MONITORING OUTDOOR ALCOHOL ADVERTISING IN DEVELOPING COUNTRIES: FINDINGS OF A PILOT STUDY IN FIVE AFRICAN COUNTRIES

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ABSTRACT

This paper aims to describe alcohol advertising in the public arena of Gambia, Ghana, Madagascar, Nigeria and Uganda. Analyses on the placement, channels, size and content of outdoor alcohol advertising practices (N=807) in relation to existing regulations are given. For example, in Gambia, the country with the most stringent alcohol marketing regulations of all countries studied, outdoor alcohol advertisements are on average smaller and less attractive to youth; whereas, in Uganda and Ghana, countries with self-regulation, there is limited protection. Findings illustrate the innovative ways in which the alcohol industry attempts to reach their market despite existing alcohol marketing regulations and cultural boundaries. Legal measures could be a policy instrument to protect against harmful exposure.

Key Words: alcohol marketing, outdoor advertising, Africa, alcohol policy

INTRODUCTION

All continents are potentially a target of meticulously planned marketing strategies by giant alcohol companies such as SABMiller, Heineken, Diageo, Carlsberg and Anheuser-Busch Inbev which promote their products globally. Due to the saturated market in most Western countries (World Health Organization, 2011), emerging markets and developing countries have been targeted recently by global alcohol corporations (Casswell & Thamarangsi, 2009).

Changes in social and cultural conditions along with increased marketing efforts, are expected to raise alcohol consumption and consequently to increase alcohol-related harm worldwide (Casswell & Thamarangsi, 2009). Developing
countries are affected disproportionately by a large burden of alcohol-related problems (Rehm et al., 2009). As European data show, costs for health care can amount to billions of dollars (Baumberg & Anderson, 2008). Furthermore, many problems will be created in private domains (home and work), such as violence, unemployment and absenteeism, as well as the public domain.

Research shows the potential influence of exposure to alcohol marketing on young people’s drinking in Western countries (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009). It is expected that in developing countries, alcohol advertising and promotion has a far stronger impact on the level of consumption than in Western countries. Jernigan (Jernigan, Obot, & Jos, 2006) warns of more sophisticated and ubiquitous marketing strategies than those allowed in developed nations which (is and) will be used to target African youth: Alcohol is portrayed as an emblem of success, and a symbol of heroism, courage and virility. New generations of drinkers are the target group of marketers by advertising in TV commercials, billboards, newspapers, magazines, internet and (event) sponsoring (Jernigan, 2008; Jernigan et al., 2006).

Outdoor alcohol advertising is a marketing strategy that, quite literally, has the potential to influence the commercial alcohol landscape of young people (B. Kelly, Cretikos, Rogers, & King, 2008). It covers all alcohol promotions in the public arena, e.g.: billboards, posters, flags, but also tables and chairs on terraces. Exposure to outdoor alcohol advertising has been associated with subsequent young people’s intention to drink (Kwate & Meyer, 2009; Pasch, Komro, Perry, Hearst, & Farbakhsh, 2007). The volume, place, size and attractiveness of the advertisements are expected to have an influence on its audience. A US study concluded that outdoor advertising near schools (within a radius of 1500 feet (547 meter)) is particularly risky due to repetitive daily exposure of young people (Pasch et al., 2007). In most developing countries, young people have to travel farther distances to visit schools and so, alcohol advertisements can be assumed to have a larger radius of reach. Also, larger outdoor advertisements can be seen from a farther distance and can therefore reach a larger audience.

A study by Chen et al (Chen, Grube, Bersamin, Waiters, & Keefe, 2005) suggests that exposure to alcohol advertisements containing elements that are considered to be appealing by youth increases the intention to purchase alcoholic products. Image advertisements are considered to be more attractive than advertisements with a basic description of the product and their appeal is associated with young people’s intention to use alcohol (K. J. Kelly & Edwards, 1998). More specifically, young people find alcohol advertising with elements such as celebrity endorsers, humor, animation, popular music and depicting sports are particularly appealing (Chen et al., 2005; Grube & Waiters, 2005; Martin et al., 2002).

Since alcohol industry activities are rising throughout the African continent there is a need to collect data on the volume and content of alcohol advertising systematically in different media in the region. It is expected that alcohol branded outdoor advertising can influence the acceptance of alcohol in societies in which the commercial market of alcohol is emerging. In order to get an impression of the alcohol industry’s activities in developing countries, examining characteristics
of alcohol branded outdoor advertising can be a useful first step. This paper aims to describe the results of monitoring alcohol branded advertising in the public arena of five Sub-Saharan African countries: the Gambia, Ghana, Madagascar, Nigeria and Uganda. It provides a description and statistical analysis on the placement, volume and content of alcohol marketing practices in these countries and correlations with existing alcohol marketing regulations in the countries studied.

