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The social context of adolescent co-use of cigarillos and marijuana blunts

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Abstract

Background—The use of cigarillos for smoking as a tobacco product and for making marijuana blunts is increasing among adolescents. Previous research has documented the co-use of these products, however little is known about the contextual features that generate and sustain this practice.

Objective—This study aims for a deeper understanding of why and how co-use of cigarillos and marijuana blunts occurs.

Methods—We conducted in-depth interviews with 30 adolescents aged 14–18 who reported smoking 1 cigarillo per week between December 2015 and April 2016. Semi-structured interviews were designed to capture participants' smoking products, practices, and preferences, as well as their beliefs and experiences about smoking. Interviews were audio-recorded and transcribed. Analysis was guided by a phenomenological approach designed to identify emergent themes.

Results—All participants reported smoking tipped cigarillos for use as a tobacco product, averaging 13 per week. Twenty-five (83%) also reported using untipped cigarillos to smoke marijuana blunts. A preference for group smoking and product sharing, and the belief that cigarillos extend the high of marijuana were found to promote the co-use of these products. Cigarillos were also found to be used as a substitute for blunts when marijuana was unavailable or when its use was being restricted or monitored.

Conclusions/Importance—This analysis of adolescent cigarillo and marijuana co-use demonstrates how marijuana use can initiate, increase, and reinforce tobacco use. These findings

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can be used to inform public health education campaigns and other programs and policies aimed at reducing cigarillos and marijuana use by youth.

Keywords

Adolescents; youth; smoking; little cigars; cigarillos; marijuana; blunts

INTRODUCTION

The rate of adolescent tobacco use in the United States has remained steady in recent years, but the relative consumption of specific tobacco products is changing (Singh et al., 2016). Use of little cigars and cigarillos (LCCs), has increased over for the past two decades (Center for Disease Control and Prevention (CDC), 2012; Delnevo, 2006). Cigarillos are especially popular, particularly among urban youth and minorities (Delnevo, Bover-Manderski, & Hrywna, 2011; Giovenco, Miller Lo, Lewis, & Delnevo, 2016). Cigarillos consist of cut tobacco wrapped in a tobacco leaf shell and are available in many flavors, with or without a filter and/or tip. Tipped cigarillos are generally smoked as a tobacco-only product; untipped cigarillos are often used to make marijuana blunts, which are tobacco leaf shells that have been emptied of some or all of their tobacco and refilled with marijuana (Koopman Gonzalez, Cofie, & Trapl, 2015; Sterling, Fryer, & Fagan, 2015). There is widely believed to be an under-reporting of cigarillo use because users may not 1) consider themselves to be “smokers”, 2) refer to the product as a “cigarillo” but by its brand name, and 3) report the use of a cigarillo when consumed as a marijuana blunt (Delnevo et al., 2011; Dickinson et al., 2016).

Co-use of tobacco and marijuana, which includes use of both substances individually within the past 30-days as well as co-administration of the substances at the same time or through blunts, appears to be increasing (Agrawal, Budney, & Lynskey, 2012; Schauer, Rosenberry, & Peters, 2017). Most marijuana users co-use tobacco products (Schauer, Berg, Kegler, Donovan, & Windle, 2015), and marijuana use among tobacco users is increasing both among youth (Rolle et al., 2015) and adults (Schauer et al., 2015). Specifically, co-use of marijuana with cigar products is significantly greater than co-use of marijuana with cigarettes (E. S. Trapl et al., 2016a). Blunt use is increasingly common among adolescents (Golub, Johnson, & Dunlap, 2005), African Americans (L. Montgomery & Oluwoye, 2016) and Hispanics (Rolle et al., 2015).

Smoking cigar products exposes users to many of the same toxicants as smoking cigarettes, poses significant health risks, and promotes nicotine and tobacco dependence (Blank, Nasim, Hart, & Eissenberg, 2011). Nicotine exposure during adolescence can have lasting adverse consequences for brain development, cause addiction, and lead to sustained tobacco use (Arrazola et al., 2015). When tobacco is co-used with marijuana, the likelihood of individual-level harm, including cognitive, psychological, respiratory, and dependency problems, increases (Agrawal et al., 2012; Rolle et al., 2015). Further, blunt users initiate marijuana use at an earlier age, report significantly more days of marijuana use in the past month, and have higher rates of marijuana use disorders than do other marijuana users (Timberlake, 2009).

