



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Institute for Global Tobacco Control

Technical Report on Flavored Cigarettes at the Point-of-Sale in Latin America

Availability and Marketing around Primary and Secondary Schools in Five Countries



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Executive Summary

The tobacco epidemic kills more than six million people worldwide each year and is projected to kill one billion people this century. In Latin America, total cigarette sales are declining, but the sales of flavored cigarettes are climbing. This report describes a study that examined cigarette retailers within a radius of 100-250 meters around schools in Argentina, Bolivia, Brazil, Chile, and Peru.

The results of this study show that cigarette packs carrying flavor descriptors were frequently displayed and advertised at the point-of-sale near schools. Most of the flavored cigarettes observed are sold by large, multinational companies such as British American Tobacco, Japan Tobacco International, and Philip Morris International.

Flavored products appeal to young and inexperienced smokers, potentially leading to a lifetime of addiction and disease. In order to maintain profits, tobacco companies must attract young smokers to replace the millions of customers that die from tobacco-caused diseases or quit each year. Most flavored cigarettes observed contained mint flavoring or menthol – a substance that also makes it easier to inhale cigarette smoke and absorb nicotine thus accelerating the addiction process. Other flavors included fruits, alcohol, and spices. Many of the flavors used non-conventional descriptions such as “Double Click Crisp” or “Ice Blast” to communicate their flavor components.

In order to protect and save lives, countries should adopt and effectively implement policies that prohibit the use of tobacco product flavorings, prohibit the use of misleading packaging and labeling, and prohibit all forms of direct and indirect advertising, promotion, and sponsorship, including the display of tobacco products at retail points of sale.

Introduction

Tobacco use is the leading cause of preventable death and disease across the globe.¹ In Latin America, more than 370,000 people die every year from diseases caused by tobacco use.² Although the sale of tobacco flavored cigarettes has seen a steady decline in the Latin American region over the past several years, the decline has been tempered by a marked increase in sales of flavored cigarettes, particularly those containing flavor capsules.³ This report examines the availability and marketing of flavored cigarettes in five cities in Latin America: Buenos Aires, Argentina, La Paz, Bolivia, Rio de Janeiro, Brazil, Santiago, Chile and Lima, Peru.

Flavoring agents are defined as “a natural or synthetic substance or mixture of substances that imparts, modifies, enhances or intensifies the flavor of tobacco products,” which can be added to cigarettes to create flavored cigarettes.⁴ Some flavored cigarettes contain flavor capsules that are embedded in the filter. Consumers press on the filter to crush the capsule and release a liquid that flavors the smoke.⁵ Brand descriptors are words, numbers or imagery that are incorporated into the marketing of the tobacco product (such as pack design or posters) and can be used to denote flavor and taste.⁶ Flavor descriptors can also be found on other parts of the pack other than in the brand variant name.

For the purposes of this study, tobacco flavored cigarettes are defined as cigarettes that do not include, somewhere on the cigarette pack or the associated marketing media (such as print signage), language or imagery indicating a characterizing flavor, such as menthol or chocolate, that would change the flavor of the tobacco in a manner that is noticeable by the smoker. Cigarettes categorized as containing menthol or other flavor descriptors include, somewhere on the cigarette pack or the associated marketing media, language or imagery that implies the presence of additives, including menthol, that would change the flavor of the tobacco which is noticeable by the smoker, or that the flavor of the tobacco is different in some way from tobacco flavored cigarettes. Conventional flavor descriptors refer to terms or imagery describing a recognizable flavor, such as: fruit, alcohol, coffee, sweets, spices, and mint or menthol. Non-conventional flavor descriptors, by contrast, are terms or imagery that do not correspond to a typically recognizable flavor, and can include: lexical color descriptors (purple crush, ruby burst), descriptors indicating a fresh, chill, or cool taste, technology words or symbols (press play), flavor change descriptors (click to activate), and alphanumeric descriptors (MX12).

Flavored Tobacco Products

The tobacco industry has long sought to design a “youth” cigarette by incorporating flavors.⁷ A September 1972 Brown & Williamson Tobacco Corporation Project Report states, “It’s a well-known fact that teenagers like sweet products. Honey might be considered.”⁸ The document suggests additional flavors, including cola and apple.⁸ In a separate Brown & Williamson Tobacco Corporation internal correspondence memo dated January 18, 1984, the author writes “smokers of flavored cigarettes would likely be: young and inexperienced smokers, possibly fad-conscious teenagers or college kids who would like to experiment...women and young people who want to look like smokers even though they do not like cigarettes.”⁹ Similarly, an October 1992 report authored by Philip Morris concludes that flavors have a “high curiosity-to-try factor” that cuts across genders and that “young adults through early 30’s voiced similar levels of interest.”¹⁰ The

report suggests flavors such as melon, kola spice, piña colada, and creamy orange.¹⁰

Researchers detected a diverse set of flavored cigarettes on the U.S. market as early as October 2004.¹¹ Brown & Williamson brought flavored cigarettes to the market by introducing cigarette packs such as Mocha Taboo and Midnight Berry.¹¹ RJ Reynolds also brought flavored cigarettes to the market with labels that included Mandarin Mint, Margarita Mixer, Twista Lime, and Warm Winter Toffee.¹¹ In a 2003 report prepared for RJ Reynolds, flavored cigarettes were found to appeal to multiple senses (taste, smell, aural, tactile), allow smokers to control the flavor as desired and contain an element of fun.¹² The report recommends that multiple flavors be made available by the company.¹²

Cigarette manufacturers control their products' sensory characteristics (e.g., taste, smell, mouth feel) in a way that allows them to make their products more attractive to consumer groups and to target them based on preferences gleaned from their consumer research. Flavorings are added to mask the harsh taste of tobacco smoke, making flavored products more palatable and appealing to young people.^{11,13} Menthol's cooling, analgesic, and soothing effects on the throat and mouth reduce the irritating and harsh effects of nicotine, increasing the ease of smoking.¹⁴

Menthol is a particularly important additive for the tobacco industry. Menthol is included as an additive in most cigarettes even when it is not indicated in the name of the brand variant or on the label of the pack.¹⁵ Internal tobacco industry studies confirm that menthol increases product appeal to initiators by masking the taste of tobacco, reducing throat irritation, and making smoke easier to inhale.¹⁶ Tobacco industry documentation has shown that menthol is added to cigarettes because it is known to be attractive to inexperienced smokers who perceive menthol cigarettes as less harsh, less harmful, and easier to smoke.¹⁷⁻¹⁹ Tobacco industry documents confirm its use of menthol, in part, to attract and retain uninitiated, younger smokers, some of whom smoke menthol cigarettes because of their perception that they are less harmful due to menthol's cooling and smoothing effects.²⁰

Flavored tobacco products are popular with youth,^{21,22} encouraging early initiation²³⁻²⁵ and resulting in high rates of use among youth and young adults. One study found that more than half of tobacco-using students in grades 9 through 12 in Canada use flavored tobacco products, despite a national ban on certain flavored tobacco products.²⁶ Another study found that smokers in Mexico who prefer flavored cigarettes, especially those with capsules, view these products as having a more positive appeal, better taste, and less risk than other brand varieties.¹³ A systematic review of 40 studies from numerous countries showed both smokers and non-smokers rated tobacco with flavor descriptors as more appealing and less harmful, and that consumers of flavored tobacco products show decreased likelihood of intentions to quit.²⁷

In 2006 the World Health Organization (WHO) recognized the dangers of flavored tobacco products, stating that these, "... seemingly harmless-sounding [flavoring] ingredients, such as chocolate, licorice, and sugars, ... can contribute to increased carcinogenic and addictive effects."²⁸ Candy-like flavoring additives such as licorice, chocolate, cocoa, and vanilla also serve to improve the taste of tobacco products and reduce their initial harshness. When burned, some of these

additives release cancer-causing chemical compounds.²⁹ “Substances such as menthol and sweeteners can also make it easier to inhale this toxic mixture deep into the lungs, by smoothing the smoke and deadening the senses”.²⁸ In addition, menthol and other additives such as cocoa, licorice, vanillin, and sugars, have been classified by the European Commission’s *Scientific Committee on Emerging and Newly Identified Health Risks* as ‘priority substances’ because of their hazard profile, which includes their potential toxicity and potential attractiveness.³⁰

A WHO Advisory note recommends that menthol should be banned from use in cigarettes. It concludes that menthol cigarettes promote youth experimentation and progression to regular use more than non-menthol cigarettes and that smoking rates of menthol cigarettes are higher among youth and young adults, females, and ethnic minorities. Tailored advertising and innovative products such as cigarettes with menthol capsules contribute to greater use of menthol cigarettes by these groups. In addition, adolescent smokers of these products are more dependent than non-menthol cigarette smokers and quit attempts by menthol smokers are less successful.³¹ In 2009, the United States banned the use of some flavors in cigarettes, describing the products as “a gateway for many children and young adults to become regular smokers.”³²

Marketing Flavored Tobacco Products

Tobacco companies further capitalize on the appeal of flavored products by using deceptive and predatory marketing practices to increase consumption and make tobacco use appear glamorous or socially acceptable while dismissing the products’ adverse health effects.³³ This is most evident through advertising and promotion initiatives at the point-of-sale (POS), including product displays, where flavored product packaging and imagery are powerful sources of advertising and promotion.³⁴

Numerous longitudinal studies demonstrate that exposure to tobacco product advertising and promotion increases the likelihood that youth will start to smoke³⁵ and that the display of tobacco products at the POS has the same effect and influence on behavior as traditional media advertising.³⁶ Marketing in retail environments specifically has been shown to increase the likelihood of smoking initiation among youth.³⁷ One study found that stores where adolescents frequently shop may contain nearly three times as many marketing materials and shelf space for popular tobacco brands.³⁸ While tobacco companies like British American Tobacco (BAT), Philip Morris International (PMI), and Japan Tobacco International (JTI) publicly state that their products are only intended for and marketed to adult consumers,³⁹⁻⁴¹ a 2015 report documented marketing practices that appeal to youth in Argentina, Brazil, Colombia, and Mexico.⁴²

Researchers have observed the use of longer brand variant names including descriptors that evoke sensations or product features that the industry was previously allowed to market, but is now restricted from using.⁴³ Some of these newer brand variant names may be taking the place of explicit presentation of flavors. There is evidence that the tobacco industry is adapting to an increasingly strict regulatory environment that imposes more restrictions on packs by changing or adding to the names of their brand variants. In Australia, shortly before the requirements for plain packaging came into effect, the industry increasingly included color descriptors as part of the

brand variant name.^{43,44} Other researchers analyzing brand variants available in Australia also found that color was the leading theme of brand variant names, with 70% of the 120 variants identified using color connotations. Other descriptors relating to color such as Sky, Night, Dawn, Sun, Storm, Sea, Ice, Frost, and Chill were also frequently noted.⁴⁵ Color descriptors can influence perceptions of harm and increase product appeal. The use of certain color terms, including 'silver' and 'gold' were rated as lower tar, lower health risk, and youth rated them as more likely to be their choice of pack if they chose to smoke in an online survey of adults and youths asked to compare pairs of packs on multiple indicators.⁴⁶

The Framework Convention on Tobacco Control

Many governments at the national and sub-national levels have enacted laws banning or restricting flavored and/or menthol tobacco products, in fulfillment of country obligations under the WHO Framework Convention on Tobacco Control. The WHO Framework Convention on Tobacco Control (FCTC) articles addressing the practices described in this report include FCTC Articles 9, 11, and 13.⁴⁷ FCTC Article 9 requires Parties to enact and implement effective measures to regulate tobacco product contents and emissions.⁴⁸ The Partial Guidelines for Implementation of Article 9 and 10 indicate Parties should prohibit or restrict ingredients that may be used to increase palatability of tobacco products and that there is no justification for permitting flavoring agents in tobacco products because they help make tobacco products more attractive, which in turn encourages their use.⁴⁹

FCTC Article 11.1(a) requires Parties to enact and implement measures to ensure that packaging and labeling do not promote a tobacco product by means that create an erroneous impression about a tobacco product's characteristics, health effects, hazards, or emissions, or that directly or indirectly create the false impression that a particular tobacco product is less harmful than others.⁵⁰ Article 13 requires a comprehensive ban on all forms of tobacco advertising, promotion and sponsorship (TAPS).⁵¹ The Article 13 Guidelines make it clear that retail display of tobacco products and other forms of advertising and promotion at retail POS are forms of tobacco advertising and that young people are particularly vulnerable to the promotional effects of product displays.⁵²

Country Markets and Regulations

Flavored cigarettes in Latin America have become popular. Between 2010 and 2015, sales of capsule cigarettes have increased in Argentina, Bolivia, Chile, and Peru.⁵³⁻⁵⁶ Complete data on the sale of flavored cigarettes in Brazil has not been published, as confirmed by Jake Palley, MPP (email communication, 2017).

Argentina

Argentina became a signatory to the FCTC on September 25, 2003.⁵⁷ Among Argentina's almost 43 million residents,⁵⁸ 29.4% of men and 15.6% of women (22.1% overall) currently smoke tobacco.⁵⁹ Flavored cigarettes, particularly those containing flavor capsules have become popular in Argentina (especially among "young" smokers), rising from 1% of total cigarettes sales in 2010 to 15% in 2015.⁵³ PMI was the market share leader in Argentina in 2015 with 76.7% of the market in 2015. That same year, BAT held 18.9% of the market share, followed by Japan Tobacco Inc (JTI) with 3.6%, Expert SA with 0.3%, Imperial Tobacco with 0.2%, and other companies with 0.3% of the market.⁶⁰

Flavored tobacco products are not currently regulated in Argentina. According to the national law, the Ministry of Health is required to establish a ban on the use of specific ingredients that increase the total toxicity inherent in the products under analysis provided it is shown to be in accordance with objective scientific criteria and international standards.⁶¹ The Ministry of Health has not used this provision to ban any additive in Argentina. However, tobacco product manufacturers and importers (but not retailers or wholesalers) are prohibited from presenting information to the public concerning ingredients that are supposedly beneficial to health, flavorings or aromatic scents, or statements referring to such ingredients having the possible effect of making consumption of the product more attractive to children and adolescents, or giving the idea that it is less hazardous to health.⁶¹ Additionally, tobacco product packaging and advertising may not directly or indirectly create the false, erroneous or deceptive impression that a particular tobacco product is less harmful than another or that may lead to error with respect to its characteristics, effects on health, risks or emissions.⁶¹

POS advertising and promotion is exempt from the general ban on tobacco advertising and promotion.⁶¹ Instead, there are restrictions placed on POS advertising and promotion. Two 30cm x 30cm two dimensional, non-illuminated signs at the POS are allowed. The first is for listing the products available for each manufacturer or importer, with the brand, logo, and price of listed products; the second is for the promotion of the listed products. The signs must not be visible from outside and are required to carry health warnings that occupy 20% of the surface area. All other advertising at POS is prohibited, including 1) direct or indirect incentives to stimulate purchase, 2) use of brands or logos for non-tobacco products on tobacco products, and 3) the sale or display of non-tobacco products that contain text, photos, images or logos associated with tobacco products.⁶¹ Implementation of these measures in subnational jurisdictions has been challenged by Nobleza Piccardo, the BAT affiliate in Argentina.⁶²

Bolivia

Bolivia became a party to the FCTC on September 15, 2015.⁵⁷ Among Bolivia's almost 11 million residents,⁶³ 38.6% of men and 11.2% of women smoke tobacco.⁶⁴ As in other parts of the region, flavored cigarettes, including menthol, are sold in Bolivia. Innovative tobacco products released recently in the country included two capsule cigarettes.⁵⁴ In Bolivia, market shares in 2015 were mainly divided between three companies: Cía Industrial de Tabacos SA (56.2%), PMI (32.6%), and JTI (8.1%), with other companies making up 3.1% of the market.⁶⁵

Bolivian law does not regulate flavored tobacco products. Misleading descriptors and claims are prohibited on packs.⁶⁶ POS advertising is specifically allowed, provided it carries a health warning, is not visible from outside, and does not include suggestions that promote the product by means that are false, misleading, or deceptive or likely to create an erroneous impression about its hazards, health effects, or emissions; or that claim they are less harmful than other tobacco products.⁶⁶

Brazil

Brazil became a party to the FCTC on 3 November, 2005.⁵⁷ Among Brazil's almost 206 million residents,⁶⁷ 18.9% of men and 11% of women (14.7% overall) currently smoke tobacco.⁶⁸ In Brazil in 2015, BAT controlled 80% of the market of cigarettes, PMI had 15.8% and other companies made up 4.2%.⁶⁹ Market analysts estimate that around 2% of total cigarette sales in Brazil are flavored, with the most popular flavors being chocolate, menthol, vanilla and gillyflower.⁷⁰ This estimate, however, is not based on complete sales data including flavor capsules, which, unlike for other large markets in the region, has not been made publicly available for Brazil, as confirmed by Jake Palley, MPP (email communication, 2017). Information from the Agência Nacional de Vigilância Sanitária (ANVISA), Brazil's public health surveillance authority, as retrieved by Jake Palley, MPP, shows that of the 510 new tobacco product applications that have been approved since 2012, 45.3% (n=231) were for flavored products (email communication, 2017).

The government issued a regulation banning most tobacco product additives, including flavorings, in 2012.⁴ However, implementation has been stayed pending the resolution of a legal challenge filed by Sinditabaco, a tobacco lobbying group.⁷¹ Misleading terms on packaging and labeling and misleading or deceptive advertising are prohibited.^{72,73} POS advertising and promotion are prohibited, with the exception of product displays.⁷⁴

Chile

Chile became a party to the FCTC on 13 June, 2005.⁵⁷ Among Chile's over 17 and a half million residents,⁷⁵ 32.1% of men and 26.3% of women smoke tobacco.⁷⁶ More smokers in Chile are using flavored cigarettes, with 2015 seeing a 6% increase in sales of flavor capsule cigarettes, which now account for 32% of cigarette sales.⁵⁵ BAT dominated the market with a 95.8% share in Chile in 2015; PMI had only 3.3%, and other companies made up 0.9% of the market.⁷⁷

The Ministry of Health has the authority to prohibit the use of additives and substances during manufacturing that increase levels of addiction, harm, or risk in the consumers of tobacco products.^{78,79} The Ministry of Health attempted to ban menthol but the regulations were never adopted and implemented.⁸⁰ A draft bill currently under discussion in the National Congress proposes to clarify the authority given to the Ministry of Health, explicitly allowing it to ban additives that increase addictiveness or harm either directly or indirectly.⁸¹ Moreover, it proposes to directly ban the sale of cigarettes with distinctive flavors that are known to be habitually consumed by children, such as menthol, vanilla, and lemon.⁸¹

Chile's laws also prohibit including misleading terms, but not other signs, such as colors and numbers in the name or properties associated with the product brand.^{78,82} Advertising of tobacco and elements of the brands are prohibited, including at POS, subject to a few exceptions including POS product displays.⁷⁸

Peru

Peru became a party to the FCTC on 30 November, 2004.⁵⁷ Among Peru's 30.74 million residents,⁸³ 17.9% of men and 4.5% of women smoke tobacco.⁸⁴ In 2015, flavored cigarettes accounted for 43% of overall cigarette sales in Peru, with new two capsule cigarettes introduced during the year.⁵⁶ In 2015 in Peru, BAT controlled the majority of the market (86.1%), PMI had 10.3%, JTI 2.2% and other companies 1.4%.⁸⁵

Laws in Peru do not regulate flavored tobacco products. There is a broad prohibition on misleading packaging and labeling that includes terms and any other signs.^{86,87} Tobacco advertising and promotion, including product displays, are allowed at the POS, provided the products are displayed in a manner that shows the pack warnings.⁸⁷ Peru's tobacco control law allows other forms and means of tobacco advertising and promotion, but advertising cannot be aimed at minors.⁸⁶

Methods

This study about the marketing and availability of flavored cigarettes at the POS in five cities in Latin America was led by the Institute for Global Tobacco Control (IGTC) at the Johns Hopkins Bloomberg School of Public Health (JHSPH). IGTC partnered with the Campaign for Tobacco-Free Kids (CTFK) and with a local tobacco control organization in every city. Local partners provided guidance and context about the sampling framework, and IGTC designed the survey instrument and data collection protocol. In each city, investigators from IGTC and CTFK trained 6-8 people to conduct the fieldwork. The groups of data collectors included students and professionals from various fields. The IGTC and CTFK study team was on-site in each city for training and data collection to troubleshoot any logistical or technical issues. Data cleaning, validation, and analysis were carried out by IGTC.

Sampling Approach

This study surveyed tobacco retailers in Buenos Aires, Argentina; La Paz, Bolivia; Rio de Janeiro, Brazil; Santiago, Chile; and Lima, Peru. In Brazil and Chile, we selected primary and secondary schools within each of the city boundaries, with consideration for the neighborhood's (1) retail density, (2) school density, and (3) safety and ease of accessibility for data collectors traversing the cities via public transportation. Each school was assigned a unique identification code. An online mapping and distance tool was used to define a sampling area radius of 100-250 meters surrounding each school, ensuring that none of the sampling areas overlapped. The size of the radii in each city was adjusted in order to maximize the number of schools included in the sample when school locations were more densely clustered and larger radii overlapped. Data collectors surveyed a convenience sample of tobacco retailers within each sampling area. In Brazil, data collectors observed newsstands, small bars or drink shops, bakeries, luncheonettes or juice shops, and beach kiosks. In Chile, data collectors observed *almacenes del barrio*, *botillerias*, mini-markets, kioskos, and *supermercados*.

In Peru, Argentina and Bolivia data collectors returned to a convenience sample of retailers that were identified and observed during a previous study which took place in February, June, and July of 2016 (respectively), using the same sampling approach described above. In Peru, data collectors only returned to bodegas, and were permitted to observe supermarkets that were added to the sample if identified while walking between bodegas that were located within the same school sampling area. Data collectors observed bodegas and supermercados in Peru, and kiosks in Argentina. In Bolivia, retailers included tiendas del barrio, dulceras/anaqueles, kioskos, micromercados, almacenes, and supermercados.

Data collectors purchased cigarettes from one retailer in each school sampling area. In Brazil and Chile, data collectors purchased cigarettes from the first retailer they observed in school sampling areas with odd identification codes (101, 103, 105) and purchased cigarettes from the second retailer they observed in school sampling areas with even identification codes (100, 102, 104). In Peru, Argentina, and Bolivia, a random number generator was used to randomly select one tobacco retailer within each school sampling area where data collectors would make their purchase (from the list of retailers generated during a previous project). If the randomly selected retailer was closed or no longer sold tobacco, the IGTC study team used the random number generator to select an alternative retailer where data collectors could make a purchase.

