

Available online at: https://jurnal.integrasisainsmedia.co.id/index.php/JIMS Journal Integration of Management Studies Volume 1 Number 2, 2023:146-157 DOI: 10.58229/jims.v1i2.62

## The Effects of Offline Alcohol Advertisement Near Bus Stops and Offline Alcohol Advertisement Regulations on Alcohol Consumption Among University Students in Groningen

Alisa Salsabila<sup>\*1</sup>

School of Business and Management, Institut Teknologi Bandung<sup>1</sup> Email: alisa\_salsabila@sbm-itb.ac.id

### Abstract

The European Commission has reported that the Netherlands placed first for weekly alcohol consumption of 47.3% of its population in 2019. Previous research has found how offline alcohol advertisements and offline alcohol regulations have a role in influencing alcohol consumption, especially among university students. Groningen is one of the cities in the Netherlands where one in four people is a university student. This research aims to analyze the effects of offline alcohol advertisements near bus stops, as one of the main forms of transportation for university students is the bus and the effects of offline alcohol advertisements on alcohol consumption among university students in Groningen. Offline alcohol advertisement is also categorized into three types: offline alcohol advertisement with price discounts, product advertisement, and event marketing. There has also been research on how existing offline alcohol advertisement regulations increased online advertising effectiveness. This research also did a similar experiment and saw the effect on alcohol consumption. This research used the quantitative approach, and the data was collected through questionnaires spread out to 208 university students aged 18-24 years old, currently studying in Groningen. The result showed that offline alcohol advertisements with price discounts and product advertisements near bus stops positively affected alcohol consumption among university students in Groningen. It also showed that offline alcohol advertisement regulations did not significantly affect alcohol consumption among university students in Groningen, although it surprisingly increased the online alcohol advertisement effectiveness. Therefore, it is suggested that the foundation, which is responsible for the alcohol advertisement regulations, use this data for future references of the regulations. Future research could take the sample from the Netherlands, not only in Groningen, to make it more applicable.

Keywords: advertisement regulations; offline alcohol advertisement; alcohol consumption

## A. INTRODUCTION

Europe is a continent with rich drinking cultures, starting from having many wine gardens to tour around to its famous beer festivals. Alcohol consumption is seen as a socially accepted behavior (Paton, 2001; Wuyts, 2016). In 2014, Europe was also viewed as the continent with the highest drinking consumption because it holds the position of the biggest percentage of current drinkers and has consumed nearly one-fourth of total alcohol globally (WUYTS, 2016; WHO, 2014). Among the European countries, in 2019, the Netherlands placed first for weekly consumption of alcohol, which consisted of almost fifty percent of their total population (47.3%). This rank was followed by Luxembourg (43.1%) and Belgium (40.8%) (European Commission, 2021). The Netherlands is famous for beer brands, such as Heineken and Amstel. Their target market is people within the legal drinking age in the Netherlands, starting from those 18 years old, which was also stated in the Responsible Marketing Code Report in one of the Dutch beer brands (The Heineken Company, 2022). Those beer brands would often market their products at music events in a festival or a sponsored venue. The advertising could also be seen in supermarkets and near public transportation. A study has shown the effect of its advertising, where the decrease in alcohol prices is strongly correlated with increasing alcohol consumption. This has more of an impact on young individuals who are sensitive to prices and who are potential victims of problematic alcohol use, according to Dr. Carmen Voogt, Project Leader of the Centre of Expertise on Alcohol. "During price promotions, there was 33% more beer sold and 50% more wine", stated a representative of the Dutch Health Ministry via email, based on the supermarket sales (Boztas, 2021).

As alcohol marketing is common in the Netherlands, regulations regarding alcohol marketing were created. STIVA later released the regulations regarding alcohol marketing. STIVA is a foundation that is responsible for alcohol advertisements in the Netherlands. STIVA activities have also been approved by the Ministry of Health, Welfare and Sport and the House of Representatives (STIVA, n.d.). The regulations consisted of rules of what should not be in alcohol advertising, such as not promoting a discount of more than 25% (Boztaz, 2021). One of the cities in the Netherlands where alcohol advertisements are often seen is Groningen. Groningen is located in the north of the Netherlands. Groningen reached 63,432 out of 234,950 based on statistics on each Groningen university's website, which means that one in four people is a university student. University students also receive a loan of €120.96 each month provided by the Ministry of Education, Culture, and Science (Dienst Uitvoering Onderwijs, n.d.). This loan enables university students to comfortably use the bus without worrying about spending their own money.