Several prior studies have described cigarillo flavor and brand preferences (Giovenco et al., 2016; Sterling, Fryer, & Nix, 2015) and risk perceptions of use (Sterling, Fryer, & Fagan, 2015), and have documented the co-use of cigarillos and marijuana blunts (Antognoli et al., 2017; Giovenco et al., 2016; T. Montgomery & Bagot, 2016; E. S. Trapl et al., 2016b). While important to the field, these studies provide little insight into how and why co-use of these products is initiated and sustained during adolescence (Agrawal et al., 2012). In order to address this gap, this study examines how cigarillo use is learned, understood and practiced within the social context of adolescence. Using qualitative methods, we aim to generate a deeper understanding of how, when and why cigarillos are co-used as tobacco products and as marijuana products. In addition, we explore the potential consequences of co-use and their implications for prevention and treatment interventions, as well as for informing public health education campaigns and regulatory action.

METHODS

Participants and recruitment

Participants were recruited from the greater Cleveland, Ohio metropolitan area, between December 2015 and April 2016. Cleveland was considered an ideal site for this research, since past 30-day adolescent little cigar/cigarillos use was 15.0% compared to the national rate of 10.3% (Kann et al., 2016; Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University, 2015). Individuals were considered eligible for this study if they were 1) between the ages of 14 and 17, or aged 18 and still in high school and 2) smoked ≥ 1 LCC in the past week.

Recruitment methods consisted of two approaches. First research staff canvassed and posted flyers in high traffic areas for the target population, including near high schools, in convenience stores and 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 email 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.

Secondly, study staff engaged community organizations who work with youth, including after school recreation programs, treatment and prevention programs, and LGBT groups. An email briefly outlining the study, its purpose and the target audience was sent to youth program leaders, along with the study flyer.

Procedures

Research staff contacted eligible individuals either by 1) returning their calls or emails expressing interest or 2) arranging to meet interested individuals in person via a community liaison (e.g. school counselor or community organization leader). Verbal consent was obtained from eligible individuals either in person or by phone, and either immediately interviewed or scheduled for a later time. The research staff conducting interviews received

training in qualitative data collection, including practice interviewing and ongoing feedback on their interviewing techniques. The study protocol was approved by the Institutional Review Board of Case Western Reserve University.

In-depth interviews were conducted based on a semi-structured interview guide. First, demographic and smoking characteristics, and product use and terminology were identified. Based on a growing literature regarding the confusion and variability associated with terms like “cigarillo” (Dickinson et al., 2016; Stephens, Ogunsanya, Ford, Bamgbade, & Liang, 2015), care was taken to elicit specific information on which products were used, when and how often each was used, and *how* each was used. Probing questions around these activities were used to prompt examples and stories.

The rest of the interview guide was designed to capture participants’ initial and current smoking experiences. Questions elicited information on participants’ smoking trajectories, reasons and contexts for smoking, feelings and sensations when smoking, and physical and mental experiences of craving. Interviews lasted between 30 and 60 minutes and were audio-recorded.

Data analysis

All interviews were transcribed verbatim, and transcripts were reviewed and compared to the original recordings to ensure accuracy. Guided by a phenomenological approach, which seeks to understand how people create meaning of their lived experience, analysis consisted of careful and repeated reading of each transcript to identify salient themes of cigarillo use. An initial codebook was generated based on reading several transcripts, and modified as new themes emerged. In this way, codebook creation and analysis proceeded iteratively. 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 (Creswell, Klassen, Clark, & Clegg smith, 2011). NVivo 11 was used to assist with qualitative data organization and analysis (QSR International Pty Ltd., 2015).

