

Closures, Clusters and Deprivation: The Geographies of High Street Betting Shops in the Early Twenty-First Century

Tim Hall (University of Winchester), **Peter Jones** (University of Gloucestershire), **Grace Nash-Williams** (University of Winchester)

Corresponding author: Tim Hall
Faculty of Humanities and Social Sciences
University of Winchester
Sparkford Road
Winchester
Hampshire
SO22 4NR

tel: 01962 841515
fax: 01962 842280

tim.hall@winchester.ac.uk

Main article
Word count (main text): 3611

Keywords: Betting shops; gambling; retail; urban; deprivation; clusters; United Kingdom.

Closures, Clusters and Deprivation: The Geographies of High Street Betting Shops in the Early Twenty-First Century

Abstract

Betting shops have been a familiar, if not always universally loved, feature on the High Street in all towns and cities throughout the UK for some 60 years, but in recent years concerns have been expressed about the undesirability of their presence in the urban retail environment. This paper analyses the geographies of betting shops in six urban areas in the UK. It explores the basic geographies of betting shops in these towns and cities and specifically the charges that they show a tendency to form clusters and that they are disproportionately found in areas of high deprivation. It finds some evidence to support these claims but recognises some important qualifications. This analysis is set within the recent sharp decline of betting shop numbers in the UK. The policy implications of these findings are drawn out.

Introduction

Betting shops have been a familiar, if not always universally loved, feature on the High Street in all towns and cities throughout the UK for some 60 years, but in recent years concerns have been expressed about the undesirability of their presence in the urban retail environment and more particularly about their role in encouraging gambling, particularly within deprived urban communities (Macdonald et al., 2018; Wardle et al., 2014) and their potential links to crime, antisocial behaviour and other environmental issues (Bradford 2011 in Macdonald et al., 2018). Further, recent years have been challenging ones for betting shops which have seen large numbers closing or due to close in the near future due to the impacts of technology, in the form of the growth of online gambling, regulation and the Covid-19 pandemic (Davies, 2020; Gambling Commission, 2019). With these thoughts in mind, this paper examines the geographies of betting shops in the early twenty-first century and focuses on the relationship between their location and areas of deprivation within a sample of towns and cities in the UK. As such, it revisits and updates issues explored in a

previous paper co-authored by one of the authors of this paper and published in *Geography* over 25 years ago (Jones, et al., 1994). The paper draws on data from the Gambling Commission, retail data showing the location of betting shops in Birmingham, Cardiff, Cheltenham, Crewe, Edinburgh, and Portsmouth for 2019, and fieldwork by two of the authors.

Recent Changes in the High Street Betting Industry and Environment

The first betting shops in the UK were opened in 1961 (Jones et al., 1994) and at the end of that decade bookmakers were trading from almost 16,000 outlets. However, following corporate reorganisation and geographical rationalisation, the number had declined to less than 10,000 by 2010 (Gambling Commission, 2019). Over the same time period, there have been a number of changes within the industry including live television coverage of sporting events and legislation permitting the introduction of Fixed Odds Betting Terminals (FOBTs) within shops, and many of the larger betting shops companies looked to have become multi-channel retailers and promote new digital experiences and services within their shops.

While gambling, and the operation of betting shops, has always been regulated within the UK, recent years have seen political and media pressure for tighter regulation to protect gamblers and the public at large. Such pressure led to the government's announcement in 2018 of its intention to reduce the maximum stake for FOBTs from £100 to £2. The betting shop companies had consistently opposed regulatory controls on FOBTs, claiming that it would lead to them closing large numbers of shops. More generally, the impact of betting shops on the vitality and viability of town centres has been a cause for widespread concern. The London Borough of Tower Hamlets Local Plan (2018: 5), for example, suggested that the proliferation of betting shops can harm "the attractiveness, vitality and character of town centres". Concerns have also been expressed about the clustering of betting shops in districts of towns and cities that exhibit deprivation. A decade ago, Harriet Harman (2011, [online]), then Shadow Secretary of State for Culture, Media and Sport, claimed that "high streets in low-income areas across the UK are blighted by the

prevalence of bookmakers” and that such shops are “pushing many families further into poverty and creating a dangerous synergy between welfare dependence and gambling that threatens the fabric of our communities”. There have also been persistent suggestions that increases in anti-social behaviour and crime have been associated with the proliferation of betting shops.

