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'Smoking': use of cigarettes, cigars and blunts among Southeast Asian American youth and young adults

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Abstract

Increased use of cigars has been noted among youth, as well as use of blunts (hollowed-out cigars filled with marijuana). Three types of relationships have been previously hypothesized between use of tobacco and marijuana in substance use progression. We aimed to assess these relationships for Southeast Asian American youth and adults in an urban population. We conducted in-person interviews with 164 Southeast Asians, smokers and non-smokers, in two low-income urban communities in Northern California, collecting both quantitative and qualitative data. Analysis of the quantitative data indicated distinct use patterns for blunts, cigars and other forms of marijuana in terms of associations with generation in the United States. The use of these items was also found to be related: ever having smoked cigarettes or blunts increased the risk of ever having smoked the other three items. Qualitative data found indications of all three hypothesized relationships between tobacco and marijuana for youths but not for older adults. For youths in the study, 'smoking' was found to constitute a social construct within which use of cigarettes, cigars and blunts were somewhat interchangeable. Youths in similar settings may initiate into and progress through smoking as an activity domain rather than any one of these items.

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Introduction

Apparent increases in cigar smoking among youths have been of concern for tobacco researchers. Delnevo *et al.* [1] pointed to increases in cigar smoking of >28% between 2000 and 2005 and attributed much of this increase to youth use of cigars. A 2001 US Surgeon General's report on women and smoking found that cigar use was increasing among women, particularly among young women [2]. This may reflect an increase in the use of cheap small cigars, described previously as an emergent trend particularly among African-American and other ethnic minority youth [3–5]. An emerging issue in tobacco and drug research is the use of these small cigars as 'blunts'—hollowed-out cigars filled with marijuana—a practice which is highly salient among urban youths and young adults. It is difficult to assess the relationship between the use of blunts, marijuana and cigars given the current state of question construction in most of the national drug and tobacco surveys, which do not clearly distinguish between cigars for cigars and cigars for blunts nor clearly include blunt use as a form of marijuana consumption. Some researchers have questioned whether youths might be reporting blunt use as cigar use [6], thus overrepresenting their use of cigars as cigars. Conversely, since blunts are a means of smoking marijuana, youths may be reporting their blunt use within their use of marijuana and thus underrepresenting their use of cigars for blunts. Alternately, they may not

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be reporting blunt use within either cigar or marijuana use [7]. Underlying these concerns is the question of the relation between use of cigars, cigars for blunts and marijuana.

In a study of adolescent use of blunts and cigars, Soldz *et al.* [6] compared survey data on use of cigars, including possibly blunts, with data on use of cigars specifically excluding blunts, and found that while use of cigars and blunts were related, cigar smoking was distinct from blunt smoking. Similarly, Ream *et al.* [8] were able to distinguish characteristics of respondents who tended to smoke marijuana in joints (rolled in cigarette papers) from those who tended to smoke it in blunts. These studies, however, were limited to investigations of the relationships between only two items (either blunts and cigars or blunts and joints) and did not consider possible relationships between multiple items.

As a whole, research on marijuana and tobacco has established an association between use of marijuana, blunts, cigars, cigarettes and/or other forms of tobacco, such as bidis [6, 9–12]. Within these studies, however, the nature of the association has not been defined. Other studies which have investigated two or more of these substances and consumption modes in relation to each other have generally offered the following relationships:

- Emergent trends: studies finding one form or substance to be a subset, particularly a new trend, of use of another; most commonly, blunt use as a new form of marijuana use [8, 13, 14].
- Progression: studies supporting a 'gateway' theory of progression from tobacco to marijuana and other drugs [15–18], a 'reverse gateway' progression of marijuana to tobacco and/or other substances [19–21] or refuting the gateway theory of drug progression [22–25] although without suggesting an alternate relationship.
- Interdependence: studies finding use of one substance or form to be interdependent with or reinforced by another; for example, smokers substituting marijuana for cigarettes due to cost or availability [26–28]; use of or dependence on nicotine reinforcing the use of cannabis or the reverse [19, 29] and blunt use increasing cigarette or cigar smoking through 'chasing' rituals [30–33].

Many of these studies have focused on youths, particularly adolescents, since identifying use trajectories among adolescents may better inform prevention efforts. While use of marijuana is found among most age groups, blunt smoking appears to be a practice specific to youth and young adults [32]. In a qualitative pilot study of substance use among second-generation Southeast Asian Americans in Northern California, the researchers found marijuana smoking to be highly normative and associated with youths' accommodation to the predominant subcultural styles of the urban settings within which they and their families were located [34]. Blunt smoking was described as popular, cigarette smoking as ubiquitous and cigar smoking was also described, but the relationships between use of cigars, blunts and marijuana as well as the relationship between smoking these items and smoking cigarettes were unclear.

