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ORIGINAL ARTICLES

Self-service sale of tobacco: how it contributes to youth access

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Abstract
***Objective* – To investigate the role of self-service tobacco displays in increasing youth access to tobacco through shoplifting and illegal sales.**
***Methods* – Telephone surveys were conducted with eight chain store corporate executives and 40 managers regarding tobacco product placement policies and store losses from tobacco theft. Additionally, more than 1000 high school students completed written surveys of their sources, availability, and use of tobacco. Finally, in a sample of 101 chain stores, tobacco product placement was observed, as was the propensity of stores to sell cigarettes to minors during purchase attempts.**
***Results* – To prevent shoplifting, stores restrict customers' access to cartons and to a lesser extent to packs of cigarettes. Store managers reported losses of about $1200 annually. The problem of shoplifting was corroborated by students' reports: 9.3% reported stealing cigarettes from stores as their primary means of access. Stores that allowed customers access to tobacco (61.4%) were more likely to sell tobacco to minors than stores that did not (30.6% *v* 12.8%).**
***Conclusions* – Many minors steal cigarettes from stores. They also find it easier to buy cigarettes from stores that allow self-service of tobacco products. Legislative bans on self-service of tobacco should be enacted to help reduce youth access to (and thereby use of) tobacco in two ways – by reducing shoplifting and reducing sales to minors.**

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Keywords: youth; access; self-service; shoplifting

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Introduction

Although there was considerable success in reducing adolescent tobacco use in the late 1970s and early 1980s, tobacco use among young people has remained essentially stable for the past decade,[1] or may even be on the rise.[2] The ease with which tobacco can be obtained is assumed to be a major contributor to underage tobacco use.[3-5] Various strategies used by underage smokers to obtain tobacco have been documented, including buying, borrowing, and stealing it.[2]

Documentation of the ease with which young people can purchase cigarettes has resulted in the enactment of federal legislation designed to prevent youth access to tobacco (for example, the 1993 Synar Amendment, which required states to enforce laws prohibiting the sale and distribution of tobacco products to children under 18) and an additional, unprecendented federal proposal as well (that is, the 1995 plan by the US Food and Drug Administration to reduce easy access to tobacco among children by requiring proof of age for tobacco purchase, and by eliminating cigarette vending machines, mail order sales, free samples, sales of single cigarettes, sale of packs with fewer than 20 cigarettes, and self-service displays). At the local level, many communities have eliminated cigarette vending machines, licensed tobacco retailers, and required retailers to check identification of young tobacco purchasers (written communication, Americans for Nonsmokers' Rights, 5 February 1995).

Enactment of local ordinances to eliminate self-service of tobacco products is gaining in popularity, relying on anecdotal evidence that such bans reduce youth access to tobacco (written communication, R Kropp, North Bay Health Resources Center, Stop Tobacco Access to Minors Project, 23 January 1995). Self-service sales are defined as products, in this case packs of cigarettes or containers of spit tobacco, on a rack, shelf, or kiosk that the public has access to *without* the assistance of a store employee. It is hypothesised that self-service of tobacco may contribute to youth use of tobacco in two ways: (1) promoting *shoplifting* of tobacco by young people, and (2) facilitating *illegal sales* of tobacco to the young.

Ordinances that ban self-service tobacco displays have been successfully enacted in more than 50 cities in the USA, primarily in the states of California, Minnesota, Michigan, Massachusetts, and New Jersey (written communication, Americans for Nonsmokers' Rights, 5 February 1995). However, no published reports were found on the impact of the self-service tobacco display bans on shoplifting or sales to minors of tobacco from cities with such ordinances.