Every time university students wait for the bus at the bus stop; they can see a billboard at each bus stop. One of the products that is being advertised is alcohol products. Surprisingly, the alcohol advertisements would also be put up at bus stops in the university area, such as at Zernike Campus, consisting of buildings from the University of Groningen and Hanze University of Applied Sciences. This brings worries as there are previous studies that have shown how offline alcohol advertisement does have a positive effect on alcohol purchase intention (Sinkevičius, 2015). In addition, more exposure to alcohol advertising apparently can lead to binge drinking, especially advertisements with price discounts (Kuo et al., 2006).

The Dutch Government has made an effort to reduce alcohol consumption that came as an impact from alcohol advertisements by issuing regulations regarding alcohol advertising. Nevertheless, it still brings worries as one study showed that promotional alcohol products, especially those containing discounted prices, raise the rate of alcohol consumption when the advertisement is located near campus (Kuo et al., 2003). The regulations regarding alcohol advertising alcohol advertisement have continuously been revised and extended. The current existing alcohol advertisement regulations are the Alcohol Code (Dutch Advertising Code Authority, 2014), the Media Act (Government of the Netherlands, 2008), and the Alcohol Act (Koninkrijksrelaties, 2021). A study has even shown how a state with offline alcohol advertising regulations only made online alcohol advertising more effective. The study showed a surprising result, when there are more offline alcohol advertising regulations, the more reactive people are to online alcohol advertising (Goldfarb & Tucker, 2011).

There are also still mixed results when it comes to the impact of alcohol advertisements on alcohol consumption. Most research on the relationship between alcohol advertisements and alcohol consumption collected data from mixed media of advertisements (offline and online advertisement). Some of the results from those research showed that alcohol advertisement does not raise alcohol consumption; meanwhile, other research showed otherwise. There are still few studies showing the impact of a single type of advertisement when it comes to alcohol advertisement. Afterward, the content of the advertisement is also important to be observed. In Groningen, often, the alcohol advertisement contents can be differentiated into three types. First, the alcohol advertisement would show discount prices of the products. Second, the alcohol advertisement would only display the physical product. Last, the alcohol advertisement would announce a brand collaborating with an event.

Based on a questionnaire the author has done and spread out to university students in Groningen, 65% of the respondents said that an offline alcohol advertisement that shows discount prices has the highest chance of raising their alcohol consumption. It is also important to see the impact on young people aged 18 - 24 in economically developed countries, as they receive more exposure to alcohol advertising and regular young drinkers become more prone to binge drinking (Meier et al., 2008; Academy of Medical Sciences, 2004).

This research aims to study the impact of offline alcohol marketing, specifically billboards near bus stops in Groningen, on alcohol consumption among university students. Then, this research also intends to find which type of offline alcohol advertisement has the most significant impact on alcohol consumption among university students in Groningen. Last, it is also important to see the impact of offline alcohol regulations on alcohol consumption among university students in Groningen.

After the researcher had identified the problem and did the literature review, a conceptual framework and hypotheses were made. The conceptual framework and hypotheses can be seen below.



#### Figure 1. Conceptual Framework

- H1: Offline alcohol advertisement near bus stops with alcohol price discount has a positive influence on alcohol purchase intention
- H2: Offline alcohol advertisement near bus stops with product advertisement has a positive influence on alcohol purchase intention
- H3: Offline alcohol advertisement near bus stops with event marketing has a positive influence on alcohol purchase intention
- H4: Offline alcohol advertising regulations have a positive influence on online alcohol advertisement effectiveness
- H5: Online alcohol advertisement effectiveness has a positive influence on alcohol purchase intention H6: Alcohol purchase intention has a positive influence on alcohol consumption

### **B. RESEARCH METHODS**

This research used the quantitative research approach. The data of this research were collected through questionnaires that were distributed to 208 respondents that are university students aging from 18-24 years old and studying in Groningen. Each of the variables has three indicators. The offline alcohol advertisement with price discounts is measured with the likeness of the respondent to price reduction offers, seasonal price discounts, and price discount offers through buying more quantities (Melina & Kadafi, 2017). The offline alcohol advertisement with product advertisement indicators is the wanting towards the alcohol product, the need towards the alcohol product, and the desire towards the alcohol product (Kim et al., 2009). The offline advertisement with event marketing's indicators is the increased interest in the alcohol product, the uniqueness of the event, and on what level the event would be recommended (Martensen et al., 2007). The offline alcohol advertisement regulations are measured through the enforcement level, the comprehensiveness of the regulations, and whether the target populations have benefited from the regulation (Anderson and Lehto, 1995). Then, online alcohol advertisements are measured by the positive feelings towards the advertisement based on the content and pictures, also the interest towards the advertisement (Nikhashemi et al., 2013). Alcohol purchase intention is measured through the probability of drinking alcohol in the future, the interest in buying alcohol products, and the plan to purchase alcohol products (Wang, 2020). Finally, alcohol consumption indicators are the agreed level on how drinking alcohol is a form of pleasure, drinking alcohol at any point (morning, afternoon, evening), and alcohol consumption (William., 2015).

