

# Preventing lottery ticket sales to minors: Factors influencing retailers' compliance behaviour



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# Outline



- ▣ Introduction
- ▣ Research goals
- ▣ Methodology
- ▣ Results
- ▣ Discussion
- ▣ Implications



# Introduction



- ❑ Limiting youth access: valuable and well-documented strategy for reducing adolescents' use of high-risk substances.

(Dent & Biglan, 2004; Popova & Rehm, 2008)

- ❑ Fundamental component of prevention initiatives is the establishment and enforcement of minimum-age requirements and other regulatory policies.



# Introduction



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Problems and High-Risk Behaviors

- ❑ *Here, we card / Ici, on carte* program (2002):
  - ❑ Supervised compliance checks.
  - ❑ Guidelines require for requesting ID from consumers appearing less than 25 years old.
  - ❑ Contravention is subject to a penalty (e.g., formal warning, license suspension).
  - ❑ ***N.B. Sale of lottery products to minors under 18 years of age is prohibited in Québec.***





# Introduction



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- ❑ Despite implementation, published research continues to document a high prevalence of participation in and ease of access to lottery playing amongst adolescents.

(Martin, Gupta, & Derevensky, 2007; Poulin, 2000; Radecki, 1994; Westphal, Rush, Stevens, & Johnson, 2000)

- ❑ It is of great importance to identify factors which contribute to the commercial accessibility of lottery products to minors.



# Research Goals



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- ❑ Examine the relationship between individual- and store-level factors, and vendor compliance with minimum-age legislation and age identification (ID) policies aimed at restricting youth access to lottery products.
  - ❑ Purchaser's gender
  - ❑ Vendor's gender
  - ❑ Vendor's estimated age group (younger vs. older)
  - ❑ Store ownership type (independent vs. chains/franchises)
  
- ❑ **Key purpose:** to identify factors that are related to vendor's compliance behaviour.



# Research Goals



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- ❑ Selection of factors of interest was predicated upon our current knowledge of variables that mediate tobacco and alcohol sales to minors.
- ❑ To provide perspective, the rate of vendor compliance for lottery tickets, alcohol, and the two combined were compared.



# Methodology



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- ❑ Thirteen adolescents (7 males, 6 females; mean age = 16.44 years; age range = 15 – 17 years).
- ❑ Four young adults (2 males, 2 females; mean age = 18.81; age range = 18 – 19 years).
- ❑ Each attempted to purchase a lottery ticket, a beer, or both products combined in the same 666 outlets.
  - ❑ 412 chain/franchise retail outlets
  - ❑ 254 independently-owned stores



# Methodology



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- ❑ A total of 2,730 compliance checks were completed in the greater Montreal area.
  
- ❑ Sample population limited to retailers licensed to offer both lottery products and alcohol.
  - ❑ Convenience stores ( $N = 326$ )
  - ❑ Service stations with convenience stores ( $N = 86$ )



# Methodology



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- ❑ Every sampled outlet visited a minimum of one and a maximum of six separate occasions.
- ❑ No store was visited twice by the same purchaser.
- ❑ In the vast majority of cases, each purchaser was served by a different vendor.



# Methodology



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Policies and Digital-First Initiatives

- ❑ Survey form was used to collect relevant descriptive information on four domains of interest:
  - i. Purchaser gender and age
  - ii. Vendor's gender, ethnicity, and estimated age
  - iii. Type of product purchased
  - iv. Store ownership type
  
- ❑ Purchasers were also required to record whether age ID was requested, and whether or not a sale was completed.
  
- ❑ For comparative purposes, all compliance checks followed a protocol similar to those used in previous tobacco and alcohol compliance research.



# Results



- ❏ Two measures of vendor compliance were used:

## 1. Request for ID

- ❏ Frequency that a valid piece of identification was requested during the attempted purchase of an age-restricted product.

## 2. Purchase outcome

- ❏ Frequency that a sale of an age-restricted product was refused, regardless of whether or not proof-of-age was requested.



# Results



- ❖ A moderate proportion of vendors ( $\approx 60\%$ ) complied with existing youth access statutes and policies for lottery **AND** alcohol products (Québec).
- ❖ Sales of age-restricted products were extremely low (2 – 4%) **WHEN** age ID was requested but not produced.
- ❖ Age ID was more likely to be requested for the purchase of a lottery ticket (62%) than for the purchase of a beer (55%). [ $\chi^2 (1, N = 1889) = 10.15, p \leq .01$ ]



# Results



- ❑ Attempted purchase of a lottery ticket (59%) or both products in combination (60%) resulted more often in a sale refusal than for the attempted purchase of a beer (55%). [ $\chi^2 (1, N = 1889) = 17.70, p \leq .01$  and  $\chi^2 (1, N = 1686) = 7.50, p \leq .01$ , respectively]
  
- ❑ Purchaser's gender had a strong effect on vendor compliance.
  - ❑ ♂ purchasers (61%) more likely to be asked for age ID than ♀ purchasers (57%). [ $\chi^2 (1, N = 2730) = 5.27, p \leq .05$ ]
  - ❑ ♂ purchasers (59%) more often refused purchase of restricted merchandise than ♀ purchasers (52%). [ $\chi^2 (1, N = 2730) = 11.91, p \leq .01$ ]



