Received June 2009
Revised April 2010
Accepted July 2010

Chinese consumers' perception of hypermarket store image

En-Chi Chang
Manchester Business School, Manchester, UK, and
Bo Luan
China Construction Bank, Da Qing City, China

Abstract

Purpose – The purpose of this paper is first, to find out store image attributes valued by Chinese consumers in Beijing; second, to understand Chinese consumers' preference by comparing an international retailer with a domestic retailer; and third, to provide both international and domestic retailers with suggestions for store image improvement.
Design/methodology/approach – This study used a three-stage approach to collect the data. First, two waves of semi-structured interviews were carried out, followed by a survey, concluding with another wave of interviews. The survey data were analyzed using SPSS.
Findings – The paper finds that there are 18 important attributes in building a hypermarket retailer's store image in China. Beijing consumers are more concerned with a retailer's reputation and services than with the price. In terms of store image dimensions, the paper concludes that store atmosphere is the most important, followed by service personnel and merchandise.
Research limitations/implications – The research scope is limited to Beijing.
Practical implications – The practical implications of the findings are that: store atmosphere is the most important store image dimension for Beijing consumers; Chinese consumers no longer look only for low prices; international hypermarket retailers hold better store image than domestic retailers; and corporate reputation is important for hypermarket retailers in China, followed by quality of goods and staff's service attitude.
Originality/value – This paper is the first to investigate Chinese consumers' perception of store image and top concerns when shopping at a hypermarket.

Keywords China, Consumer behaviour, Store ambience, Hypermarkets, Perception

Paper type Technical paper

Introduction

China's accession to World Trade Organization (WTO) is regarded as a landmark of China's commitment to further opening its market and further participating in the international market. One of the conditions of China's entry to WTO is the opening of the service industry to foreign investment (Agarwal and Wu, 2004). The retail industry is regarded as one of the important sectors within the service industry in China and has a vast market potential. According to AT Kearney's (2007) global retail development index, China ranked the third in top ten countries for investment (Lewis, 2008). International grocery retailers such as Wal-Mart, Carrefour and Metro entered China by using the hypermarket/supercenter format which was a new retailing concept to the country in the 1990s and have changed Chinese consumer's shopping behavior. After China joined the WTO, these retailers opened hypermarket stores around China at a fast pace. While these international retailers expanded in China enthusiastically, domestic retailers also adopted the self-service shopping concept and opened modern retail shops. Currently domestic retailers still dominate the hypermarket sector by outnumbering international retailers' stores and this retail format will continue its growth in China until after 2010 (Miu and

The authors would like to thank two anonymous reviewers for their detailed comments and references.

Asia Pacific Journal of Marketing and Logistics
Vol. 22 No. 4, 2010
pp. 512-527

1355-5855
DOI 10.1108/13555851011090538

Penhirin, 2003; Lewis, 2008). In the context of China's globalization, these international retailers help Chinese retailers learn and catch up the international standard in the retail practice; they also bring consumers world-class stores and retail services. To further expand their operations in China, international retailers need to know whether they are on the right track in providing Chinese consumers with appropriate retail services. On the other hand, domestic retailers need to know whether they perform well and are capable of competing with international retailers.

Due to the increasing number of stores opened by international and domestic retailers, the hypermarket sector in China is already under intensive competition in first-tier cities (Wong and Yu, 2003) and thus it is important for retailers to understand what attracts Chinese consumers to visit and to repatronize a hypermarket store. Though retailers are keen to expand their hypermarket chains, the understanding regarding Chinese consumers' perception of the hypermarket store image is still under-researched. Positive store image is of utmost importance if a retailer wants to attract and retain more customers because customers' perception of a store influences the customer's behavior such as which shop they choose to visit, how frequent they will shop in the store, how much they will spend in the store and how loyal they are towards a retailer. Newman and Cullen (2002) point out that "a retailer can attract more customers and increase sales by creating the right sort of image." Hence, it is important to investigate what attributes of store image Chinese consumers value most and to understand the consumers' perceptions of store image offered by hypermarket retailers, both international and domestic in China. All in all, this study serves three goals. The first is to find out what attributes of store image are valued by Chinese consumers and the importance of each attribute. The second is to compare Carrefour and Beijing Hualian in each of these attributes and to understand Chinese consumers' preference of hypermarket retailers. Finally, this study provides suggestions to both retailers, based on the results of the survey.

Literature review

Store image

Store image has been regarded as an important antecedent in retail studies of store preference (Thang and Tan 2003), consumer satisfaction (Martenson, 2007), the frequency of store visits (Pan and Zinkhan, 2006), shopping trips, shopping expenditure and store loyalty (Arnold *et al.*, 1983; Sirgy and Samli 1985). Martineau (1958) defines store image as "the way in which the store is defined in the shopper's mind." Bloemer and de Ruyter (1998) define the store image as "the complex of a consumer's perceptions of a store on different attributes." Berman and Evans (2007) define the store image as "how a given retailer is perceived by consumers and others." Keaveney and Hunt (1992) and Newman and Cullen (2002) point out store image is a combination of an individual's cognitive and emotional responses and stress that customers' previous experience is very important for store image. Therefore, this study defines store image as "the complex of a consumer's perceptions of a store on different attributes based on the customer's previous experience."

