Factors influencing consumer behaviour toward store brands Evidence from the French market

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Factors influencing consumer behaviour towards store brands: Evidence from the French market

1. Introduction

Store brands (SBs) have been increasingly investigated by marketing scholars and have been the focus of retail managers’ interest (Hyman et al., 2010). SBs must be differentiated from private label brands (PLBs); the former indicates products with a retailer name, whilst the latter are not typically endorsed by a retailer. SBs experienced a phenomenal growth in various product categories during the past years (Baltas and Argouslidis, 2007). There are many incentives (e.g., increasing retail margins, building store loyalty, increasing store traffic, enhancing negotiating strength with manufacturers, etc.) for retailers to create SB programs (Baltas and Argouslidis, 2007; Binninger, 2008). In Western Europe, SB penetration exceeds 50% of sales by volume in Switzerland and more than 35% in major markets such as the United Kingdom, Belgium, Germany, and Spain (Lamey et al., 2007). Retailers are facing strong competitive pressure, leading them to launch an ever-increasing number of SBs. Today, SBs are growing faster than manufacturer brands (Kumar and Steenkamp, 2007). According to Grewal and Levy (2009, p. 523), “we saw increasing evidence of store brands with similar quality levels coupled with 10–15% lower prices than those charged by national brands.” For retailers, the use of SBs is a reliable method to increase sales quickly at a relatively low cost.

Simultaneously, consumers are now more willing to purchase SB products (PLMA, 2009) and are delighted to have SB lines available in stores in which they shop (Binninger, 2008). Several factors drive consumer willingness to purchase SB products: socio-demographic factors (Baltas and Argouslidis, 2007; Martinez and Montaner, 2008), economic factors (Lamey et al., 2007), and psychographic factors (Burton et al., 1998; Garretson et al.,...
Socio-demographic factors include household income, the number of children in the household, gender, age, etc. Previous research showed that income and family size was strong determinants of store brand purchase behaviour (Burton et al., 1998; Martinez and Montaner, 2008). Economic factors are related to the economic cycle, whilst psychographic factors involve variables such as value consciousness, risk awareness, price-quality inferences, self-smart shopper perceptions, etc.

Vahie and Paswan (2006) highlighted the increasing importance of image factors in the perception of store brands. Indeed, given the increased improvement of SB product quality (Kumar and Steenkamp, 2007), factors related to image must be taken into account in SB purchase behaviour. However, to the best of our knowledge, no extant research has evaluated the joint impact of image and consumer factors on SB purchase. Consequently, the aim of this paper is to investigate the influence of image factors (store image perceptions and SB price-image), consumer factors (value consciousness and attitude toward SBs), and SB purchase intention on SB choice.

The French market has been chosen because of convenience, but also because the retail market is very dynamic and store brands are developing quickly. SBs represent about 36% of product sold by large retailers according to the last PLMA study [1]. Additionally, the French market has been investigated less than other Western markets such as the United States (see Buron et al., 1998; Garretson et al., 2002), the United Kingdom (see Burt, 2000; Burt and Sparks, 2000), and Spain (see Martinez and Montaner, 2008). Cliquet and Jara (2012) studied SB equity in France, and Binninger (2009) investigated the relationship between SBs and consumer store loyalty in the French context. However, many other variables (e.g., store image, value consciousness, and SB attitude) have been studied less in relationship to SBs in France. This gap may be related to the fact SBs have been long
considered as non-brands in France where Carrefour popularised the “white products” in the 1970s.

The intended contribution of this paper is three-fold. First, we emphasise both consumer and image factors (store image and SB price-image); previous research focused mainly on perceptual, demographic, and psychographic ones (Jin and Suh, 2005; Garretson et al., 2002). Second, we propose and validate a partial mediation model of consumer choice of SBs in the less-investigated European market, despite the strong presence of mass retailers and SBs in this market. Third, we investigate the influence of store familiarity on SB purchase behaviour; previous studies did not widely address this issue, or were more interested in the effect of brand familiarity on SB purchase behaviour (Richardson, 1997). This study fills a gap in this research area by showing how consumer factors (value consciousness, SB attitude, and SB purchase intention) and image factors (store image perceptions and SB price-image) have significant effects on both SB choice and store familiarity.

The paper is organised by presenting the theoretical framework and the hypotheses development, outlining the study’s methodology with a focus on data collection and measurement issues, detailing the results, and discussing the findings, proposing managerial implications, and pointing out limitations and research orientations for future studies.