During the last decade, and in the face of the growth in mobile and online betting opportunities and legislation to dramatically reduce stake money on FOBTs, the number of betting shops in the UK declined to 8,320 by 2019. This decline disproportionately affected independent shops or smaller chains although some large chain operators have indicated that significant cuts to their shop estate are imminent (Davies, 2020). Gambling companies have looked to close their poorer performing outlets in an attempt to develop a more sustainable model. That said, some shops with a short time period remaining on their leases were also considered vulnerable. Here closures have occurred in some better performing outlets where the betting shop companies have been unable to negotiate a reduction in leasing charges, to reflect their changing business environment, with property owners. Where betting shop companies have owned, rather than leased shops, then in some cases this has influenced decisions to retain, rather than close, shops. Competition has also been a factor in cases where two companies’ shops are located in close proximity and one company has recognised that its competitor has strong customer loyalties, and that investment in modernisation would show little or no future return.

Method of Inquiry and Data Analysis

This paper analyses betting shop locations for 2019 in six British towns and cities: Birmingham, Cardiff, Cheltenham, Crewe, Edinburgh, and Portsmouth. **This utilised retail data purchased from a business analytics company, a sample of which was tested for accuracy through site visits, virtual field surveys and the local knowledge of two researchers. Very few inaccuracies or omissions were identified. Shop data included locational information which allowed mapping and analysis using QGIS software. Deprivation data was obtained through the English indices of deprivation 2019 mapping resources and Lle: A Geo-Portal for Wales websites (Gov.uk, 2019; Welsh Government, 2019).**

These six towns and cities were selected for their geographical spread, population size range and familiarity to the researchers. These data covered 371 betting shops in the six urban areas. Birmingham and Edinburgh contained the most shops with 176 and 81 respectively, whilst Cardiff had 60 shops in 2019. Cheltenham, Crewe and Portsmouth had 17, 12 and 25 shops respectively. The vast majority of these shops, 332 or 89.5 percent, were the 'Big Four' brands, Coral and Ladbrokes (both owned by GVC Holdings), Betfred and William Hill (table 1). A further 12 shops were owned by Paddy Power, an Irish company who run over 100 shops in the UK. This mirrored the nationwide picture where, in March 2019, 7241, or 87 percent, of the UK's 8,320 betting shops were Big Four shops (Gambling Commission, 2019).

Table 1: Betting shop data analysed, summary statistics

The following sections aim to explore three issues:

- The basic geographical patterns of betting shops within these urban areas.
- The charge that betting shops are disproportionately located in areas of high deprivation. This utilises Index of Multiple Deprivation data from 2019 which were mapped against betting shop locations in five urban areas.
- The charge that betting shops display distinctly clustered distributions with multiple shops located in close proximity. This is explored through site visits, virtual 'streetview' surveys and spatial statistical analysis.

The Contemporary Geographies of Betting Shops

In large urban areas, the geographies of betting shops display three elements, with the largest grouping of betting shops located towards the edges of urban centres; smaller groupings of shops found in other areas of the towns/cities, with a tendency for these to occur in areas of higher deprivation; and single shops or pairs of shops distributed more widely. These patterns were observed in the four most populous urban areas studied (Birmingham, Cardiff, Edinburgh, and Portsmouth). In all cases the majority of shops

occupied what might be characterised as 'high street' rather than 'side street' or 'back street' locations (Jones et al., 1994). Whilst in smaller urban areas the central grouping of betting shops remain, other aspects of their geographies are less consistent. Both smaller urban areas (Cheltenham and Crewe) displayed central groupings of six and five betting shops respectively. However, whilst Cheltenham's remaining shops were distributed throughout the town, Crewe's few remaining shops were located in two small groups to the east and south of the centre.

