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A Commentary on Social & Experiential (e-)Retailing and (e-)Shopping Deserts

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ABSTRACT

Purpose – The last ten years have seen a gradual withdrawal of retail facilities from many local areas and the consequent growth of ‘shopping deserts’, resulting in social and health disbenefits. This paper examines the potential for e-shopping to fill the vacuum and to assist disadvantaged shoppers.

Design/methodology/approach – The paper uses prior published research to comment on the extent to which e-retailing may be the shopping solution of the future?

Findings – The Internet has limited potential to compensate for shopping deserts, as consumers who do not have a good range of physical shops within walking distance also tend to lack access to the Internet.

Research limitations/implications – The paper is based solely on prior research. The authors recommend action research that may hopefully help excluded shoppers to become more included by addressing the problems of access to e-shopping.

Practical implications – Government, service providers and e-retailers are may consider interventions such as subsidised Internet access, training and the provision of e-cash.

Originality/value – The paper links research from diverse fields relating to shopping deserts, the digital divide, health, wellbeing, social and experiential aspects of (e-)shopping.

Keywords Shopping deserts, food deserts, retail exclusion, e-shopping, e-retailing, Internet shopping, Internet retailing.

Paper type General review.

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Introduction

One of the major issues associated with moves towards an information society will be the economic and social effect of e-commerce on consumers. Despite the considerable attention given to the Internet in the popular press, and the belief in many business circles that the Web represents a huge marketing opportunity, scholarly research

focusing on the Internet and its opportunities seriously lags behind business practise (Hoffman 2000; Habul and Trifts 2000; Jayawardhena *et al.*, 2003). This lag has already prompted a number of publications in quality journals, but much more needs to be done in order to fill the many gaps in our understanding of the Internet consumer and aspects of service delivery over the Internet (Shim *et al.*, 2001).

Similarly, shopping behaviour is changing, but research into the effects has lagged behind. In this paper, we consider the effects of e-retailing on consumers. Over the previous three decades, retail facilities in many local areas have been in decline. For example, Barclays Bank closed 171 UK branches in 2000. From 1986 to 1997 the number of independent retail stores in the UK declined by almost 40 percent (Lang and Rayner, 2001). The potential for e-retailers to fill this vacuum merits examination. ‘Shopping deserts’ have been identified (areas with a lack of opportunities for purchasing a range of products and services). These present a significant problem for health and wellbeing and there has been demonstrated to be a causal link in the UK between retail exclusion and poor nutrition (Rex and Blair, 2003; Kyle and Blair 2007; Wrigley *et al.*, 2003). The pattern is similar in the US but more polarised on ethnic lines with food deserts associated with poorer nutrition of African-Americans (Wrigley, 2005). E-retail has been championed as a solution – it has been suggested that consumers can e-shop instead (let them eat cake?). In this paper we explore two contrasting questions. Firstly, what is the potential for e-retailers to fill the vacuum of shopping deserts? Secondly, will the disadvantaged become further disadvantaged as a result of e-shopping?

The rest of this paper proceeds as follows. Firstly, we briefly note the prospects for the growth of e-retail and then outline the shopping deserts issue. In order to address the relationship between e-retail and shopping deserts, we then consider the ‘digital divide’ between those with access to the benefits of the Internet and those excluded. The next two sections argue the case that shopping provides not just tangible products but also social, hedonic and even health benefits. Next come conclusions and finally we propose action research aimed addressing the problems of consumers excluded from social and hedonic benefits of (e-)shopping.

Prospects and trends in e-retail

The rise in online shopping is outstripping that of the high street by a factor of 6 to reach £6 billion by 2005 (Verdict, 2006). This was only 3.5 percent of all retail sales but predicted to rise to 10 percent by 2009 (Gibson, 1999; IMRG 2003; Verdict, 2006). ‘Most people’ will buy groceries, books, CDs and even clothes by e-shopping (RICS 2000). Books, movies and software, high on ‘factual search’ (Shim *et al.*, 2001) are natural for e-retailing, but groceries and clothing are also increasing (Doidge and Higgins, 2000, Verdict 2006). Ninety-four percent will be at expense of existing channels (half diverted from catalogues, half from high street – BCSC, 2001), only 6 percent from extra growth (Prefontaine, 1999).

