Gambling venues and the distribution of harm

While the spatial distribution of EGM (electronic gaming machine) venues (i.e. pubs, clubs, and casinos) in Australia has been shown to follow a gradient of socioeconomic disadvantage, little is known about the differences between individual venues in terms of gambling outcomes. We categorised EGM venues in the Northern Territory (NT) according to geographic and licensing variables, then conducted a mail-survey to examine the variation between these venue types in terms of clientele, gambling participation, and problem gambling. For a full description of this study see Young et al. (in press).

**Methods**

We clustered 64 EGM venues in the NT based on five variables that have previously been implicated in gambling outcomes: a) license type, b) number of EGMs, c) proximity to a centre of community congregation such as a supermarket, d) distance from the central business district, and e) venue density. We subsequently identified the clientele of each venue through a geocoded mail survey (conducted April - August 2010) of all NT households in the Geocoded National Address File. Our response rate was 14.5% (totalling 7,041 completed questionnaires).

**Results**

**Venue typology**

The cluster analysis identified six distinct venue types:

1. **Casinos** (n = 2): Large, gambling-specific venues are licensed to provide several hundred EGMs as well as table games.
2. **Supermarket-attached clubs** (n = 7): Located within 750m of a supermarket. All but one had reached their cap of 45 EGMs.
3. **Peripheral clubs** (n = 19): Smaller clubs (e.g. golf and bowling clubs) located away from shopping centres, typically near sporting facilities.
4. **Agglomerated pubs** (n = 10): Centred on Mitchell Street in Darwin’s CBD and oriented towards the night-time economy.
5. **Supermarket-attached pubs** (n = 9): Located within 750m of and usually integrated into a supermarket complex.
6. **Peripheral pubs** (n = 17): Located away from urban shopping complexes and the CBDs, such as along thoroughfares (e.g. roadhouses) or near other facilities (e.g. airports and beaches).

**Gambling outcomes**

Gambling behaviour varied significantly by venue type (Table 1). The proportion of visitors who played EGMs was significantly higher for casinos (40.2%) and supermarket-attached clubs (22.4%) compared to 14.1% for all venues. Conversely, a lower proportion of supermarket-attached (7.2%) and agglomerated pub-goers (6.2%) gambled on EGMs compared to the whole sample. Mean EGM gambling session duration was highest for the casinos (130 min), followed by clubs (over an hour for both types), and lower again for the pubs. Visitors travelled further on average to visit the casinos (10.2 km) than other venues. The distance travelled to venues that were near supermarkets was significantly lower (4.5 km for supermarket-attached pubs and 4.7 km for supermarket-attached clubs) compared to visits to all venues (7.3 km).

Casinos were most associated with problem gambling, with 6.7% of casino visitors at high risk of problem gambling (c.f. 2.8% for the sample frame). Supermarket-attached clubs were also associated with high rates of gambling-related harm, with 10.1% of visitors at moderate risk of problem gambling (c.f. 5.3% for the sample frame).

We suggest two forces at play here: accessibility and venue size. In terms of accessibility, the location of EGM venues in or near local shopping centres means that more people are exposed to convenience gambling. In terms of venue size, larger venues are able to be gambling-specific venues and attract proportionately more EGM gamblers by virtue of the gambling opportunities available. The result is a scale effect, whereby venues offering more EGMs are able to reinvest their earnings in other gambling-specific features such as larger linked jackpots, marketing and promotions.
Table 1: EGM gambling participation, EGM session duration, distance travelled to venue and problem gambling by venue type

<table>
<thead>
<tr>
<th></th>
<th>Casino n = 1069 N = 16530</th>
<th>Supermarket-attached club n = 999 N = 14133</th>
<th>Peripheral club n = 1331 N = 19874</th>
<th>Agglomerated pub n = 449 N = 11107</th>
<th>Supermarket-attached pub n = 447 N = 8799</th>
<th>Peripheral pub n = 683 N = 14819</th>
<th>Sample frame n = 7041 N = 112541</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent played EGMs</td>
<td>40.2</td>
<td>22.4</td>
<td>14.7</td>
<td>6.2</td>
<td>7.2</td>
<td>10.8</td>
<td>14.1</td>
</tr>
<tr>
<td>EGM session (mean mins.)</td>
<td>130</td>
<td>64</td>
<td>62</td>
<td>38</td>
<td>59</td>
<td>54</td>
<td>88</td>
</tr>
<tr>
<td>Distance travelled to venue (mean km)</td>
<td>10.2</td>
<td>4.7</td>
<td>6.8</td>
<td>8.6</td>
<td>4.5</td>
<td>8.0</td>
<td>7.3</td>
</tr>
<tr>
<td>PGSI Non-problem %</td>
<td>71.5</td>
<td>76.4</td>
<td>84.5</td>
<td>83.2</td>
<td>79.3</td>
<td>82.8</td>
<td>83.1</td>
</tr>
<tr>
<td>Low risk %</td>
<td>13.0</td>
<td>9.9</td>
<td>8.7</td>
<td>12.7</td>
<td>11.0</td>
<td>8.6</td>
<td>8.9</td>
</tr>
<tr>
<td>Moderate risk %</td>
<td>8.8</td>
<td>10.1</td>
<td>4.5</td>
<td>2.7</td>
<td>5.9</td>
<td>6.1</td>
<td>5.3</td>
</tr>
<tr>
<td>High risk %</td>
<td>6.7</td>
<td>3.6</td>
<td>2.2</td>
<td>1.4</td>
<td>3.8</td>
<td>2.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Notes: n = number of respondents, N = weighted sample size. Category estimates where the 95% confidence interval does not overlap the sample frame’s 95% confidence interval are indicated in bold.

Authors and acknowledgements
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References