**The Relationship between High Street**

**Footfall, Attraction & Conversion**

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**Abstract**

The three critical measures of retail performance are often suggested to be *“location, location, location”*. However this generalisation, like many others in the literature, is of little practical use without underpinning empirical evidence. At a time when high streets find themselves under pressure from emerging omni-channel shopping behaviours, now more than ever retail managers need reliable performance benchmarks and comparators. We report findings from a mass observation of high street shopping behaviour in a single category, covering four brands, competing in four location types over two days. Our aim was to identify predictable behavioural norms between the key retail metrics; footfall density, shopper attraction and shopper conversion. Such evidence-based relationships, empirical generalisations, would then imply that the one number that matters is high street footfall, tentatively quantifying the retailers’ mantra.

Although shopper marketing (conversion) is much studied (Sorensen, 2005; Underhill, 2009; Desforge & Anthony, 2013) footfall density has to date been the preserve of the urban planning rather than the marketing literatures (exceptions are Denison, 2005; Kirkup, 1999; Yiu and Ng 2010) and we found no studies linking all three metrics. Our observations revealed systematic regularities. Despite great differences in multiple conditions (base footfall, timings, brands, trading locations, frontage) attraction rates remained close to 4% for each competing outlet with an average conversion rate of 43%. Attraction patterns conformed to a well-known mass observation phenomenon, the Law of Double Jeopardy (McPhee, 1963; Ehrenberg, Goodhardt & Barwise, 1990), such that higher share brands attracted slightly more shoppers into store. Double Jeopardy was not so clear in the conversion ratio. Results therefore suggest a law-like relationship between footfall and retail volumes that might be usefully applied in a wide range of circumstances, for example to negotiate rent, forecast sales and to evaluate performance variances between competing brands or between outlets within a retail brand.

**Keywords:** Retail Footfall, Shopper Marketing, Double Jeopardy, Empirical Generalisations, Marketing Effectiveness

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1. **Introduction**

If asked to name the three most important factors determining retail success, most shopkeepers would probably, and perhaps not entirely flippantly say *“location, location, location”,* a generalisation implying that given superior footfall past the shop window, any retail business can hardly fail to succeed. For many years, declining UK high street vitality has been a matter of pressing concern for small businesses, regional and national multiple retailers and local & national government (Portas, 2011; Wrigley & Lambini, 2014). The tightening trading environment has encouraged much research and yet this often quoted generalisation remains simply that, a generalisation with little empirical support, since surprisingly little evidence has yet been shown to link footfall densities with relative retail performance (some important exceptions to this include work by Denison, 2005; Kirkup, 1999).

While location undoubtedly plays a part, retail performance is thought to depend upon at least three different measures of competitive effectiveness. Footfall density, the volume of passing trade attracted to the location itself and available at any time; the attraction rate, the proportion of those potential customers that can be encouraged to enter the store; and the conversion rate, the proportion of those in the store that can be induced to purchase one or more items. A fourth related metric is average spend. In this paper we concentrate only on the three preceding behavioural measures, which we see as measures of competitive effectiveness – consumers can choose between high streets, between retail brands, and between in-store offers, and on any one visit they may also not buy at all.

Of the three measures, attraction and conversion are likely to depend upon an

individual retailer’s marketing approach – for example the ability of a window display to draw attention (Underhill, 2011), the range and quality of merchandise on offer and the store layout policies adopted (Sorensen, 2009). Yiu and Ng (2010) consider attraction and conversion and find from a study of visitors to a Hong Kong mall that there is a critical difference between a shopper and a buyer. They suggest that skilful retail marketers may be able to switch more people than average from one to other condition, and suggest that effectiveness may be measured and modelled through conversion rates from those attracted in.

This approach does not however take account of base footfall levels, and while Yiu and Ng predict attraction and conversion at the mall level, for practitioners these metrics would be better interpreted in a competitive context at the category level (e.g. between rival coffee shops or pharmacy brands) because it would then be possible to extract useful benchmarks based on a brand’s competitive strength both within the category but also between locations.

Underhill (2011) and Yiu and Ng both point out that attraction itself has not yet been widely researched although a very extensive literature now considers conversion, shopper marketing (for example Hui, Bradlow & Fader, 2009; Sorensen, 2009; Stahlberg and Maila, 2011), the principles at the heart of category management (Dupre & Gruen, 2004).