Betting shops located within the centres of urban areas tend to occupy relatively marginal positions within these spaces, something illustrated by the case of Birmingham (Figure 1). There are two sub-groupings of shops within Birmingham's central area, one consisting of 11 shops to the north of New Street Railway Station around Birmingham's primary shopping and commercial centre, and a group of six shops to the South of New Street Station in the Rag Market / Aracadian / Chinatown area. This second area is a formerly marginal city centre quarter that underwent extensive regeneration in the 1990s. Although some betting shops in these groups occupy more central locations than is typical of the city centre shops observed in other locations, closer inspection reveals other forms of marginality in these sites. For example, a William Hill shop is located at the top of the pedestrian ramp leading into the Grand Central shopping centre located above New Street Station. Whilst very central, this location is primarily one of pedestrian transit which is, and has long been, occupied by convenience outlets, such as fast-food takeaways. The shop in question is also relatively small. Further, the William Hill shop in New Street near the Britannia Hotel, at the heart of Birmingham's central shopping area, occupies a first-floor location with only a single doorway opening directly on to New Street. In addition, a Betfred shop on Stephenson Street occupies a site which is dark, overhung by the New Street Station development and which has traditionally been occupied by relatively transitory, convenience retail outlets. The other shops in these groups occupy spaces that are peripheral to the main retail centre in ways that reflect the geographies of their equivalents in other urban centres.

Figure 1: Betting Shop Locations and Multiple Deprivation Birmingham, 2019

Secondary groups of betting shops in all of the urban areas examined, where they were present, tended to contain between three and five shops. In all urban areas there was a tendency for such shops to locate in areas of higher deprivation. The numbers of such groups were not large, however, with Cardiff containing four such groups, Edinburgh five and Portsmouth two, outside their main shopping centres. Whilst Birmingham contained more of these groups, this reflects its significantly larger size.

In Portsmouth one secondary group, in the London Road area, is typical of these secondary groupings (Figure 2). It contains four shops with a fifth nearby to the north. Here two Betfred shops are found in sight of each other on the same parade of shops, albeit on opposite sides of the road, with a Ladbrokes and a William Hill found between them. This is an area characterised by a high number of budget and convenience supermarkets, coffee shops, pubs and fast-food takeaways and banks. There is one branch of Cash Generator on this parade of shops, a company that buys and sells second-hand items as well as offering a cheque cashing facility, and slightly further north up London Road, a branch of Cash Converters. Both of the secondary groups of betting shops in Portsmouth, on London Road and to the north in Cosham, are in areas characterised by relatively high levels of deprivation. The London Road group is located within the third most deprived decile and surrounded by areas in the first, second, third and fourth most deprived deciles. Two shops in the Cosham cluster are located in the second most deprived decile, although this does border an area of more middling deprivation within which the third shop in this group is located.

Figure 2: Betting Shop Locations and Multiple Deprivation Portsmouth, 2019

Secondary groups of shops were much less common than lone shops or pairs of shops in the urban areas studied. The distribution of these secondary groups reflects a combination of the geography of local shopping centres and multiple deprivation to an extent, in that local shopping centres in less deprived areas of the towns and cities studied tend to be characterised more by lone betting shops, pairs of shops or an absence of shops.

However, numerous examples of local shopping centres in relatively highly deprived areas were also observed which contained lone betting shops, pairs of shops or no betting shops at all. Such secondary groups of betting shops seem to represent those that have drawn the ire of critics who suggest they represent a clustering tendency in areas of relatively high deprivation. This analysis suggests there is some limited substance to this charge, although this tendency is not universal and betting shops show no greater tendency to cluster in these places than do small bank branches, food outlets and budget and convenience supermarket outlets. Indeed, other research suggests gambling outlet clusters are less common than clusters of other types of retail “environmental bads” (see below and Macdonald et al., 2018: 227). The issues of clustering and deprivation will be explored further in the following section.

Betting Shops, Clustering and Deprivation

At the intra-urban level there does appear to be a relationship between betting shop location and deprivation. The Bennett Institute for Public Policy (2019, [online]) for example, are able to argue that “on average, towns that have a greater proportion of poor people living in them, have high streets that are much more densely filled by betting shops”. This section explores the relationships between betting shop location and deprivation at the inter-urban level within five of the urban areas studied. In the five urban areas for which multiple deprivation data was available (excluding Edinburgh) betting shop locations were skewed towards areas of relatively higher deprivation with almost three quarters of shops located in the four most deprived deciles (table 2). This skew towards locations in relatively more deprived areas was observed in all the urban areas examined with the exception of Cheltenham. It was particularly pronounced in Birmingham, however, which numerically dominated this analysis. If Birmingham is removed from the analysis, the four remaining urban areas still demonstrate this skew towards betting shops locating in areas of relatively high deprivation but it is much less pronounced (table 3). With Birmingham included in the analysis the five most deprived deciles account for the locations of 83.2 percent of betting shops, removing Birmingham reduced this to 68.4 percent. We can conclude that betting shops do locate more frequently in areas of high deprivation but this tendency varies

between urban areas and there are likely to be a few exceptions, as demonstrated by the case of Cheltenham.