The data presented here were collected as part of a subsequent mixed methods study comparing norms, beliefs and practices related to use of tobacco among two generations of Southeast Asians in the United States, specifically Cambodians and Laotians. Southeast Asians arrived in the United States as refugees from the wars in Indochina from the mid-1970s through the 1990s. The largest percent of Southeast Asians in the United States now reside in California. Northern California Southeast Asians include members of various Laotian ethnic groups (lowland Lao, Mien, Khmu, Tai Dam and Leu) and Cambodians as well as Vietnamese. Most of these persons came from remote rural areas, had little or no formal education and no English skills and many had experienced years of trauma as refugees before their United States arrival. First-generation Southeast Asians often suffer from undiagnosed and untreated Post-Traumatic Stress Disorder, depression and anxiety. While the primary experiences of the older generation were traditionally conservative and ethnically homogeneous villages, then refugee camps, followed by

relatively isolated lives as refugees, their children have grown up as English-speaking ethnic minorities in impoverished ethnically heterogeneous neighborhoods and schools, with some exposure to mainstream American culture but more frequent exposure to urban 'street' culture, wherein gangs and drugs were highly normative. Consequently, the gap between the generations is dramatic for this population [34].

The substance use practices of this population were of interest for two primary reasons. (i) Prior research showed an exceedingly high prevalence of cigarette smoking, particularly among males, in the countries of origin, but little information on use of other drugs. Cigarettes smoking among US Southeast Asians has been reported at rates of 35–70% [35]. Westermeyer [36] listed cannabis as one of several psychoactive substances consumed by various ethnic groups in Laos, and others have mentioned the use of cannabis in herbal traditional herbal medications and, as hemp, in textiles [37] but otherwise little is known about marijuana use in Southeast Asia. Use and misuse of alcohol, tobacco and opium has been found among populations of adult Southeast Asians in the United States [38–40] but use of marijuana has not previously been described. (ii) Few population-based studies of substance use in the United States, whether among adults or adolescents, have included Asian Americans, and none has included small subgroups such as Southeast Asians [41, 42], so the prevalence of use of marijuana or other drugs is unknown. There have been indications that Southeast Asians including youths may be at risk for substance abuse [43, 44]; yet to date, Southeast Asian substance use remains understudied and poorly understood, particularly among the second generation.

A generational comparison of tobacco use norms and practices was a primary motive for conducting our research. California's comprehensive tobacco control program has been credited with low rates of smoking among adults and adolescents compared with other US states [45, 46], while tobacco control was practically non-existent in Asia at the time the families represented by the participants in our study arrived in California as refugees. The researchers expected to see differences in the tobacco use norms and practices of Southeast Asians raised primarily in Asia as opposed to those raised primarily in California. In order to address the questions raised in the pilot study about the relationships between smoking cigarettes, cigars, blunts and other forms of marijuana, we collected data on use of these as well.

The present study aims to assess the fit between the three types of relationships previously hypothesized for associations between tobacco and cannabis—emergent trends, progression or interdependence—among Southeast Asian Americans. The bigenerational design of the parent project also allowed us to examine the degree to which the use of these items may be related to generation in the United States. As respondents in the pilot study had described use of marijuana and blunts in relation to a 'ghetto' identity specific to their experiences growing up in the United States [34], we expected that blunt smoking would be more associated with the second generation compared with the first.

Methods

Overview of the study

We recruited 164 respondents from two communities in the San Francisco Bay Area with sizeable concentrations of Southeast Asian Americans. Both communities are low-income and with predominantly ethnic minority populations (roughly one-third African-American and one-fourth Latino with another 10–15% Asian and Pacific Islander). Researchers conducted a confidential in-person interview with each respondent, collecting quantitative data in a brief close-ended survey and qualitative data in a subsequent in-depth semi-structured interview. Interviewers obtained informed consent from all respondents as well as from parents of minor respondents. All data collection and consent forms were available in Khmer or Laotian as well as English and respondents were allowed to choose in which language they wished to conduct the interview. All second-generation respondents chose to

be interviewed in English, while only a few of the first-generation respondents chose English. Of the 10 interviewers employed over the course of this study, six were bilingual–bicultural in Laotian or Cambodian. Interviews were conducted at a place of the respondent's choosing: most were conducted at the office of the research agency in Berkeley or at collaborating community-based organizations serving the local Southeast Asian community but some respondents preferred to be interviewed in their homes. The Institutional Review Board of the Pacific Institute for Research and Evaluation approved all data collection protocols for the protection of human subjects.