Survey Instrument

The survey instrument was designed to address known trends in tobacco display, advertising and promotional characteristics, and key components of POS marketing that may attract youth (Figure 1). Data collectors recorded the date, retailer geolocation, school sampling area code, POS code (when applicable), retailer type, retailer address, and other notes or comments about the retailer. The survey also asked which types of cigarettes were for sale, which brands had flavored cigarettes, which types of flavor descriptors were observed, and whether the retailer sold loose or single cigarettes. The instrument included fields to capture information about the purchased cigarette packs and photos of the display, advertisement, or promotion of cigarettes with menthol or other flavors both indoors and outdoors (Figure 2).

Figure 1. POS instrument content

Display	Advertising	Promotion	Purchased Cigarette Packs
Cashier zone	Print signage (posters, banners, flyers, shelf liners, backgrounds, etc.)	Price discounts (sale, coupon, multi-pack)	Cheapest tobacco flavored cigarettes (no menthol or other flavor)
Behind the cashier zone	Electronic signage (digital or video)	Free cigarettes	Cheapest menthol only cigarettes
On a power wall of tobacco products	3-dimensional signage (e.g. giant cigarette packs)	Gifts (free or with purchase)	Cheapest cigarettes with another flavor (with or without menthol)
Using lights	Signage visible from outdoors (menthol or other flavor only)	Contests or competitions	Brand and variety
Using movement		Loyalty/rewards scheme or mention of social media channel	Price
On a branded stand or cabinet		Brand stretching (hats, lighters, umbrella, shopping basket with tobacco branding)	
With sweets, snacks or sugary drinks		Promotions visible from outdoors (menthol or other flavor only)	
With products for children (toys, stickers, coloring books, etc.)			
At the eye-level of children (1 meter or less from the floor)			
Display visible from outdoors (menthol or other flavor only)			

Figure 2. Purchased cigarette pack instrument content

Pack Characteristics		
Brand	Conventional flavor descriptors	Number of sticks per pack
Manufacturer	Non-conventional flavor descriptors	Mention of flavor capsules
Type of cigarette (tobacco flavored or with menthol or other flavor descriptors)	Mention of menthol	Number of distinct capsule flavors per pack
Photos of every face of the pack	Use of "double" menthol descriptors	Number of capsules per stick

Data Collection Protocol

Observations, purchased packs and photos were collected from retailers during normal business hours throughout the month of January 2017. In Brazil and Chile, each data collector received a packet of sampling area maps including the unique school identification code and space to record

the addresses of retailers in the area. Street names and radii boundaries were clearly visible on all sampling area maps. Data collectors identified retailers within the sampling area by using the maps to follow a systematic-walking pattern, observing all streets within the defined radius. The maps and list of retailers included the name, address, and unique identification code of the school, as well as the retailer address, type, and unique POS code. Due to a technical glitch with the online mapping and distance tool, we were unable to generate sampling area maps in Peru, and only provided information about the schools and retailers.

Retailers that sold tobacco products prompted a request for detailed observations on cigarette marketing, while only the date, retailer geolocation, school code, POS code, retailer address, retailer type, and visibility from the school were recorded for locations that did not sell cigarettes. Data collectors wrote or confirmed the address of each cigarette retailer they observed on the corresponding sampling area maps. Observational data and photos of cigarette displays, advertisements and promotions were recorded and uploaded to a cloud-based database in real-time within Magpi, a mobile data collection application installed on smartphones. The order of questions and format of response options were designed to facilitate rapid and discrete observation by data collectors.

The instrument prompted data collectors to check their sampling area maps and lists of retailers to determine when and where they should purchase cigarettes. The sampling area maps in Brazil and Chile included a reminder to purchase cigarettes from the first retailer observed in sampling areas with odd identification codes, or from the second retailer observed in sampling areas with even identification codes. In Argentina, Bolivia and Peru, the randomly selected retailers where data collectors purchased cigarettes were starred and highlighted on lists of retailers and addresses. When making a purchase, data collectors were instructed to first ask the cashier for the cheapest tobacco flavored cigarette pack available (without menthol or any other flavor), then for the cheapest menthol-only pack of cigarettes, followed by the cheapest cigarette pack with any other flavor (which could also include menthol). If the retailer sold multiple brands of the same type at the cheapest price, data collectors asked for the product that was most popular. After completing the purchase and exiting the store, data collectors recorded the brand, price, and a photo of each cigarette pack. Packs were placed in small plastic bags and labeled with the price, and school code and/or POS code. Every unique cigarette pack was individually coded for flavor descriptors and product features (Figure 2) by a member of the study team.

At the end of each observation period, data collectors reported the address, sampling area code, and/or POS code of each retailer they observed by entering information into a spreadsheet hosted on Google Drive. The IGTC study team reviewed these reports in order to verify the uploaded dataset and ensure that the mobile software application was functioning properly.

Training

Six to eight paid data collectors attended a full day training on how to implement the study protocol immediately before each data collection period. The study team explained in detail the purpose of the study, the current tobacco control laws, the survey content, key terms and definitions, the Magpi software application, and data collection procedures. Data collectors were instructed to

behave as customers in order to discretely observe the retail environment and capture photos. In order to estimate the placement and proximity of products at the eye level of children or near sweets and other youth products, each data collector used a measuring tape to identify a 1-meter reference point on their body. The data collection team was trained to recognize the relevant cigarette types, popular brands, types of flavors, and product display, advertising, and promotional characteristics. During the training, data collectors participated in a field test of the study protocol to practice using the survey, mobile app, and data collection procedures in nearby retailers.

Results

Across all five countries, we selected 399 school sampling areas, 310 of which were visited (Figure 3). Cigarette retailers were identified within 77.9% (n=285) of the sampling areas, with radii that ranged from 100-250 meters surrounding the schools. Data collectors identified 1,188 stores within the sampling areas, 69.4% (n=825) of which sold cigarettes, and collected a total of 601 cigarette packs by purchasing from one retailer within every school sampling area.

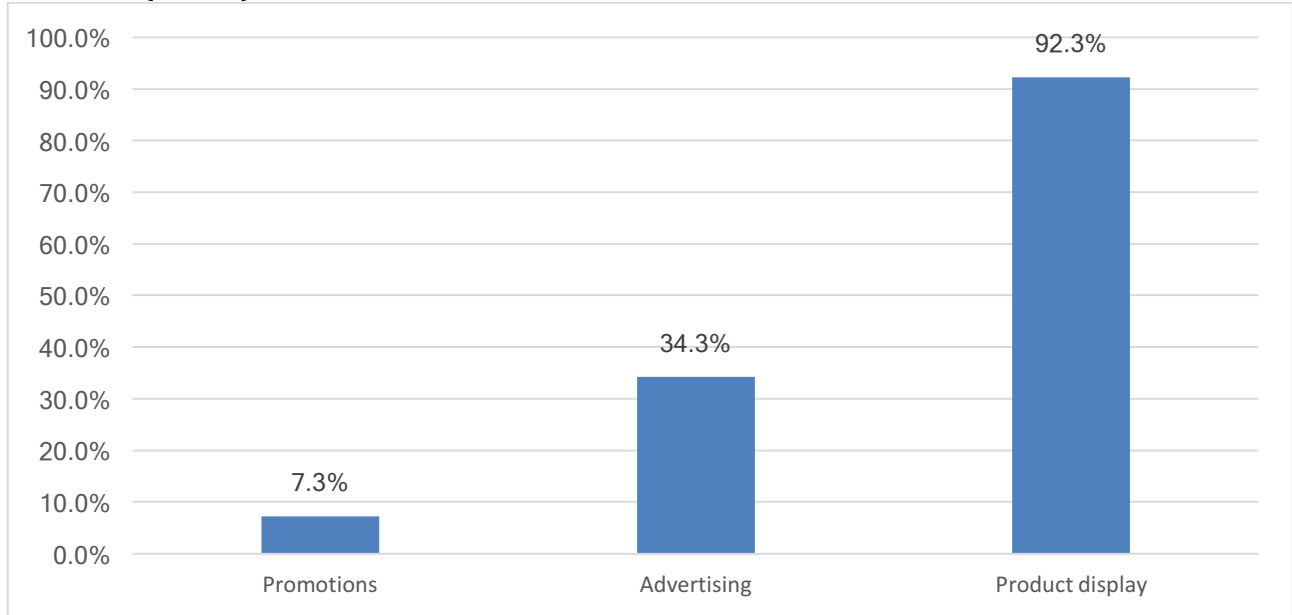
Figure 3. Sample of schools and retailers across five countries

	Argentina	Bolivia	Brazil	Chile	Peru	Total
Dates of Observation	18-Jan	20-Jan	10-12 Jan	27-31 Jan	17-Jan	10-31 Jan
Size of Radius (meters)	250	100	175	250	250	100 - 250
Schools Selected	86	64	92	107	50	399
School Sampling Areas Observed	49	51	86	81	43	310
School Sampling Areas with Cigarette Retailers	48	44	74	78	41	285
Retailers Identified	308	114	282	372	112	1188
Retailers Selling Cigarettes	244	93	205	183	100	825
Cigarette Packs Purchased	108	72	156	195	70	601

Marketing for Cigarettes with Menthol or Other Flavor Descriptors Across 5 Countries

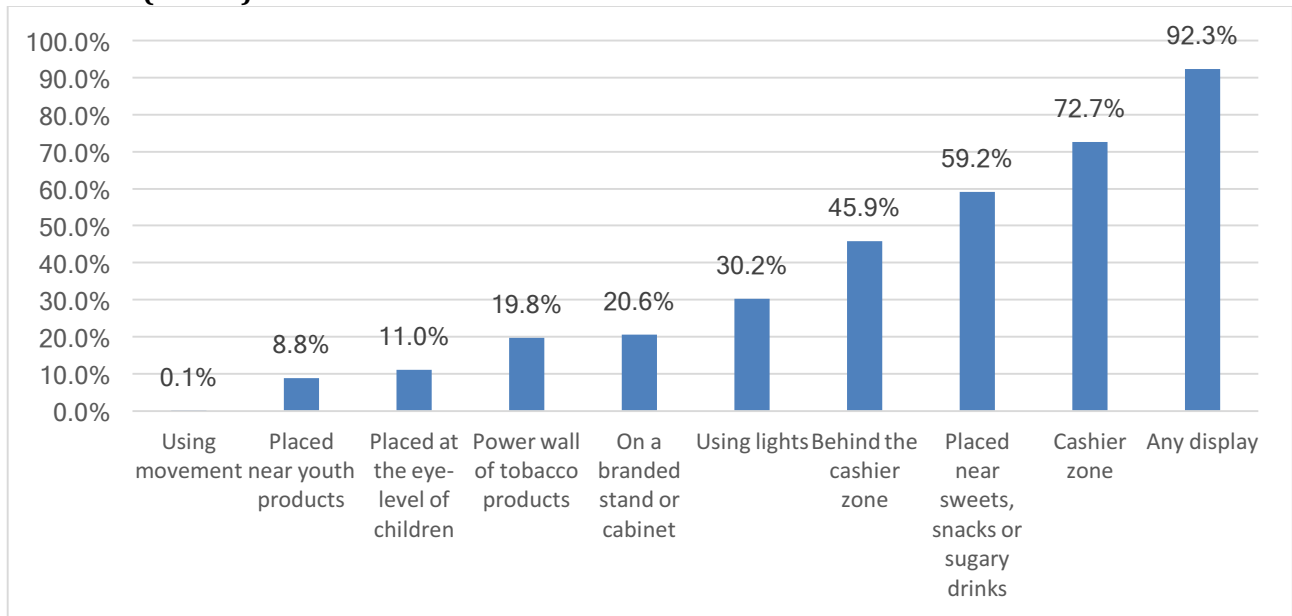
Among the 825 cigarette retailers observed across the 5 countries, 85.2% (n=703) sold cigarettes with menthol or other flavor descriptors, 71.4% (n=589) sold cigarettes with flavor capsules, and 41.5% (n=342) sold loose or single cigarettes. These products were on display in 92.3% (n=649) of retailers and advertised in 34.3% (n=241) of retailers (Figure 4). Special promotions were offered in 7.3% (n=51) of retailers. Cigarettes with flavor capsules

Figure 4. POS marketing for cigarettes with menthol and other flavor descriptors across 5 countries (n=703)



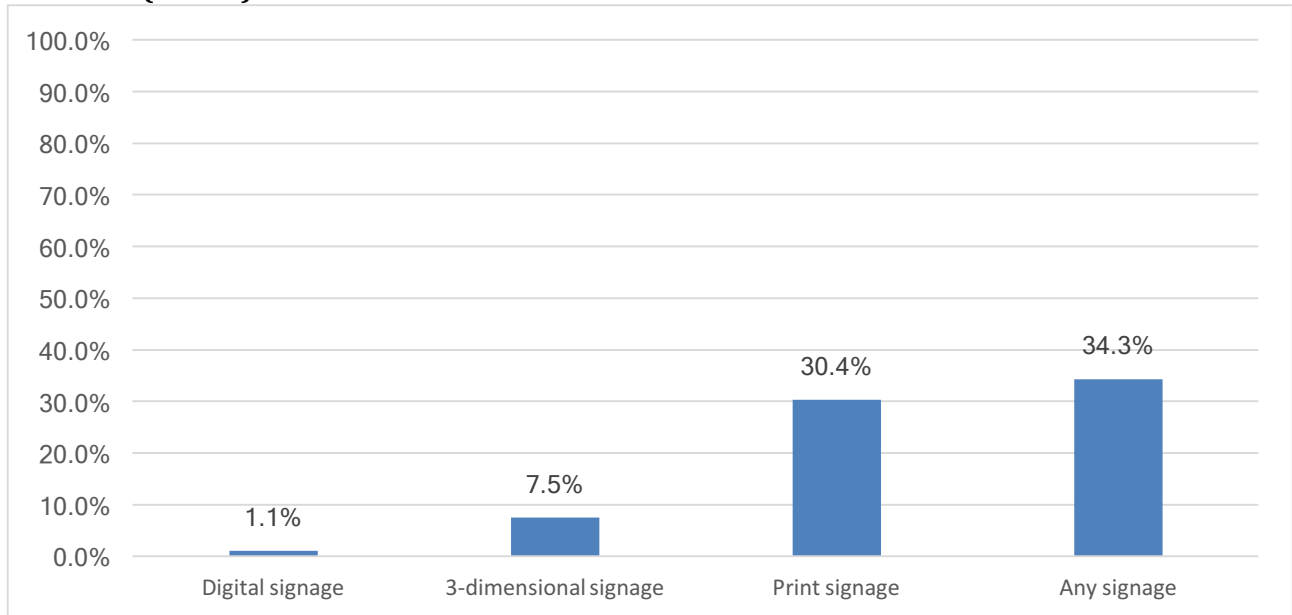
Across the retailers observed in all five countries, cigarettes with menthol or other flavor descriptors were most frequently placed in the cashier zone, (72.2%, n=512), near sweets, snacks, or sugary drinks (59.2%, n=416), and behind the cashier zone (45.9%, n=323) (Figure 5). Some retailers used lighted displays (30.2%, n=212) to call attention to cigarettes with menthol or other flavor descriptors, which were occasionally placed at the eye-level of children (11.0%, n=77) or near youth products like coloring books or stickers (8.8%, n=62).

Figure 5. POS display of cigarettes with menthol and other flavor descriptors across 5 countries (n=703)



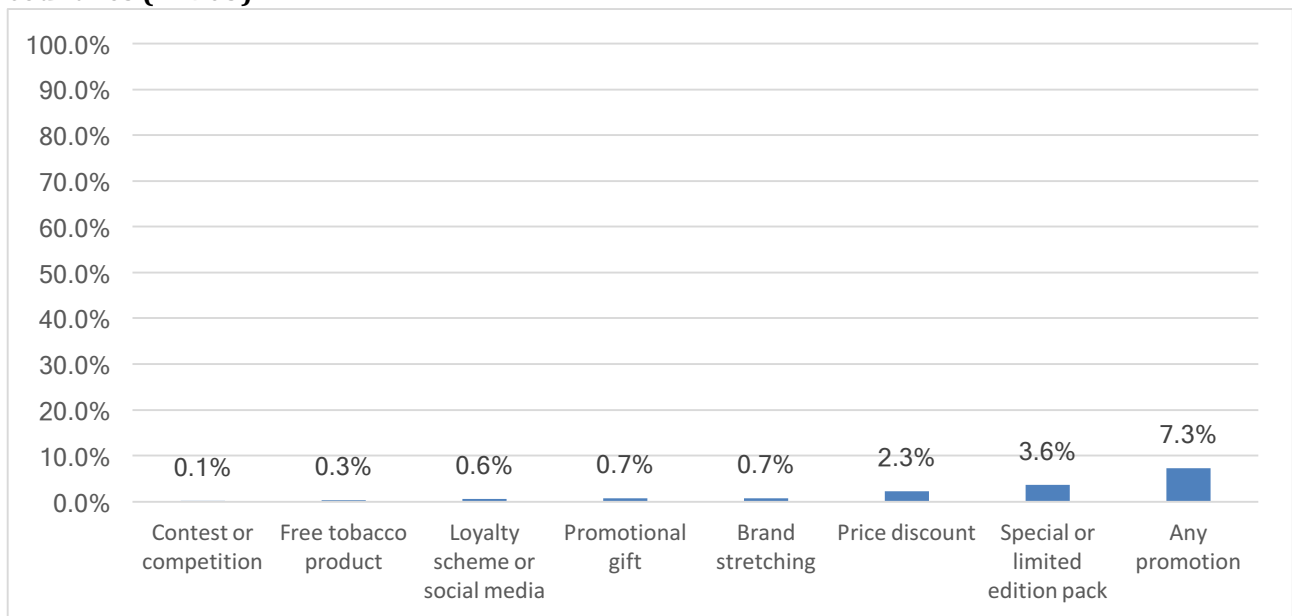
Retailers typically used print signage (30.4%, n=214) to advertise cigarettes with menthol or other tobacco products (Figure 6). Three-dimensional signage (such as an oversized cigarette pack) was observed in 7.5% of retailers (n=53), and 1.1% (n=8) used digital advertising signs.

Figure 6. POS advertising of cigarettes with menthol and other flavor descriptors across 5 countries (n=703)









Promotions for cigarettes with menthol or other flavor descriptors typically included special or limited edition packs (3.6%, n=25), or price discounts (2.3%, n=16) (Figure 7).

Figure 7. POS promotions for cigarettes with menthol and other flavor descriptors across 5 countries (n=703)



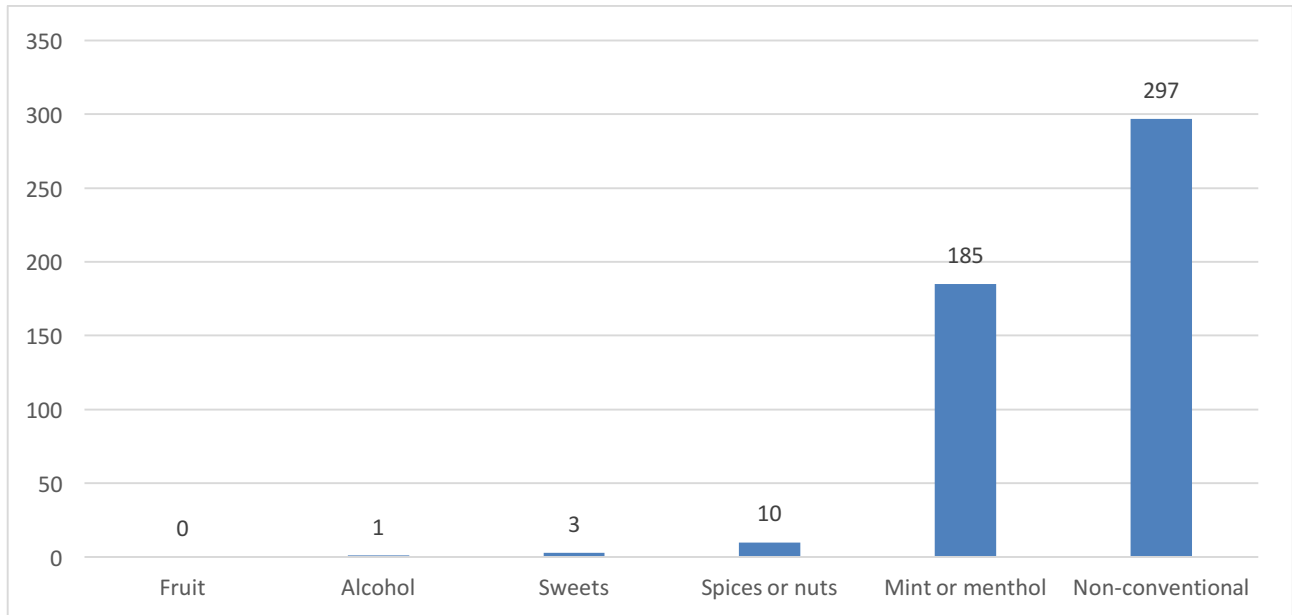
Among the 703 retailers selling cigarettes with menthol or other flavor descriptors, mint or menthol was the most frequently observed descriptor (74.1%, n=521), followed by non-conventional flavor descriptors (69.6%, n=489) (Figure 8). Flavor descriptors for fruit were recorded occasionally (10.8%, n=76).

Figure 8. Flavor descriptors observed at the POS in 5 countries (n=703)

	Argentina (n=216)	Bolivia (n=72)	Brazil (n=164)	Chile (n=156)	Peru (n=95)	Total (n=703)
 Mint or menthol	62.5%	63.9%	97.0%	92.3%	38.9%	74.1%
 Non-conventional	76.9%	68.1%	45.7%	80.1%	77.9%	69.6%
 Fruit	2.8%	8.3%	15.9%	19.9%	7.4%	10.8%
 Spices or Nuts	0.5%	50.0%	3.0%	0.0%	5.3%	6.7%
 Alcohol	5.6%	0.0%	0.0%	6.4%	0.0%	3.1%
 Sweets	0.0%	1.4%	0.6%	0.0%	0.0%	0.3%

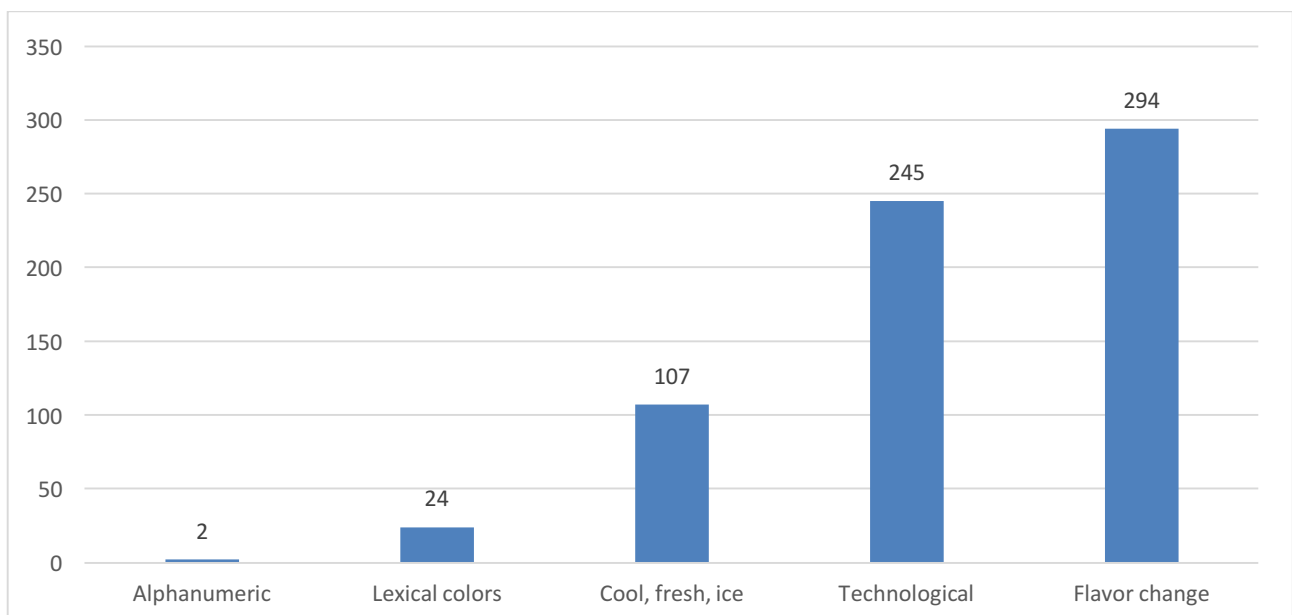
Non-conventional flavor descriptors were the most frequently observed type of descriptor across flavored packs purchased in all 5 countries, with 92.8% (n=297) of packs carrying such terminology (Figure 9). Descriptors for mint or menthol were observed on 57.8% (n=185) of all flavored packs.