Finally, while attraction and conversion rates might evaluate competitive effectiveness between rival retailers, base footfall is a measure of competitive strength between retail locations, describing the relative ability to draw visitors from wider catchments more often and at different times. It is less likely to be affected by the actions of individual retailers but more by larger and longer term issues such as the evolving retail mix, urban planning policies and changes to habitual shopping or visiting patterns (Instone & Roberts, 2006). Footfall density can be at least partly explained by well-known retail gravitation models which describe the relative draw of one location over another (Converse, 1949; Ghosh & Craig, 1983; Huff, 1964; Reilly, 1931).

Rather than considering these three measures in isolation, the retail axiom *“location, location, location”* implies the existence of a generalising relationship between them for which little support has yet been found. Such a relationship if established would clearly be a useful practical benchmark with implications beyond the evaluation of single store performance– it would be a simple metric for competitive effectiveness.

In this paper we describe results from a scientific study designed to capture that evidence from observations of shopper behaviour in one retail category, recorded simultaneously in four different location types on two occasions. The results point to a promising initial empirical generalisation (EG), a broadly fixed relationship between the measures within that category, and we are able to demonstrate how the EG can be applied to isolate important differences between the rival brands with practical implications for their managers.

In the remainder of this paper we review literature in the areas of retail consumer behaviour in order to contextualise the importance of this competitive view for practitioners. We then describe the methodology and present the results to demonstrate the empirical generalisation. In the final sections we explain how the new EG links to known laws of marketing, then suggest some practical applications before outlining the research agenda necessary to strengthen the benchmark.

*Empirical generalisation and marketing science*

The research approach was that of the natural sciences - inductive - to identify and systematically replicate and extend EG’s through observation of patterns and relationships occurring and recurring in differentiated sets of data. There were no hypotheses or new theory to test initially.

An empirical generalisation is *"a pattern or regularity that repeats over different circumstances and that can be described simply by mathematical, graphic, or symbolic methods."* (Bass,1995). Some of the best known include Boyle’s Law or Newton’s Laws of Motion. It is surprising to some but such law-like generalisations also exist in marketing, and especially in consumer behaviour where useful examples such as Ehrenberg’s Law of Double Jeopardy (Ehrenberg, Goodhardt and Barwise, 1990) are in everyday managerial use (Sharp, 2010). It is the role of marketing science both to develop the strength, scope and limits of known empirical generalisations through systematic replication and extension (Anderson, 1983; Wright & Kearns, 1998) and also to discover new ones. Results build over time, first in observing low-level regularities, then in establishing, replicating and extending empirical generalisations and then (eventually) by linking them in explanatory theories that are strengthened when exceptions are observed in further tests (Ehrenberg, 1982; 1995; 2002).

An important feature of such studies is that they do not rely on tests of statistical significance or best fit (Ehrenberg, 1995) – there is no initial model to fit to. The criterion for judging any EG is that it can be observed to approximately describe a regular relationship between two or more variables in many different sets of data, and thereby acquires a use as a powerful benchmark with which to evaluate or understand other, unfamiliar results, or to predict future outturns in similar circumstances (Barwise 1995). The object of the scientific method as defined by both Aristotle and Newton (Blackstone, 2004) is to let reality speak for itself – or as Gerald Goodhardt once said, If you can see it, it ***is*** probably there.

A legitimate question of a method that does not rely on statistical testing is therefore “what makes a good empirical generalisation”. Barwise (1995) suggests that good EG’s have scope, precision, parsimony, usefulness and links with theory. As to scope, empirical generalisations should be routinely predictable under a wide range of conditions. Further replications then increase these conditions and establish where they begin to break down. Precision relates to the best possible description of the phenomenon, while parsimony relates to the quantity of possible variables that can be excluded from that description. Precision and parsimony lead to improved usefulness, and should encourage further practical applications among managers. Finally, an empirical generalisation is better if it can be explained by a theory. The theory can then account for the generalisation, and for its scope (e.g. Double Jeopardy, which *predicts* a brand’s loyalty, doesn’t always hold for individual own-brand products because their distribution, and hence their penetration, is restricted).

