Alcohol warning label perceptions: Emerging evidence for alcohol policy

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ABSTRACT

OBJECTIVES: Patterns of alcohol and cigarette use and abuse can be considered parallels due to their similar social, biological and epidemiological implications. Therefore, the cross-fertilization of policy research, including health warnings evidence, is justified. The objective of this study was to apply the lessons learned from the tobacco health warnings and plain packaging literature to an alcohol packaging study and test whether labelling alters consumer perceptions.

METHODS: Ninety-two adults were exposed to four labelling conditions of bottles for a famous brand of each of wine, beer and hard liquor. Participants were randomly assigned to one of four labelling conditions: standard, text warning, text and image warning, or text and image warning on a plain bottle. Participants then expressed their product-based (i.e., evaluation of the products) and consumer-based (i.e., evaluation of potential consumers of the products) perceptions in relation to each label condition and were asked to recognize the correct health warning.

RESULTS: As expected, participants perceived bottles with warnings less positively as compared to standard bottles in terms of product-based and consumer-based perceptions: plain bottles showed the most consistent statistically significant results, followed by text and image warnings, and then text warnings in pair-wise comparisons with the standard bottles. Some support for the impact of plain packaging on warning recognition was also found.

CONCLUSION: Unlike previous studies, this study reveals that health warnings, if similar to those on cigarette packs, can change consumer-based and product-based perceptions of alcohol products. The study reveals the importance of serious consideration of stringent alcohol warning policy research.

KEY WORDS: Alcohol; alcohol policy; drug labelling; public policy

La traduction du résumé se trouve à la fin de l'article.

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Alcohol is socially acceptable in many cultures. The public is exposed to alcohol marketing, including TV, large billboards, and sporting events. With a marketing landscape that glamorizes alcohol, binge and heavy drinking patterns remain commonplace.[1] While education at the individual level is important, it is insufficient to limit alcohol consumption. Health behaviour theories reveal the importance of changing norms and environments in order to effectively lead to behaviour change.[2]

There has been some policy momentum to influence social norms and factors that reduce individual control for heavy and risky drinking, such as alcohol taxes, advertisement restrictions, and laws against selling alcohol to minors.[1] Despite this progress, alcohol warning labels remain an underexplored policy and research option for reducing heavy drinking. Health warnings can counteract attractive product designs, which serve as an advertisement vehicle for the alcohol industry. There are at least 20 countries with alcohol warning labels, including the US and countries in Asia, Europe and Latin America.[3] Worldwide, current alcohol warning labels have potential limitations, including the voluntary nature of labels, lenient content, poor visibility, and the lack of pictorial warnings or plain packaging.[4]

Alcohol and cigarettes share biological, epidemiological and social impacts. Therefore, this allows researchers to consider knowledge gained in the cigarette packaging literature and how it may apply to the packaging of alcohol.[4] Alcohol and cigarettes are addictive and activate dopamine-releasing systems upon sight of either an alcohol bottle or a cigarette package.[5,6] They also are associated with similar epidemiological patterns, including causal relationships with chronic diseases and effects on newborns due to maternal prenatal use.[1,4–8] Both products also have an impact on society; for instance, drinking and driving accidents and cigarette-related fires.[9,10] It is important to note that alcohol differs from cigarettes in that typically only risky and heavy drinking patterns are detrimental to health and society,[11] and there are some possible protective effects associated with alcohol, at low doses, such as against heart disease.[12]

Previous studies on alcohol warning labels used potentially problematic warnings to assess message recognition and perception change, thereby risking erroneous results and conclusions (see Al-hamdani, 2014, for a review).[4] Essentially, these studies have found that alcohol warning labels are ineffective at decreasing positive product perceptions and showed mixed results for increasing health warning recognition,

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with young adults and heavy drinkers being significantly more likely to be aware of and recall warnings.[13]

In comparison, the cigarette label literature has relied on stringent guidelines and has employed pictorial warnings as well as plain packaging in order to measure perception changes related to altered packages relative to standard packaging.[14–18] These studies revealed that the more stringent the health warning, the more negative the perceptions about the package, and the greater the warning recognition.