SHOPLIFTING

Retailers lose an average of about 2% of their sales to merchandise shortages, about 40% of which are attributable to shoplifting.[6,7] As retail stores increasingly adopt self-service strategies, they become even more attractive targets for consumer theft. Shoplifting is a startlingly common method of acquiring goods – as many as 60% of consumers overall have shoplifted at some time in their lives.[6,7]

Shoplifting is a particularly common behaviour among adolescent consumers. A survey of 1692 adolescents found the incidence of shoplifting to be about 40% overall,[6] peaking during middle adolescence (grades 9 and 10, ages 14–16 years). Most shoplifters were males, who generally show a stronger tendency than females to break rules.[7] Cigarettes have been reported by grocery retailers as the item stolen most often from their stores.[8] In a survey of almost 8000 9th graders (14–15 years old), 44% of smokers admitted to stealing cigarettes.[9] A statewide Pennsylvania study found that about 22% of 7th graders reported stealing cigarettes, compared to 8% of 12th graders.[10]

ILLEGAL SALES TO MINORS

Until the pioneering work by Stanford University in 1988, little research had been conducted in the area of reducing the *supply* of tobacco products to young people in order to reduce their consumption of tobacco.[11] Later surveys across the nation indicated that children under 18 years of age were successful in buying cigarettes over the counter on average 67% of the time and 88% of the time from cigarette vending machines.[2]

Despite community efforts to educate retailers, the sale of cigarettes to minors remains a serious problem.[12,13] Law enforcement authorities in many communities are reluctant to enforce sales laws actively,[14] even though enforcement may be the most effective deterrent to illegal sales,[3,15] and thereby underage consumption of tobacco.[3–5]

Self-service sales of tobacco may promote smoking among young people in several ways. Self-service tobacco displays do little to remind sales clerks and customers alike that tobacco is an age restricted product. Also, a self-service environment offers no deterrence for those underage tobacco buyers who might be intimidated by a sales clerk.[16] Such interaction provides an opportunity for sales clerks to ask for and check the identification of young tobacco purchasers.

During 1993–94, Project T.R.U.S.T. (Teens and Retailers United to Stop Tobacco) of San Diego State University, conducted four small studies on two issues that bear on youth access to tobacco: cigarette shoplifting and cigarette sales to minors. Three shoplifting studies included (1) a telephone survey of corporate retail executives, (2) a telephone survey of corporate/franchise store managers, and (3) a written survey of high school students. The sales to minors study required minors to document the outcomes of their attempts to purchase packs of cigarettes at stores. The purpose of this paper is to describe the results from these four studies and to discuss how self-service of tobacco may increase underage consumption of tobacco through shoplifting and illegal sales.

Methods

CORPORATE RETAIL EXECUTIVES SURVEY

In 1994, four supermarket, three convenience store, and six gas station corporations were selling tobacco products in San Diego County. Executive representatives from all of the supermarket and convenience store chains and three gas station chains were targeted for participation in a brief telephone survey. (Executives at the remaining three gas station chains were not included in the survey as to avoid overrepresentation of one store type.) Collectively, the participating corporations represented about three quarters of the corporately owned and franchise stores located in the county.

Initial telephone calls to offices of the 10 corporate headquarters generated a list of division or district managers responsible for tobacco retail sales in the San Diego area. A trained staff member attempted to contact each of the 10 designated individuals during May 1994. The purpose of the corporate level executive survey was twofold: first to ask respondents about any company policies related to tobacco product placement or customer access; second to receive permission to contact a sample of their store managers to conduct a more in-depth telephone interview related to tobacco placement and losses due to shoplifting.

STORE MANAGER SURVEY

The 10 retail corporations targeted for inclusion in this study represented 544 area stores. A 10% stratified random sample of corporate stores was selected to participate in the store manager survey. During May and June 1994, the 54 store managers were contacted by a trained staff member on the telephone to answer a 12 item questionnaire. The purpose of the survey was to determine (a) the location of and justification for tobacco product placement, and (b) losses due to tobacco shoplifting. Respondents also provided information on store ownership (corporate or franchise).