Participants and recruitment

We recruited respondents through a combination of agency referrals and snowball sampling. The sample was stratified by gender (48% male) as well as cigarette smoking status (50% current smokers), ethnic group (49% Cambodian and 51% Laotian), and generation in the United States, either first or second generation. We defined the first generation (53%, $N = 88$) as persons who were born in Southeast Asia and lived more than one-fourth of their lives there, while the second generation (46%, $N = 76$) included persons who were born and raised in the United States as well the 'one and a half' generation, i.e. those who were born overseas but lived more than one-fourth of their lives in the United States [47]. The respondents' ages ranged from 15 to 87, with the mean age of 35.4 years (SD $\pm$ 17.4). First-generation respondents ranged in age from 30 to 87 with a mean age of 49.2 years (SD $\pm$ 11.84), while second-generation respondents ranged in age from 15 to 28 years with a mean age of 19.3 years (SD $\pm$ 3.42). 'Laotian' included members of the Lao, Khmu, Mien and Thai Dam ethnic groups but not Hmong, as there were very few Hmong in the Bay Area. Current cigarette smoking status was defined as having smoked at least one whole cigarette in the past 30 days. Due to difficulties identifying males who had never smoked cigarettes (rates of cigarette smoking among Southeast Asian males are very high, and while very low among older females, smoking may be increasing among younger women, which was one of the rationales for conducting the study), non-smokers included former smokers. The mean age of smokers was 52.1 years (SD $\pm$ 11.35) for the first-generation age group and 19.6 years (SD $\pm$ 3.24) for the second-generation age group.

Data collection and analysis

The study utilized a mixed method design. The use of two types of data in mixed methods studies allows for triangulation of findings [48]. In this case, the quantitative data outlined general patterns of behavior, while the qualitative data collected from the same respondents provided explanatory material on these patterns and clarified the culturally relevant meanings and realities which shaped the respondents' substance use behaviors [49].

Quantitative data

Measures and analysis Quantitative data were collected in an interviewer-administered survey and recorded on paper; the results of the survey were later double entered and cleaned in SPSS. The survey consisted of a total of 60 items and took ~20 min to complete. In the survey, we collected lifetime and current (past 30 days) use and age of first use data for smoking cigars, blunts and other forms of marijuana as well as cigarettes. In this paper, we refer to these items as 'smokeable items'. For the purposes of this study, cigars, blunts and other forms of marijuana were defined as mutually exclusive. The questions for these items were adapted from those used in the National Youth Tobacco Survey for other forms of tobacco besides cigarettes. The question for cigars used in our survey read: 'Have you ever smoked cigars, cigarillos, or little cigars? [Only tobacco]?' The question about blunts followed the cigar item: 'Have you ever smoked 'blunts'—cigarillos or cigars mixed with marijuana?' Because blunt is the name for a brand of cigar commonly used to smoke marijuana but which could be smoked without the addition of marijuana, the prompt was added to define blunts specifically as containing marijuana. Other use of marijuana was then measured with the item: 'Have

you ever smoked marijuana? [OTHER THAN blunts]?' Analysts conducted statistical analysis of quantitative data to determine frequencies odds ratios (OR) and statistical relationship between variables. All statistical analyses were conducted using SPSS Windows version 15.0.

Qualitative data

Topical domains and analysis. Following the interviewer-administered survey, qualitative data were then collected in a semi-structured interview. The time for this section of the interview averaged 50 min. The interview allowed respondents to describe their use of and ideas about smoking, including all items listed above. Specific questions relevant to this paper asked respondents to compare their use of cigarettes to blunts and blunts to other forms of marijuana, as well as their smoking history.

The interviews were translated, if necessary, and transcribed by either in-house or contracted transcriptionists. All transcripts were reviewed by a transcription manager and randomly checked for accuracy. We were not able to conduct on-going reviews of translations from Laotian and Khmer, but initial translations were judged by bilingual community stakeholders to be accurate. The interview transcripts were then coded using the ATLAS-ti qualitative data management and analysis software [50]. The codebook was developed by the research staff, consisting of the principal investigator and qualitative data manager, in consultation with several of the field interviewers, through an iterative process. First, we developed a preliminary set of codes based on the topical domains used in the semi-structured interview guide, together with the primary research questions. Examples of these codes include reasons for smoking, smoking habits, start smoking and ethnicity and smoking. Category codes reflecting the sample strata (such as 'Male' or '[Cigarette] Smoker') were also included. These codes were revised and updated during the process of coding for clarity. Due to the large volume of qualitative data collected in this study, open coding was not utilized. However, the research staff met weekly with the field interviewers and coding staff to discuss the research progress, and as new themes and domains emerged in these conversations, new codes were considered and added to the codebook. Issues related to intercoder reliability were negated by having a single coder, whose work was periodically reviewed by the research staff. Analysis consisted of isolating and reviewing passages coded for blunts, cigars and marijuana (which were separate codes in the codebook) and comparing them for patterns such as concurrence, recurrence and variation, as well as by category code. This analysis was done by the principal investigator, with frequent 'member checks' to discuss findings with the qualitative data manager, coder and field interviewers as well as with community stakeholders such as community-based service providers representing the Southeast Asian community. These member checks served to clarify and validate the qualitative findings [51].