Figure 9. Flavor descriptors on purchased cigarette packs across 5 countries (n=320)



Language or imagery indicating a flavor change was observed on 91.9% (n=295) of the flavored packs purchased in all 5 countries, followed by technological descriptors (76.8%, n=245), and descriptors such as cool, fresh or ice (33.4%, n=107) (Figure 10).

Figure 10. Non-conventional flavor descriptors on purchased cigarette packs across 5 countries (n=320)



Argentina

In Buenos Aires, data collectors visited 49 of the 86 school sampling areas we selected, and identified tobacco retailers near 98.0% (n=48) of those schools. Data collectors visited 308 retailers located within 250 meters of a school, 79.2% (n=244) of which sold cigarettes, 1.6% (n=5) of which no longer sold cigarettes, and 19.1% (n=59) of which were closed or changed retailer type (all retailers were kiosks). Cigarettes with menthol or other flavor descriptors were identified in 88.5% (n=216) of retailers, and tobacco flavored cigarettes were identified in 93.0% (n= 227) of retailers. Cigarettes with flavor capsules were observed in 83.6% of retailers (n=204). Loose or single cigarettes were for sale in 21.7% (n=53) of all retailers observed.

Cigarettes with menthol or other flavor descriptors were on display in 95.8% (n=207) of kiosks where menthol or other flavored cigarettes were sold, and tobacco flavored cigarettes were displayed in 93.4% (n=212) of kiosks where tobacco flavored cigarettes were available for purchase (Figure 11). Cigarettes with menthol or other flavor descriptors were most frequently placed in the cashier zone (76.5%, n=163), near sweets, snacks, or sugary drinks (74.5%, n=161), or using lights (55.5%, n=120). These products were occasionally placed near other products that appeal to youth (16.2%, n=35) or at the eye-level of children (5.1%, n=11). Tobacco flavored cigarettes were displayed similarly to cigarettes with menthol or other flavor descriptors, in the cashier zone (73.6%, n=167), near sweets, snacks, or sugary drinks (71.8%, n=163), and using lights (52.4%, n=119).

Figure 11. Number of kiosks with tobacco product displays at the POS

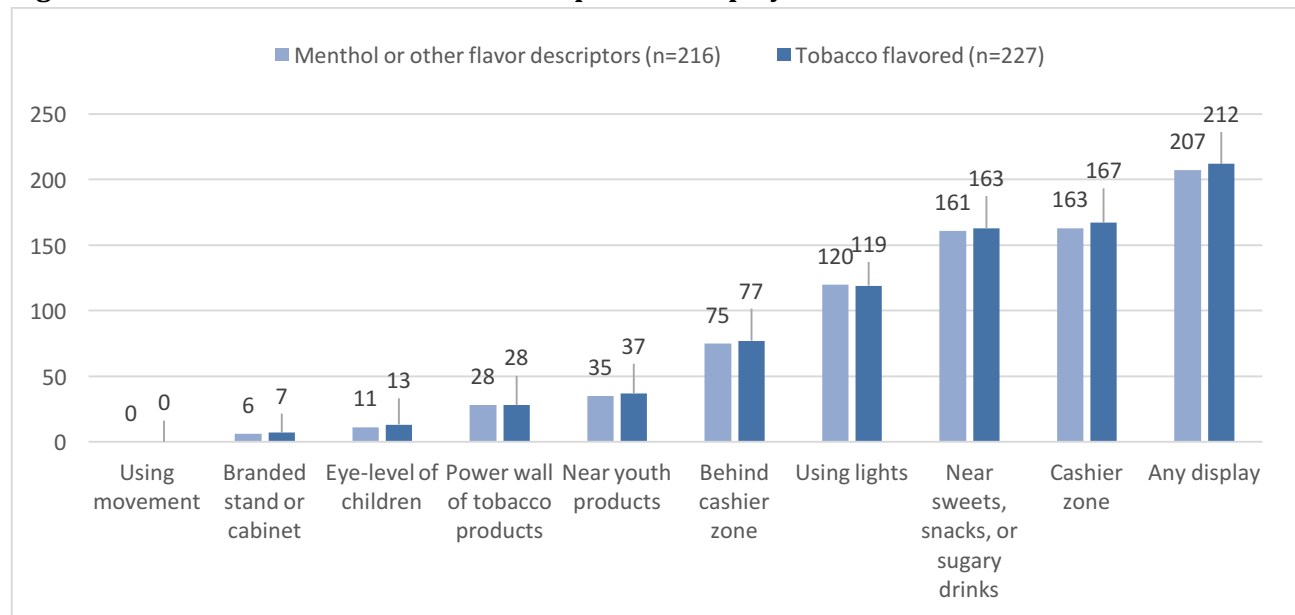


Figure 12. Cigarette display at a kiosk in Buenos Aires, Argentina



Only 19.4% (n=42) of kiosks used advertising signage for cigarettes with menthol or other flavor descriptors, usually in the form of print signage (14.3%, n=31) or 3-dimensional signage (4.2%, n=9) (Figure 13). Half of kiosks (n=115) advertised tobacco flavored cigarettes, using print signage (30.8%, n=70) and 3-dimensional signage (21.6%, n=49). Only 2 digital signs were observed for cigarettes with menthol or other flavor descriptors.

Figure 13. Number of kiosks with tobacco advertising signage at the POS

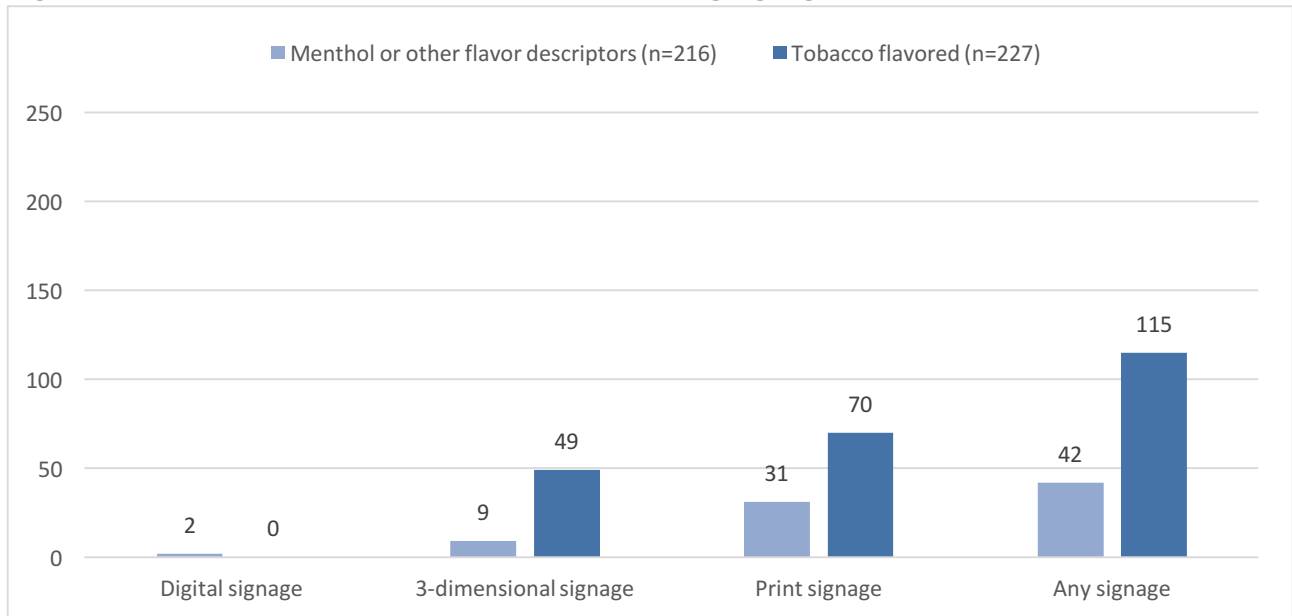


Figure 14. Print signage for cigarettes at a kiosk in Buenos Aires, Argentina



Only 4.2% (n=9) of kiosks offered special promotions for cigarettes with menthol or other flavor descriptors (Figure 15). Twenty-nine percent (n=66) of kiosks promoted tobacco flavored cigarettes, typically using special or limited edition packs (17.6%, n=40) or price discounts (10.1%, n=23).

Figure 15. Number of kiosks with tobacco promotions at the POS

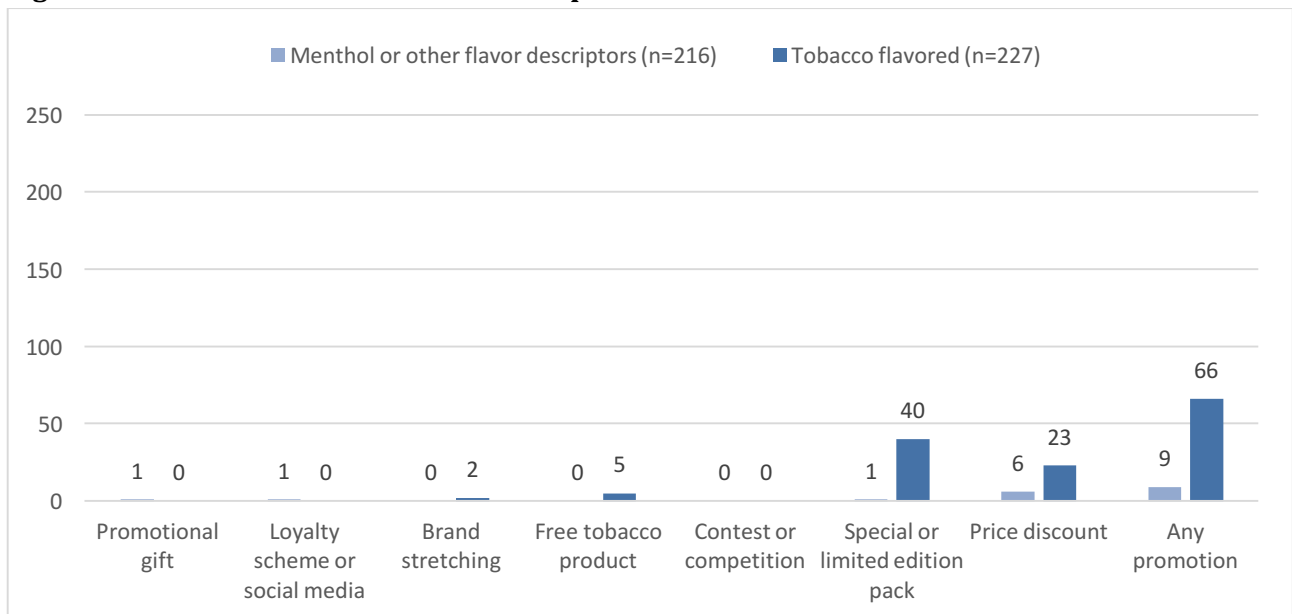
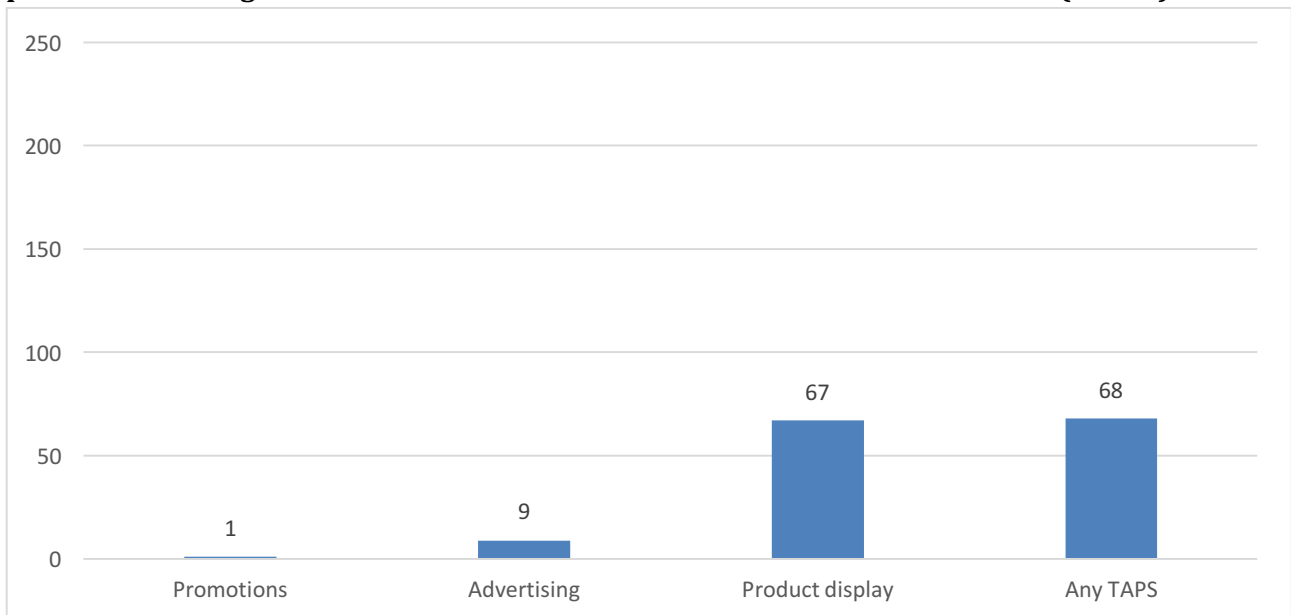


Figure 16. Print signage for a new limited edition “Urban Expressions” Camel cigarettes



Cigarettes with menthol or other descriptors were visible on display from outside the kiosk in 31.0% (n=67) of retailers (Figure 17).

Figure 17. Number of cigarette retailers with product display, advertising signage, or promotions for cigarettes with menthol or other flavors visible from outdoors (n=216)



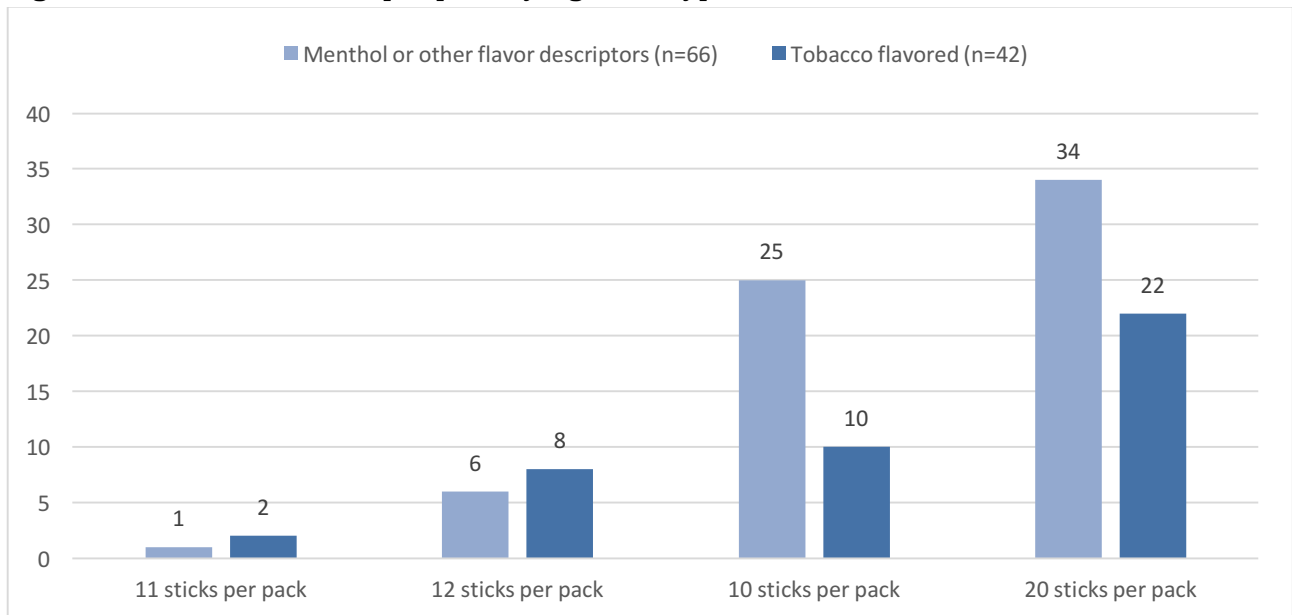
Data collectors identified 23 unique cigarette brands that used menthol or other flavor descriptors, although they did not record an exhaustive list of the available brands. The most frequently observed brand of cigarettes using menthol or other flavor descriptors was Marlboro Fusion Blast, followed by Philip Morris Caps, Lucky Strike Click and Roll, Philip Morris Caps Duo, Chesterfield Fresh Capsule, Marlboro Ice Blast, and Viceroy Switch (Figure 18). Most brands observed at the POS are owned by multinational tobacco companies, such as British American Tobacco (BAT), Philip Morris International (PMI), and R.J. Reynolds Tobacco Company (RJR).

Figure 18. Brands using menthol or other flavor descriptors at the POS (n=216)

	n	%
Marlboro Fusion Blast	111	51.4%
Philip Morris Caps	107	49.5%
Lucky Strike Click and Roll (Blue)	95	44.0%
Philip Morris Caps Duo	88	40.7%
Chesterfield Fresh Capsule	87	40.3%
Marlboro Ice Blast	80	37.0%
Viceroy Switch	15	6.9%
Lucky Strike Capsule Flow	9	4.2%
Camel Activate Blue	7	3.2%
Camel Freshness	7	3.2%
Camel Menthol	5	2.3%
Viceroy Menthol	3	1.4%
Lucky Strike Double Click Crisp	2	0.9%
Pall Mall Mojito Nights	2	0.9%
Viceroy Click Blue	2	0.9%
Camel Ice	1	0.5%
Chesterfield Fresh	1	0.5%
L&M Fresh	1	0.5%
Lucky Strike Fresh	1	0.5%
Pall Mall Click On	1	0.5%
Pall Mall Daiquiri Nights	1	0.5%
Pall Mall Flavors Duo	1	0.5%
Red Point Menthol	1	0.5%

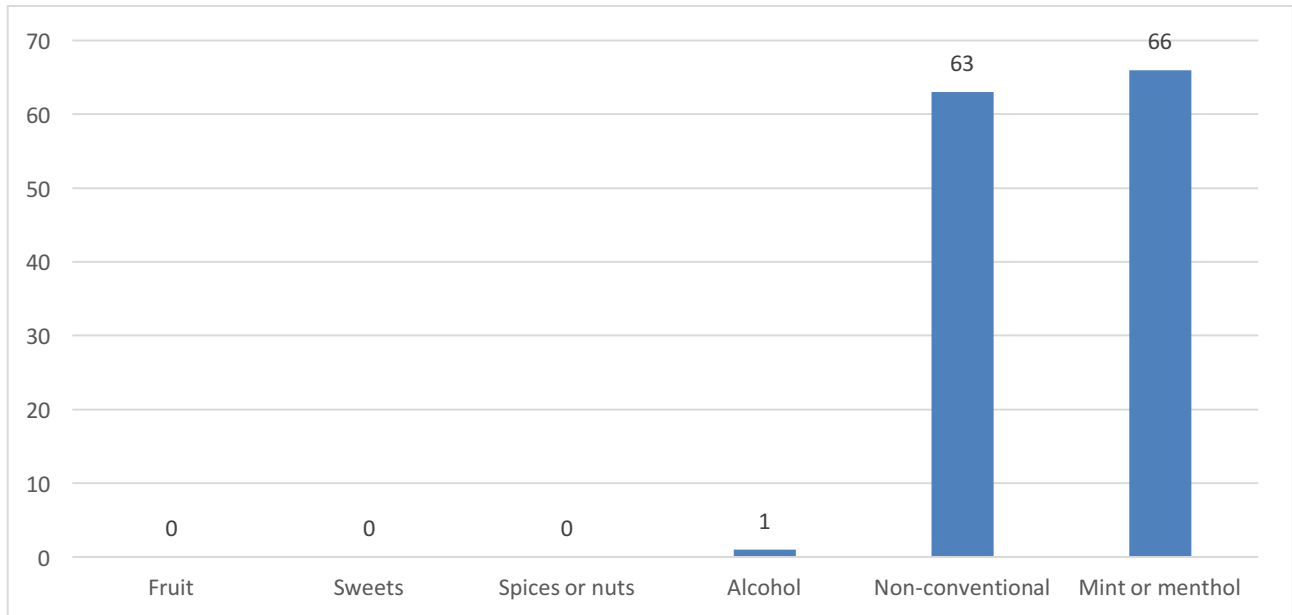
In Argentina, data collectors purchased 108 packs of cigarettes: 66 with menthol or other flavor descriptors, and 42 tobacco flavored cigarette packs. The number of sticks per pack ranged from 11 to 20, with most packs containing 10 or 20 sticks per pack (Figure 19), and 71.3% (n=77) of the packs were duplicates (see Appendix A). The average price of the cheapest packs with menthol or other flavor descriptors was \$34.08 pesos, and the average price of the cheapest tobacco flavored packs was \$30.26 pesos. All 66 of the packs with flavor descriptors mentioned menthol on the pack, and two of the packs mentioned a double-menthol product feature. Sixty-three packs used flavor capsules, 27 of which had two capsules in each stick, and 36 of which had a single flavor capsule.