Food deserts and shopping deserts

Between 1971 and 1992 the number of out-of-town superstores increased from 21 to 719 and by 2000 there were 960 (Lang and Rayner, 2001). According to some researchers, the consequence has been ‘food deserts’ (shopping desert areas with a

lack of opportunities for purchasing nutritional food) in inner cities that have disadvantaged the underprivileged (e.g. Bromley and Thomas, 1995; Guy *et al.*, 2004; Hallsworth, 1988; Kyle and Blair 2007; Opacic and Potter, 1986; Reisig and Hobbiss, 2000; Rex and Blair, 2003). The concept of food deserts has been challenged, with for example, deprived areas of Glasgow (UK) having been demonstrated to be well provided with food shops (Cummins and Macintyre, 1999). A study in Newcastle upon Tyne (UK) concluded that food deserts exist only for those people who do not or cannot shop outside their immediate locality, that being one with a poor retail provision (White *et al.*, 2004). Nevertheless, studies in other areas have provided evidence of problems. For example, Rex and Blair (2003) mapped every shop selling food in an area of Sandwell (UK Midlands) with a population of 100000 people. Most residents did not have access to healthy food such as fresh fruit and vegetables within 500 metres, the distance used to define 'walking distance' with respect to food deserts (although access to biscuits, chocolate, and cigarettes was relatively good). Researchers are studying the social, nutritional and health consequences of food deserts (e.g. Cannings and Whelan, 2001; Dowler *et al.*, 2001; Wrigley *et al.*, 2003).

Tackling social exclusion has been a priority for the UK government. Wrigley and colleagues (2003) described the setting up of the Social Exclusion Unit and research highlighting inequalities. The Social Exclusion Unit (2001a, 2001b) outlined a grim picture of those neighbourhoods in which 'once vibrant local shopping centres or neighbourhood stores ... have mostly disappeared' (Department of Health, 1999). Raynsford (2000) described 'tackling social exclusion [as the] new main task for retail planning policy'. One small step forward was reported by Kent and colleagues (2003) who demonstrated the efficacy of a mentoring scheme for small retailers. Nevertheless, to date no follow-up study has been carried out to demonstrate how such a time- and expertise-hungry solution could be rolled out on a larger scale, or what the effects would be from the consumers' point of view. Kyle and Blair (2007) reported an ambitious programme of intervention at the Sandwell food desert, the 'Eatwell' project, which combined nutrition advice with improvements to the retail provision of fruit and vegetables. The programme was successful in improving nutrition through changing shopping habits. As with Kent and colleagues' (2003) mentoring scheme, there will be substantial resources issues in scaling up the framework of the 'Eatwell' programme.

Wrigley reported some success in tackling food deserts, although results appeared to be contrary to official emphasis on local neighbourhood stores. In Seacroft, Leeds, UK, 70 percent of residents were beyond walking distance of healthy foods, around 70 percent reported fruit and vegetable consumption below the nation average (itself well below the UK government's recommended target) and 10 percent consumed less than one portion of fruit and vegetables per day (typical shopping provision illustrated in Figure 1). Following the opening of a Tesco superstore, three-quarters of the group with the worst diets increased their fruit and vegetable consumption. There were also big impacts on food shopping travel in the area with around three times as many people walking after the store's opening than before and correspondingly less use of motorised transport. Residents who switched to the new store cited 'easy to get to' (79 percent) as the main reason and many were also motivated by other convenience aspects and by bargains. Nevertheless, healthy food and exercise *per se* hardly got a mention in the post-intervention focus groups (Wrigley *et al.*, 2003; 2004). The Tesco intervention had an additional benefit not

mentioned in that study: the new store is an e-retail supplier, adding around a couple of dozen extra jobs in a major unemployment black spot. UK supermarkets have been reported to be acting in 'enlightened self interest' with such areas becoming the focus of 'regeneration partnership store development' (Wrigley *et al.*, 2002). By 2005, Tesco had opened 16 of these with others being developed by Asda/Walmart and Sainsbury (Wrigley, 2005). Even so, this type of intervention is unlikely to be a universal solution to the food deserts problem as it is almost axiomatic that not every food desert will be able to host a new grocery superstore.



Figure 1 Example of retail provision in Seacroft, Leeds
Source: Wrigley *et al.*, 2003.

Indeed, the evidence of the impact of such interventions is mixed. In a study of deprived areas of Glasgow, Cummins and colleagues (2008, forthcoming) compared changes in diet and psychological health before and after the building of a hypermarket in Springburn with a comparison area (Shettleston). They found weak evidence for the impact of the hypermarket on population diet but good evidence of psychological health improvement amongst those who switched to the new hypermarket.