On this basis the aim of the present study was to collect observations of behavioural data on the three dimensions of footfall, attraction and conversion, differentiated by location type and time, in one retail category. The objectives were to:

* **Identify regularities or patterns that exist between the measures**
* **Identify persistence in differentiated replications to extend them**
* **Evaluate them against the criteria outlined by Barwise (1995)**

1. **Theoretical Background**

In this section we briefly describe the theoretical context underpinning the three measures observed, the nature of competition between locations, between stores in one location, and between the brands in store.

*Base Footfall Density*

Consumers choose to visit a range of available high streets, and divide their shopping between them depending on occasion or convenience. The number of visitors on any high street, the footfall density, is normally determined by retail gravitation theory (*e.g.* Converse, 1949; Ghosh and Craig, 1983; Huff, 1964; Reilly, 1931), which estimates the competitive effects of distance and attractiveness or size on retail catchment area.

There are many reasons to visit a town centre. As Dobson (2012) points out most retail districts are better viewed as a multipurpose social, civic and communal space, or *agora* as well as a retail centre.East *et al.,* (2008) draws attention to some of the factors underlying the regularity of high street choices making the point that many individual trips occur when they do for good reason and those reasons while different between individuals are likely to be relatively long-term stable. For example, the *choice of day* on which to visit a particular store or town centre might reflect its proximity to a weekend, a day off, or a day where a store was less busy. The *time**of day* might reflect other regular factors – the end of work, an available car share or the school run. It would therefore be reasonable to expect that the number of shoppers present on a high street (and predicted by gravitation models) at a given time would remain relatively stable, but might fluctuate around a long-run mean perhaps with seasonal variation, the weather or in response to commercial or community one-off events.

Since the turn of the millennium some have predicted that high street vitality will be depressed by the rapid adoption of online shopping behaviour, which renders irrelevant the utilities of time and place provided by bricks and mortar retailers (Sheth and Sisodia, 1999). The British Retail Consortium (BRC, 2012) suggested that the inevitable consequence will be rising shop vacancies and falling high street footfall densities, a trend predicted by Deloitte (2015, p.10) who found that 70% of consumers are now *“leading their own shopper journey”* through online search.

The evidence is more complex: Wrigley and Lambini (2014) found from a large national study that shaped by routine, consumer purchasing is moving back into town but is becoming convenience driven. Pure-play online and catalogue retailers are also moving onto the high streets to access new consumer purchase occasions with some effect; Pauwels & Neslin (2015) examined sales data from one multi channel retailer and demonstrate that such offline strategies lead to an increase in purchase frequency because of the “availability effect”. Footfall is still therefore drawn to the high streets and is in turn attracting new retailers who can embrace the new technologies.

*Attraction into Store*

Footfall on the high street, like other consumer behaviour can be modelled stochastically to determine attraction rates to individual retailers. Using the NBD-Dirichlet model, Brewis-Levie and Harris (2000) showed that the competitive structure of women’s high street fashion retail is more dependent on the number of customers attracted to a store than on the number of visits those buyers made, and Kennedy and Ehrenberg (2001) demonstrated that grocery store buyers were similarly unsegmented when choosing between multiple grocery brands. Store attraction is determined to be polygamous – that is, individual shoppers are attracted to a portfolio of outlets they use regularly.

These findings are important to this study because they confirm that both high street and store vitality depend largely on penetration, footfall density, rather more than any special USP to attract loyalty to a particular retailer. Attraction rates to stores are distributed predictably across shoppers. The NBD-Dirichlet describes unpartitioned and stationary buying across the market, so if these conditions are met, then close-fitting model output suggests that consumer behaviour is as habitual (and likely slow changing) at high street and store level as it is when choosing between FMCG brands. Shah, Kumar & Kim (2014) recently reviewed evidence to suggest that as much as 45% of human behaviour can be deemed habitual, and this too points to the likelihood of a behavioural norm in attraction rates between competing stores in a category, although studies have only considered fashion and grocery retail so far.

*Shopper Marketing: Conversion Rates*

The third measure we consider here is the effectiveness of shopper marketing in each retailer, the rate at which browsers become buyers. This is the crucial buyer to shopper ratio described by Yiu and Ng (2012). The main contribution is methodological. They confirm that surveying shoppers (the most common approach) is less accurate than observation in determining this ratio, a finding enhanced by Denison (2005) and Kirkup (1999) which both describe important advances in electronic footfall observation.