Figure 19. Number of sticks per pack by cigarette type



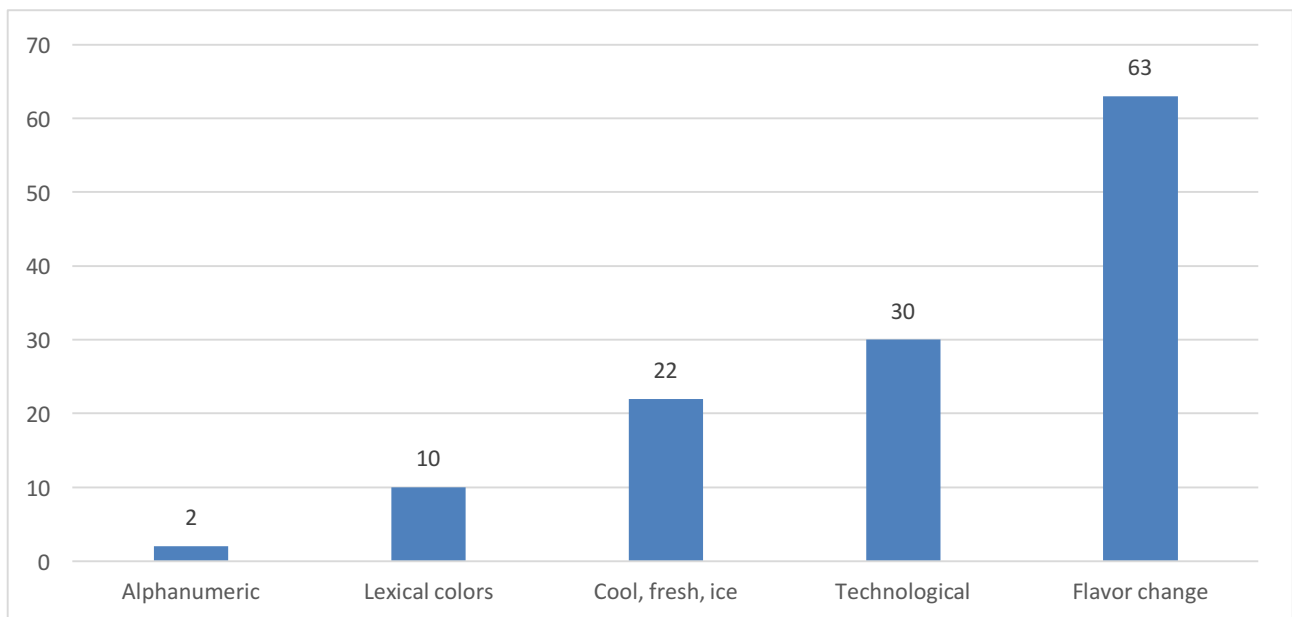
Flavor descriptors for mint or menthol were observed on all packs (100.0%, n=66) that carried any flavor descriptor, followed non-conventional flavor descriptors (95.5%, n=63). One pack (1.5%) used a descriptor for an alcoholic flavor (Figure 20).

Figure 20. Flavor descriptors on purchased cigarette packs (n=66)



Language or imagery indicating a flavor change was observed on 95.5% (n=63) of the flavored packs purchased in Argentina, followed by technological descriptors (45.5%, n=30), and descriptors such as cool, fresh or ice (33.3%, n=22) (Figure 21).

Figure 21. Non-conventional flavor descriptors on purchased cigarette packs (n=66)

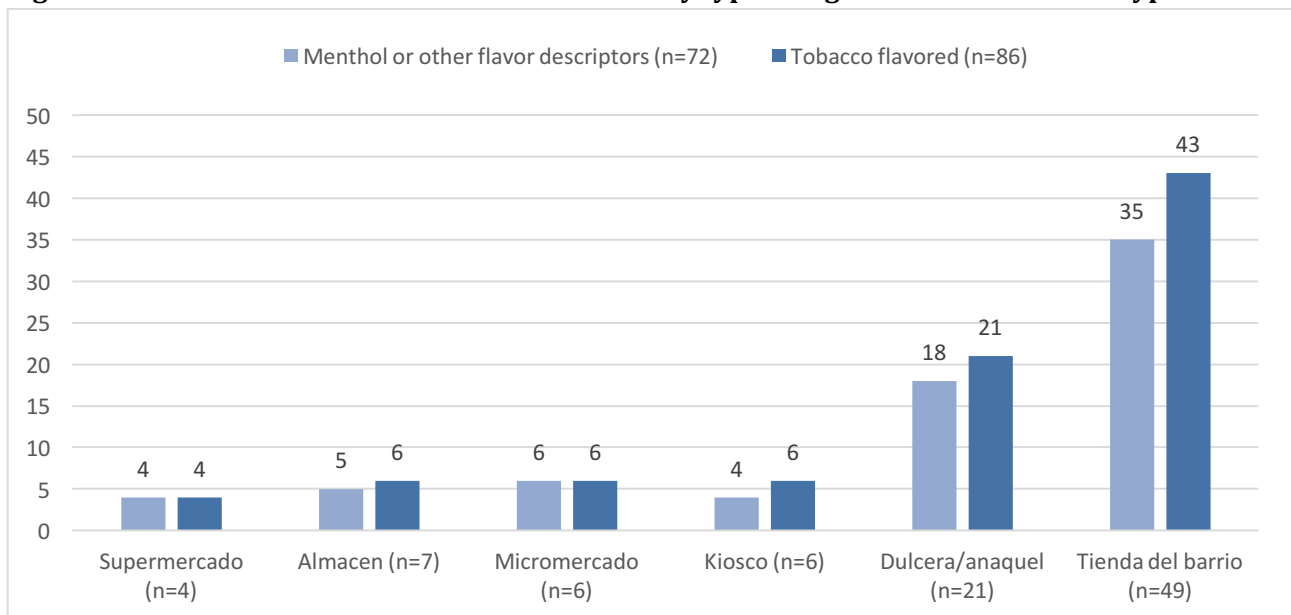


Bolivia

Among the 64 school sampling areas selected, data collectors visited 51 of these areas and identified cigarette retailers within 86.3% (n=44) of these areas. Data collectors visited 114 retailers in La Paz, 81.6% (n=93) of which still sold cigarettes. Retailer types included tiendas del barrio (n=58), dulceras/anaqueles (n=33), almacenes (n=7), kiosks (n=6), micromercados (n=6), and supermercados (n=4). Cigarettes with menthol or other flavor descriptors were identified in 77.4% (n=72) of retailers, and tobacco flavored cigarettes were identified in 92.5% (n=86) of retailers. Cigarettes with flavor capsules were observed in 63.4% of retailers (n=59). Loose or single cigarettes were for sale in 89.2% (n=83) of all cigarette retailers observed.

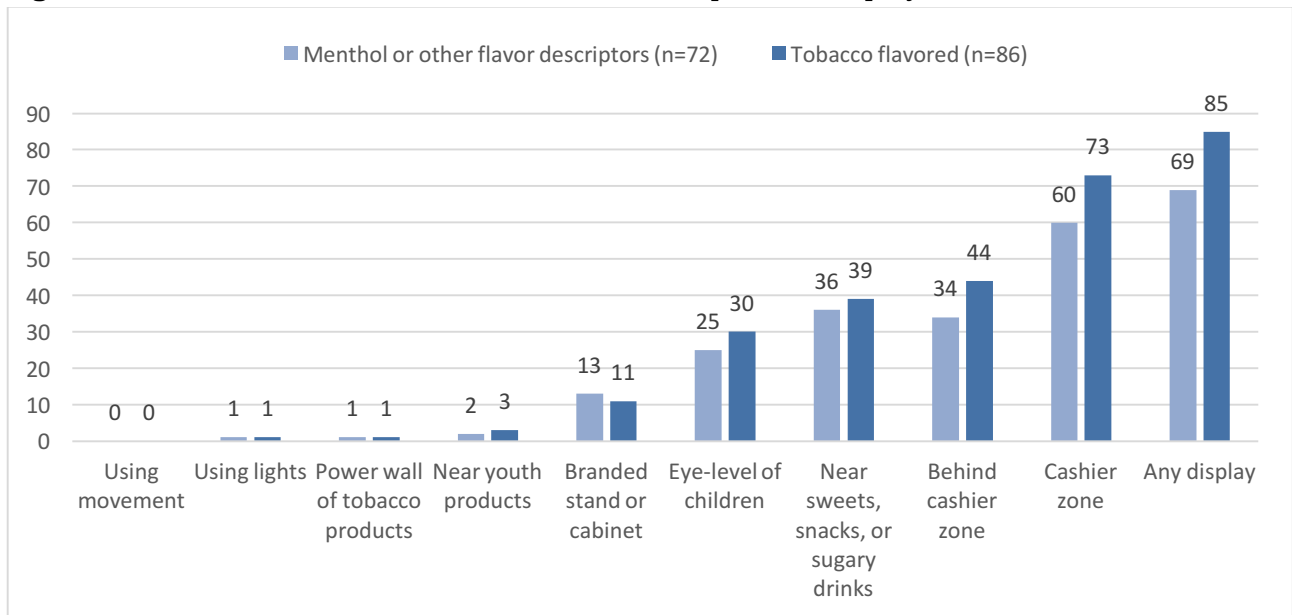
Cigarettes with menthol or other flavor descriptors were observed in 71.4% (n=35) of tiendas del barrio, 85.7% (n=18) of dulceras/anaqueles, 66.7% (n=4) of kioskos, 100% (n=6) of micromercados, 71.4% (n=5) of almacenes, and 100% of supermercados (n=4) (Figure 22). tobacco flavored cigarettes were available in 87.8% (n=43) of tiendas del barrio, 100% (n=21) of dulceras/anaqueles, 100% (n=6) of kioskos, 100% of micromercados (n=6), 85.7% (n=6) almacenes, and 100% of supermercados (n=4).

Figure 22. Number of tobacco retailers observed by type of cigarettes sold and POS type



Cigarettes with menthol or other flavor descriptors were on display in 95.8% (n=69) of retailers, and tobacco flavored cigarettes were displayed in 98.8% (n=85) of retailers (Figure 23). Cigarettes with menthol or other flavor descriptors were most frequently placed in the cashier zone (83.3%, n=60), behind the cashier zone (47.2%, n=34), or near sweets, snacks, or sugary drinks (50.0%, n=36). These products were also placed at the eye-level of children in 34.7% of retailers (n=25). Tobacco flavored cigarettes were displayed similarly to cigarettes with flavor descriptors, in the cashier zone (84.9%, n=73), behind the cashier zone (51.2%, n=44), near sweets, snacks, or sugary drinks (45.3%, n=39), and at the eye-level of children (34.9%, n=30).

Figure 23. Number of tobacco retailers with tobacco product displays at the POS



Advertising signage was only observed in 12.5% (n=9) of retailers selling cigarettes with menthol or other flavor descriptors, and 9.3% (n=8) of retailers selling tobacco flavored cigarettes, which was almost always in the form of print signage. One (1.9%) retailer used 3-dimensional signage, and no digital signage was observed.

Two (2.8%) retailers offered any kind of promotion for cigarettes with menthol or other flavor descriptors, and 3.5% (n=3) of retailers offered promotions for tobacco flavored cigarettes. Promotional strategies included price discounts, special or limited edition packs, and brand stretching. No promotional gifts, loyalty schemes, mention of social media, free tobacco products, or contests and competitions were observed.

The display of cigarettes using menthol or other flavor descriptors was visible from outside 8.3% (n=6) of retailers, and advertising signage was visible in 4.2% (n=3) of retailers. No promotional tactics for cigarettes with menthol or other cigarettes were visible from outside the POS.

Figure 24. Print signage for cigarettes with flavor capsules at the POS in La Paz, Bolivia



Figure 25. A special promotion for Camel's "iWin" to register a code online to win 1 of 60 prizes



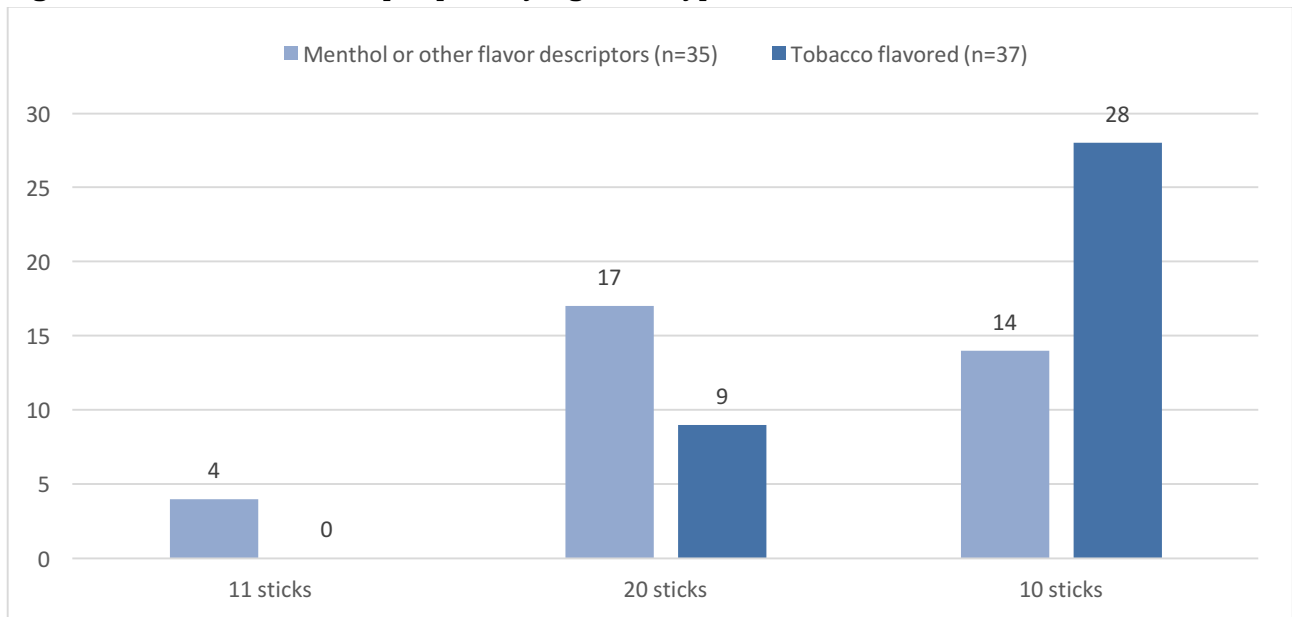
Data collectors identified 20 unique cigarette brands at the POS that used menthol or other flavor descriptors, although they did not record an exhaustive list of the available brands. Derby Cool was the most frequently observed brand using menthol or other flavor descriptors at the POS, followed by Derby Click Citrus Mint, Lucky Strike Click, Camel Purple Mint, and Marlboro Blue Fresh (Figure 26). Most brands observed at the POS are owned by multinational tobacco companies, such as British American Tobacco (BAT), Philip Morris International (PMI), and R.J. Reynolds Tobacco Company (RJR).

Figure 26. Brands using menthol or other flavor descriptors at the POS (n=72)

	n	%
Derby Cool	47	65.3%
Derby Click Citrus Mint	33	45.8%
Lucky Strike Click	33	45.8%
Camel Purple Mint	28	38.9%
Marlboro Blue Fresh	27	37.5%
Lucky Strike Crisp	17	23.6%
Marlboro Fusion Blast	16	22.2%
L&M Kretek Mint	13	18.1%
Camel Activate	12	16.7%
L&M Menthol	8	11.1%
L&M Forward	5	6.9%
Djarum (black, cherry)	3	4.2%
Camel Activate Double Mint Purple	2	2.8%
Camel Menthol	1	1.4%
Djarum Menthol	1	1.4%
Marlboro Blue Ice	1	1.4%
Marlboro Ice Express	1	1.4%
Marlboro Kretek Mint	1	1.4%
Jaisalmer Menthol	1	1.4%
L&M Kretek	1	1.4%

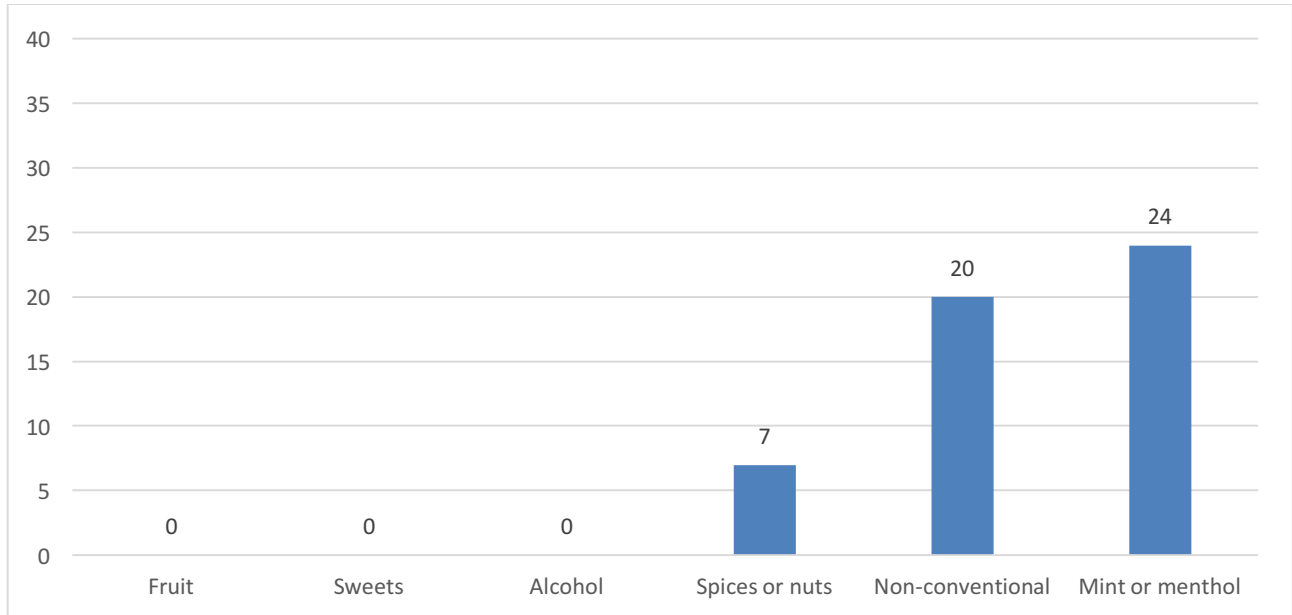
In Bolivia, data collectors purchased 72 packs of cigarettes: 35 with menthol or other flavor descriptors, and 37 tobacco flavored packs. The number of sticks per pack ranged from 10 to 20, with most packs containing 10 or 20 sticks per pack (Figure 27), and 59.7% (n=43) of the packs were duplicates (see Appendix B). The average price of the cheapest packs with menthol or other flavor descriptors was \$9.93 bolivianos, and the average price of the cheapest tobacco flavored packs was \$6.59 bolivianos. Twenty-three of the 35 packs with flavor descriptors mentioned menthol on the pack. Seventeen packs used flavor capsules, 5 of which had two capsules in each stick, and 12 of which had a single flavor capsule.

Figure 27. Number of sticks per pack by cigarette type



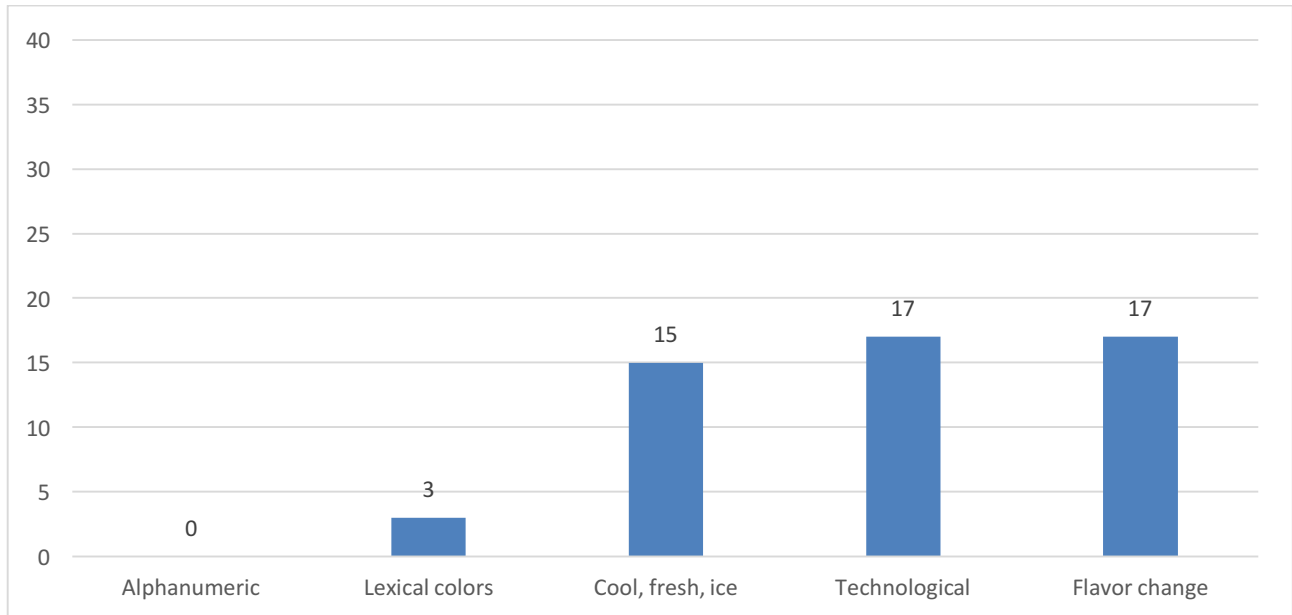
Flavor descriptors for mint or menthol were observed on 68.6% (n=24) of packs that carried any flavor descriptor, followed non-conventional flavor descriptors (57.1%, n=20), and descriptors for spices or nuts (20.0%, n=7) (Figure 28).

Figure 28. Flavor descriptors on purchased cigarette packs (n=35)



Language or imagery indicating a flavor change (48.6%, n=17), or technological features (48.6%, n=17) were the most frequently observed descriptors among all flavored packs purchased in Bolivia, followed by descriptors such as cool, fresh, and ice (42.9%, n=15) (Figure 29).