The MAMPA project

In 2010, the African Regional Office of the World Health Organization commissioned the -Monitoring Alcohol Marketing Practices in Africa (MAMPA) project (A. De Bruijn, 2011) in which a method was pre-tested that systematically monitored alcohol marketing practices in the Gambia, Ghana, Nigeria and Uganda. The findings have been reported in a WHO report (De Bruijn, 2011). In October 2013, a similar monitoring exercise was undertaken in Madagascar (De Bruijn & Van der Waal, 2013). This paper utilizes data collected in both projects.

Reflecting religious, cultural, political and economic variety between countries, the sampled countries differ in alcohol consumption rates (World Health Organization, 2011), acceptance of alcohol use and existing regulations covering alcohol marketing.

For example, reflecting the public reluctance towards alcohol in the Gambia, alcohol marketing is strictly regulated in the Gambia. Alcohol is not allowed to be advertised on national television and radio (World Health Organization, 2011). Advertising spirits through sport sponsorship is not allowed by law (World Health Organization, 2011). In channels in which alcohol advertisements are permitted, there is a mandatory health warning message in place (World Health Organization, 2011). Although alcohol branded outdoor advertising is permitted, it is hypothesized to be less prevalent in terms of size and attractiveness to youth than in the other African countries monitored due to its reluctance of the general public towards alcohol use and advertising.

Global alcohol producing countries are already very active on the Ghanaian and Ugandan market (De Bruijn, 2011). Both Ghana und Uganda rely fully on self-regulation by the alcohol industry. The voluntary codes do not restrict the volume of (outdoor) alcohol advertising and there is a lot of freedom regarding the content of alcohol advertising. A few weeks before the start of the data collection, a new tax on billboards in the district of Kampala had been introduced. This new law might influence the use of billboards as a marketing tool in Uganda (De Bruijn, 2011). It is, however, unclear whether the law was actually already in place during the time of the data collection. Due to the absence of national legal restrictions of alcohol marketing, it is hypothesized that characteristics of outdoor alcohol advertising in Uganda show many similarities with those in Ghana.

By monitoring other marketing channels in these countries we have seen that alcohol is marketed as a product that plays a central role in the life of every Ghanaian and Ugandan: It is part of every party and celebration and it is easily available and affordable to everyone (De Bruijn, 2011). We expect a similar picture regarding outdoor advertising of the product. It is hypothesized that the content and placement of outdoor alcohol advertising is very visible and attractive to youth and
does not differ much among countries that rely solely on self-regulation of alcohol marketing.

Madagascar has a base of legislative restrictions on alcohol advertising in the ‘Code General de Impots’ (Art. 10/06/37-39 & Art. 10/06/73-75). Art 10/06/74 prohibits lifestyle marketing or any associations that go beyond product information. Madagascar has some regulation that restricts point of sale of alcohol within 150 metre radius of any public institution including religious buildings, hospitals and schools; nor can a point of sale be placed around another existing flow. However, the articles do not prohibit advertising near schools (i.e. within 150 metres). It is hypothesized that alcohol advertisements are visible to youth, although there will be few attractive elements given the legislative base.

The Nigerian government does not strictly regulate the advertising industry, but a government agency (APCON) is enacted to oversee the activities of the industry. No outdoor alcohol advertising is allowed near schools, hospitals, sports arenas and places of worship (De Bruijn & Van der Waal, 2013). The alcohol advertising regulations could only be attained from within Nigeria and no direct copy of the text was found. This regulation, along with a general tax on all kinds of billboards that is in place, is expected to influence the use of billboards as a marketing instrument by alcohol marketers in Nigeria. It is hypothesized that outdoor alcohol advertisements have been placed further away from schools in Nigeria compared to countries without such legal restriction. Moreover, it is hypothesized that alcohol advertisers prefer to use alternatives to billboards due to the tax paid on this marketing channel.

## METHOD

### Sample

The study includes a routine-data-based study carried out at the individual level in which alcohol marketing practices are the study subjects of interest. An impression of the volume of alcohol marketing in the public arena is made by recording the place, volume and content of outdoor alcohol advertisements in the public arena. A broad definition of outdoor advertising is used, which includes billboards, posters, flags, signs, promotional items, logos of alcohol brands on stacked beer crates, etc (Kwate & Lee, 2007). Variation exists between monitored areas due to limitations of existing maps. In Uganda and Ghana areas of 0.25 km² of a city centre, a suburban area and a village were identified on a map. In Madagascar, five areas of 0.25m² were monitored, including four urban areas and one suburban area. In the Gambia and Nigeria, a radius of 500 metres was identified in similar areas.

