

Original investigation

## In Their Own Words: Young Adults' Menthol **Cigarette Initiation, Perceptions, Experiences** and Regulation Perspectives

Received November 2, 2016; Editorial Decision February 10, 2017; Accepted February 16, 2017

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## **Abstract**

Background: Menthol cigarettes are disproportionately used by young people and have been called smoking starter products. However, limited qualitative research exists on young adults' perceptions of and experiences with these products, with much of it based on document reviews of the tobacco industry's research.

Methods: We conducted six focus groups with young adult (ages 18-24) menthol smokers in New Jersey (half with black smokers) between December 2014 and March 2015. Participants were asked open-ended questions about their menthol smoking initiation, preference reasons, substitution behaviors, and perceptions of menthol cigarette risks and regulation.

Results: Participants' menthol cigarette initiation and preference were influenced by their perceived popularity, brand recognition, taste, smoothness, satisfaction and access (including as "loosies," typically available for Newport). Some believed menthol cigarettes were less harmful than non-menthol cigarettes when initiating smoking. Many currently believed menthol cigarettes were more harmful because they contained extra "additives," were stronger (ie, requiring fewer cigarettes to feel satisfied), and/or based on hearsay. Many had tried new brand Camel Crush, which was perceived to be especially minty, fun, and attractive for newer smokers. While some used non-menthol cigarettes when menthols were unavailable, many said they would never or almost never substitute. Many acknowledged a menthol cigarettes ban would likely help them quit smoking, even though they did not support the idea.

Conclusions: Menthol cigarette initiation is influenced by an interplay of multiple factors including their sensory properties, marketing, perceived popularity and availability. The FDA should continue to pursue closing this flavored cigarette loophole.

Implications: In this first qualitative study of menthol cigarette use among young adults, we found further evidence that menthol cigarettes can act as starter products because they are perceived

as easier to smoke and taste and smell better than non-menthol cigarettes. We also add to the literature in finding that menthol cigarettes are perceived by young people who smoke menthol cigarettes as delivering satisfaction with fewer cigarettes, being accessible as "loosies", and being popular among their peers. Many did not understand the reasons behind a potential menthol ban. Any future regulation of menthol cigarettes should include a public educational campaign to support buy-in.

## Introduction

Although the 2009 Tobacco Control Act (TCA) banned the sale of flavored cigarettes out of concern for their appeal to youth, it exempted menthol flavored cigarettes, which make up approximately 31% of cigarette sales. However, the TCA did require the US Food and Drug Administration (FDA) to study if and how menthol cigarettes should be regulated in the future and two FDA-related reports have subsequently concluded that menthol is likely associated with initiation, greater addiction, and lower cessation. On July 23, 2013, the FDA issued an Advance Notice of Proposed Rulemaking signaling that it may take action on menthol and requested information that may inform such regulatory actions.

Keeping a spotlight on menthol cigarettes is important given that they are disproportionately used by certain population groups. Approximately 88% of black smokers smoke mentholated cigarettes (compared to 25.7% of whites),<sup>5</sup> an association that has been linked to targeted marketing.<sup>6,7</sup> Menthol cigarette use is also high among young people and has been associated with smoking initiation and progression.<sup>8,9</sup> Using data from 2012 to 2014, researchers found that over half (53.9%) of teenage smokers (aged 12–17) and 50% of young adult (YA, 18–25) smokers smoked menthol cigarettes, compared to 39% of smokers overall.<sup>5</sup> For these reasons, mentholated cigarettes have been referred to as "starter products" in the scientific literature.<sup>10,11</sup>

Despite their high use prevalence, limited research exists about how and why young people begin using menthol cigarettes and their perceptions about these products, with much of it based on the tobacco industry's own internal research. Previous studies have suggested that the taste and cooling properties of menthol cigarettes (which can mask the harshness of tobacco smoke) are primary reasons for young people's menthol cigarette preference, 12-14 but studies of initial experiences from users' perspectives are limited. One review of tobacco documents (largely from the 1970s and early 1980s) found that some tobacco company research studies pointed to use of menthol cigarettes by family members and friends as a particularly important factor in young people's menthol cigarette initiation, while others described menthol initiation as being more of a "haphazard" event rather than a deliberate and conscious decision.<sup>13</sup> Current original research would benefit our understanding of how and why young people come to first try menthol cigarettes and to become established menthol smokers. Research is also needed to explore how newer menthol brands marketed with menthol "capsule technology," such as Camel Crush, might appeal to young people and be related to their initiation.<sup>15</sup>

There are also mixed research findings about menthol risk perceptions. Menthol cigarettes were historically marketed as healthier and "medicinal" alternatives to non-menthols and their smoother taste may suggest to users that they are less harmful, <sup>6,7,16</sup> a perception which may also lead to their preference. <sup>13,17</sup> However, some studies have found that users, particularly young people, largely find menthol cigarettes to be as or even more risky or harmful than non-menthol

cigarettes. <sup>18-20</sup> More research is needed to better understand young people's current risk perceptions about menthol cigarettes, the basis for these risk perceptions, and if they change over time.