Underhill (1999) reports the astonishment of his retailer clients to discover that not everyone in their outlets was a buyer. He found that the conversion rate in New York department stores was less than half (48%). Since then a literature in Shopper Marketing has developed which describes ways to increase the conversion rate (Desforge & Anthony, (2013) describe this as a revolution) Sorensen, (2009) suggests that the key is to make best use of shopper time. Certainly once in store behaviour appears to be quick and almost unthinking. Anesbury *et al.* (2014) have reported findings from a large sample of grocery consumers in the US, Singapore and Australia and show that most brand choices take less than ten seconds while Sorensen (2005) suggests that the average shopping trip covers only 25% of the store in the interests of speed, while the most commonly seen basket at the checkout contains just one item.

Aside from better merchandising to take advantage of more seconds of customer time, Verhoef, Kannan & Inman (2015) report an evolution in behaviour, from a multi-channel response (buying the same brands through on and offline channels, with the potential to reduce high street footfall) to an omni-channel response in which marketers create on and off-line brand touch points that interact in the physical environment. They point to the emergence of web-rooming – consumers checking mobile devices for better deals while in a physical retail outlet, and the ways in which retailers can create conversion from this.

Category management measures the relative ability of rival retailers to increase conversion rates in a category in their store through ranging, promotion, pricing and display. Conversion can therefore be considered as an important measure of competitive effectiveness, as well, as a period to period management metric within the store, or between stores in the same chain.

In summary, the *“location, location, location”* axiom suggests that the footfall density passing the shop door is the main contributor to retail performance. The two subsequent measures, attraction and conversion, are more easily influenced by the retailer, and managers commonly invest in enticing customers into store and converting them into buyers. The shopper marketing and category management research literatures are substantial. On the other hand some consider that in aggregate habitual behaviour is stochastic and so predictable, which would then imply that retailers can do little to influence sales beyond picking a better location. Attraction and conversion will then follow. The relationship between these numbers is the basis of the study.

1. **Research Context & Methodology**

*Research Context*

The study was based in a single category to test competitive effects between retailers. The *masstige* skincare UK retail category was selected and Table 1 gives comparative performance measures for the leading brands in the UK in 2012. Space NK is an exception in the category because it sells a range of well-known brands, and was excluded from the study. The Body Shop competes on its ethical and sustainable heritage, Lush has a youthful and fun image, L’Occitane originates in the rural South of France, and Kiehl’s promotes a sophisticated urban American identity. These four brands were selected for the observations of buying behaviour in the study.

The table reveals a strong association between outlet numbers, retail selling space and sales, indicating that despite differences in image these brands are close competitors. The Body Shop is roughly three times the size of its nearest rival, and around twenty times the size of Kiehl’s. L’Occitane (which opened stores during the year) was showing strong growth, while The Body Shop was virtually stable.

**Table 1. Relative UK performance of six competing retail brands**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Outlets | | Share of | | Sales | | Sales | | |
| Brands | |  | | Retail | | 2011 | | Y/Y | |
|  | |  | | Space (%) | | (£m) | | (+/- %) | |
| The Body Shop | | 311 | | 54 | | 156 | | -2.0 | |
| Lush | | 94 | | 16 | | 44 | | 7.3 | |
| Space NK | | 60 | | 10 | | 50 | | 6.2 | |
| L'Occitane | | 53 | | 9 | | 33 | | 21.2 | |
| Molton Brown | | 40 | | 7 | | 46 | | -4.1 | |
| Kiehl's | | 15 | | 3 | | n/a | | n/a | |
| *Source: Mintel - Beauty Retailing- January 2012* | | | | | | | | |

When establishing empirical generalisations it is important to vary the conditions of the replications in order to identify where any emerging relationship between variables may or may not exist. In this study several conditions were manipulated: first, the four brands have clearly differentiated brand images that might appeal to different shopper segments. By comparing consumer response it was hoped that positioning effects might be revealed.