RESULTS

Demographic and smoking characteristics

Participants’ demographic information is reported in Table 1. The age range of participants was 14–18, with an average age of 16.5. The majority of participants were male (63%), 63% were African American and 17% were Hispanic/Latino/a. Smoking characteristics are shown in Table 2. All 30 participants reported smoking the tipped cigarillos called Black & Milds (hereafter referred to as “cigarillos” or “Milds”) as a tobacco-only product. In addition, 25 (83%) reported using various brands of untipped cigarillos to smoke as marijuana blunts (hereafter referred to as “blunts”). The average age of first smoking was 14 for both cigarillos and blunts. The average number of cigarillos smoked per week was 13; 5 (20%) smoked about the same amount of blunts per week, 11 (44%) smoked fewer blunts than cigarillos, and 9 (36%) smoked more blunts than cigarillos.

Eighty percent of participants usually “freaked” their cigarillos. “Freaking” involves removing the plastic or wooden tip of the cigarillo, emptying the tobacco leaf from inside,

removing the paper liner, then refilling the shell with some or all of the tobacco leaf and reattaching the tip (Koopman Gonzalez et al., 2015). Freaking is a skill that must be learned and practiced. In our sample, those who did not freak their cigarillos explained that they just hadn't mastered it yet. When asked why they freaked their cigarillos, several responded they didn't know, or just did it because they observed others doing it. Others explained that "freaking" makes the cigarillos easier to smoke, and less harsh.

Making a marijuana blunt involves a similar process of emptying the loose tobacco from the tobacco shell. However, instead of refilling the shell with the tobacco, the shell is refilled with marijuana (E. S. Trapl et al., 2016a). Cigarillo shells were reported to be used because they are inexpensive and the flavoring masks the taste and smell of the marijuana. In this sample, favorite flavors included tropical, grape, peach, and blueberry. Many participants expressed that they would not smoke these untipped cigarillos as-is, because they are too strong. With regard to terminology, while some participants had heard the term "cigarillo" being used, none used the term to refer to either tipped or untipped cigarillos. Tipped cigarillos were referred to as "Milds" and untipped cigarillos were referred to as "shells" or by the brand name, such as "Swishers".

The social context of smoking

Tobacco and marijuana are present in the social environment of many adolescent smokers in this sample. Twenty-five (87%) reported living in households with other tobacco smokers, and 15 (50%) reported living in households with marijuana smokers. This environment may provide easy access to smoking products and regular opportunities to smoke, as exemplified by a participant who described their initiation to smoking cigarillos:

"I guess it was like - I don't want to say I inherited it - but you know it was just like around in my environment. So it just kind of happened."

When discussing their first smoking experience with both cigarillos and blunts, 70% reported being with their friends or family members. As one blunt smoker explains:

"It's just 'cause I thought it was cool and that's what everybody else did. So you did it too, you know?"

For adolescents, friends appear to be an especially important factor in smoking initiation:

(cigarillos)

"I grew up around people doing it so much, not knowing what it was. I was curious to know how it felt, and when I seen like older friends of mine smoking Mild's, I figured that was like the new cigarette, so I just went along with that."

(blunts)

"I started hanging out with people older than me. They would always have weed around, and I started smoking probably like five blunts a day."

The tendency for cigarillos and blunts to be smoked in a group, in addition to by oneself, also seemed to facilitate smoking initiation. Of the 30 participants, only two preferred smoking cigarillos alone, 3 exclusively smoked cigarillos in a group, and 25 reported

smoking them both alone and in groups. Group sizes ranged from two to 15 people. All 28 group smokers reported sharing their cigarillos when in a group, by taking a few hits of the product and then passing it along. This is the context in which many participants described their initial smoking experiences with cigarillos as taking place:

“I was with some friends, and then they asked did I want to hit it? And then I was just like ‘Yeah, I’ll try it.’”

Similarly, all 25 blunt users described smoking with others and passing blunts around the group:

“They passed me it and I didn’t know what it was. They told me it was weed, and I hit it.”

When asked about which product they smoked initially, nine reported trying cigarillos before trying blunts, eight said they had tried cigarillos and blunts at about the same time, and six tried blunts before cigarillos. As noted above, the average age of smoking initiation for both products was 14, so it can be inferred that the smoking of one product was shortly followed by the other. The initiation of both products at similar times may partially be explained by the pervasive belief that it is beneficial to smoke the two products in close proximity. Most commonly, the marijuana blunt is smoked first, followed shortly thereafter by the cigarillo. This is called “chasing”:

Interviewer: And at what age did you start smoking Black & Mild’s?