Under the supervision of the Dutch Institute for Alcohol Policy and the European Centre for Monitoring Alcohol Marketing (EUCAM), two teams of researchers scanned the area and photographed each alcohol branded outdoor advertisement encountered. Teams consisted of representatives of national NGOs or research institutes knowledgeable in the alcohol and alcohol marketing field. To identify the spatial location of outdoor alcohol advertisements, the placement of the advertisement was estimated and identified on a map. A similar approach was taken to estimate the placement of primary and secondary schools in and around the identified areas. This paper limits its scope to schools since they are visited by a large majority of minors and
are easily identified as such. The number of alcohol advertising practices encountered in the public domain (on the street) within the defined areas was reported, together with the placement and content of the advertisements of all marketing. Since areas monitored were not identical in size no meaningful comparison of alcohol advertisement density (B. Kelly et al., 2008; Kwate & Lee, 2007) between the identified areas could not be made.

Data from Madagascar was collected in 2013. Data from all other countries was collected in 2010.

In total, 807 outdoor promotions were encountered and recorded by the research teams. An overview of all photos taken and maps of areas monitored has been included as an annex of the MAMPA report (De Bruijn, 2011).

Variables and analyses:

Marketing channels
A broad definition of outdoor alcohol advertising is used which include all types of alcohol promotion encountered in the public arena (that can be seen from the streets). The following marketing channels have been identified: 1 product display (including beer crates, alcohol bottles and ‘mugs’); 2 posters; 3 flags or signs; 4 paintings on buildings/walls/fences; 5 billboards; 6 promotional items (including alcohol branded tables, umbrellas, etc). Examples of marketing channels are provided online (De Bruijn, Ferreira-Borges, Engels, & Bhavsar, 2014).

Size
Previous studies that identify the size of outdoor advertisements typically do not identify very large billboards or wall paintings as a separate category (B. Kelly et al., 2008). To modify the categories according to local peculiarities, we have distinguished the size of outdoor alcohol advertising in the following categories: 1 (< 0.006m² including beer crates); 2 (0.006m²-0.012m² including small posters); 3 (0.012m²-0.064m² including medium size posters); 4 (0.064m²-1.44m² including large posters and small billboards); 5 (>1.44m² including large billboards and large wall paintings).

School distance
The frequently used benchmarks of 500 and 1000 feet (e.g. (Hackbarth et al., 2001; Kwate, Jernigan, & Lee, 2007; Pasch et al., 2007)) is taken in the current study as cutting points to estimate the distance between alcohol advertisements and schools. An approximation of the distance is estimated on a map and categorized as 1 (<500 feet from schools); 2 (500-1000 feet); 3 (>1000 feet).

Data from Madagascar was collected in 2013. Data from all other countries was collected in 2010. Alcohol marketing regulations have not been changed since the data collection and time of writing. A Kruskal Wallis test is used to determine the strength of the alcohol marketing regulation at the time of data collected and the distance between alcohol ads and schools. Communication with stakeholders and a search through the literature informed us about existing regulations in the countries sampled. Both Nigeria and Madagascar have some regulation, however, it is not possible to compare the strength of regulation in the two countries. Therefore, two sets of comparisons were made: one between the Gambia (strict regulation), Madagascar (regulation) and Ghana and Uganda (self-regulation), and the other between The Gambia...
(strict regulation), Nigeria (regulation) and Ghana and Uganda (self-regulation).

**Attractive elements**

The identification of thematic content of the outdoor advertisements was based on the list of themes constructed by Pinsky and Silva (Pinsky & Silva, 1999) that measured appealing elements in alcohol advertisements. The list was slightly modified according to local peculiarities identifying the following themes: social theme (including friendship, social success), sport theme (including physical activity), economic theme (including economic success), sexual connotations, music, national symbolism and tradition, social responsibility (‘better world’), fun and humor, and masculinity. Advertisements were judged conservatively on presences of attractive elements. Each advertisement was coded by two raters on the presence of these themes. When there was a difference in coding between raters, consensus was sought. The use of these different attractive elements was summed (range from 0 to 6).

**Image**

All outdoor advertisements were coded on whether the advertisement contained images or no use of images (i.e. containing images other than solely product information) which resulted in a dichotomous variable (0: No use of an image; 1: image-advertising). Advertisements were judged conservatively on whether they contained images or not. Examples of advertisements are provided online (De Bruijn et al., 2014)

**Analysis**

A description of outdoor alcohol advertising in each country is given and an overview of the use of marketing channels is provided by the use of a cross table. SPSS 17.0 was used for analysis. To analyze differences in preference of these channels in the countries sampled, multinomial logistic regression analyses have been performed of which the main results are described. Ordered logistic regression analyses have been performed to analyze differences in sizes, and school distance predicted by country or regulation. Linear regression analyses have been performed between country and number of attractive elements, and a binary logistic regression analysis has been performed to study whether alcohol advertisements contain images other than product information. To summarize results, a graph has been drafted in which the mean of all dependent variables by country has been drawn. For sake of clarity, all dependent variables have been rescaled to a range of 0 to 1 to put them in one graph.