Table 2: Distribution of Betting Shops and Areas of Multiple Deprivation (analysis for Birmingham, Cardiff, Cheltenham, Crewe, Portsmouth).

Table 3: Distribution of Betting Shops and Areas of Multiple Deprivation with Birmingham excluded (analysis for Cardiff, Cheltenham, Crewe, Portsmouth).

Gambling companies, unsurprisingly, have said little publicly about their outlet location strategies and their relationship to areas of deprivation. In addition to being commercially sensitive, any public discussion by gambling companies of betting shop location and deprivation has the potential to generate very damaging publicity. Analysis of the academic and professional literature, though, points to four factors influencing the patterns observed here. First, betting shop locations reflect patterns of customer demand. Betting shops are sustained by relatively limited pools of frequently visiting customers. Identifying and locating near such customer pools is important for betting shop success. Second, proximity to other amenities such as public transport hubs, food outlets and pubs and bars has been shown to be important in betting shops attracting customers. A betting shop visit is rarely the only reason for a customer trip. Typically betting shop visits are combined with use of these other, complementary, amenities. Third, gambling companies seek low rent locations for a significant proportion of their betting shop estate. These tend to be found more frequently in areas of disadvantage. Finally, the regulatory environment in the UK offers few instruments with which central or local government can directly influence the locations of betting shops with regard to areas of deprivation (Jones, et al., 2021: 4; Macdonald et al., 2018: 228; Newgrove, no date).

The tendency of betting shops to cluster, a charge prominent within critical discourses of high street betting, was analysed through three measures. These were analysis of the average distance to nearest shop, number of shops within 400 metres of nearest neighbour and nearest neighbour analysis. 400 metres has been cited as “a distance people are willing to walk before taking alternative transport” in a previous spatial analysis of high

street betting (Vi, 2012 [online]). This analysis reveals that the mean distance to the nearest betting shop is slightly in excess of 400 metres in all towns and cities except Crewe (table 4), which only accounts for a small number of shops, half of which are found in close proximity around the city centre. This is 'straight line' distance. Walking between shops will generally necessitate walking further than this depending upon local street patterns. However, the majority of betting shops examined (61.4 percent, table 5) were found within 400 metres of their nearest neighbour. Vi (2012: np) argues "new betting shops preferred to open where there were high concentrations of betting shops within a 400m radius". Our results show some similarities with Vi (2012). However, few "high concentrations of betting shops" were actually observed beyond city centre areas. Even around city centres, it would be stretching the charge to suggest betting shops dominate these retail landscapes to a greater extent than any other single retail category. Where betting shops were proximally located the patterns tended to be pairs of shops or groups of three to five shops.

Nearest neighbour analysis is a technique which provides a numerical measure of the degree of clustering of geographical phenomena. The nearest neighbour index produces results in the range between 0 and 2.15. A result of 0 = a clustered distribution, a result of 1 = a random distribution and a result of 2.15 = a uniform distribution. Betting shops in the majority of urban areas examined, with the exception of Cheltenham, showed some tendency towards clustering. However, taking into account the number of shops in each case (the n number), at the 95% confidence level, the only urban areas within which betting shops show a significant element of clustering are Birmingham and Edinburgh. Cheltenham, Crewe and Portsmouth have n numbers that are below the recommended minimum to produce statistically valid results, whilst the results for Cardiff suggest the distribution of betting shops there does not show a significant element of clustering at the 95% confidence level. Birmingham and Edinburgh though do account for the majority (257 or 69.8 %) of the 371 shops included in this analysis.

