



Original investigation

Cigarettes, Little Cigars, and Cigarillos: Initiation, Motivation, and Decision-Making

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Abstract

Introduction: Cigarettes and little cigars and cigarillos (LCCs) are the most prevalent dual-use tobacco combination; one-third of cigarette smokers use LCCs. Risk factors for multiple tobacco product use have been reported; however, there is little understanding of why some individuals transition to and maintain multiple product use. In this study, we examine narratives of tobacco product initiation and decision-making among LCC-only and LCC-cigarette smokers.

Methods: We audio-recorded in-depth interviews with 60 individuals, aged 14–28, who reported smoking more than or equal to 1 cigarillo per week; half also smoked cigarettes. Transcribed interviews were coded using a phenomenological approach to examine themes about smoking initiation, motivation, and product decision-making.

Results: Among dual users, 60% began smoking LCCs before or at the same time as cigarettes, and 40% began smoking cigarettes first. Reasons for smoking cigarettes in addition to LCCs included easier access when experiencing craving and less time to smoke the product. Cigarette smokers reported first smoking LCCs in social contexts when sharing LCCs with other smokers, or when they could afford a single LCC but not a pack of cigarettes. LCC-only smokers reported not smoking cigarettes because of their expense, unpleasant taste and/or smell, and fear of becoming addicted.

Conclusions: In this sample of current LCC users, half also used cigarettes. Product initiation order was almost evenly split, but reasons for initiating the second product differed, with immediacy of reducing cravings as a key reason for LCC users to smoke a cigarette and social and financial reasons for cigarette users to smoke an LCC.

Implications: Understanding how and why dual use is initiated and sustained can inform policies to help prevent increased nicotine dependence and initiation of additional tobacco products. This study demonstrates that the beliefs, perceptions, and practices of LCC-only and dual users inform their product selection. Our findings point to the need to apply the strategies that have been effective at decreasing cigarette consumption to LCCs.

Introduction

Cigarette use has declined for the past 50 years while the use of alternative tobacco products, particularly among adolescents and young adults, has increased.¹⁻³ In the United States, more than twice as many youth currently use two or more tobacco products than cigarettes alone.⁴ The use of little cigars and cigarillos (LCCs) has been steadily increasing over the past decade,^{5,6} particularly among urban, Hispanic, and African American populations.⁷⁻⁹ Cigarettes and cigars are the most prevalent dual-use combination,^{4,10} and about one-third of current cigarette smokers report dual use of LCCs.^{11,12} Dual users are more likely to come from socially disadvantaged racial and ethnic groups,¹³ have low socioeconomic status,¹² have lower educational attainment,¹⁴ and report recent drug use.¹¹

Dual users of LCCs and cigarettes are more likely to report current frequent use of both cigars and cigarettes.¹⁵ This is particularly concerning since dual users inhale LCC smoke just as they inhale cigarette smoke, exposing themselves to considerable amounts of nicotine and other components of tobacco smoke.¹⁶⁻¹⁸ This could mean greater potential for nicotine dependence,¹² increased risk of tobacco-related cancers, and diseases of the heart and lungs.¹⁹⁻²¹ Dual users are also more likely to use other alternative tobacco products,^{12,14,22} further contributing to these risks.

Given the prevalence of and harm associated with the use of multiple tobacco products, identifying ways to curtail this practice, particularly in vulnerable populations, is a critically important issue in tobacco regulatory sciences. With the May 2016 extension of regulatory authority of the U.S. Food and Drug Administration (FDA) to include cigar products, evidence that can help inform an approach to cigar product regulation is needed.²³ Likewise, the knowledge, attitudes, and behaviors related to tobacco product use have been identified as research priorities by the FDA.²⁴

A growing body of survey research has begun to examine the reasons for LCC use, which include affect regulation, affordability, appealing flavors, and longer burn time than cigarettes.^{22,25-27} A few qualitative studies have also provided important insights into why young adults choose to smoke LCCs. We know that the taste, smell, and flavoring of LCCs make them more palatable for some than cigarettes^{28,29} and that the social context of smoking LCCs enables their use more than control it.²⁸⁻³¹ One study uses qualitative methods to explicitly examine and compare reasons for use of cigarettes and LCCs among dual users.³² In this study of African American young adults, Mead et al.³² found that emotional factors (such as coping with negative emotions) and urges to smoke were reasons for the use of both cigars and cigarettes; that attractive cigar product characteristics (eg, flavors) were important for cigar initiation and smoking, and that outside pressure from one's social group is a reason for current cigar smoking. However, we currently have little understanding of how the transition from single to dual product use happens, why in some cases it does not happen, and how people make decisions about where and when to begin and continue using each product. Further, to our knowledge, there have been no qualitative studies examining adolescent preferences for LCC and cigarette use. Including adolescents is important, since adolescents smoke nearly as many LCCs as cigarettes^{33,34} and may be more vulnerable to nicotine addiction even at lower levels of exposure.^{35,36}