**RESULTS**

**Different marketing channels**

Table 1 shows the distribution of marketing channels of outdoor alcohol advertisements by country. In the Gambia, 94.3% of the country’s outdoor advertising consisted of product display and 2.9% consisted of billboards. In Nigeria, 28.3% of the country’s outdoor advertising consisted of product display and 3.0% consisted of billboards. In these countries there is strict regulation (the Gambia) or a tax law on billboards (Nigeria). In Uganda, where there is only self-regulation, 22.3% of its outdoor advertising was through billboards. This was similar to the situation in Ghana. Outdoor advertising in Madagascar used relatively low levels of
billboards. In the Gambia, no posters for alcohol were found. However, in all other countries studied, posters were frequently used. Flags or signs were frequently found in Madagascar but not in the Gambia. In Ghana, painting on walls/buildings/frames were identified frequently (18.3% of advertisements) for outdoor advertising. Promotional items were encountered in all countries except the Gambia. A statistical test to compare distribution of the preferences of the marketing channels between the five countries was conducted and can be found online (De Bruijn et al., 2014).

Size of the advertisements:
The size of the alcohol advertisements is connected to the marketing channel used. In separate analyses, each country was used as a predictor variable to compare the size of the advertisements (dependent variable). Figure 1 outlines the hierarchy of the size of the advertisements and the statistical significance. In line with the hypothesis formulated, the ordered logistic regression analysis suggests that alcohol ads found in Ghana are larger than those found in Nigeria ($B=2.669^{***}$, $W=6.300$) but do not differ in size from ads found in Uganda or Madagascar ($p>.05$). Ads in Madagascar are smaller than Uganda ($B=6.03^{***}$, $W=6.713$). Ads in Nigeria are larger than those in Gambia $B=4.360^{***}$, $W=18.675$) but smaller than those in Uganda ($B=-2.900^{***}$; $W=116.219$), Ghana ($B=-2.669^{***}$; $W=6.300$) and Madagascar ($B=-2.296^{***}$; $W=114.747$). Outdoor alcohol advertisements in Gambia are smaller than in the other four countries ($p<.001$).

Placement of ads near schools:
A Kruskal Wallis test shows a positive correlation between the strength of the alcohol marketing regulation and the distance of alcohol ads placed from schools. Both Nigeria and Madagascar had varying degrees of regulation, and so, it was not possible to distinguish the level of regulation between the two. Therefore,

<table>
<thead>
<tr>
<th>Country</th>
<th>Product display</th>
<th>Poster</th>
<th>Flag/sign</th>
<th>Wall/fence painting</th>
<th>Billboard</th>
<th>Promotional item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambia</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>94.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>2.9%</td>
<td>0.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Ghana</td>
<td>8</td>
<td>21</td>
<td>3</td>
<td>11</td>
<td>16</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>13.3%</td>
<td>35.0%</td>
<td>5.0%</td>
<td>18.3%</td>
<td>26.7%</td>
<td>1.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>103</td>
<td>182</td>
<td>38</td>
<td>11</td>
<td>11</td>
<td>19</td>
<td>364</td>
</tr>
<tr>
<td></td>
<td>28.3%</td>
<td>50.0%</td>
<td>10.4%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>5.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Uganda</td>
<td>1</td>
<td>61</td>
<td>10</td>
<td>6</td>
<td>25</td>
<td>9</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>0.9%</td>
<td>54.5%</td>
<td>8.9%</td>
<td>5.4%</td>
<td>22.3%</td>
<td>8.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Madagascar</td>
<td>3</td>
<td>93</td>
<td>67</td>
<td>11</td>
<td>17</td>
<td>29</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>1.4%</td>
<td>42.3%</td>
<td>30.5%</td>
<td>5.0%</td>
<td>7.7%</td>
<td>13.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>357</td>
<td>118</td>
<td>40</td>
<td>70</td>
<td>58</td>
<td>791</td>
</tr>
<tr>
<td></td>
<td>18.7%</td>
<td>45.1%</td>
<td>14.9%</td>
<td>5.1%</td>
<td>8.8%</td>
<td>7.3%</td>
<td>100%</td>
</tr>
</tbody>
</table>
two sets of analyses were conducted either excluding Nigeria (Chi-Sq (df 2) =75.756 \( p<0.001 \)), or excluding Madagascar (Chi-Sq (df 2) =49.717 with \( p<0.001 \)). Overall, results suggest the more stringent the alcohol marketing regulation in a country, the further alcohol ads are placed away from schools. However, when distinguishing the different countries, we can see that the relationship is a more complex one. An ordered logistic regression analysis of school distance by country shows that there is no difference between the placement of alcohol ads in Nigeria and Ghana near schools (\( p>0.05 \)). In line with the expectations, alcohol ads in the Gambia are placed further away from schools compared to those in Uganda. However, they are not placed further away than those found in Ghana (\( p>0.05 \)). Ads in Nigeria are more likely to be placed further from school than Madagascar.