We aimed to provide a current picture of menthol cigarette initiation, product beliefs and use by conducting focus groups with YAs. Qualitative data about menthol cigarette perceptions and use have been surprisingly limited in the literature, with much of it based on reviews of the tobacco industry's own research documents (largely older studies before the 1990s). To our knowledge only one qualitative study conducted by public health researchers has exclusively focused on menthol cigarettes but was limited to older black smokers (ages 45–64).<sup>21</sup> We also aimed to explore YAs' awareness and thoughts about a potential future menthol cigarette ban.

#### Methods

We conducted six in-person focus groups with a convenience sample of adult (ages 18-24) current smokers (defined as those who indicate that they have ever smoked 100 cigarettes and now smoke every day or some days) who indicate that the brand they usually smoke is mentholated. Three of these groups were conducted exclusively with black YAs (with race status based on self-report during telephone screening), and moderated by an experienced African American facilitator. The other groups were open to menthol smokers of all other race/ethnicities (referred to from here on as the "general" YA groups) and were led by the study Principal Investigator (PI). Participants were recruited from an ad posting in the central New Jersey section of Craigslist.org and flyer postings on the Rutgers University college campus and in local neighborhoods. Participants completed a brief survey before the sessions about their demographics and smoking history. During the focus groups, participants were asked openended questions about their smoking initiation (eg, "describe for us the very first time you tried smoking a cigarette"), experiences with and perceptions of menthol cigarettes (eg, "how would you compare smoking menthols to non-menthol cigarettes?"), menthol cigarette brands and marketing (eg, "what are some of the reasons why you smoke your particular brand?") and a potential menthol cigarette ban (eg, "what do you think you would do if menthol cigarettes were no longer sold in the United States?"). Follow up probes and questions were used as needed to clarify participants' responses and/ or get more detailed information. After the session, participants were given a smoking cessation resource sheet and a \$50 gift card. Groups lasted approximately 90 minutes each and were conducted between December 2014 and early March 2015.

Sessions were transcribed and then a list of codes was developed, including inductive codes based on themes identified from repeated transcript readings, and deductive codes conceptualized a priori based on our question guide. The codes were then applied to the transcripts using Atlas.ti qualitative software. Two of the research team members (PI and a research assistant) coded one of the six transcripts together in Atlas. The research assistant then coded the

remaining five transcripts and the PI reviewed these for agreement. Coded text was re-reviewed to summarize the themes and patterns of participants' responses and illustrative quotes were selected for presentation (with some edited for brevity and clarity).

### Results

A total of 45 YA menthol smokers (average age 21) participated. Participant characteristics are found in Table 1.

# Smoking Initiation, Experimentation and Transition into Regular Smoking

Participants' age of first trying a cigarette ranged from 5 to 21, although many appeared to provide these as approximate guesses. Participants described initiating and experimenting with cigarettes, largely with their friends, because they were curious, bored, or because

it seemed "cool" (data not in table). Some recounted negative perceptions of their first experience(s) (eg, coughing, getting sick) but "sticking with it" because of their friends. Some also described use of other substances (eg, marijuana, alcohol at parties) as being associated with their cigarette smoking initiation. A few participants (mostly in the black YA groups) mentioned that they started smoking with Black & Mild cigars first. Although participants described stealing cigarettes from their parents/relatives or getting cigarettes from older friends, many also knew of stores or gas stations in their communities known to sell cigarettes to minors, and/or to sell single stick cigarettes (ie, "loosies"). However, several participants appeared to not transition to "regular" smoking until they could purchase packs on their own, and/or until they reached college, when they were away from their parents.