Respondents were asked to report all locations of packs and cartons of cigarettes in their stores including placement on open shelves/racks, on locked shelves/racks, behind the counter, on the counter, or in the back room. They were also asked to report reasons for placements, including policy, theft, minors' access, store appearance, customer convenience, sales clerk convenience, and slotting fees. (Slotting fees are promotional allowances paid to retailers by tobacco distributors or company representatives for shelf space.) Store managers also were asked to answer two questions related to the theft of tobacco: (1) the percentage of losses due to tobacco shoplifting, and (2) the actual dollars lost monthly from tobacco shoplifting.

HIGH SCHOOL STUDENT SURVEY

In October 1993, 1092 9th to 11th grade students (aged 13–17 years) from five high schools in two San Diego area cities completed a 25 item self report questionnaire regarding their sources of, accessibility to, and consumption of cigarettes. These schools were selected for participation because the retailers in the area had not yet been educated by the project about tobacco sales laws. At four of the five schools, classroom teachers administered the surveys; project staff conducted the survey at the fifth school at the school's request. Because of the low prevalence of smokeless tobacco use in San Diego County,[17] survey items pertained to cigarettes only.

Items regarding students' *source* of cigarettes included the question, "Where do you *usually* get cigarettes?" Possible responses included from friends, parents, siblings, or buy or steal from a store. An item regarding *availability* of cigarettes asked, "How difficult would it be for you to buy cigarettes?" A five point Likert scale was used to determine whether purchase of cigarettes would be impossible (1) to very easy (5). An item regarding *consumption* of cigarettes asked, "In the last 7 *days*, how many cigarettes did you smoke?" Responses ranged from none (0) to more than one pack (6). Subjects also provided demographic data.

SALES TO MINORS AND TOBACCO PRODUCT LOCATION SURVEY

One hundred and nineteen corporately owned or franchise chain stores were selected for participation in the study to explore the association between tobacco placement and sales to minors. These targeted stores all were known to have participated in a 1990 intervention study to reduce illegal sales to minors, which is described in detail elsewhere.[12] Briefly, stores throughout the county received education on tobacco sales laws during three visits from project health educators over a one year period. The intervention was effective in reducing sales to minors by about one half. Corporate/franchise stores only were selected because it was believed that such stores would be more likely to have and to follow policies regarding tobacco product sales and placement location.

In May of 1994, following a 1 h training, six teenage volunteers between the ages of 14 and 17 were driven by adult volunteers to the 119 selected stores to attempt to purchase cigarettes. During the assessment, minors followed a data collection protocol used by the project since 1990 (described in previous reports[18]) to complete sales outcome reports (SOR).

Key SOR variables included (a) the attempted purchase outcome, (b) whether or not identification was requested, and (c) the location(s) of tobacco inside the store. The minors recorded the attempted purchase as either no sale (0) or sale (1). Request for identification was documented as not asked for (0) or asked for (1). The minors were also trained to observe the placement of tobacco in the store and recorded no (0) or yes (1) if packs of cigarettes were located (a) on open shelves, (b) in locked racks, (c) on unlocked racks/shelves, or (d) behind the counter.

METHODS OF ANALYSIS

In addition to simple descriptive analyses, *t* tests and χ^2 analyses were conducted to test associations between cigarette shoplifting and sales to minors and the role they play in contributing to youth access to tobacco.

Results

CORPORATE RETAIL EXECUTIVES SURVEY

Of the 10 corporate executives contacted, eight were willing to discuss company policies relating to the issues of tobacco product placement, shoplifting, and sales to minors. One executive from a gas station chain refused to discuss the issues and the other from a supermarket chain agreed to at a later date, but was unavailable thereafter. At the end of the discussion, all respondents authorised the participation of their *store managers* in another telephone survey.

With regard to policies on tobacco product placement, the store executives reported that placement was dictated by a merchandising plan (schematic) that all the corporately owned stores followed. Franchises received product placement recommendations but were not required to follow the plan. None of the corporate tobacco plans included placing products on open shelves on the sales floor.