The following relationships were found:

- In Nigeria (\( B=-2.979, \text{Wald}=223.945, \ p<0.001 \)), Ghana (\( B=-2.700, \text{Wald}=73.482, \ p<0.001 \)), Uganda (\( B=-1.056, \text{Wald}=21.272, \ p<0.001 \)) and Gambia (\( B=-1.879, \text{Wald}=28.054, \ p<0.001 \)), ads are more likely to be placed further from school than Madagascar. Surprisingly, in Ghana, ads were placed further from school than in Gambia and Uganda.

- In Ghana (\( B=-1.644, \text{W}=25.557, \ p<0.001 \)), Gambia (\( B=-0.822, \text{W}=5.090, \ p<0.024 \)) and Nigeria (\( B=-1.922, \text{W}=80.331, \ p<0.001 \)), ads are more likely to be further from school compared to Uganda; In Madagascar, ads are less likely to be further from school (\( B=1.071 \text{W}=21.865, \ p<0.001 \)) compared to Uganda.

- In Nigeria (\( B=-1.100, \text{W}=10.323, \ p<0.001 \)) ads are more likely to be placed further away from schools than Gambia. Madagascar (\( B=1.879, \text{W}=28.054, \ p<0.001 \)) and Uganda are more likely (\( B=0.822, \text{W}=5.090 \ p=0.024 \)) to have ads placed closer to school when compared to Gambia. There was no difference between Ghana and Gambia between ads and the distance to school (\( p>0.05 \)).
- In Madagascar (B=2.700, W=73.482, p<0.000), and Uganda (B=1.644, W=25.557, p<0.001) ads are more likely to be placed closer to school compared to Ghana, with Madagascar being closest to schools and Uganda being furthest relative to Ghana.

- In Madagascar (B=2.979, W=223.945, p<0.001), Uganda (B=1.922, W=80.331, p<0.001) and Gambia (B=1.100, W=10.323, p<0.001) ads are more likely to be placed closer to school compared to Nigeria. There was no difference between Ghana and Nigeria between ads and the distance to school (p>0.05).

**Image advertising:**

In line with the hypothesis formulated, the binary logistic regression analyses performed show that outdoor advertisements in the Gambia and Madagascar have significantly less chance to contain images other than product information (Table 2). For example, the odds that alcohol ads contain images in Uganda is 87.6 times greater than in the Gambia. In Ghana, the odds that alcohol ads contain images is 53.8 times greater than in the Gambia. In Nigeria, the odds that alcohol ads contain images other than product information is 40.2 times greater than in the Gambia. When comparing alcohol ads in Madagascar to Gambia, there was no significant difference. The likelihood of using images in ads in Uganda is 2.2 times greater than in Nigeria. When comparing alcohol ads in Ghana to Nigeria, there was no significant difference. Compared to Madagascar, the likelihood of using images in ads is 11.9 times greater in Ghana, 8.9 times greater in Nigeria and 19.3 times greater in Uganda. When comparing alcohol ads in Madagascar to Gambia, there was no significant difference.

**Attractive elements:**

Among the alcohol ads in each country, the most attractive element varied. In Ghana, 21.7% of ads contain social attractiveness elements. In Madagascar, 3.6% of the ads contain social attractiveness elements, which is more than any other

**Table 2.** Likelihood of image advertising by country

<table>
<thead>
<tr>
<th>Level of Regulation</th>
<th>Country</th>
<th>Uganda (U)</th>
<th>Ghana (Gh)</th>
<th>Madagascar (M)</th>
<th>Nigeria (N)</th>
<th>Gambia (Ga)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% self-regulation</td>
<td>Uganda</td>
<td>n.s.</td>
<td></td>
<td>O.R.=19.3 [10.885, 34.284] P=0.951</td>
<td>O.R.=2.2 [1.388, 3.420] P=0.686</td>
<td>O.R.=87.6 [11.516, 666,012] P=0.989</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
<td>Wald=2.152 p&gt;0.05</td>
<td>O.R.=11.9 [6.170, 22.854] P=0.922</td>
<td>n.s.</td>
<td>O.R.=53.8 [6.908, 419.409] P=0.982</td>
<td></td>
</tr>
<tr>
<td>Regulation</td>
<td>Madagascar</td>
<td>Wald=102.359 p&lt;0.001</td>
<td>Wald=54.878 p&lt;0.001</td>
<td>Wald=87.478 p&lt;0.001</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nigeria</td>
<td>Wald=11.455 p&lt;0.001</td>
<td>Wald=1.082 p&lt;0.05</td>
<td>O.R.=8.9 [5.613, 14.010] P=0.899</td>
<td>O.R.=40.2 [5.466, 296.754] P=0.976</td>
<td></td>
</tr>
<tr>
<td>Strict Regulation</td>
<td>Gambia</td>
<td>Wald=18.669 p&lt;0.001</td>
<td>Wald=14.477 p&lt;0.001</td>
<td>Wald=2.129 p&lt;0.05</td>
<td>Wald=13,116 p&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