Past research has identified and classified components, which make up store image. Many studies agree that store image is a multiattribute model (Bloemer and de Ruyter, 1998), which consists of both the more visible attributes (functional qualities), such as the quality and availability of merchandise and the less tangible attributes (psychological attributes) such as the atmosphere (e.g. lighting, sounds, smells and colors) of the store (Fisk, 1961; Hansen and Deutscher, 1977; Lewison, 1997; Porter and Claycomb, 1997; Cox and Brittain, 2000; Davies and Ward, 2002). Lewison (1997, p. 11) provides a list of store image dimensions, including product, service, price, place and promotion, and each dimension contains several attributes. Bloemer and de Ruyter (1998) adopt Ghosh's (1990) view and contend that store image includes the following components: location, merchandise, store atmosphere, customer service, price, advertising, personal selling and sales incentive programs. Kan (2005) also summarizes past studies of store image and provides the components of store image suggested by various researchers and Tseng (2008) summarizes dimensions in store image studies in Taiwan (Table I). McGoldrick (2002, p. 188) provides a more comprehensive classification of store image and adds more intangible store image dimensions into the list, e.g. reputation on adjustment, personality of store and institutional image. Therefore, to obtain a more comprehensive understanding of Chinese consumers' perception of store image attributes, this study will adopt McGoldrick's classification as the foundation for extracting attributes valued by Chinese consumers.

In summary, store image contains the following dimensions: merchandise, service personnel, location/convenience, store atmosphere, promotion, services and reputation; each of these dimensions contains several attributes. Customers often evaluate and select retailers on the basis of the image they project and thus it is very important for retailers to cultivate and communicate the right store image, which can help attract more customers and increase sales. Though customers usually hold a global image of a retailer, there are many components contributing to the holistic store image and each component weighs differently in different consumers' minds and in different customer segments (McGoldrick, 2002). To get a better picture of how consumers evaluate a store, a retailer

Table I.
Dimensions of store image classified by different studies

Researchers	Dimensions
Fisk (1961)	Convenient location, product's suitability, price, selling promotion, store atmosphere, post-transactional satisfaction
Hansen and Deutscher (1977)	Merchandise, service, clientele, physical facilities, convenience, promotion, store atmosphere, institutional factors, post-transactional satisfaction
Porter and Claycomb (1997)	Fashion, selection, quality of merchandise, customer service, sales personnel, physical condition, store atmosphere
Cox and Brittain (2000)	Merchandise, store location, promotion, pricing policy, service, store clientele, store atmosphere, layout
Davies and Ward (2002)	Merchandise (assortment, quality, brand mix and price); store (location, internal and external environment, atmosphere and name/fascia); service (personnel and levels of quality); promotion (advertising/public relations and in-store)
Burt and Carralero-Encinas (2000)	Customer service, store reputation, produce range, physical characteristics, character and pricing policy
Store image dimensions in Taiwan	
Lin (1999)	Merchandise quality, store atmosphere, service quality
Hsiao (2002)	Price, product, services, convenience and physical environment
Chuang (2003)	Merchandise, convenience, services, sales promotion, physical facility and store atmosphere
Lu (2004)	Convenience (location, shopping process), store facility and atmosphere (display, cleanliness, store atmosphere), and service attitude (personnel attitude, personnel knowledge, speed and accuracy of cashiers)
Lee (2008)	Merchandise, services, convenience, physical facility, promotion, store atmosphere

Sources: Adapted from Kan (2005); Tseng (2008) must consider the weighing of each store image attributes in order to design a better retail mix.

The hypermarket in China

The huge potential of the retail market in China has attracted many retailers to invest in this market. All retail formats such as the supermarket, the hypermarket, the discount store and the convenience store, new in the 1990s, now can be seen in China (Business Monitor International, 2009). Uncles (2010) points out that hypermarkets and supermarkets in China have been growing faster than other grocery retail formats. According to the *Classification of Retail Format* in China (Beijing.gov, 2004), the self-service stores in China include the convenience store, the standard supermarket, the hypermarket and the warehouse club. Among these formats, international retailers from Europe, the USA and the Southeast Asia use mainly the hypermarket format to develop the China market (Wang, 2009). The Unit for Retail Planning Information (1988) describes that:

> [. . .] superstores are defined as single-level self-service stores selling a wide range of food, or food and non-food goods with at least 2,500 square meters [27,000 sq. ft.] trading floor space and supported by car parking. Stores selling only non-food goods are excluded. Stores with 5,000 square meters [54,000 sq. ft.] or more are commonly referred to as Hypermarkets.

Lewison (1997) considers

> [. . .] this "mall without walls" [hypermarket] concept must become a destination-type store capable of attracting customers from a 50-60 mile radius. A self-service retailer with central checkouts [typically fifty or more] and a sophisticated system of materials handling, the hypermarket attempts to under-price traditional retailers by as much as 20 to 40 percent. To enhance its drawing power, hypermarkets incorporate café, video stores, beauty salons, eye-care, and pharmacies.

The *Classification of Retail Format* in China (Beijing.gov, 2004) defines the hypermarket as the one-stop-shopping retail store over 6,000 m^2 and with comprehensive merchandise. The international retailers who already made massive investments in China are Wal-Mart, Carrefour, Metro, Tesco, Auchan/RT-Mart. Local retailers such as Beijing Hualian, Shanghai Lianhua, Wu-Mart, Vanguard (Chinese Resource Enterprises) and A.Best also joined the competition in this sector. These retailers use the hypermarket as the major format for market expansion and most of them have at least 20 stores in China (Linkshop.com, 2007).

The large hypermarket chain retailers focused their expansion on the first-tier and second-tier cities and, therefore, these cities have witnessed the saturation of the hypermarket stores. Though international and large domestic companies are proactive in expanding stores nationwide, the retail market in China is still highly fragmented (Datamonitor, 2008). According to IGD (www.igd.com), the market share of top grocery retailers in China ranges from 0.04 to 1.5 percent in 2008. Therefore, at this moment, the large nationwide retailers (both international and domestic) gain only a small proportion of the market share. The majority of the market is still dominated by a large number of regional retailers. These regional retailers do not have many stores but they dominate their home market in which the nationwide hypermarket retailers still do not have a strong presence.