Results

Quantitative findings

Analysis of the survey data indicated distinct as well as linked use patterns for blunts, cigars and other forms of marijuana. There were associations between generational status and the use of these smokeable items based on lifetime and current patterns. For lifetime use among the second-generation respondents, blunts were more commonly reported (62%) than other forms of marijuana (45%) or cigars (30%). For the first generation, other forms of marijuana were more commonly reported (22%) than cigars (16%) or blunts (10%) and the mean age of those who reported having ever smoked blunts (40.8 years $\pm$ 10.1) was younger than that of those who ever smoked other marijuana (46.1 $\pm$ 9.4) or cigars (46.2 years $\pm$ 14.2), while among the second-generation respondents, there was little difference in the mean age for blunts (19.6 $\pm$ 3.0), other marijuana (20.2 $\pm$ 3.1) or cigars (20.4 $\pm$ 3.1). For current use among the second generation, blunts were more commonly reported (27%) than other marijuana (17%) or cigars (8%). For current use among the first generation, there was only one

Table I. *Comparison of lifetime and current use for four smokeable items by generational group*

Mean age (SD)	Generation 1 (n = 88)		Generation 2 (n = 76)		χ^2 statistics between generational groups and reported use
	49.2 years (11.84)		19.3 years (3.42)		
Number of substances	(%)	Mean age (SD)	(%)	Mean age (SD)	
Cigarettes					
Lifetime	71	50.7 (±11.6)	65	19.3 (±3.2)	NA
Current	49	52.1 (±11.3)	46	19.6 (±3.2)	NA
Blunts					
Lifetime[a]	10	40.8 (±10.1)	62	19.6 (±3.0)	χ^2 = 48.31, df = 1, P = 0.00
Current[b]	1	30.0 (±0.0)	27	19.3 (±2.9)	χ^2 = 29.25, df = 1, P = 0.00
Other marijuana					
Lifetime[a]	22	46.1 (±9.4)	45	20.2 (±3.1)	χ^2 = 9.98, df = 1, P = 0.00
Current[b]	1	40.0 (±0.0)	17	19.2 (±3.0)	χ^2 = 16.02, df = 1; P = 0.00
Cigars					
Lifetime[c]	16	46.2 (±14.2)	30	20.4 (±3.1)	χ^2 = 4.89, df = 1, P = 0.03
Current[b]	0	0.0 (±0.0)	8	18.3 (±2.1)	χ^2 = 7.21, df = 1, P = 0.00

NA, not applicable (no calculations were conducted as cigarette smoking status was a sample selection criteria).
[a]Statistical associations: lifetime use—blunt, other marijuana, P = 0.00.
[b]Statistical associations: current use—blunt, other marijuana, cigar use, generation, P = 0.00.
[c]Statistical associations: lifetime use—cigar use, generation, P = 0.03.

report for use of blunts, one for other marijuana and no reported use of cigars (see Table I).

Among the first generation, analysis of data examining the association between types of substances ever used found statistically significant relationships between the following: cigarette use and other marijuana use (χ^2 = 6.67, df = 1, P = 0.00) (22% of users), cigarette use and cigar use (χ^2 = 4.58, df = 1, P = 0.03) (16% of users) and blunt use and other marijuana use (χ^2 = 18.69, df = 1, P = 0.00) (8% of users), blunt use and cigar use (χ^2 = 11.77, df = 1, P = 0.00) (6% of users) and other marijuana use and cigar use (χ^2 = 24.42, df = 1, P = 0.00) (11% of users). There was no association between cigarette use and blunt use (10% of users). Among the second generation, statistically significant relationships were found between cigarette use and blunt use (χ^2 = 25.1, df = 1, P = 0.00) (57% of users), cigarette use and other marijuana use (χ^2 = 12.11, df = 1, P = 0.00) (41% of users) and cigarette use and cigar use (χ^2 = 13.43, df = 1, P = 0.00) (30% of users) and blunt use and other marijuana use (χ^2 = 27.15, df = 1, P = 0.00) (42% of users), blunt use and cigar use (χ^2 = 15.97, df = 1, P = 0.00) (29% of users) and other marijuana use and cigar use (χ^2 = 23.77, df = 1, P = 0.00) (26%).

Further analyses found statistically significant relationships between generational groups and number of substances used. For lifetime use, statistically significant differences were found between the generational groups for use of one smokeable item (χ^2 = 7.25, df = 1, P = 0.00) and three smokeable items (χ^2 = 13.65, df = 1, P = 0.00). Additionally, for past 30 days use, statistically significant differences were found between the generational groups for use of one item (χ^2 = 5.36, df = 1, P = 0.02) and two (χ^2 = 7.12, df = 1, P = 0.00) and three items (χ^2 = 7.59, df = 1, P = 0.00) (see Table II). The most common lifetime multiple use pattern for both generations was all four items (cigarettes, blunts, other marijuana and cigars) with 41% of first generation and 30% of second-generation respondents reporting this (see Table II).

