

**Product Display, Advertising and Promotion
around Primary and Secondary Schools**



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Background and Introduction

Tobacco use is the leading cause of preventable death and disease across the globe.¹ Although global estimates of tobacco marketing expenditures are not available, US cigarette manufacturers alone are estimated to have spent over 26 billion US dollars between 2011 and 2013 on advertising and promotion.² Tobacco companies use deceptive and predatory marketing practices to increase consumption of their products, and to make tobacco use appear glamorous or socially acceptable while dismissing the products' adverse health effects.³ Article 13 of the World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) calls for a comprehensive ban on all forms of TAPS, including the retail display of tobacco products.⁴ Evidence shows that the tobacco industry responds to partial TAPS bans that regulate only certain types of TAPS strategies (such as television or radio) by re-directing their resources to market their brands on unregulated channels such as the point-of-sale (POS).⁵ Numerous longitudinal studies have demonstrated that exposure to tobacco product advertising and promotion increases the likelihood that youth will start to smoke.⁶ The display of tobacco products at the POS has the same effect and influence on behavior as traditional media advertising.⁷ Marketing in retail environments specifically has been shown to increase the likelihood of smoking initiation among youth.⁸ 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.⁹

Additionally, tobacco companies use additives, such as flavors to enable smokers to extract nicotine from tobacco more easily, speed up nicotine absorption by the lungs, and enhance the delivery of nicotine to the brain.¹⁰ The World Health Organization (WHO), as early on as 2016 recognized the dangers in flavored tobacco products, stating that these "...seemingly harmless-sounding [flavoring] ingredients, ... can contribute to increased carcinogenic and addictive effects."¹¹ Others have shown that, for example: menthol, when inhaled cools and numbs the throat reducing the irritating effects of nicotine essentially making tobacco smoke feel smoother when inhaled,^{10,12} thus making it easier for beginner smokers to tolerate smoking.^{13,14} 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. Not only that, but also, when burned, some of these additives release cancer-causing chemical compounds,¹⁵ while others act as bronchodilators expanding airways to the lungs, allowing more air to flow in.^{16,12,17}

The tobacco industry is acutely aware of the added harms and appeal of their flavored and menthol products to youth. Internal industry studies confirm that menthol and candy-like flavors increased product appeal to initiators by masking the taste of tobacco, reducing throat irritation, and making smoke easier to inhale.¹⁸ Similarly, the tobacco industry uses menthol to attract and retain new, younger smokers. Tobacco industry documentation has shown that menthol is added to cigarettes by producers as it is known to be attractive to inexperienced smokers who perceive menthol cigarettes as less harsh, less harmful than non-menthol cigarettes, and easier to smoke.^{19,20,21} Menthol, along with other flavored additives (including 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.²²

Bulgaria became a party to the FCTC on 5 February, 2006.²³ Among Bulgaria's just over 7 million residents,²⁴ an estimated 40.8% of adult men, and 31.5% of adult females use tobacco daily, with 24.4% of boys, and 31.6% of girls being recorded as current smokers.²⁵ Bulgaria's current tobacco control laws allow for tobacco advertising at retail outlets, however, the

sale of tobacco products has been ‘forbidden’ on the premises of schools.