Notes: n.s. = no significant difference (p>0.05), O.R.= Odds Ratio, P= Probability
attractive element for this country. In Uganda, 15.8% of the alcohol ads represent the nation as an attractive element. In Nigeria, 11.5% of the ads use sports as an attractive element. In Gambia, there were no attractive elements in the alcohol ads.

The linear regression analysis shows that alcohol ads in the Gambia have significantly less attractive elements in alcohol ads compared to alcohol ads in Nigeria ($B = -.274$ ($t = -1.744$) with $p$-1-sided=.041), Uganda ($B = -.598$ ($t = -3.502$) with $p$-1-sided<.001) and Ghana ($B = -.897$ ($t = -4.777$) with $p$-1-sided<.001). There was no significant difference between alcohol ads in Gambia and Madagascar ($p>0.05$). Alcohol ads in Madagascar also have less attractive elements than those found in Nigeria ($B = -.174$ ($t = -2.747$) with $p$-1-sided=.003), Uganda ($B = -.499$ ($t = -5.770$) with $p$-1-sided<.001) and Ghana ($B = -.797$ ($t = -7.250$) with $p$-1-sided<.001). Alcohol ads in Nigeria use less attractive elements than those found in Ghana ($B = -.623$ ($t = -5.168$) with $p$-1-sided<.001) and Uganda ($B = -.324$ ($t = -3.522$) with $p$-1-sided<.001). Although we hypothesized not to find any differences, alcohol ads in Ghana have significantly more attractive elements than ads found in Uganda ($B = -.298$ ($t = -2.164$) with $p$-1-sided=.016).

**Overall picture of differences in outdoor alcohol advertisements between countries:**

To get a summary of how ads in each country score on several characteristics a graph with means have been drawn (see figure 2).

Figure 2 shows that outdoor alcohol advertisements in the Gambian are on average less attractive to youth and smaller

![Figure 2. Average score on closeness to schools, images, attractive elements and size by country.](image)

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in size compared to alcohol advertisements in the other countries. However, by promoting alcohol advertisements on packages of soft drinks (on crates), alcohol marketers have found a way to market closer to schools and playground as seen in Ghana and Nigeria. As expected, the economic regulation in Nigeria does protect young people against large size and attractive outdoor alcohol promotion better than the countries in which self-regulation is in place but not as well as in the Gambia. Outdoor alcohol advertisements in both countries that are only regulated by self-regulation do not differ much, except for placement near schools. In Uganda, outdoor alcohol advertisements are placed on average more close to schools than in Ghana.

DISCUSSION AND CONCLUSION

This paper aims to describe findings of a systematic monitoring exercise conducted in five African countries (the Gambia, Ghana, Madagascar, Nigeria and Uganda) to examine outdoor alcohol advertising. In our analysis we have found that the differences in the use of marketing channels in countries studied suggest that alcohol marketers use various marketing strategies in different countries, depending on the culture’s alcohol acceptability and the regulatory framework that is in place.

Generally in the Gambia, a country with more stringent alcohol marketing regulations than the other countries, and a less tolerant culture on alcohol use, very little outdoor alcohol advertising other than beer crates was found. Alcohol producers here market their product by the use of product display particularly through promotion on crates. Most of the selling points at which these stacked crates were observed, sold no alcoholic beverages. These crates often contain only soft drinks, but constitute an alternative way of promoting alcoholic drinks.

Regardless of the marketing channel used, the use of image advertising (i.e. images showed more than product information) is not common in the Gambia, in line with the use of beer crates and promotional items which generally did not have images. There were significantly less attractive elements in advertisements in the Gambia compared to the other countries, supporting the role of regulation. Results from analyzing the size of advertisements demonstrate that the size of advertisements in the Gambia are smaller than the other countries studied. With respect to placement of advertisements near schools, advertisements in Nigeria were more likely to be placed further from schools than Gambia, while surprisingly there was no significant difference between advertisements in the Gambia and Ghana, indicating a potential gap in Gambian regulations, or stricter regulation in Nigeria and Ghana.