The digital divide

Could consumers who lack access to physical shops e-shop instead? The idea is attractive, but the difficulty concerns an equivalent lack of access to e-shopping. 'Diffusion of Innovations' theory (Rogers, 1995) predicts that the 'laggards', those slowest to take up an innovation such as the Internet, will tend to be older, lower education level and lower socio-economic status (SES) than the average – i.e. the demographic characteristics most prone to social and retail exclusion. Where Internet prices do continue to decline or remain cheaper than the prices of comparable items in terrestrial shops, those with the lowest levels of disposable income will continue to be disadvantaged if they do not possess Internet access. This situation would not be unusual. Many disadvantaged inner city residents are already handicapped by not possessing suitable forms of transport to allow them to shop at cheaper out-of-town retail centres. Instead, they are restricted to only having access to relatively more expensive city centre shops. A similar form of discrimination could arise if they are also restricted in accessing the Internet and are therefore not able to purchase the cheaper goods and services that are available through electronic

commerce. Fitch and Fernie (2002) demonstrated that the socially excluded tended to have low levels of computer ownership and Internet access – see Figure 2. Whilst 40 percent of owner occupied households had computers, only 16 percent of renters did, falling to 13 percent for social housing. Internet access for the lower income households was less than one tenth of the level of the highest income ones. Fitch (2004) drew attention to ‘an extremely strong link between social exclusion and digital exclusion’ based on the Scottish Household Survey. Households who found local food provision ‘very convenient’ were almost 50 percent more likely to have a home computer than those who considered it ‘very inconvenient’. Households who found food shopping least convenient were least likely to have a home computer with an Internet connection. The picture is similar across the UK as a whole, where the Oxford Internet Survey found a ‘clear [positive] relationship between economic status and Internet use’ (OxIS 2005). Across the UK, seven percent of households are involuntarily excluded from the use of the Internet (Citizens Online, 2007).

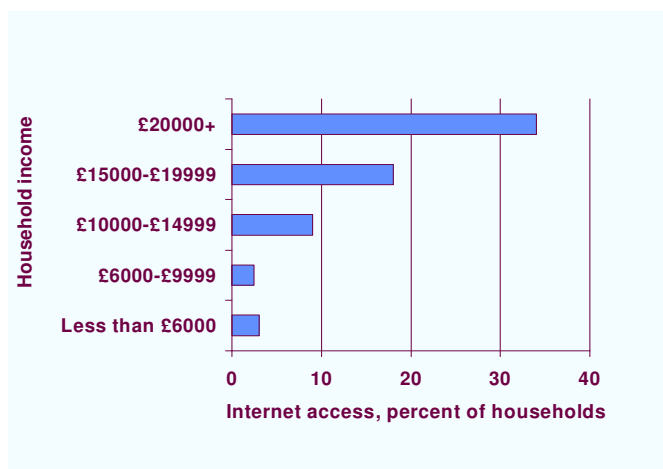


Figure 2 Household income and access to the Internet at home: Scotland
 Source: Adapted from Fitch (2002), based on The Scottish Household Survey.

Lack of literacy, numeracy and access to credit means that those who most need extra provision are least able to access it by e-shopping. For example, 11 percent of households had no bank account and therefore presumably no credit card. On a local level, the penetration of e-shopping vs. the level of food shopping provision in the Seacroft food desert is illustrated in Table 1. In three out of the four of the postcode sectors, low or very low food shopping provision was associated with low or very low e-shopping. For 85 percent of the residents, penetration of e-shopping was either low or very low. Deprivation is a feature of three of the postcode sectors (but not LS 142, the ‘outlier’ with a high penetration of e-shopping).

The social and hedonic benefits of shopping

Shopping is a social activity. As well as its functional role it includes the pleasure of browsing, impulse buying, discovering new shops, casual conversation, and planned and unplanned meetings with other people. Researchers have drawn attention to the importance of social and affiliation motivations for shopping (e.g. Dennis *et al.*, 2001; 2002b; c; Shim and Eastlick, 1998; Westbrook and Black, 1985). Lunt (2000) found that a main reason for consumers not e-shopping was that it ‘lacks the experiential aspects’. Dennis *et al.* (2002b) found that service and experience attributes were more associated with shopping behaviour than were shops and merchandise. Retail forms

the heart of UK cities and is a focus for communities (Dennis *et al.*, 2002a). Social aspects are important for shoppers' wellbeing, particularly for females (e.g. Dholakia, 1999). Shopping is an important part of social relationships within the family (Dholakia, 1999; Miller, 1998). Enjoyment and entertainment have been demonstrated to be important benefits of shopping (e.g. Babin *et al.*, 1994; Sit *et al.*, 2003), valued by consumers in spending terms (e.g. Jones, 1999; Machleit and Mantel, 2001). Customers' positive emotional responses, particularly pleasure, can increase in a store with a pleasant atmosphere compared to an unpleasant one (Ang and Leong, 1997; Spies *et al.*, 1997). Work by Zaltman and Kosslyn has indicated that shopping is associated with increased brain activity in the left prefrontal cortex: a physical measurement of heightened pleasure (reported in outline in the Sunday Times 8 August 1999 but the detailed results not in the public domain). Denison (2003) reported the beneficial physiological effects of shopping, indicated by levels of the hormone cortisol, associated with excitement. These findings give literal meaning to the cliché: 'retail therapy'! In the section below we speculate on possible health benefits that retailing might provide.

Table 1 Food shopping availability and e-shopping: Seacroft food desert.