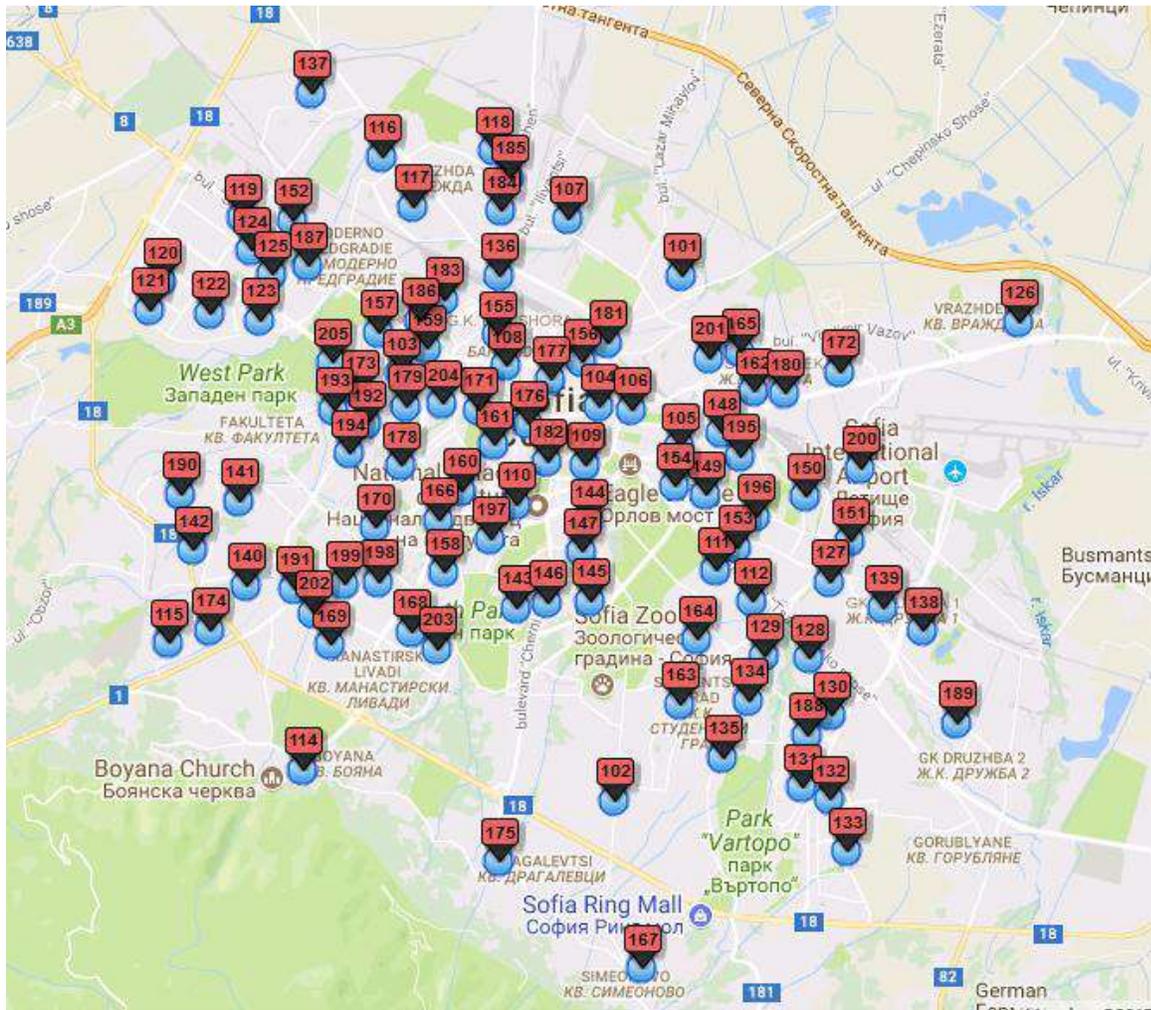
Methods

The following report describes a study about tobacco marketing at the point-of-sale in Sofia, Bulgaria. The work was led by the Institute for Global Tobacco Control (IGTC) at Johns Hopkins Bloomberg School of Public Health (JHSPH). IGTC partnered with the Campaign for Tobacco Free Kids (CTFK) and the Smoke Free Life Coalition (SFLC), who provided guidance and context about the sampling framework. IGTC designed the survey instrument and data collection protocol, and CTFK trained the field workers to gather data and submitted daily reports for review in real-time. The CTFK study team was in Sofia 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 the city of Sofia, Bulgaria. SFLC identified and selected primary and secondary schools within the city which were then plotted on a map (Figure 1). Schools and neighborhoods were selected based on local knowledge surrounding (1) retail density, (2) school density; (3) safety, and (4) ease of accessibility for data collectors traversing the city via public transportation. One hundred and five schools were selected and assigned unique identification codes. An online mapping and distance software was used to define the sampling area radius of 250 meters surrounding each school, ensuring that none of the sampling areas overlapped. The study surveyed a convenience sample of tobacco shops, gas stations, convenience stores, supermarkets, cafés/bars/restaurants, kiosk/newsstands, small/independent stores, and outdoor markets.

Figure 1. Selected Schools in Sofia, Bulgaria (n=105)



Survey Instrument

The survey instrument was designed to address Bulgaria’s tobacco control law that allows POS marketing, as well as known TAPS trends that may target youth (Figure 2). The survey also asked whether the store was within eyesight of the school and provided fields for data collectors to enter the sampling area code, retailer address, name brand of tobacco products displayed or advertised, and other notes or comments about the retailer.

Figure 2. Survey Instrument Content

Display Characteristics	Promotions	Advertising Characteristics
Cashier zone	Price discounts	Print signage
Behind the cashier zone	Free tobacco products	3-dimensional signage
On a power wall of tobacco products	Gifts (free or with purchase)	Electronic signage (digital or video screen)
On a branded stand or cabinet	Special or limited-edition packs	Using lights (not on a screen)
Using lights	Brand stretching	Using English words
With sweets, snacks, or sugary drinks	Imitation cigarette (candy or toy)	Visible from outside
With products for children	Mention of tobacco company sponsored events	Product Availability
Using movement	Contests or competitions	Naswar
1 meter or less from the floor	Loyalty/rewards scheme or mention of social media	Cigarettes with flavor capsules
Visible from outside	Presence of brand representative	Cigarettes with menthol
	Visible from outside	Cigarettes with other flavors