The executives reported that in supermarkets tobacco products were generally located in open racks by the customer service desk, in locked racks (for cartons) by the checkstands, or behind the counter. In gas stations and convenience stores, cigarettes were kept most often in overhead racks behind the counter, and less often directly on the counter or just in front of the counter in view of the sales clerks. The respondents stated that most often tobacco buying customers asked sales clerks for assistance.

The most common reason provided for the current placement was theft. All corporations reported problems with pilferage. To prevent shoplifting, stores reported locking up tobacco products or keeping them in the proximity of sales clerks. Other reasons for the store policies, in order of frequency, were store image (cleaner look), slotting fees, and preventing sales to minors. There are no local ordinances, nor a state law, prohibiting self-service of tobacco in San Diego County.

Additional interesting comments provided by the corporate retail executives included: (1) cigarette companies dislike securing tobacco as it reduces shoplifting, resulting in less product movement; (2) by securing tobacco, sales profits were up in that more actual sales were occurring with less theft; (3) inconveniece to supermarket customers meant lost business as some forget to ask; and (4) some corporations had schematic agreements which described slotting fee awards according to the number and location of tobacco companys' sales racks, as well as competitors' racks.

STORE MANAGER SURVEY

Forty store managers (74% of the targeted sample) agreed to participate in the telephone survey. Those managers declining to participate indicated they were "too busy" or preferred to confirm corporate office approval. The 40 managers represented convenience stores (n = 20), gas stations (n = 10), and supermarkets (n = 10). While all of the supermarkets were corporately owned and operated, 70% of the gas stations and convenience stores were independent franchises.

According to store manager reports, placement of cartons was usually restricted but packs of cigarettes were not. Seventy percent of stores (28 of 40) reported keeping their *cartons* of cigarettes in locked cases, behind the sales counter, or in a back room completely out of customers' reach. In contrast, only 22% of stores (nine of 40) reported restricting *packs* completely from customers. Most common (42%) was the report by store managers that packs were placed both behind and on the sales counter.

Store managers' rank ordering of the seven reasons for the storage of cigarettes appears as table 1. The results indicated that cigarettes are generally stocked in places for the convenience of the sales clerk, and to prevent shoplifting.

Store managers were also asked two questions related to theft of tobacco products. All three store types reported some losses due to shoplifting of tobacco products, with no significant differences between stores. Losses due to shoplifting of tobacco averaged 16% of losses overall, about $1200 annually. One quarter of stores, only gas stations and convenience stores, reported *no* losses due to shoplifting. Yet 91% of these stores indicated that not all of their cigarette packs were locked up.

Table 1 Rank order of reported reasons for placement of packs and cartons of cigarettes (n = 40)

Reason	*Pack*	*Carton*
Clerk convenience	1	2
Shoplifting	2	1
Policy of corporation	3	4
Slotting fees	4	5
Appearance of store	5	3
Access to minors	6*	6
Customer convenience	6*	7

* Denotes a tie.

HIGH SCHOOL STUDENT SURVEY

Complete surveys were collected from 1092 students from five high schools in two neighbouring suburban cities of San Diego County. There were virtually no missing data for those who completed the brief survey, and fewer than 1% of students declined to complete the brief survey. The average age of respondents was 15.2 years, with a range of 13–17 years. Seventy three percent of the sample indicated their ethnicity as white. Equal numbers of males and females completed the survey.

When asked to identify their usual source of cigarettes, 758 (69.4%) of the students reported that they "don't get cigarettes." The remaining 334 (30.6%) of the students were then classified as current tobacco users and subsequent analyses were performed using data only from these subjects. Almost half of tobacco users (49.1%) reported *primarily* obtaining tobacco from stores through purchase. The most favoured store type by far was the liquor store (59.4%), followed by gas/convenience stores (18.9%), small markets (8.7%), vending machines (7.5%), and supermarket/variety stores (5.5%).