2. Theoretical framework and hypotheses development

According to Jin and Suh (2005), most of the consumer factors associated with SB purchase behaviour can be grouped in three categories: personality (Burton et al., 1998), perceptual (Garretson et al., 2002), and socioeconomic (Baltas and Argouslidis, 2007; Martinez and Montaner, 2008). In previous studies, consumer perceptual characteristics such as price-quality perception, perceived quality, value consciousness, price consciousness, smart-shopper self-perception, and general deal proneness were associated with SB purchase (Garretson et al., 2002). In this research, we argue that image factors must be taken into
account as consumers use image perceptions to make inference about SB perceived quality (Richardson et al., 1994). SBs have also achieved greater quality improvement in recent years, allowing the enhancement of image factors within SB purchase behaviour.

Figure 1 summarises our conceptual model in which store image perception, SB price-image, value consciousness, and attitude toward SB influence SB choice directly or indirectly through the mediation of SB purchase intention. We not only test this model, but we also assess two other competitive models: a full mediation alternative [2] and a model that includes control variables (age, gender, household income, and family size).

**Figure 1 here**

2.1. Store image perceptions

Store image is important because it is closely related to consumers’ perception of retailer’s activities and brand equity (Ailawadi and Keller, 2004; Burt, 2000; Cliquet and Jara, 2012). Several conceptualisations of store image have been proposed in previous research. These conceptualisations have changed over time, indicating the difficulties encountered in defining the construct (Hartman and Spiro, 2005). Martineau (1958) gave one of the earliest definitions of store image. He posited that store image is defined in the shopper’s mind, partly by the functional qualities and partly by an aura of psychological attributes. Store image develops from consumers’ objective and subjective perceptions learned over time. Subsequent conceptions of store image have taken into account the interactions among attribute perceptions (Lindquist, 1974), and even as a component of store attraction (Nevin and Houston, 1980).

Previous research has established the relationship between store image perceptions and consumer purchase behaviour (Grewal et al., 1998) or store choice (Thang and Tan, 2003).
According to this theory, products provide an array of cues that serve as surrogate indicators of quality to shoppers (Richardson et al., 1994). These cues can be classified as extrinsic (e.g., store image and SB price) or intrinsic (e.g., aroma, ingredients) to the product. As an extrinsic cue, store image perception can be a determinant of SB perceived quality and SB purchase behaviour. We can consider SBs to be a brand extension of the store. Brand extension research supports the idea that store associations and evaluations can be generalised to SBs (Collins-Dodd and Lindley, 2003). As SB perceived quality is related to SB purchase intention and SB choice (Burton et al., 1998; Garretson et al., 2002; Jin and Suh, 2005), we anticipate that perception of store image will directly influence SB purchase intention and indirectly influence SB choice. Therefore:

\(H1.\) Consumer perceptions of store image have a direct and positive influence on SB purchase intention.

\(H2.\) Consumer perceptions of store image have an indirect and positive influence on SB choice.

Previous research has also demonstrated the relationship between store image perceptions and price-image perceptions (Martineau, 1974; Mazursky and Jacoby, 1986). For SBs, because the perceptions of store image provide a highly relevant cue for the SB, they can act as the original brand in a brand-extension scheme, providing a basis for overall SB quality (Collins-Dodd and Lindley, 2003) and influencing SB image (Vahie and Paswan, 2006) and, consequently, SB price-image. Based on previous studies on the relationship between store image and brand image (Burt and Sparks, 2002; Vahie and Paswan, 2006), we expect that a positive store image perception will lead to a positive SB price-image. Furthermore, Wu et al. (2011) demonstrated that store image directly influences a positive SB image. Based on these studies, we anticipate:
**H3.** Consumer perceptions of store image have a direct and positive influence on SB price-image.

### 2.2 Store brand price-image

Price-image is increasing investigated by researchers (Zielke, 2010). Price-image perceptions are considered as an integral part of a retailer’s store image (Lindquist, 1974). To the best of our knowledge, SB price-image has not yet been defined in previous research. We can infer its definition from the definition of store price-image. Store price-image is defined as “a global representation of the relative level of prices” of a store (Martineau, 1958; Mazurky and Jacoby, 1986). Following this definition, we can define SB price-image as a global representation of the relative level of SB product prices for a given retailer.