Both international and domestic retailers have their strength and weakness in the hypermarket sector. Though domestic retailers seem to be the winner in terms of the market share, in general they still fall behind international retailers in store management. International retailers are more sophisticated in store management but need to overcome the geographical and cultural differences which may bring difficulties in expanding their business in China (Hingley *et al.*, 2009). International retailers may also rely too much on their existing business models and thus lack flexibility and adaptability in the local market. Nevertheless, these foreign retailers have brought huge impact and pressure on domestic retailers. Therefore, compared with domestic retailers, international retailers were able to generate better performance by utilizing their advantage in financial and technological resources, experiences of modern retail operations and advanced managerial skills (Table II).

One of factors which influence retailers' performance is "store image." Uncles (2010) points out Chinese consumers are willing to accept and adapt to modern retail formats such as hypermarkets and shopping malls, which look fresh and inviting. The new shopping environment, together with the service and price elements (Goldman, 2000), are aspects of store image introduced by international retailers and changing Chinese consumers' shopping behavior. Though store image is a well explored topic in marketing research and some retail studies focusing on Asia (e.g. Chang and Tu, 2005; Koo, 2003) already discussed the relationships of store image and related variables, the study of store image in China is still scant due to the lack of market research in the retail sector in this market (Uncles, 2010). Since China is the important retail market in Asia (Datamonitor, 2008) and the hypermarket is one of the fast growing format in China (Uncles, 2010), it is imperative for hypermarket retailers in China to know how they can build positive image to attract consumers.

Methodology

Beijing Hualian (BHH, available at: http://en.beijing_hualian.com) and Carrefour (www.carrefour.com.cn) were chosen to represent domestic and international hypermarket retailers in China, respectively, because these two retailers were the top retailers in the hypermarket sector in China. These two retailers were listed the third and the fourth among the top 30 Chinese retailers in 2003 (The Ministry of Commerce of PRC, 2007a,b) and, among the hypermarket retailers in the Beijing area, BHH and Carrefour were ranked the first and the second, respectively. Beijing was chosen as the prime location for this study due to the following two reasons. First, Beijing is the capital of China and an important retail market (Hingley *et al.*, 2009). Second, both BHH and Carrefour have at least nine hypermarket stores in Beijing and thus consumers shop at and are familiar with both retailers' stores.

This study used three-stage approach to collect data. The data collection started with two waves of semi-structured interviews through emails to probe Beijing consumers' experiences at the hypermarket stores and perceptions of the store image attributes they concerned most. Emails asking consumers to write down the important

Table II. The comparison of performance between the domestic and foreign retailers

Performance index	Domestic retailers	International retailers
Sales per store	–	2 to 3 times more than sales of local retailers
Customer visits per day	8 thousand customers	12 thousand customers
Spending per visit	RMB 30-50	Over RMB 70
Percentage of out-of-stock products	1.8	5

Source: ICBC (2005)

retail image attributes for hypermarkets were sent to China. The emails were sent to the family members and friends of one co-author. The emails contained attributes of store image summarized by McGoldrick (2002, Chinese version). The list of these attributes served to provide the respondents with a reference when considering the attributes they valued. A total of 23 responses were collected during the two weeks period after the emails were sent. After content analyzing the data, another 11 Chinese consumers aged between 22 and 47 currently studying at the university the authors work for were recruited and asked through semi-structured interviews whether they agreed with these image attributes. These 11 interviewees were shown both McGoldrick's (2002) classification of the store image and the result from the analysis of 23 email interviews. Then they were to recall their shopping experience back home and asked the following questions:

- Do you think the image attributes which were summed up from the 23 responses are accurate and comprehensive?
- Besides these attributes, is there any other attribute important for the hypermarket store image?

This second wave of interviews affirmed the image attributes obtained through the 23 initial interviews and at the same time revealed some other attributes, such as ease to find merchandise, store layout (including the display of merchandise) and the facility inside store (e.g. shelves, fridges and freezers). Table III shows the result of Chinese consumers' perception of hypermarket store image from these two sets of interviews.

At the second stage, a survey was conducted in Chinese among Beijing consumers. The items of store image in this questionnaire were based on attributes summarized in Table III. Since these attributes are based on the list provided in McGoldrick's (2002) *Retail Marketing* in Chinese, the item equivalence was assured. The first section of the questionnaire asked respondents to rate the importance of each image attribute listed in Table III. All items were measured on six-point Likert scales with anchors of not

Dimension of store image	Attributes of store image
Merchandise	Low price Good quality Breadth and depth of choice
Service personnel	Number/availability of staff Knowledgeability of staff Service attitude of staff Efficient checkout service
Convenience	Convenient location Availability of parking Opening hours Ease of finding goods
Store atmosphere	Exterior/interior décor Store layout (e.g. the layout of merchandises and shelves) Interior environment (e.g. light and music) Physical facilities (e.g. shelves, freezers and lifts)
Services	Promotion service Membership service
Reputation (声誉信誉)	–

Table III. Attributes of store image for the hypermarket in Beijing important at all (1) and very important (6). The second section asked respondents' satisfaction in each attribute with BHH and Carrefour; each attribute for BHH and for Carrefour was placed side-by-side in the questionnaire and thus the arrangement could help the respondent compare these two retailers. Items in this section were also measured on six-point Likert scales with anchors of very dissatisfied (1) and very satisfied (6). The last section asked demographic information such as gender, age, monthly income and the frequency of shopping at a hypermarket (the English version of the questionnaire is available upon request).