In Ghana, alcohol is frequently marketed by paintings on walls and fences. As described in the MAMPA report (De Bruijn, 2011), painting buildings to market alcohol is part of the Ghanaian tradition: Traditionally, bars in Ghana selling unrecorded alcohol are painted in blue and white. This way, people can recognize the locations where alcohol is sold. Although small posters of alcohol brands are shown on the outside of the kiosks, alcohol-branded posters are almost always found inside the bar which are not visible from the street and are not included in this study. Besides the blue and white bars, international brands often
interact with this traditional type of marketing alcohol by painting bars in specific colors (De Bruijn, 2011). This type of alcohol advertising shows people not only where they can buy alcohol, but also the “recommended” brand of choice. These painted bars are not only found in large cities, but also in small towns and villages (De Bruijn, 2011). Reaching the capital city of Ghana, traffic junctions were covered with billboards of different products. Alcohol-branded billboards were frequently found. These billboards mostly advertised international beer and spirit brands. In some places alternatives to billboards were placed to reach out to the crowd. Posters, along with billboards, were often found in the city centre as well. There were significantly more attractive elements used in advertisements in Ghana, and to a lesser degree in Uganda, suggesting that self-regulation is related to image advertising and the use of attractive elements. The results of the size of advertisements showed that ads in Ghana are larger than those found in Nigeria and Gambia, where there is stronger regulation in place. Although Uganda and Ghana are virtually the same with respect to level of regulation and global alcohol companies active in the country, it was found that advertisements in Ghana are placed further away from schools compared to Uganda. No conclusive explanation can be given for this difference except for the preference of marketers in Ghana to use the walls of pubs and bars to place their ads. This tradition is less flexible compared to the use of billboards and posters which are the marketing channel of choice in Uganda.

In Madagascar, alcohol is frequently advertised through the use of posters, and flags or signs. Regulation in Madagascar states that advertising of fermented beverages cannot portray a positive influence on health and longevity. Advertising of distilled beverages is prohibited except for providing product information only. In the advertisements observed in Madagascar, there was a significantly lower chance of advertisements containing images other than product information and attractive elements, however, it did not completely rule out potential breaches (i.e. advertisements showed image advertising and not solely product information) suggesting a need for stricter monitoring. Although the regulations in Madagascar do not refer to the size of the ads, the advertisements in Madagascar are smaller than those found in Uganda, which is in line with expectations. Madagascar’s legislative base states that alcohol cannot be sold within 150 metres of an educational center, but there is no requirement to say that advertisements cannot be placed within this radius. Advertisements in Madagascar were found to be closest to school when compared to the other countries.

In Nigeria, small posters and product display were commonly used marketing channels. In both the city centre and the suburban area, there were not many large alcohol posters or billboards. The lack of large posters or billboards might be due to a governmental tax that is in place. Retailers and alcohol producers have found alternative ways to market alcoholic products, especially beer. Stacked crates of beer, often in combination with small posters, are displayed on the street to indicate selling points of alcohol. The frequency of places with crates of beer on the street indicate the numerous selling points and distribution centers of alcohol. Besides the benefit of creating more space inside the store for customers, crates of
beer in front of the store are used as a marketing instrument (De Bruijn, 2011). In the village that was monitored, similar tactics were found. Industrial produced alcohol is promoted by small posters and the display of crates and beer cans. Locally produced alcohol is advertised more frequently in villages compared to the more urban areas. It is promoted by the display of mugs made from calabash or bottles of locally produced spirits in front of the stores and bars. Another marketing instrument which alcohol producers provide shop and bar owners with, is the use of chairs, tables, umbrellas and refrigerators with logos of the brand. Providing this material assures the alcohol companies that retailers will sell their brand. The likelihood of image advertising in Nigeria is greater than in the Gambia, but the same as Ghana, suggesting that Nigeria and Ghana have similar regulation (or non-regulation) with respect to image advertising. Yet, alcohol advertisements in Nigeria have less attractive elements than those in Ghana and Uganda, countries with only self-regulation, suggesting that regulation might facilitate dealing with attractive elements in advertisements. The results from the placement of ads near the school suggest that Nigeria and Ghana are similar with placement of advertisements near schools, which is comparatively further from schools than in Madagascar, Uganda and even the Gambia.

In Ghana and Uganda, alcohol marketers do not yet seem to be confronted by cultural or regulatory boundaries. Alcohol-branded posters and billboards were frequently found on the main roads and the city centre of the capital city of Uganda. On roads that were expected to be very busy during rush hour, large billboards were found. Some of the billboards covered whole buildings or the sideways of streets, dominating the street view (A. de Bruijn et al., 2014). There was also a high likelihood for advertisements in Uganda to contain image advertising compared to the Gambia, Madagascar, and Nigeria. There was no significant difference between Uganda and Ghana for image advertising suggesting that countries that have only self-regulation will have a high likelihood of image advertising, whereas stricter regulation will prevent image advertising. Advertisements in Uganda were larger than those in Madagascar, Nigeria and Gambia, and there was no difference in the size of advertisements in Uganda and Ghana. This again, suggests that regulations should control for the size of the advertisements. In Uganda, a country that has only self-regulation, advertisements were closest to schools compared to the other countries studied, except for Madagascar. In the case of Uganda, stricter regulation could mean that advertisements will be placed further away from schools.

