

Alcohol-Branded Merchandise and Alcohol Consumption in Thai Youth: a Loophole for Brand Advertising and Legislations Crisis in Thailand

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Abstract

Although Thailand has a policy to regulate advertising of alcohol products, ABM has been used as a marketing tool of alcohol industries to implicitly promote their alcohol products and images. This seems to be a loophole of alcohol control policy and there is little research exploring relationship between ABM and alcohol consumption. The objectives of this study are to examine exposure, recognition and ownership of ABM among Thai youths and their associations with alcohol-related attitudes and behaviors. A cross-sectional study was conducted in from five provinces in Thailand ($n=1,351$). Self-administered questionnaires were provided for data collecting with samples of ABM products as relevant materials to help student recall. The study used logistic regression analysis to identify any associations. Of the total sample, almost half of the students were exposed to ABM every day. Forty percent (40%) of the students highly recognized ABM, for example they correctly identified brands and logos of alcohol products. Eighty-five percent (85%) of them owned ABM with an average of four items per person. The study results illustrate that ownership and preference of ABM are related to alcohol consumption. Therefore, regulation of ABM should be included in alcohol policy like other alcohol marketing approaches.

Keywords: Alcohol-Branded Merchandise, alcohol, youth, Thailand

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บทคัดย่อ

แม้ว่าประเทศไทยมีกฎหมายในการควบคุมการโฆษณาของผลิตภัณฑ์เครื่องดื่มแอลกอฮอล์สิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์สูกันนำมาใช้เป็นเครื่องมือทางการตลาดของอุตสาหกรรมเครื่องดื่มที่มีแอลกอฮอล์เพื่อส่งเสริมการขายและพาลักษณ์ของผลิตภัณฑ์เครื่องดื่มแอลกอฮอล์ การสื่อสารการตลาดดังกล่าวถือเป็นช่องทางของกฎหมายควบคุมเครื่องดื่มแอลกอฮอล์ และการศึกษาความสัมพันธ์ของสิ่งของที่มีตราสัญลักษณ์เครื่องดื่มแอลกอฮอล์กับการบริโภคเครื่องดื่มแอลกอฮอล์นั้นยังมีอยู่อย่างจำกัด การศึกษานี้จึงมีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ของการเปิดรับการจำได้ และการเป็นเจ้าของสิ่งของที่มีตราสัญลักษณ์เครื่องดื่มแอลกอฮอล์กับทัศนคติและพฤติกรรมที่เกี่ยวข้องกับเครื่องดื่มแอลกอฮอล์ของเยาวชนไทย

การศึกษาแบบภาคตัดขวางโดยดำเนินการในจังหวัดของประเทศไทย (กลุ่มตัวอย่าง จำนวน 1,351 คน) เก็บรวบรวมข้อมูลจากการใช้แบบสอบถามให้กับกลุ่มตัวอย่างตอนกลางวันและมีตัวอย่างของสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์เพื่อทดสอบการจำได้ของนักเรียน วิเคราะห์ข้อมูลโดยใช้สถิติการทดสอบโดยโลจิสติกเพื่อศึกษาความสัมพันธ์ดังกล่าว ผลการศึกษา พบว่า กลุ่มตัวอย่างเกือบครึ่งหนึ่งเปิดรับสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์ทุกวัน ร้อยละ 40 ของนักเรียนจำได้สิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์ได้เป็นอย่างดี ร้อยละ 85 ของกลุ่มตัวอย่างเป็นเจ้าของสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์ และกลุ่มตัวอย่างเป็นเจ้าของสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์เฉลี่ย 4 ชิ้นต่อคน ผลการศึกษาแสดงให้เห็นว่า ความเป็นเจ้าของและความชอบสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์มีความสัมพันธ์กับการบริโภคเครื่องดื่มแอลกอฮอล์ ดังนั้น มาตรการควบคุมสิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์ควรจะรวมอยู่ในนโยบายเครื่องดื่มแอลกอฮอล์ เช่นเดียวกับวิธีการสื่อสารการตลาดเครื่องดื่มแอลกอฮอล์ในรูปแบบอื่นๆ ด้วย

คำสำคัญ: สิ่งของที่มีตราสัญลักษณ์ของเครื่องดื่มที่มีแอลกอฮอล์, เครื่องดื่มแอลกอฮอล์, เยาวชน, ประเทศไทย

Introduction

In 2011, a national survey reported that the alcohol consumption prevalence rate in Thailand to be 31.5% among those aged 15 years and above. The proportion of alcohol consumption in the 25-29 age groups was 77%, 15-24 was 15% and over 60 years was 8%. The result showed that about 82% of all alcohol consumers were males. The prevalence of youth drinkers, aged 15-24 years old, increased from 21.6% in 2001 to 23.7% in 2011. It is noteworthy that the prevalence of alcohol consumption rose by 9.5%, or 1% increase per year, during the ten-year period (National Statistical Office of Thailand, 2011). However, the alcohol consumption prevalence of the elderly and the working group, those over 60 years and 25-29 years, declined from 20% to 16.6% and 39.9 to 37.3%, respectively. Additionally, among adolescents, 2.5 million are current drinkers (Center for Alcohol Studies Thailand, 2013).