SB price-image can be a reference for the consumer when purchasing a SB product. In fact, retailers are now offering different kinds of SB product ranges such as premium SBs and standard SBs with different levels of quality and different levels of perceptions (Kumar and Steenkamp, 2007). From previous research, we know that SBs are key elements of store image (Collins-Dodd and Lindley, 2003; Vahie and Paswan, 2006), which is supposed to influence SB purchase behaviour via SB perceived quality (Richardson et al., 1994). So, except for premium SBs (high value added SBs) which can be perceived as true brands (see Kumar and Steenkamp, 2007), we can expect that consumers will be positively influenced by SB price-image perceptions when purchasing SB products. Therefore, we propose:

**H4.** SB price-image has a direct and positive influence on SB purchase intention.

**H5.** SB price-image has a direct and positive influence on SB choice.

**H6.** SB price-image has an indirect and positive influence on SB choice.

### 2.3 Value consciousness

Previous definitions in the literature indicated that perceived value is derived from a comparison between the expected benefits of a product and the sacrifices that a consumer has
to make in order to assure those benefits. According to Zeithaml (1988), customers defined
the term value in different ways: low price, the benefits they receive from the products, the
quality they get for the price they pay, and what they get for what they give. However, other
research defined this concept just as the “quality one gets for the price one pays” (e.g., Jin and
Suh, 2005; Sweeney and Soutar, 2001). Based on the differences in these expressions of value
consciousness, we can say that this concept is differently perceived.

In the marketing literature, it was well established that the intention to buy a given
brand is strongly influenced by the perceived monetary sacrifice, in conjunction with the
perception of product quality (Jin and Suh, 2005). Empirical research has confirmed that
value consciousness is positively related to SB purchase behaviour and SB purchase attitude
(Burton et al., 1998; Garretson et al., 2002). Jin and Suh (2005) provided further evidence
that value consciousness is positively related to SB purchase behaviour. SBs have achieved
great quality improvement in recent years and more consumers accept that SBs carry good
quality yet a much lower price, hence good value, compared to name brands. Therefore, for
standard SBs, all other things being equal, greater consumer value consciousness will lead to
higher levels of SB purchase intention and SB choice. From this, we anticipate that:

$H7$. Value consciousness will have a direct and positive influence on SB purchase
intention.

$H8$. Value consciousness will have a direct and positive influence on SB choice.

$H9$. Value consciousness will have an indirect and positive influence on SB choice.

Previous research demonstrated that value consciousness is positively related to SB
attitude (Burton et al., 1998). Garretson et al. (2002, p. 92) stated that research “drawing from
acquisition-transaction utility theory indicates that consumers with favorable attitudes toward
deals tend to be value conscious” and “do not necessarily consider a price reduction as a sign
of poor product quality”. Value-conscious consumers were indeed found to have a positive
attitude toward SBs for both food and non-food product categories (Jin and Suh, 2005). According to Garretson et al. (2002, p. 92), “where consumers balance price and quality, there is a more favorable attitude toward private labels.” They also empirically showed that consumer value consciousness directly and positively affects attitudes toward SB products. Therefore, we propose:

\[ H10. \text{Value consciousness will have a positive and direct influence on SB attitude.} \]

2.4. Attitude toward SBs

An attitude is generally regarded as a set of beliefs, experiences, and feelings forming a predisposition to act in a given direction. Attitude also has an effect on intentions and consumer behaviour (Fishbein and Ajzen, 1975). Attitude toward SB (i.e., SB attitude) is defined as a predisposition to respond in a favorable or unfavorable manner due to product evaluation, purchase evaluations, or self-evaluations associated with SB grocery products (Burton et al., 1998). Consumers appear to hold attitudes toward SBs that influence their propensity to purchase SBs (Collins-Dodd and Lindley, 2003). Studies attempted to identify SB buyers on the basis of demographics and psychographics; however, the evidence was inconclusive (Martinez and Montaner, 2008).

SBs have been affected for a long time by negative stereotypes such as low-quality goods designed for low-income consumers. For this reason, SBs have low market shares in some product categories such as shampoo and can be found mainly in lower value-added product ranges. Consumer attitudes toward SBs were often negative when SBs offers started. This attitude toward SBs is now changing as retailers are launching higher value-added products. For instance, in the United Kingdom, Tesco has premium SBs that can compete with manufacturer brands on a quality basis (Kumar and Steenkamp, 2007). Improved quality of SB products has lead consumers to develop stronger preferences for SBs in most product categories (Huang and Huddleson, 2009). Therefore, we anticipate:
H11. Attitude toward SBs has a direct and positive influence on SB choice.