Participant: A little after I smoked weed, because they said it makes you higher when you smoke a Mild after you smoke.

“‘Cause it’s like after I’ll get done smoking my blunt, it’s like I’ve gotta have a Mild to chase it.”

The most common reason for chasing, which was reported by 86% of participants, was that the cigarillo is felt to extend or heighten the high produced by the marijuana blunt:

“Like you’re just high, and then like, you know your buzz getting down. So you gotta just like boost it back up on another level - so smoke the Mild and be back on Cloud 9.”

Several participants also described smoking cigarillos and blunts in a continuous, alternating pattern of chain smoking:

“Start with a blunt. We’ll smoke the whole blunt. Then we’ll smoke the Mild. We’ll smoke the Mild ‘til it’s like three-fourths gone, or half. Then there’s always another blunt, and so then we smoke that one. Then if he’s like midway through the blunt, he’ll light the Mild up.”

“All right, so we’ll be in a car and we’ll light up a Mild and then a blunt, and then the first one hits it and then another person hits a Mild, and we just keep switching it.”

Substitution of cigarillos for marijuana blunts

Substituting a cigarillo for a marijuana blunt was found to be a predominant theme among the 25 participants who smoked both products. As described, cigarillos are believed to boost or extend the high derived from smoking marijuana blunts. A variation of this theme is the idea that the two products produce a feeling that, while on the whole is different, share certain qualities or effects:

“Well, if you don’t like weed... Mild’s have this thing where if you inhale it right, you could get high for a couple minutes. It hits you hard.”

“You know when I ain’t got marijuana, it’s (a cigarillo) just something to smoke, whatever, for the feeling too, like a little lightheaded, maybe a little something else.”

In the same vein, when asked about why they smoked these products, individuals described similar situations in which stress or an upset or depressed mood was alleviated by the relaxing, calming effects of both cigarillos and blunts:

(cigarillos)

“My first time smoking (a cigarillo), it was just ‘cause my cousin told me to hit it. But then I realized when I get mad, or I’m depressed or something like that, I need one.”

(blunts)

Interviewer: So how did (blunts) become a habit, when were you kind of smoking them more regularly?

Participant: I feel like I was stressing too much, so I would just roll me a blunt and just free my mind, and it would just relax me.

The following participant describes the effects of both products:

“When you smoke Milds, it’s just more of like a calming kind of feeling. And then when you’re smoking a marijuana blunt, you feel more relaxed and, yeah, more like you don’t have no worries.”

In addition to these descriptions of how or why cigarillos can replace blunts, participants described a range of circumstances in which this substitution might take place. First, cigarillos are more readily available and cheaper than blunts. Often teens have access to cigarillos in their households and through their friends, as noted. Cigarillos are also sold in many urban neighborhoods in the Cleveland area, can be bought individually, and cost as little as \$1 (tipped cigarillos) or 50 cents (untipped cigarillos, or “shells”). Marijuana, alternatively, is reported to be more expensive (\$5.00/blunt), and sources may not be as reliable. One participant describes the process of purchasing cigarillos and marijuana with his friend:

“I’ll hit my friend up, ask him what he got on the weed. He put half in, you know ‘cause you can’t just freeload. We buy some from the bud man. Then we go get a Mild for a dollar. He buy the shells[untipped cigarillos]. So we even, for real. We

put half in on the bud. You know it might be 10, matter of the bud man. He put 5 in on it, I put 5 in. That's 10. I'll buy the shells, he buy the Mild. That's \$12."

Since marijuana is more costly, teens don't always have the money available to buy it, whereas buying a cigarillo is less cost prohibitive. Not having access to or being able to afford marijuana was described by several participants as the reasons they began smoking cigarillos in the first place, or why it became a habit:

"What I do is, if I don't have a blunt, I'll smoke a Black & Mild. That's why I smoke them frequently. 'Cause when I started smoking, that's what I'd smoke. And I was smoking marijuana a lot, so that made me get into a habit of smoking Black & Mild's."