In Thailand, alcohol has been estimated to be important significant health risk factor affecting overall disability adjusted life years (DALYs), with 15.7% attributed to alcohol consumption. Moreover, there is a significant gender difference for alcohol-related DALYs. Alcohol ranks third as a health risk factor for Thai males (at 8.7% of DALYs) and 11th for women (1.0%) (Thai Working Group on Burden of Disease, 2009).

Thailand has several measures to control alcohol consumption covering four areas. To control accessibility the sale of alcohol is limited to 11.00-14.00 and 17.00-24.00 hrs. Alcohol purchasers and drinkers must be at least 20 years old, and alcohol is banned from being sold in certain places such as educational institutes, temples, and gas service stations (The Alcohol Beverage Control

Act B.E. 2551 [2008], 2008). This law aims to reduce the impact from alcohol in three areas:

1) reduce the number of new drinkers by increasing the legal drinking age, (National Statistical Office of Thailand, 2011),

2) reduce the overall consumption by the population, and

3) reduce harm from alcohol consumption such as accidents, violence and health problems (Thai Working Group on Burden of Disease, 2009 ; Thai Health Promotion Foundation and Stopdrink Network, 2003).

In addition, the current alcohol advertising policy prohibits any advertising of the products (Section 32 in the Alcohol Beverage Control Act B.E. 2551 [2008], 2008). The regulation of alcohol marketing, revised in 2003, covers three aspects of advertising: sites of promotion (National Statistical Office of Thailand, 2011), which prohibits billboard promotions in areas near educational institutions (Center for Alcohol Studies Thailand, 2013); time of promotion, which bans broadcast advertisements between 5 a.m. and 10 p.m. (Ministerial Regulation: Criteria and Conditions for Displaying the Symbol for Advertising or Public Relations of Alcoholic Beverage B.E. 2553, 2010.); and the content of promotions (Thai Working Group on Burden of Disease, 2009), which restricts any content concerning drinking persuasion and beverage properties, as well as requiring warning messages to be displayed on alcohol products (Notification of the Alcohol Beverage Control Committee, 2010). Prior to these regulations revisions, spending on alcohol promotion in broadcast media had grown sevenfold between 1989 and 2003 (Wibulpolprasert ed., 2005). Measures to control alcohol advertising are stringent, in spite of this however, alcohol use among underage people is still found.

The alcohol industry has found ways to circumvent the regulations by using indirect advertising in the controlled media and increasing promotions in unregulated, below the-line media. A study in 2004 reports a high frequency of logos and names of alcohol beverages broadcast during prohibited times, as well as the promotion of logo and name-sharing products (Phipitkul & Sornphaisarn, 2005). Additionally, the budget for mobile advertisements, such as advertisements on vehicles and on-site promotions at venues, increased from 2003 by 583% and 148%, respectively.

Advertising has a strong influence on consumer's decisions to purchase goods and service (Chaloemmeeprasert, 2007). The alcohol industry spends an average of 2.4 billion baht each year on television, newspaper, film, radio, and billboard advertising (Center for Alcohol Studies Thailand, 2013). Alcohol advertising expenditure in mass media represent just one portion of the total advertising budget of alcohol business, with additional funds spent on internet advertising, promotional items, and sports and music sponsorships (Sornphaisarn et al., 2010).

Furthermore, evidence shows that alcohol marketing and advertising influence young people's attitude towards drinking and their decision to initiate drinking, and there is a link between ownership of ABM and underage drinking as well as in binge drinking (Workman, 2003; McClure, Gibson & Sargent, 2006; Hurtz, Wang, Feighery & Fortmann, 2007). Other evidence suggests a relationship between ownership of ABM and initiation of drinking as well as underage binge drinking (McClure & Stoolmiller et al., 2009). In addition, longitudinal studies have examined ownership of these items among baseline never-drinkers and have shown that ownership predicts initiation of alcohol consumption (Collins, McCaffrey & Hambarsoomians, 2007; Fisher, Austin, Camargo & Colditz, 2007; Henriksen, Schleicher & Fortmann,

2008). Several studies recommend prohibiting ABM as a means to prevent youth from engaging in health demoting behaviors (Workman, 2003; McClure, Gibson & Sargent, 2006; Hurtz, Wang, Feighery & Fortmann, 2007; Collins, McCaffrey & Hambarsoomians, 2007; Fisher, Austin, Camargo & Colditz, 2007; McClure & Stoolmiller et al., 2009).