Data Collection Protocol

Observations and photos were collected during normal business hours from 452 retailers from April 11-14, 2017. 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 (Appendix A). 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 250-meter and were instructed to use nearest intersections and nearby landmarks to better identify the limit of the sampling radius. Retailers that sold tobacco products prompted a request for detailed observations on tobacco product marketing, while only the address, school identification code, visibility from the school, date of observation, and geolocation were recorded for locations that did not sell tobacco products. Data collectors wrote the address of each tobacco retailer they observed on the corresponding sampling area map. Observational data and photos of tobacco product displays or ads were recorded and uploaded to a cloud-based database in real-time within Magpi, a mobile data

collection application installed on smartphones. The mobile app automatically captured the date, geographic coordinates, and data collector name for each record uploaded to the dataset. The order of questions and format of response options were designed to facilitate rapid and discrete observation by data collectors. Data collectors also carried paper copies of the survey to use as an alternative to the mobile app in the event of any technical issue. At the end of each day, data collectors reported the address and sampling area code of each retailer they observed by entering information into a spreadsheet hosted on Google Drive. The CTFK study team reviewed these reports daily in order to check the uploaded dataset and ensure that the mobile software application was functioning properly.

Training

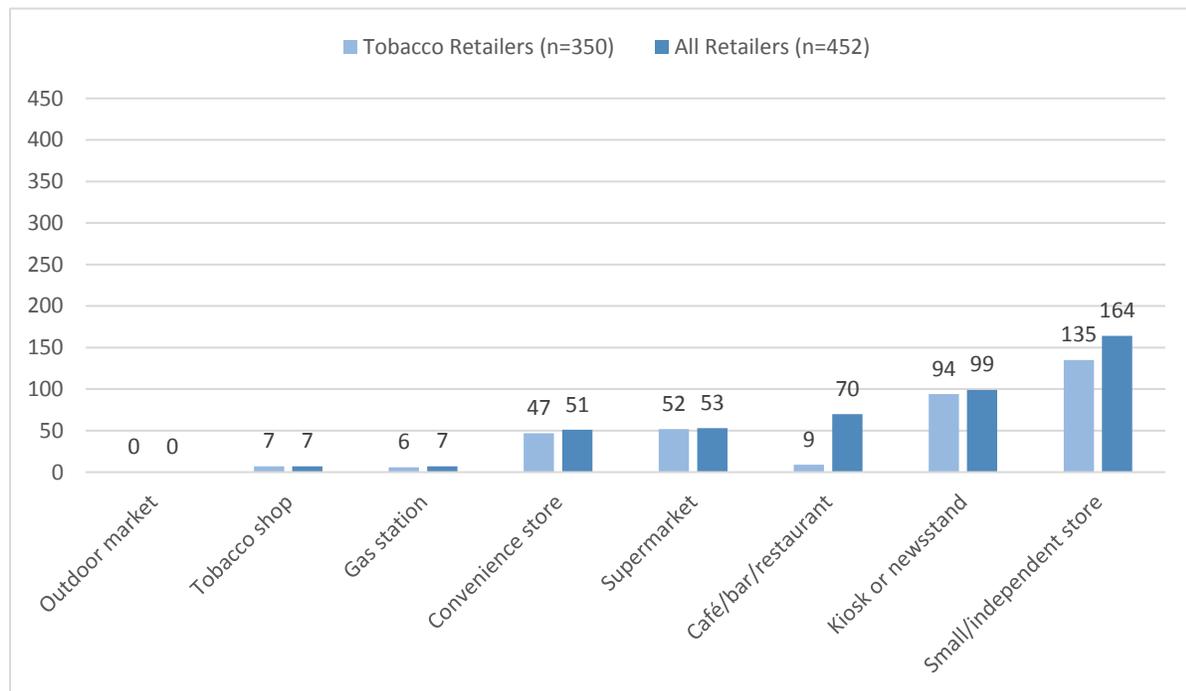
Ten data collectors attended a one-day training on the study protocol on April 10, 2017 – immediately before the data collection period. The IGTC study team explained in detail the purpose of the study, the current tobacco control law, the survey content, key terms and definitions, the Maggi software 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 of products at the eye level of children, 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 product displays, advertising, promotions, and flavor descriptors. 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

Data collectors observed 87 of the 105 school sampling areas selected and identified 452 retailers within 250 meters of a school – 77.4% (n=350) of which sold tobacco products. Nearly 27.0% (26.9%, n=94) of these tobacco retailers were located within eyesight of a school. Retailers that sold tobacco products were identified within 96.6% (n=84) of the school sampling areas observed.