The data were analyzed using PLS-SEM analysis. The PLS-SEM analysis includes a reliability test, validity test, collinearity test, structural path significance, coefficient of determination, stone-gasser test, effect size, total effect, and hypotheses testing. After the analysis, the researcher interpreted and summarized the finding from the analysis.

## C. RESULTS AND ANALYSIS

The data that has been collected for this research was collected using the SmartPLS version 4.0 software. Below are the results from the first test, the reliability test. According to Table 1, it can be seen that all of the outer loading values of each indicator are above 0.70, which means all indicators are reliable (Hair et al., 2019).

Table 1. Reliability Test Results					
Variable	Indicator	Outer Loading	Reliability		
Offling alashal advertisement	OAPD1	0.875	Reliable		
with price discount	OAPD2	0.873	Reliable		
with price discount	OAPD3	0.912	Reliable		
	OAPA1	0.900	Reliable		
with product advertisement	OAPA2	0.895	Reliable		
with product advertisement	OAPA3	0.879	Reliable		
	OAE1	0.890	Reliable		
with event merketing	OAE2	0.891	Reliable		
	OAE3	0.889	Reliable		
	OAR1	0.893	Reliable		
mailations	OAR2	0.876	Reliable		
legulations	OAR3	0.901	Reliable		
	OAAE1	0.914	Reliable		
official according advertisement	OAAE2	0.898	Reliable		
effectiveness	OAAE3	0.883	Reliable		
	API1	0.897	Reliable		
Alcohol purchase intention	API2	0.897	Reliable		
	API3	0.869	Reliable		
	AC1	0.886	Reliable		
Alcohol consumption	AC2	0.821	Reliable		
	AC3	0.900	Reliable		

Source: Research data, 2023

The next test that is performed is the validity test. The table below shows the result of the convergent validity test.

Variable	AVE
Offline alcohol advertisement with price discount	0.787
Offline alcohol advertisement with product advertisement	0.795
Offline alcohol advertisement with event marketing	0.792
Offline alcohol advertisement regulations	0.792
Online alcohol advertisement effectiveness	0.807
Alcohol purchase intention	0.788
Alcohol consumption	0.757

Source: Research data, 2023

The guidelines for this test are to see the Average Variance Extracted from each variable, and it has to reach a value greater than 0.50 to be considered acceptable (Hair et al., 2019). Based on Table 2 above, it can be seen that all of the variables are considered valid as all of the AVE of each variable is greater than 0.50. Another way to assess research validity is by doing a discriminant validity test. The guidelines for this test are that each construct of the AVE's square root should be greater than other model construct shared variances (Fornell and Larcker, 1981; Hair et al., 2014). The table below shows the result of this test.

	Table 3. Discriminant Validity Result									
	AC API OAR OAE OAPD OAPA OAAE									
AC	0.870									
API	0.839	0.888								
OAR	0.807	0.816	0.890							
OAE	0.817	0.804	0.864	0.890						
OAPD	0.819	0.812	0.852	0.854	0.887					
OAPA	0.805	0.800	0.884	0.863	0.816	0.892				

	AC	API	OAR	OAE	OAPD	OAPA	OAAE
OAAE	0.830	0.799	0.833	0.895	0.857	0.867	0.898

Source: Research data, 2023

It can be seen from the table above that each construct of the AVE's square root is indeed greater than other model construct shared variances. Thus all of the variables are valid. The next part of this analysis is the collinearity test. If the variables were to have a high level of collinearity, it would show that it has collinearity issues that must be avoided. The guideline for this test is to check the Variance Inflation Factor (VIF) if it scores below or above five (Hair et al., 2019). VIF values of five or lower would be considered acceptable (Wong, 2013). Table 4 below shows the result of this test.

Table 4. Collinearity Test Result				
Indicators Code	VIF			
OAPD1	2.086			
OAPD2	2.185			
OAPD3	2.608			
OAPA1	2.403			
OAPA2	2.350			
OAPA3	2.205			
OAE1	2.251			
OAE2	2.296			
OAE3	2.273			
OAR1	2.259			
OAR2	2.189			
OAR3	2.414			
OAAE1	2.687			
OAAE2	2.552			
OAAE3	2.214			
API1	2.355			
API2	2.467			
API3	2.026			
AC1	2.112			
AC2	1.744			
AC3	2.312			

Source: Research data, 2023

Table 4 shows the result of the collinearity test of how each indicator has VIF values below five. In conclusion, multicollinearity issues do not exist between the independent variables.