At the third stage, another wave of interviews was conducted, after the survey data were analyzed. Semi-structured interviews with five Beijing consumers were conducted by phone to understand Beijing consumers' perceptions and perspectives for each store image attribute. These five Beijing consumers were recruited through one co-author's acquaintances in China. The purpose of these interviews was to understand more details about the difference of Beijing consumers' perceptions between Carrefour and BHH (Robson, 1993, p. 271). These respondents were asked to express their opinions for the difference of each attribute between these two retailers and to provide examples to support their answers when necessary. Each interview took about 20 to 30 min. The interview result was then content analyzed.

Before the formal survey, a pretest was conducted with 40 Beijing consumers and 33 valid questionnaires were returned. The result of the item analysis showed the reliability for all items ranged from 0.86 to 0.89 and thus all items of store image attributes were retained for the formal survey. The formal survey was administrated through three channels in June 2008: respondents acquired through snowballing by the acquaintances of one co-author, respondents intercepted at several shopping centers in the Haidian District and Bai Jingshan District in Beijing, and respondents online (my3q.com). Respondents with shopping experiences in Carrefour and BHH stores were invited to answer the questionnaire. Among 206 responses collected, 175 were valid for the formal analysis and thus the response rate was 85 percent. Table IV shows the profile of respondents in the survey.

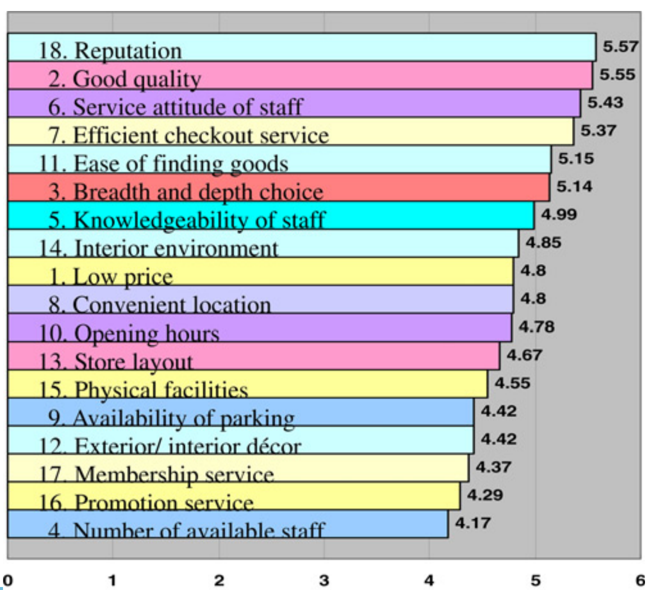
Table IV shows that 54.9 percent of respondents were male and 45.1 percent were female; the distribution was similar to the 6:5 distribution of the total population in China (Watts, 2007). The respondents aged between 21 and 40 accounted for 69.8 percent of the sample. In all, 80.6 percent of respondents had a monthly income between RMB 1,001 and 5,000 and 16 percent had the monthly income between RMB 5,000 and 7,000. The average monthly income of respondents was around RMB 3,200. This result is similar to the figure obtained in a past survey (World Executive Data Base, 2007). Table IV also indicates that the average shopping frequency of respondents in the survey was about 1.6 times per week, which was similar to the five times per month or 1.5 times per week frequency in an AC Nielsen survey (2007). Therefore, in general, the survey sample represented Chinese consumers, especially Beijing consumers.

Data analysis

The data from the formal survey were analyzed using SPSS 14.0. The analysis of the store image attributes shows that all 18 store image attributes have mean scores over 4 and thus they were all important for the hypermarket store image. This indicates that a hypermarket retailer should keep these 18 attributes in mind when building and maintaining its store image. A further examination of the attributes shows that, among these attributes, the five most important attributes are reputation, good quality, service attitude of staff, efficient checkout service and ease of finding goods (Figure 1). Therefore,

Demographic characteristics	Number ($n = 175$)	Percentage
Gender		
Male	96	54.9
Female	79	45.1
Age		
Under 20	8	4.6
21-30	68	38.9
31-40	54	30.9
41-50	40	22.9
Over 51	5	5.7
Monthly income (RMB)		
Under 1,000	5	2.9
1,001-3,000	70	40.0
3,001-5,000	71	40.6
5,001-7,000	28	16.0
7,001-9,000	1	0.6
Over 9,000	0	0
Shopping frequency/week		
Less than 1	22	12.6
1	58	33.1
2	61	34.9
3	31	17.7
4	1	0.6
5	2	1.1
More than 5	0	0

Table IV.
The profile of the respondents



Note : X axis = mean score

Figure 1.
Rank of the importance of hypermarket image attributes

a hypermarket retailer should consider these five factors as priority when building or improving store image in Beijing. The analysis then utilized EFA to extract the related dimensions. Based on the factor analysis, these attributes can be classified into six dimensions (Table V); however, since there is only one item in "Reputation," this dimension is dropped in the later comparison. Among the remaining five dimensions, store atmosphere appears to be the most important, followed by service personnel and merchandise. The store image dimensions, in which consumers are satisfied with Carrefour, are store atmosphere (eigenvalues = 6.86), service personnel (eigenvalues = 2.81), merchandise (eigenvalues = 1.74), convenience factors (eigenvalues = 1.30), and service (eigenvalues = 1.17), while the dimensions for BHH are merchandise (eigenvalues = 5.92), service personnel (eigenvalues = 2.26) and store atmosphere (eigenvalues = 1.83), service (eigenvalues = 1.52), convenience factors (eigenvalues = 1.11). This result shows that Carrefour's store image is in line with the dimensions which Beijing consumers consider to be the most important. Meantime, Beijing consumers were most satisfied with BHH in merchandise, followed by store personnel and store atmosphere.