Table 4: Mean distance to nearest shop and Nearest Neighbour Analysis

Table 5: Number of shops found with 400 metres of another shop

Our analysis finds some support for concerns expressed in the media and by politicians and residents for the tendency of betting shops to cluster, and to tend to do so in more deprived areas. However, it adds nuance to this narrative and reflects the findings of comparable research elsewhere. Our analysis confirms observations within other studies that, whilst clusters of betting shops do tend to occur more frequently in the most deprived areas, the numbers of such clusters are relatively small. For example, Macdonald et al. (2018: 226-227) found five statistically significant clusters of gambling outlets (which included lottery vendors, bingo halls, casinos and gambling machines, as well as betting shops) in Glasgow, two of which were located in the most deprived income quintile and one of which was located in the next most deprived income quintile. By contrast, they found 20 clusters of alcohol outlets in the city, 12 of which were located in the two most deprived income quintiles; 16 clusters of fast food outlets, 10 of which were located in the two most deprived income quintiles; and 15 clusters of tobacco outlets, nine of which were located in the two most deprived income quintiles. They were able to argue “only slightly more clusters of gambling outlets were located within the most deprived areas” (Macdonald et al., 2018: 227).

In sum, the results of our analysis and that of comparable research do detect elements of clustering within the geographies of betting shops and tendencies for these to favour locations associated with higher levels of deprivation. However, it suggests that these tendencies are not universal within the UK and indeed they may be relatively rare. Certainly, these clusters seem to be less extensive with regard to betting shops than they are for other retail “environmental bads” (Macdonald et al., 2018). This observation has implications in policy terms where calls for universal regulation of betting shops to counter their clustering in deprived areas might be replaced with more targeted, localised forms of intervention directed at the small number of potentially problematic clusters that this and other analysis has highlighted. Further, the national context of sharply declining numbers of betting shops discussed earlier in this paper raises questions for future research and policy. Will the well documented decline in betting shops in the UK see the number of betting shop clusters in deprived areas fall further or will these clusters be resilient to this decline? This is

an issue worthy of further research and one that is likely to inform future regulatory responses to the geographies of betting shops.

Conclusions

Betting shops are a feature of the retail geography of towns and cities and they are currently found in three general locations, namely, on the edge of primary retail locations, within secondary retail centres, where they often occur in clusters, and in freestanding locations within the more general urban fabric. It is the first two sets of locations where betting shops have been seen to cause a variety of problems. In addressing the impact of betting shops on the attractiveness and vitality of retail centres, it is important to recognise it is the scale of shop closures on the high street and other primary and secondary retail locations, that has served to highlight the increasingly dominant presence of betting shops in such locations. Indeed, it might be argued that without the presence of betting shops, many centres would have more empty shop units and show even greater signs of neglect and decay. While the current analysis has revealed some evidence of locational links between betting shop locations and areas of high deprivation, these links are best described as ecological correlations, rather than causal relationships, and detailed primary fieldwork is required to explore the more precise nature of these relationships. More fundamentally, it would surely be foolish to look to explain urban deprivation in relation to gambling alone without recourse to a deeper awareness of structural inequalities within society.

Acknowledgements

This research received funding from the University of Winchester. Grace Nash-Williams' participation in this research was made possible through the Winchester Research Apprenticeship Programme. This is a programme that pairs undergraduate students with members of staff to allow them to act as research assistants on live research projects.

References

Bennett Institute for Public Policy (2019) 'More troubles for the High Street: what are the odds of that?...'. Available at: <https://www.bennettinstitute.cam.ac.uk/blog/more-troubles-high-street-what-are-odds/> [Accessed 21 January 2021]

Bradford, M. (2011) *Scrutiny Review of the Clustering of Betting Shops in Haringey*, London: Haringey Council.

Davies, R. (2020) 'William Hill expects to take hit from shock sports results behind closed doors', *The Guardian*, 21st October. Available at: <https://www.theguardian.com/business/2020/oct/21/betting-income-returning-to-pre-covid-levels-says-william-hill> [Accessed 8th November 2020]

Gambling Commission (2019) *Gambling Industry Statistics April 2015 to March 2019*, Updated to include October 2018 to September 2019. Available at: <https://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-industry-statistics.pdf> [Accessed 6 November 2020].

Gov.UK (2019) *English Indices of Deprivation 2019: Mapping Resources* <https://www.gov.uk/guidance/english-indices-of-deprivation-2019-mapping-resources> [Accessed 26th July 2021]

Harman, H. (2011) 'The Problem of Betting shops blighting High Streets and Communities in Low-Income Areas'. Available at: <https://fairergambling.org/wp-content/uploads/2012/12/Annex-1-Harriet-Harman-Constituency-Report.pdf> [Accessed 31 January 2020].