Data collectors identified 164 small/independent markets, 99 kiosks/newsstands, 70 cafes/bars/restaurants, 53 supermarkets, 51 convenience stores, 7 gas stations, and 7 tobacco shops (Figure 3). Tobacco products were for sale in 82.3% of small/independent stores (n=135), 94.9% of kiosks/newsstands (n=94), 12.9% of cafes/bars/restaurants (n=9), 98.1% of supermarkets (n=52), 92.2% of convenience stores (n=51), 85.7% of gas stations, and 100.0% of tobacco shops (n=7). No outdoor markets were observed. Loose or single cigarettes were observed for sale in 14.0% (n=49) of tobacco retailers, and less than 1% of tobacco retailers sold naswar (0.9%, n=3). Tobacco products with menthol were observed in 74.0% (n=259) of tobacco retailers, and 48.9% of retailers sold cigarettes with flavor capsules (n=171)

Figure 3. Number of retailers identified



Nearly all tobacco retailers (99.1%, n=347) displayed tobacco products in their stores, and most frequently placed the displays behind the cashier zone (63.1%, n=221) (Figure 4-5). Tobacco products were also typically placed with sweets, snacks, or sugary drinks (43.4%, n=152), in the cashier zone (43.1%, n=151), and on a power wall of tobacco products (41.7%, n=146). Some retailers used lights (33.1%, n=116) or branded display stands/cabinets (31.7%, n=111).

Figure 4. Number of tobacco retailers with tobacco product displays at the point-of sale (n=350)

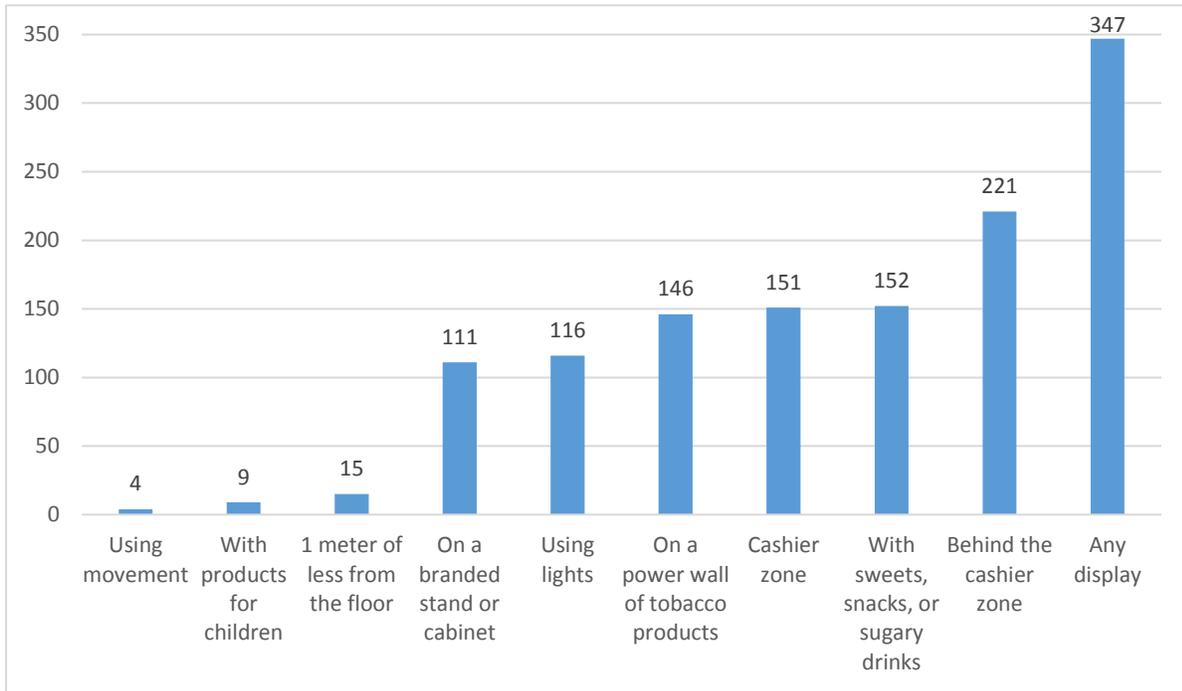


Figure 5. Tobacco product display case using lights at the point-of-sale



Nearly 80% (79.7%, n=279) of tobacco retailers used advertising signage to market tobacco products (Figures 6-7). Print signage was the most frequently observed advertising tactic (65.1%, n=228) followed by use of English words (38.6%, n=135), and use of lights (27.1%, n=95).

Figure 6. Number of tobacco retailers with advertising signage (n=350)