Crude risks were estimated (using ORs) comparing having ever smoked cigarettes to ever having smoked cigars, ever having smoked other marijuana smokers and ever having smoked blunts. Both the effect estimate and 95% confidence intervals are given below. We found a significant risk for ever-cigarette smokers for smoking all three other

Table II. *Comparison of combination of use of listed smokeable items by generational group*

Mean age (SD)	Generation 1 (n = 88)		Generation 2 (n = 76)		χ^2 statistics between generational groups and reported use
	49.2 years (11.84)		19.3 years (3.42)		
Number of substances	(%)	Mean age (SD)	(%)	Mean age (SD)	
All listed items					
Lifetime	41	47.4 (±13.2)	30	18.3 (±3.5)	$\chi^2 = 2.07$, df = 1, $P = 0.15$
Current	0	0.0 (±0.0)	3	16.5 (±2.1)	$\chi^2 = 2.34$, df = 1, $P = 0.12$
Three items					
Lifetime[a]	36	43.4 (±7.9)	17	19.0 (±3.9)	$\chi^2 = 7.59$, df = 1, $P = 0.00$
Current[b]	0	0.0 (±0.0)	14	19.0 (±2.0)	$\chi^2 = 13.65$, df = 1, $P = 0.00$
Two items					
Lifetime	10	51.6 (±14.6)	11	19.0 (±3.5)	$\chi^2 = 0.00$, df = 1, $P = 0.95$
Current[b]	2	35.0 (±7.0)	13	21.2 (±2.9)	$\chi^2 = 7.12$, df = 1, $P = 0.00$
One item					
Lifetime[a]	10	39.5 (±9.9)	26	20.6 (±3.4)	$\chi^2 = 7.25$, df = 1, $P = 0.00$
Current[b]	47	51.7 (±10.5)	29	19.1 (±3.3)	$\chi^2 = 5.36$, df = 1, $P = 0.02$

[a]Statistical associations: lifetime use—one item, three items, generation, $P = 0.00$.
[b]Statistical associations: current use—one item, two items, three items, generation, $P \leqslant 0.02$.

items. That is, estimated risks were increased for having ever smoked cigars ($OR_{\text{ever smoke cigarettes}}$ = 4.02; 95% confidence interval (CI) = 1.68–9.80), other forms of marijuana ($OR_{\text{ever smoke cigarettes}}$ = 3.07; 95% CI = 1.55–6.09) and blunts ($OR_{\text{ever smoke cigarettes}}$ = 2.52; 95% CI = 1.23–5.18). Due to the small N for current use of some items, OR was only calculated for 'ever' or lifetime use.

Additionally, crude risks were estimated (using ORs) comparing ever having smoked blunts to ever having smoked cigarettes, ever having smoked cigars and ever having smoked other forms of marijuana. Given ever having smoked blunts, we found a significantly increased risk for use of the other three items. Estimated risks were increased for ever having smoked other forms of marijuana ($OR_{\text{ever smoked blunts}}$ = 15.04; 95% CI = 6.92–34.27), cigars ($OR_{\text{ever smoked blunts}}$ = 9.12; 95% CI = 3.96–21.04) and cigarettes ($OR_{\text{ever smoked blunts}}$ = 3.77; 95% CI = 2.27–20.18). The confidence intervals were wide probably due to a relatively small N but the magnitude of effect was found to be quite large for all measures.

Qualitative findings

Qualitative data provided explanatory material regarding the associations we identified in the quantitative data. Specifically, the qualitative data gave evidence that all three of the specific types of relationships between smokeable items noted in the literature—progression, interdependence and emergent forms—were relevant for youths and young adults in this population. Additionally, these relationships were not necessarily mutually exclusive but may be related through the broader social construct of 'smoking'. As indicated in the survey data, few first-generation respondents had tried blunt smoking, and those who did were at the younger end of this age group, i.e. young adults. As we were specifically interested in the relationships between blunts, cigars and other forms of marijuana, and as the older generation were less forthcoming about marijuana smoking, the qualitative findings presented here were based primarily on analyses of data from interviews with adolescent and young adult respondents.

Emergent forms

In discussing use of blunts, users clearly identified blunt smoking as a form of marijuana use but not as a form of cigar use. As indicated in the quantitative findings, many younger respondents had smoked marijuana in various forms, including blunts. A few marijuana users stated that they had

no preference for delivery system, that it made no difference in terms of the high and that they occasionally smoked marijuana in joints but mostly used blunts. For most of the adolescent and young adult marijuana users, however, blunts were the preferred delivery system. Some respondents acknowledged that they smoked blunts because that was the current trend. Many respondents cited functionality as the reason for their preference.

> I think the reason why people prefer blunts is because it's a bigger paper, and it's thicker, and it burns slower. So usually when you smoke in groups, you smoke a blunt—it lasts longer, and you'll get more to smoke.

Very few blunt-smoking respondents considered the use of cigars for blunts to be a form of tobacco use. Most appeared to consider only the discarded contents of cigars to be tobacco and were uncertain of what the cigar shell was made.

> The wrappers? They're generally like a chocolate color? They smell good, but other than that I have no idea. They throw away the inside of the tobacco, or throw the tobacco away, and they use the wrappers.