Additionally, ABM defined as Alcohol Branded Merchandise is an effective tool used to advertise alcohol. The development of communication technology and marketing strategies of the alcohol industries have changed over time leaving loopholes within the process both channel and format such as advertising on the internet, advertising brands, sponsorship, and Corporate Social Responsibility (CSR). These loopholes need to be closed permanently; a ban on alcohol advertising should be considered. Some international studies found relationship between ABM and alcohol consumption but until now, there was no research to show relationship in Thailand. Therefore, the goals of this study are to identify alcohol advertisement, especially Alcohol-Branded Merchandise (ABM), that influence the age of initiation for drinking in Thailand and to discuss loopholes for branded merchandise advertising and legislations in Thailand.

Methods

This study was a cross-sectional study conducted with high school and vocational school students using a self-administered questionnaire. All the procedures of this study were approved by Research Ethics Board of Institute for Development of Human Research Protection (IDHRP), Thailand.

Population and Sample

This study is a nationwide cross-sectional survey conducted in the high school and vocational school

setting. The study employed stratified three-stage sampling approach; high school and vocational school level. Five provinces were systematically selected proportionate to population size from four regions which were North, Northeast, Central (including East) and South. In each province, four schools consisting of one urban high school, one rural high school, one rural vocational school and one rural vocational school were randomly selected. Proportional probability to the population size was used to calculate sample size of each school. Of all students studying in the 2011 academic year, 1,351 were randomly selected to participate in this study.

The survey questionnaire

The questionnaire was composed of eight parts including a quiz. Content validity of the questionnaire was assessed by three experts in alcohol research. Two pilot surveys were conducted to assess reliability and applicability of the questionnaire, giving a 0.781 reliability score.

ABM Ownership

ABM Ownership was measured by asking participants how many pieces of ABM you have. The numbers of ABM were scored dichotomously to compare students without any ABM with those who have ABM.

ABM Exposure

To determine ABM exposure, each student was asked how often each you are exposed to or see ABM per month. The six categories were ≥ 5 times per week, 3-4 times per week, 1-2 times per week, 1-3 times per month, <1 times per month and never seen.

ABM Recognition

Student's ABM recognition ability was assessed by a short quiz. The quiz consisted of five ABM each displaying a real piece of a frequently advertised brand logo of alcohol. For each ABM the students were required

to write down what they believed it represented, e.g., beer, spirit, or wine. ABM recognition ability of students was assessed by summing up the total number of correct answer given in the quiz, to form a score out of 5. Then researcher recoded score to three categories: 5-4 was defined as more recognition, 3 was defined as moderate recognition, 1-2 was defined as less recognition and 0 was defined as cannot recognize.

ABM Preference

To determine preference for ABM, each student was asked “Do you like ABM?” and could respond with either “like” or “dislike.”

Attitudes toward drinking

Attitudes toward drinking were measured with 15 messages and adapted from designs of previously validated survey instruments used to investigate attitudes toward drinking in Thai adolescents by using Likert scale that consisted of 5 levels: 5 was defined as totally agree, 4 as agree, 3 as neutral, 2 as disagree, and 1 was defined as totally disagree. To determine attitude toward alcohol, we use the average score from 15 items.

Drinking participation

A single item assessed whether or not respondents had ever finished most or all of beer, or other drink containing alcohol. Response options included, “never consumed, has consumed but in the past 12 months, and consumed in 12 months”. Students who indicated no alcohol consumption in response to all three items were coded as lifetime abstainers. Students who indicated any alcohol consumed in the last 12 months were coded as current drinkers. Students who indicated any alcohol used, but not in the past 12 months were defined as former drinkers.

Binge drinking

A single item assessed whether or not respondents had ever drunk more than five standard drinks of beer, or other alcoholic beverage in the last 12 months. Response

options included, “yes” or “no”.

Data collection

All respondents were given the brief information of this study, and their consent was obtained prior to data collection. This study collected data in students’ classrooms after their final examination. All students were asked to complete the questionnaire by themselves. Data were collected from June – July 2012.

Data analysis

Summary statistics were used to describe ABM ownership, type of ABM, level of exposure and recognition together with liking of any ABM. Associations of ABM ownership with a positive attitude toward drinking, drinking participation and binge drinking were examined. Multiple logistic regression models were applied to determine the associations when controlling for different characteristics of the students, with 95% confidence interval.

Results

Characteristics of the students

Study participants included 52.7% females and 47.3% male and were 16 years old (47.4%), 17 years (41.5%), and 18 years (5.4%). The average age of study participants was 16.58 years old. The majority of students (66.2%) were educated in high school while 33.8% studied at a vocational school. The Grade-Point Average (GPA) was between 3.01 and 4.00 (46.3%). In addition, 36.7% of samples have never used alcohol. (Table 1)

At the time of the study, 36.7% of the study participants had not used alcohol in the previous 12 months. At follow-up, 424 students reported having drunk alcohol in past 12 months, 30.7% as having consumed but (not?) in the past 12 months, and 36.7% as having never consumed alcohol. Of all participating students, 33.5% of students had binged on alcohol while 66.5% did not.