After completing various tests above, the author continues with bootstrapping. There would be a databased simulation where the data would be resampled with replacement several times. This simulation creates an empirical estimate of a statistic's sampling distribution (Mooney et al., 1993). Next, it would assess the statistical significance by identifying whether the correlations are significant from the two-tailed test. It is significant if the T-statistics shows a value bigger than 1.96 by a 5% significance level (Wong, 2013). The current model has seven latent variables and 21 indicators. Figure 4.8 below shows the bootstrapping results. In order to assess the model quality, the Coefficient of Determination Test and Stone-Geisser Test are also done by the author. The result of this approach would decide if the hypotheses can be accepted.

Table 5. Coefficient of Determination and Stone-Geisser Result						
Path	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	Coefficient of Determination (R2)	Cross- validated Redundancy (Q2)
Offline Alcohol Advertisement with Price Discount -> Alcohol Purchase Intention	0.347	0.337	0.122	2.847	0.727	0.719
Offline Alcohol Advertisement with Product Advertisement -> Alcohol Purchase Intention	0.267	0.271	0.086	3.095		
Offline Alcohol Advertisement with Event Marketing -> Alcohol Purchase Intention	0.176	0.186	0.111	1.580		
Offline Alcohol Advertisement Regulations -> Online Alcohol Advertisement Effectiveness	0.833	0.829	0.035	23.629	0.694	0.699
Online Alcohol Advertisement Effectiveness -> Alcohol Purchase Intention	0.113	0.109	0.105	1.068	0.727	0.719
Alcohol Purchase Intention -> Alcohol Consumption	0.839	0.835	0.034	24.879	0.703	0.710

#### Source: Research data, 2023

According to Table 5, it can be seen that there are two paths where the T-statistics are below 1.96, which means that those are not significant. Those two paths are "Offline Alcohol Advertisement with Event Marketing -> Alcohol Purchase Intention" with a T-statistic of 1.580 and "Online Alcohol Advertisement Effectiveness -> Alcohol Purchase Intention" with a T-statistic of 1.068. The other paths 'T-statistics are above 1.96, which indicates that it is significant.

Next, the table also shows the result from the Coefficient of Determination. If the R-square value is 0.70, it would be significant. Meanwhile, an R-square value of 0.50 is adequate, and a lower value would indicate a weak correlation (Henseler et al., 2009; Hair et al., 2019). First, the Alcohol Purchase Intention variable has an R-square value of 0.727, which indicates a significant correlation. It also means that Offline Alcohol Advertisement with Price Discount, Offline Alcohol with Product Advertisement, Offline Alcohol with Event Marketing, and Online Alcohol Advertisement Effectiveness variables explain 72.7% of the variance in the Alcohol Purchase Intention. Second, the Online Alcohol Advertisement Effectiveness variables has an R-square value of 0.694, which indicates an adequate correlation. It also means that the Offline Alcohol Advertisement Regulations variable explains 69.4% of the variance in the Online Alcohol Advertisement Effectiveness. Last, the Alcohol Consumption variable has an R-square value of 0.703, which indicates a significant correlation. It also means that the Alcohol Consumption.

Besides the Coefficient of Determination result, it shows the Stone-Geisser Test result. When the result shows a bigger value of Q-square, it indicates the model's predicted accuracy is higher (Hair et al., 2014). A Q-square value that is 0.5 or larger indicates a large predictive relevance of the model (Hair et al., 2019). According to the table above, all of the Q-square show a value above 0.5, indicating a large predictive relevance of the model.

Next, after having the result from the Coefficient of Determination and Stone-Geisser Test, it is possible to do a goodness-of-fit test. The goodness-of-fit can be calculated by multiplying the average of Q-square with the square root value that comes from the average of R-square (Wong, 2013). If the result of the GoF is greater than 0.1, then the model can empirically represent the expected data (Tenenhaus & Vinzi, 2005). Table 4.8 below shows the result of the GoF.

Table 6. The Goodness of Fit Results					
Variable	Coefficient of Determination (R2)	Cross-validated Redundancy (Q2)			
Online alcohol advertisement effectiveness	0.694	0.699			
Alcohol purchase intention	0.727	0.719			
Alcohol consumption	0.703	0.710			
GoF	0.5968				

### Source: Research data, 2023

According to Table 2.8, the GoF for this research model is 0.5968. This research model indicates significance and can describe the observed data. The next analysis is effect size analysis. F square measures the

effect of the link between the latent variables in the real world. The greater the effect size value, the greater the effect of the study in reality. If the F square shows a value of 0.35, it substantially affects the real world. Meanwhile, an F square value of 0.15 indicates a moderate effect and an F square value of 0.02 indicates a weak effect (Cohen, 1988). Table 4.9 below presents the F Square Test results.