This study further conducted a *t*-test to compare between BHH and Carrefour on each attribute of store image (Table VI). Table VI reveals that Beijing consumers perceived Carrefour and BHH differently in most of store image attributes. The result also indicates that Carrefour in general outperformed BHH in all attributes of store image except in "service attitude of staff" and "reputation." Among the 18 attributes, the largest gaps existed in the four attributes of store atmosphere and three attributes of merchandise (Table III).

Image factor	Store atmosphere	Service personnel	Merchandise	Convenience factors	Service	Reputation
Exterior/interior decor	0.887					
Store layout	0.805					
Interior environment	0.785					
Physical facilities	0.760					
Number of available staff		0.845				
Efficient checkout service		0.837				
Knowledgeability of staff		0.760				
Service attitude of staff		0.736				
Good quality			0.837			
Breadth and depth of choice			0.796			
Low price			0.652			
Opening hours				0.822		
Ease of finding goods				0.708		
Convenient location				0.589		
Parking				0.508		
Promotion service					0.895	
Membership service					0.825	
Reputation						0.827
Eigenvalues	5.628	2.824	1.714	1.338	1.281	1.051
Percentage of variance explained	31.265	15.689	9.524	7.431	7.117	5.836

Table V.
Factors extracted from the importance of store image attributes

	BHH	Mean Carrefour	Mean Difference	Significance (two-tailed)
1. Low price	4.23	4.98	−0.749	***
2. Good quality	4.30	4.96	−0.657	***
3. Breadth and depth of choice	4.57	5.11	−0.537	***
4. Number of available staff	4.22	4.75	−0.531	***
5. Knowledgeability of staff	4.35	4.70	−0.354	***
6. Service attitude of staff	4.59	4.59	0.000	–
7. Efficient checkout service	4.47	4.93	−0.463	***
8. Convenient location	4.84	5.00	−0.160	*
9. Availability of parking	3.91	4.83	−0.920	***
10. Opening hours	4.64	5.01	−0.371	***
11. Ease of finding goods	4.80	5.10	−0.297	**
12. Exterior/interior decor	4.11	5.18	−1.069	***
13. Store layout	4.21	5.14	−0.926	***
14. Interior environment	4.02	5.04	−1.017	***
15. Physical facilities	4.24	4.99	−0.754	***
16. Promotion service	4.13	4.67	−0.543	***
17. Membership service	4.13	4.41	−0.274	***
18. Reputation	4.94	4.53	0.411	***

Notes: $^{*}p < 0.5$; $^{**}p < 0.01$; $^{***}p < 0.001$

Table VI. Comparisons of the image scores between BHH and Carrefour

Discussions

Based on the result of the analysis in the previous section, another wave of interviews among five Beijing consumers was conducted to understand why Beijing consumers preferred Carrefour to BHH. The content of interviews is incorporated in the following discussion.

Though Chinese consumers are perceived to be price sensitive (Hingley *et al.*, 2009), the result here shows that Beijing consumers concerned more with services than with the price (Figure 1). This result may be due to the fact that both retailers focused on low-price appeal and thus respondents might already think the price is satisfactory; it may also suggest that retailers with the mentality of selling cheap products in China, especially in first-tier cities, should be aware that Chinese consumers no longer look only for low prices. Figure 1 also suggests that, on the top of Beijing consumers' minds, reputation is the most important criterion in selecting a hypermarket retailer. This result implies the importance of corporate brand management for retailers in China now. Meantime, the quality of merchandise was ranked the second and service attitude of staff the third. The result of the factor analysis for the importance of store image dimensions also shows that store atmosphere and service personnel are the most important factor in selecting a hypermarket. This result is in line with some past studies and market reports. In the 1990s, Beijing consumers were still price-sensitive and favored large state-owned stores and local markets; decades later, they become very sophisticated in terms of requiring for shopping services (Gamble, 2009) and concern more with services, convenience and store layout when shopping (Powers, 2005). This change was due to consumers' increasing disposable income, international retailers' introduction of modern retail concepts and domestic retailers' quick copy of international retailers' operation (Powers, 2005). In a survey among joint venture shopping center visitors in Shanghai and Wuxi, Wong and Yu (2003) also conclude that, besides price, other factors such as services and quality are important concerns for consumers.

The comparison between Carrefour and BHH reveals that Carrefour's most salient store image dimensions are in line with those dimensions highly regarded by Beijing consumers. This result implies that Carrefour accurately aligned its positioning with local consumers needs. However, among the five most important attributes Beijing consumers value (Figure 1), Carrefour did not outperform BHH in "reputation" and "service attitude of staff." This result may be due to domestic retailers' better relationships with local customers (Hingley *et al.*, 2009) and indicate that Carrefour has not been able to "win Beijing customers" hearts yet.