# Results



- ❑ Category of store ownership important factor in prohibited sales to minors.
  - ❑ Age ID requested more frequently at chain/franchise outlets (64%) than at independently-owned stores (52%).  
[ $\chi^2 (1, N = 2730) = 39.09, p \leq .001$ ]
  - ❑ Sale declined more often at chain/franchise outlets (61%) than at independently-owned stores (47%).  
[ $\chi^2 (1, N = 2730) = 46.09, p \leq .001$ ]



# Results



- ❏ Robust association between vendor gender and vendor compliance.
  - ❏ ♀ vendors (63%) more likely to request age ID from young-looking customers than ♂ vendors (56%).  
[ $\chi^2 (1, N = 2730) = 11.53, p \leq .01$ ]
  - ❏ ♀ vendors (58%) more likely to decline the sale of restricted merchandise than ♂ vendors (53%).  
[ $\chi^2 (1, N = 2730) = 5.67, p \leq .05$ ]



# Results



## *Logistic Regression Analysis for Vendor's Request for Age Identification (N=2730)*

Variable	$\beta$	S.E.	Wald $X^2$	df	Exp( $\beta$ )
Product Type <sup>a</sup>					
<b>Beer</b>	<b>-.305</b>	<b>.095</b>	<b>10.263</b>	<b>1</b>	<b>.737*</b>
Combined	-.068	.096	.507	1	.934
Store Ownership Type <sup>b</sup>					
<b>Independent</b>	<b>-.502</b>	<b>.081</b>	<b>38.617</b>	<b>1</b>	<b>.605*</b>
Purchaser Gender <sup>c</sup>					
Female	-.185	.079	5.519	1	.831*
Vendor Gender <sup>d</sup>					
<b>Male</b>	<b>-.264</b>	<b>.080</b>	<b>10.983</b>	<b>1</b>	<b>.768*</b>

Note.  $R^2 = .024$ .

Note.  $\beta$  is the parameter estimate. S.E. is the standard error. Exp( $\beta$ ) is the odds ratio.

<sup>a</sup>Lottery ticket is the reference for product type.

<sup>b</sup>Chain / Franchise is the reference for store ownership type.

<sup>c</sup>Male is the reference for purchaser gender.

<sup>d</sup>Female is the reference for vendor gender.

<sup>e</sup>Younger is the reference for vendor estimated age group.

<sup>f</sup>Male purchaser and female vendor is the reference for purchaser gender X vendor gender.

\* $p < .05$



# Results



- ❑ Significant relationship between the type of product purchased and vendors' request for age ID.
- ❑ Robust association between store ownership type and vendors' request for age ID.
- ❑ Significant association between vendor gender and vendor compliance.



# Results



## *Logistic Regression Analysis for Vendor's Sale Refusal (N=2730)*

Variable	$\beta$	S.E.	Wald $X^2$	df	Exp( $\beta$ )
Product Type <sup>a</sup>					
<b>Beer</b>	<b>-.402</b>	<b>.095</b>	<b>18.098</b>	<b>1</b>	<b>.669*</b>
Combined	-.112	.095	1.400	1	.894
Store Ownership Type <sup>b</sup>					
<b>Independent</b>	<b>-.485</b>	<b>.087</b>	<b>31.014</b>	<b>1</b>	<b>.616*</b>
Purchaser Gender <sup>c</sup>					
Female	-.277	.078	12.474	1	.758*
Vendor Gender <sup>d</sup>					
<b>Male</b>	<b>-.174</b>	<b>.079</b>	<b>4.891</b>	<b>1</b>	<b>.840*</b>
Vendor Estimated Age Group <sup>e</sup>					
Older	-.158	.085	3.445	1	.854

Note.  $R^2 = .031$ .

Note.  $\beta$  is the parameter estimate. S.E. is the standard error. Exp( $\beta$ ) is the odds ratio.

<sup>a</sup>Lottery ticket is the reference for product type.

<sup>b</sup>Chain / Franchise is the reference for store ownership type.

<sup>c</sup>Male is the reference for purchaser gender.

<sup>d</sup>Female is the reference for vendor gender.

<sup>e</sup>Younger is the reference for vendor estimated age group.

<sup>f</sup>Male purchaser and female vendor is the reference for purchaser gender X vendor gender.

\* $p \leq .05$



# Results



- ❑ Significant relationship between the type of product purchased and vendors' sale refusal.
- ❑ Important relationship between store ownership type and vendors' sale refusal.
- ❑ Robust association between vendor gender and vendor compliance.



# Discussion



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- ❑ Underage adolescents have reasonable access to alcohol and lottery products from retail outlets.
  
- ❑ Alcohol products are more accessible to young-looking customers than lottery products.
  - ❑ Enforcement activities?
  - ❑ Profit margin?
  
- ❑ Young girls find it easier to purchase age-restricted merchandise from retail outlets than boys.



# Discussion



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- ❑ Vendors in “mom-and-pop” stores much more likely to sell age-restricted merchandise to minors.
- ❑ Male vendors are much less compliant with current minimum-age legislation and age identification policies.
- ❑ Thus, particular groups of vendors appear to be more vulnerable to selling to minors.
- ❑ Requesting age ID from young-looking customers is generally an effective instrument for limiting sales of prohibited merchandise to minors.



# Implications



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- ❑ The results highlight the need to:
  - ❑ Strengthen current legislation aimed to restrict youth access to lottery and alcohol products.
  - ❑ Implement active enforcement programs (e.g., regularly scheduled compliance checks) to further enhance vendor compliance with legislation and policies.
  - ❑ Develop education and training programs that take into consideration the needs and characteristics of various vendor groups (gender, place of employment).

# Thank you



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Questions ?