			Table 7. Effe	ct Size Result			
	AC	API	OAR	OAE	OAPD	OAPA	OAAE
AC							
API	2.368						
OAR							2.267
OAE		0.017					
OAPD		0.098					
OAPA		0.053					
OAAE		0.007					

#### Source: Research data, 2023

Based on Table 7, two paths indicate a large effect size. The paths with F square value above 0.35 are Alcohol Purchase Intention to Alcohol Consumption and Offline Alcohol Advertisement Regulations to Online Alcohol Advertisement Effectiveness. The F square values of those two paths indicate a large effect size. Next, the two other paths, Offline Advertisement with Price Discount to Alcohol Purchase Intention and Offline Advertisement to Alcohol Purchase Intention, have F square values above 0.02. It indicates that it has a moderate effect size. The last two paths, which are Offline Advertisement with Event Marketing to Alcohol Purchase Intention and Online Alcohol Advertisement Effectiveness to Alcohol Purchase Intention, have F square values that are below 0.02. This means that the last two paths have a weak effect size. The next part of this analysis is the total effects. This section aims to identify how much of the independent variable's indirect effect is on the dependent variable through the intervening variable.

Table 8. Total Effect Result				
Path	Original Sample			
Offline alcohol advertisement with price discount -> Alcohol Consumption	0.291			
Offline alcohol advertisement with product advertisement -> Alcohol Consumption	0.224			
Offline alcohol advertisement with event marketing -> Alcohol Consumption	0.148			
Offline alcohol advertisement regulations -> Alcohol Consumption	0.079			
Online alcohol advertisement effectiveness -> Alcohol Consumption	0.094			
Alcohol purchase intention -> Alcohol Consumption	0.839			

Source: Research data, 2023

The interpretations regarding the total effects based on Table 4.10 is: 1) Offline alcohol advertisement near bus stops with price discount influences alcohol consumption by 29.1% through alcohol purchase intention; 2) Offline alcohol advertisement near bus stops with product advertisement influences alcohol consumption by 22.4% through alcohol purchase intention; 3) Offline alcohol advertisement near bus stops with event marketing influences alcohol consumption by 14.8% through alcohol purchase intention; 4) Offline alcohol advertisement regulations influences alcohol consumption by 7.9% through online alcohol advertisement effectiveness and alcohol purchase intention; 5) Online alcohol advertisement effectiveness influences alcohol consumption by 9.4% through alcohol purchase intention; 6) Alcohol purchase intention influences alcohol consumption by 83.9%.

The last part of the analysis would be hypothesis testing. The guideline for this part is that for the hypothesis to be accepted, the T-statistics must be above 1.96 with a 5% significance level (Wong, 2013). Table 4.11 below shows the result of the hypothesis testing.

	Table 9. Hypothesis 1 esting Result			
Hypothesis	Structural Path	T Statistics	P Values	Result
H1	Offline Alcohol Advertisement with Price Discount -> Alcohol Purchase Intention	2.847	0.004	Accepted
H2	Offline Alcohol Advertisement with Product Advertisement -> Alcohol Purchase Intention	3.095	0.002	Accepted

Hypothesis	Structural Path	T Statistics	P Values	Result
H3	Offline Alcohol Advertisement with Event Marketing -> Alcohol Purchase Intention	1.580	0.114	Rejected
H4	Offline Alcohol Advertisement Regulations -> Online Alcohol Advertisement Effectiveness	23.629	0.000	Accepted
H5	Online Alcohol Advertisement Effectiveness -> Alcohol Purchase Intention	1.068	0.286	Rejected
H6	Alcohol Purchase Intention -> Alcohol Consumption	24.879	0.000	Accepted

Source: Research data, 2023

## Offline alcohol advertisement near bus stops with price discount positively influences alcohol purchase intention.

This first hypothesis stated that offline alcohol advertisement near bus stops with price discount positively influences alcohol purchase intention. According to the calculations result in the previous subchapter, the first hypothesis is confirmed. The reason is due to the hypothesis that offline alcohol advertisement near bus stops with price discounts positively influences alcohol purchase intention, with a T-statistic value above 1.96 with a 5% significance level. This finding is consistent with the previous study by (Qazi et al., 2021), how price discount is the most effective method of promotional tools when it comes to increasing purchase intention.