The comparison of all 18 attributes between these two retailers shows that in general Carrefour still gave Beijing customers a better image than BHH and that a gap of store image between Carrefour and BHH existed. The largest gap appears in attributes related to store atmosphere (Table VI), availability of parking and low price and Carrefour surpassed BHH in these attributes. Among the attributes related to store atmosphere, the largest gap came from the exterior and interior decor. The third stage interviews reveals that, in interior environment, Carrefour gave the impressions of being bright, comfortable and clean, while BHH was perceived as being shady, dirty and noisy. The interviewees described that BHH's interior environment was a little messy and the goods were in disorder. Though past studies (e.g. Warden and Chen, 2008) in the effect of "*renao*" on Chinese shopping behavior conclude that being noisy and crowded is an important feature in Chinese retail settings, the result of the third wave interviews in this study suggests that Beijing consumers prefer a comfortable shopping environment. Regarding store layout, the shelf and the counter of BHH were more crowded than those of Carrefour. Gaps could also be found in the perception of physical facilities, such as shelves, freezers and containers; facilities in Carrefour looked nicer, cleaner and more state-of-the-art than those in BHH. Large image gaps also existed in "low price" and "good quality," two attributes related to merchandise. Carrefour priced products lower and provided discounts for various products every day to attract customers. In terms of quality, the survey result shows that respondents were more satisfied with the quality offered by Carrefour. Compared with BHH, Carrefour provided merchandise with more breadth and with higher quality. Also, the good store atmosphere of Carrefour stores may make customers perceive that the quality of goods in Carrefour is more trustworthy (Baker *et al.*, 1994).

BHH is one of the 15 largest retail enterprises supported by Ministry of Commerce (http://en.beijing-hualian.com/About.aspx) and is rated as reaching high retail quality standards by the Ministry of Commerce (http://zglsy.mofcom.gov.cn/rtl/map/bj.html). Therefore, BHH is one of the leading domestic retailers in China and this study considers that the comparison between BHH and Carrefour can provide BHH and other domestic retailers with some directions for the improvement of store image. To attract more customers and to compete with international hypermarket retailers, domestic retailers should consider improving store atmosphere as their priority. On the other hand, though Carrefour has better store image in Beijing, those individual attributes it obtained the highest score (exterior/interior decor, store layout, breadth and depth choice) in fact were not deemed the most important by Beijing consumers (Figure 1). Therefore, Carrefour should be more sensitive to local Chinese consumers' perception of its reputation and not rest on its laurels. Table IV shows that though consumers perceived that overall Carrefour was better than BHH, they considered that Carrefour had a worse reputation. Carrefour's lower score in this attribute may be linked to the past accident at the retailer's store (*EIU ViewsWire*, 2008) and the nationalistic sentiment stirred by the Olympics and Dalai Lama incidents (Lee, 2008). The result may also be explained by the consumer's ethnocentrism. However, since this study did not include other variables, such as purchase intention and customer satisfaction, it is not clear whether these attributes influence consumers' post purchase perception or behavior. Based on the result in Figure 1, Carrefour may also strengthen its staff training to improve customers' impression of in-store services and in turn its reputation.

Conclusions

After China joined WTO, international retailers have been keen in establishing their presence in this market. International retailers from the West and from Southeast Asia open hypermarket stores at a high speed. In the context of China's globalization, these retailers bring modern retail practices into China and improve Chinese consumers' shopping environment. Thus international retailers put huge competitive pressure on domestic retailers in China and in turn force domestic retailers to improve their operation. The end result is that domestic retailers become more sophisticated in their operation and some even become competitive to international retailers. At the same time, Chinese consumers raise their expectations in shopping environment and become more service-conscious.

This study is the first to investigate Chinese consumers' perception of store image and top concerns of the hypermarket. By conducting a survey and a series of interviews, this study helps both international and domestic retailers understand the most important attributes when Chinese consumers evaluate the store image of a hypermarket retailer. According to the result of the factor analysis, store atmosphere, service personnel and merchandise are three most important store image dimensions, followed by convenience factors and service. A more detailed examination of mean scores finds that, in terms of individual store attributes, a retailer's reputation and attributes related to service personnel (service attitude of staff and efficient checkout service) and merchandise (good quality) were the major concern for Beijing consumers. Therefore, hypermarket retailers in Beijing should pay attention to their merchandise quality and store staff training if they want to deliver a more positive store image.

The survey result shows that Beijing consumers considered Carrefour had a better holistic store image. Although domestic retailers have improved their operations in recent years, it is still difficult for them to compete with international retailers and some even went out of business due to lack of proper store management. Since the survey reveals that attributes related to store atmosphere dimension showed the largest gap, domestic retailers should consider improving this dimension as their priority. For example, the exterior and interior decor of a hypermarket is very important for creating customers' first impression and thus a welcoming and stylish decor should help improve domestic retailers' image. This study suggests domestic retailers to make the decor look more dainty and attractive. Inside the store, special designs may create attractive appeal as well; for example, the retailer may design the fish section in the style of a lively fish market near the harbor. Besides, the physical facilities inside the store should be maintained periodically and keep clean. The store layout should be a top concern as well, since domestic retailers' stores often look crowded. There should be more aisle space so that consumers can stroll inside the store ore comfortably. Meantime, the quality of goods in merchandise dimension is also consumers' top concern. Therefore, domestic retailers should make sure that products they provide are of good quality and in-store staff should check the merchandise carefully and frequently to ensure the freshness.

Though this study provides important information both for domestic retailers and international retailers in China in managing their store image, several limitations provide the foundation for the improvement in future research. First of all, although both BHH and

Carrefour are well known and successful in China, they may not represent all the domestic and international retailers in China. Future research may compare the store image of retailers from different countries or in different formats. Second, this study focused only on consumers in Beijing; however, due to regional differences in China, the perception of Beijing consumers may not be the same as those of consumers in other regions. In addition, the time and geographical constrains of this study limited the samples can be used and thus may compromise the generalizability of the result. Future research may include consumers in other first-tier cities or compare the store image between the urban and the less developed areas in China. By doing so, both international and domestic retailers can adjust their retail mix and store image accordingly to ensure customer satisfaction in different regions. Finally, this study focused only on the comparison of store image between two retailers and did not consider other variables which may be related to store image; future research may consider exploring the relationships of store image and other variables, e.g. purchase intention, brand loyalty and *renao*'s effect on consumers' behavior in retail shops introduced after the economic reform.