2.5. SB purchase intention

Data on purchase intention is routinely used by marketing managers to make strategic decisions about both new and existing SB products and the marketing programs that support them. Purchase intention refers to a consumer tendency to purchase the brand routinely in the future and resist switching to other brands (Wu et al., 2011). In the cognitive-affective model, many perceptual factors influence consumers’ buying behaviour and purchase intention. Consumers may intend to purchase a particular SB because they perceive the brand offers the right price-quality relation or other benefits, such as a good price-image. Purchase intention has been widely used in the literature as a predictor of subsequent purchase and the concept was found to be strongly correlated with actual behaviour (Fishbein and Ajzen, 1975). In this respect, SB purchase intention would lead directly to SB purchase. Sometimes, this construct has been used as a proxy for SB purchase, yielding some confusion between the two variables (Jin and Suh, 2005). However, SB purchase intention is a projection in the future, whilst SB purchase is an action. Simply put, all else being equal, consumers’ SB purchase intention may influence their SB choice. Hence, we derive that:

H12. SB purchase intention has a direct and positive influence on SB choice.

2.6. The influence of store familiarity

Alba and Hutchinson (1987) defined familiarity as “the number of product related experiences that have been accumulated by the consumer” (p. 411). Previous research showed that increased store familiarity improved consumers’ cognitive structures, as well as their ability to analyse information (Park and Lessig, 1981). Store familiarity can be enhanced by frequent exposure to the store. Previous research has shown the impact of brand familiarity, such as its influence on confidence in brand evaluation in a given store setting (Laroche et al., 1996) or improving perceptions of online banking (Mäenpää et al., 2008).
The rationale for brand familiarity can be extended to store familiarity. Chebat et al. (2005) showed that store patrons more frequently used memory resources and external resources as guidelines in the store to achieve the purpose of their shopping visit. Therefore, as familiarity with the store increases, consumers purchase behaviour toward brands also increases. The same reasoning can be extended to the relationship between store familiarity and SB purchase behaviour. In fact, consumers may perceive SBs as less risky when they are more familiar with the store in which the SBs are sold. Also, since SBs are exclusive to a given store, we expect store familiarity will increase SB purchase behaviour. Thus, store patrons with more experience of SBs are probably more prone to buy SBs than newcomers to the store. Based on this rationale, we propose:

**H13.** Store familiarity will have a positive influence on SB purchase behaviour.

**H13a.** Consumers with higher level of store familiarity will develop increased SB purchase intention.

**H13b.** Consumers with higher level of store familiarity will have more SB choice.

3. **Research methodology**

3.1. **Data collection and sample**

We sampled SB consumers who regularly shop at hypermarkets in three French southern towns. We aggregated the samples as respondents are all French ones and the retailers have the same positioning across the three towns investigated. No difference was found in the sample composition based on ANOVA analyses ($p>0.05$ in all cases). Data was collected using a self-administered questionnaire delivered to homes during two different periods: February 2010 (250 questionnaires) and April 2010 (350 questionnaires).

To participate, the respondent had to be at least 20 years old and fully or partially in charge of the household purchases of food and groceries. Respondent selection was based on convenience, and we ensured that categories of sex, age, level of income, etc. were adequately
represented. Respondents indicated the store at which they usually shop. The questionnaire was structured as follows: the first part contained general questions to ascertain that respondents were regular SB buyers and were able to distinguish between SBs and national brands; the second part included scale items; and the third part covered general socio-demographic items such as age, gender, household income, family size, and education.

After deleting those questionnaires not completed properly, 140 questionnaires were used as the sample for exploratory factor analysis, and 266 questionnaires were used as the sample for confirmatory factor analysis and structural model testing. The distribution of the respondents did not indicate any serious bias compared to members of the French population who patronise retail stores. Most of the respondents in the first and second sample were women (61.4% and 59%, respectively). About half of them were younger than 26 years old (50.7% and 51.9% respectively). For instance, in the second sample, age is distributed as follows: less than 26 years old: 51.9%; 26-49 years old: 32.7% and 50 years old or more: 15.4%. Consumers with monthly household incomes of less than €2000 represented 45.8% and 44.3% of the respondents. The majority of respondents had an undergraduate diploma (68.6% and 57.1%, respectively). Furthermore, most of main retailers present in the French market were represented in the sample (Carrefour, Casino, Système U, Leclerc, Auchan, etc.) and two main store formats (supermarket and hypermarket) were represented.