In this study, we applied the lessons from the tobacco label literature to alcohol packaging:[4]

- We used a concise, accurate and clear health warning: we made the participant aware that heavy drinking causes liver cancer by eliminating words that add ambiguity (e.g., "may")
- We presented a numerical risk for liver cancer survival rates to counteract false optimism (the tendency to think that something negative is going to happen to others but not oneself)
- We used pictorial warnings and plain packaging
- We used real brands and carefully altered them to reflect realism

The design for this study follows the regulatory steps of tobacco health warnings, and uses four alcohol bottles: standard, text warning, combined text and image warning on standard bottles, and combined text and image warning on plain bottles for one top-selling brand of each of beer, wine and hard liquor. The rationale for testing these three products is the expected variance in age-specific preferences – beer for instance might be the preferred drink among young adults as compared to wine. Previous alcohol label studies used knowledge-oriented scales,[13] while this study uses positive perception scales. Positive perception scales are used in this study because product packaging arguably has a positive promotional effect on consumers,[19] which could explain heavy drinking. Two positive perception scales, product-based (the mental associations related to the appearance of the product itself) and consumer-based (expected personality of an individual who regularly consumes the product), were used in this study. The two positive perception measures were used because they are validated,[18] and the results of previous studies that used the scales served as a case for strengthening warnings on cigarette packages.[16] Further, like tobacco, alcohol is a badge or identity product to which consumers are attached,[4,20] therefore, reducing that positive association could shift the consumer's focus toward health messages,[18] increase their receptivity to the warning, and increase their awareness of heavy drinking behaviour.

It is expected that because the text warning used in this study is direct, concise and conveys a clear message,[4] it will lead to some positive perception changes.

> *Hypothesis 1 - Participants who receive the text-warning bottle will have less positive product-based and consumer-based perceptions as compared to those who receive the standard bottle.*

The tobacco health warning literature has revealed that pictorial health warnings reduce package attractiveness and increase negative emotions more than text warnings,[21,22] which is the basis of the second hypothesis:

> *Hypothesis 2 - Participants who receive the combined text and image-warning bottle will have less positive product-based and consumer-based perceptions as compared to those who receive the standard bottle.*

Because plain packages with pictorial health warnings were shown to receive low positive perception scores as compared to standard packages for cigarettes,[20] the same is expected for alcohol:

> *Hypothesis 3 - Participants who receive the plain packaged bottle will have less positive product-based and consumer-based perceptions as compared to those who receive the standard bottle.*

For cigarettes, pictorial health warnings reduce the space available for brand imagery elements and increase attention to health warnings,[20,22] while plain package use dissolves brand imagery characteristics and further increases consumers' attention to health warnings,[4] which leads to the expectation that:

> *Hypothesis 4 - Participants who receive the combined text and image-warning bottle or plain packaged bottle will be more likely to recognize the health warning on the bottle as compared to those who receive the text health-warning bottle.*

METHODS

Design

The study used a 3 (Alcohol type: beer, wine and hard liquor) × 4 (Packaging level: standard, text warning, combined text and image warning, and combined text and image warning on plain packaged bottles) mixed design where the alcohol type is a within-subjects variable and the packaging level is a between-subjects variable. The text warning read *"Heavy drinking causes liver cancer. Your chances for a 5-year survival from the disease are 3% when caught in its late stages"*, and the image was that of a liver cancer.* The standard bottles were unaltered commercial bottles. The text-warning bottles included a warning that occupied 25% of the front body area of the bottles; the text and image-warning bottles included a warning that occupied 50% of the front body area of the bottles; and the plain bottles included a text and image warning that occupied 50% of the front body area of the bottle and removed brand imagery elements such as bottle seals and logos, and used a standardized font for the name of the brand and all its text descriptors (see Figure 1).

Participants

The participants ($N = 92$) included an adult convenience sample of students from two medium-sized universities as well as employees from a large hospital, in Nova Scotia, Canada, in order to diversify our sample: 39.8% were hospital employees and 60.2% were students. The mean age was 36.4 (SD = 13.3); 38.6% had an undergraduate degree and 66.2% were female. Participants

* We sought a legal opinion on intellectual property and trademark before using the images in this study, and the images are not included in the body of this paper to avoid targeting any brands.

