Outdoor Advertising and Daily Journeys to School

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Outdoor advertising and daily journeys to school

A social marketing approach to regulation

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Introduction

• Outdoor advertising in the UK is ‘a consistently successful medium’ (Kinetic, 2011:5).
• A number of studies from North America, New Zealand, India and Greece suggest that outdoor advertising targets specific and potentially vulnerable communities (Barbeau et al., 2005; Cairns et al., 2013; Day and Pearce, 2011):
  – Communities afflicted by urban and physical decay.
  – Young people.
• Prevailing approaches to regulation may represent, at best, a missed opportunity, at worst, an inadequate response to public health threats.
Research questions and approach

Critical social marketing perspective to analyze the distribution of outdoor advertising around schools

- What is the relationship between outdoor advertising and urban vulnerability?
- How do our findings fare against existing guidelines for best practice?
- What are the implications for outdoor advertising regulations and industry codes of conduct?

Review of policies and codes of conduct around outdoor advertising (in reference to children)

Spatial analysis study conducted around 100 schools in Nottingham

Discuss implications.
Background

Outdoor advertising

• Outdoor advertising in the UK is ‘a **consistently successful medium**’ (Kinetic, 2011:5).
• At the same time, young people have become a fast-growing market segment, and the **effort** and **expenditure** devoted to targeting them has **increased** proportionally.
• The issue of **advertising regulation** has been attracting wider attention, with **polarised views** ensuing about its influence on consumers’ attitudes, behaviours and outcomes.
  ➔ A consistent message is that **stronger regulations are needed** so that the persuasive effects outdoor advertising are not targeted towards vulnerable groups.
Background
Outdoor advertising regulations

- Many countries have taken regulatory action and self-regulatory practices are being introduced to protect advertisers’ and consumers’ interests.

**Regulatory action**
- Philadelphia: billboards prohibited within 660ft of parks, playgrounds, schools.
- No outdoor advertising in Sao Paulo, Brazil, since 2006.
- India: ban on certain forms of ads within 100 yards of schools.

**Self-regulation**
- Australia (Children’s Advertising Review Unit CARU).
- UK (Advertising Standards Authority ASA): complaints & ensuring code compliance.
- Expected to benefit organizations and consumers, limited effect.

**UK regulations and codes of conduct**
- Tobacco ads- complete ban.
- Outdoor Media Centre voluntary code for outdoor advertisers: no alcohol advertising on static panels within 100m of schools.
- ASA: placement restrictions for sexual imagery.

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Spatial analysis study. Sample
Understand how UK codes of conduct fare against the distribution of outdoor advertising

ANALYSIS
- Content analysis of geo-tagged photos in terms of advert classes and depicted products; descriptive statistics.
- Poisson regression to model the number of ads across the defined school locales based on urban vulnerability.

SCHOOLS MAP
Map all schools in Nottingham (N= 100)

SCHOOL LOCALES
Schools were chosen as unit of analysis.

OUTDOOR ADVERTISING
Geo-tagged photos of advertising sports. Data set consists of 1197 advert points, 1969 depicted products.

LOCALE EXTENTS
Geographic extents were defined for each school by applying 500m buffers around each school ground and five consecutive buffers every 100m.

URBAN VULNERABILITY
Locales characterised through urban vulnerability descriptors.

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Spatial analysis study. Sample- school map and locales extents

Snipped view of schools in Nottingham and successive buffers around them
Spatial analysis study. Sample- Urban vulnerability

Descriptors of urban vulnerability (results of Principal Component Analysis)