3.2. Measures

We developed the survey instrument following a comprehensive review of the relevant literature. For each latent variable, we adapted an existing scale or gathered a set of items from past research in the retail sector and from a pilot study. The questionnaires were double back-translated within a framework of collaborative and iterative translation proposed by Douglas and Craig (2007). We then assessed the content and face validity of each item with four academic experts who were familiar with the topic under investigation. In a series of
face-to-face settings, we pre-tested the questionnaire with 15 SB buyers to test response format and clarity of instructions to prevent common method bias. All items were rated on a 7-point Likert scale with 1 representing “strongly disagree” and 7 representing “strongly agree”. All of the statements were positive; therefore, high scores or levels of agreement could be taken to represent some degree of positive assessment with the item concerned.

To measure store-image perceptions, seven items from Grewal et al. (1998) were employed. SB price-image was measured using four items adapted from Zielke (2010). Value consciousness was measured by four items taken and adapted from Burton et al. (1998). Attitude toward SBs was measured with four items from Garretson et al. (2002). SB purchase intention was measured with four items adapted from previous research (Grewal et al., 1998; Jin and Suh, 2005). The dependent variable, SB choice, was measured with four items. The first three items were adapted from Ailawadi et al. (2001), and the other item was created based upon a qualitative research.

We used an objective measure of store familiarity, frequency of store visit, and length of store use adapted from Mäenpää et al. (2008). Frequency of store visit was measured by four options: (a) less than 2 times a month, (b) 2–3 times a month, (c) 4–5 times a week, and (d) more than 5 times a month. Duration of store patronage was assessed by asking, “How long have you been shopping in this store?” and the following options were available: (a) less than 2 years, (b) 2–5 years, (c) 6–10 years, and (d) more than 10 years. The two items were substantially related (Spearman Rhô = .70, p<0.01, α = .83). Therefore, we used the standardised factor from the two indicators, and split the data into two sub-samples based on the median of the factor values. Finally, in additional analysis, we included some covariates (age, gender, household income, and family size) to control for their potential effects on our results. The covariates were measured as categorical variables.
4. Analysis and results

4.1. Measurement model testing

Since some of our scales have not been tested yet in the French context, the scale validation process was based on Churchill’s paradigm (1979) and its updated version (Gerbing and Anderson, 1988). To determine the patterns of factor loadings for each measurement model, we used exploratory factor analysis: EFA (N1 = 140). During the EFA process, we deleted items that do not load well on the construct they were supposed to measure (loading < 0.4). Items with communalities lower than 0.4 were also deleted. After this process, four items remained for each construct. These items loaded significantly on only one construct. Every construct obtained an eigenvalue larger than 1. The percentage of variance explained by the construct ranged from 60% to 75%. All constructs obtained Cronbach alpha greater than 0.7 [3]. We subsequently used confirmatory factor analysis (N2=266) in which we employed the two-step procedure to ensure an adequate measurement and structural model. We used maximum likelihood (ML) on the covariance matrix with AMOS 18. Table 1 presents means, standards deviations, and correlations of the six constructs.

Table 1 here

To evaluate fit of each model, three types of fit indexes (absolute, incremental, and parsimonious) were used following the benchmarks suggested in previous research (Jackson et al., 2009; Kline, 2010). The overall measurement model’s fit indexes indicated a satisfactory model fit (e.g., $\chi^2$/df = 1.02, $p = .40$, RMSEA = .007, CFI = .99 and TLI = .99; and CAIC = 857.03). Table 2 shows that reliability values ($\rho$) were above the recommended cut-off criteria (.7) for each scale. Convergent validity of the constructs was fulfilled as AVE
values ($\rho_{VC}$) were greater than .5 (Fornell and Larcker, 1981). Discriminant validity of constructs was assessed following Fornell and Larcker (1981) by comparing $\rho_{VC}$ values to squared correlations between the constructs and was found satisfactory (see table 2). Based upon the recommendations of Podsakoff et al. (2003), we tested for the common method variance using Harman’s single factor test. The results [$\Delta\chi^2(19) = 2798.12, p < .01$] did not indicate any serious matter related to common method variance.