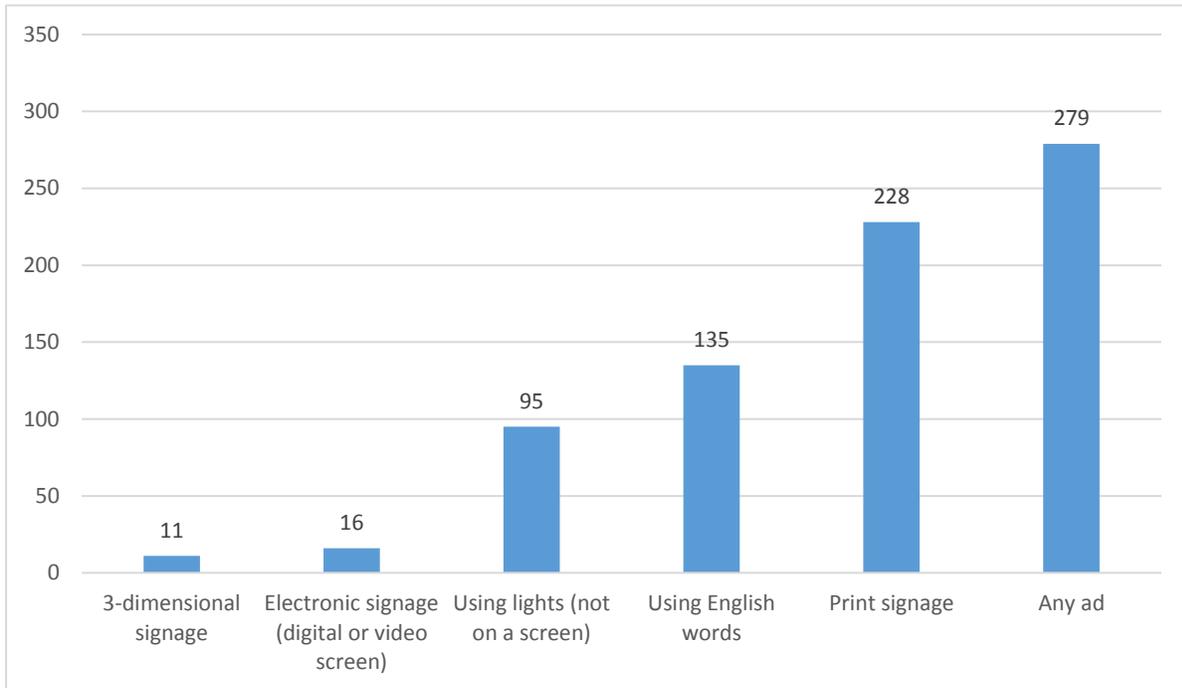
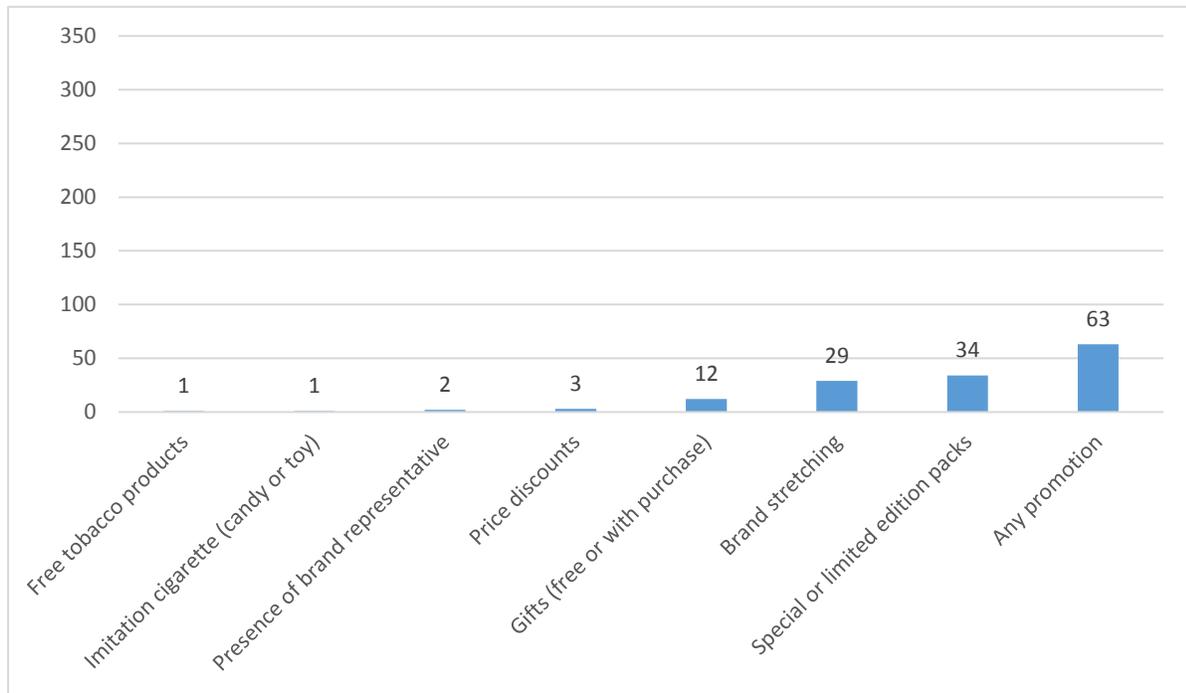


Figure 7. Tobacco advertising signage placed on a tobacco display case at the point-of-sale in a supermarket