Interviewer: "And how did (smoking cigarillos) become more of a habit?"

Participant: "Because it was like, sometimes when I ain't have no weed, I just needed a substitute."

In addition to cost and availability, cigarillos are viewed as a preferable alternative to marijuana for legal reasons:

Interviewer: "And what makes you decide then to choose a Mild over a blunt?"

Participant: "'Cause you won't go to jail for smoking a Mild, and you'll go to jail for smoking weed."

The following participant explains her choice of cigarillos instead of blunts:

"Yeah, 'cause like right now I'm trying to get me a job, so I'll be preferring to smoke a Black & Mild. 'Cause if I smoke marijuana, it'll take me a whole 'nother month to get my pee clean."

Using cigarillos in place of marijuana was particularly pertinent to three of our participants who were on probation for being caught smoking marijuana, and whose urine was being tested weekly to ensure they were abstaining:

Participant: "Yeah. I'm addicted (to cigarillos) now, because I'm on probation."

Interviewer: "Why do you say that?"

Participant: 'Cause I can't smoke no weed.... like I've got to smoke a Mild now."

"(Smoking cigarillos) started because when I got put on probation... Like I used to smoke marijuana, but I had to stop 'cause I got put on probation. So I just got Mild's and started smoking them and they became a habit."

One teen explains how this situation led him to substitute cigarillos:

"I can't quit (smoking cigarillos). 'Cause like when I was off probation, I ain't do nothing but smoke weed. So now (that I'm on probation) you're telling me I can't smoke no weed, so I'm a need something to substitute... You feel me?"

Finally, although the perceived effects of marijuana and cigarillos were described as similar, another reason for smoking a cigarillo in place of a blunt is the need to be awake and clear-headed:

“Afternoons, when I’m not doing anything, I smoke blunts. When I don’t have to go to school, when I don’t have to go to work, or when I don’t have to do anything - only because they make me real lazy and go to sleep. So I smoke them on my free time.”

When asked if she would ever want to smoke a cigarillo, but not a blunt, one participant says:

“Yeah. I would. ‘Cause like a blunt will get you high and you gon’ be dingy. And a Black & Mild, you just smoke it and be calm and cool.”

DISCUSSION

Adolescent use of cigarillos as both tobacco-only products and as marijuana blunts is increasing (U.S. Department of Health and Human Services, Office of the Surgeon General, 2014), particularly in urban areas and among African Americans and other minorities (Center for Disease Control and Prevention (CDC), 2012; Singh et al., 2016). While other studies have reported concurrent use of tobacco and marijuana (Agrawal et al., 2012; Ramo, Liu, & Prochaska, 2012), and of cigarillos and blunts specifically (Giovenco et al., 2016; Koopman Gonzalez et al., 2015) our analysis provides insight into the social contextual features that give rise to the concurrent use of cigarillos and marijuana.

The preference for smoking in a group and the practice of sharing products within that group fosters the initiation and continued use of both cigarillos and blunts. Group smoking, which has been reported for cigarillos (E. Trapl et al., 2016), and marijuana (Dunlap, Benoit, Sifaneck, & Johnson, 2006), is a way for teens to bond. Smoking together can increase solidarity with one’s peers, thereby reinforcing these behaviors. Group smoking also increases access to both products by making it socially acceptable, and even encouraged, to smoke even when a person does not have their own products. Further, the manipulation of each product in a parallel fashion by either “freaking” or “blunting” is common among cigarillos users (E. S. Trapl et al., 2016a), and can be an important aspect of group identity (Sifaneck, Johnson, & Dunlap, 2005). These techniques must be learned, and the skill to freak or roll a blunt may be a point of pride, giving one status within one’s social group.