Table 2 here

4.2. Structural model: Main hypothesis testing

We examined the hypothesised relationships among constructs by estimating a structural equation model with Amos 18. Table 3 shows that our partial mediation model has a satisfactory fit to the data: $\chi^2 = 599.31$, df=243, $p<0.001$; RMSEA=0.074; CFI=0.91; TLI=0.90; $\chi^2$/df=2.46 and CAIC=974.57. Furthermore, on average, our results indicated that the predictors explained substantial amounts of variance in the endogenous constructs: SB price-image $R^2 = .25$; attitude toward SBs $R^2 = .43$; SB purchase intention $R^2 = .40$; and SB choice $R^2 = .63$. As we found a satisfactory fit for the proposed model, we moved to hypothesis testing. Direct effects were tested using the student $t$-test whilst indirect effects were tested using the bootstrap BC method (Cheung and Lau, 2008). Table 3 shows the structural coefficients used in estimating our model.

Table 3 here

Store image perceptions significantly directly influenced SB purchase intention ($\gamma_{direct} = .19$, $p < .01$) and SB price-image ($\gamma_{direct} = .50$, $p < .001$), and indirectly influenced SB choice
All signs of the coefficients were in the hypothesised directions. Therefore, these findings fully supported H1, H2 and H3. As expected, we also found support for H4, H5 and H6, as SB price-image directly influenced SB purchase intention ($\beta_{\text{direct}} = .42, p<.001$) and SB choice ($\beta_{\text{direct}} = .39, p<.001$), and indirectly influenced SB choice ($\beta_{\text{indirect}} = .12, p<.01$). H7, H8, H9 and H10 are supported as value consciousness directly influenced SB purchase intention ($\gamma_{\text{direct}} = .32, p<.001$), attitude toward SBs ($\gamma_{\text{direct}} = .66, p<.001$) and SB choice ($\gamma_{\text{direct}} = .21, p<.001$). It also had an indirect effect on SB choice ($\gamma_{\text{indirect}} = .27, p<.01$).

H11 stated a direct influence of attitude toward SBs on SB choice, and that was supported ($\beta_{\text{direct}} = .28, p<.001$). H12 posited a direct and positive influence of SB purchase intention on SB choice and found support ($\beta_{\text{direct}} = .30, p<.001$).

To further validate our model, we performed additional analysis. First, we compared our model to a competitive one as recommended by Kline (2010) and then assessed a model including four control variables. According to the theory of reasoned action, purchase intention fully mediates the relationships between consumer behaviour and its antecedents (Fishbein and Ajzen, 1975). We therefore tested a full mediation model inspired by this theory against our partial mediation model. The full mediation model showed an acceptable fit to the data: $\chi^2 = 625.78$, df = 245, $p<0.001$; RMSEA = 0.077; CFI = 0.90; TLI = 0.89; $\chi^2$/df = 2.55 and CAIC = 989.87. However, our partial mediation model better fit the data than this full mediation model [$\Delta \chi^2 = 67.4 (4), p<.01$ and $\Delta$CAIC = 13.3]. Therefore, we preferred the proposed partial mediation model (figure 2) to the competitive one.

Figure 2 here

In addition, we included four covariates (age, gender, household income, and family size) to control for their potential effects on our results. In fact, previous research showed that
these covariates could have some influence on SB purchase behaviour (Batra and Sinha, 2000; Burton et al., 1998). Our results show that the model that includes the four covariates has a slightly more acceptable fit to the data: $\chi^2 = 768.01$, df = 341, $p<0.001$; RMSEA = 0.069; CFI = 0.89; TLI = 0.88; $\chi^2/\text{df} = 2.25$ and CAIC = 1195.93. Besides, the inclusion of the four covariates does not materially change our substantive findings. None of them had an effect on SB choice ($p>0.05$ in all cases). These findings will be discussed in section 5.

4.3. The influence of store familiarity

As stated earlier, we split our data into two groups based on store familiarity. One partial data set indicated a higher level of store familiarity (N2a = 136) and the other a lesser level (N2b = 130). Therefore, it became possible to investigate the influence of store familiarity groups (low-store familiarity and high-store familiarity) on SB purchase behaviour (SB purchase intention and SB choice) using MANOVA, ANOVA, and $t$-test. The results of the MANOVA tests (table 4) indicate that the main effect of store familiarity (Wilks’ = 0.89, $p<0.001$) is significant. The ANOVA results indicate that the effect of store familiarity on SB choice (H13b: $F_{1,264} = 25.10$, $p<0.001$) is significant. However, the effect of store familiarity on SB purchase intention is not significant (H13a: $F_{1,264} = 3.21$, $p>0.05$).