<i>Postcode sector</i>	<i>Level of food shopping (bricks) provision per household¹</i>	<i>Penetration of e-shopping per household²</i>	<i>Percent of residents categorised as 'deprived'³</i>
LS 141	Very low	Low	33
LS 142	Very low	High	4
LS 145	Very low	Very low	29
LS 146	Low	Very low	49

1. Sources: Wrigley *et al.*, 2003; Clarke *et al.*, 2002

2. e-Types e-shopping stages 4 and 5. Source: e-Types 2003

3. Mosaic classifications 16 (low expectations, limited ambitions, heavily dependent on the welfare state, public transport and social services – the predominant household type in LS 141 and LS 146); 17 (single parents, despair, high debt, high crime and few cars); and 18 (high unemployment, crime, drugs, broken marriages, violence and neglect; high spending on tobacco and alcohol). LS 145 is predominantly type 13: pit closures. LS 142 is predominantly type 14: two-income council houses with relatively high spending on luxuries. Source: Experian 2000.

Kolesar and Galbraith (2000) found that e-retailers have difficulty in satisfying customers' higher level needs such as personal interaction. Rohm and Swaminathan (2004) compared a sample of e-shoppers with non-e-shoppers and found that social interaction, variety seeking and convenience were all significant motivators for e-shopping. Lee and Tan (2003) found that shoppers were more likely to shop in store (rather than e-shop) for products/services high in purchase risks. On the other hand, Childers and colleagues (2001) found enjoyment to be a strong predictor of attitude towards e-shopping. 'Usefulness' and 'enjoyment' were equally predictive of attitude overall. Social and hedonic motives, important for shopping in general, are, despite some qualification, also significant for e-shopping. Parsons (2002) investigated to what extent social motives were valid for e-shopping. Of five motives (hypothesised based on Tauber, 1972), only 'pleasure of bargaining' was not applicable. Parsons found clear support for the concept of communities such as chat rooms and special interest discussion websites on the Internet:

'The ability of online shopping to cater to social experiences outside the home, without actually leaving home, offers a distinct advantage for those unable or unwilling to venture out to physical locations, as well as offering social support.'

(Parsons, 2002)

Parsons concluded that personal and social motives are not only applicable to e-shopping, but they are also being applied by e-retailers.

Wellbeing, health and mortality

The social aspects of shopping are, we contend, literally a matter of life and death. Many studies have demonstrated that socially isolated people have mortality rates between 50 percent and 300 percent higher than people who are integrated into social groups (e.g. Avlund *et al.*, 1998; Berkman, 2000; Bowling, 1998). Similarly, many researchers have reported that people who are happy are ill less often and recover quicker (e.g. Danner *et al.*, 2001; Kiecolt-Glaser, 2002; Kubzansky and Kawachi, 2000). Happiness and increased immune resistance are correlated with high activity in the left prefrontal cortex, associated with pleasure and positive thinking (Rosenkranz, 2003), the same brain response associated with pleasant shopping.

Taking SES into account, there is a ‘double whammy’ for the unfortunate residents of shopping deserts. Low SES is associated with poorer health and higher mortality. This can occur through poorer nutrition, which can be exacerbated by food deserts as, for example, in Sandwell, which has high levels of cancer, coronary heart disease, diabetes and obesity (Kyle and Blair, 2007). Low SES is also correlated with negative emotions. In addition to the nutrition problems associated with food deserts, shopping deserts may be associated with negative emotions. This was illustrated in the Springburn intervention where Cummins and colleagues (2008, forthcoming) found good evidence of psychological health improvement amongst those who switched to the new hypermarket. Negative emotions in turn act to increase illness and mortality (Gallo and Matthews, 2003). A reduction in psychological wellbeing of the already disadvantaged shoppers might be contributing to the physical health problems that researchers have observed in deprived areas? The debate concerns some of society’s real problems; at least one Social Inclusion Partnership has set out to address drugs, unemployment and teen pregnancy by focusing on the primary concern of residents: retailing (Fitch and Fernie, 2002). The decline in local retail provision might be associated with worsening social problems.

Researchers have suggested that as shoppers increasingly e-shop, high streets are losing business, which in future could result in some shops and even shopping centres closing (e.g. BCSC, 2001; Verdict, 2006). The reduction in choice is likely to affect non-car-owning and non-computer-owning shoppers disproportionately – further disadvantaging the disadvantaged and exacerbating the shopping deserts problem.

Numerous studies have demonstrated that shoppers’ preferences for the experience of ‘real’ shopping are amongst the most important issues affecting Internet shopping (e.g. Dennis *et al.*, 2002c; Retail Forward, 2003; Swinyard and Smith, 2003). On the other hand, e-Shoppers can and do use the Internet to obtain enjoyment benefits (e.g. Childers *et al.*, 2001; Dennis and Pappamatthaiou, 2003; Monsuwé *et al.*, 2004).