The belief and experience that smoking a cigarillo with or shortly after smoking a blunt heightens or extends the high produced by marijuana is pervasive, and accounts for the common practice of “chasing.” We found that adolescents who try blunts first are introduced and encouraged to smoke cigarillos afterwards. This is likely contributing to increasing numbers of individuals who use tobacco among those who use marijuana. Tobacco use has previously been considered a gateway drug to marijuana use (Ramo et al., 2012). But while a trend of marijuana use preceding and being a risk factor for tobacco use has been noted in other studies as well (Cohn et al., 2015), particularly among African Americans (Kennedy, Patel, Cheh, Hsia, & Rolle, 2016), this is the first study to explore *how* marijuana blunt use can lead to tobacco initiation.

We found that adolescents report substituting cigarillos for marijuana. As reported elsewhere (Stoltz & Sanders, 2000), both products are felt by adolescents to be relaxing, to relieve

stress, and to contribute to positive affect. However, cigarillos are cheaper, more readily available, and less likely to present legal trouble than blunts. This pattern of substitution has implications for marijuana treatment programs. Several participants specifically mentioned smoking more cigarillos or becoming addicted to cigarillos because they were on probation from such programs and unable to smoke blunts.

One of the limitations of this study is that the data were collected in a geographically bound area for the purpose of canvassing and conducting the in-depth interviews. Therefore, our sample may not be representative of other populations of cigarillo users nationwide, although others have found similar use patterns (Giovenco et al., 2016). Expanding the sampling frame to other geographic regions and other age groups is warranted. Additionally, our sample size of 30 also limits the generalizability of these findings. However, this is an acceptable sample size for a study based on in-depth interviews, and saturation of themes was reached during analysis (Givens, 2008).

Despite these limitations, findings from this study have several important implications. Since the attractiveness of smoking is grounded in adolescents' social environment, tobacco control interventions will be most effective when this environment is factored in to the conceptualization and design of such interventions (O'Loughlin, Kishchuk, DiFranza, Tremblay, & Paradis, 2002). Prevention and treatment programs aimed at LCC use could benefit from incorporating information on the risks of marijuana use, for example. Conversely, marijuana treatment programs should be aware of the role cigarillos often play among users. Studies of adolescents indicate that persistent tobacco use is associated with a poorer response to treatment for marijuana use disorders (Gray et al., 2011) and that marijuana use among tobacco smokers may predict poorer tobacco cessation outcomes (Stapleton, Keaney, & Sutherland, 2009). Emerging evidence suggests that dual abstinence may predict better tobacco cessation outcomes, yet empirically researched treatments tailored for co-occurring use are lacking (Agrawal et al., 2012). The increasing legalization and public acceptability of marijuana could further increase its use among adolescents, which in turn could affect the prevalence of adolescent tobacco use. Public health messaging that incorporates the risks of using both products may have more of an impact than messaging aimed at addressing cigarillo use only.

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Table 1

Demographics

Demographic characteristics	N ^a (%)
Male	19 (63)
Age (years), mean (SD)	16.5 (0.9)
Race	
Black/African-American	19 (63)
Non-Hispanic White	4 (13)
Hispanic / Latino/a	5 (17)
Biracial	2 (7)
Occupation	
Neither school nor work	2 (7)
School	21 (70)
Work and school	7 (23)
Grade in school	
8 th grade	1 (3)
9 th grade	3 (10)
10 th grade	11 (37)
11 th grade	7 (23)
12 th grade	6 (20)

^a Aged 14–17, Aged 18 and in high school

Table 2

Smoking characteristics

Smoking products	N (%)
Tipped cigarillos smoked as tobacco only product	30 (100)
Untipped cigarillos used as marijuana blunt	25 (83)
Smoking characteristics	Median (range)
Age at first cigarillo, median years	14 (10–16)
Age at first marijuana blunt, median years	14 (7–16)
Cigarillos smoked per week,	13 (2–70)
Smoked Monday–Thursday	8 (0–40)
Smoked Friday–Sunday	5 (0–30)
Frequency of marijuana blunt use	
Same as cigarillos	5 (20)
Less than cigarillos	11 (44)
More than cigarillos	9 (36)
Usually “freak” cigarillos	24 (80)
Household smoking	
Smokers in household (yes)	26 (87)
Family member who smokes tobacco	25 (83)
Family member who smokes marijuana	15 (50)