In the current study, we further understanding of LCC-cigarette dual use by using in-depth interviews to examine and compare adolescent and young adult users of LCCs-only and LCCs-cigarettes. This study provides a deeper understanding of the perceptions,

attitudes, and behaviors related to dual users' initiation of and motivation for product use. Understanding how and why individuals initiate and sustain their use of tobacco products, and choose among tobacco products, can help inform the regulatory approach of the FDA toward curtailing multiple product use.

Methods

Study Overview

This study is part of a larger project to develop a measure of nicotine dependence that is inclusive of LCC users and grounded in the perspectives, attitudes, and behaviors of LCC and LCC-cigarette users. We used qualitative methods to gain a deeper understanding of why and how individuals initiate and sustain LCC and cigarette use. In-depth interviews were used to elicit participants' experiences and perceptions of their tobacco use, and their motivation to use LCCs and/or cigarettes. The study was conducted between June 2015 and January 2016, and was approved by the institutional review board of Case Western Reserve University.

Participants and Recruitment

Participants were recruited from the greater Cleveland, OH, metropolitan area. Cleveland was considered an ideal site for this research, since past 30-day adolescent LCC use was 15.0% compared to the national rate of 10.3%.^{33,37} Individuals were considered eligible for this study if they were (1) between the ages of 14 and 28 and (2) smoked more than or equal to one LCC in the past week. We used a stratified purposive sampling strategy to recruit 30 adolescents (14-17 years old) and 30 young adults (18-28 years old).³⁸ We were interested in including both high school-aged adolescents and young adults because they represent the most frequent LCC users, but thought it important to distinguish the groups because of likely different living circumstances and behavioral contexts. In addition, we aimed to recruit an equal number of LCC-only and LCC-cigarette users to get adequate representation from both groups, and to be able to compare and contrast their smoking experiences. We recruited 30 individuals from each group to reach saturation of emerging themes in each group.

Two recruitment methods were used in the current study. First, research staff canvassed and posted flyers in locations frequented by the target population, including near high schools, college campuses, bus stops; in convenience stores, gas stations, and other retail areas popular with youth; and at service agencies frequently used by youth, such as libraries, recreation and other community centers, and teen clinics. Flyers and study cards described the study aims and procedures, and invited those interested to contact staff via e-mail or phone. Potential participants were informed that their participation would be confidential and that they would be offered a gift card as compensation for their time. A devoted toll-free number for the study was available, as was a study website with frequently asked questions and contact information. A full-time study team member was available to answer the study line and returned calls during business hours. Forty-four participants were recruited using this strategy.

Second, study staff engaged community organizations who work with youth, including after school recreation programs; treatment and prevention programs; and lesbian, gay, bisexual, and transgender (LGBT) groups to raise awareness about the study. An e-mail briefly outlining the study, its purpose, and the target audience was sent to youth program leaders, along with the study flyer. Sixteen participants were recruited using this strategy.

Procedures

Trained research staff assessed enrollment eligibility for interested individuals via telephone within 24 hours once contacted. Once an individual was determined to be eligible, verbal informed consent was obtained. For individuals aged 14–17, a waiver for parental consent was requested and approved by the institutional review board of Case Western Reserve University, since requiring such consent could put the child at risk by revealing their smoking behavior to a parent. The participant was either interviewed by phone immediately following consent or scheduled for a later time. Interviews were conducted by phone or in person depending on the preference of the participant. In-person interviews were conducted at schools or community centers. Of a total of 98 screened individuals, 72 were eligible. Up to three attempts were made to contact these individuals, of whom 60 completed interviews.

Interviews were conducted using a semi-structured interview guide. To begin the interview, demographic and smoking characteristics, product use (ie, cigarillo, cigarette, and other tobacco products), and terminology were collected. The rest of the interview guide was designed to capture participants' initial and current smoking patterns, levels, and experiences; reasons and contexts for smoking; feelings and sensations when smoking; and physical and mental experiences of craving. Example questions include:

- When did you start smoking (tobacco product)? Tell me more about how that happened.
- Thinking about smoking (tobacco product)—what are the things about smoking that you find most enjoyable?
- When you have cravings, what product do you reach for? Why?