Second, the four brands selected were of greatly differing size, and one was a new entrant. The study might therefore reveal some insight into how the market positions of each had evolved. Third, brands were selected on the basis that each had outlets in four different but comparable retail settings, namely prime West End shopping streets, secondary London high streets, shopping malls and transportation terminals. Again, it was hoped that any variance in response as a result of location would be observable, but could also be compared between rivals. Finally, because trade levels vary by day of week, two different days were selected for the study, Wednesday and Saturday. To control for extraneous variables (for example weather, industrial action or major sporting events) the times and the dates of the observations on those two days were kept constant across each set of manipulations.

*Methodology*

In each location teams of four researchers were positioned to count the footfall of adults passing in both directions on the pavement immediately outside each store for precisely one hour between 14.00 and 15.00 on each day. The researchers also took it in turns to note the numbers entering each store between the cut-off times, and also to observe and note those who had made a purchase. While Yiu and Ng (2010) recommend observation to determine purchase it was not always possible to view a purchase being made and not all shoppers who had purchased left the store with a visible branded bag, therefore some error may still have resulted even from these observations, although the sample is large, and any bias is likely to be slight. Across the space of two hours across all locations around 57,000 footfall observations were made, and 900 individual purchases recorded. The analysis was straightforward: having collected the data it was a matter of simple tabulation to establish and compare footfall measures at each location type and on each day, the attraction rates for each store brand, and their relative effectiveness revealed in the conversion rates. Any generalising associations and patterns in the data were then clearly revealed.

In the next section the main findings are presented before a discussion of their implications is given, and routes for further research are suggested and described.

1. **Results**

The results are compiled in Table 2, which compares brand performance across location type, and between days of the week. In round numbers the tables show the footfalls counted at each location for each brand in the sample. It can be seen at once that there is a great disparity in the footfall available to each retailer by location: just 150 people passed Kiehl’s in Waterloo station on Saturday afternoon while at the same time 2,500 were passing by their store in Westfield. The averages at the base of the table are then useful in describing the variances in density by location type and day.

In the next column at each location type, the proportion of the available footfall then entering each store by day is described as *v* (visitors), to arrive at the attraction rate - the percentage of footfall. This is fairly volatile at the store level but when described as an average by location we can begin to see an emerging similarity between location types; lower attraction rates at High Street and West End stores compared to Malls. Numbers at the stations are less consistent, and whilst this might be a result of sample error (densities being lower generally) it appears that attraction is more easily achieved on weekdays rather than at weekends.

The conversion rate is then expressed as *b/v* (*b* for buyers) to describe how efficiently the retail operation is performing in each location. A generalising pattern is emerging which suggests that just under 50% of store visitors are making purchases, approaching the figure reported for US department stores by Underhill (1999), of around 48%.

**Table 2: Footfall, attraction and conversion measures by day**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Counts 3.00 to 4.00 pm WEDNESDAY** | | | | | | | | | | | | |
|  |  |  |  | *Data rounded* | | | | | | |  |  |
| Brand | West End | | | High Street | | | Shopping Malls | | | Stations | | |
|  | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* |
|  |  | % | % |  | % | % |  | % | % |  | % | % |
| Body Shop | 4600 | 2.6 | 18 | 900 | 1.3 | 75 | 2000 | 7.1 | 18 | 400 | 12.4 | 45 |
| L'Occitane | 2060 | 4.4 | 12 | 970 | 3.8 | 24 | 960 | 1.0 | 22 | 830 | 0.7 | 17 |
| Lush | 2060 | 3.0 | 54 | 800 | 3.7 | 73 | 630 | 5.8 | 42 | 800 | 3.7 | 73 |
| Kiehl's | 640 | 1.4 | 44 | 900 | 1.1 | 60 | 800 | 1.3 | 50 | 260 | 6.8 | 67 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average | 2300 | 2.9 | 32 | 890 | 2.5 | 58 | 1100 | 3.8 | 33 | 573 | 5.9 | 51 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Counts 3.00 to 4.00 pm SATURDAY** | | | | | | | | | | | | |
|  |  |  |  | *Data rounded* | | | | | | |  |  |
| Brand | West End | | | High Street | | | Shopping Malls | | | Stations | | |
|  | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* | F/Fall | *v* | *b/v* |
|  |  | % | % |  | % | % |  | % | % |  | % | % |
| Body Shop | 8000 | 5.2 | 16 | 2600 | 2.6 | 46 | 4800 | 5.3 | 29 | 1500 | 4.0 | 42 |
| L'Occitane | 4600 | 3.8 | 25 | 1500 | 4.6 | 31 | 1100 | 1.1 | 31 | 1100 | 0.7 | 38 |
| Lush | 4500 | 2.0 | 52 | 1100 | 4.7 | 48 | 580 | 12 | 44 | 1100 | 4.7 | 48 |
| Kiehl's | 890 | 1.6 | 80 | 1300 | 1.8 | 66 | 2500 | 2.4 | 10 | 150 | 4.1 | 66 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average | 4500 | 3.2 | 43 | 1600 | 3.4 | 48 | 2200 | 5.2 | 29 | 960 | 3.4 | 49 |

