks of tobacco products including the comparative risk smokeless tobacco and nicotine replacement therapy.
 - However, participants correctly perceived nicotine replacement therapy and e-cigarettes as less harmful than traditional cigarettes. (Czoli et al, 2016)
- 

Research Question

- Do the kinds of group and product cues featured in media coverage about regulating tobacco product flavoring influence public support for policy changes?
- 

Experimental design

CONDITIONS

Low-Income teens
Menthol cigarettes

American teens
Menthol cigarettes

Low-Income teens
Wintergreen chew

American teens
Wintergreen chew

2 (Product: Menthol Cigarettes,
Wintergreen Chew)

X

2 (Group cue: American teens, Low-
income teens)



Example text

- **TITLE:** [Menthol cigarettes/Wintergreen chew] making quitting harder for among [low-income/ American] teens.
- The American Cancer Society is calling for a ban on menthol in tobacco products. The minty flavoring makes smoking more appealing to beginners and is especially popular among [low-income/ American] teens. "Our concern is that [menthol cigarettes are /menthol or wintergreen chew is] a starter product for [low-income/American] teens and are a threat to their health" said Dr. Chris Porter, a representative of the American Cancer Society. Studies suggest that menthol makes it easier to start using tobacco products and harder to quit.



Outcomes

1. POLICY SUPPORT

1. CLICK ON PETITION LINK

OUTCOMES	
POLICY SUPPORT: What is your opinion about a policy that would ban the [MENTHOL CIGARETTE, WINTERGREEN CHEW], flavor throughout the United States? <i>5 pt. scale –Strongly against, strongly in favor*</i>	BEHAVIOR: If you are interested in signing a petition for a ban of [MENTHOL CIGARETTES, WINTERGREEN CHEW], below is a link to the American Cancer Society. <i>Yes, clicked No, did not click</i>

Experimental design

CONDITIONS	OUTCOMES	
Low-Income teens Menthol cigarettes	POLICY SUPPORT: What is your opinion about a policy that would ban the [MENTHOL CIGARETTE, WINTERGREEN CHEW], flavor throughout the United States? <i>5 pt. scale –Strongly against, strongly in favor</i>	BEHAVIOR: If you are interested in signing a petition for a ban of [MENTHOL CIGARETTES, WINTERGREEN CHEW], below is a link to the American Cancer Society. <i>Yes, clicked No, did not click</i>
American teens Menthol cigarettes		
Low-Income teens Wintergreen chew		
American teens Wintergreen chew		

Data Collection

- GfK panel
- N=627 collected in 2014
- Young adults 18-34



Sample characteristics

	N	%
Race		
Non-Hispanic White	332	52.95
Non-Hispanic Black	128	20.41
Other	167	26.63
Flavored product use		
Non-user	480	77.8
Used flavored tob. Products	137	22.2
Male (ref)	330	52.63
Income (Above 150 FPL)	394	62.84
Below 150 FPL	233	37.16
Political orientation		
Liberal (ref)	151	24.43
Moderate	357	57.77
Conservative	110	17.8



Predictor variables

- Above or below 150% of the federal poverty line
 - Gender
 - Political orientation (liberal, moderate or conservative)
 - Race (Black, White, Other – Hispanic, two or more races, other racial/ethnic groups such as Asian)
 - User versus non-user of the product
- 

Analysis

- General results by condition were compared using ANOVA
 - OLS regression was used to examine the relationship between policy support and predictor variables
 - OLS regression was used to examine the relationship between clicking on a petition and predictor variables
- 

Results-differences in outcome by condition

Condition	N	Mean	[95% CI]	Support* (%)	Clicked on petition (%)
Low-Income teens Menthol cigarettes	141	3.48	[3.26,3.69]	45.4	27.0
American teens Menthol cigarettes	156	3.37	[3.16,3.57]	43.6	17.9
Low-Income teens Wintergreen chew	164	3.16	[2.98,3.35]	31.7	17.7
American teens Wintergreen chew	159	3.08	[2.89,3.26]	30.8	15.1
All conditions	620	3.26	[3.16,3.36]	37.6	19.2

*Support includes favor and strongly in favor



Results-differences in outcome by condition

Condition	N	Mean	[95% CI]	Support* (%)	Clicked on petition (%)
Low-Income teens Menthol cigarettes	141	3.48	[3.26,3.69]	45.4	27.0
American teens Menthol cigarettes	156	3.37	[3.16,3.57]	43.6	17.9
Low-Income teens Wintergreen chew	164	3.16	[2.98,3.35]	31.7	17.7
American teens Wintergreen chew	159	3.08	[2.89,3.26]	30.8	15.1
All conditions	620	3.26	[3.16,3.36]	37.6	19.2

*Support includes favor and strongly in favor



Results-Policy Support (N=611, R²=0.07)

	B	P>t	[95% CI]
American wintergreen (ref)	–	–	–
Low-income menthol	0.34	0.018	[0.06, 0.62]
American menthol	0.26	0.064	[-0.01, 0.53]
Low-income wintergreen	0.09	0.495	[-0.17, 0.36]
Non-Hispanic White (ref)	–	–	–
Non-Hispanic Black	0.21	0.129	[-0.06, 0.48]
Other	0.39	0.001	[0.16, 0.63]
Non-user (ref)	–	–	–
Used flavored tob. products	-0.56	0.000	[-0.80, -0.32]
Liberal (ref)	–	–	–
Moderate	-0.38	0.001	[-0.62, -0.15]
Conservative	-0.17	0.279	[-0.48, 0.14]

Results-Clicking on the Petition (N=611, Pseudo-R²=0.04)

	OR	P>z	[95% CI]
American wintergreen (ref)	–	–	–
Low-income menthol	2.02	0.021	[1.11, 3.66]
American menthol	1.18	0.596	[0.64, 2.18]
Low-income wintergreen	1.20	0.559	[0.65, 2.20]
Non-Hispanic White (ref)	–	–	–
Non-Hispanic Black	0.92	0.781	[0.50, 1.69]
Other	1.92	0.007	[1.20, 3.07]
Liberal (ref)	–	–	–
Moderate	0.54	0.010	[0.33, 0.86]
Conservative	0.61	0.130	[0.32, 1.16]

Findings

- Nearly 38% of respondents supported a menthol ban and 19% clicked on the link to sign the petition.
 - Support varied by race, ideology, and having used flavored tobacco products.
 - Menthol/low-income vs. Wintergreen/American frame
 - Higher levels of policy support
 - Higher likelihood of clicking on the petition
- 

Limitations

- Small effects
 - Diverse, purposive sample; not representative
 - Young adults use menthol products more than older cohorts (Giovino et al. 2015; Villanti et al. 2016)
 - Older cohorts may provide different answers
 - One point in time (2014)
- 

Conclusions

- The findings uncovered different levels of support for banning menthol based on demographic characteristics.
 - The kinds of group and product cues featured in media coverage about regulating tobacco product flavoring could influence public support for policy changes.
- 

Thank you

- sande411@msu.edu
- 