Table 1 Number and percentage of demographic characteristics

Characteristics	N	Percent
Gender	1,314	100.0
female	693	52.7
male	621	47.3
Age	1,316	SD
mean	16.58	0.781
School type	1,317	100.0
high school	872	66.2
vocational school	445	33.8
Location	1,317	100.0
urban	815	61.9
rural	502	38.1
GPA	1,220	100.0
3.01-4.00	565	46.3
2.01-3.00	558	45.7
≤2.00	97	8.0

ABM Situations

Detailed results are presented in Table 2. A total of 1,144 adolescents (88.5%) reported that they own at least one ABM item such as glass. The questionnaire did not ask students to specify the brand of ABM. Of the participants, 89% of males possessed ABM while

88.2% of females reported owning ABM. In regard to grade point average (GPA) and ABM ownership, 94.8% of students who self-reported a GPA of ≤ 2.00 owned ABM, while 89.6% GPA of 2.01-3.00 and 86.5% GPA of 3.01-4.00 owned ABM.

Table 2 Percentage of demographic characteristics and ownership of alcohol merchandises

Demographic characteristics	Total	Percentage of ownership of alcohol merchandises	
		Yes	no
Total	1292	88.5	11.5
Gender	1,268	1,123	145
male	670	89.0	11.0
female	598	88.2	11.8
Location	1270	1,126	144
urban	785	90.7	9.3
rural	485	85.4	14.6

Demographic characteristics	Total	Percentage of ownership of alcohol merchandises	
		Yes	no
Track	1,317	1,126	144
high school	872	88.2	11.8
vocational school	445	89.6	10.4
GPA (School performance)	1,176	1,042	134
3.01-4.00	96	86.5	13.5
2.01-3.00	539	89.6	10.4
≤ 2.00	541	94.8	5.2

Percentages of students who reported owning each category of alcohol merchandise were: glass (71.1%), sport clothing (56%), key ring (46.4%), calendar/poster

(36.8%), cap (36.2%), vacuum bottle (34.9%), bag (32.6%), ashtray (21.2), umbrella (17.6%) and others such as pen handy drive (11.2%). (Table 3)

Table 3 Percentage of type and ownership of alcohol merchandises

Type of merchandises	Total	Percentage of ownership of alcohol merchandises	
		Yes	no
glass	1,329	71.1	28.9
sport clothing	1,331	56.0	44.0
key ring	1,331	46.4	53.6
calendar/poster	1,330	36.8	63.2
cap	1,332	36.2	63.8
vacuum bottle	1,323	34.9	65.1
bag	1,327	32.6	67.4
ashtray	1,328	21.2	78.8
umbrella	1,325	17.6	82.4
others	1,339	11.2	88.8

Factors associated with attitude toward drinking, drinking participation and binge drinking

Table 4 shows the factors associated with attitude toward drinking, drinking participation and binge drinking. The logistic regression analysis found that the boys were 1.80 times (95% CI= 1.34-2.42) more likely to have positive attitudes toward drinking compared to the female students. No statistical significant association

exists between age and attitude towards drinking. There is a statistically significant association between ABM exposure and attitude toward drinking of students ($p = 0.015$). The students who saw ABM were 1.51 times (95% CI= 1.08-2.10) more likely to have a positive attitude toward drinking compared to students who did not see ABM. ABM recognition was significantly associated with attitudes towards drinking ($p = 0.006$), with students

who recognized ABM being 0.83 times (95% CI= 0.73-0.95) more likely to have positive attitude toward drinking than students who could not identify ABM. The relationship between ABM ownership and drinking participation was significant for owners ($p < 0.001$). Those students who reported that they possessed ABM were 1.10 times (95% CI= 1.04-1.16) more likely to have positive attitude toward drinking compared to students who did not own ABM. There was association with ABM preference and alcohol consumption of students. The students who favored ABM were 1.79 times (95% CI= 1.16-2.74) more likely to drink alcohol than those who did not (respectively; $p < 0.001$). There are no statistically significant associations between exposure to ABM and alcohol consumption of young people. Students who saw ABM were 1.9 times (95% CI= 1.17-3.14) more likely to drink alcohol compared to students who did not see ABM. ABM recognition was not significantly associated with alcohol consumption ($p = 0.191$), with students who recognized ABM being 0.92 times (95% CI= 0.81-1.04) more likely to drink alcohol to students who did not recognize ABM. The relationship between ABM ownership and drinking participation was significant for owners ($p = 0.008$). Those students who

reported that they possessed ABM were 1.07 times (95% CI= 1.02-1.13) more likely to drink alcohol compared to students who did not occupy ABM. There was an association with ABM preference and alcohol consumption of students. The students who favored ABM were 2.04 times (95% CI= 1.45-2.88) more likely to drink alcohol than those who did not (respectively; $p < 0.001$). The relationship between attitude toward drinking and drinking participation was significant for drinkers ($p < 0.001$). Those students who reported that they had positive attitude toward drinking were 2.47 times (95% CI= 1.83-3.33) more likely to drink alcohol compared to students who did not have a positive attitude toward drinking.