The tables also suggest a different behaviour between High Street and West End and Mall locations on this basis, especially on Saturdays. The conversion ratios suggest that rather more people in Malls and in the West End are “shopping” rather than buying, while conversion rates on both days at the stations were found to be consistently higher. Intuitively, these patterns make sense in that a shopping trip to the West End or a Mall is often a social or family event rather more than a functional expedition for supplies, so more time can be taken browsing and window shopping. Why those in stations are somewhat more likely to make a purchase is rather less clear however.

We see that there are variations between the types of retail setting, but broadly the patterns are similar – a very large number of people passing by (and in this category, the people passing are highly likely to be buyers of these brands at one time or another), but very few attracted into the stores, whatever the brand. Once inside, less than half generally make a purchase.

From the data we can consider **brand performance** as well as the results from individual stores in different locations. The brand-level picture captures differences between rivals instead of differences between location types, so by aggregating the data it is possible to see how well each brand is competing for higher traffic locations, how effectively each brand attracts footfall, and how efficiently it converts those shoppers it has attracted into buyers. By holding the observation period strictly steady, regularities and exceptions in performance metrics are more clearly revealed without recourse to statistical analysis, but simply by organising the main measures into tables, and deriving the mean scores.

The technique has been adopted for the data presented in Table 3 from which a number of clear patterns emerged along with some important exceptions.

**Table 3. Aggregated footfall density and purchase metrics by brand**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Base Footfall** | |  | **Attraction *(v)*** | |  | **Conversion *(b)*** | |
| **Brand** |  |  | |  |  | |  |  | |
|  |  | **Wed.** | **Sat.** |  | **Wed.** | **Sat.** |  | **Wed** | **Sat** |
|  |  | *,000's per hour* | |  | *% entering* | |  | *% buying* | |
| Body Shop |  | 2.0 | 4.2 |  | 5.9 | 4.3 |  | 39 | 33 |
| Lush |  | 1.0 | 1.8 |  | 4.1 | 5.9 |  | 61 | 48 |
| L'Occitane |  | 1.2 | 2.1 |  | 2.5 | 2.6 |  | 19 | 31 |
| Kiehl's |  | 0.7 | 1.2 |  | 2.7 | 2.5 |  | 55 | 56 |
|  |  |  |  |  |  |  |  |  |  |
| **Average** |  | **1.2** | **2.3** |  | **3.8** | **3.8** |  | **43** | **42** |

*A New Empirical Generalisation*

Results from the evidence in the column averages are astonishing. Even though footfall varies by 100% between Wednesday and Saturday, it can be seen that the brand attraction rate remains completely stable at under 4%, while the conversion metric in this category appears to be around 42% of shoppers, regardless of footfall.

The finding is a low-level empirical generalisation across brands, contexts and days, and it gives some credibility to the retailers *“location, location, location”* axiom. If robust, it provides a norm or benchmark with which to assess brand performance in the individual retail metrics, since **whatever the footfall**, the expectation is that about 4% of shoppers will be attracted and 42% converted.

The first pattern to be observed is that the dominant factor in sales per store must be the number of potential shoppers passing the front door. Any shop in this category should expect to bring in about four out of every hundred passers-by, and sell something to about two in five of those it attracts. Clearly the more passing traffic there is, the higher the sales will be. The regularity of the relationship within the category across locations, days, base footfall levels and brands is quite surprising and has not been previously reported to the best of our knowledge.