"... it was an occasional thing until I turned 18 and went off to [college]—basically until I turned 18, I hadn't bought a pack." (black YA group, female, age 20)

Table 1. Young Adult (YA) Menthol Focus Group Participant Demographics and Smoking History

	General YA Groups $(n = 26)$	Black YA Groups $(n = 19)$	Total $(n = 45)$
Gender			
Male	65.4%	36.8%	53.3%
Female	34.6%	63.2%	46.7%
Age range	18–24	18–25 <sup>a</sup>	18-25a
Average age	21	21	21
Race/Ethnicity			
White	80.8%	0	46.7%
Black/African American	0	100%	42.2%
Asian	15.4%	0	8.9%
Other	3.8%	0	2.2%
Education level (highest completed)			
High school graduate or GED	15.4%	42.1%	26.7%
Some college or technical school	65.4%	42.1%	55.6%
College degree or technical school certification	19.2%	15.8%	17.8%
Enrolled in college/university in last 6 months			
Yes	57.7%	57.9%	57.8%
No	42.3%	42.1%	42.2%
Ave. no. days smoked in past 30 days	26	21	24
Ave. no. cigarettes smoke per day	9	4	7
Ave. age first tried cigarette	15	16	16
Ave. age started smoking menthols regularly	17	17	17
No. of first few cigarettes that were menthol			
All of them	32%	36.8%	34.1%
Most of them	24%	26.3%	25%
Some of them	24%	26.3%	25%
None of them	12%	10.5%	11.4%
I don't remember	8.0%	0	4.5%
How first tried menthol cigarettes			
Tried/snuck cigarette from friend	72%	57.9%	65.9%
Tried/snuck cigarette from relative	16%	10.5%	13.6%
Bought menthol cigarette on own and tried it	8%	15.8%	11.4%
Tried from promo table at club, bar, concert, event	0	10.5%	4.5%
How risky think menthol cigarettes are compared to no			
Less risky	3.8%	5.3%	4.4%
About the same	50%	68.4%	57.8%
More risky	46.2%	26.3%	37.8%
Regular menthol brand	.0.270	20.070	37.070
Newport	34.6%	73.5%	51.1%
Marlboro	38.5%	15.9%	28.9%
Camel	23.1%	10.6%	17.8%
Other	3.8%	0	2.2%

<sup>&</sup>lt;sup>a</sup>one participant was 24 years old during recruitment but had turned 25 by the day of the focus group.

## Initiation of and Preference for Menthol Cigarettes

Participants varied somewhat in how early in their smoking initiation they had tried menthol cigarettes in particular, although more than half (57.7%) indicated that either all (33.3%) or most (24.4%) of their first few cigarettes were mentholated (see Table 1). Although some participants mentioned having parents or family members that smoked menthol cigarettes (particularly so in the black YA groups), most described trying menthol cigarettes for the first time from their friends who used menthol cigarettes.

A major theme that emerged across all groups was that participants' menthol cigarette smoking initiation was influenced by the fact that menthol cigarettes were largely what their friends smoked, what they perceived as being popular, and ultimately the type of cigarettes that seemed familiar, normal and accepted in their social and environmental communities (see Table 2, A).

"When you're black and live in the hood and everybody smoke Newport..." (black YA group, male, age 24)

While some participants described initiating menthol cigarettes because it was the only type they had access to from an older friend or sibling, some also referred to picking a menthol brand when they *did* have a choice or when they started to buy their own packs because that was what was familiar to them, and/or because they liked or recognized the advertising or packaging (see Table 2, B). Findings suggested that for many, particularly participants in the black YA groups, the easy access to menthol cigarettes as single cigarette "loosies" also influenced their menthol use (see Table 2, C).

Another major reason for preferring menthol cigarettes (both initially and currently) was taste. Participants referred positively to menthol cigarettes as being "minty," "cool," "fresh," and "refreshing" and as even smelling pleasant and better than non-menthols ("they just taste nice and fresh and you don't feel as dirty afterwards"). Across groups, the "coolness" of menthol cigarettes were also related to perceptions that menthol cigarettes are smoother, less harsh, and "easier to inhale" than non-menthol cigarettes, which were generally regarded as strong, harsh and "gross" (see Table 2,