Rotated component matrix

<table>
<thead>
<tr>
<th>Rotated component matrix</th>
<th>Socio-economic deprivation</th>
<th>Living environment deprivation &amp; diversity</th>
<th>Amenities accessibility</th>
<th>Neighbourhood access &amp; violence</th>
<th>Barriers to housing &amp; services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to minor roads</td>
<td>Distance to A (major) roads</td>
<td>Distance to B roads</td>
<td>Indoors deprivation</td>
<td>School deprivation</td>
<td>Adult skills</td>
</tr>
<tr>
<td>Geographical barriers</td>
<td></td>
<td>Geographical barriers</td>
<td>Employment deprivation</td>
<td>School ethnic diversity</td>
<td>Number of supermarkets</td>
</tr>
<tr>
<td>Number of supermarkets</td>
<td>Education, skills &amp; training</td>
<td>Employment deprivation</td>
<td>Distance to bus stops</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
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<td>Employment deprivation</td>
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<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
<td>Education, skills &amp; training</td>
</tr>
<tr>
<td>School deprivation</td>
<td>Number ofスーパーマーケット</td>
<td>Employment deprivation</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
<td>Education, skills &amp; training</td>
</tr>
<tr>
<td>Number ofスーパーマーケット</td>
<td>Health deprivation &amp; disability</td>
<td>School ethnic diversity</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
<td>Education, skills &amp; training</td>
</tr>
<tr>
<td>Health deprivation &amp; disability</td>
<td>Income deprivation affecting children</td>
<td>Living environment deprivation</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
<td>Education, skills &amp; training</td>
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<tr>
<td>Income deprivation affecting children</td>
<td>IMD</td>
<td>Living environment deprivation</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
<td>Education, skills &amp; training</td>
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<tr>
<td>IMD</td>
<td>Number of commercial establishments</td>
<td>Crime</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
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<td>Number of commercial establishments</td>
<td>Crime</td>
<td>Outdoors deprivation</td>
<td>Deprivation affecting young people</td>
<td>Education, skills &amp; training</td>
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<td>Crime</td>
<td>Wider barriers</td>
<td>Wider barriers</td>
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<td>Wider barriers</td>
<td>Wider barriers</td>
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Spatial analysis study. Sample- Outdoor advertising
Documentation of all outdoor adverts within 500m of school grounds

- Data-set of 1090 geo-tagged photos;
- Geo-tagged photos were content-analysed in terms of advert class and product type, resulting in 1197 advertisements, 1969 depicted products.
- Poisson regression.
Spatial analysis study. Results

Advert classes represented in our sample
Spatial analysis study. Results
Product classes represented on the sampled adverts

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Spatial analysis study. Results
Poisson Regression: Descriptors of urban vulnerability and ad distribution in Nottingham

- Environment deprivation & diversity (Component 2) 95.6% increase in the number of ads.
- Barriers to housing and services (Component 5): 35.4% fewer ads.
Discussion

Main findings

• Effectiveness of outdoor advertising regulations in the UK:
  – Letter of these codes is followed, we ask whether the spirit of the code is also adhered to.
  – Emerging areas: advertising for gambling and lottery, smaller format advert classes.
  – Living environment deprivation and diversity; commercial attractiveness of areas.
Conclusion

• In broad lines, placement restrictions are an effective measure to protect potentially vulnerable groups from the negative effects of some outdoor advertising.

  ➔ It is important that social marketing practitioners continue to monitor the impact of marketing activity on local communities and provide a nuanced understanding of the relationship between individual and environment.

  ➔ Looking upstream, they should also be entrusted with evaluating the evidence base for the effectiveness of marketing regulations.

  ➔ By adopting systems thinking, social marketing practitioners could be bringing together upstream stakeholder such as the ASA, as well as campaign groups and citizens for more meaningful collective action and change.
Thank you!

Time for questions

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• Encoding of product classes and types was based on typologies previously developed in Australian Food and Grocery Council (2012) and Kotler (2002).
• Advert classes and types: Cronin (2006).

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### Parameter Estimates

<table>
<thead>
<tr>
<th>Parameter</th>
<th>B</th>
<th>Std. Error</th>
<th>95% Wald Confidence Interval</th>
<th>Hypothesis Test</th>
<th>95% Wald Confidence Interval for Exp(B)</th>
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<tbody>
<tr>
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<td>.0440</td>
<td>3.047</td>
<td>3.220</td>
<td>5067.188</td>
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<tr>
<td>(Scale)</td>
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<td></td>
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</tr>
</tbody>
</table>

**Dependent Variable:** Number of ads

Model: (Intercept), School type, Components 1-5

- a. Set to zero because this parameter is redundant.
- b. Fixed at the displayed value.
The suitability of PCA was assessed prior to the analysis:

- The overall Kaiser-Meyer-Olkin (KMO) measure was 0.754, deemed as ‘meritorious' according to (Keiser, 1974)
- Bartlett's test of sphericity was statistically significant $p< .005$), indicating that the data was likely factorizable
- PCA outputted 5 components that had eigenvalues greater than one and which explained 39.26%, 21.59%, 7.92%, 6.44% and 5.69% of the total variance
- This solution explained 80.91% of the total variance and a Varimax orthogonal rotation was employed to aid interpretability
References

URL: http://tinyurl.com/mu6q6cm.