Table 4 here

5. Discussion and implications

5.1. Summary

Various consumer factors were correlated to SB purchase behaviour in previous studies (Burton et al., 1998; Garretson et al., 2002). This research consistently showed that value consciousness, attitude toward SBs, and SB purchase intention positively influenced SB choice. More specifically, value consciousness was found to highly influence SB choice
\( \gamma_{\text{direct}} = .21, p < .001; \gamma_{\text{indirect}} = .27, p < .01 \text{ and } \gamma_{\text{total}} = .48, p < .01 \) compared to other consumer factors. Burton et al. (1998) and Garretson et al. (2002) found similar results in the American market. Garretson et al. (2002) results showed that value consciousness influences SB attitude \( (\gamma = .17, p < .05) \), which in turn influences SB purchase behaviour \( (\gamma = .22, p < .05) \). However, they only tested indirect effects of value consciousness on SB purchase behaviour, whilst we assess both direct and indirect effects in this research. The stronger indirect effect of value consciousness on SB purchase seems to mean that this construct is no longer the only key factor impacting SB purchase. The conclusion we can derive is that SBs seem to be less associated only to price constructs due to their improved perceived quality. Even though price still matters, other factors such as attitude and store image become relevant. Our results also show a stronger effect of value consciousness compared to those of Garretson et al. (2002) and to those of Jin and Suh (2005). This result may be related to the fact that SBs, despite their quality improvement, are still associated with utilitarian functions, as demonstrated in the mid-seventies when the French retail chain Carrefour popularised its unbranded “free products” as “good, yet less expensive”. Furthermore, the results indicate that image factors are important determinants of SB choice. Store image perceptions are found to be a key element in SB purchase behaviour \( (\gamma_{\text{indirect}} = .31, p < .01) \). The effect of store image is consistent with previous research highlighting the influence of store image on SB purchase or perceptions (Collins-Dodd and Lindley, 2001; Vahie and Paswan, 2006). Our results are also in line with cue utilisation theory (Richardson et al., 1994) as store image is an indirect determinant of SB choice, meaning that consumers use the store image as a cue for SB purchase behaviour. This result was interesting since it relates cue utilisation theory to purchase behaviour, whilst previous studies were mainly focused on the relation between this theory and perceived quality (Richardson et al., 1994). Finally, our results demonstrated the influence of SB attitude and SB price-image on SB purchase behaviour. The influence of SB
attitude ($\gamma = 0.28, p<0.05$) is comparable to that found by Garretson et al. (2002) in the US market. However, the direct influence of store brand price-image on SB choice was rather strong ($\gamma=0.39, p<0.05$) and indicated that price related constructs still impact consumer behaviour toward SBs. Next, we present the managerial implications of our findings, research limitations, and suggestions for future research.

5.2. Managerial implications

Several managerial implications can be drawn from this research. First, the indirect effect of store image perceptions on SB choice confirmed that consumers use store image including service, layout, and merchandise as heuristics to make inferences about the quality of SB products (Richardson et al., 1994) before moving to SB choice. At the same time, the relative strength of store image perceptions may seem surprising, given the focus on value consciousness discussed above. One would expect that value conscious consumers would not focus on store image as the latter would be associated with high prices. Therefore, retail managers must be aware of this apparent contradiction by offering SBs that attract consumers not only in terms of price and quality, but also in terms of image. Our results also showed that SB price-image strongly influenced SB choice ($\gamma_{direct} = .39, p<.001; \gamma_{indirect} = .12, p<.01$ and $\gamma_{total} = .51, p<0.01$). This finding is interesting because previous research focused mainly on price consciousness when evaluating consumer price perceptions toward SBs (Burton et al., 1998; Jin and Suh, 2005). However, SB price-image seems worthwhile to study as it takes into account prices charged by competitive retail stores in SBs’ price evaluation. Based on these findings, we recommend that retail managers put more emphasis on both price-image and store image as these factors not only influence consumer purchase behaviour, but they are also positively related.