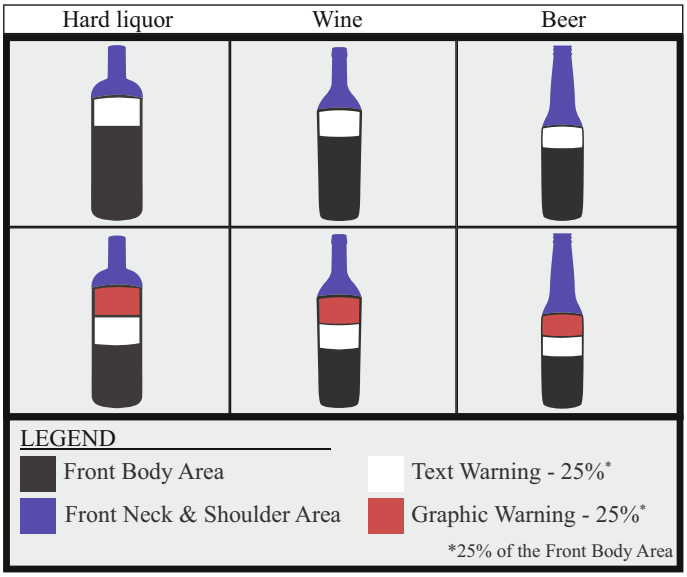

Figure 1. Surface area of the text and image warnings

learned about the study through posters placed at all the organizations and electronic screen ads in two of the three organizations. Employees and senior students were entered into a prize draw. First-year students were offered bonus points toward their courses.

Procedure

The study was completed online. Participants completed a demographic questionnaire and were randomly assigned to one of the four labelling conditions for each of beer, wine and hard liquor. Participants then saw each assigned alcohol image separately and answered questions before moving on to the next image. The images were pilot tested to ensure that participants would be able to easily see and understand the health warning and other aspects (e.g., name of the brand, logos). Participants then completed product-based and consumer-based perception scales for each alcohol type. Next, participants were asked to identify the correct health warning from a choice of four warnings (two liver cancer and two liver cirrhosis warnings). The warning was the same on all the alcohol types and in all labelling conditions. Participants completed the same task for each type of alcohol. Participants were then briefed on the purpose of the study and those eligible were offered the opportunity to enter the draw.

Measures

The perception measures were adapted from Wakefield et al.[18] to fit alcohol rather than smoking perceptions. The measures were based on a 5-point Likert scale from "Strongly Disagree" 1 to "Strongly Agree" 5. The study sample's reliability coefficients of the two scales for each alcoholic product were as follows:

1. Positive product-based perceptions – (Hard Liquor $\alpha = 0.88$; Wine $\alpha = 0.90$; Beer $\alpha = 0.83$);
2. Positive consumer-based perceptions – (Hard Liquor $\alpha = 0.87$; Wine $\alpha = 0.81$; Beer $\alpha = 0.90$).

The positive product-based perceptions consisted of three items and were presented as:

> *Based on **only the physical look** of the alcohol product I just saw, I think the alcohol product: "is attractive relative to the products I have seen before", "is a product that has the potential to be popular among consumers", "is a product that I might try."*

The positive consumer-based perceptions consisted of five items and were presented as:

> *When I saw the **alcohol product that was displayed to me,** I associated it with someone who is: "trendy", "young", masculine", "sociable", "confident."*

In addition to the two perception scales, the participants were asked a multiple choice question to identify the correct health warning. The responses were grouped into correct and incorrect choices to allow for binary logistic regression analysis.

Analysis

The analyses in this study involved one-way ANOVA, with *t*-tests for pair-wise comparisons to test perceptions; and logistic regression, with odds ratios for comparing correct versus incorrect responses regarding health warning recognition. Both analyses were performed using SPSS version 19.0.