References

AC Nielsen (2007), *The Research of Consumer Trend in China, 2006*, available at: http://mkt.icxo.com/htmlnews/2007/07/04/1153788.htm (accessed 12 June 2008).

AT Kearney (2007), *Global Retail Development Index*, available at: www.atkearney.com/images/global/pdf/GRDI_2007.pdf

Agarwal, J. and Wu, T. (2004), "China's entry to WTO: global marketing issues, impact and implications for China", *International Marketing Review*, Vol. 21 No. 3, pp. 279-300.

Arnold, S., Oum, T. and Tigert, D. (1983), "Determining attributes in retail patronage: seasonal, temporal, regional, and international comparisons", *Journal of Marketing Research*, Vol. 20, pp. 149-57.

Baker, J., Grewal, D. and Parasuraman, A. (1994), "The influence of store environment on quality inferences and store image", *Journal of the Academy of Marketing Science*, Vol. 22 No. 4, pp. 328-39.

Beijing.gov (2004), *Classification of Retail Format* (*China*) (in Chinese), available at: www.beijing.gov.cn/zfzx/tzgggs/bmtz/P020070412484468154814.doc (accessed 24 October 2007).

Berman, B. and Evans, J. (2007), *Retail Management: A Strategic Approach*, 10th ed., Pearson, Prentice-Hall, Englewood Cliffs, NJ.

Bloemer, J. and de Ruyter, K. (1998), "On the relationship between store image, store satisfaction and store loyalty", *European Journal of Marketing*, Vol. 32 Nos 5/6, pp. 499-513.

Burt, S. and Carralero-Encinas, J. (2000), "The role of store image in retail internationalization", *International Marketing Review*, Vol. 17 Nos 4/5, pp. 433-53.

Business Monitor International (2009), *China Food & Drinks Report 2009 Q2*, Business Monitor International, London.

Chang, C.H. and Tu, C.Y. (2005), "Exploring store image, customer satisfaction and customer loyalty relationship: evidence from Taiwanese hypermarket industry", *Journal of American Academy of Business*, Vol. 7 No. 2, pp. 197-202.

Chuang, Y. (2003), "A study on store image and brand perception toward consumers' choice of chain store" (in Chinese). National Chaotung University Institute of Business & Management, Hsinchu.

Cox, R. and Brittain, P. (2000), *Retail Management*, Pearson Education, Harlow.

Datamonitor (2008), *Food Retail in China: Industry Profile*, Datamonitor, London.

Davies, B. and Ward, P. (2002), *Managing Retail Consumption*, Wiley, Chichester.

EIU ViewsWire (2008), "China regulations: safety check ordered on holiday promotions", *EIU ViewsWire*, 16 September.

Fisk, G. (1961), "A conceptual model for studying customer image", *Journal of Retailing*, Vol. 37 No. 4, pp. 1-8.

Gamble, J. (2009), "Demanding customers in the Chinese context", *Asia Pacific Business Review*, Vol. 15 No. 1, pp. 93-105.

Ghosh, A. (1990), *Retail Management*, 2nd ed., The Dryden Press, Chicago, IL.

Goldman, A. (2000), "Supermarkets in China: the case of Shanghai", *The International Review of Retail, Distribution and Consumer Research*, Vol. 10 No. 1, pp. 1-21.

Hansen, R. and Deutscher, T. (1977), "An empirical investigation of attribute importance in retail store selection", *Journal of Retailing*, Vol. 53 No. 4, pp. 59-72.

Hill, F. (2007), "China organic partners with Hualian Hypermarket of Beijing, trades flat on higher volume", *Financialwire*, 27 July.

Hingley, M., Lindgreen, A. and Chen, L. (2009), "Development of the grocery retail market in China: a qualitative study of how foreign and domestic retailers seek to increase market share", *British Food Journal*, Vol. 111 No. 1, pp. 44-55.

Hsiao, C. (2002), "The comparative study of store image of coffee chain stores and consumers: a case of Taipei area", Department of International Business, Tamkang University, Taipei (in Chinese).

Industrial and Commercial Bank of China (2005), "The market share occupied by the state-owned enterprises has decreased to 16%" (in Chinese), available at: www.icbc.com.cn/detail.jsp?column=%B2%C6%BE%AD%B6%AF%CC%AC&infoid=1113447896100&infotype=CMS.STD (accessed 20 August 2007)

Kan, C.Y. (2005), *A Study on the Relationship Between Store Atmosphere and Brand Image*, University of Bradford, Bradford.

Keaveney, S. and Hunt, K. (1992), "Conceptualization and operationalization of retail store image: A case of rival middle-level theories", *Journal of the Academy of Marketing Science*, Vol. 20 No. 2, pp. 165-75.

King, N. (1994), "The qualitative research interview", in Cassell, C. and Symon, G. (Eds), *Qualitative Methods in Organizational Research*, Sage, London.

Koo, D.M. (2003), "Inter-relationships among store images, store satisfaction, and store loyalty among Korea discount retail patrons", *Asia Pacific Journal of Marketing and Logistics*, Vol. 15 No. 4, pp. 42-71.

Lee, C. (2006), "A study on relationships among store image, product involvement and customer lifetime value of customers in coffee chain stores", Graduate School of Tourism, Mingchuan University, Taipei (in Chinese).

Lee, M. (2008), "When in China. . .", *Communication World*, Vol 25 No. 6, pp. 34-7.

Lewis, H. (2008), "Branded foods in China: forecasts to 2013", *Just Food*, November, pp. 15-22.

Lewison, D. (1997), *Retailing*, 6th ed., Simon & Schuster Company, Upper Saddle River, NJ.