#### Table 2. Participants' Stated Reasons for Initiating and Preferring Menthol Cigarettes, by Theme

A. Perceptions that menthol cigarettes/brand were popular in their peer groups/social communities:

- "all my friends... it's like the highest smoked cigarette is Newport, so it was just kind of the thing that was right there in front of me. (General YA Group, male, 24)
- "The first time I smoked a cigarette, I probably was like 12. I stole it from my mom. My mom smokes Marlboro Lights. It was terrible. I coughed a lot, and it was really uncomfortable. And then I got to high school, and literally every single one of my friends smoked menthol cigarettes." (General YA Group, female, 21)
- B. Perceptions that menthol brand was familiar, recognized and/or liked advertising or packaging:
- "I thought that the ads that I saw looked really appealing and, like it [Newport] was really the only cigarette brand that I knew that I wanted. And my friend had an older brother who was of age to buy cigarettes, so we would just ask him to buy us packs and...the only name that I knew was Newport, so I would ask, "can I have a pack of Newports?" I didn't know any of the other brands at all so I got them and I just, it stuck..." (Black YA Group, female, 19)
- "...you know, you just knew Newport 'cause you'd have access to what you heard more often or that's what people had, and I was—and I knew what the box looked like, so I'd, like, 'Oh, can I have Newport? and those were just what I smoked. It wasn't even menthol, not menthol. It was just 'I know Newport'." (Black YA Group, female, 19)
- "The first one wasn't menthol, and, like, for a while I didn't smoke menthol, but then, again, like, the box was cool, so I was like, "Okay, well, let me just go for this one," [referring to Newports]. (Black YA Group, female, 19)
- C. Perceptions that menthol cigarettes were available as "loosies"
- "...last year, I lived next to this corner store that like sells loosies and they sell menthols there, so that's when I started smoking menthols... I've never came across a place that sells loosies that are not menthol. Most of them are Newport." (General YA Group, male, 20)
- "They won't crack a pack [of Marlboro]. No, because no one's comin' in the store and saying, 'Well, let me get a loosie of Marlboro.' Like, no one does that. It's always a Newport..." (Black YA Group, female, 23)
- "Cause it's more convenient now too because you can just go to a little store and get a single cigarette, and it's a Newport." (Black YA Group, female, 21)
- D. Perceptions that menthol cigarettes are less harsh and easier to inhale
- "It cools it down, so I think it, like, makes it easier to inhale..." (Black YA Group, male, 24)
- "But say if I smoke a non-menthol cigarette, it's more harsher because it would seem as almost like you were inhaling a burning fire." (General YA Group, male, 24)
- "I think for a menthol smoker, when they smoke a non-menthol cigarette, it's kinda like when you inhale a cigar. It feels unnatural and you start kinda choking. It's not as severe, but it's certainly along the similar lines. Like, your throat is kind of rejecting it almost." (General YA Group, male, 18)
- "It was just I know Newport, and it was better, in my opinion, because it was a lot less harsh for me and I liked how it just felt easier." (Black YA Group, female, 19)
- E. Perceptions that menthol cigarettes hit harder, are more satisfying
- "...I could smoke probably, like, four or five non-menthol cigarettes, but then it still won't satisfy me as much as that one menthol cigarette, you know?" (Black YA Group, male, 20)
- "For me it's like I've tried other things like the Marlboro Lights and the Marlboro Reds, and it's kind of like smoking air, like you get really nothing out of it, and when you're done smoking one it's kind of like you want another one in 10 to 20 minutes. There's no satisfaction, and with the menthol it just kind of feels like after that, you can enjoy that and then move forward. The other ones, I dunno, it just, it's not as satisfactory."

  (General YA Group, male, 24)
- "...if I smoke a plain cigarette, after I'm done, I can smoke another one. It's like air. I can't smoke two [Newports] back-to-back. I'd pass out."
   (General YA Group, male, 18)
- "It's kind of like if you smoke—like if I smoked one of these right now, I wouldn't have to smoke another one till, like, maybe an hour or two. You know, I could space it out, whereas if I'm smoking non-menthol in, like, 20 minutes I'm gonna feel that again and I'm gonna want to smoke again. I feel like I'll smoke double what I smoke if I'm not smoking menthol." (General YA Group, male, 24)

D). These were reasons not only for preferring menthol cigarettes currently, but were also important when initiating smoking:

"For me at least when I started smoking, they were easier to smoke, almost. Because it's like you don't even feel like you're inhaling smoke. It's like ice in your mouth, and I just like that." (general YA group, male, age 19)

However, some participants also described menthol cigarettes as being "strong" (and potentially harsh), at least at first, given their intense taste and ability to make you feel lightheaded. A final related major reason for preferring menthol cigarettes were the perceptions (consistent across groups) that menthol cigarettes delivered a "fuller" smoke and "hit hard," requiring fewer cigarettes to feel "satisfied" (see Table 2, E).