Interviews lasted between 30 and 60 minutes and were audio-recorded and transcribed. Participants were provided a \$25 gift card as compensation for their time. The four research staff conducting interviews received training in qualitative data collection, including practice interviewing and ongoing feedback on their interviewing techniques.

Data Analysis

All interviews were transcribed verbatim, and transcripts were reviewed and compared to the original recordings to ensure accuracy. We used a phenomenological approach in our data analysis to understand how people make meaning of their lived experience and to develop a deeper understanding about the common features that are shared among individuals who use LCCs or LCCs and cigarettes.³⁹ Analysis began with a careful and repeated reading of each transcript to identify significant statements and salient themes of tobacco use. In the first phase of analysis, an initial codebook was generated based on two trained qualitative analysts' reading of several transcripts, and modified as new themes emerged. In this way, codebook creation and analysis proceeded iteratively and collaboratively. An experienced qualitative research team met regularly to discuss ideas, identify emerging patterns, and organize codes around central themes and relationships drawn across all the participant narratives. Analysis was conducted by two experienced coders who met regularly to reconcile coding discrepancies.

In the second phase of analysis, interviews were divided into those who only smoked LCCs and those who smoked LCCs and cigarettes. In this phase, analysts were blinded to the age group of the participants so that contrasts between the groups would not drive the emerging themes. A data file was prepared for the analysts with

a randomly generated case number and any age-related information was removed from the transcripts. Analysts then conducted thematic analysis of narratives focused on smoking initiation, motivation, decision-making, context, beliefs, and experiences of addiction, meeting regularly to discuss and resolve identified themes. One team member analyzed all 60 transcripts. To corroborate and legitimize the findings, a second team member analyzed a random sample of 18 of the transcripts, at which point saturation of the themes was reached. NVivo 11 was used to assist with qualitative data organization and analysis.⁴⁰ SPSS 24 was used to generate descriptive characteristics of the sample.

Results

Demographic and Smoking Characteristics

In our sample of 60 LCC smokers, 30 only smoked LCCs and 30 smoked LCCs and cigarettes (dual users), and these were the predominant tobacco products used. The LCC users in our sample most frequently smoked a brand of tipped cigarillos called Black & Mild (referred to as "Milds" later). Demographic and smoking characteristics are displayed in [Table 1](#). Overall, the sample was 47% female, 72% African American with an average age of 19.7 years. The dual users were significantly older than the LCC-only group, 21.3 (SD 3.6) versus 18.2 (SD 3.1) ($p < .01$), and were less likely to be African American than the LCC-only group, (57%) versus (87%) ($p < .01$). There were no significant differences between groups in age at first LCC or number of LCCs smoked per week.

Smoking Initiation of Second Tobacco Product Among Dual Users

Among dual users, 60% ($n=18$) began smoking LCCs before or at roughly the same time as cigarettes, and 40% ($n=12$) began smoking cigarettes first. For those who smoked LCCs first, initial use of a cigarette as a second tobacco product was most often described as happening when an LCC was unavailable. Cigarettes were reported as more commonly available than LCCs. Therefore, if someone does not have an LCC on hand, there is a good chance someone else in the environment—whether a friend or a family member—will have a cigarette. Example statements include:

I recently just started smoking (cigarettes). My boyfriend smokes them, so if I don't have a Mild, I'll just hit a cigarette a few times, but I really smoke Milds. (ID 26, female, aged 23)

I was at my house and didn't have no Milds. And I really wanted one. There was a pack of my Mom's Newports sittin' there and I thought 'well, give it a try,' (ID 12, male, aged 23)

Initial use of an LCC as a second tobacco product was described as being driven by two main reasons. First, participants reported being attracted to the smell, taste, and smoothness of the tobacco in LCCs.

I didn't like the cigarettes, but the Black & Mild tasted better, so it didn't make me cough as bad when I smoked it. So I just liked the taste better. (ID 15, male, aged 20)

Milds always smelled amazing, so I'm like 'Wait. If I can get my hands on some. That would be great.' (ID 13, male, aged 16)

Second, many described being offered the opportunity to initially try an LCC while in a group context in which an LCC was shared.