Lin, L. (1999), "The impact of coffee usage and product involvement on consumers' perception of coffee shops – an empriical study of chain coffee shops in Taipei City area", Department of Industrial and Business, Changgung University, Taoyuan (in Chinese).

Linkshop.com (2007), *Analysis and Research of Hypermarkets I* (in Chinese), available at: http://blog.linkshop.com.cn/u/tania168888/archives/2007/92190.html (accessed 20 August 2008).

Liu, K. (2007), "Unfolding the post-transition era: the landscape and mindscape of China's retail industry after 2004", *Asia Pacific Journal of Marketing and Logistics*, Vol. 19 No. 4, pp. 398-412.

Lu, H. (2004), “The effects of product price, promotion type, and store image on consumers’ perceived value and purchase intention under different chain store systems”, Department of Business Administration, Soochow University, Taipei (in Chinese).

McGoldrick, P. (2002), *Retail Marketing*, 2nd ed., McGraw-Hill Education, Maidenhead.

Martenson, R. (2007), “Corporate brand image, satisfaction and store loyalty: a study of the store as a brand, store brands and manufacturer brands”, *International Journal of Retail & Distribution Management*, Vol. 35 No. 7, pp. 544-55.

Martineau, P. (1958), “The personality of the retail store”, *Harvard Business Review*, Vol. 36 No. 1, pp. 47-55.

(The) Ministry of Commerce of PRC (2007a), *Analysis and Research of Hypermarkets I*, available at: http://blog.linkshop.com.cn/u/tania168888/archives/2007/92190.html (accessed 20 November 2007).

(The) Ministry of Commerce of PRC (2007b), *Analysis and Research of Hypermarkets II*, available at: http://blog.linkshop.com.cn/u/tania168888/archives/2007/92229.html (accessed 20 November 2007).

Miu, A. and Penhirin, J. (2003), “Hypergrowth for China’s hypermarkets”, *McKinsey Quarterly*, I.2, pp. XX.

Newman, A. and Cullen, P. (2002), *Retailing Environment & Operations*, Thomson Learning, London.

Pan, Y. and Zinkhan, G. (2006), “Determinants of retail patronage: a meta-analytical perspective”, *Journal of Retailing*, Vol. 82 No. 3, pp. 229-43.

Porter, S. and Claycomb, C. (1997), “The influence of brand recognition on retail store image”, *The Journal of Product and Brand Management*, Vol. 6 No. 6, pp. 373-87.

Powers, P. (2005), “What a difference a decade makes”, *The China Business Review*, November/December, pp. 8-16.

Robson, C. (1993), *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*, Blackwell, Oxford.

Sirgy, J. and Samli, A. (1985), “A path analytic model of store loyalty involving self-concept, store image, geographic loyalty, and socioeconomic status”, *Journal of the Academy of Marketing Science*, Vol. 13 No. 3, pp. 265-91.

Thang, D. and Tan, B. (2003), “Linking consumer perception to preference of retail stores: an empirical assessment of the multi-attributes of store image”, *Journal of Retailing and Consumer Service*, Vol. 10 No. 4, pp. 193-200.

Tseng, Y. (2008), “The relationship between the online store image, the customer value, the perceived risk and repurchase intention-the case of Yahoo and PChome websites”, Graduate School of Marketing and Distribution Management, National Changhua University of Education, Changhua (in Chinese).

Uncles, M. (2010), “Retail change in China: retrospect and prospects”, *International Review of Retail, Distribution and Consumer Research*, Vol. 20 No. 1, pp. 69-84.

Unit for Retail Planning Information (1988), *1998 List of UK Hypermarkets and Superstores*, URPI, Reading.

Wang, S. (2009), “Foreign retailers in post-WTO China: stories of success and setbacks”, *Asia Pacific Business Review*, Vol. 15 No. 1, pp. 59-77.

Warden, C. and Chen, J. (2008), “When hot and noisy is good: Chinese values of *renao* and consumption metaphors”, *Asia Pacific Journal of Marketing and Logistics*, Vol. 21 No. 2, pp. 216-31.

Watts, J. (2007), “Crisis looms as 18 million Chinese can’t find a wife”, *The Observer*, 26 August.

Wong, G.K. and Yu, L. (2003), "Consumers' perception of store image of joint venture shopping centres: first-tier versus second-tier cities in China", *Journal of Retailing and Consumer Services*, Vol. 10, pp. 61-70.

World Executive Data Base (2007), *Rank of Salary Level of Different Cities in Chinoa*, available at: http://data.icxo.com/htmlnews/2007/06/27/1149702 0.htm (accessed 20 June 2008).

Further reading

Child, P. (2006), "Lessons from a global retailers: an interview with the president of Carrefour China", *McKinsey Quarterly*, Special Edition, pp. 70-81.

Kotler, P., Keller, K. and Lu, T.H. (2009), *Marketing Management in China*, Prentice-Hall, Singapore, pp. 418-9.

McGoldrick, P. (2004), *Retail Marketing*, 2nd ed., China Machine Press, Beijing (in simplified Chinese).

Rein, S. (2008), "Lessons for Chinese companies as they go global", available at: www.businessweek.com/globalbiz/content/dec2008/gb2008121_644935.htm?chan=top+news_top+news+index+-+temp_global+business (accessed 5 May 2009).

Yan, F. (2009), "Carrefour sees '09 China sales growth above 15 percent", available at: www.reuters.com/article/rbssConsumerGoodsAndRetailNews/id USSHA12764320090116?pageNumber=1&virtualBrandChannel=0R (accessed 15 January 2008).

Corresponding author

En-Chi Chang can be contacted at: enchi.chang@mbs.ac.uk