Discussion

This paper set out to examine the potential for e-retailers to fill the vacuum of shopping deserts. There is evidence that tackling food deserts can improve nutrition (and by inference, health and longevity). We contend that addressing the shopping deserts issue can also provide social and pleasure benefits for consumers. These benefits are not trivial, but may also contribute to health benefits.

There is a paradox in that whilst e-shopping is forecast to lead to worsening shopping deserts problems, in theory the Internet can provide shopping and even social and hedonic benefits for consumers. e-Shopping therefore has the potential to help address the problems of shopping deserts. The problem is that at present the benefits are mainly restricted to the 'haves' rather than the 'have nots'. Over time as Internet access diffuses throughout the population, this might be expected to change. Unfortunately, this is again a problem for shopping deserts. As mentioned above, residents of shopping deserts are likely to have lower SES and education levels – i.e. typical characteristics of the 'laggards' in the take-up of technological innovations (Rogers, 1995). Faster change would be likely to need some form of intervention. Government, service providers and e-retailers may consider subsidised Internet access, training and the provision of e-cash, although this would obviously be expensive on a large scale.

Conclusions

e-Shopping may pose as many problems as it solves with respect to social and retail inclusion. It would appear to provide a replacement for ever-scarcer local shops, yet its market range is limited by lack of personal computers amongst the very sector of the community (i.e. the disadvantaged) that might benefit from its services. To those to whom it is available, it provides satisfaction as a 'shopping experience', yet by using it, they may exacerbate the decline in the number of real shops available, and so disadvantage the unconnected. Fifty-five percent of UK households are web-connected (Citizens Online, 2007), but that still leaves 45 percent that are not. The World Summit on the Information Society (2003) pointed out that in the 3rd World, only two percent are connected to the Internet. The conclusion of the same report is that *'instead of contributing to an increase in everyone's well being, we sometimes notice the opposite effect. The gap between those who have access to information and those who do not is constantly growing and continuing to deepen the already existing division between the rich and poor, instead of bringing them together'*.

The means of facilitating transactions: i.e. credit cards and computers, are lacking from the very groups of society that are suffering most from the shop closures. These groups are left with expensive credit facilities and expensive 'corner shops' (if they exist at all). The rhetoric of the web is that it brings shopping to the home and creates a more equal society. Could the reality be a widening of the social, economic and even health divisions that, ideally, the web should be helping to abolish?

Having considered many of the key issues, it is appropriate to propose a few action points for policy makers and traders that will enable them to promote electronic commerce as a socially inclusive activity. First, redress in law for e-retailing vendors and customers appears difficult. Indeed the US Government believes that freedom of

speech applies on the Internet and that laws censoring information flow are both misguided and impractical given the global nature of the Internet (Irving, 1998). If this is the case then what lies between a socially beneficial use of the Internet and one that is harmful is the willingness amongst e-retailers and consumers to subscribe to a self regulated ethical code and to participate in continual education and awareness programmes regarding the benefits and pitfalls. Second, e-retailing requires new skills for network literacy. Consumers need to be familiar with information technology so that they can identify, access, order and progress goods and services electronically. Society (both suppliers and consumers) needs to get used to trading internationally rather than in a national or regional market place. All this points to an enormous need for training and education. Third, e-retailing will have a profound effect on society and its organisations and upon our lives as consumers and employees. It is not clear what that impact will be. Therefore a broad and continued social dialogue about these questions is essential to overcome the hurdles and reap the benefits.

We believe that the evidence assembled above strongly supports the case for further research into ways in which excluded shoppers can be helped to become more included by addressing the problems of access to e-shopping. We encourage researchers and potential sponsors to carry these ideas forward, hopefully with action research that might demonstrate practical benefits.

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References

- Ang S H, Leong S M and Lim J** (1997) 'The mediating influence of pleasure and arousal on layout and signage effects', *Journal of Retailing and Consumer Services*, 4 (1): 13-24.
- Avlund K, Damsgaard M T and Holstein B E** (1998) 'Social relations and mortality. An eleven year follow-up study of 70-year old men and women in Denmark', *Social Science and Medicine*, 47 (5): 635-643.
- Babin B J, Darden W R and Griffin M** (1994) 'Work and/or fun: measuring hedonic and utilitarian shopping value', *Journal of Consumer Research*, 20: 644-656.
- BCSC** (2001), 'Future Shock or E-Hype: The Impact of Online Shopping on UK Retail Property', British Council of Shopping Centres/The College of Estate Management, London.
- Berkman L F** (2000) 'Social support, social networks, social cohesion and health', *Social Work in Health Care*, 31 (2): 3-14.
- Bowling A** (1998) 'The association between social networks and mortality in later life', *Reviews in Clinical Gerontology*, 8 (4): 353-361.
- Bromley D F and Thomas C J** (1995) 'Small town shopping decline: dependence and inconvenience for the disadvantaged', *The International Review of Retail, Distribution and Consumer Research*, 5 (4): 433.
- Bromley D F and Thomas C J** (2002) 'Food shopping and town centre vitality: exploring the link', *The International Review of Retail, Distribution and Consumer Research*, 12 (2): 109-130.