There are statistically significant associations between attitude toward drinking and binge drinking ($p < 0.001$), with students who had positive attitude toward drinking 4.03 times (95% CI= 2.53-6.43) more likely to be binge drinking compared to students who did not have a positive attitude toward drinking. Associations between owner, exposure, recognition, preference, attitude toward drinking and binge drinking were not found.

Table 4 Factors associated with attitude toward drinking, drinking participation and binge drinking

Factors	Positive attitude toward drinking			Drinking participation			Binge drinking					
	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value			
Male	1.80	1.34	2.42	<0.001	1.57	1.20	2.07	<0.001	1.73	1.05	2.83	0.030
Age (year)	1.17	0.98	1.40	0.090	1.18	0.99	1.40	0.070	1.30	1.00	1.68	0.043
Vocational school	1.76	1.30	2.40	<0.001	1.30	0.97	1.74	0.079	2.06	1.27	3.35	0.004
GPA score	0.61	0.48	0.78	<0.001	0.56	0.44	0.71	<0.001	0.60	0.41	0.90	0.014
Number of ABM	1.10	1.04	1.16	<0.001	1.07	1.02	1.13	0.008	1.06	0.98	1.16	0.121
Weekly exposed ABM	1.51	1.08	2.10	0.015	1.91	1.17	3.14	0.058	1.68	0.92	3.06	0.090
ABM recognition score	0.83	0.73	0.95	0.006	0.92	0.81	1.04	0.191	0.96	0.78	1.19	0.715
ABM preference	1.79	1.16	2.74	<0.001	2.04	1.45	2.88	<0.001	1.15	0.98	1.36	0.097
Attitude toward drinking	-	-	-	-	2.47	1.83	3.33	<0.001	4.03	2.53	6.43	<0.001

Note: reference group was female, high school, GPA > 3.00, not having ABM, none exposure, be not able to recognize, dislike, negative attitude toward drinking

CI stands for confidence interval.

Discussion

ABM Situations

This study found that 88.5% of students own an ABM item. A variety of ABM items were owned by students. The most common category of alcohol-branded merchandise was glass and sport clothing, with matched findings from McClure AC and team (McCaffrey & Hambarsoomians, 2007). The study clearly showed that students are exposed and similar with various forms of alcohol marketing, including, brand and alcohol-branded merchandise.

Factors associated with attitude toward drinking, drinking participation and binge drinking:

The results showed associations between exposure, ownership, recognition, preference of ABM and attitude toward drinking. There are no previous studies or evidence that clearly confirm of these findings. However, self-exposure processes (where one infers one's attitude from one's actions) are important in the formation of attitudes (Olson & Stone, 2005). Using an item of ABM may cause youth to perceive that they like the product portrayed (such as have a positive attitude toward it), which subsequently leads them to be more likely to try that product. This may be especially true among youth who see clothing and other personal items as reflecting their identity.

This study demonstrates that more than 80% of the Thai adolescents in the study sample own an item of ABM, and that ownership of ABM is associated with drinking participation. This study confirms findings from a previous published study of Shannon Q. Hurtz et al (2007). McClure et al (2006) and Workman (2003) also demonstrated an association between ownership of ABM and adolescent alcohol consumption. The association is similar in magnitude to the association between ownership of cigarette-branded merchandise

and being smokers (Shah, Pednekar, Gupta & Sinha, 2008; Sargent, Dalton, Beach, Bernhardt, Heatherton & Stevens, 2000).

Other variables found to be associated with drinking were owner, preference and attitude toward drinking. There is relationship between ABM preference and drinking participation similar to the findings of Grenard Grenard et al (2013), Henriksen, Schleicher, Dauphinee, and Fortmann (2012) and Smith and Foxcroft (2009). In addition, the attitude toward drinking is associated with binge drinking, which matches findings from McClure et al. (2009). Although ABM is not legally defined as advertisement the alcohol industry perceives that they could market and promote their products by exposing their target groups to ABM. There is an association between ABM exposure, recognition and drinking participation. This finding corresponds with the results of studies by Henriksen, Feighery, Schleicher, and Fortmann (2008) and Unger, Schuster, Zogg, Stacy and Dent (2003). Moreover, this study found the relationship between preference of ABM, attitude toward drinking and drinking because ABM is available through a variety of means: it can be purchased in stores or online and it is given away as "free gifts" at sponsored events or with the purchase of alcohol. How children come to own an ABM is an important consideration as it may relate to important differences in alcohol-related attitudes and behaviors. For example, purchasing one's own ABM may be a marker for a student's existing positive attitudes toward drinking, whereas being given ABM may lead to more positive attitudes toward drinking. Receiving an item of ABM from a parent may convey the implicit message that alcohol use is condoned by that parent (Workman, 2003). In a study cited above, adolescent participants

who perceived that parents approved of their drinking were more likely to have received an ABM from their parents.