Figure 29. Non-conventional flavor descriptors on purchased cigarette packs (n=35)



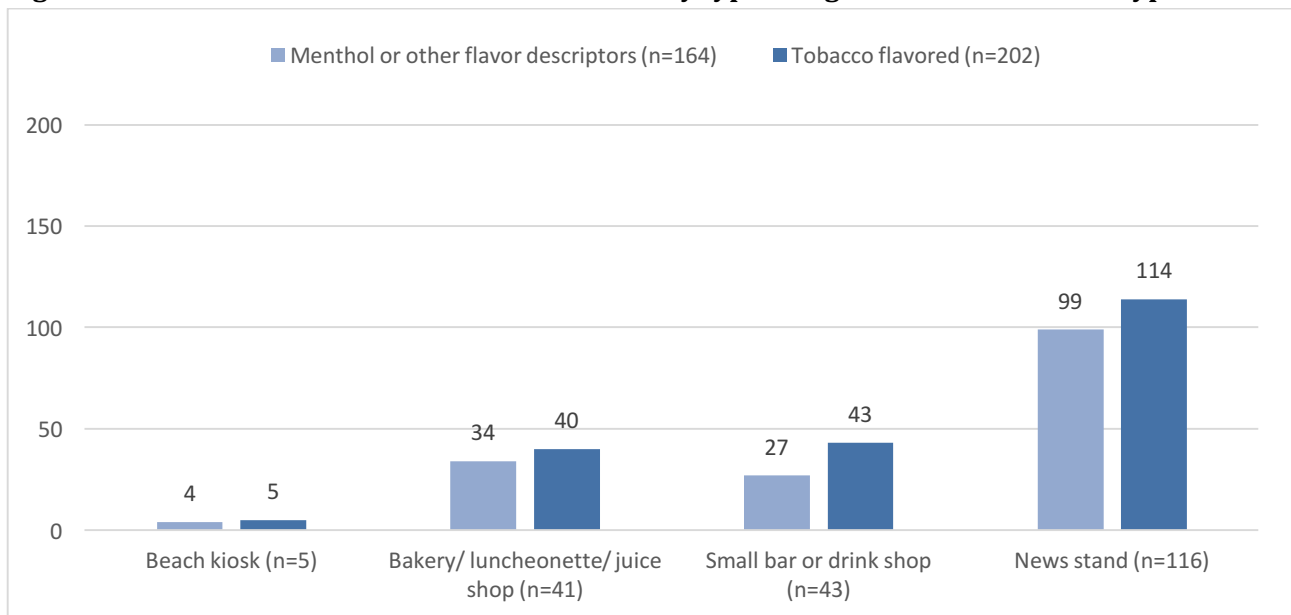
Brazil

Data collectors observed 86 of the 92 school sampling areas that were selected, and identified tobacco outlets near 86.0% (n=74) of those schools. Of the 282 retailers identified within 175-meters of a school, 72.2% (n=205) sold cigarettes. The retailer types included newsstands (n=116), small bars or drink shops (n=43), bakeries, luncheonettes, or juice shops (n=41) and beach kiosks (n=5). In Rio de Janeiro, cigarettes with menthol or other flavor descriptors were identified in 80.0% (n=164) of retailers, and tobacco flavored cigarettes were identified in 98.5% (n=202) of retailers. Cigarettes with flavor capsules were observed in 49.3% of retailers (n=101). Loose or single cigarettes were for sale in over half of all retailers observed (52.0%, n=106).

Cigarettes with menthol or other flavor descriptors were observed in 85.3% (n=99) of newsstands, 62.8% (n=27) of small bars or drink shops, 82.9% (n= 34) of bakeries, luncheonettes or juice shops, and 80.0% (n=4) of beach kiosks (Figure 30).

Tobacco flavored cigarettes were available in 98.3% (n=114) of newsstands, 100.0% (n=43) of small bars or drink shops, 97.6% (n=40) bakeries, luncheonettes, or juice shops, and 100% (n=5) of beach kiosks.

Figure 30. Number of tobacco retailers observed by type of cigarettes sold and POS type



Among the 164 retailers that sold cigarettes containing menthol or other flavors, 99.4% (n=163) of stores displayed those products at the POS. Packs were most frequently placed in the cashier zone (78.7%, n=129), behind the cashier zone (64.6%, n=106), and near sweets, snacks, or sugary drinks (62.8%, n=103) (Figure 31). Some retailers displayed cigarettes with menthol or flavor descriptors at the eye level of children (7.9%, n=13) or near youth products (like toys or coloring books) (9.1%, n=15).

The display of tobacco flavored packs was similar to the display of cigarettes with menthol or flavor descriptors. Among the 202 retailers selling tobacco flavored cigarettes, 82.2% (n=166) of retailers displayed tobacco flavored packs in the cashier zone, 60.4% (n=122) displayed packs behind the cashier zone, and 56.4% (n=114) displayed packs near sweets, snacks, or sugary drinks.

Figure 31. Number of tobacco retailers with tobacco product displays at the POS

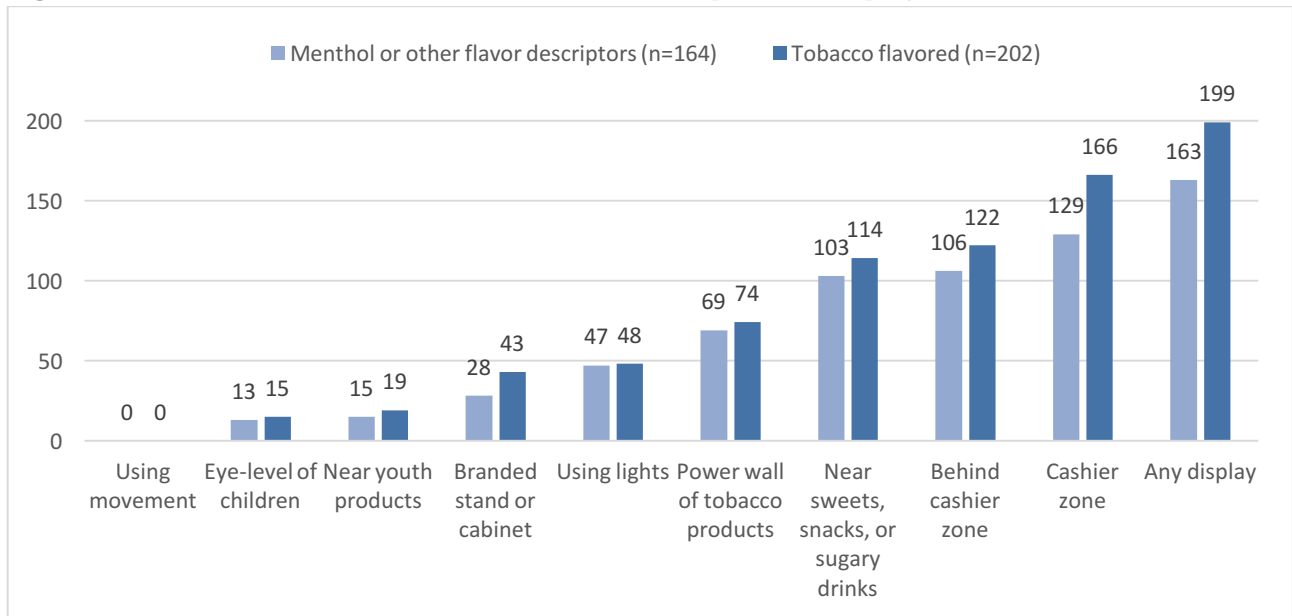


Figure 32. Flavored cigarettes on display behind the cashier zone in Rio de Janeiro, Brazil



Advertising for cigarettes with menthol or flavor descriptors was observed in 52.4% (n=86) of retailers selling those products, most frequently through the use of print signage (51.2%, n=84) (Figure 33). Tobacco flavored cigarettes were advertised at the POS in 55.4% (n=112) of retailers with 52.9% (n=107) displaying print signage and 5.4% (n=11) displaying 3-dimensional signage. Only 1 digital sign was observed for cigarettes with menthol or other flavor descriptors.

Figure 33. Number of tobacco retailers with tobacco advertising signage at the POS

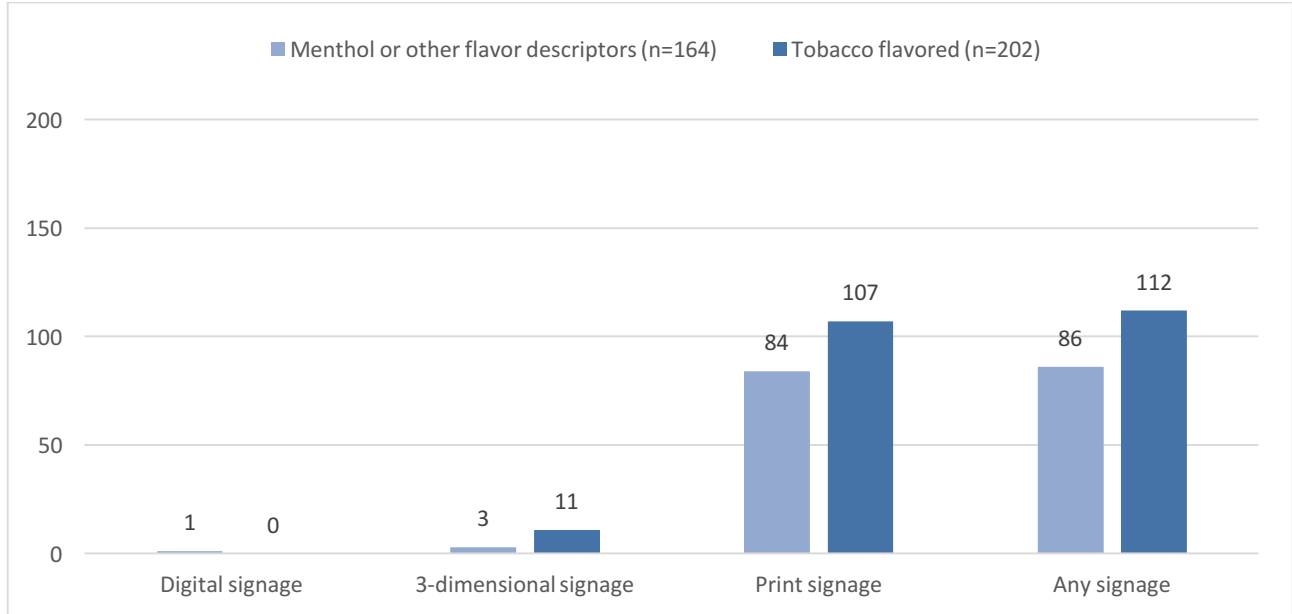


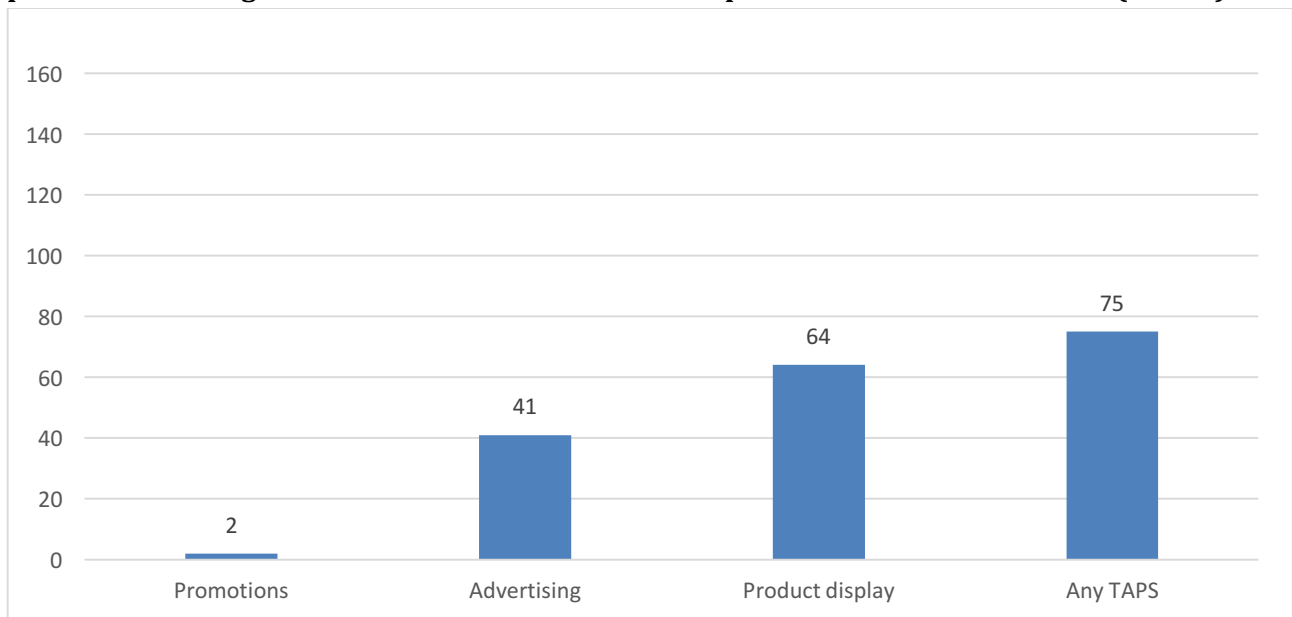
Figure 34. Single cigarettes for sale next to gum and candy in Rio de Janeiro, Brazil



Six (3.6%) retailers selling cigarettes with menthol or other flavor descriptors and six (3.0%) retailers selling tobacco flavored cigarettes offered any type of promotion. Special or limited edition packs, price discounts, and contests or competitions were observed for both product types. One offer for free cigarettes with menthol or other flavor descriptors was observed. No promotional gifts, loyalty schemes, mention of social media, or brand stretching was observed.

Product display, advertising signage or promotions for cigarettes with menthol or other flavor descriptors that were visible from outdoors were observed in 45.7% of retailers (Figure 35). Displays were visible from outside of 39.0% (n=64) of stores, followed by advertising signage which was visible from outside of 25% of stores (n=41).

Figure 35. Number of tobacco retailers with tobacco product display, advertising signage, or promotions for cigarettes with menthol, flavors, or capsules visible from outdoors (n=164)



In Brazil, data collectors identified 9 unique cigarette brands at the POS that used menthol or other flavor descriptors, although they did not record an exhaustive list of the available brands. Lucky Strike Double Click was the most frequently observed brand, followed by Free (boost), Marlboro Double Burst, L&M Black Ice, and Winston Expand Exotic Mint (Figure 36). Most brands observed at the POS are owned by multinational tobacco companies, such as British American Tobacco (BAT), Philip Morris International (PMI), and Japan Tobacco International (JTI).

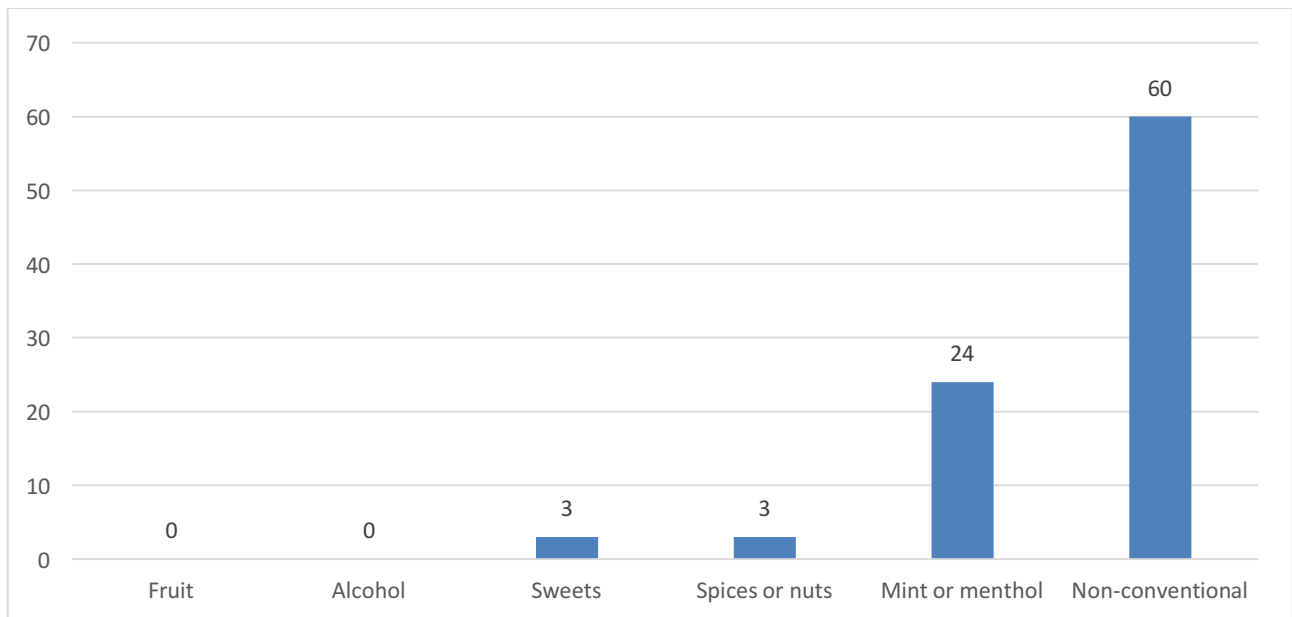
Figure 36. Brands using menthol or other flavor descriptors at the POS (n=164)

	n	%
Lucky Strike Double Click	79	48.2%
Free (boost)	55	33.5%
Marlboro Double Burst	52	31.7%
L&M Black Ice	27	16.5%
Winston Expand Exotic Mint	26	15.9%
Lucky Strike Fresh	2	1.2%
Dunhill Double	2	1.2%
Lucky Strike Switch	1	0.6%
Derby Click+	1	0.6%

In Brazil, data collectors purchased 128 packs of cigarettes: 65 with menthol or other flavor descriptors, and 63 tobacco flavored packs. All packs contained 20 sticks of cigarettes and 71.1% (n=91) of the packs were duplicates (see Appendix C). The average price of the cheapest packs with menthol or other flavor descriptors was 7.74 reais, and the average price of the cheapest tobacco flavored packs was 6.07 reais. Menthol was mentioned on 58 of the 65 packs with flavor descriptors (typically in the list of ingredients), and 13 of the packs mentioned a double-menthol product feature. Sixty packs used flavor capsules, 19 of which had two capsules in each stick, and 41 of which had a single flavor capsule.

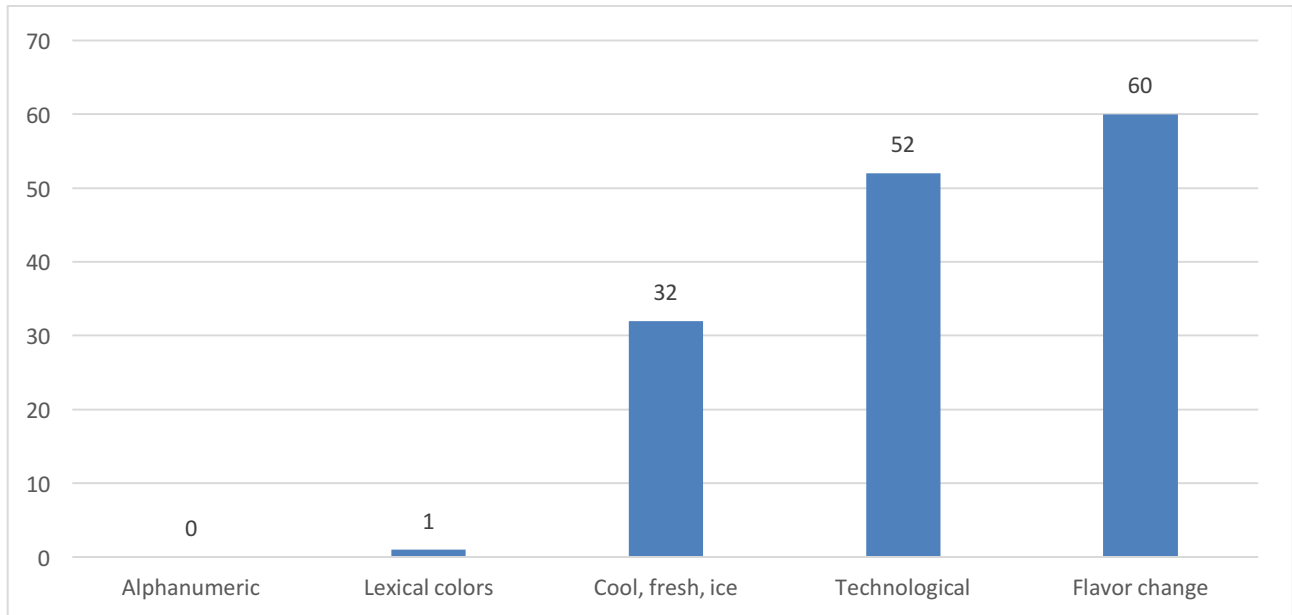
Non-conventional descriptors were observed on 92.3% (n=60) of packs that carried any flavor descriptor, followed by descriptors for mint or menthol (36.9%, n=24), spices or nuts (4.6%, n=3), and sweets (4.6%, n=3) (Figure 37).

Figure 37. Flavor descriptors on purchased cigarette packs (n=65)



Language or imagery indicating a flavor change (92.3%, n=60) were the most frequently observed descriptors among all flavored packs purchased in Brazil, followed by descriptors for technological features (80.0%, n=52), and descriptors such as cool, fresh, and ice (49.2%, n=32) (Figure 38).

Figure 38. Non-conventional flavor descriptors on purchased cigarette packs (n=65)

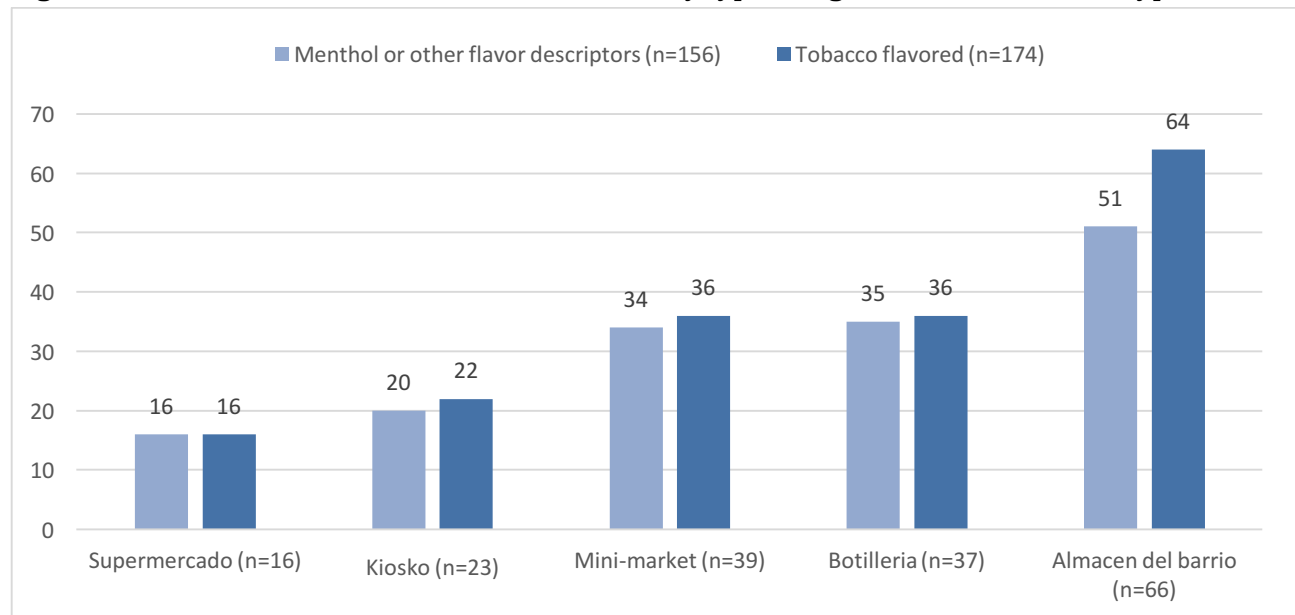


Chile

Data collectors visited 81 of the 107 school sampling areas we selected, and identified cigarette retailers within 96.3% (n=78) of those areas. Three hundred and seventy-two retailers were identified within 250 meters of a school, 49.2% (n=183) of which sold cigarettes. The retailer types included almacenes del barrio (n=68), botillerias (n=37), mini-markets (n=39), kioskos (n=23), and supermercados (n=16). No restaurants or bars were observed. In Santiago, cigarettes with menthol or other flavor descriptors were identified in 85.2% (n=156) of cigarette retailers, and tobacco flavored cigarettes were identified in 95.1% (n=174) of retailers. Cigarettes with flavor capsules were observed in 74.3% of retailers (n=136). Loose or single cigarettes were for sale in 21.8% (n=40) of all retailers observed.