Progression

While some youthful smokers described starting with cigarettes and then included marijuana in the standard gateway progression, many described the reverse gateway, first smoking marijuana, often in the form of blunts, and then progressing to use of tobacco. Many blunt smokers reported first trying cigars because they had some on hand to prepare blunts. It is important to note that the cigars marketed for blunt smoking were very inexpensive compared with those marketed for adult cigar use and were usually flavored, making them more attractive to youths [32]. This woman's description of her initiation to smoking by way of cigars includes both of these features:

> I was about 12, 13, when I first actually smoked. And I started off not with cigarettes. [I: What did you start with?] Sweet Tip Tampas. Cigars. Like cigars, Black 'n Milds. Because that was what was in, back in the days. It was really cheaper than cigarettes, and it lasts a long time, 'cause it was three-and-half, four inches long, and they used to sell it for fifty cents. And then the Sweet Tip Tampa tasted so sweet–you didn't feel you were smoking tobacco. It was just like inhaling this air of sweetness, y'know. [But] the cigars were getting too thick for me, too heavy. So I got on cigarettes. Like if I smoke it and then I didn't want it no more, I could just throw it away and get another one, 'cause it came in the pack, y'know?

Interdependence

Interdependence between smokeable items manifested both as reinforcement—use of one smokeable reinforced a respondent's use of another—and substitution—respondents described substituting one smokeable for another. The most common manifestation of reinforcement among second-generation respondents was marijuana use reinforcing use of cigarettes. Marijuana smokers frequently described smoking cigarettes in order to enhance the effects of the marijuana. This was referred to as 'boosting your high'. Boosting was always identified with cigarette use and not with use of cigars or other forms of tobacco.

> I started with my friends, 'cause we had just gotten done smoking some weed, and then they said cigarette'll boost it up, so I just try the cigarette. It just like you could feel it more, you feel your high rise a little bit.

> They think that cigarettes boosts up your high after smoking. I think it's bullshit, but I do it any ways, just to try to get it.

Respondents described substituting one smokeable for another. For example, one respondent described smoking cigarettes in place of marijuana:

> I don't smoke weed no more, and at the time when I did, that did make me feel good. And

> then I started smoking cigarettes, and after that I stopped smoking weed, and then I just stayed on cigarettes. So I guess that just made me, bring that feeling back, but temporarily—like a short feeling of when I used to smoke marijuana.

Alternately, this respondent smoked marijuana in place of cigarettes:

> Even though I stop cigarette, I would still smoke marijuana. It's 'cause if I don't smoke cigarettes, smoking marijuana is like also smoking cigarettes. It's just like I inhale it.

Smoking preferences

Narratives about substitution were usually linked with narratives about smoking preferences. Most youthful smokers expressed a preference for marijuana, some a preference for cigarettes and few preferred cigars. Many described smoking cigars only when they had the cigars available for making blunts and had nothing else to smoke.

> I only smoke cigar in place of cigarettes, when I don't have cigarettes. [If] I can't afford cigarettes, I buy cigar. It depends on what kind of cigar is it. Twenty-five cents to a dollar or something. When you have a dollar you buy a good cigar, instead of buy cigarettes for three or four dollars. But I'm not a cigar smoker. It's more worser than cigarettes.

While some respondents described going through a phase of cigar smoking, few described it as a continuing habit and most stated that cigars were 'nasty' or tasted bad. Some were also concerned that cigars were unhealthier than cigarettes:

> I heard cigar is worser than cigarettes. It's more tobacco, it's stronger.

Most respondents distinguished smoking cigarettes from smoking blunts in terms of use contexts and costs as well as effects:

> I think I smoke cigarettes more, 'cause I smoke probably at least about a blunt a day, and I smoke about five cigarettes a day, ten cigarettes a day. So I smoke cigarettes more 'cause it's cheaper, probably. And when I'm out with my boys is the only time I smoke blunts, but cigarettes, I smoke alone, too.

> I smoked cigarettes more, because cigarette was legal, and marijuana is not and you can't just go along holding a cigarette with marijuana and smoke it. I could be at work and all these people come and smoke cigarette with me, that don't mean I smoke marijuana with them.

Smoking blunts and cigarettes were sharply distinguished from smoking marijuana or any other substance from a pipe, which was shunned by many:

> I don't like pipe because it makes you look like you a dope fiend, a crack head, smoking out of a pipe.

Smoking as a social construct

Adolescent and young adults respondents frequently referred to smoking as an activity, without specifying what they were smoking.

> [I: What you do when you spend time with your friends?] What do I do? Just kick it and talk like that. Have fun, party. [I: What do you mean by kick it?] Kick it? Do whatever we do. We smoke. That's how we do it, smoke.

When asked about smoking in the environment around him, this respondent considered blunt smoking as well as cigarette smoking in his response:

> [I: Throughout the whole day, do you see people smoking?] I see [that] in the morning when I drive to work, I see the [person in the] car next to me smoking a blunt or cigarettes. So I see that every day, so it's a regular thing to me now.