**Strength and limitations**

Although alcohol marketing activities have been increased rapidly over the last few years in Africa. Independent monitoring of these activities is rather new. The MAMPA report (De Bruijn, 2011) illustrates alcohol marketing in African countries. The current paper aims to provide a quantitative description of differences between the countries studied. The paper focuses on outdoor advertising, a type of marketing that is very visible and can dominate the public arena. In practice, outdoor alcohol advertising often connects the consumer to points of sale for alcohol.
The volume of alcohol marketing practices is an important component when examining outdoor alcohol advertising. Since areas monitored were not identical in terms of size, the amount of advertisements in the areas identified could not be compared meaningfully. Future research is recommended to focus on quantity of alcohol advertisements. In this paper we were able to compare the placement near schools, attractiveness of the alcohol advertisements and their size. Aggregated data could be utilized in future research to be compared with cohort data to draw links between alcohol advertising and individual attitudes and behaviours (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009).

The level of attractiveness of outdoor advertisements is measured by the presence of images and the number of attractive elements found in the advertisement. This method provides only an indication of level of attractiveness and does not cover the full spectrum of attraction. Future research is recommended to focus more on this element, for example by the use of (youth) rating panels (Babor, Xuan, & Damon, 2013; Babor, Xuan, & Proctor, 2008).

**Policy recommendations**

Most African countries are not prepared to deal effectively with societal and individual problems that result from alcohol use and misuse. To prevent these problems is even more challenging. Next to other control policy instruments like limiting the availability and affordability of alcohol (T. Babor et al., 2010), it is important to restrict or to prohibit alcohol advertising to prevent a one-sided, positive image of alcohol (De Bruijn, Johansen, & Van den Broeck, 2010), especially given the lack of a systematic and ground-ed prevention strategy in most countries. In an action plan for effective alcohol policy, Parry (2000) points out that the restriction of alcohol marketing is one of the most promising strategies for governments in developing countries.

Although the sample was too small for testing, preliminary results presented suggest that alcohol marketing regulations that are in place (together with cultural values), influence the characteristics of alcohol advertising in the public arena. For example, in the Gambia, the combination of clear and strict alcohol marketing regulations, the support of this regulation by the general public and the relatively small size of Banjul Brewery which is not owned by giant global alcohol companies, might explain why the Gambian youth is not exposed to much alcohol advertising. Important media and marketing channels, particularly television, radio, and sport sponsoring, are free of alcohol advertising. Yet, by permitting alcohol advertising on the street, increases in outdoor alcohol advertising can become an issue in the future. It is also important to note that advertisements in the Gambia are not necessarily placed furthest from schools compared to the other countries studied, and thus, this is an area that merits further monitoring. A ban on broadcasting alcohol marketing and alcohol branded sport sponsorship in the Gambia illustrates legal possibilities that governments of developing countries can take to address alcohol marketing in their country. Banning alcohol advertising from the public arena goes hand in hand with the aim to protect young people against exposure to alcohol advertising and promotion which could prevent increases in their alcohol use.
Regulations in Madagascar and Nigeria also suggest ways to improve alcohol marketing regulations. For example, in Madagascar’s regulation, alcohol cannot be portrayed as having a positive influence on health and longevity and advertisements of distilled beverages can only provide product information. Including a clear stipulation such as this can potentially protect youth against alcohol harm, but there is also a need to ensure that such stipulations are enforced. The use of taxation on billboards in Nigeria discourages the use of this marketing channel, although, instead the alcohol industry places emphasis on other methods.

Findings presented in this paper suggest that the self-regulation of outdoor alcohol advertising is not able to protect young people against exposure to alcohol ads near their school, and against attractive and large size alcohol ads. The placement of alcohol advertisements near schools and playgrounds already illustrates that international self-regulation codes were not adhered to in Uganda. This self-regulating system is supported by the National Alcohol Policy drafted. These National Alcohol Policy drafts when being discussed were almost identical in Ghana and Uganda and rely fully on self regulation of alcohol marketing without a framework of legislation (Bakke & Endal, 2009). The role of the alcohol industry in the development of these policies is heavily criticized by experts specialized in alcohol and drugs as a development issue (Bakke & Endal, 2009; Dumbili, 2013).

In conclusion, further quantitative and qualitative research on restriction of alcohol marketing, monitoring regulations and reduced input from the alcohol industry are recommended as strategies to protect youth from exposure to alcohol advertisements and subsequent harm.

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