Cigarettes with menthol or other flavor descriptors were available in 75.0% (n=51) of almacenes del barrio, 94.6% (n=35) of botillerias, 87.2% (n=34) of mini-markets, 86.9% (n=20) of kioskos, and 100% (n=16) of supermercados (Figure 39). Tobacco flavored cigarettes were available in 94.1% (n=64) of almacenes del barrio, 97.3% (n=36) of botillerias, 92.3% (n=36) of mini-markets, 95.6% (n=22) of kioskos, and 100% (n=16) of supermercados.

Figure 39. Number of tobacco retailers observed by type of cigarettes sold and POS type



Cigarettes with menthol or other flavor descriptors were on display in 82.7% (n=129) of retailers that sold flavored cigarettes, and tobacco flavored cigarettes were displayed in 74.7% (n=130) of retailers that sold tobacco flavored cigarettes (Figure 40). Cigarettes with menthol or other flavor descriptors were most frequently placed in the cashier zone (57.7%, n=90), near sweets, snacks, or sugary drinks (50.6%, n=79), behind the cashier zone (42.9%, n=67) or on a branded stand or cabinet (32.1%, n=50). Tobacco flavored cigarettes were also placed in the cashier zone (52.3%, n=91), near sweets, snacks, or sugary drinks (42.0%, n=73), and behind the cashier zone (39.7%, n=69).

Figure 40. Number of tobacco retailers with tobacco product displays at the POS

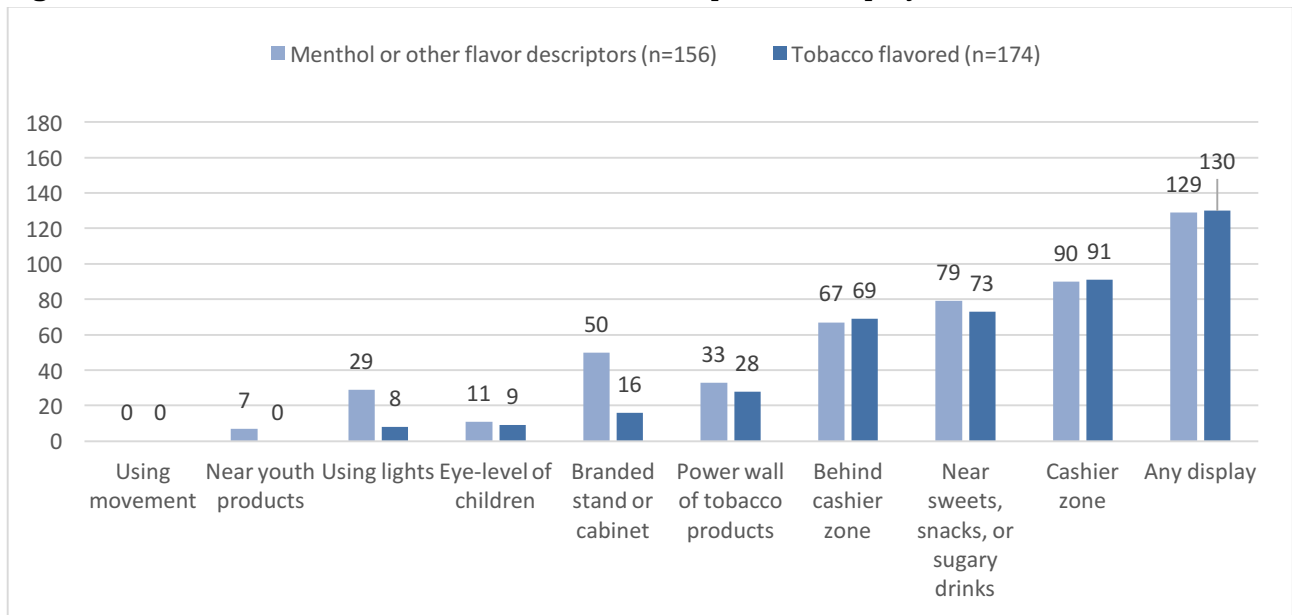
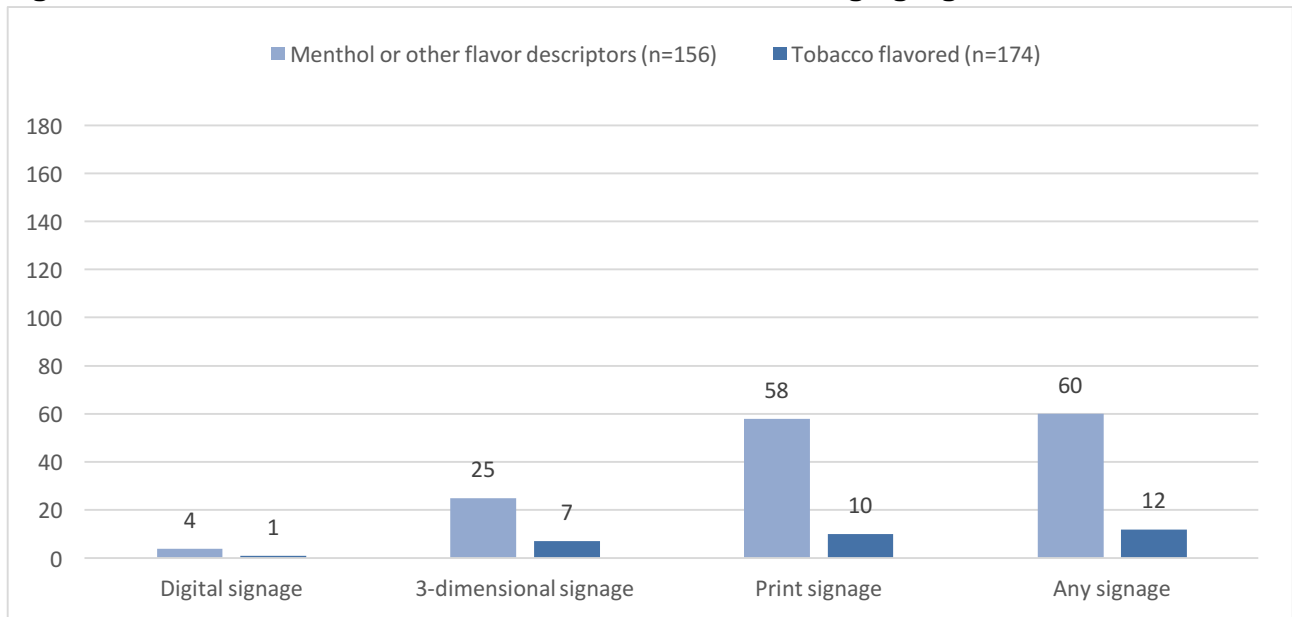


Figure 41. Display of cigarettes in the cashier zone at the POS in Santiago, Chile



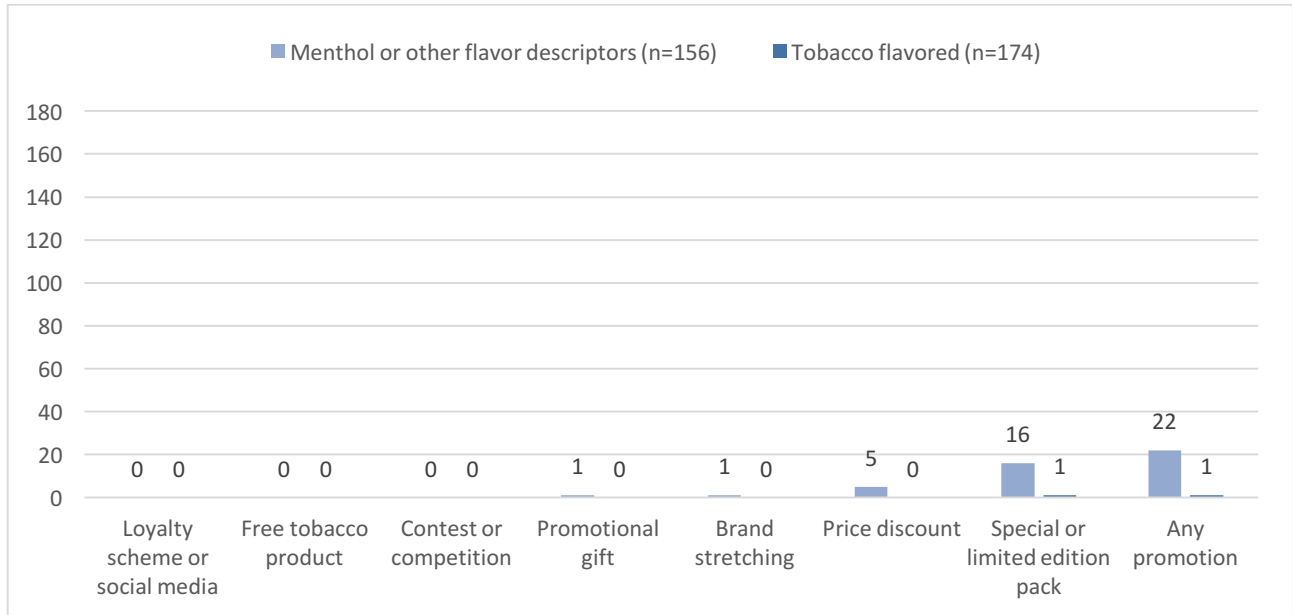
Advertising for cigarettes with menthol or other flavor descriptors was observed in 38.5% (n=60) of retailers, while only 6.9% (n=12) of retailers advertised tobacco flavored cigarettes (Figure 42). Cigarettes with menthol or other flavor descriptors were advertised using print signage (37.2%, n=58), 3-dimensional signage (16.0%, n=25) and digital signage (2.6%, n=4). Tobacco flavored cigarettes were also advertised using print signage (5.7%, n=10) and 3-dimensional signage (4.0%, n=7).

Figure 42. Number of tobacco retailers with tobacco advertising signage at the POS



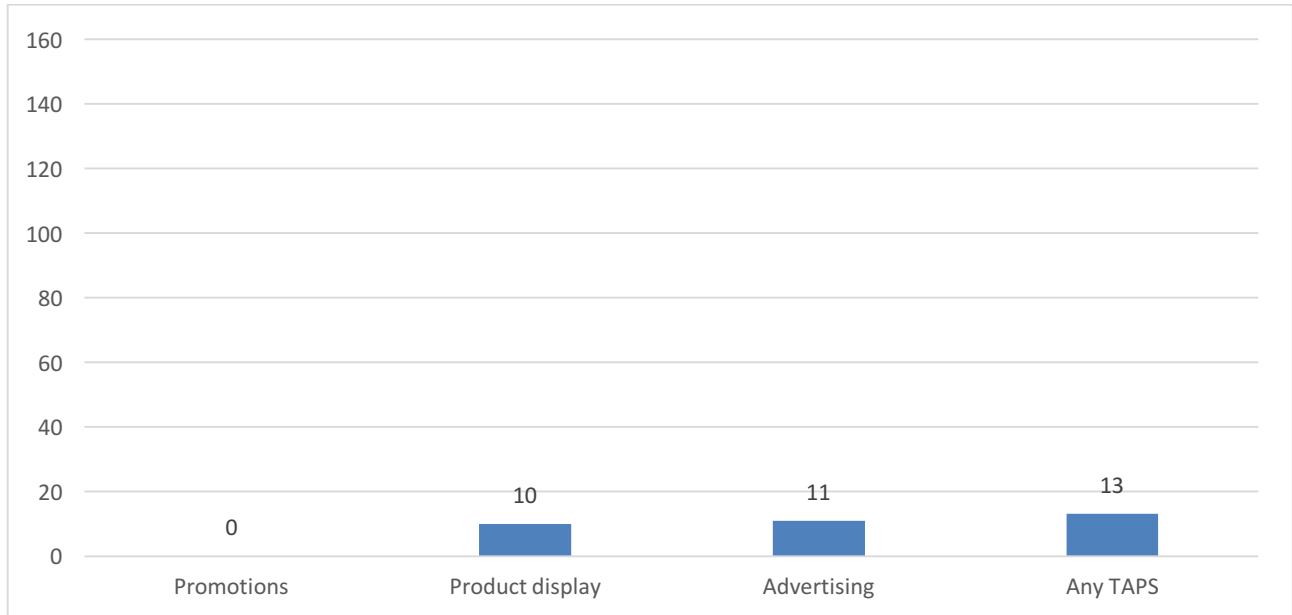
Special promotions for cigarettes with menthol or other flavor descriptors were observed in 14.1% (n=22) of retailers, typically in the form of special or limited edition packs (10.3%, n=16) (Figure 43). Only one retailer offered any special promotion (a special or limited edition pack) for tobacco flavored cigarettes.

Figure 43. Number of tobacco retailers with tobacco promotions at the POS



Cigarettes with menthol or other flavor descriptors were visible on display from outside of 6.4% (n=10) of retailers (Figure 44). Advertisements for these products were visible from outside of 7.1% (n=11) of retailers.

Figure 44. Number of tobacco retailers with tobacco product display, advertising signage, or promotions for cigarettes with menthol, flavors, or capsules visible from outdoors (n=156)



In Chile, data collectors identified 18 unique cigarette brands at the POS that used menthol or other flavor descriptors, although they did not record an exhaustive list of the available brands (Figure 45). Pall Mall was the most frequently observed brand using menthol or other flavor descriptors, followed by several variants of Lucky Strike cigarettes, Pall Mall Boost, Kent iBoost and Kent iSwitch. All brands observed at the POS are owned by multinational tobacco companies, such as British American Tobacco (BAT), Philip Morris International (PMI), R.J. Reynolds Tobacco Company (RJR).

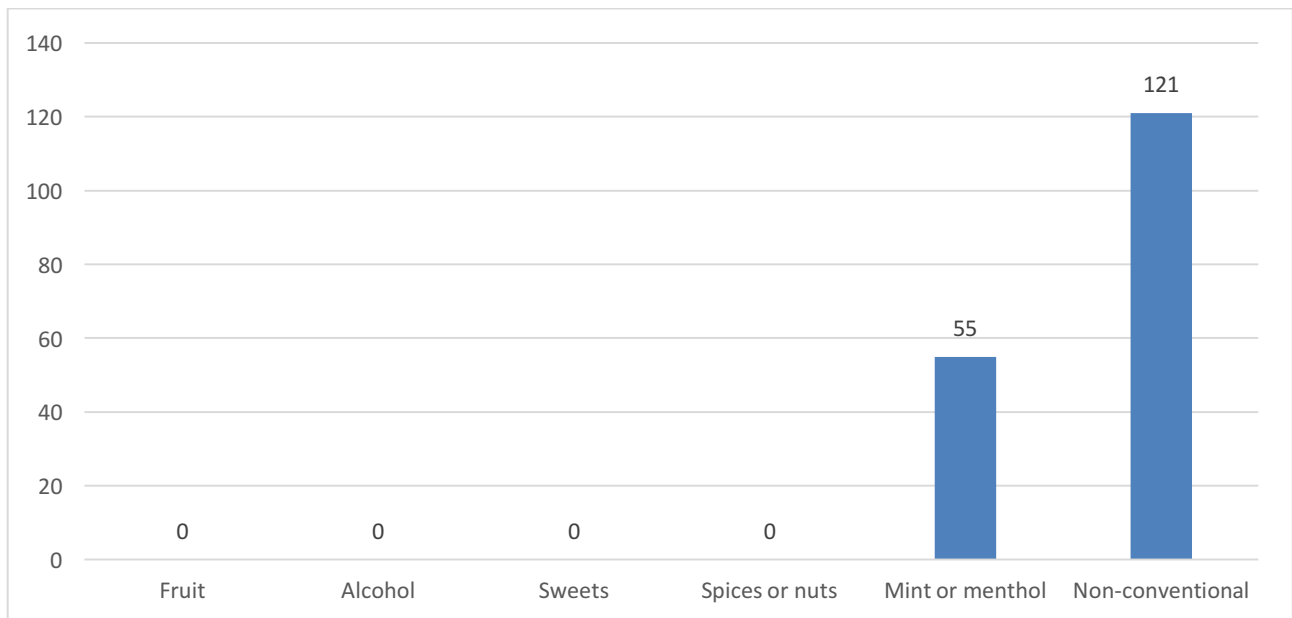
Figure 45. Brands using menthol or other flavor descriptors at the POS (n=156)

	n	%
Pall Mall Click On	139	89.1%
Lucky Strike Fresh	121	77.6%
Lucky Strike Double Click Crisp	113	72.4%
Lucky Strike Double Click Wild	113	72.4%
Pall Mall Boost	108	69.2%
Kent iBoost	77	49.4%
Kent iSwitch	75	48.1%
Philip Morris Caps	53	34.0%
Marlboro Iceblast	42	26.9%
Marlboro Double Fusion	17	10.9%
Lucky Strike Indigo	12	7.7%
Camel Freshness	1	0.6%
Dunhill Click	1	0.6%
Lucky Strike Click and Roll	1	0.6%
Marlboro Fusion Blast	1	0.6%
Pall Mall Daiquiri Nights	1	0.6%
Latino Freeze	1	0.6%
Latino Fresh	1	0.6%

In Chile, data collectors purchased 195 packs of cigarettes: 121 with menthol or other flavor descriptors, and 74 tobacco flavored packs. All packs contained 20 cigarettes and 86.5% (n=166) of the packs were duplicates (see Appendix D). The average price of the cheapest packs with menthol or other flavor descriptors was 2,970 pesos, and the average price of the cheapest tobacco flavored packs was 2,520 pesos. Fifty-five of the packs with flavor descriptors mentioned menthol on the pack. All 121 packs with menthol or other flavor descriptors contained cigarettes with capsules; 32 of those packs contained cigarettes with two capsules per stick, and 89 had a single flavor capsule.

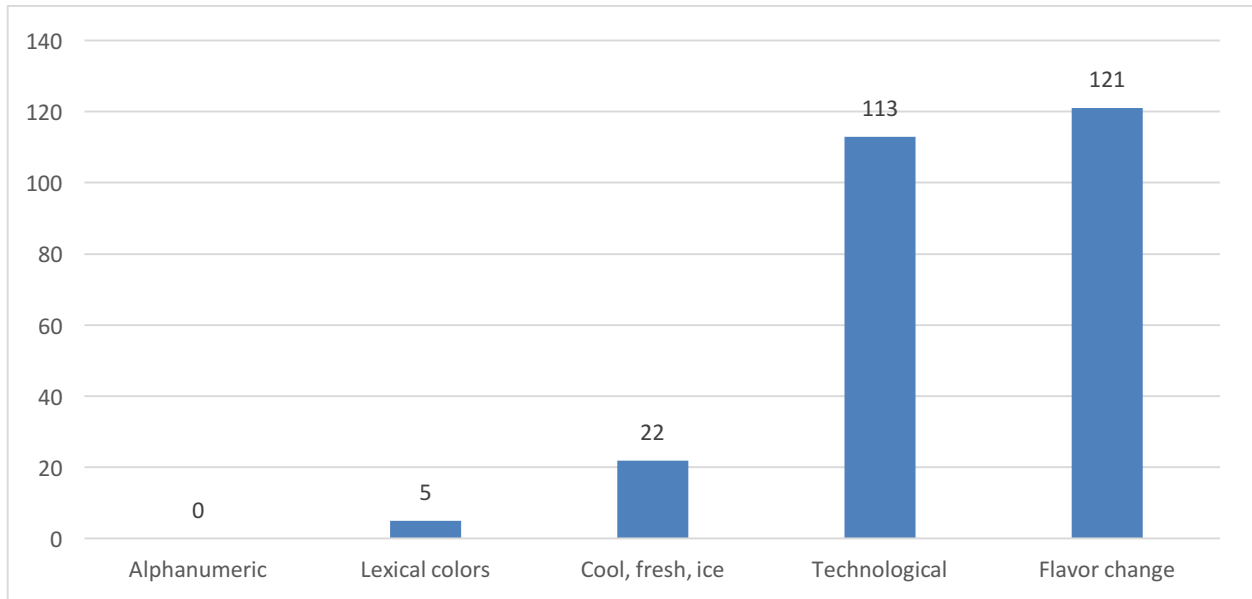
Non-conventional descriptors were observed on all packs (100.0%, n=121) that carried any flavor descriptor, followed by descriptors for mint or menthol (45.5%, n=121) (Figure 46).

Figure 46. Flavor descriptors on purchased cigarette packs (n=121)



Language or imagery indicating a flavor change (100.0%, n=121) was observed on all flavored packs purchased in Chile, followed by technological descriptors (93.4%, n=113), and descriptors such as cool, fresh, and ice (18.2%, n=22) (Figure 47).

Figure 47. Non-conventional flavor descriptors on purchased cigarette packs (n=121)

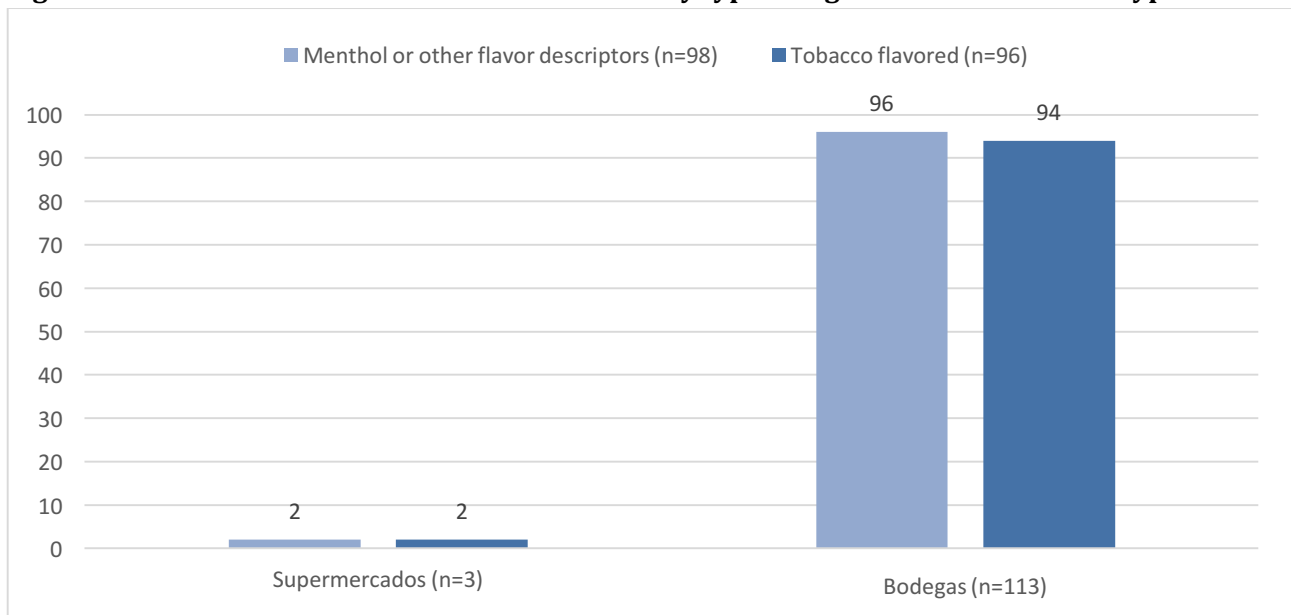


Peru

Among the 50 school sampling areas selected in Lima, data collectors visited 43 areas and identified cigarette retailers within 95.3% (n=41) of those areas. Data collectors visited 112 retailers, 89.3% (n=100) of which sold cigarettes. Retailer types included bodegas (n=109) and supermercados (n=3). Cigarettes with menthol or other flavor descriptors were identified in 95.0% (n=95) of retailers, and tobacco flavored cigarettes were identified in 93.0% (n=93) of retailers. Cigarettes with flavor capsules were observed in 89.0% of retailers (n=89). Loose or single cigarettes were for sale in 60.0% (n=60) of all retailers observed.