- Cannings E and Whelan A** (2001) 'The consequences for households living in food deserts: previous findings and the experience of Seacroft residents', *Food Deserts in British Cities: Identification, Measurement and Perception*, seminar, University of Leeds, 6 April.
- Childers T L, Carr C L, Peck J and Carson S** (2001) 'Hedonic and utilitarian motivations for online retail shopping behaviour', *Journal of Retailing*, 77: 511-535.
- Citizens Online** (2007) *Statistics*, available from: <http://www.citizensonline.org.uk/statistics> (accessed 7 February, 2007).
- Clarke G P, Eyre H and Guy C M** (2002) 'Deriving indicators of access to food retail provision in British cities: studies of Leeds, Bradford and Cardiff', *Urban Studies*, 39.
- Cummins S and Macintyre S** (1999) 'The location of food stores in urban areas: a case study in Glasgow', *British Food Journal*, 101 (7): 545-553.
- Cummins S, Findlay A, Higgins C, Pettigrew M, Sparks L and Thomson H** (2008, forthcoming) 'Reducing inequalities in health and diet: findings from a study on the impact of a food retail development', *Environment and Planning A*.
- Danner D D, Snowdon D A and Friesen W V** (2001) 'Positive emotions in early life and longevity: findings from the nun study', *Journal of Personality and Social Psychology*, 80 (5): 804-813.
- Dennis C and Pappamatthaiou E-K** (2003) 'Shoppers motivations for e-shopping', *Recent Advances in Retailing and Services Science, 6th International Conference*, The European Institute of Retailing and Services Studies, Portland, Oregon, August 7-10.
- Dennis C E and Hilton J** (2001) 'Shoppers' motivations in choices of shopping centres', *8th International Conference on Recent Advances in Retailing and Services Science*, Vancouver, EIRASS.
- Dennis C E, Harris L and Sandhu B** (2002c) 'From Bricks to Clicks: Understanding the e-Consumer', *Qualitative Market Research - An International Journal*, 5 (4).
- Dennis C E, Patel T and Hilton J** (2002b) 'Shoppers' motivations in choices of shopping centres, a qualitative study', *9th International Conference on Recent Advances in Retailing and Services Science*, Heidelberg, EIRASS.
- Dennis C, Marsland D and Cockett W** (1999) 'Why do people shop where they do?' *Recent Advances in Retailing and Services Science, 6th International Conference*, Puerto Rico, The European Institute of Retailing and Services Studies, (Eindhoven, EIRASS).
- Dennis C., Marsland D. and Cockett W.** (2002a) 'Central place practice: shopping centre attractiveness measures, hinterland boundaries and the UK retail hierarchy', *Journal of Retailing and Consumer Services*, 9 (4): 185-199.
- Department of Health** (1999) *Improving Shopping Access for People Living in Deprived Neighbourhoods*, Discussion paper of Policy Action Team 13 of the National Strategy for Neighbourhood Renewal, London, Department of Health.
- Dholakia R R** (1999) 'Going shopping: key determinants of shopping behaviour and motivations', *International Journal of Retail and Distribution Management*, 27 (4-5): 154.
- Doidge R. and Higgins C.** (2000), *The Big Dot.com Con*, Colliers Conrad Ritblat Erdman.