Although cigarettes purchased at stores were the most common source for respondents, their friends (33.5%), siblings (4.5%), and parents (3.6%) were also cited as primary sources. Almost one in 10 respondents (9.3%) reported stealing from stores as their primary means of obtaining cigarettes.

Tobacco users were then divided into two groups: (a) shoplifters, and (b) non-shoplifters. Of particular interest was to identify any demographic or behavioural differences between shoplifters and non-shoplifters. As indicated in table 2, shoplifters reported significantly greater ease in *buying* cigarettes than did non-shoplifters. Shoplifters also reported being heavier smokers, as indicated by a significantly larger number of cigarettes smoked per week. Age was not related to the method of obtaining cigarettes: all respondents were, on average, 15.5 years of age. Shoplifting, however, was a tobacco acquisition behaviour found almost exclusively (90%) among males.

SALES TO MINORS AND TOBACCO PRODUCT PLACEMENT SURVEY

Six volunteers, four females and two males, average age 14.6 years, attempted to purchase cigarettes and recorded the location of tobacco products at 119 corporately owned or franchise chain stores. The surveyors were unable to locate 18 (15%) of the stores targeted for

Table 2 Ability to purchase, and use of cigarettes by high school students. Values are means (SD)

Variable	*All students (n = 1092)*	*Smokers who do not shoplift cigarettes (n = 303)*	*Smokers who do shoplift cigarettes (n = 31)*	*t*
Ease of buying[a]	3.57 (1.32)	4.10 (0.85)	4.42 (0.89)	−1.97*
Weekly cigarette use[b]	0.75 (1.73)	2.10 (2.35)	3.58 (2.73)	−2.90†

[a] 1 = impossible, 2 = difficult, 3 = somewhat difficult, 4 = easy, 5 = very easy.
[b] 0 = none, 1 = less than 1 cigarette, 2 = 1–4 cigarettes, 3 = 5–10 cigarettes, 4 = 11–15 cigarettes, 5 = 15–20 cigarettes, 6 = more than one pack.
* $p < 0.05$.
† $p < 0.01$.

Table 3 Observed tobacco product placement in corporate/franchise stores (n = 101)

	n	%
Inaccessible to customers		
Behind counter	26	25.7
Locked racks	12	11.9
Locked racked + behind counter	1	0
Total	**39**	**38.6**
Accessible to customers		
Open shelves + behind counter	54	53.5
Open shelves	7	6.9
Unlocked racks	1	0
Total	**62**	**61.4**

Table 4 Cigarette sales to minors according to stores' tobacco product placement (n = 101)

	Sale to minor				
	Yes		*No*		*Total*
	n	%	*n*	%	(*n*)
Tobacco inaccessible to customers (ALL locked up/behind counter)	5	12.8	34	87.2	39
Tobacco accessible to customers (NOT all locked up/behind counter)	19	30.0	43	69.4	62
Total	**24**	**23.8**	**77**	**76.2**	**101**

Note: $\chi^2 = 4.20$, df = 1, $p < 0.05$.
Odds ratio = 3.0, 95% confidence interval = 1.02 to 8.86.

survey; thus the final store sample included 19 supermarkets, 32 gas stations, and 50 convenience stores, for a total of 101 stores.

Sales to minors

Overall, only 23.8% (24 of 101) stores previously educated on sales to minors laws were willing to sell cigarettes to the underage buyers. About 42% of sales clerks requested identification. Sales were significantly lower in those stores where young people were asked for identification ($\chi^2 = 18.14$, df = 1, $p < 0.001$). When identification was asked for, 41 of 42 stores (97.6%) refused to make the illegal sale. When identification was *not* requested, 23 of 59 stores (61.0%) refused to make a sale.

Product placement

As indicated in table 3, six different combinations of tobacco product placement were observed, three that completely restricted access to tobacco and three that kept at least some tobacco within customers' reach. The most common placement (53%) was a combination of open shelves (generally in front of or on the sales counter) *and* behind the sales counter. Roughly one of three stores (38.6%) kept tobacco in locations completely inaccessible to customers. Analysis of placement by store type revealed that supermarkets (84.2%) were more likely than gas stations (34.4%) or convenience stores (24%) to have their tobacco completely secured ($\chi^2 = 17.65$, df = 1, $p < 0.001$).