Cigarettes with menthol or other flavor descriptors were observed in 85.3% of bodegas (n=93) and 66.7% (n=2) of supermercados (Figure 48). Tobacco flavored cigarettes were available in 83.5% of bodegas (n=91) and 66.7% (n=2) of supermercados.

Figure 48. Number of tobacco retailers observed by type of cigarettes sold and POS type



Cigarettes with menthol or other flavor descriptors were on display in 85.3% (n=81) of retailers that sold flavored cigarettes, and tobacco flavored cigarettes were on display in 87.1% (n=81) of retailers that sold tobacco flavored cigarettes (Figure 49). Cigarettes with menthol or other flavor descriptors were most frequently displayed in the cashier zone (72.6%, n=69), on a branded stand or cabinet (50.5%, n=48), behind the cashier zone (43.1%, n=41), and near sweets, snacks, or sugary drinks (39.0%, n=37). tobacco flavored cigarettes were also displayed in the cashier zone (74.1%, n=69), on a branded stand or cabinet (51.6%, n=48), behind the cashier zone, (44.0%, n=41), and near sweets, snacks, or sugary drinks (39.8%, n=37).

Figure 49. Number of tobacco retailers with tobacco product displays at the POS

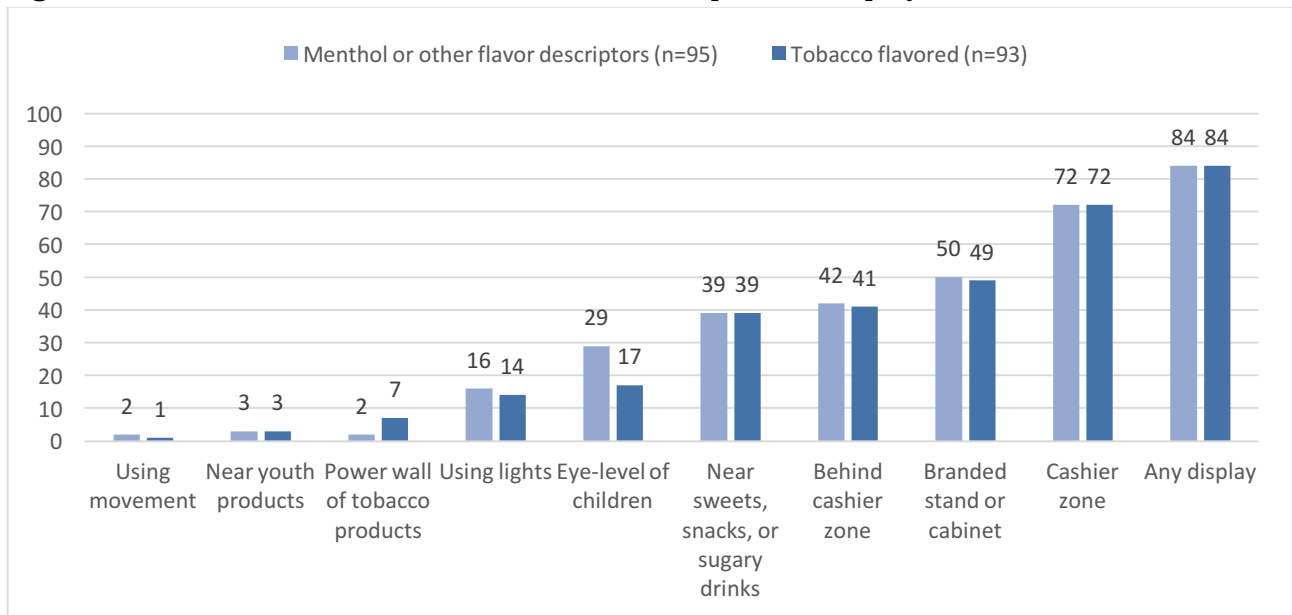
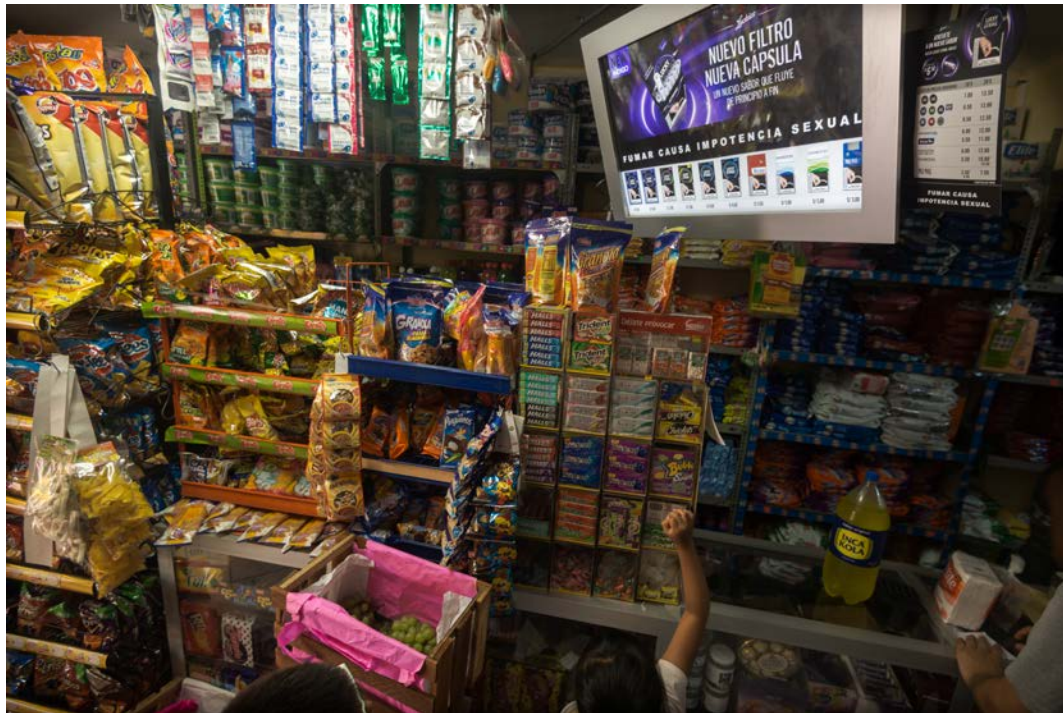


Figure 50. Flavored cigarettes placed near sweets and snacks at the POS in Lima, Peru



Cigarettes with menthol or other flavor descriptors were advertised in 46.3% (n=44) retailers, and tobacco flavored cigarettes were advertised in only 12.9% (n=12) of retailers (Figure 51). Cigarettes with menthol or other flavor descriptors were typically advertised using print signage (33.7%, n=32) or digital signage (15.8%, n=15). Tobacco flavored cigarettes were also advertised using digital signage (7.5%, n=7) and print signage (6.5%, n=6).

Figure 51. Number of tobacco retailers with tobacco advertising signage at the POS

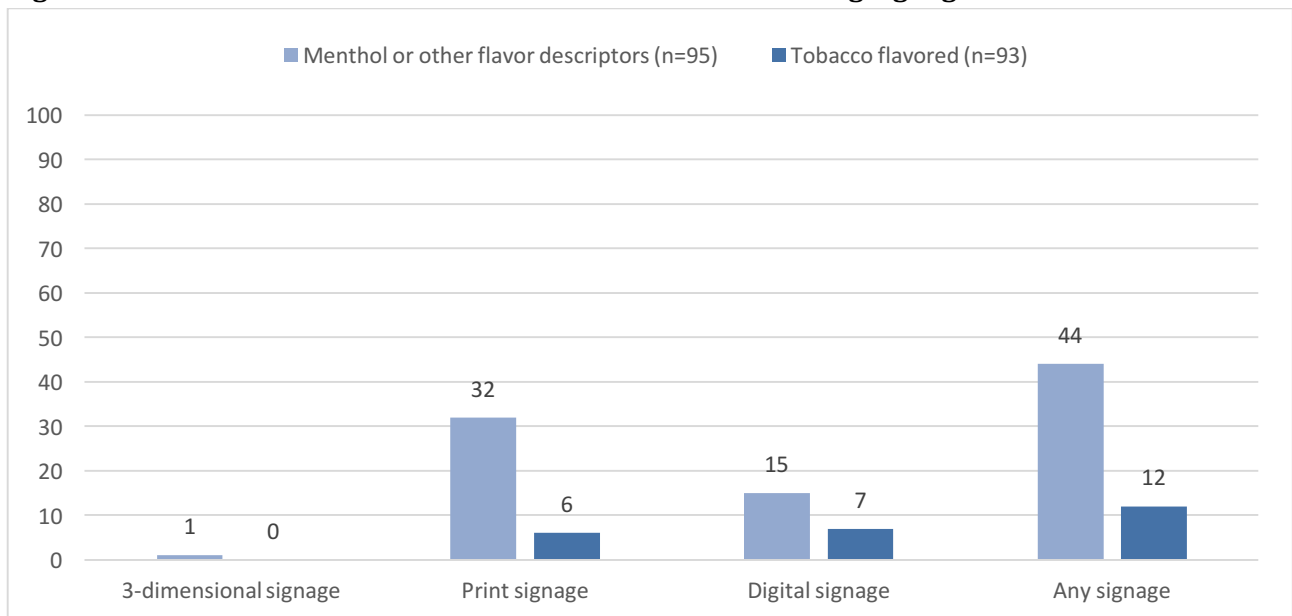
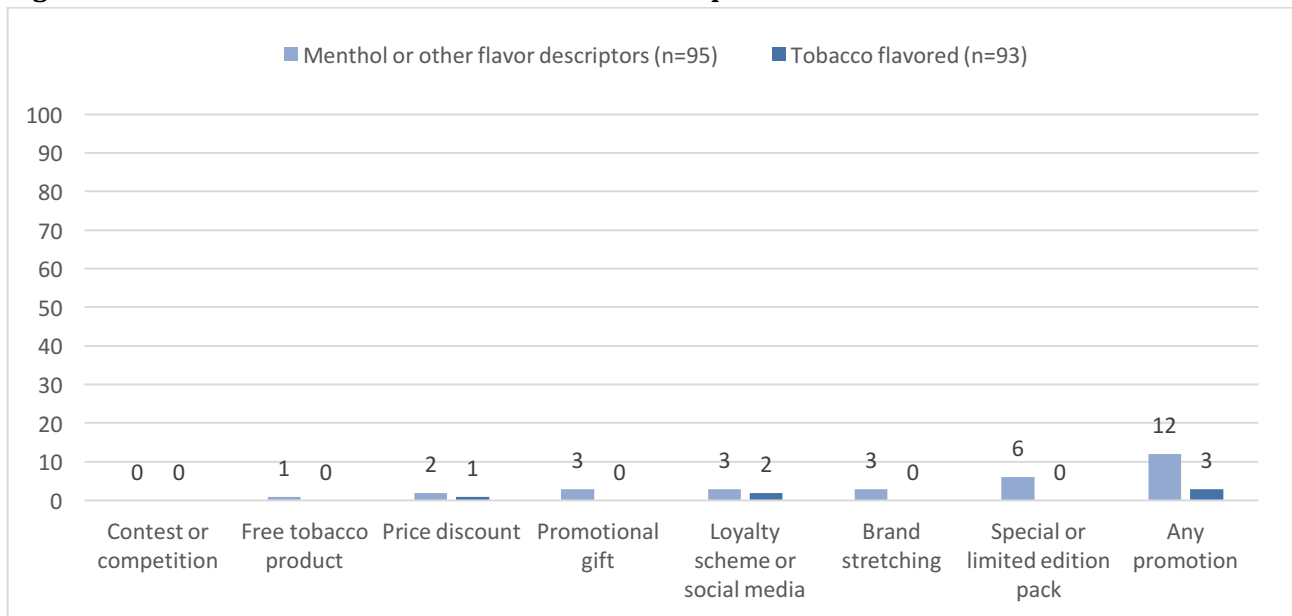


Figure 52. Print advertisements for flavored cigarettes at the POS in Lima, Peru



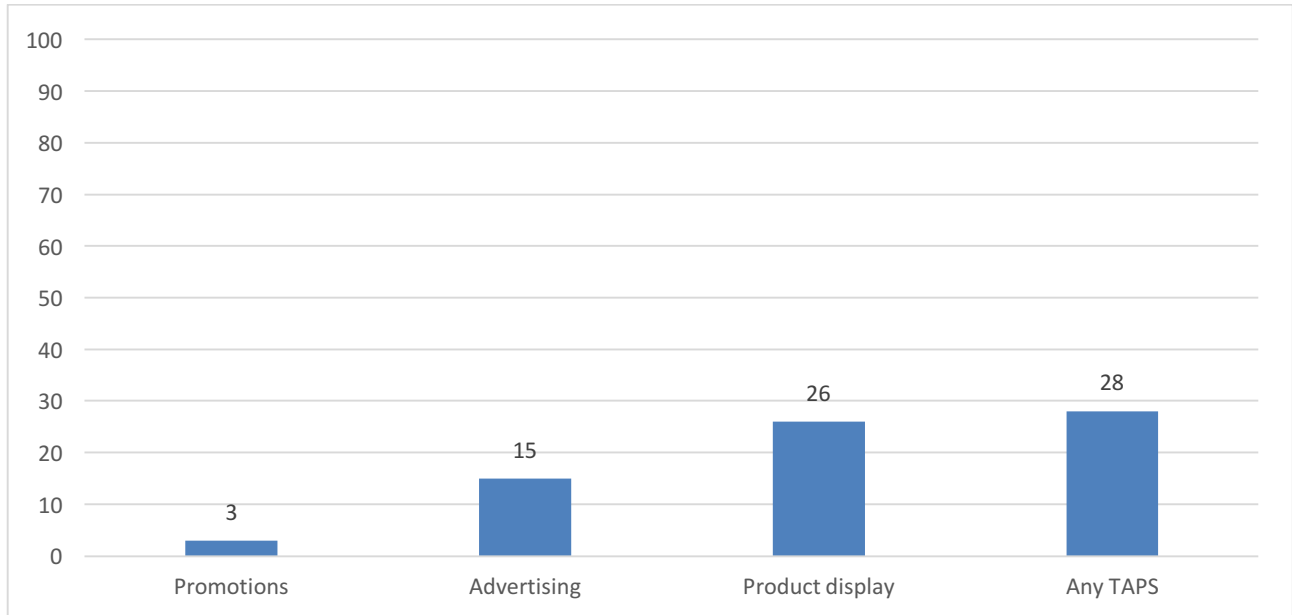
Only 12.6% (n=12) of retailers offered any promotion for cigarettes with menthol or other flavor descriptors, most frequently with special or limited edition packs (6.3%, n=6) (Figure 53). Tobacco flavored cigarettes were only promoted in 3.2% (n=3) of retailers.

Figure 53. Number of tobacco retailers with tobacco promotions at the POS



Marketing for cigarettes with menthol or other flavor descriptors was visible from outside the store at 29.5% (n=28) of retailers, most frequently in the form of product display (27.4%, n=26) and advertising signage (15.8%, n=15) (Figure 54).

Figure 54. Number of tobacco retailers with tobacco product display, advertising signage, or promotions for cigarettes with menthol, flavors, or capsules visible from outdoors (n=95)



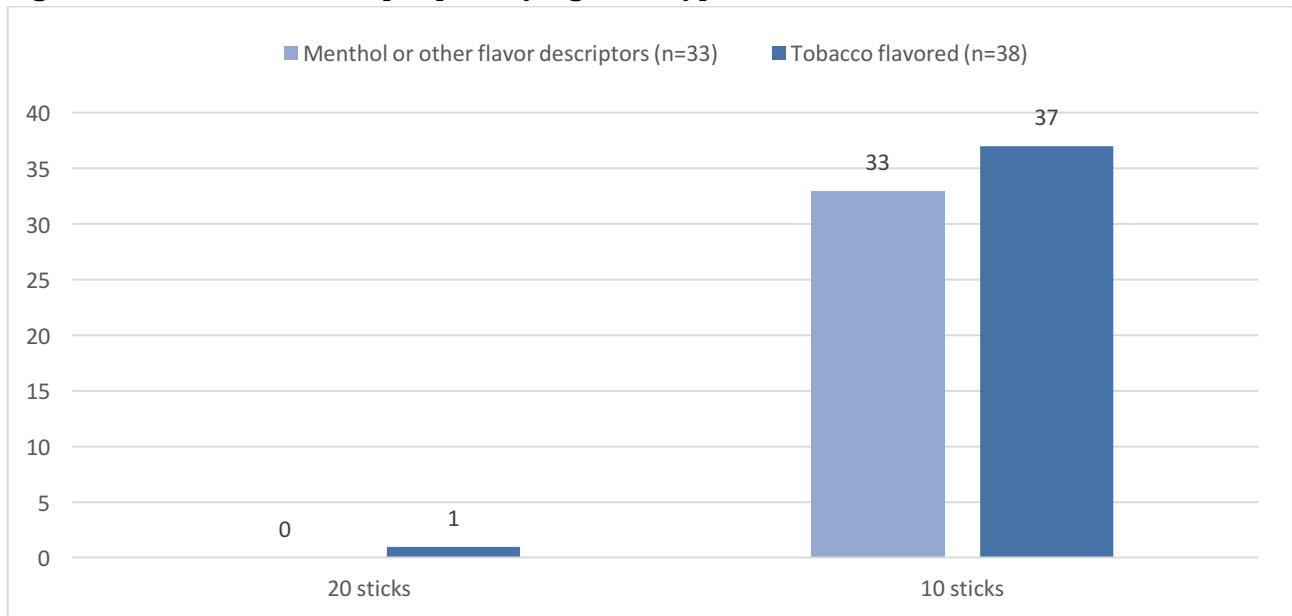
Data collectors identified 15 unique cigarette brand variants at the POS that used menthol or other flavor descriptors, although they did not record an exhaustive list of the available brands. Hamilton Fresh was the most frequently observed brand using menthol or other flavor descriptors, followed by Lucky Strike Double Click Wild Crisp and Lucky Strike Indigo, and other brands using non-conventional flavor descriptors such as “Switch”, “Blue Ice”, “Ruby Ice”, and “Double Fusion” (Figure 55). All brands observed at the POS are owned by multinational tobacco companies, such as British American Tobacco (BAT), Philip Morris International (PMI), R.J. Reynolds Tobacco Company (RJR).

Figure 55. Brands using menthol or other flavor descriptors at the POS (n=95)

	n	%
Hamilton Fresh	92	96.8%
Lucky Strike Double Click Wild Crisp	88	92.6%
Lucky Strike Indigo	83	87.4%
Lucky Strike Switch	82	86.3%
Marlboro Blue Ice	40	42.1%
Marlboro Ruby Ice	36	37.9%
Marlboro Double Fusion	17	17.9%
Marlboro Double Burst	4	4.2%
Camel Freshness	1	1.1%
Dunhill Click	1	1.1%
Lucky Strike Click and Roll	1	1.1%
Marlboro Fusion Blast	1	1.1%
Pall Mall Daiquiri Nights	1	1.1%
L&M Forward	1	1.1%
Marlboro Kretek Mint	1	1.1%

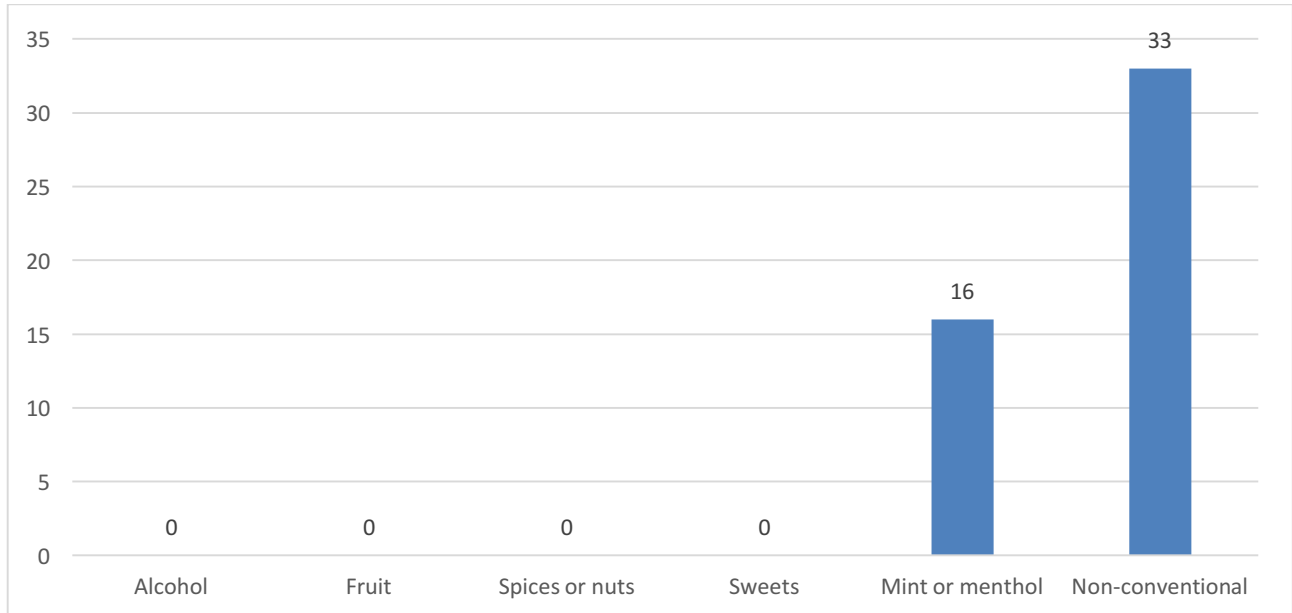
In Peru, data collectors purchased 71 packs of cigarettes: 33 with menthol or other flavor descriptors, and 38 tobacco flavored packs. The number of sticks per pack ranged from 10 to 20, with most packs containing 10 sticks per pack. Only one tobacco flavored pack contained 20 sticks (Figure 56), and 74.6% (n=53) of the packs were duplicates (see Appendix E). The average price of the cheapest packs with menthol or other flavor descriptors was \$6.56 soles, and the average price of the cheapest tobacco flavored packs was \$4.31 soles. Two of the packs with menthol or other flavor descriptors mentioned menthol on the pack, and one of the packs mentioned a double-menthol product feature. All 33 of the flavored packs contained cigarettes with flavor capsules, 14 of which had two capsules in each stick, and 19 of which had a single flavor capsule.