A second important pattern now revealed from this type of analysis is that some retailers (and especially The Body Shop) are better at acquiring higher traffic locations. The Body Shop trades in locations benefitting from twice the base footfall seen for the other brands. Because it is the clear brand leader, greater resources allow it to derive competitive advantage from stronger relationships with estate agencies, or a better ability to pay the higher rents demanded for busier sites. The best locations are a facet implicit in retail brand equity, and one that clearly creates strong barriers to entry. Acquiring the best locations is a critical success factor in retail strategy.

The third, slightly unsurprising pattern revealed is that Saturdays are busier than weekdays, but the table now shows by how much: on average, footfall doubled between the days. This has crucial practical implications for store management, which must ensure adequate levels of both staff and stock ahead of any surge; a lost sale is lost forever. There are exceptions to the pattern for example, reference to Table 2 shows that some station locations were busier during the week and quieter at weekends.

*Applying the Empirical Generalisation*

Using the new benchmark as a comparator, insight can be gained about the nature of competitive brand strength. The Body Shop is the best-known brand of the four observed, and as well as having the best locations, it attracted a higher than average proportion of the passing trade into its shops. In fact, the ability to attract trade into the store is directly related to brand size – the better known the brand, the higher the proportion of potential buyers it attracted. (This is a well-known characteristic of the Double Jeopardy Law; *small* brands suffer twice in having fewer buyers who like the small brand a little less than the bigger brands, and buy it a little less often). But it is now clear through comparison with the benchmark averages that in the case of Body Shop, visitors were not being converted at the expected rate. It can also be seen through the comparator that Lush, a newer brand with stores in less highly trafficked locations, managed to attract above-average numbers (perhaps as a result of the enticing fragrances emanating from its stores), and unlike Body Shop, was then able to convert rather more of them.

L’Occitane and Kiehl’s trade in lower footfall locations, and were also less able to entice potential buyers into store, again constrained by the Law of Double Jeopardy. Whereas L’Occitane is converting well below average proportions of the few potential buyers it did have in store, the benchmark shows that Kiehl’s, surprisingly, had the highest strike rate of all four brands.

Observers in the research teams had confirmed that visitors to Kiehl’s appeared to know what they wanted, visited specifically to buy it, but spent little time browsing the store. The new benchmark suggests however that being in the lowest traffic locations means that sales will always be constrained by a lower number of visitors, supporting the retailers’ mantra.

Finally, it is obvious that the new empirical generalisation has great potential as a practical behavioural norm. As it becomes more robust through further replication, it will provide an easy rule of thumb to assess the potential for a given category in any retail site. It will allow managers to develop realistic marketing plans, evaluate and manage owned and franchised operations with more insight and negotiate rents and premiums more favourably. It allows brand managers to assess the performance of their competitors, and to evaluate the effectiveness of their own strategies.

In the final section of the paper we discuss the implications of these findings in more detail, linking them with established theory in consumer behaviour, and setting out a programme of further scientific replication and extension.

1. **Discussion and Implications**

Retailers know how difficult it is to make sales and Figure 1 demonstrates why, graphically. In two hours of observation we counted nearly 57,000 people in four retail locations passing by the competing shop window displays. The body care category is widely consumed, and the four observed brands are well known – a very high proportion of the passing trade was likely to have consisted of category consumers – yet from that substantial base footfall, only 900 shoppers were converted to buyers, just 1.6% of the available traffic density. So while footfall is an important part of the story, it is certainly not the whole of it for those looking to effectively leverage their most expensive asset – retail space.

**Figure 1: The relationship between footfall and conversion**

***Footfall is the one number you need because only a tiny proportion will buy.***

Given the obvious difficulty in making sales, it was sensible to compare the three measures of retail competition, footfall, attraction and conversion within the category, in order to establish measures of retail marketing effectiveness on a like-for-like basis. The consistency in the metrics between brands, times and locations suggested the existence of a predictable relationship, an empirical generalisation that would allow interpretation of competitive intensity, and a possible explanatory link to other theory. In the event, the results described *several* empirical generalisations conforming to a well-established norm in mass observation studies, the Law of Double Jeopardy (Ehrenberg, Goodhardt & Barwise, 1990; McPhee, 1963; Sharp, 2010).

The law suggests that small brands suffer twice. In comparison to bigger competitors they have fewer buyers who buy a little less often. The evidence consistently shows that loyalty, however measured (purchase frequency, repeat purchase, share of category requirement *etc*) differs little between competing brands of vastly different size, so the disparity in market share is almost entirely accounted for by the number of buyers that the bigger brand attracts.