Based on the questionnaire result, offline alcohol advertisement with price discount indicator "I like the offline alcohol advertisements near bus stops with price reduction offers" has the highest mean of the three indicators, which was 4.255. This finding indicates that the respondents like alcohol advertisements with price reduction offers the most. This finding is also consistent with a previous study by (Meier, 2008), which stated how price reduction in offline alcohol advertisements increased alcohol purchase intention among undergraduate students significantly. Thus, offline alcohol advertisement near bus stops with price discount positively influences alcohol purchase intention.

# Offline alcohol advertisement near bus stops with product advertisement positively influences alcohol purchase intention.

This second hypothesis stated that offline alcohol advertisement near bus stops with product advertisement positively influences alcohol purchase intention. According to the calculations result in the previous subchapter, the second hypothesis is confirmed. The reason is due to the hypothesis that offline alcohol advertisement near bus stops with product advertisement has a positive influence on alcohol purchase intention, with a T-statistic value above 1.96 with a 5% significance level. This finding is aligned with the previous study by (Kim et al., 2009), how product advertisement generally has a positive influence on the product's purchase intention. The study showed how product advertisement affected the consumer's view of the company and the promoted products, which influenced the purchase intention of the product (Kim et al., 2009). In conclusion, offline alcohol advertisement near bus stops with product advertisement positively influences alcohol purchase intention.

## Offline alcohol advertisement near bus stops with event marketing positively influences alcohol purchase intention.

This third hypothesis stated that offline alcohol advertisement near bus stops with event marketing positively influences alcohol purchase intention. According to the calculations result in the previous subchapter, the finding is that the third hypothesis is rejected. The reason is due to the hypothesis that offline alcohol advertisement near bus stops with event marketing has a positive influence on alcohol purchase intention, with a T-statistic value below 1.96 with a 5% significance level. According to a previous study (Gebrameskel, 2014), event marketing can have an insignificant influence on purchase intention when it is exaggeratedly promoted to the point that it can bring out negative emotions. Thus, offline alcohol advertisement near bus stops with event marketing does not significantly influence alcohol purchase intention.

## Offline alcohol advertisement regulations have a positive influence on online alcohol advertisement effectiveness.

This fourth hypothesis stated that offline alcohol advertisement regulations positively influence online alcohol advertisement effectiveness. According to the calculations result in the previous subchapter, the finding

is that the fourth hypothesis is confirmed. The reason is due to the hypothesis that offline alcohol advertisement regulations positively influence online alcohol advertisement effectiveness, having a T-statistic value above 1.96 with a 5% level of significance. This finding is aligned with previous research (Goldfarb & Tucker, 2011) on how a state with offline alcohol advertisement regulations made online alcohol advertisement more effective. The reason is that offline alcohol advertisement regulations made offline alcohol advertising less effective, and consumers started to be more reactive to online alcohol advertisements. The more offline alcohol advertisement regulations there are, the more effective it will be for online alcohol advertisement (Goldfarb & Tucker, 2011). Thus, offline advertisement regulations do have a positive influence on online alcohol advertisement effectiveness.

## Online alcohol advertisement effectiveness has a positive influence on alcohol purchase intention.

This fifth hypothesis stated that online alcohol advertisement effectiveness positively influences alcohol purchase intention. According to the calculations result in the previous subchapter, the finding is that the fifth hypothesis is rejected. The reason is due to the hypothesis that online alcohol advertisement effectiveness positively influences alcohol purchase intention and has a T-statistic value below 1.96 with a 5% level of significance. According to the study (Goldfarb & Tucker, 2011), the reason why online alcohol advertising effectiveness does not have a significant influence on alcohol purchase intention is that the products that are being promoted online have low awareness. Thus, online alcohol advertisement effectiveness does not significantly influence alcohol purchase intention.

## Alcohol purchase intention has a positive influence on alcohol consumption.

This last hypothesis stated that alcohol purchase intention positively influences alcohol consumption. According to the calculations result in the previous subchapter, the finding is that the last hypothesis is confirmed. The reason is due to the hypothesis that alcohol purchase intention positively influences alcohol consumption, which has a T-statistic value above 1.96 with a 5% level of significance. This finding aligns with a previous study by Martalegawa et al. (2020), which stated how alcohol purchase intention positively influences alcohol consumption. The study mentioned how young people aged 21-24 years old have a high alcohol purchase intention which leads to higher alcohol consumption because young people use alcohol as a social tool (Martalegawa et al., 2020). Thus, alcohol purchase intention does have a positive influence on alcohol consumption.