Figure 56. Number of sticks per pack by cigarette type



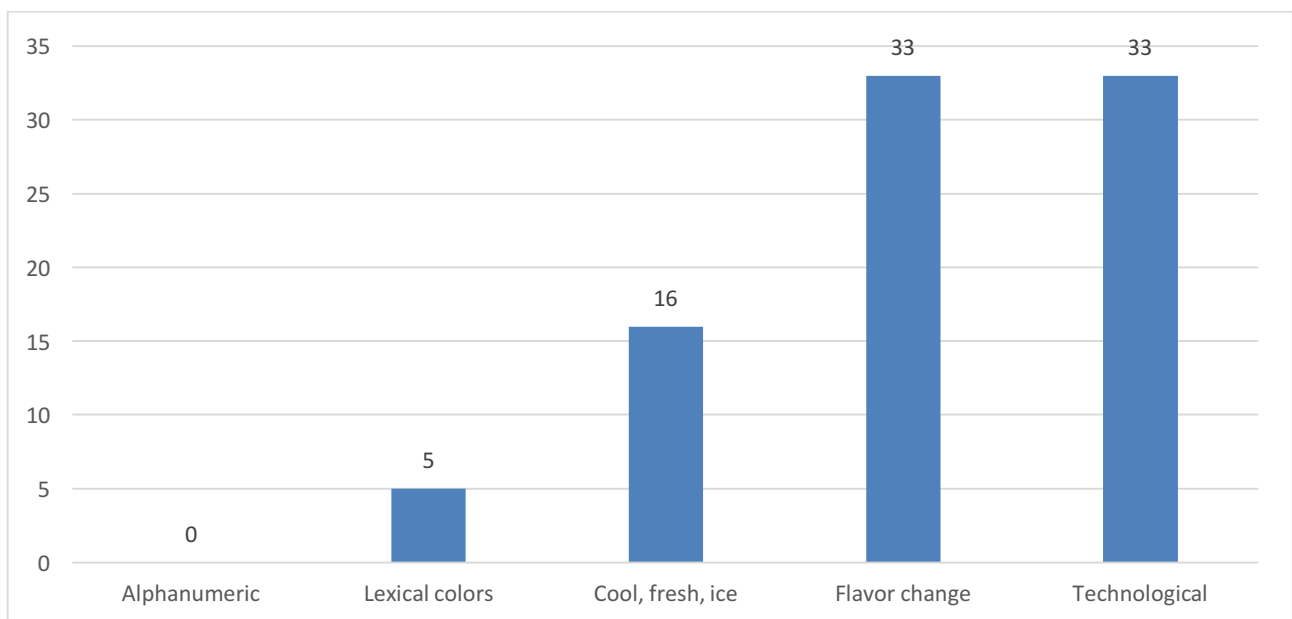
Non-conventional flavor descriptors were observed on 100.0% (n=33) of packs that carried any flavor descriptor, followed descriptors for mint or menthol (48.5%, n=16) (Figure 57).

Figure 57. Flavor descriptors on purchased cigarette packs (N=33)



Language or imagery indicating technological features (100.0%, n=33), or a flavor change (100.0%, n=33) were the most frequently observed descriptors among all flavored packs purchased in Peru, followed by descriptors such as cool, fresh, and ice (48.5%, n=16) (Figure 58).

Figure 58. Non-conventional flavor descriptors on purchased cigarette packs (n=33)



Discussion

Cigarettes with menthol or other flavor descriptors were sold in 77.4%-95.0% of cigarette retailers observed in each of the five countries, where product display was the most prevalent marketing tactic. Although Argentina, Bolivia, and Peru prohibit the use of misleading advertising that is aimed at minors or suggests that any tobacco products is less harmful than another, cigarettes with menthol or other flavor descriptors that have been shown to appeal to youth and create a false perception of reduced risk from tobacco use were sold in these countries. The products were consistently placed in and behind the cashier zone, a prominent location within the retail environment. Cigarettes with menthol or other flavor descriptors were also displayed near sweets, snacks, or sugary drinks in all five countries, thereby normalizing these harmful and addictive products in the context of products that attract the attention of children; this contradicts the company policies that are publicly promoted by such entities as Philip Morris International (PMI), British American Tobacco (BAT), and Japan Tobacco International (JTI). In Brazil and Chile, where most forms of POS marketing are prohibited, we observed the use of price lists that functioned as advertising signage. The uniformity and professional production quality suggest that the tobacco companies likely provided the price signage to the retailers. The high prevalence of cigarette packs and marketing media that use flavor descriptors for menthol or mint further demonstrate the significance of this particular flavorant to attracting customers. The high frequency of non-conventional flavor descriptors on cigarette packs and marketing media suggests that the tobacco industry may be attempting to circumvent or anticipate existing or future laws that prohibit the use or promotion of flavorants in tobacco.

Limitations

This study used a purposive sample of schools and a convenience sample of retailers in one city in each of the five countries. The results may not be representative of all types of tobacco retailers or generalizable to all areas of each country or region.

Conclusions

This study demonstrates that harmful tobacco products using misleading packaging and predatory marketing strategies are prevalent and accessible in retailers surrounding schools (in Buenos Aires, Argentina, La Paz, Bolivia, Rio de Janeiro, Brazil, Santiago, Chile, and Lima, Peru). The study also demonstrates that misleading and predatory marketing strategies are employed by multiple tobacco companies, including British American Tobacco, Phillip Morris International, Japan Tobacco International and their affiliates, among others. The FCTC and its implementing guidelines are based on rigorous scientific evidence. Partial regulations that allow exceptions for certain marketing practices (such as product display) allow the tobacco industry to circumvent the law by redirecting their resources toward unregulated tactics (such as product display or elaborate price lists that function as advertisements). Enacting measures that align with the FCTC and its implementing guidelines will facilitate compliance, deter noncompliance, and enable governments to take appropriate legal actions against violations. In order to protect and save lives, countries should adopt and effectively implement policies that prohibit the use of tobacco product flavorings, prohibit the use of misleading packaging and labeling, and prohibit all forms of direct and indirect advertising, promotion, and sponsorship, including the display of tobacco products at

retail points of sale.

Key Terms and Definitions

Term	Definition
Advertising (signage)	Branded print or digital/electronic media such as posters, backgrounds, banners, flyers, shelf liners, and television or computer screens - that are intended to promote awareness and favorable opinions of a tobacco brand or product.
Branded	Elements such as brand name, logo, slogan, color schemes, or patterns that allow customers to recognize a particular brand. For the purposes of this monitoring, "branded" refers to tobacco brands only.
Cashier zone	The area immediately surrounding the cash register (on top of, above, to the left/right of, or in front of the counter where the cash register is located).
Cigarettes with menthol or other flavor descriptors	Cigarettes that include, somewhere on the cigarette pack or the associated marketing media, language or imagery that implies the presence of additives, including menthol, that would change the flavor of the tobacco which is noticeable by the smoker, or that the flavor of the tobacco is different in some way from tobacco flavored cigarettes.
Conventional flavor descriptors	Terms or imagery describing a recognizable flavor, such as: fruit, alcohol, coffee, sweets, spices, and mint or menthol.
Flavor capsule	A small bead in the cigarette filter that consumers break to release a flavoring agent that flavors the tobacco smoke.
Flavor descriptors	Words, numbers, or imagery that are incorporated into the brand name of the tobacco product or other text describing the tobacco product that can be used to denote flavor and taste.
Flavored cigarettes	Cigarettes that include, somewhere on the cigarette pack or the associated marketing media, language or imagery that implies the presence of substances, including menthol, that would change the flavor of the tobacco, or that the flavor of the tobacco is different in some way from tobacco flavored cigarettes.
Flavoring agents	A natural or synthetic substance or mixture of substances that imparts, modifies, enhances, or intensifies the flavor of tobacco products, which can be added to cigarettes to create flavored cigarettes.
Loyalty scheme	Rewards programs or points systems that customers subscribe to for special benefits.
Menthol cigarette	Cigarettes that include menthol, either in the tobacco or in a flavor capsule.
Non-conventional flavor descriptors	Terms or imagery that do not correspond to a typically recognizable flavor, and can include: lexical color descriptors (purple crush, ruby burst), descriptors indicating a fresh, chill, or cool taste, technology words or symbols (press play), flavor change descriptors (click to activate), and alphanumeric descriptors (MX12).

Power wall	A display of tobacco products behind the cashier zone, with multiple shelves and multiple packs.
Product display	Special presentations of a store's cigarette products in the actual size which they are for sale such as an exhibition case or power wall.
Promotions	Special or limited time offers that are intended to result in the purchase of a tobacco product.
TAPS	Tobacco advertising, promotion, and sponsorship - types of marketing strategies.
Tobacco flavored cigarettes	Cigarettes that do not include, somewhere on the cigarette pack or the associated marketing media (such as print signage), language or imagery indicating a characterizing flavor, such as menthol or chocolate, that would change the flavor of the tobacco in a manner that is noticeable by the smoker.

Appendix A: Cigarette Packs Purchased in Argentina

Manufacturer	Brand Name	Brand Variant	Number of Packs Purchased	Average Price	Range of Prices (ARS - Pesos)
British American Tobacco (BAT)	Lucky Strike	Lucky Strike Click (Blue)_12	2	25.00	25.00-25.00
	Lucky Strike	Lucky Strike Click (Blue)_20	1	50.00	50.00-50.00
	Lucky Strike	Lucky Strike Double Click Crisp_12	3	25.00	25.00-25.00
	Lucky Strike	Lucky Strike Double Click Crisp_20	4	50.00	45.00-55.00
	Pall Mall	Pall Mall Mojito Nights Double Click_20	1	47.00	47.00-47.00
	Richmond	Richmond_20	3	20.00	15.00-25.00
	Rothmans	Rothmans_11	2	20.00	20.00-20.00
	Viceroy	Viceroy Red 11s_12	8	19.50	18.00-20.00
	Viceroy	Viceroy Red_20	4	35.25	34.00-37.00
	Viceroy	Viceroy Switch 11s_11	1	19.00	19.00-19.00
	Viceroy	Viceroy Switch 11s_12	1	20.00	20.00-20.00
	Viceroy	Viceroy Switch 20s_20	5	35.80	35.00-38.00
Dorados Cigarritos	Dorados	Dorados_20	2	15.00	15.00-15.00
Espert Sociedad Anonima	Melbour	Melbour Classic_20	3	25.00	25.00-25.00
Philip Morris International (PMI)	Chesterfield	Chesterfield Fresh Cap_10	4	18.75	18.00-20.00
	Chesterfield	Chesterfield Fresh Cap_20	4	40.25	38.00-45.00
	Chesterfield	Chesterfield Red_10	5	18.60	18.00-20.00
	Chesterfield	Chesterfield Red_20	1	32.00	32.00-32.00

	L&M	L&M Forward 2&1_20	1	46.00	46.00-46.00
	Marlboro	Marlboro Fusion Blast_10	6	27.70	25.00-29.00
	Marlboro	Marlboro Fusion Blast_20	4	45.50	40.00-52.00
	Marlboro	Marlboro Ice Blast_10	1	25.00	25.00-25.00
	Marlboro	Marlboro Ice Blast_20	1	47.00	47.00-47.00
	Marlboro	Marlboro Red_20	1	45.00	45.00-45.00
	Philip Morris	Philip Morris Caps 20	4	48.50	45.00-50.00
	Philip Morris	Philip Morris Caps Duo_10	3	22.70	22.00-24.00
	Philip Morris	Philip Morris Caps Duo_20	6	48.50	47.00-50.00
	Philip Morris	Philip Morris Caps_10	11	24.50	22.00-30.00
	Philip Morris	Philip Morris_10	5	23.80	22.00-25.00
Tabacalera Sarandi	Red Point	Red Point Menthol The American Blend_20	3	28.00	24.00-30.00
	Red Point	Red Point The American Blend_20	8	28.50	25.00-30.00

Appendix B: Cigarette Packs Purchased in Bolivia

Manufacturer	Brand Name	Brand Variant	Number of Packs Purchased	Average Price	Range of Prices (BOB - Bolivianos)
British American Tobacco (BAT)	Lucky Strike	Lucky Strike Convertible	2	7.50	7.50-7.50
	Lucky Strike	Lucky Strike Double Click	2	8.00	8.00-8.00
Compania Industrial De Tabacos S.A.	Astoria	Astoria_20	1	5.00	5.00-5.00
	Big Ben	Big Ben_20	1	10.00	10.00-10.00
	Derby	Derby (Gold)_10	7	5.50	5.00-6.00
	Derby	Derby (Gold)_20	3	9.67	8.00-11.00
	Derby	Derby (Orange)_20	1	8.00	8.00-8.00
	Derby	Derby (Red)_10	5	5.30	5.00-6.00
	Derby	Derby (Red)_20	1	11.00	11.00-11.00
	Derby	Derby Cool_10	1	5.00	5.00-5.00
	Derby	Derby Cool_20	2	10.50	10.00-11.00
Djarum	Djarum	Djarum Menthol_10	1	7.50	7.50-7.50
Godfrey Phillips	Jaisalmer	Jaisalmer Menthol_20	1	6.00	6.00-6.00
Japan Tobacco International (JTI)	Camel	Camel (Yellow)_10	1	7.50	7.50-7.50
	Camel	Camel Activate Double Purple_10	2	7.75	7.50-8.00
	Camel	Camel Activate Double Purple_20	1	8.00	8.00-8.00
	Camel	Camel Activate Freshness_10	5	8.60	8.00-9.00
	Camel	Camel Activate Freshness_20	1	15.00	15.00-15.00
	Camel	Camel Blue_10	1	7.00	7.00-7.00
Philip Morris International (PMI)	L&M	L&M Blue Label_10	6	5.83	5.00-6.00
	L&M	L&M Blue Label_20	1	10.00	10.00-10.00
	L&M	L&M FORWARD 2 IN 1_10	1	9.00	9.00-9.00

	L&M	L&M FORWARD 2 IN 1_20	3	14.00	13.00-15.00
	L&M	L&M Kretek Mint_20	5	14.60	12.00-18.00
	L&M	L&M Menthol Label_10	4	5.63	5.00-6.00
	L&M	L&M Menthol Label_20	3	11.00	10.00-13.00
	L&M	L&M Red Label_10	8	5.69	5.00-6.50
	L&M	L&M Red Label_20	1	11.00	11.00-11.00
	Marlboro	Marlboro Kretek Mint	1	16.00	16.00-16.00

Appendix C: Cigarette Packs Purchased in Brazil

Manufacturer	Brand Name	Brand Variant	Number of Packs Purchased	Average Price	Range of prices (BRL - Reais)
British American Tobacco / Souza Cruz (BAT)	Derby	(blue)	2	7.37	7.25-7.50
	Derby	(red)	1	7.25	7.25-7.25
	Derby	(silver)	1	7.25	7.25-7.25
	Derby	Click +	1	7.25	7.25-7.25
	Derby	Premium Menthol	1	7.50	7.50-7.50
	Dunhill	Carlton Blend	5	8.50	8.50-8.50
	Dunhill	Double (pink and blue)	4	8.31	8.00-8.50
	Dunhill	Switch (blue)	1	8.50	8.50-8.80
	Free	Boost	7	7.98	7.00-9.00
	Free	Taste + Filter	1	7.50	7.50-7.50
	Hilton	Authentic Slims	1	missing	missing
	Hollywood	Blue	1	7.50	7.50-7.50
	Hollywood	Mint	4	7.37	7.00-7.50
	Hollywood	Original (red)	1	7.50	7.50-7.50
	Lucky Strike	Blue	2	7.75	7.50-8.00
	Lucky Strike	Convertibles Click and Roll Fresh	13	7.50	7.50-7.50
	Lucky Strike	Convertibles Switch Click and Roll	7	7.50	7.50-7.50
	Lucky Strike	Double Click Cold	13	8.25	7.50-9.00
	Lucky Strike	Red	1	7.50	7.50-7.50
	Minister	Special	12	5.46	5.00-7.75
Minister	Unique (red)	8	5.53	5.00-6.50	
Philip Morris International (PMI)	Dallas	Classic (blue stripe)	1	5.00	5.00-5.00
	Dallas	Classic (red block with crest)	1	5.00	5.00-5.00
	Dallas	Classic (red stripe)	1	7.25	7.25-7.25
	L&M	Blue Label Fine Cut Tobacco	1	7.00	7.00-7.00

	Marlboro	Blue Ice Iceball	5	7.59	7.00-8.00
	Marlboro	Double Burst Doublecap Technology	1	8.50	8.50-8.50
	Marlboro	Gold	2	7.75	7.50-8.00
	Marlboro	Red	7	7.84	7.00-8.50
Djarum	L.A.	Cereja (Cherry)	3	8.32	8.00-9.00
	L.A.	Kretek Menthol	1	8.00	8.00-8.00
Japan International (JTI)	Camel	Blue International Blend	1	8.00	8.00-8.00
	Camel	Double Mint Purple	1	8.50	8.50-8.50
	Camel	Filters (yellow)	1	missing	missing
	Winston	Blue International	3	5.33	5.00-5.50
	Winston	Classic International	3	5.63	5.00-6.50
	Winston	Expand Exotic Mint	3	5.83	5.50-6.00
Not listed	Gift	Gift	6	3.52	2.50-4.00

Appendix D: Cigarette Packs Purchased in Chile

Manufacturer	Brand Name	Brand Variant	Number of Packs Purchased	Average Price	Range of Prices (CLP - Pesos)
British American Tobacco (BAT)	Belmont	Belmont Rojo	1	4,500.00	4,500.00-4,500.00
	Kent	Kent Belmont Blend	3	2,550.00	1,850.00-3,000.00
	Lucky Strike	Lucky Strike Click	3	2,870.00	1,900.00-3,400.00
	Lucky Strike	Lucky Strike Convertibles Flow Filter Indigo	13	3,220.00	2,000.00-5,000.00
	Lucky Strike	Lucky Strike Double Click Crisp	5	4,100.00	3,500.00-5,000.00
	Lucky Strike	Lucky Strike Double Click Wild	22	3,420.00	1,900.00-5,000.00
	Lucky Strike	Lucky Strike Fresh	4	3,450.00	3,400.00-3,500.00
	Pall Mall	Pall Mall (Gray Special Edition)	1	2,650.00	2,650.00-2,650.00
	Pall Mall	Pall Mall Azul	35	2,410.00	1,500.00-2,700.00
	Pall Mall	Pall Mall Click On Fresh Taste	13	2,630.00	1,700.00-3,000.00
	Pall Mall	Pall Mall Click On Menthol Boost	52	2,650.00	1,400.00-4,800.00
	Pall Mall	Pall Mall Gris	1	2,600.00	2,600.00-2,600.00
	Pall Mall	Pall Mall Rojo	9	3,310.00	2,000.00-4,500.00
Marca KT&G	Pine	Pine Blue	1	1,100.00	1,100.00-1,100.00
Philip Morris International (PMI)	L&M	L&M Red Label	1	2,600.00	2,600.00-2,600.00
	Marlboro	Marlboro Crush Iceball & Purpleball	5	3,240.00	3,200.00-3,400.00
	Marlboro	Marlboro Gold Original	1	3,400.00	3,400.00-3,400.00

	Philip Morris	Philip Morris (Blue)	3	2,470.00	2,400.00-2,500.00
	Philip Morris	Philip Morris (Red)	5	2,500.00	2,400.00-2,600.00
	Philip Morris	Phillip Morris Caps	3	2,800.00	2,700.00-3,000.00
Saigon Tobacco Company-Vietnam	Nirvana	Nirvana	1	1,100.00	1,100.00-1,100.00
Tabacalera Hernandarias S.A. Paraguay	Fox	Fox	5	1,600.00	1,200.00-2,000.00
Tobacos Apolo S.A.	Latino	Latino (Blue)	2	2,100.00	2,100.00-2,100.00
	Latino	Latino (Red)	1	2,200.00	2,200.00-2,200.00
	Latino	Latino Freeze	1	2,300.00	2,300.00-2,300.00
	Latino	Latino King Size (Blue)	1	1,100.00	1,100.00-1,100.00
	Latino	Latino King Size (Red)	2	4,050.00	1,100.00-7,000.00
	Pacific	Pacific Filter Long (Red)	1	2,200.00	2,200.00-2,200.00

Appendix E: Cigarette Packs Purchased in Peru

Manufacturer	Brand Name	Brand Variant	Number of Packs Purchased	Average Price	Range of prices (PEN - Sol)
British American Tobacco (BAT)	Hamilton	Hamilton Fresh_10	4	5.25	5.00-6.00
	Hamilton	Hamilton_10 (blue color)	3	5.83	5.00-7.00
	Lucky Strike	Lucky Strike Blue_10	1	8.00	8.00-8.00
	Lucky Strike	Lucky Strike Double Click Crisp_10	6	7.17	7.00-7.50
	Lucky Strike	Lucky Strike Double Click Wild_10	8	7.25	7.00-8.00
	Lucky Strike	Lucky Strike Fresh_10	3	6.83	6.50-7.00
	Lucky Strike	Lucky Strike Indigo_10	4	7.00	6.50-7.50
	Lucky Strike	Lucky Strike Switch_10	4	7.00	6.50-7.50
	Pall Mall	Pall Mall Click on Fresh Taste_10	6	4.88	3.50-8.50
	Pall Mall	Pall Mall_10 (blue color)	19	3.78	3.00-7.50
	Pall Mall	Pall Mall_10 (green)	6	3.72	3.50-4.00
	Pall Mall	Pall Mall_10 (red color)	1	3.00	3.00-3.00
	Pall Mall	Pall Mall_20 (Green)	1	7.50	7.50-7.50
	Winston	Winston American Flavor_10	1	6.50	6.50-6.50
Philip Morris International (PMI)	L&M	L&M Forward 2 in 1_10	1	3.00	3.00-3.00
	Marlboro	Marlboro Blue Ice_10	1	6.00	6.00-6.00
	Marlboro	Marlboro Gold_10	1	3.80	3.80-3.80
	Marlboro	Marlboro Red_10	1	5.50	5.50-5.50

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