

Commercial locations and Social Deprivation: A Critical Assessment of Alleged Anti-Social Retailers' Locations and Socio-economic Deprivation

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Summary

There is growing concern that particular retailers which are referred to in this paper as 'alleged anti-social retailers' (AASRs) i.e. gambling, fringe banks (payday loans and pawn brokers) and rent-to-own (RTO) establishments are concentrated in deprived communities. Critics allege that due to the nature of the services offered by these retailers, existence of this trend will further deteriorate the living. This concerns necessitated this paper which aims to offer an overview of the proposed methods to be used to achieve the objectives of a wider study aimed at critically assessing the relationship between commercial locations of AASRs and socio-economic deprivation, compare location patterns of alleged anti-social and food and grocery retailers and develop a model that fits the observed patterns of AASRs using geographical information systems (GIS) and statistical techniques.

KEYWORDS: Alleged anti-social retailers, socio-economic deprivation, health, commercial locations, food and grocery

1. Introduction

In attempting to tackle the health and well-being challenges of underprivileged neighbourhoods, many scholars have argued that agglomeration of commercial activities is observed in deprived areas, especially in AASRs such as gambling outlets (Robitaille & Herjean, 2008; Warlde et al., 2014), fringe banking outlets i.e. payday loans, pawnbrokers (Martin et al., 2006, Graves, 2003; Ray et al., 2013) and rent-to-own businesses (RTO) (APPG, 2015). Furthermore, a recent survey about how stakeholders feel about retail outlets in their localities revealed that pawnbrokers and betting shops rank the lowest (ACS, 2015). Consequently, the presence (concentration) of these AASRs allegedly has negative impacts on their localities. These impacts include increased crime occurrences (Kubrin et al., 2011), problem gambling (Wheeler et al., 2006) and exorbitant interest rates (Hill et al., 1998; Graves, 2003). Interestingly, in the food and grocery market, this debate about retailers targeting deprived areas has been a growing concern (Cummins et al., 2005; Macdonald et al., 2007). These highlighted points give justification for this research which will use GIS and statistical techniques to critically analyse relationships between AASRs' locations and deprivation, compare their location patterns to that of food and grocery retailers, develop a model that best fits the observed patterns.

1.1. Research Gap and Justification

Most studies in the UK focus on the psychological/economic aspects of alleged anti-social activities (Orford et al., 2010; Griffiths, 1994) as opposed to spatial locations of these retailers vis-à-vis social deprivation. Moreover, the methodologies adopted were mostly based on surveys, interviews and questionnaires. A particular study which utilised geo-statistical methodologies (Wardle et al., 2014) to

explore the relationship between FOBT and deprived neighbourhood in the UK found a complex concentration in deprived neighbourhoods. Unfortunately, this research including those carried out in other parts of the world did not incorporate all AASRs' locations (gambling and fringe banking and rent-to-owns). Whysall (2014) revealed that concentration of retailers in deprived communities is prevalent. This study raised important questions for future studies but only used exploratory statistical methods. Furthermore, available studies have failed to carry out comparative analyses between the concentration of alleged anti-social and other retailers (e.g. food and grocery).

1.2. Aim

To give an overview of the proposed methods to be employed to critically assess the relationship between commercial locations of AASRs and socio-economic deprivation, compare locational patterns of alleged anti-social and food and grocery retailers and develop a model that fits the observed patterns of AASRs.

1.3. Objectives

2. To establish the relationship between alleged anti-social retail locations and social deprivation.
3. Confirm/validate if there is a concentration of AASRs e.g. gambling and fringe banking in disadvantaged neighbourhoods.
4. Explore if these concentrations are also found in other retailers' locations (food and grocery retailers' locations).
5. Develop a neighbourhood model that best fits AASRs' location using socio- demographic variables.

2. Literature Review

The recent increase in fringe banks has given rise to concerns in various sectors of the economy. In North America, the increase is attributed to, a vacuum created by mainstream financial institutions (Eskin 1995; Stegman, 2007; Buckland, 2012) as well as favourable government policies (Stegman, 2007). These services are typically utilised by low-income/status individuals (Martin et al., 2006) neglected by mainstream institutions; hence, their proliferation in disadvantaged communities (Kubrin et al., 2011; Graves, 2003). Furthermore, Stegman and Faris (2003) argue that payday lending in the USA "is significantly enhanced by the successful conversion of more and more occasional users into chronic borrowers" (p.25). Likewise, in the UK, patronage of these establishments is common among individuals neglected by mainstream financial institutions and there is evidence that their services are expensive and exploitative (Gibbons et al., 2010).

Globally, gambling has become widespread and gained popularity. Due to an increase in demand for gambling activities, there has also been a corresponding increase gambling establishments. There is increasing agitation from stakeholders that the retailers are targeting deprived communities. In Australia and New Zealand, there is evidence of concentrations of gambling opportunities in socially deprived areas (Wheeler et al., 2006; Marshall & Baker, 2002). Likewise, in North America, empirical findings suggest that there is a relationship between gambling outlets and social deprivation (Robitaille & Herjean, 2008; Gilliland & Ross, 2006). Findings in the UK on fixed odds betting terminal (FOBT) locations (Wardle et al., 2014) also consistent results from other parts of the world.

RTO retailers are gradually becoming a household name in the UK. They mainly offer consumers household goods on hire-purchases. RTOs have received growing attention in North America compared to Europe. In the UK, 2 retailers; BrightHouse and Perfect Home dominate the market. Literatures allude that they tend to concentrate in deprived neighbourhood (APPG, 2015; Whysall, 2014) because they prey on disadvantaged consumers who either have bad credit records or low-income (Hill et al.,

1998). RTOs employ questionable tactics like non-transparent pricing policies, exorbitant interest rates, unnecessary insurance cover and selling inappropriate products (APPG, 2015). Accordingly, these have led to concerns that agglomerations of these retailers in deprived communities will not only prey on the poor, but also impact negatively on their health and well-being.