## **D. CONCLUSIONS**

In the first chapter, it has been stated that this research aims to find out the impact of offline alcohol advertisements near bus stops and offline alcohol advertisement regulations on alcohol consumption among university students in Groningen. In addition, this researcher's goal is to see which type of content in offline alcohol advertisements near bus stops has the biggest impact on alcohol consumption among university students in Groningen. The data in this research has been collected using the quantitative approach. The researcher distributed questionnaires that received 208 respondents, where the respondents are university students aged 18-24 years old in Groningen. Then, data analysis was performed by descriptive analysis and PLS-SEM analysis. The PLS-SEM analysis was conducted using the SmartPLS 4.0 software. This research has seven variables: offline alcohol advertisement with price discount, offline alcohol advertisement near bus stops with event marketing, offline alcohol advertisement regulations, online alcohol advertisement effectiveness, alcohol purchase intention, and alcohol consumption. From the seven variables, there are six hypotheses tested in this research. Four out of six hypotheses are accepted based on the data analysis results. The two rejected hypotheses are "Offline alcohol advertisement near bus stops

with event marketing has a positive influence on alcohol purchase intention" and "Online alcohol advertisement effectiveness has a positive influence on alcohol purchase intention."

The research found that offline alcohol advertisement near bus stops does have a positive significant effect on alcohol consumption among university students in Groningen, but it does not apply to every type of offline alcohol advertisement. The offline alcohol advertisement near bus stops with price discounts and product advertisements positively influence alcohol consumption among university students in Groningen through alcohol purchase intention. Between the two, offline alcohol advertisement near bus stops with price discount influences alcohol consumption among university students in Groningen the most by 29.1% through alcohol purchase intention. Meanwhile, the hypothesis that "Offline alcohol advertisement near bus stops with event marketing has a positive influence on alcohol purchase intention" is rejected; thus, offline alcohol advertisement near bus stops with event marketing does not significantly affect alcohol purchase intention. Since it is insignificant, this research can not further analyze the impact of offline alcohol advertisements near bus stops with event marketing on alcohol consumption through the Alcohol Purchase Intention variable. Another hypothesis is rejected: "Online alcohol advertisement effectiveness has a positive influence on alcohol consumption." This indicates that online alcohol advertisement effectiveness does not have a significant positive effect on alcohol purchase intention. Since it is proven insignificant, this research can not further analyze the impact of offline alcohol advertisement regulations on alcohol consumption through the Online Alcohol Advertisement Effectiveness and Alcohol Purchase Intention variable. Although offline alcohol advertisement regulations do significantly positively affect online alcohol advertisement effectiveness, the rejected hypothesis shows that online alcohol advertisement effectiveness does not mean a significant positive effect on alcohol purchase intention.

How this research focuses on the effect of offline alcohol advertisements near bus stops and offline alcohol advertisement regulations on alcohol consumption among university students in Groningen may help The Responsible Alcohol Consumption Foundation, which is responsible for alcohol consumption and advertising in the Netherlands. The findings in this research can help the foundation in setting the offline alcohol advertisement regulations, especially how offline alcohol advertisement near bus stops with price discounts has the biggest impact on alcohol consumption among university students.

This research only focuses on the effect of offline alcohol advertisements near bus stops and offline alcohol advertisement regulations on alcohol consumption among university students in Groningen. Thus, some research limitations are occurring. This research does not analyze the data by grouping the respondents of the questionnaires. Categorizing respondents based on their drinking habits could show different results. In addition, this research only studies the effect on university students in Groningen, not the whole Netherlands. Thus, future research can take samples from the whole Netherlands.

## REFERENCES

- Anderson, P., & Lehto, J. (1995). Evaluation and Monitoring of Action on Alcohol. In WHO. Copenhagen: WHO. Retrieved from WHO website: https://apps.who.int/iris/handle/10665/260541
- Boztas, S. (2021, June 25). Cheers! "Stunt" alcohol promotions banned from July 1. Retrieved July 11, 2023, from DutchNews.nl website: https://www.dutchnews.nl/2021/06/cheers-stunt-alcohol-promotions-banned-from-july-1/
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, N.J.: L. Erlbaum Associates.
- De Dienst Uitvoering Onderwijsno. (n.d.). Student travel product DUO. Retrieved July 11, 2023, from duo.nl website: https://www.duo.nl/particulier/student-travel-product/