"It's more satisfying. I don't have to go for a second cigarette right after putting the first out...It just satisfies you for longer." (general YA group male, age 24)

### Menthol Cigarette Substitution

Participants were asked if there were ever times when they would currently smoke a non-menthol cigarette. A few participants said that they preferred to smoke non-menthol cigarettes when they were sick and some said they sometimes used non-menthol cigarettes to try something new or because they liked some non-menthol styles. Several people noted that they were willing to smoke a friend's nonmenthol cigarette if they didn't have their own cigarettes ("beggars can't be choosers"). This was more likely and tolerable when drinking alcohol. However, others expressed that there were very limited situations in which they would do so (eg, when "desperate", or as a "last resort"), and that they would never or almost never substitute ("I would have to be in real dire straits to switch over," male, 24). A few participants described taking precautions to avoid such unpleasant situations:

"If I have one or two cigarettes left and I know I'm going out that night, I'll buy a new pack...I try and never leave myself without at least one menthol cigarette 'cause I know I won't smoke a nonmenthol." (general YA group, female, age 23)

## Perceptions of Menthol Cigarette Brands

Participants' stated brand preferences were influenced by taste and perceived strength and satisfaction-delivery (with Newport commonly regarded as the "strongest" menthol brand), and again by its perceived familiarity, popularity and accessibility ("everybody in our town smokes Newports," general YA group, female, age 19). For many, the brand they regularly used was the one they perceived to be largely used by their friends and in their community, and that which they had started with early on:

"I just stuck with it ever since—me and my best friend, if we're together, it's always Marlboro Menthols." (black YA group, female, age 21)

Most participants indicated that their regular brand was Newport (51.1%), which was more heavily preferred in the black YA groups (73.4%), followed by Marlboro Menthol (28.9%)(see Table 1). Participants across groups had heard that menthol cigarettes, particularly Newports, were most prevalent among black smokers. While some referred to this as a "stereotype" that wasn't necessarily true, participants in the black YA groups largely agreed with this perception. One black male participant recalled the surprised reactions

he would receive from black community members whenever they found out that he smoked Marlboro (his original brand), before he switched to Newports. In another group, some black participants believed it was a result of targeted marketing in black communities, neighborhoods and media:

" I'm 24 and, like, all I have seen is Newports. That's why I said, it's like all we know is Newport, really....growing up as a kid, my aunt smoked Newports. Her boyfriend would smoke....You go to the store, you see the Newport signs outside the window....it just seems like every corner out here, you see a liquor store with a Newport sign..." (black YA group, male, age 24)

Participants across all groups were also familiar with newer brand Camel Crush, with many having at least tried it, and seven participants (15.5%) using it regularly. Participants agreed that Camel Crush cigarettes were "very minty" or "more minty" than other menthol cigarettes (Table 3, Section A) and also described the "crushing" aspect of Camel Crush as fun and entertaining, a perceived reason for their popularity (Table 3, B). Some thought Camel Crush was cheaper and some thought it was popular because it provided an option between the two flavors and could be shared between nonmenthol and menthol smokers, (Table 3, Section C) though participants did not actually know people who smoked it "uncrushed." Despite the generally positive comments about Camel Crush, some participants said that they didn't view it as a good regular menthol cigarette because it was too "light," "quick" or "minty." It was suggested that Camel Crush might more likely appeal to younger and/ or newer smokers, or just be used by smokers occasionally for entertainment (Table 3, Section D).

### Menthol Cigarette Risk Perceptions

Participants were also asked about their risk perceptions of menthol cigarettes relative to non-menthol cigarettes. Many perceived menthol cigarettes to be "about the same" in terms of risks because they were perceived to differ only in their presence of menthol, which they viewed simply as adding a flavor, and which could also be found in other products such as cough drops (see Table 4, A). In contrast, many participants believed, either based on what they had heard (online, in the media, from others, and "on the street") or their own assumptions, that menthol cigarettes "were worse for you" because they had "extra" chemicals and additives such as menthol flavoring itself, and/or fiberglass, which could cause one to "cough up blood" and was associated with Newport cigarettes in particular (Table 4, B). A few participants also believed that menthol cigarettes (particularly Newport) were likely more harmful because they were "stronger" cigarettes:

"I feel that the Newport smokers all like agree, other cigarettes don't really hit the spot, and that probably means that there is something that's not really that good in it." (general YA group, female, age 21)

However, participants across groups also noted that even if menthol cigarettes were somewhat more harmful, it was likely not a big or meaningful difference because both types were very harmful to begin with. Although no one indicated during discussion that they *currently* thought menthol cigarettes were less risky or harmful than regular cigarettes, across groups participants acknowledged that some people likely *do* think so because menthol cigarettes are less harsh, smoother and easier to smoke, characteristics which might give this impression. A few noted that they personally thought this when they were younger and/or first started smoking (Table 4, C):

