Cigarette Type 'Switchers': A Descriptive Analysis

Dear Editor:

Tobacco price increases, such as through taxation, are an effective strategy to reduce smoking prevalence, however this strategy is undermined by both discount and contraband tobacco.¹ The discount cigarette market has grown substantially since 2003, with discount cigarettes selling for approximately \$10-15 less per carton than premium brands.² The illegal sale of contraband cigarettes has become increasingly common, providing an even cheaper source of cigarettes.³ While the cost of cigarettes has been shown to influence smokers' decisions to switch cigarette types,^{1,4,5} little is known about the nature and extent of switching, or factors that influence switching.

To examine the incidence of cigarette type switching and the characteristics of those who switch, we compared baseline to 12-month follow-up data from the Ontario Tobacco Survey, a population-based cohort of adult smokers.^{6,7} Smokers' usual brand of cigarettes was categorized as premium, discount or contraband, according to a list of discount cigarette brands⁸ and known contraband cigarettes in Ontario.⁹ Patterns of switching were examined by cigarette type at baseline. Socio-demographic and smoking-related characteristics of switchers and non-switchers were examined, adjusting for the complex survey design.

Overall, 24% of smokers switched the category of cigarette they smoked over the one-year period. One in five premium smokers switched to a lower-cost cigarette type (Table 1). Similarly, about one in five discount smokers switched cigarette types, with slightly more switching to a premium brand (13%) than to contraband cigarettes (9%). Sixteen percent of contraband smokers switched, with almost half of switchers moving to a premium brand. With 70% of switchers moving from a more expensive to a less expensive cigarette type, the overall result was a considerable decrease in the number of premium smokers, and a substantial increase in the number of contraband cigarette smokers.

Those who switched to a less expensive category of cigarette were more likely to be under the age of 45 compared to those who switched to a more expensive brand ($p < 0.01$) (Table 2). Those who switched cigarette type at either the 6- or 12-month follow-up were more likely to have less education ($p < 0.01$). The type of cigarette smoked at baseline predicted ($p = 0.07$) a change in cigarette type over the one-year period.

With approximately 1 in 4 smokers reporting that they switched the type of cigarette they smoked over a one-year period, cigarette

type appears to be relatively fluid, considering the tobacco industry is known for its high brand loyalty.¹⁰ Of note are the large number of smokers moving to contraband cigarettes, with the number of contraband smokers increasing by 45% over one year. Further, as the percentage of smokers remaining in the contraband category was highest (85%) among the three cigarette types, those who switch to contraband cigarettes are likely to remain in this group. If this pattern of switching persists, we would expect a continuing growth of the contraband cigarette market. Finally, the fact that 11% of lower-cost-cigarette smokers switched to a premium brand was unexpected. This may be attributable to the brand recognition and prestige associated with premium brands, offsetting the cost savings of the less expensive brands for some individuals. Limitations of this study include a lack of data regarding other factors that may influence an individual to change cigarette type, including changes in individual economic and social situations. While we found little difference in the socio-demographic or smoking characteristics between switchers and non-switchers, a larger-than-expected group of smokers appears unstable in the type of cigarette they smoke.

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Table 1. Cigarette Type at Baseline and One-year Follow-up (n=2243)

Cigarette Type at Baseline	Cigarette Type at One Year						Total
	Premium		Discount		Contraband		
	n*	%†	n*	%†	n*	%†	
Premium	931	79.6	150	12.5	114	7.9	1195
Discount	95	13.0	579	77.6	69	9.4	743
Contraband	20	6.9	27	8.6	258	84.5	305
Total	1046		756		441		2243

Bold figures indicate number and percentage of those who did not switch cigarette types.

* Unweighted sample size.

† Population weighted estimates.

Note: Table 1 does not display the few 'switchers' who switched their cigarette type at the 6-month follow-up, only to revert back to their original type after 12 months; however, only 3% of the total population fit these criteria, with a non-differential distribution across cigarette types. Further, only 1% of the total sample switched to a different cigarette type at both the 6-month and the 12-month follow-ups.

Table 2. Descriptive Statistics of Eligible Respondents at Baseline by Switching to More Expensive vs. Less Expensive Cigarettes (n=475), and by Cigarette Type Switching at 6- or 12-month Follow-up ('All Switchers') vs. Non-switchers (n=2243)

Baseline Characteristic	Switched to More Expensive*		Switched to Less Expensive*		All Switchers		Non-switchers	
	n†	%‡	n†	%‡	n†	%‡	n†	%‡
Sample size	142	100	333	100	547	100	1696	100
Brand type								
Premium	0	0.0	264	79.7	299	55.7	896	57.9
Discount	95	71.1	69	20.3	193	36.0	550	30.4
Contraband	47	28.9	0	0.0	55	8.3	250	11.7
Age group (years)§								
18-29	21	25.4	44	17.4	78	20.4	263	21.7
30-44	32	19.8	120	41.7	175	35.4	533	33.3
45-59	63	44.3	124	30.8	216	34.2	637	31.5
60+	23	10.6	42	10.0	72	10.0	256	13.6
Sex								
Female	94	55.4	173	43.1	316	49.3	961	48.7
Male	48	44.6	160	56.9	231	50.7	735	51.3
Education								
Less than high school	28	21.1	71	20.8	111	19.8	276	14.5
High school and some college	52	40.0	161	49.3	250	47.9	728	42.2
Completed college	61	38.9	100	29.8	184	32.4	691	43.3
Rurality								
Urban	107	84.5	236	81.2	393	81.5	1210	80.9
Rural	33	15.5	92	18.8	147	18.5	473	19.1
Smoking status								
Daily smoker	131	94.7	316	94.0	516	94.0	1589	92.8
Non-daily smoker	11	5.3	17	6.0	31	6.0	107	7.2
Heaviness of smoking index (HSI)								
Low (0-2)	40	28.7	70	24.6	129	27.7	464	32.5
Moderate (3,4)	62	51.4	135	43.7	219	43.0	699	37.9
High (5,6)	40	19.9	125	31.7	195	29.3	516	29.6
Quit intention								
No/Don't know	86	64.5	212	63.2	347	64.7	1054	65.0
Yes	56	35.5	121	36.8	200	35.3	642	35.0
Lifetime number of quit attempts								
None	21	11.6	40	14.3	71	13.0	249	16.7
One	27	21.5	67	18.7	109	20.4	380	23.3
Two or more	94	66.8	226	67.1	367	66.6	1064	60.0
Perceived addiction								
Not at all addicted	4	1.7	9	6.3	16	5.0	75	5.0
Somewhat addicted	41	31.6	75	23.9	137	28.5	428	28.5
Very addicted	97	66.7	249	69.8	394	66.6	1188	66.5

* Only includes individuals who switched cigarette type between baseline and 1 year. Unlike the 'All Switchers' column, these two columns do not include those who switched their cigarette type after 6 months, only to revert back to their original type after 1 year (n=72).

† Unweighted sample size.

‡ Population weighted estimates.

§ Chi-square $p < 0.01$ comparing switching to more expensive vs. less expensive.

|| Chi-square $p < 0.01$ comparing all switchers vs. non-switchers.

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