- Dutch Advertising Code Authority. (2014). THE DUTCH ADVERTISING CODE WITH INFORMATION ABOUT THE WORKING PROCEDURES OF THE ADVERTISING CODE COMMITTEE AND THE BOARD OF APPEAL. Netherlands: Dutch Advertising Code Authority.
- European Commission. One in twelve adults in the EU consumes alcohol every day. (n.d.). Retrieved from ec.europa.eu website: https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/edn-20210806-1
- Goldfarb, A., & Tucker, C. (2011). Advertising Bans and the Substitutability of Online and Offline Advertising. Journal of Marketing Research, 48(2), 207–227. Retrieved from https://www.jstor.org/stable/23033426
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/ebr-11-2018-0203
- Kim, S., Haley, E., & Koo, G.-Y. (2009). Comparison of the Paths From Consumer Involvement Types To Ad Responses Between Corporate Advertising And Product Advertising. Journal of Advertising, 38(3), 67–80. https://doi.org/10.2753/joa0091-3367380305
- Koninkrijksrelaties, M. van B. Z. en. (2021, July 1). Alcoholwet. Retrieved May 11, 2023, from wetten.overheid.nl website: https://wetten.overheid.nl/BWBR0002458/2021-07-01
- Kuo, M., Heeb, J.-L., Gmel, G., & Rehm, J. (2003). Does Price Matter? The Effect of Decreased Price on Spirits Consumption in Switzerland. Alcoholism: Clinical and Experimental Research, 27(4), 720– 725. https://doi.org/10.1111/j.1530-0277.2003.tb04410.x
- Martalegawa, K., Prihatini Gultom, B. V., Pramudito, F., Badri Halim, M., & Taufik, R. (2022). A Qualitative Study on Millennials Consumption Behavior of Alcohol Beverages in Jakarta, Indonesia. Indonesian Business Review, 5(2), 144–155. https://doi.org/10.21632/ibr.5.2.144-155
- Martensen, A., Grønholdt, L., Bendtsen, L., & Jensen, M. J. (2007). Application of a Model for the Effectiveness of Event Marketing. Journal of Advertising Research, 47(3), 283–301. https://doi.org/10.2501/s0021849907070316
- Melina, M., & Kadafi, M. A. (2018). Pengaruh Price Discount dan in-Store Display terhadap Impulse Buying pada Matahari Department Store di Samarinda. Forum Ekonomi, 19(2), 201. https://doi.org/10.29264/jfor.v19i2.2126
- Mooney, C. Z., & Duval, R. D. (1993). Bootstrapping : a nonparametric approach to statistical inference. Newbury Park: Sage.
- Government of the Netherlands. (2008). Media Act. Retrieved March 25, 2023, from https://www.government.nl/binaries/government/documenten/publications/2022/06/14/media-act-2008/Media+Act+2008.pdf
- Nikhashemi, S., Paim, L., & Sharifi Fard, S. (2013). The Effectiveness of E-Advertisement towards Customer Purchase Intention: Malaysian Perspective. IOSR Journal of Business and Management, 10(3), 93–104.
- Sinkevičius, M. (2015). ADULT ALCOHOL PURCHASE INTENTION: THE INFLUENCE OF HEALTH CONSCIOUSNESS, ATTITUDES TOWARD ALCOHOL ADVERTISING AND ALCOHOL DRINKERS. Laisvalaikio Tyrimai, 1(5), 1–10. https://doi.org/10.33607/elt.v1i5.218
- Sinkevičius, M. (2016). Intention to Purchase Alcohol by Adults in the Country in Transition: the Effects of Health Consciousness, Self-efficacy and Religion Importance. Organizations and Markets in

Emerging Economies, 7(2), 25-42. https://doi.org/10.15388/omee.2016.7.2.14206

STIVA. (n.d.). Over STIVA. Retrieved June 26, 2023, from STIVA website: https://stiva.nl/

- Tenenhaus, M., & Vinzi, V. E. (2005). PLS regression, PLS path modeling and generalized Procrustean analysis: a combined approach for multiblock analysis. Journal of Chemometrics, 19(3), 145–153. https://doi.org/10.1002/cem.917
- The Heineken Company. (2022). OUR RESPONSIBLE MARKETING CODE. Retrieved from https://www.theheinekencompany.com/sites/theheinekencompany/files/our-company/how-werun-our-business/code-conduct/HEINEKEN-Responsible-Marketing-Code-final.pdf
- Wang, E. S.-T. (2020). Hypotheses for the Reasons behind Beer Consumer's Willingness to Purchase Beer: An Expanded Theory from a Planned Behavior Perspective. Foods, 9(12), 1842. https://doi.org/10.3390/foods9121842
- William. (2015). Studi Perilaku Konsumsi Alkohol Ditinjau Dari Kepribadian Big Five Pada Remaja Yang Datang Ke Clubbing. Medan: Universitas Medan Area Repository.
- Wong, K. (2013). 'Partial least square structural equation modeling (PLS-SEM) techniques using SmartPLS', Marketing Bulletin, 24, pp. 1–32.
- Wuyts, C. et al. (2016) Comparison of alcohol consumption in European countries, and some methodological thoughts. European Social Survey.