RESULTS

On average, participants looked at each image for 49 seconds. Participants were accurate in their health warning recognition approximately 1/3 of the time (27.2%, 41% and 36.6% accuracy for beer, hard liquor and wine bottles respectively). The majority (91.1%) of participants drank at least one drink/week with an average consumption of 4–5 drinks/week. The most preferred alcoholic beverage was wine (40.7%), followed by beer (32.1%) and hard liquor (27.2%). Age did not have a significant effect on person-based or consumer-based perceptions. There were no differences between males and females in terms of perceptions, except that females had significantly higher product-based perceptions for wine (Females: M = 2.78, SD = 0.84; Males: M = 1.22, SD = 0.20, $p < 0.05$). Neither age nor sex had an effect on health warning recognition.

Perceptions and health warning recognition

Packaging level had an influence on product-based perceptions (hard liquor: $F(3, 79) = 23.0$, $p < 0.05$, partial $\eta^2 = 0.466$; wine: $F(3, 77) = 8.1$, $p < 0.05$, partial $\eta^2 = 0.241$; beer: $F(3, 76) = 5.2$, $p < 0.05$, partial $\eta^2 = 0.169$) and consumer-based perceptions (hard liquor: $F(3, 79) = 8.0$, $p < 0.05$, partial $\eta^2 = 0.233$; wine: $F(3, 77) = 3.6$, $p < 0.05$, partial $\eta^2 = 0.123$; beer: $F(3, 76) = 3.2$, $p < 0.05$, partial $\eta^2 = 0.112$). Table 1 provides a summary of the mean comparisons among bottles with each packaging level for each alcoholic product.

As shown in Table 1, hypothesis 1 was partially supported as the mean product-based perceptions were lower for the hard liquor bottle with the text warning (M = 3.19, SD = 0.94) as compared to the standard bottle (M = 3.88, SD = 0.49). Consistent with hypothesis 2, mean perception scores were lower with the combined text and image warning versus the standard bottles for the two perceptions, across all types of alcohol, with the

Table 1. Mean comparisons for standard bottles versus other bottles by perception measure

Perception measure	Packaging level			
	Standard	Text	Text and image	Text and image (plain)
	M	M	M	M
Product-based				
Hard liquor	3.88	3.19*	1.98*	2.08*
Wine	3.60	3.39	2.48*	2.48*
Beer	3.61	3.48	2.96*	2.54*
Consumer-based				
Hard liquor	3.38	2.86	2.39*	2.47*
Wine	3.12	2.85	2.45*	2.57*
Beer	3.62	3.51	3.21	2.37*

*The mean value is significantly different from its standard bottle mean counterpart at $p < 0.05$.

exception of consumer-based perceptions for beer bottles (Standard: M = 3.62, SD = 0.57; Text and image: M = 3.21, SD = 0.87). Consistent with hypothesis 3, the mean perception scores were lower with the plain-labelled bottles versus the standard bottles for the two perceptions. Hypothesis 4 was partially supported as the odds of recognizing a health warning on a plain labelled bottle of wine, as compared to its standard counterpart, were 7.5 times higher [($\chi^2(2)$, $N = 60$) = 6.89, $p < 0.10$].

DISCUSSION

This is the first experiment that utilizes evidence-based health warnings on alcohol bottles, developed from the more established tobacco health warnings literature. The results of this study support the use of alcohol health warnings to alter consumer-based and product-based perceptions, which serve as a proxy of increased awareness and receptivity to health warnings on alcohol bottles by enhancing consumer's positive identification with the product.[4,13,16,18–20]

Two findings of this study are worth noting. First, the study found strong evidence that text and image warnings decrease positive product-based and consumer-based perceptions. This finding reveals that unlike previous studies that used weak health warnings,[4] stronger text and image warnings on standard bottles as well as plain packaging alter perceptions. These results mirror those of cigarette packaging studies where text and image warnings and plain packages resulted in decreased positive perceptions about cigarettes.[14–18] The results also serve as a call for researchers to conduct future studies – particularly, large-scale population-based studies – before confirming that alcohol health warnings are effective in forming negative consumer-based and product-based perceptions. This study had a small sample, but the results were generally consistent regardless of the type of alcohol bottle used, and the age and sex of the participants. Importantly, this study focused on perceptions of consumer products, and not how attitudes and perception impact actual health behaviours. Thus our research further highlights the need to explore the link between perceptions and drinking behaviour. Nevertheless, previous research has demonstrated a link between perceptions and specific health behaviours.[23–25]

The second key finding pertains to the fact that exposure to text and image health warnings on a plain wine bottle, as compared to its standard counterpart, increased the odds for health warning recognition. This finding resembles those in the cigarette warning literature, where plain packages increased health warning recognition.[14] This finding also reveals the importance of stringent alcohol labelling in increasing health warning recognition. Again, more alcohol health warning recognition studies are needed before confirming the effectiveness of alcohol warning labels because we were only able to retain 60 participants from the original sample. The reduction in the sample size for the recognition question is possibly due to the fact that some participants could not recognize the correct warning and chose to refrain from answering the question.