#### Table 3. Select Example Quotes of Participants' Camel Crush Perceptions, by Theme

A. Perceptions that Camel Crush cigarettes are very or more minty:

- "They taste like candy, it is more minty." (General YA Group, male, 24)
- "This has more menthol in it." (General YA Group, female, 24)
- "It's gonna be a little bit more mintier. Kinda has, like, that mint taste." (General YA Group, male, 24)
- "They taste like mint. When I first started smoking Newport I thought I was going to puke, I hated it. But with Camel Crush I feel like maybe I wouldn't get that feeling because it tastes like toothpaste or mouthwash which would just be more normal." (General YA Group, female, 18)
- "I'll buy the Camel Crushes [when sick] because they're mintier." (General YA Group, female, 20)
- "I do like the Camel Crushes 'cause they're mintier." (Black YA Group 1, female, 19)

B. Perceptions that Camel Crush are fun, entertaining:

- "I think they wanted something new, like maybe people are getting bored of traditional cigarettes. It's something different. It's a new feature. It's like a new toy." (General YA Group, male, 18)
- "I think they are cool though, like that little ball. They are actually like candy. I think it is fun." (General YA Group, male, 19)
- "It is a time occupier and it is an entertainment thing too." (General YA Group, female, 19)
- "They gave it to me and said here try it, press the middle and I felt it and said OMG this is cool." (General YA Group, male, 19)
- "It's—I don't wanna say fun, but it is fun." (Black YA Group, female, 20)
- "Yeah, it was just something cool to play with." (Black YA Group, male, 24)

C. Perceptions that Camel Crush give both flavor options, can be shared

- "Well, I've seen, I've seen advertisements for them, and like it's for sharing...like if a friend smokes menthol, and one smokes non-menthol, you can share." (General YA Group, female, 24)
- "Some people like the option of having a menthol and non-menthol in the same pack." (General YA Group, male, 24)
- "They might want a menthol so they just crush it and maybe later they want a non-menthol." (General YA Group, male, 24)
- "Best of both worlds." (General YA Group, male, 24)

D. Perceptions that Camel Crush are not good regular cigarette for established smokers, for new, young smokers

- "I feel like they're running towards younger people because they are so minty, it doesn't taste like a cigarette, sometimes." (General YA Group, female, 20)
- "It appeals to kids. People that like to play with stuff..." (Black YA Group, female, 25)
- "[Camel Crush is] for a smoker that is not really a lifetime smoker, it is like a phase." (General YA Group, female, 19)
- "I also think a lot of like mediocre smokers use that. I feel it doesn't really taste too much like smoke. If you compare that to a different cigarette you will get more of a cigarette taste. It is like a pack of gum." (General YA Group, female, 19)
- "You don't get much smoke with Camel Crush either." (General YA Group, female, 19)
- "And it is a quick cigarette, I don't know if you guys realize that, it is very quick, it burns quick." (General YA Group, female, 19)
- "I always just thought of it as a gimmick...But if I get one for free, like at a party, that's usually where I experiment, hell yeah, I'll smoke it, but I wouldn't buy it 'cause I'm like, "This is just stupid." Like, I don't need toys in my cigarettes. I just need to smoke." (Black YA Group, female, 25)

#### Table 4. Example Quotes of Participants' Menthol Cigarette Risk Perceptions

A. Perceptions that menthol cigarettes are just as harmful/risky as non-menthol cigarettes:

- "I just think they're just the same. I feel like the only difference is the mintiness, and I feel like that's not something that's gonna be, like, a lot more harmful than all the other bad stuff that's in cigarettes." (Black YA Group, female, 21)
- "...there's menthol in cough drops too. [Laughs] So it can't be the menthol, itself, that's entirely just bad." (Black YA Group, male, 24)

B. Perceptions that menthol cigarettes are more harmful/risky than non-menthol cigarettes:

- "Yeah, I just think more additives, they add more chemicals to it, definitely." (Black YA Group, male, 24)
- "Yeah, I would say the chemical they put in it to make it taste menthol. It's probably a bad thing. It makes sense." (General YA Group, male, 18)
- "Yeah. That's what I heard about. If you smoke, like, a pack a week of Newports for four years, you'll have enough fiberglass in your lungs to build a car." (General YA Group, female, 23)
- "I feel that the Newport smokers all like agree, other cigarettes don't really hit the spot, and that probably means that there is something that's not really that good in it." (General YA Group, female, 21)
- "I know a lot of people, they—they stopped smokin' Newports because they—they talking about, their throat, so they had to go to non-menthol cigarettes or, like, [Marlboro] Reds and stuff." (Black YA Group, male, 24)