Okay, I started (smoking LCCs) at 16. I was hitting them with my friends and then I gradually started to buy like ones for myself. (ID 19, female, aged 25)

Table 1. Demographic and Smoking Characteristics

Demographic characteristics	Total <i>n</i> =60		LCCs <i>n</i> =30		LCCs-Cigarettes <i>n</i> =30		<i>p</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	
Female	28	47	12	40	16	53	.31
Age, mean (SD)	19.7	(4.0)	18.2	(3.1)	21.3	(3.6)	<0.001
Race/ethnicity ^a							.02
African American	43	72	26	87	17	57	
Non-Hispanic White	8	13	1	3	7	23	
Other ^b	9	15	3	10	6	20	
Occupation ^c							.08
Neither school nor work	9	15	3	10	6	20	
School	15	25	4	13	11	37	
Work	28	47	18	60	10	33	
Both school and work	8	13	5	17	3	10	
Smoking characteristics	Mean	SD	Mean	SD	Mean	SD	
Age at first LCC	15.1	(2.7)	14.6	(1.7)	15.7	(3.4)	.12
Age at first cigarette	15.3	(3.2)	—	—	15.3	(3.2)	
LCCs smoked per week	21.3	(22.1)	19.8	(15.4)	22.8	(27.4)	.60
Cigarettes smoked per week	—	—	—	—	31.3	(32.3)	

LCCs = little cigars and cigarillos.

Percentages may not add to 100 because of rounding.

^aFisher-Freeman-Halton exact test used. Posthoc decomposition revealed that proportionately more African Americans were in the LCC-only group than in the LCC and cigarettes group, and proportionately more non-Hispanic Whites were in the LCC and cigarettes group than in the LCC-only group. The proportions of those of other race/ethnicity in the two groups were not significantly different.

^bOther race/ethnicity included Hispanic/Latino (5), Biracial (3), and Asian (1). Because of problems associated with small cell counts and small expected frequencies, these groups were combined for testing racial/ethnic differences by LCC use category.

^cFisher-Freeman-Halton exact test used.

Interviewer: Do you remember the age when you smoked your first Black & Mild?

Participant: I was 16.

Interviewer: Can you tell me about how that happened?

Participant: Hanging with my friend. (ID 07, male, aged 25)

Sustained Dual Use and Product Decision-Making

Among dual users, individuals described a variety of reasons for continued use of each product. Two themes emerged as the primary reasons for individuals to sustain their use of cigarettes and to choose them rather than an LCC at a given time. First, participants reported that having a craving for nicotine motivated them to smoke a cigarette:

If you have a nicotine addiction, you're gonna smoke a cigarette before you smoke a Mild because a cigarette has nicotine in it. A Mild don't have nicotine in it. It just got tobacco and stuff, flavored tobacco. (ID 22, female, aged 22)

(I prefer) a Mild, but if I don't have a Mild on me, I'll blaze a cigarette real quick just because I want the nicotine. (ID 05, female, aged 28)

Cigars are like for settin' a mood, yeah. But if I have a strong urge, I'll grab me a cigarette. Get that fix satisfied. (ID 02, male, aged 26)

The only time I really smoke a cigarette is if I don't have a Mild or I'm around somebody that doesn't smoke Milds and they smoke a cigarette and I just kind of want to get like I guess a little nicotine in my system. (ID 27, female, aged 26)

The second reason for choosing a cigarette over an LCC is that they are considered to be more readily available and faster to smoke than an LCC.

A cigarette you can smoke in three minutes. A Black & Mild takes a while. So it's a brevity thing. Even though I greatly prefer the taste of Black & Mild's. (ID 21, male, aged 25)

Interviewer: So in the morning, when you get up, which do you smoke first: a little cigar or a cigarette?

Participant: The cigarette, 'cause those are easier access. They're easier to get to. (ID 16, female, aged 18)

Cigarettes, you actually inhale them and you get the buzz like right away, unlike Black & Milds, like you have to puff on it for a little bit and then like you feel the buzz the moment after. (ID 12, male, aged 23)

Two main themes emerged regarding reasons for sustaining use of an LCC and/or choosing to smoke an LCC instead of a cigarette. Smoking an LCC was associated with being in a certain mood or context where one could relax and/or socialize. In contrast to choosing a cigarette because it is quicker, some individuals like the fact that LCCs take longer to smoke, and reported preferring to smoke them when they had time and were not in a hurry:

Like a cigarette, like if you smoke it outside, like if it's windy, that cigarette gone with the wind. You don't even really get that many hits on it. With a Mild, it's a little bigger, little longer, lasts a little longer, so I just prefer to smoke those. (ID 02, male, aged 26)

I smoke cigarettes during work, and then I'll smoke a Black & Mild after work. (ID 21, male, aged 25)

Similarly, being in the mood to relax and have a smoother smoking experience was often noted:

(I smoke a Mild) if I don't have any cigarettes, or if I'm just in the mood to make it last longer, or if I'm just in the mood for the taste. It has a very relaxing feel for me. (ID 13, male, aged 16)

I like the smell of them and the taste of them (Black & Milds). I really don't like smoking cigarettes. I just smoke them for stress. (ID 09, female, aged 17)

The second major theme for choosing to smoke an LCC over a cigarette was financial:

So if I like run out of money and I don't have enough money to buy cigarettes, or I don't want to spend the money to buy cigarettes, then I will definitely just go to the store and get like a 70 cent Black & Mild, instead of spending \$8 on a pack of cigarettes. (ID 20, male, aged 23)

I would buy one or two (LCCs) a week, 'cause I'm usually with my band and you know they smoke all my cigarettes, so when we're low on funds, we just buy a Mild, 'cause that'll last us a while. (ID 13, male, aged 16)

Sustained LCC-Only Use

LCC-only users described three main reasons for not smoking cigarettes, which have already been touched upon in the previous sections. First, for those who have no or limited income, buying LCCs individually or in a pack of two is significantly cheaper than buying a pack of cigarettes. Further, the common context of group smoking and sharing of LCCs makes it easier for those with little or no money to smoke someone else's LCC and therefore spend no money at all.

Interviewer: And when do you think it became a habit to smoke a Black & Mild?

Participant: Mm, when we all hang out together, we all want to go get a Black & Mild. Sometimes we'll share a Black & Mild. (ID 07, male, aged 25)

If I'm with other people, if they smoke Milds, then we'll probably have two or three and then like we'll go back and forth with it like a regular thing. (ID 08, female, aged 15)

Another common thread among LCC-only users is the opinion that cigarette smoke is unpleasant, whereas the taste and smell of LCCs smoke is enjoyable. It is important to note here that even participants who preferred the "regular" flavored LCCs reported enjoying their flavor and taste.

I don't smoke cigarettes at all. I don't like the way they smell or taste or like how it lingers on your body, but Black & Mild's are different. The smell, to me, doesn't stay on your breath. It doesn't stay close. (ID 20, female, aged 17)

I've tried some different flavors and some of them are good. But I just like the regular Milds. How they smell and taste. (ID 03, male, aged 17)

I like the way they smell. They smell like chocolate. Sometimes they smell like coffee when they first lit. (ID 27, female, aged 26)

Finally, several participants expressed their belief that cigarettes were worse for your health and/or more addictive than LCCs:

I just feel like cigarettes will be so much worse for you...cause all the chemicals and stuff. I haven't did that much research to see if some of the same chemicals are in the Black & Milds, but I've always been told that cigarettes were like the worse thing possible. (ID 13, male, aged 16)

'Cause cigarettes, like you'll catch a lung disease from that, or you'll catch cancer from that. Your breath will get that smell when you smoke cigarettes, and some people be having that cigarette smell in their clothing that won't get rid of. (ID 05, female, aged 28)

Discussion

In this sample of current adolescent and young adult LCC users, half also used cigarettes. Product initiation order was almost evenly split, but reasons for initiating and sustaining use of the second product differed. For those who began smoking LCCs and added cigarettes, their initial cigarette use was often related to the availability of a cigarette and lack of availability of an LCC. This situational context implies that an LCC user may have already developed some dependence before trying a cigarette. The craving combined with the ubiquity of cigarettes could result in dual-use initiation. This is supported by the finding in a survey of adolescents that current cigar users are more susceptible to future cigarette smoking than nonusers,¹⁵ and raises important questions about nicotine dependency among LCC users. Future research should seek to develop a measure of nicotine dependency that is inclusive of cigar products.