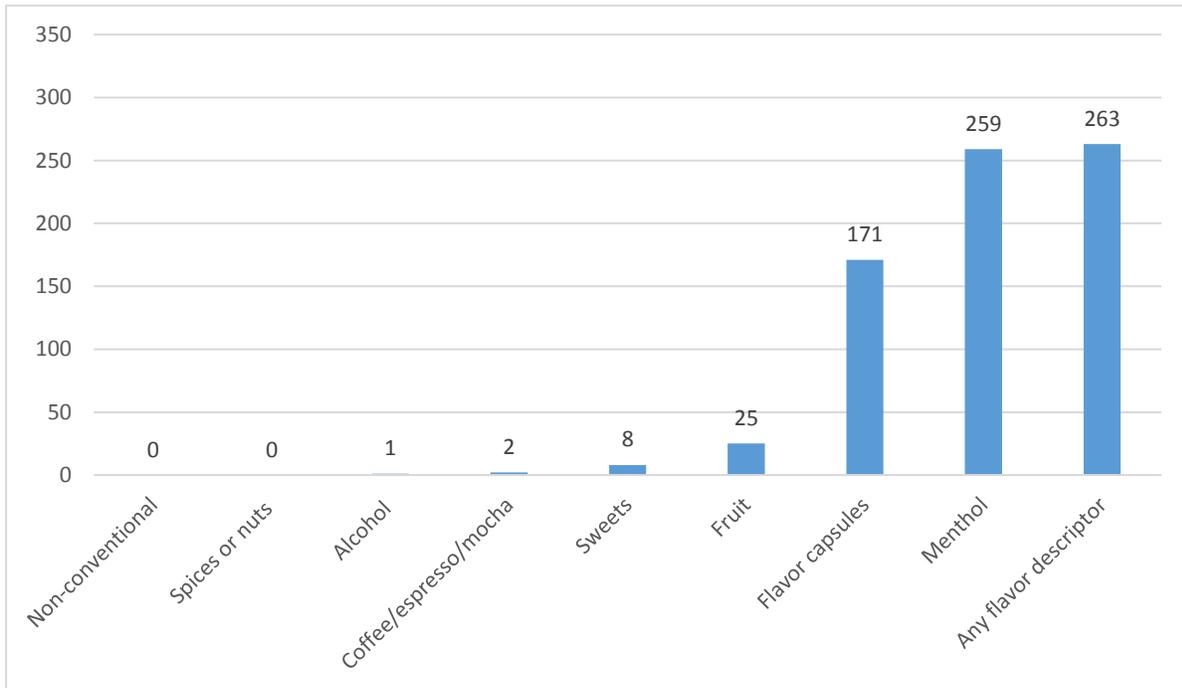
Special promotions were observed in 18.0% of tobacco retailers, which included special or limited-edition tobacco packs (9.7%, n=34), and brand stretching (8.3%, n=29) (Figure 8).

Figure 8. Number of Tobacco Retailers with Promotion of Tobacco Products (n=350)



Marketing for flavored tobacco products was observed in 75.1% of tobacco retailers (n=263) (Figure 9). Menthol was the most frequently observed flavor descriptor (74.0%, n=259), and flavor capsules were observed in 48.9%% (n=171) of tobacco retailers.

Figure 9. Number of tobacco retailers with marketing for flavored tobacco products (n=350)



Twenty-five unique tobacco brands were identified on display, advertising signage, or with special promotions, across all 350 tobacco retailers (Figure 10). Victory was the most frequently observed brand in 66.6% (n=233) of retailers, followed by Eva (59.7%, n=209), King's (56.9%, n=199), Karelia (54.0%, n=189), and Merilyn (48.0%, n=168).

Figure 10. Tobacco brands displayed at the point-of-sale (n=350)

Tobacco Brands	Tobacco Retailers (n=350)	%
Victory	233	66.6%
Eva	209	59.7%
King's	199	56.9%
Karelia	189	54.0%
Merilyn	168	48.0%
Marlboro	69	19.7%
Winston	61	17.4%
Davidoff	57	16.3%
Rothmans	56	16.0%
Dunhill	53	15.1%
Corset	36	10.3%
Camel	35	10.0%
Soberanie	22	6.3%
Falcon	12	3.4%
Ome	10	2.9%
Lucky Strike	8	2.3%
More	8	2.3%
Vogue	8	2.3%
Parliament	7	2.0%
Black Devil	5	1.4%
L&M	4	1.1%
Kent	3	0.9%
Memphis	2	0.6%
Korona	1	0.3%
Murati	1	0.3%

Tobacco marketing was visible outside of 59.1% of tobacco retailers (Figure 11-12). Tobacco product display (46.9%, n=164) and advertising signage (41.1%, n=144) were the most frequently observed marketing activities.