Young respondents described smoking as a social behavior that encompassed consuming a range of smokable items.

> When its lunchtime, we get off campus, everybody just go to the liquor store, get what they want to eat, and then just smoke whatever they smoke. Everybody be at the liquor store smoking something. Like if not cigarette, [then] weed, Black ['n Mild cigars], whatever they smoking.

While as previously noted some respondents described substituting one smokeable item for another, this respondent overtly linked the practices of smoking:

> I think if I was to quit one thing, I'm gonna quit the others. So I don't think I would smoke blunts if I quit smoking cigarettes.

Smoking marijuana and smoking cigarettes were also linked in the social construct of the 'smoker':

> [I: Do you consider yourself a smoker?] Mm hmm. 'Cause um, I smoke cigarettes and weed.
>
> [I: what does it mean to be a smoker?] You smoke cigarettes, weed, or whatever you can smoke, you smoke it.
>
> Person like, smoker can be anybody that inhales a cigarette. Or like, not just a cigarette, it could be like, marijuana too. Or like anything that they inhale smoke to.

Discussion

In this study, we aimed to investigate the relationships between cigars, blunts, other forms of marijuana and cigarettes for Southeast Asian Americans, particularly for the younger generation who have grown up in the United States. Prior research had suggested three possible relationships: progression, interdependence or emergent trends. Our findings indicate that all three relationships may be relevant for this population.

Blunts, other forms of marijuana and cigars emerged as distinct in our quantitative analyses and associated with different generational groups. Based on their reported lifetime use, blunt smoking was more prevalent than smoking other forms of marijuana or cigars for second-generation respondents but other marijuana was more prevalent than blunt or cigar use among the first generation. However, all these items were found to be linked for users. The vast majority (87%) of our first-generation respondents and more than half (58%) of our second-generation respondents had used more than one of these items in their lifetime; more than one-third (41%) of the first generation and nearly a third (30%) of the second generation had ever used all four items. Not only did cigarette smoking increase the risk of smoking blunts, cigars and other forms of marijuana but also smoking blunts increased the risk of smoking cigarettes, cigars and other forms of marijuana as well.

Beyond identifying these associations, the small size of our sample did not allow us to quantitatively identify any of the three suggested relationships. Analysis of the qualitative data, however, indicated that all three theorized relationships were relevant within the sampled population. For qualitative research, 12–20 cases are generally considered sufficient to achieve maximum variation of information and to allow for disconfirming evidence, which are two primary means of establishing the validity of the data collected [52, 53]. The study sample of 164 respondents, even within the sample strata of gender, generation and smoking status, was more than adequate to allow for variation and disconfirming evidence. The qualitative findings presented here represent the range of variations described by our respondents on relationships between the four smokeable items.

As in other reports, blunt smoking was described as an emergent trend, i.e. the most popular form of marijuana use among peers for second-generation respondents. The other two hypothesized relationships, however, emerged most often as interrelated. Narratives of a progression from one smokeable item to another were linked with narratives about interdependence between items. Most salient was the use of cigarettes to 'boost' the high from marijuana, which was described by many respondents as the main motivation for beginning and continuing

to smoke cigarettes. Similarly, narratives about substituting one smokeable item for another—marijuana in place of cigarettes, cigarettes in place of marijuana, cigars in place of blunts—spoke to the role of this substitution in some respondents' reported progression from one smokeable item to another. In this sense, progression from one item to another might entail maintaining use of the first, generally as a form of interdependence, or it might entail substituting use of the second item for use of the first.

These interlinked relationships spoke to a larger sense in which younger respondents may find cigars, cigarettes and blunts (and to a lesser extent other forms of marijuana) to be somewhat interchangeable. Initiation into smoking any one of these items appeared to relax inhibitions toward and/or create positive associations about smoking other items in this set. Marijuana smoking and cigarette smoking both evoked positive associations of inhaling the smoke. Those who described quitting sometimes selected one habit to maintain, based on risk assessments such as the legal status of the substances, known health risks and self-image. Alternately, a few respondents described deciding to quit smoking all items, as the act of smoking one item was too closely linked to smoking any of the others. For some respondents, what defined a person as a smoker was simply having the habit of smoking, whether it be blunts, cigars or cigarettes or some combination of these. In this sense, we suggest that smoking may represent an overarching social construct for these youths, a construct which encompasses the set of smokeable items (particularly cigarettes, cigars and blunts) as well as the act of smoking them.