- Dowler E, Blair A, Rex D, Donkin A and Grundy C** (2001) 'Mapping access to food in deprived areas for health authority activity: experience from London and Sandwell, *Food Deserts in British Cities: Identification, Measurement and Perception*' seminar, University of Leeds, 6 April.
- e-Types** (2003) *e-Types Regional Analysis*, available from www.etypes.info/reghome.asp (accessed 8 December, 2003).
- Experian** (2000) *GB Mosaic*, London, Experian, from http://census.ac.uk/cdu/Datasets/Experian_data/2000_supply.htm accessed 25 May 2005.
- Fitch D** (2002) 'Digital inclusion, social exclusion and retailing: an analysis of data from the 1999 Scottish Household Survey', *Proceedings of the International Symposium on Technology and Society (ISTAS 02), Social Implications of Information and Communication Technology*, Institute of Electrical and Electronics Engineers, Piscataway, NJ, USA: 309-313.
- Fitch D** (2004) 'Measuring convenience: Scots' perceptions of local food and retail provision', *International Journal of Retail and Distribution Management*, 32 (2): 100-108.
- Fitch D and Fernie J** (2002) 'Local stores in Scotland: opinions, prospects', 9th *International Conference on Recent Advances in Retailing and Services Science*, Heidelberg, EIRASS.
- Gallo L C and Matthews K A** (2003) 'Understanding the association between socioeconomic status and physical health: do negative emotions play a role?' *Psychological Bulletin*, 129 (1): 10-51.
- Gibson B** (1999) 'Beyond shopping centres - e-commerce' *British Council of Shopping Centres Conference*.
- Guy C M, Clarke G and Eyre H** (2004) 'Food retail change and the growth of food deserts: a case study of Cardiff', *International Journal of Retail and Distribution Management*, 32 (2): 72-88.
- Habal G and Trifts V** (2000) 'Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids', *Marketing Science*, Vol.19, No.1, pp. 4-21
- Hallsworth A** (1988) *The Human Impact of Hypermarkets and Superstores*, Aldershot, Avebury.
- Hoffman D** (2000) 'The Revolution Will Not be Televised: Introduction to the Special Issue on Marketing Science and the Internet', *Marketing Science*, Vol.19, No.1, pp. 1-3
- IGD** (2001) *European Grocery Retailing*, Institute of Grocery Distribution, Watford.
- IMRG** (2003) *Internet Shopping 6 % of All Retail in January – 2nd £1 billion month*, Interactive Media in Retail Group / Forrester Research, London.
- Irving L** (1998) The Risks and Rewards of Electronic Commerce (information technology expands business), *Journal of Internet Banking and Commerce*, <http://www.arraydev.com/JIBC/9801-3.htm>, accessed 5/27/05 at 15.55.
- Jayawardhena C, Wright L T and Masterson R** (2003) 'An Investigation of Online Purchasing', *Journal of Qualitative Market Research: An International Journal*, Vol.6, No.1, pp.58-65.
- Jones M A** (1999) 'Entertaining shopping experiences: an exploratory investigation', *Journal of Retailing and Consumer Services*, 6: 129-139.

- Kent A, Tanton S and Dennis C E** (2003) 'What training do SME Retailers want? An evaluation of mentoring in the delivery of learning needs', *International Journal of Retail and Distribution Management*, 31 (8): 440-448.
- Kiecolt-Glaser K, McGuire L, Robles T, and Glaser R** (2002) 'Emotions, morbidity, and mortality: New perspectives from psychoneuroimmunology.' *Annual Review of Psychology*, 53: 83-107.
- Kubzansky L D and Kawachi I** (2000) 'Going to the heart of the matter: do negative emotions cause coronary heart disease?' *Journal of Psychosomatic Research*, 48 (4-5): 323-337.
- Kolesar M B and Galbraith R W** (2000) 'A services-marketing perspective on e-retailing: implications for e-retailers and directions for further research', *Internet Research: Electronic Networking Applications and Policy*, 10 (5): 424-438.
- Kyle R and Blair A** (2007) 'Planning for health: generation, regeneration and food in Sandwell', *International Journal of Retail and Distribution Management*, 35 (6).
- Lang T and Rayner G** (eds.) (2001) *Why Health is the Key to the Future of Food and Farming*, Joint Submission to the Policy Commission on the Future of Farming and Food, December, www.ukpha.org.uk.
- Lee K S and Tan S J** (2003) 'E-retailing versus physical retailing: a theoretical model and empirical test of consumer choice', *Journal of Business Research*, 56 (11): 877-885.
- Lunt P** (2000) 'The virtual consumer', *Virtual Society? Delivering the Virtual Promise? From Access to Use in the Virtual Society*, ESRC presentation led by Brunel University, London, 19 June.
- Machleit K A and Mantel S P** (2001) 'Emotional response and shopping satisfaction: moderating effects of shopper attributions', *Journal of Business Research*, 54: 97-106.
- Miller D** (1998) *A Theory of Shopping*, Polity, London.
- Monuweé T P, Dellaert G C and de Ruyter K** (2004) 'What drives consumers to shop online? A literature review', *International Journal of Service Industries Management*, 15 (1): 102-121.
- NAMNEWS** (2003) 'US: eBay tells analysts growth can be sustained', *NAMNEWS The Original Newsletter for Key Account Managers*, EMR-NAMNEWS, London, www.kamcity.com/namnews accessed 30 October.
- Naughton J** (2002) 'Like electricity, the Web is a liberator that's here to stay' <http://www.paricenter.com/library/papers> (accessed 03/09/03).
- NetValue** (2001) 'NetValue study on US and European Internet usage', www.netvalue.com. (08-09-03).
- Nielsen NetRatings** (2003) www.nielsen-netratings.com Accessed August.
- Opacic S and Potter R B** (1986) 'Grocery store cognitions of disadvantaged consumer groups: a Reading case study', *Tijdschrift voor Econ. En Soc. Geografie*, 77 (4): 288-298.
- OxIS** (2005) *Oxford Internet Survey*, Oxford Internet Institute.
- Parsons A G** (2002) 'Non-functional motives for online shoppers: why we click', *Journal of Consumer Marketing*, 19 (5): 380-392.
- PreFontaine M** (1999) 'Beyond shopping centres - e-commerce' *British Council of Shopping Centres Conference*.
- Raynsford N** (2000) Speech to LGN/NRPF Conference on 'Town Centres': *Turning the Lights On*, available from www.nrpf.org.