C. Perceptions that menthol cigarettes might be perceived as less harmful when initiating smoking

- "When I was younger I thought that they were less harmful. Like when I first started smoking and just because you are inhaling it and it just feels like cool instead of like smoke that makes you cough. Like when you smoke a Marlboro Red for the first time, I coughed my lungs out. So I feel like it just goes down easier which might make it feel less harmful." (General YA Group, male, 19)
- "I said "about the same", but when I was like a kid I thought, like when I was smoking them for the first time I thought it was less harmful because I thought they took some of the bad stuff out and put this minty fresh feeling in." (General YA Group, male, 19)
- "I think when I, like, first started smoking menthols, I was like, 'These are better 'cause it cools your throat off.' "(Black YA Group, male, 24)

"When I was younger I thought that they were less harmful. Like when I first started smoking and just because you are inhaling it and it just feels like cool instead of like smoke that makes you cough. Like when you smoke a Marlboro Red for the first time, I coughed my lungs out. So I feel like it just goes down easier which might make it feel less harmful." (general YA group, male, age 19)

## Awareness and Perceptions About Menthol Cigarette Regulation

Very few participants had heard anything about menthol cigarettes in the news nor had they previously heard that the FDA was considering a ban on menthol cigarettes, an idea that promoted feelings of anger or dismay ("I think it's an outrage," black YA group, female, 19). Several participants across groups expressed the idea that it should be people's "choice" to smoke or not and that banning menthol cigarettes (rather than all cigarettes) seemed unfair, wrong and inconsistent. One participant also noted that the rationale for a potential menthol ban was not clear:

"Because, if we're gonna ban, don't just ban menthols. It doesn't—it's, like, illogical to me. Like, ban all of them. They're not giving us information as to why only menthols. Why doesn't the FDA give more information about why menthol is bad? They're not informing us." (black YA group, female, age 19)

Some didn't think a ban was realistic because the government would lose too much tax profit and many participants were highly skeptical that a ban could be effective, believing that people would still find a way to get menthol cigarettes, either on the "black market" or by making their own bootleg versions. In addition, some participants in the general groups also said that if such a ban would be implemented it would not make much of an impact on them because they would just switch to non-menthol cigarettes. In contrast, more participants (particularly in the black groups) acknowledged that even if they did not personally support such a ban, it might be good for society and actually help them quit smoking, because they did not like non-menthol cigarettes and switching to non-menthols wouldn't be "worth it".

"You're, like, paying for cancer kind of when you buy cigarettes. It's, like, I have to like them if I'm gonna be spending all this money." (black YA group, female, age 20)

Several black participants, including those who said they would quit smoking, also indicated that they would likely go back to using Black & Mild cigars or use them more frequently than they currently did. A few participants indicated that they'd likely smoke more marijuana. Several participants already used e-cigarettes to some extent and indicated that they could see themselves continuing to use e-cigarettes. No participants expressed interest in switching to smokeless tobacco which was referred to as "gross."

## **Discussion**

This study supports previous research in finding that the taste, coolness and relative smoothness of menthol cigarettes are important factors in young people's initiation of and preference for menthol cigarettes. 12-14 As evidenced by young people's own descriptions, menthol cigarettes appear to facilitate smoking initiation and continued smoking because they are easier to smoke and because they taste and smell substantially better than non-menthol cigarettes, sentiments echoed across both the black and non-black participant groups. This study also adds to the literature in finding another perceived benefit of menthol cigarettes among YAs-that is, the ability to smoke fewer menthol cigarettes and feel satisfied. This perception is consistent with some previous studies finding that menthol smokers smoke fewer cigarettes per day<sup>22-25</sup> and is likely an important value-added benefit for price-sensitive young people. These factors are important as the FDA has the regulatory authority to restrict products, like menthol cigarettes, that appeal to youth in order to protect public health.

Findings of the strong taste preference for menthol cigarettes and dislike of non-menthol cigarettes also suggest that banning or restricting menthol cigarettes may encourage a substantial number of current menthol smokers to quit smoking or significantly reduce

cigarette consumption. Indeed, many participants, particularly the black participants, described that they currently never or almost never willingly use non-menthol cigarettes and that switching to disliked non-menthol cigarettes in the event of a ban wouldn't be worth the cost and associated risks. Many acknowledged that a ban might help them quit. This is consistent with previous research finding that the prevalence of switching between menthol and non-menthol cigarettes in adults is very low, particularly among black smokers. 13,26 This is also consistent with a previous study finding that 65% of YA menthol smokers and 79% of black YA menthol smokers indicated that they would quit tobacco use altogether if menthol cigarettes were banned.<sup>27</sup> Of course it is not known to what extent respondents' stated intention would correlate with their actual behavior in the event of a ban, 28-30 and respondents likely under-estimate their addiction to nicotine and over-estimate their ability to quit altogether. In addition, several black participants in this study indicated that they would likely turn back to or increase consumption of cigars if menthol cigarettes were banned. Switching to combustible cigars would likely not substantially reduce public health risks and efforts to guard against such switching in the event of a ban should be pursued. Nevertheless, if even a small percentage of menthol smokers were to truly quit tobacco, numerous lives could potentially be saved.28-30