This view of smoking allows for an integration of the three hypothesized relationships between use of tobacco and marijuana. For youthful respondents, particularly those experimenting with substance use, the formal features of smoking may be as attractive as the substances consumed. Several of our respondents specified inhaling the smoke as a positive feature of the smoking experience. Elsewhere we have described the pride that blunt smokers take in rolling and handling blunt cigars [B. Soller and J. P. Lee (under review)]. Other researchers have found similar fetishistic aspects of blunt use, such as choice of cigar for blunts as well as blunt rolling skills [32], and ritualized smoking practices within blunt user groups [54]. Our findings suggest that users may extend to cigars some of the positive attributes that attach to cigars for blunts, at least initially. Use of one smokeable item may therefore not only relax inhibitions toward experimentation and possible uptake of another smokeable item but also may actively promote positive associations. As we had found previously in our pilot study, smoking cigarettes, blunts and cigars continued to be sharply contrasted with smoking a pipe for nearly all our respondents. The stigmatized image of the crackhead and concomitant aversion to this image and to use of cocaine by the 'blunts generation' has been noted by Furst *et al*. [55], in their work among youths in urban New York. The pipe as a drug delivery system appears to also be highly stigmatized for Bay Area Southeast Asians, predominantly living in communities hard hit by the crack epidemic of recent decades. The use of pipes to smoke opium by older Southeast Asians may add to the stigma of pipes among the younger generation. While none of our respondents mentioned this specifically as an influence, they did express strong negative attitudes toward opium use in general, and opium smoking was sometimes ascribed to older adults, as has been noted previously among the first generation of Southeast Asian refugees [56].

Our findings indicate that once initiated into smoking, whether by way of cigarettes, cigars or blunts, a user may move somewhat freely between these items through experimentation, substitution, reinforcement and/or following new trends. For urban Southeast Asian youth and young adults, progression, interdependence and emergent trends may all be possible relationships within the encompassing construct of smoking as it pertains to cigars, blunts and cigarettes. In this regard, the normative boundary between use of items in this set and those in the set that includes substances smoked in a pipe establishes the next step in a progression. This would suggest that smokers who cross the line from cigar/cigarette/blunt smoking into pipe smoking

may enter a separate normative realm of substance use wherein inhibitions may be relaxed and positive attributes attached toward use of other substances smoked in pipes; but this line of investigation remains to be pursued.

Implications

The study indicates the importance of considering the linkages between use of cigarettes and use of other smokeable items in prevention efforts. There is some concern that tobacco prevention efforts such as increased taxes may have the unintended consequence of driving smokers to increasing their consumption of marijuana and other drugs, but the few studies on this topic indicate that the opposite may be the case and that taxes on cigarettes are associated with decreased marijuana use [27, 57]. Alternately, drug prevention efforts may have the secondary effect of increasing tobacco consumption. One study has shown, for example, that juvenile probationers who were regularly subjected to urinalysis reported increasing their use of cigarettes to compensate for the screened drugs they were avoiding [58]. Our findings indicate that reduction or cessation of one smokeable item may be linked either to an increased use of other items or to an overall reduction in smoking. It is not clear from our data what drives the decision to switch items versus reduce or quit all smoking, and further research on this question is needed. Nevertheless, cessation and prevention programs would do well to assess participants' overall substance use and, for participants who have some history of using both tobacco and marijuana, focus as much on the social construct of smoking as on any one smokeable item.

The lack of survey data collected in this study on the timing of quitting use of blunts, other forms of marijuana, cigars and cigarettes do not allow us to definitively identify sequences of use. Although the qualitative data collected here give some indication of sequences for the younger generation, first-generation respondents were overall less forthcoming about marijuana use and so, the qualitative discussion of sequencing is necessarily focused on the reports from the second-generation respondents. The present study is limited to one subgroup of Asian Americans in one geographic area and as such cannot be said to represent patterns of tobacco and marijuana use in other contexts or among other populations. Elsewhere, we have described Southeast Asians youths' use of blunts as a reflection of their socioeconomic position and identification with Hip-Hop culture [B. Soller and J. P. Lee (under review)]. The study did not collect comparable data on use of blunts and cigars by coresident youths of other ethnicities nor is there other data available on blunt use among Northern California youths in general. However, as peer use is highly predictive of adolescent substance use [59, 60] and as use of blunts appears to be common among urban ethnic minority youths, particularly those involved in the hip-hop music and dance scene, as has been reported elsewhere [3, 5, 7], the norms and behaviors we have identified among urban Southeast Asian adolescents very likely reflect the presence of similar norms and behaviors among coresident peers of other ethnicities. The concept of smoking tobacco to boost the effects of cannabis has been reported among African-American youths in other parts of the United States [3, 5, 33] and similarly the stigma attributed to use of pipes for blunt smokers [55]. The emergence of such constructs in disparate locations and subpopulations may indicate the diffusion of a youth subculture oriented to marijuana smoking with a preference for blunts as the delivery system, as indeed some scholars have proposed [7]. These preferences may also predispose blunt smokers to use of small cigars [61], which represent a cheap alternative to cigarettes [5] as well as a cheap 'smokeable' alternative to marijuana, as some of our respondents reported. However, the degree to which the construct of smoking as an encompassing category is shared by substance users in other areas and among other populations, or by the older generation of Southeast Asian Americans, cannot be determined from this study. The study does indicate the need for research on concurrent use of blunts, cigars, cigarettes and marijuana with larger and more inclusive samples.

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Conflict of interest statement

None declared.

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