A loophole for branded merchandise advertising and legislations in Thailand:

In Thailand, there are many current alcohol advertising regulations. For example, section 32 in the Alcohol Control Act B.E. 2551 (2008) states that any advertisement or public relation made by manufacturers of alcoholic beverage of all kinds can only be displayed for the purpose of giving information or creative knowledge without displaying pictures of the products or packages, except for the display of symbol of such alcoholic beverage or the symbol of the company manufacturing the alcoholic beverage (Section 32 in the Alcohol Beverage Control Act B.E. 2551 [2008], 2008). In this regard, it shall be in accordance with the Notification of Ministry of Public Health Prescribed Standards for Alcohol Advertising identified that the warning label must show on the container and advertising on mass media such as television, radio, cinema, and print media such as poster, billboard, or vehicle media (Notification of the Alcohol Beverage Control Committee, 2010). Additionally, there are criteria and conditions for displaying the brand or logo for advertising or public relations of alcoholic beverages (Ministerial Regulation: Criteria and Conditions for Displaying the Symbol for Advertising or Public Relations of Alcoholic Beverage B.E. 2553, 2010.). For instance, 5% of advertising size can be displayed alcohol logo or company logo. Furthermore, alcohol advertising on mass media such as television can only be broadcast between 10 p.m. and 5 a.m. This study found that the students are continually exposed to ABM because they possess ABM, while the Thai statute only restricts the time of alcohol advertising in mass media. This is a

gap in alcohol-related legislation in Thailand that alcohol industries take advantage of to promote their products.

However, these legislations do not cover advertising online [below the line] or indirect advertising, especially branded merchandise. In addition, regulators have been ineffective in monitoring and enforcing of regulations (Thamarangsi, Pitayarangsarit, Iam-anan, Phulkerd & Pongutta, 2011). Although Anderson, Bruijn, Kathryn, Ross and Hastings (2009) found that alcohol advertising and promotion in a variety of ways, including estimates of the volume of media and advertising exposure, ownership of branded merchandise, as well as recall and receptivity increase the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol. The result of this study strongly suggests that ownership, exposure, recognition, and preference of ABM are related to pro-drinking attitude and drinking participation practice, and yet there is no equivalent vehicle for such a policy regarding ABM in Thailand. However, eight states already ban distribution of ABM predicated on product purchase (Jernigan, 2009), and in most states, attorney generals or other state-level policymakers have the power to enact further restrictions or bans.

One limitation inherent in the design of this study is that the causal direction cannot be established. Although drinking participation was assessed over time, ownership, exposure, recognition, preference and attitude toward drinking was assessed only at follow-up. Therefore, the relationship between ABM ownership, exposure, recognition, preference, attitude toward drinking and teen drinking reported herein is cross-sectional, and it is unclear whether onset of drinking preceded or followed ABM ownership, exposure, recognition, and preference. Longitudinal studies where ABM ownership is determined at baseline are warranted to further examine the direction of the relationship between ownership,

exposure, recognition, preference, attitude toward ABM and drinking participation. Another possible limitation is that our study was limited only to high school and vocational school students, thus population was not nationally representative. Further studies should be conducted to confirm these findings in other school aged samples. And the reliance of self-report approach is on self-report measures to determine exposure and drinking is another limitation. Recall bias could be reduced by requiring participants to use a diary to record exposure and drinking.

In future research on ABM, it will be important to consider its use in the context of a student's social environment such as his or her peer group. Other research studies have identified the importance of peer influence in initiation of alcohol consumption (Trucco, Colder, Wieczorek, Lengua and Hawk, 2014; Jones and Magee, 2014; Hoffmann and Bahr, 2014). Therefore, it could be that a child's use of ABM may be interpreted by his or her peers as an endorsement of alcohol and drinking behaviors. This raises a concern about ABM ownership that transcends concerns about the direct effect of owning them. An adolescent who wears an ABM item may become the mediator of an indirect effect on peers who observe him/her and then incorporate these predominantly positive images into their own drinker prototypes.

Policy Recommendations

The Global strategy to reduce the harmful use of alcohol has suggested that reducing the impact of alcohol marketing, particularly on young people, is an important strategy to reduce youth drinking. Regulations to restrict ABM are worth considering as an intervention to reduce impact from alcohol marketing (World Health Assembly, 2014). Including ABM as an integral component of the alcohol marketing regulatory framework in order to control

or restrict alcohol advertising could play an important role in this strategy.