Figure 11. Number of tobacco retailers with tobacco advertising, promotions, or product displays visible from outdoors (n=350)

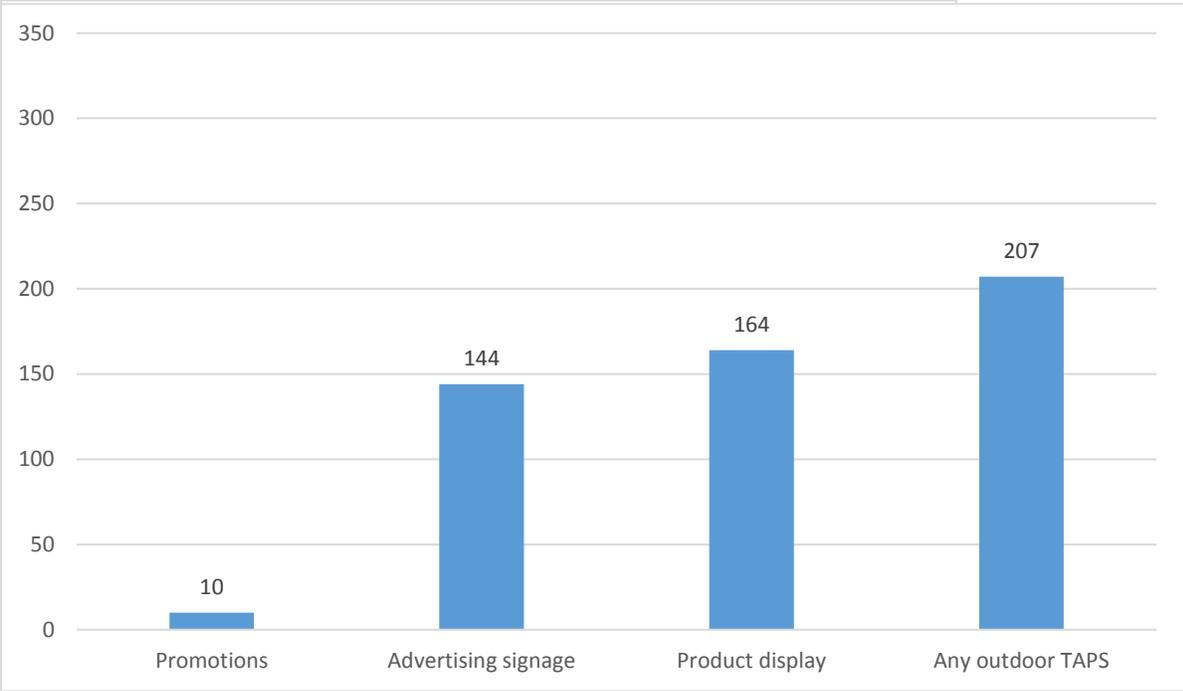


Figure 12. Tobacco product display and advertising signage placed with candy and visible outside a kiosk



Discussion

This study demonstrates that harmful tobacco products and advertisements are placed in areas that are visible and accessible to minors and near schools. Nearly all tobacco retailers displayed tobacco products and consistently placed packs in prominent areas such as the cashier zone, sometimes with lights or products that appeal to children, such as candy or soda. Two-thirds of retailers displayed or advertised flavored products (primarily menthol), which also appeal to children and facilitate the initiation of tobacco use. The use of print signage to advertise tobacco products was prevalent among tobacco retailers, and sometimes used lights or English words to attract the attention of customers. Branded display cases in nearly one third of tobacco retailers also function as a form of advertising. These tobacco product displays and advertisements were visible from outside of many retail locations. Data collectors identified 25 unique tobacco brands, which indicated a diverse market which may appeal to a variety of consumers.

Limitations

This study uses a strategic selection of neighborhoods, and a convenience sample of schools and the retail locations surrounding them. Therefore, the results may not be representative of all types of tobacco retailers or generalizable to all areas of Bulgaria.

Conclusions

Partial bans of tobacco product marketing allow the tobacco industry to exploit deficiencies or loopholes in the law by allocating their resources to mediums that are not regulated, that are poorly defined, or that are weakly enforced. In order to protect the health of all citizens, and particularly children, Bulgaria should extend the prohibition of tobacco advertising to include tobacco product display and advertising in retail locations. Product display and advertising signage are common marketing practices that are noticeable to children walking by. Prior research has demonstrated that exposure to advertising increases the likelihood that children will start smoking, and the law, as it is currently implemented and enforced, is not effectively shielding children from this potential harm. A complete and enforced ban of tobacco product display, advertising, and promotion in retail locations would comply with FCTC recommendations and more effectively achieve the goal of protecting the public from the harms of tobacco products.