- Reisig V M T and Hobbiss A** (2000) 'Food deserts and how to tackle them: a study of one city's approach', *Health Education Journal*, 59 (2): 137-149.
- Retail Forward (2003)** 'Preliminary holiday 2002 online shopping survey results, January 2003', available from www.pwc-ris.com.
- Rex D and Blair A** (2003) 'Unjust des(s)erts: food retailing and neighbourhood health in Sandwell', *International Journal of Retail and Distribution Management*, 31 (9): 459-465.
- RICS Foundation** (2000) *20:20 Visions of the Future*, Royal Institute of Chartered Surveyors.
- Rogers E M** (1995) *The Diffusion of Innovations*, 4th edition, Free Press, New York.
- Rohm A J and Swaminathan V** (2004) 'A typology of online shoppers based on shopping motivations,' *Journal of Business Research*, 57 (7): 748-757.
- Rosenkranz M A, Jackson D C, Dalton K M, Dolski I, Ryff C D, Singer B H, Muller D, Khalin N H and Davidson R J** (2003) 'Affective style and *in vivo* immune response: neurobehavioural mechanisms', *Proceedings of the National Academy of Science USA*, 100 (19): 11148-11152.
- Shim S and Eastlick M A** (1998) 'The hierarchical influence of personal values on mall shopping attitude and behaviour', *Journal of Retailing*, 74 (1, Spring): 139-160.
- Shim S, Eastlick M A and Lotz S** (2000), 'Assessing the impact of Internet Shopping on Store shopping among mall shoppers and Internet users', *Journal of Shopping Center Research*.
- Shim S, Eastlick M A, Lotz S L and Warrington P** (2001) 'An online prepurchase intentions model: the role of intention to search', *Journal of Retailing*, 77: 397-416.
- Sit J, Merrilees W and Birch D** (2003) 'Entertainment-seeking shopping centre patrons: the missing segments', *International Journal of Retail and Distribution Management*, 31 (2): 80-94.
- Social Exclusion Unit** (2001a) *A New Commitment to Neighbourhood Renewal – National Strategy Action Plan*, London, The Cabinet Office, 35 Great Smith Street.
- Social Exclusion Unit** (2001b) *National Strategy for Neighbourhood Renewal – Policy Action Team Audit*, London, The Cabinet Office, 35 Great Smith Street.
- Spies K, Hesse F and Loesch K** (1997) 'Store atmosphere, mood and purchasing behaviour', *International Journal of Research in Marketing*, 14: 1-17.
- Swinyard W R and Smith S M** (2003) 'Why people (don't) shop online: a lifestyle study of the Internet Consumer', *Psychology and Marketing*, 20 (7): 567-597.
- Tauber E M** (1972) 'Why do people shop?' *Journal of Marketing*, 36 (Oct.): 46-59.
- Verdict** (2006), *e-Retail*, Verdict Research, London.
- Westbrook R A and Black W C** (1985) 'A motivation-based shopper typology', *Journal of Retailing*, 61 (1): 78-103.
- White M, Bunting J, Williams E, Raybould S, Adamson A and Mathers J** (2004) *Do 'Food Deserts' Exist? A Multi-Level, Geographical Analysis of the Relationship Between Retail Food Access, Socio-Economic Position and Dietary Intake*, University of Newcastle upon Tyne/Food Standards Agency.
- World Summit on the Information Society** (2003) 'The information Society: a tremendous advantage' www.wfuna.org/site/wsis/wsis%20presentation.htm
- Wrigley N** (2005) 'Food poverty and retail access: what recent UK-US research reveals' *Poverty and Place in the US-UK: Comparisons of Experiences and*

Policy with a Look Toward the Future, MIT Institute Workshop, Cambridge MIT Institute, 15-16 September.

Wrigley N, Guy C M and Lowe M S (2002) 'Urban regeneration, social inclusion and large store development: the Seacroft development in context', *Urban Studies*, 39: 2101-2114.

Wrigley N, Warm D and Margetts B (2003) 'Deprivation, diet and food retail access: findings from the Leeds 'food deserts' study, *Environment and Planning A*, 35 (1): 151-188.

Wrigley N, Warm D Margetts B and Lowe M S (2004) 'The Leeds 'food deserts' intervention study: what the focus groups reveal', *International Journal of Retail and Distribution Management*, 32 (2): 123-136.