Product placement and sales to minors

An analysis was conducted to compare sales to minors in stores that had self-service of tobacco versus stores that did not. As indicated in table 4, stores that did not give customers access to tobacco were significantly less likely to sell cigarettes to minors (12.8%) than stores that provided customers access to tobacco products (30.6%) ($\chi^2 = 4.20$, df = 1, $p < 0.05$). Stores without self-service were also more likely to ask for identification from underage buyers (56.4%) than stores with self-service of tobacco (32.3%) ($\chi^2 = 5.74$, df = 1, $p < 0.05$).

Discussion

Analysis of the research in the past two decades indicates that to achieve tobacco use reduction among young people, no *single* approach appears to work best. Rather, a comprehensive approach that simultaneously applies multiple strategies (that is, family, clinical, school, societal) appears to be most effective in tobacco use control.[1] Societal approaches (for example, laws limiting sales to minors or advertising) have the potential to reach all young people at risk for tobacco use, unlike other approaches that target individuals.

Retailers may undermine community tobacco control efforts by promoting and selling tobacco products to underage customers. Convenience stores have been successful in merchandising tobacco products to gain market share, and now claim that 28% of sales are from tobacco, far ahead of the second place beer category (13% of sales).[20] Much of this success is attributed to self-service strategies – attractive targets for consumer theft.

According to corporate store executives, large financial losses due to tobacco shoplifting the past few years led stores to somewhat restrict customers' access to tobacco. Store managers reported keeping cartons of cigarettes out of customers' reach for about 70% of the time. Packs of cigarettes were most commonly found within view of sales clerks, both behind and on the sales counter. Overall, *all* tobacco was observed to be out of customers' reach in close to 40% of the 101 chain stores surveyed for placement and sales to minors. The trend in shoplifting of tobacco products may be attributable to the high cost of tobacco. Cigarette prices have risen on average by about 14% annually over the past 40 years, from \$0.34 to \$2.40 per pack, mostly because of increases in manufacturer price, rather than tax increases.[21]

Store managers reported losses of about \$1200 annually due to tobacco shoplifting. These losses may be offset by slotting fees paid for shelf space by tobacco companies. (Slotting fees are paid to retailers to keep a company's products in view and reach of customers.) The amount received by retailers is difficult to determine but is estimated from Federal Trade Commission reports to average \$1500 per retailer per year.[22]

It was interesting to note that one quarter of stores reported *no* losses due to shoplifting, yet these same stores did *not* report locking up all tobacco. (It is possible that shoplifting was underreported by the respondents.) Perhaps strong employee training or surveillance systems were in effect in these stores, but the study did not address such issues. Shoplifter surveys have indicated that many thieves could be deterred by tightening security or selling methods.[23] Tobacco retailers who are serious about preventing pilferage could install electronic article surveillance (EAS) systems similar to those used by department stores. With an EAS system, a product bearing an electronic tag activates an alarm when carried between sensors if not scanned at a sales register. Only about 5% of supermarkets are reported to be using an EAS system.[24] Ideally, to defray labour costs security tags would be inserted at the packaging level by manufacturers.[24] In the liquor industry, source tagging is gaining in popularity as distillers and bottlers tuck the tags under labels.[25]

The stores' reported problems with shoplifting were in part corroborated by reports from high school students on their sources of tobacco products. Of the more than 1000 high school students surveyed, about 30% reported having a source of cigarettes. Overall their most popular source was through purchase, usually from liquor stores. (It is interesting to note, however, that county health department records indicated convenience stores to be the most prevalent store type in the area. This may indicate that minors will indeed shop for tobacco where they know they will be successful.)