Two unexpected findings were related to hypotheses 1 and 4. For hypothesis 1, which suggested that text warnings would result in lower perception scores as compared to standard bottles, only text warnings on the hard liquor bottle resulted in significantly lower positive product-based perceptions. This suggests that text warnings have a weaker effect as compared to combined text and image warnings. Hypothesis 4 suggested that health warning recall will be higher for combined text and image warnings as compared to text-warning bottles, yet health warnings were only recalled on plain bottles. However, this may be because they strip the product of imagery and thus focus attention on the text. It is not clear why the result was significant for wine and not beer or hard liquor. Potentially, the plain wine bottle had weaker brand imagery features as compared to the plain hard liquor and beer bottles, which maintained condensation drops for the former and a distinctive lid and neck shape for the latter.

Limitations and future directions

There are five potential limitations to this study. The study did not include individuals with low socio-economic status, who tend to engage in heavy alcohol drinking patterns.[26] However, university students engage in such drinking patterns,[27] thereby mitigating this issue. Future studies might consider a more representative sample. Notwithstanding the above, given the relative lack of impact of age and sex on perception and recognition outcomes in this study, we might expect to see consistent results across other samples, as the characteristics of a sample could vary but basic psychological process (perceptions and impact of warning labels) would remain unchanged.[28]

A second potential limitation is that this study did not examine the impact of branding on perceptions. However, the cigarette packaging literature reveals that branding does not influence perceptions.[18] which suggests that alcohol branding may not affect perceptions. Future studies should nonetheless explore the impact of alcohol branding on perceptions.

Third, this study did not explore the impact of plain packaging levels on perceptions and health warning recognition. The inclusion of plain packaging levels in this study's design would have complicated its analyses. Thus, a future study should explore the impact of plain packaging levels on alcohol perceptions and health warning recognition. The tobacco packaging literature has shown that higher levels of plain packaging lead to less favourable perceptions.[16–18] and increase health warning recognition.[14–17]

Fourth, the participants were given health warning choices that are similar to each other, all related to liver disease. We suspect

that the results of the recognition test would have been stronger if the participants were given choices that were more distinct.

Finally, the effect of the pictorial health warnings could be due to their larger size alone and not the fact they included an image, therefore, future comparisons of same-size text warnings and pictorial warnings are warranted.

CONCLUSION

Evidence-based alcohol health warnings can be effective in decreasing positive product-based and consumer-based perceptions. Plain labelling and combined text and image warnings seem to have a stronger effect on alcohol consumers than the use of texts only. Plain labels also resulted in increased recognition of health warnings on wine bottles. The findings of this study support the exploration of improved alcohol health warnings in alcohol policy research.