This is precisely what we see in our data; because the attraction and conversion rates are broadly constant, the differences in market share can only depend on the numbers of shoppers attracted into store, and that number depends entirely on footfall density outside the shop. It seems likely then that the Law of Double Jeopardy applies in retail as much FMCG buying.

Is segmentation and positioning not important? What about the frontage of the stores observed, or the nature of the window displays? These four brands have each spent large sums to develop and communicate a compelling brand image in the minds of their consumers, each differentiated from the other, in an attempt to convert more customers and entice them back. Nevertheless, the observed rates at which those shoppers were converted to buyers (which here equates to loyalty or even liking) are broadly a constant two out of five – so the shoppers at Lush appear to like Lush as much (or as little) as the shoppers at L’Occitane (a lower number) appear to like L’Occitane. The data suggests that no one *masstige* body care brand is being bought any differently by its buyers than any other, the phenomenon which led Sharp (2010) and Ehrenberg and Kennedy (2001) to assert that brand level customer segmentation is seldom seen.

In FMCG markets such as detergent, the reason for this is that the buyers of Persil are very often also buyers of Ariel – and so because the customers of the different brands are in effect largely the same people, it is unlikely that any segmentation study could expose meaningful differences between them. In the specialist skincare retail category, repertoire buying is also normal, so the conversion rates in competing retailers are very likely to be similar because they simply reflect habitual split-loyal category purchasing.

Penetration, the proportion of potential buyers reached in any period (even the two hours observed here), is therefore the crucial measure of marketing effectiveness. Anschuetz (2001), Ehrenberg et al., (2004) and (Romaniuk & Sharp, 2015) all present consistent and compelling evidence that through Double Jeopardy, loyalty depends on penetration, and penetration largely defines brand size. Brands in FMCG grow (when they do) by attraction far more than by retention. Our observations of retail store patronage demonstrate the same effects in describing competitive market structure, effects which appear to comply with the law of Double Jeopardy.

The retailers axiom is probably therefore correct – if superior footfall is consistently delivered in one location over another, all that can matter is *“location, location location”.* The empirical generalisations outlined here capture and describe that numerically, and so we suggest they fit the definition of a good EG (Barwise,1995) in having:

* **Scope** - holding under varied and differing conditions.
* **Precision** - a comprehensive description of an observed phenomenon
* **Parsimony** – less is more in summarising that phenomenon
* **Usefulness** –of benefit to practitioners
* **Links to theory** – for example here, to the Law of Double Jeopardy

*Further Research*

This exploratory study has produced promising findings. In the first place the results suggest a single framework for assessing the relative competition for customers and trade across locations in a retail category because they indicate a predictable relationship between base high street footfall and normal trade levels for any retailer in that category. This means that for practitioners a simple and inexpensive footfall observation might provide the insight necessary to perform many management functions.

It is hoped that these findings will become more robust through scientific replication and to continue the work the following studies are indicated.

First, further replications are required in the same category, collecting data over longer periods in each day, on different days of the week, and in further locations. More substantial datasets will assess the reliability of the initial results, and strengthen the low-level empirical generalisations identified here.

Second, the studies should be extended to further comparative goods retail sectors including men’s and women’s fashion, to independent and specialist food retail, coffee shops and to restaurants. These studies are required in order to strengthen initial findings through extension to other competitive areas, and should enhance theoretical knowledge if clear links emerge between category penetration, attraction and conversion from base footfall.

Third, the emerging EG should be tested in further types of location – high streets and high roads, markets, regional shopping malls, airports and other transportation hubs, as well as in countries and continents with cultural variations in shopping behaviours and different retail densities.

These types of extension will identify if a similar relationship exists across categories but is of a different order of magnitude. This is intuitively likely since all categories have greater or smaller national penetrations and inherently higher or lower average purchase frequencies.

Once a wider range of categories has been observed further patterns may well emerge, making it possible to connect the new retail EGs with other well-established norms of marketing, and to stochastic models of market structure such as the NBD-Dirichlet. These Laws developed through mass observation already have substantial theoretical support and explanatory power. Extending and connecting them will lead not just to further usable benchmarks and norms, but to an understanding of the most effective routes by which to develop effective retail marketing strategies.

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