Alarmingly, 9.3% of smokers reported shoplifting as their primary means of obtaining cigarettes, a finding supported by the 12% shoplifting rate reported in a study of Wisconsin students.[26] Tobacco shoplifting rates of adolescents when determined from samples of in-school students may be an underestimation of the behaviour, as school drop-outs or chronically absent students tend to be heavier smokers and are more likely to be shoplifters.[27]

Shoplifting of cigarettes was a more common source than siblings and parents combined. Shoplifters, almost exclusively 15 to 16 year old males, reported significantly greater ease in buying cigarettes than other smokers. Why someone who reported no trouble buying cigarettes would steal them is uncertain. Perhaps the fact that shoplifters also reported being heavier smokers indicates a need for cigarettes (nicotine) which exceeds their budget. According to other studies, shoplifters who have reported stealing cigarettes or alcohol did so not to avoid paying but to avoid embarrassment or restrictions on purchase.[6, 23]

While shoplifting was reported by store managers to be the primary impetus for restricting tobacco product placement, and preventing sales to minors was the least likely reason, stores that voluntarily restricted customers' access to tobacco may create an environment less conducive to illegal sales to minors. In our study, stores *without* access restrictions were more than twice as likely to sell cigarettes to minors than those that kept tobacco behind the sales counter or in locked cases (about 31% and 13%, respectively). Stores without self-service were also more likely to ask for identification from buyers. When identification was asked for, virtually all of the underage purchase attempts were refused.

The policy implications of these results seem clear. To reduce minors' access to tobacco through shoplifting and illegal sales, a ban on self-service sales of tobacco is warranted. Such a policy would require that all tobacco sales transactions be made with sales clerk assistance – a policy that has public support. Not only has such an ordinance been enacted in more than 50 cities nationwide, but a national survey by the Robert Wood Johnson Foundation indicated that the public does not believe that retailers have the right to display tobacco products wherever they want. Seventy eight percent of those surveyed supported a ban on self-service displays to prevent tobacco shoplifting by minors.[28]

During conversations between this research team and local retailers faced with self-service display bans, claims were made that such ordinances would have deleterious effects on their businesses because they would cause financial loss and inconvenience to sales clerks. It is unclear how sales clerks from small stores would be inconvenienced by having to reach behind or overhead to retrieve tobacco products for customers. Larger stores such as supermarkets would need a manager or other employee to retrieve the products, as it would be unwise for sales clerks to leave their cash registers unattended. Retailers' financial well-being may be affected in three ways: increased construction costs, fewer tobacco sales overall, and loss of promotional allowances (slotting fees). Such losses, however, could potentially be offset by reductions in tobacco shoplifting costs.

Construction costs would arise from the need to modify existing shelving or purchase new shelving for behind the counter or locked storage. It is uncertain that such retrofitting costs are actually incurred by retailers. Tobacco company representatives generally provide retailers with suitable storage facilities, complete with brand logos, at no charge. Retailers are fearful that less visibility of tobacco will result in fewer sales. Yet given the powerfully addictive nature of tobacco, it is unlikely that regular (adult) smokers would be influenced by changes in how tobacco products are merchandised. While slotting fee amounts paid to retailers are difficult to ascertain, they do appear to vary by size and type of store. Fees as high as $7000 annually have been quoted for independent markets (oral communication, Beth Beeman, California Grocers' Association, 9 May 1995). Tobacco companies spent a record $6.0 *billion* dollars on advertising and promotion in 1993, 84% of which was spent on store based advertising, about one third of which was paid as promotional allowances to retailers.[22]

In summary, eliminating self-service

tobacco sales may contribute to a decline in consumption of cigarettes by minors by decreasing shoplifting and illegal sales. Eliminating self-service displays may also have two secondary positive effects. Placing the product out of reach will reinforce the message that tobacco products are not in the same class as candy or potato chips. Placing the product behind the counter may also eliminate some of the point of sale advertising displays that promote experimentation and impulse buying.[16]

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