REFERENCES

1. Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. *Alcohol: No Ordinary Commodity*. (2nd ed.). Oxford, England: Oxford University Press, 2010.
2. Hagger MS, Chatzisarantis NL. Integrating the theory of planned behaviour and self-determination theory in health behaviour: A meta-analysis. *Br J Health Psychol* 2009;14(Pt 2):275–302. PMID: 18926008. doi: 10.1348/135910708X373959.
3. IARD. *Health Warning Labelling Requirements*. 2015. Available at: http://www.iard.org/Policy/Policy-Resources/Policy-Tables-by-Country/Health-Warning-Labeling-Requirements (Accessed July 15, 2015).
4. Al-hamdani M. The case for stringent alcohol warning labels: Lessons from the tobacco control experience. *J Public Health Policy* 2014;35(1):65–74. PMID: 24257632. doi: 10.1057/jphp.2013.47.
5. Drobes DJ. Concurrent alcohol and tobacco dependence: Mechanisms and treatment. *Alcohol Res Health* 2002;26(2):136–42.
6. Robinson TE, Berridge KC. The neural basis of drug craving: An incentive-sensitization theory of addiction. *Brain Res Rev* 1993;18(3):247–91. PMID: 8401595. doi: 10.1016/0165-0173(93)90013-P.
7. Proctor RN. *Golden Holocaust: Origins of the Cigarette Catastrophe and the Case for Abolition*. Berkley, CA: University of California Press, 2012.
8. Rehm J, Room R, Monteiro M, Gmel G, Graham K, Rehm N, et al. Alcohol Use: Chapter 12. In: Rehm J et al. (Eds.), *Comparative Quantification of Health Risks*. WHO, 2012. Available at: http://www.who.int/publications/cra/chapters/volume1/0959-1108.pdf (Accessed November 9, 2014).
9. Flegel K, MacDonald N, Hébert PC. Binge drinking: All too prevalent and hazardous. *CMAJ* 2011;183(4):411. PMID: 21242265. doi: 10.1503/cmaj.110029.
10. Sacks JJ, Nelson DE. Smoking and injuries: An overview. *Prev Med* 1994; 23(4):515–20. doi: 10.1006/pmed.1994.1070.
11. Hamajima N, Hirose K, Tajima K, Rohan T, Calle EE, Heath CW Jr, et al. Alcohol, tobacco and breast cancer–Collaborative reanalysis of individual data from 53 epidemiological studies, including 58,515 women with breast cancer and 95,067 women without the disease. *Br J Cancer* 2002;87(11): 1234–45. PMID: 12439712. doi: 10.1038/sj.bjc.6600596.
12. Bagnardi V, Zatonski W, Scotti L, La Vecchia C, Corrao G. Does drinking pattern modify the effect of alcohol on the risk of coronary heart disease? Evidence from a meta-analysis. *J Epidemiol Community Health* 2008; 62(7):615–19. PMID: 18559444. doi: 10.1136/jech.2007.065607.
13. Stockwell T. *A Review of Research into the Impacts of Alcohol Warning Labels on Attitudes and Behaviour*. Victoria, BC: University of Victoria, Centre for Addictions Research of BC, 2011.
14. Al-hamdani M. The effect of cigarette plain packaging on individuals' health warning recall. *Healthc Policy* 2013;8(3):68–77. PMID: 23968628.
15. Beede P, Lawson R. The effect of plain packages on the perception of cigarette health warnings. *Public Health* 1992;106(4):315–22. PMID: 1529094. doi: 10.1016/S0033-3506(05)80425-1.
16. Germain D, Wakefield MA, Durkin SJ. Adolescents' perceptions of cigarette brand image: Does plain packaging make a difference? *J Adolesc Health* 2010;46(4):385–92. PMID: 20307829. doi: 10.1016/j.jadohealth.2009.08.009.
17. Munafò MR, Roberts N, Bauld L, Leonards U. Plain packaging increases visual attention to health warnings on cigarette packs in non-smokers and weekly smokers but not daily smokers. *Addiction* 2011;106(8):1505–10. PMID: 21401767. doi: 10.1111/j.1360-0443.2011.03430.x.
18. Wakefield MA, Germain D, Durkin SJ. How does increasingly plainer cigarette packaging influence adult smokers' perceptions about brand image? An experimental study. *Tob Control* 2008;17(6):416–21. PMID: 18827035. doi: 10.1136/tc.2008.026732.
19. Perreault WD, McCarthy EJ. *Basic Marketing: A Global-Managerial Approach*. (13th ed.). Boston, MA: Irwin/McGraw-Hill, 1999.
20. Hammond D. Health warning messages on tobacco products: A review. *Tob Control* 2011;20:327–37. PMID: 21606180. doi: 10.1136/tc.2010.037630.
21. Hammond D, Fong GT, Borland R, Cummings KM, McNeill A, Driezen P. Text and graphic warnings on cigarette packages: Findings from the International Tobacco Control Four Country Study. *Am J Prev Med* 2007;32(3):202–9. PMID: 17296472. doi: 10.1016/j.amepre.2006.11.011.
22. Kees J, Burton S, Andrews JC, Kozup J. Tests of graphic visuals and cigarette package warning combinations: Implications for the framework convention on tobacco control. *J Public Policy Marketing* 2006;25(2):212–23. doi: 10.1509/jppm.25.2.212.
23. Ajzen I, Fishbein M. Understanding attitudes and predicting social behaviour. *Adv Exp Soc Psychol* 1980;20:1–63.
24. McMillan B, Conner M. Applying an extended version of the theory of planned behavior to illicit drug use among students. *J Appl Soc Psychol* 2003;33:1662–83. doi: 10.1111/j.1559-1816.2003.tb01968.x.
25. Terry DJ, O'Leary JE. The theory of planned behaviour: The effects of perceived behavioural control and self-efficacy. *Br J Soc Psychol* 1995; 34:199–220. PMID: 7620846.
26. Mäkelä P, Paljärvi T. Do consequences of a given pattern of drinking vary by socioeconomic status? A mortality and hospitalisation follow-up for alcohol-related causes of the Finnish Drinking Habits Surveys. *J Epidemiol Community Health* 2008;62(8):728–33. PMID: 18621959. doi: 10.1136/jech.2007.065672.
27. Kypri K, Cronin M, Wright CS. Do university students drink more hazardously than their non-student peers? *Addiction* 2005;100(5):713–14. PMID: 15847629. doi: 10.1111/j.1360-0443.2005.01116.x.
28. Rosenthal R, Rosnow RL. The characteristics of volunteers for research participation: The resulting artifacts, and procedures for estimating and reducing bias. In: *The Volunteer Subject*. New York, NY: Wiley, 1975; pp. 198–99.