Findings from this study also suggest that young people may be more likely to believe menthol cigarettes are less harmful than nonmenthol cigarettes when first starting to smoke and to modify these beliefs over time. Consistent with previous research, 14,19,31 most YAs currently believed menthol cigarettes were as or more harmful than regular cigarettes. Interestingly, while these perceptions were attributed in part to hearsay, they also appeared to be based on intuitive assumptions given the product's characteristics (eg, perceived strength, menthol being an additive). The FDA and tobacco control professionals may be able to leverage this latter finding in future communications related to regulating menthol. Indeed, many participants did not understand the reasons behind a potential menthol ban and felt that such a move would be unfair. Any potential future regulation of menthol cigarettes should include a public educational campaign to support public buy-in, acceptance, and enforcement of such a policy.

Public health campaigns may also be needed to counter the powerful influence of the perceived popularity and acceptability of menthol cigarettes and brands, which this study also found to be especially strong influential factors in young people's menthol smoking initiation. Indeed, while participants described preferring the sensory characteristics of menthol cigarettes, they also described starting with menthol cigarettes or brands because it was what they knew. Black participants particularly described the dominance of Newport in their communities. This is undoubtedly related to tobacco marketing, and speaks to the power of marketing to influence brand association and loyalty from the earliest of ages. It also reminds us of the concerted efforts that tobacco companies have historically used to promote menthol cigarettes in black and urban communities. Indeed, tobacco industry documents describe strategies historically used to maintain a highly visible Newport brand presence in these areas such as extensive free sampling, point of sale materials, promotional items and advertising in bars, nightclubs concerts and special events.32

Although Newport and Marlboro remain the most popular menthol cigarette brands nationally,<sup>33</sup> this study also presents important qualitative findings about Camel Crush, a relatively new menthol

brand. Our findings suggest that the minty flavor and "crush" characteristics of this style may have particular appeal among young people, and may serve as a starter product, even within the menthol cigarette category (ie, act as a starter menthol product). It should be noted that in 2015 the FDA banned the sale and distribution of Camel Crush Bold (a newer line extension of Camel Crush), because it was not found to be "substantially equivalent" to an existing predicate tobacco product and because the manufacturer (ie, RJ Reynolds) failed to show that it does not raise different questions of public health (including regarding consumer perceptions about its menthol capsule).<sup>34</sup> However, three other forms of Camel Crush (including the original, Camel Crush Menthol, and Camel Crush Menthol Silver) remain on the market at the time of this publication, potentially awaiting their own substantial equivalence reviews (submitted applications are confidential). Future research should continue to monitor the use and appeal of this product among young people.

This study also demonstrates that underage access to menthol cigarettes at the point-of-sale continues to be a preventable pathway to smoking experimentation and initiation. Our findings also suggest that access to single stick cigarette "loosies", which are less expensive than full packs in the short run for price-sensitive youth, may be a gateway into menthol cigarette smoking in particular, especially in urban and black communities. Retailer education, compliance and proper enforcement of tobacco point-of-sale regulations remain critical in prevention efforts. Finally, our findings also suggest that young people progress into established smoking once they are of age to buy their own packs and lends support to arguments that increasing the legal age of sale to 21 may further restrict such progression and aid in smoking prevention, efforts that have been spreading through the country. 35,36

This study used a small local convenience sample which may limit the finding's generalizability. Studies in other geographic areas and with bigger sample sizes could be conducted to confirm themes observed in this study.

Overall, this study finds that initiation of menthol cigarettes is influenced by an interplay of multiple factors including their sensory properties, marketing, perceived popularity and acceptance, and availability. While recent research momentum seems to have shifted towards studying flavors in non-cigarette tobacco products, the fact remains that cigarettes remain the most deadly form of tobacco and that over half (54%) of youth smokers smoke menthol cigarettes.<sup>5,37</sup> The US tobacco control community has unfinished business with menthol cigarettes and the FDA should continue to pursue closing this flavored cigarette loophole.

## **Funding**

This work was supported by grant number (1 P50 CA180906) from the National Cancer Institute and the FDA Center for Tobacco Products (CTP). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or the Food and Drug Administration.

### **Declaration of Interests**

None declared.

### **Acknowledgments**

Thank you to Suzanne Millward for help in implementation of study activities and to Stacey Gagosian and Andrea Villanti for information regarding Camel Crush.

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