2.1. Impact of Concentration of AASRs

AASRs' concentrations in deprived areas will pose serious threats to the well-being of inhabitants. As the services provided by these AASRs are controversial, there is a divide in opinion on their impact. Some have argued that they provide essential services to a neglected sector of the population (e.g. fringe banking & RTOs) and serves as a form of recreational activity (gambling), while others believe they have a number of negative consequences such as exorbitant lending rates (Stegman, 2007; Gibbons et al., 2010), addiction/problem gambling (Wheeler et al., 2006), and crime (Kubrin et al., 2007) among others. The literature on exorbitant interest rates is abundant (Hill et al., 1998; Stegman, 2007) and policy makers have begun to advocate measures to safeguard exploitation of consumers. Likewise, many studies (e.g. Wheeler et al., 2006; Pearce et al., 2008) have researched addiction and problem gambling which can also be fuelled by concentration of gambling outlets. Furthermore, studies in North America and Australia have found a relationship between crime and AASRs' locations, especially fringe banking and gambling locations (Kubrin et al., 2011; Blaszczyński, et al., 1989).

3. Methodology

In order to achieve the stated aims and objectives, the proposed methods described in this section. It is important to note that there are differences in the indicators, administrative boundaries and period used for the indices of multiple deprivation (IMD) in England, Scotland and Wales (Smith et al., 2015). As a result, the study area for this research will be all postal areas/codes in England. That is, all identified AASRs' outlets in all postal codes/areas in all the regions in England will be analysed. A look up table provided by Department of Communities and Local Governments (DCLG) will be used to obtain the IMD at postcode level.

3.1. Data

Data for this research and their sources (see table 1). These data will be collected from various websites as listed above. All data will be collected (retail outlets, IMD and population) and aggregated to postal level geography. Retailers' outlets data will require going to each retailer's website and copying the addresses of each store location. This process is on-going and various challenges have been encountered. Most retailers do not list their actual store locations on their websites, rather they use a map interface where you type in your location and the map interface is populated with stores in the locality. This introduces a problem of getting all store locations completely. All efforts are being made to ensure inclusiveness of all stores. Furthermore, the data on gambling outlets obtained from the gambling commission's website contains some inaccurate postcodes due to termination or introduction of postcodes and typographical errors like representing an 'O' with '0' in the postcodes. This generates errors when trying to link the postcode to the indices of multiple deprivation (IMD). In addition, because the IMD is only available for postcodes that have usual resident population, retail outlets in output areas with no usual resident population have no deprivation index.

3.2. Mapping and Exploring Retailers' Locations

To explore the pattern of location of retailers (AASRs and food and grocery), a technique which will represent the retail locations in a continuous surface (cluster) will be utilised using population as the weighing factor. All operating addresses of the retailers will be converted to Ordnance Survey Coordinates (easting and northings) and mapped. The resulting cluster maps (food and grocery and AASRs) will show the clustering of these retail locations thereby aiding a comparative study to show

the national patterns of retailing in England. Subsequently, each AASRs' location (gambling, fringe banks and RTOs) is mapped distinctly to give a clear idea of their spatial distribution.

Table 1 Data and Sources

S/N	Data	Source	Remarks
1	Gambling Outlets, 2015	Gambling Commission, UK	Data available on the Gambling Commission Website
2	Fringe Banking Outlets (Payday Loan, Pawn Brokers, Rent to Own)	Payday Loan, RTO Retailers websites	Data will be obtained from various retailers websites.
3	Food and Grocery Retailers Outlet	GeoLytics, Limited	Data available on the GeoLytics Website
4	England Population, 2011	Department of Communities and Local Government (DCLG)	Data available at http://infuse2011.ukdataservice.ac.uk/
5	English Indices of Multiple Deprivation Data (IMD)	Department of Communities and Local Government (DCLG)	Data available at http://infuse2011.ukdataservice.ac.uk/
6	England Boundary Data	Uk Borders	Data available at http://infuse2011.ukdataservice.ac.uk/

3.3. Exploring the Relationship between AAASRs' Locations and Social Deprivation and developing a model that best fits the observed patterns

The IMD data ranks deprived areas as well as providing the key statistics (domains) used in producing the index (income, health, employment, education, crime, housing barriers, living environment, income deprivation affecting children index and income deprivation affecting older people). Therefore, it is possible to use either the IMD or select which domains are particularly relevant to the research. The aggregate IMD will be used for initial analysis. The resulting map is then overlaid with the AASRs' cluster maps to show their relationship with social deprivation. The domains will also be used because they will enable a more robust analysis compared to the IMD. The domains will be used to create a neighbourhood deprivation map using clustering and k-means classification techniques and compared to the AASRs location. Correlation and regression analyses will also test the relationship statistically and a model that best fits the observed relationship is developed using a multivariate regression analysis and also compared to the retailers' locations.

4. Conclusion

This paper which provides an overview of the methods proposed to achieve the aims of a wider research which aims at establishing the relationship between social deprivation and retailers. The proposed method utilises GIS and Statistical methods focusing on spatial location of AASRs and food and grocery retailers. The methods will be used to achieve the aims of the broader research which are to critically access the relationship between commercial locations of AASRs and socio-economic deprivation, compare locational patterns of alleged anti-social and food and grocery retailers and develop a model that fits the observed patterns of AASRs. In doing this, it will help to further inform the conflicting arguments between scholars, politicians, community interest groups and other stakeholders about the location preferences of these AASRs. Furthermore, this research will help address the seemingly endless health and well-being issues encountered in deprived communities in the UK.

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