Presently, the Alcohol Control Act states: "No person shall advertise or display names or trademarks of alcoholic beverage deemed to exaggerate their qualifications or induce people to drink such alcoholic beverage either directly or indirectly" (Section 32 in the Alcohol Beverage Control Act B.E. 2551 [2008], 2008). This study suggests short term restrictions on ABM should be included in the Alcohol Control Act. Strengthening law enforcement coverage restricting alcohol advertising in all formats and channels of communication, especially in ABM, whether it is distributed for free or for sale, by developing mechanisms to track and monitor the alcohol advertising in all channels of communication. Guidelines and measures should be developed to control alcohol advertising or brand logos and legal sanctions should be imposed for promotion of ABM to people under the age of 20. For long-term alcohol-related policy changes, policymakers should consider revising Section 32 of the Alcohol Control Act B.E. 2551 (2008) by introducing a total ban on alcohol advertising and promotion aimed at young people.

Conclusion

Possession of ABM is prevalent among Thai students. Ownership, exposure, recognition, and preference of ABM related to pro-drinking attitude and alcohol consumption practice. ABM has a clear association to drinking practice among Thai youth. Even though current policy that regulates alcohol advertising prohibits advertising of products, many loopholes exist within the process, for instance, ABM and brand marketing. Alcohol branded merchandise – whether for free or for sale – should be legally defined as a form of advertising in order to strengthen law enforcement and coverage, effectively imposing a total ban on alcohol advertising.

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References

Anderson, P., Bruijn, A., Kathryn, A., Ross, G., and Hastings, G. (2009). Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol and Alcoholism*, 44(3), pp. 229-243.

Center for Alcohol Studies Thailand. (2013). *National Alcohol Report 2013: Thailand's Alcohol Situation and Related Harms*. Nonthaburi: The graphico system co,ltd.

Chaloemmeeprasert, Pornpimol. (2007). Advertising Language for Communication. *Journal Faculty of Management, Mahasarakham University*, 3(5), p. 48.

Collins, R.L., Ellickson, P.L., McCaffrey, D., and Hambarsoomians, K. (2007). Early adolescent exposure to alcohol advertising and its relationship to underage drinking. *Journal of Adolescent Health*. 40(6), pp. 527-534.

Fisher, LB., M.I., Austin, SB., Camargo, CA Jr., and Colditz, GA. (2007). Predictors of initiation of alcohol use among US adolescents: findings from a prospective cohort study. *Archives of Pediatrics and Adolescent Medicine*, 161 (10), pp. 956-966.

Grenard, J.L., Dent, C.W., and Stacy, A.W. (2013). Exposure to alcohol advertisements and teenage alcohol-related problems. *Pediatrics*, 131(2), pp. e369-79.

Heeather, N. and Stockwell, T. (2004). *The Essential Handbook of Treatment and Prevention of Alcohol Problems*. England: John Wiley and Sons, Ltd. Retrieved from <http://robinsteed.pbworks.com/w/file/fetch/52176344/TreatmentAndPreventionOfAlcoholProblems.pdf>. [2014, August 15]

Henriksen, L, Feighery, E.C., Schleicher N.C., and Fortmann, SP. (2008). Receptivity to alcohol marketing predicts initiation of alcohol use. *Journal of Adolescent Health*, 42 (1), pp. 28-35.

Henriksen, L., Schleicher, N.C., Dauphinee, A.L., and Fortmann, SP. (2012). Targeted advertising, promotion, and price for menthol cigarettes in California high school neighborhoods. *Nicotine and Tobacco Research*, 14(1), pp. 116-21.

Hoffmann, J.P., and Bahr, S.J. (2014). Parenting style, religiosity, peer alcohol use, and adolescent heavy drinking. *Journal of Studies on Alcohol and Drugs*, 75(2), pp. 222-7.

Hurt S.Q., Henriksen, L., Wang, Y., Freighery, E.C., and Fortmann, S.P. (2007). The relationship between exposure to alcohol advertising in stores, owning alcohol promotional items, and adolescent alcohol use. *Alcohol and Alcoholism*, 42 (2), pp. 143-149.

Jernigan, D.H. (2009). Alcohol-branded merchandise: the need for action. *Archives of Pediatrics and Adolescent Medicine*, 163(3), pp. 278-9.

Unger, J., Schuster, D., Zogg, J. Dent, C.W., and Stacy, A. W. (2003). Alcohol Advertising Exposure and Adolescent Alcohol Use: A Comparison of Exposure Measures. *Addiction Research and Theory*, 11 (3), pp. 177-193.

Jones, S.C., and Magee, C.A. (2014). The role of family, friends and peers in Australian adolescent's alcohol consumption. *Drug and Alcohol Review*, 33(3), pp. 304-13.