Key Terms and Definitions

Advertising signage: branded print or digital/electronic media such as posters, banners, flyers, or shelf liners that are intended to promote awareness and favorable opinions of a tobacco brand or product

Brand stretching: the presence of non-tobacco items that carry a tobacco brand name

Cashier zone: directly on top of, in front of, or to the side of the counter or cash register where consumers make a purchase

Eye level of children: placement of products 1 meter or less from the ground

Power wall: an excessive display of tobacco products showing multiple packs on multiple shelves

Product display: physical packs of tobacco products that are visible to potential consumers

Reverse brand stretching: non-tobacco branding on tobacco products, advertisements, or promotions

Sponsorship: contributing to any event or activity (sporting events, concerts, etc.) to promoting a tobacco product

References

1. WHO. WHO report on the global tobacco epidemic, 2015 Raising taxes on tobacco. [Accessed 2016 Aug 17] Available at: http://www.who.int/tobacco/global_report/2015/en/
2. Federal Trade Commission. Cigarette Report for 2013. Issued 2016. [Accessed 2016 Aug 17] Available at <https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-cigarette-report-2013/2013cigaretterpt.pdf>
3. Davis RM, Gilpin EA, Loken B, Viswanath K, Wakefield MA. The role of the media in promoting and reducing tobacco use. Tobacco control monograph No. 19. (2008); 359-428.
4. WHO. Framework Convention on Tobacco Control, 2003 [Accessed 2016 Mar 11] Available at http://www.who.int/fctc/text_download/en/
5. Dewhirst T. POP goes the power wall? Taking aim at tobacco promotional strategies utilized at retail. Tobacco Control 2004; 13(3): 209-10.
6. Lovato C, Watts A, Stead LF. Impact of tobacco advertising and promotion on increasing adolescent smoking. American Journal of Public Health 2004;94(12):2081-3.
7. Thomson G, Hoek J, Edwards R, Gifford H. Evidence and arguments on tobacco retail displays: marketing an addictive drug to children? New Zealand Medical Journal 2008; 121(1276):87-98.
8. Slater SJ, Chaloupka FJ, Wakefield M, Johnston LD, O'Malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. Archives of Pediatric Adolescent Medicine 2007; 161(5):440-5.
9. Henriksen L, Feighery EC, Schleicher NC, Haladjian HH, Fortmann SP. Reaching youth at the point-of-sale: cigarette marketing is more prevalent in stores where adolescents shop frequently. Tobacco Control 2004; 13(3):315-8.
10. Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), Addictiveness and
11. Attractiveness of Tobacco Additives, 2010 WHO. Tobacco: deadly in any form or disguise. [Accessed 2016 Dec 22] Available at http://www.who.int/tobacco/communications/events/wntd/2006/Tfi_Rapport.pdf
12. WHO Study Group on Tobacco Product Regulation. WHO Technical Report Series 967, 2012
13. Tobacco Products Scientific Advisory Committee. Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations. 2011, July 21
14. WHO. Advisory note: banning menthol in tobacco products: WHO Study Group on Tobacco Product Regulation (TobReg). 2016
15. German Cancer Research Center. Additives in Tobacco Products: Contribution of Carob Bean Extract, Cellulose Fibre, Guar Gum, Liquorice, Menthol, Prune Juice Concentrate and Vanillin to Attractiveness, Addictiveness and Toxicity of Tobacco Smoking. 2012
16. Bates C, Jarvis M, Connolly G. Tobacco additives: Cigarette engineering and nicotine addiction: A survey of the additive technology used by cigarette manufacturers to enhance the appeal and addictive nature of their product. Report prepare for Action on Smoking and Health (ASH UK) and Imperial Cancer Research Fund. No date.
17. Rabinoff M, Caskey N, Rissling A, Park C. Pharmacological and Chemical Effects of Cigarette Additives. American Journal of Public Health. 2007 November; 97(11):1981-91.
18. Kostygina G, Glantz S, Ling PM. Tobacco industry use of flavours to recruit new users of little cigars and cigarillos. Tobacco Control 2014; 0:1-9. doi:10.1136/tobaccocontrol-2014-051830
19. Klausner K. Menthol cigarettes and smoking initiation: a tobacco industry perspective. Tobacco Control 2011;20(2):ii12-ii19. doi:10.1136/tc.2010.041954
20. Anderson S. Marketing of menthol cigarettes and consumer perceptions: a review of tobacco industry documents. Tobacco Control 2011;20(2):ii20-ii28. doi:10.1136/tc.2010.041939

21. Henriksen L, Schleicher NC, Dauphinee AL, Fortmann SP. Targeted advertising, promotion, and price for menthol cigarettes in California high school neighborhoods. *Nicotine & Tobacco Research* 2012;14(1):116–121. doi: 10.1093/ntr/ntr122
22. SCENIHR. Final opinion on additives used in tobacco products (Opinion 1) Tobacco Additives I. 2016 [Accessed 2016 Dec 22] Available at http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_051.pdf
23. CTFK. Tobacco Control Laws – Country Details for Bulgaria. [Accessed 2017 February 23] Available at: <http://www.tobaccocontrolaws.org/legislation/country/bulgaria/summary>
24. CIA. The World Factbook – Bulgaria. [Accessed 2017 February 23] Available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/bu.html>
25. The Tobacco World Atlas. Country Fact Sheet – Bulgaria. [Accessed 2017 February 23] Available at <http://www.tobaccoatlas.org/country-data/bulgaria/>