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RÉSUMÉ

OBJECTIFS : Les habitudes de consommation et d'abus pour l'alcool et la cigarette peuvent être considérées comme étant parallèles en raison de leurs répercussions sociales, biologiques et épidémiologiques semblables. L'enrichissement mutuel de la recherche stratégique sur l'alcool et la cigarette, y compris les données probantes sur les mises en garde sanitaires, est donc justifié. Notre étude visait à appliquer les leçons tirées des études sur les mises en garde sanitaires et la banalisation des emballages des produits du tabac á une étude sur l'emballage de l'alcool, et de tester si l'étiquetage modifie les perceptions des consommateurs.

MÉTHODE : Quatre-vingt-douze adultes ont été exposés à quatre formules d'étiquetage des bouteilles de marques connues de vin, de bière et d'une boisson fortement alcoolisée (une marque chacune). Les participants ont été exposés de façon alêatoire à l'une de quatre formules d'étiquetage : étiquette standard; texte de mise en garde; texte et image de mise en garde; ou texte et image de mise en garde sur une bouteille banale. Les participants ont ensuite exprimé leurs perceptions fondées sur le produit (évaluation du produit) et fondée sur les consommateurs du produit (évaluation des consommateurs possibles du produit) pour chaque formule d'étiquetage, et on leur a demandé d'identifier la mise en garde sanitaire correcte.

RÉSULTATS : Comme prévu, les participants ont eu une perception moins positive des bouteilles avec mise en garde que des bouteilles standard, tant pour ce qui est du produit que des consommateurs du produit; les bouteilles banales ont donné les résultats significatifs les plus constants, suivies des bouteilles avec texte et image de mise en garde, et enfin des bouteilles avec texte de mise en garde seulement, selon les comparaisons par paire avec les bouteilles standard. Nous avons aussi recueilli des preuves à l'appui de l'impact de la banalisation des emballages sur la reconnaissance des mises en garde.

CONCLUSION : Contrairement aux études antérieures, celle-ci révèle que les mises en garde sanitaires, si elles sont semblables à celles que l'on trouve sur les paquets de cigarettes, peuvent changer les perceptions des produits alcoolisés fondées sur le produit et sur les consommateurs du produit. Notre étude montre l'importance de songer sérieusement à faire de la recherche stratégique sur le resserrement des mises en garde sur l'alcool.

MOTS CLÉS : alcool; politique sur l'alcool; étiquetage de médicament; politique publique