Jones, P., Comfort, D. and Hall, T. (2021) 'Betting shops in the public eye: a commentary', *Journal of Public Affairs*, 21, 1: 1-5

Jones, P., Hillier, D. and Turner, D. (1994) Back street to side street to high street: the changing geography of betting shops. *Geography*, 122-128.

London Borough of Tower Hamlets (2018) 'Tower Hamlets Local Plan: Topic Paper, Town Centres', https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Submission_2018/Topic_Paper_Town_Centres_2018.pdf [Accessed 31st January 2020].

Macdonald, L., Olsen, J. R., Shortt, N. K., Ellaway, A. (2018) 'Do "environmental bads" such as alcohol, fast food, tobacco and gambling outlets cluster and co-locate in more deprived areas in Glasgow city, Scotland?', *Health and Place*, 51: 224-231.

Newgrove (no date) 'What makes the perfect location for betting shops?',

<https://newgrove.com/what-makes-the-perfect-location-for-betting-shops/> [Accessed 26th July 2021]

Vi, Y. (2012) High Street Gambling a Spatial Analysis. Available at:

<https://britishlibrary.typepad.co.uk/socialscience/2012/10/high-street-gambling-a-spatial-analysis.html> [Accessed 3 February 2021]

Wardle, H., Keily, R., Astbury, G. and Reith, G. (2011) 'Risky places?': mapping gambling machine density and socio-economic deprivation', *Journal of Gambling Studies*, 30 (1): 201-212.

Welsh Government (2019) 'Welsh Index of Multiple Deprivation (WIMD) 2019', *Lle: A Geo-Portal for Wales*,

<http://lle.gov.wales/catalogue/item/WelshIndexOfMultipleDeprivationWIMD2019/?lang=en> [Accessed 27th July 2021]

Brand	Number of Shops
Betfred	52
Coral	47
Ladbrokes	110
Paddy Power	12
William Hill	123
Non-chain	27

Table 1: Betting shop data analysed, summary statistics

IMD Decile	Number shops	IMD Quintile	Number shops
1 Most deprived	94 (32.4%)	1 Most deprived	131 (45.2%)
2	37 (12.7%)	2	86 (29.7%)
3	51 (17.6%)		
4	35 (12.1%)	3	46 (15.9%)
5	24 (8.3%)		
6	22 (7.6%)		
7	9 (3.1%)	4	18 (6.2%)
8	9 (3.1%)		
9	3 (1.0%)	5 Least deprived	9 (3.1%)
10 Least deprived	6 (2.1%)		

Table 2: Distribution of Betting Shops and Areas of Multiple Deprivation (analysis for Birmingham, Cardiff, Cheltenham, Crewe, Portsmouth).

IMD Decile	Number shops	IMD Quintile	Number shops
1 Most deprived	22 (19.3%)	1 Most deprived	35 (30.7%)
2	13 (11.4%)	2	26 (22.8%)
3	16 (14.0%)		
4	10 (8.8%)	3	30 (26.3%)
5	17 (14.9%)		
6	13 (11.4%)		
7	6 (5.3%)	4	14 (12.3%)
8	8 (7.0%)		
9	3 (2.6%)	5 Least deprived	9 (7.9%)
10 Least deprived	6 (5.3%)		

Table 3: Distribution of Betting Shops and Areas of Multiple Deprivation with Birmingham excluded (analysis for Cardiff, Cheltenham, Crewe, Portsmouth).

Town / City	Number of Shops (n)	Average Distance to Nearest Shop	Nearest Neighbour Index
-------------	---------------------	----------------------------------	-------------------------

Birmingham	176	432.7	0.605
Cardiff	60	525.1	0.853
Cheltenham	16	485.5	1.116
Crewe	10	158.7	0.729
Edinburgh	81	408.0	0.631
Portsmouth	25	417.4	0.782

Table 4: Mean distance to nearest shop and Nearest Neighbour Analysis

Town / City	Number of Shops within 400 metres of nearest neighbour	Percentage of shops included in distance matrix
Birmingham	103	59.2
Cardiff	27	45.7
Cheltenham	8	50
Crewe	10	100
Edinburgh	58	73.4
Portsmouth	17	68.0
Total	223	61.4

Table 5: Number of shops found with 400 metres of another shop



2019 Birmingham Betting Shops.pdf



2019 Portsmouth Betting Shops.pdf