Continuing use of cigarettes as a second product was described as being due to the fact that they relieved a craving for nicotine, and did so in a relatively faster, more convenient way. This could in part be because of the common practice of preparing an LCC for smoking by "freaking" it—a time-consuming process wherein the contents of the cigar are removed and then replaced before being smoked.⁴¹⁻⁴³ LCCs can also have a longer burn time, making them less practical when someone wants a "quick smoke."²⁷ Further, some participants believed that LCCs did not contain nicotine, or not as much nicotine as cigarettes, making them less desirable when craving nicotine. A growing body of literature has documented the belief that LCCs are less harmful and/or addictive than cigarettes,²⁷⁻²⁹ but this is usually posited as a reason for smoking them, rather than a reason for choosing a cigarette over an LCC.

Among cigarette smokers, reasons for initiating LCC use included being attracted to the smell and taste, and because they were shared by friends in a social setting. The sensory attractiveness of LCCs, both flavored and regular, has been well documented as a key reason for smoking them.^{25,28,29,32} Regulation that would ban flavorings could potentially decrease the prevalence of cigar initiation. The importance of the social context of smoking has also been noted. Mead et al.³² found that the immediate social networks and social groups, as well as the broader neighborhood environment and the media all influence cigar smokers' use of the products. Further, the practice of sharing and passing LCCs can be the vehicle for product initiation.⁴³ These findings suggest that cessation programs might be better able to reduce LCC use if they incorporate attention to social norms and practices.

Participants chose to continue smoking LCCs because they associated their use with having time to relax, socialize, and enjoy their "smoothness," taste, and smell, which mirrors reasons for initiation LCC use. LCC use appears to be associated with leisure time, which is corroborated by studies that found socializing while smoking to be an important reason for smoking LCCs.^{22,30} LCCs were also chosen when finances did not allow the purchase of a pack of cigarettes. LCCs are sold singly and/or in small packs of two or three, and are not taxed at the same rate as cigarettes, making them an affordable alternative for many.^{25,32}

We also found that for those who smoked LCCs only, reasons for not smoking cigarettes related to beliefs about the greater harm and addictive potential of cigarettes compared to LCCs, the unpleasant taste and/or smell of cigarettes, and/or the expense of having to buy a pack of cigarettes compared to an individual or small pack of LCCs. Sterling et al.⁴⁴ found that African American cigarette smokers and

those with lower educational attainment had greater odds of perceiving that LCC tobacco was less harmful and easier to quit smoking than cigarettes. Others have found that LCC use is commonly perceived as a healthy alternative to and less addictive than smoking cigarettes.^{20,28,45}

Implications

Understanding how and why dual use is initiated and sustained can inform policies to help prevent increased nicotine dependence and initiation of additional tobacco products. This study demonstrates that the beliefs, perceptions, and practices of LCC-only and dual users inform their product selection. Our findings point to the need to incorporate LCCs into the strategies that have been effective at decreasing cigarette consumption. For example, since LCCs are available as single product or in packages of two, it could be beneficial to set a minimum number of LCCs per package to increase the cost to be equivalent to the cost of a pack of cigarettes. Additionally, tobacco control campaigns should incorporate LCCs into their messaging, emphasizing that LCCs contain nicotine, are addictive, and are associated with the same health risks as cigarettes. Health education and youth prevention programs should similarly incorporate LCCs into their curricula, correcting common misperceptions about LCCs. Such efforts might reduce the relative attractiveness of LCCs compared to cigarettes. Finally, our finding that motivations for initiating and sustaining use of LCCs and cigarettes include personal, social, and societal reasons suggests that a tailored, multilevel approach to smoking cessation programs is warranted.

This study is strengthened by its qualitative methods, which facilitated a depth of understanding of the contextual features of smoking behavior and beliefs that is generally not accessible through survey and other quantitative methods. However, the study findings must be interpreted within the context of a few limitations. First, the study is limited to residents in the greater Cleveland metropolitan area, which was selected as a site for this study because of its high rate of adolescent LCC use. We anticipate that the main themes revealed in this study are not geographically specific, but may vary based on the strength of youth tobacco restriction policies. Additional research is needed to determine whether our findings are similar to LCC and dual users across the country. Second, as with most qualitative studies, the purpose and sampling approach is designed to generate rich narratives to deepen understanding of a phenomenon. The prevalence of features identified through this analysis cannot be inferred to the larger population.

Conclusions

In this sample of current LCC users, half also used cigarettes. Product initiation order was almost evenly split, but reasons for initiating the second product differed substantially, with immediacy of reducing cravings as a key reason for LCC users to smoke a cigarette and social and financial reasons for cigarette users to smoke an LCC. Our findings support tobacco regulation of LCCs that focuses on packaging and pricing to have equity with cigarettes.

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Declaration of Interests

None declared.

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