McClure A.C., Dal, C.S., Gibson, J., and Sargent, J.D. (2006). Ownership of alcohol-branded merchandise and initiation of teen drinking. *American Journal of Preventive Medicine*, 30(4), pp. 227-283.

McClure, A.C., Stoolmiller, M., Tanski, S.E., Worth, K.A., and Sargent, J.D. (2009).

Alcohol-Branded Merchandise and Its Association With Drinking Attitudes and Outcomes in US Adolescents. *Archives of Pediatrics Adolescent Medicine*. 163(3), pp. 211-217.

National Statistical Office of Thailand. (2011). *The Cigarette Smoking and Drinking Behavior of the Population 2011*. National Statistical Office: Ministry of Information and Communication technology.

Olson, J.M., and Stone, J. (2005). The Influence of Behavior on Attitudes. In D. Albarracin, B.T. Johnson, and M.P. Zanna (Eds.), *The Handbook of Attitudes*, (pp. 223-71). Mahwah, NJ: Lawrence Erlbaum Associates.

Phipitkul, W. and Sornphaisarn, B. (7 September 2005). Alcohol promotion. *Bangkok Business Newspaper*.

Sargent, J.D., Dalton, M., Beach, M., Bernhardt, A, Heatherton, T. and Stevens, M. (2000). Effect of cigarette promotions on smoking uptake among adolescents. *Preventive Medicine*, 30(4), pp. 320 -7.

Shah, P.B., Pednekar, M.S., Gupta P.C, and Sinha D.N. (2008). The relationship between tobacco advertisements and smoking status of youth in India. *Asian Pacific Journal of Cancer Prevention*, 9(4), pp. 637-42.

Smith, L.A, and Foxcroft, D.R. (2009). The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health*, 6(9), p. 51.

Sornphaisarn Bundit and et al. (2010). *Thailand, National Alcohol Report 2010*. Center for Alcohol Studies Thailand , Nonthaburi: The grahpico system co,ltd.

Srirach Loysamut. (2012). *Open mask of Alcohol Marketing*. Bangkok: Stop Drink Network.

Thai Health Promotion Foundation and Stopdrink Network. (2003). *Youth and Alcoholic Beverages Advertisement*. Fact-sheet for alcohol refraining, Bangkok: Thai Health Promotion Foundation.

Thai Working Group on Burden of Disease. (2009). *Burden of Disease and Injuries in Thailand: Priority Setting for Policy. International Health Policy Program*. Bangkok: Bureau of Policy and Strategy, Office of Permanent Secretary, Ministry of Public Health.

Thamarangsri, T., Pitayarangsarit, S., Iam-anan, P., Phulkerd S, Pongutta S, et al. (2011) Gaps and Opportunities in Addressing Non Communicable Diseases in Thailand with WHO's Best Buys and Good Buys interventions. *Journal of Health Systems Research*, 5(April), pp. 400-38.

The Department of Disease Control. (2011). Notification of the Alcohol Beverage Control Committee: Pattern and Method for the Display of Symbol of Alcoholic Beverage or Symbol of the Company Manufacturing the Alcoholic Beverage B.E. 2553 (2010). In *The Alcohol Control Act B.E. 2551 (2008)*. Nonthaburi: Sam Jud Nuengsi Company Litmitied.

The Department of Disease Control. (2011). The Alcohol Control Act B.E. 2551 (2008). Nonthaburi: Sam Jud Nuengsi Company Litmitied. The Department of Disease Control. (2011). Ministerial Regulation: Criteria and Conditions for Displaying the Symbol for Advertising or Public Relations of Alcoholic Beverage B.E. 2553 (2010). In *The Alcohol Control Act B.E. 2551 (2008)*. Nonthaburi: Sam Jud Nuengsi Company Litmitied.

The Department of Disease Control. (2011). Section 32 in the Alcohol Beverage Control Act B.E. 2551 (2008). Nonthaburi: Sam Jud Nuengsi Company Litmitied.

Trucco, E.M., Colder, C.R., Wieczorek, W.F., Lengua, L.J., and Hawk, Jr, L.W. (2014). Early adolescent alcohol use in context: how neighborhoods, parents, and peers impact youth. *Development and Psychopathology*, 26(2), pp. 425-36.

Wibulpolprasert, S., (Ed). (2005). *Thailand Health Profile 2001-4*. Nonthaburi: Bureau of Policy and Strategy, Ministry of Public Health.

World Health Assembly. *WHA61.4: strategies to reduce alcohol-related harm*. Retrieved from http://www.who.int/gb/ebwha/pdf_files/A61/A61_R4-en.pdf. [2014, August 15]

Workman, J.E. (2003). Alcohol promotional clothing items and alcohol use by underage consumers. *Family and Consumer Science Research Journal*, 31(3), pp. 331-354.