Second, socio-demographic variables are probably the most studied variables in relation to SB purchase behaviour. We evaluated a partial mediation model including four
socio-demographic variables (age, gender, household income, and family size) as covariates, or antecedent of SB choice. The results showed that none of these socio-demographic variables had an effect on SB choice ($p > .05$ in all cases). At first glance, these findings may seem surprising in contrast to some previous research, which found significant effects of socio-demographics on SB purchase behaviour, e.g., Burton et al. (1998) for household income. However, previous results dealing with the effects of socio-demographics on SB store purchase behaviour have been rather inconsistent (Martinez and Montaner, 2008). For instance, Burton et al. (1998) found no effect of age on SB purchase behaviour, whilst Ailawadi et al. (2001) found a significant effect of this variable on SB use. For retail managers, these results may mean that SB products are becoming more and more popular among an increasing number of consumer categories, including those with high household income. However, the lack of significant relationships between socio-demographics and SB purchase behaviour may also be related to the fact that the data were collected in 2010, during the worst recession in recent memory. Perhaps most consumers, regardless of socio-economic group, were looking for value in their grocery purchases.

Third, in contrast to previous research that focused mainly on brand familiarity, in this research we investigated the influence of store familiarity on SB purchase behaviour (SB purchase intention and SB choice). The MANOVA results showed a significant effect of store familiarity on SB purchase behaviour. However, the subsequent ANOVA results indicated that only the effect on SB choice is significant. Based on $t$-test results, the influence of store familiarity was demonstrated. Similar to previous research on brand familiarity (Richardson, 1997), consumers with higher store familiarity had stronger scores on SB choice. Consequently, managers would benefit by developing actions that increase consumer familiarity with their stores (e.g., more promotion on SB products in different periods in the week to increase frequency of store patronage). However, there was no effect of store
familiarity on SB purchase intention. This result is surprising but may be related to the fact that as SB purchase intention was measuring before the shopping trip, consumers did not really have a precise idea of SB purchase at this stage. It may also indicate a lack of loyalty toward SBs. Consequently, retailers would benefit by offering an increased number of higher value added SBs (i.e., premium SBs) to bring in and nurture SB loyal consumers.

5.3. Limitations and orientations for future research

In this research, we proposed a partial mediation model of consumer and image factors influencing SB choice. Even if the proposed model was found to have sound psychometric qualities, this study had some limitations. First, we did not investigate the influence of product categories, so we cannot know how the results would change in different product categories. Previous research showed that SB purchase behaviour varies depending on product categories (Batra and Sinha, 2001); therefore, different structural paths across product categories in our model would not be expected. However, the strength of SB choice determinants may vary depending on the nature of the product category (e.g., risky versus less risky products). Second, SB choice measurement was based on consumer judgments after the shopping trip as measured by the Likert scale. It would be interesting for future studies to use an objective measure of purchase such as scanned data. We also measured SB choice in a single shopping occasion, but longitudinal data would have allowed us to assess consumer behaviour toward SBs over time. Following Burton et al. (1998), we recommend that future research use longitudinal data in order to cover a broader time frame and provide more understanding about the relationships between the variables under investigation.

The results of this study also open other avenues for future research activities. French retailers are now focusing more attention on premium SBs (e.g., Selection in Carrefour and Collection in Auchan) and on organic SBs (e.g., Carrefour Bio in Carrefour and Monoprix Bio in Monoprix), and a growing democratisation of organic SBs can be found in France.
Given the growing interest in these special SBs, it would be interesting to investigate French consumers’ purchase behaviour toward organic SBs compared to premium SBs using the proposed model. Also, given that SBs have become a global phenomenon, it would be useful to replicate this study in other countries, either European or others. A special focus may be placed on emerging markets, as most of the existing research on SBs was performed in Western countries (Burton et al., 1998; Lamey et al., 2007). More interestingly, future studies could evaluate the proposed and validated model in different cultural contexts to test it for metric invariance.
Endnotes


[2] We refer here to full mediation when all relationships between the dependent variables and the independent ones are mediated (indirect, i.e., pass through another variable) and to partial mediation when some relationships are mediated (indirect) whilst others are not (direct).

[3] Complete results of the EFA are not reported for convenience. However, these results are available upon request from the corresponding author.

[4] Items deleted from the analysis as they did not load significantly on their construct.

*Store image perceptions*

SIP3: This store has a good image
SIP4: This store has a good overall service
SIP7: This store has knowledgeable salespeople

*Store brand price-image*

SBPIM1: I find in this store low prices for all SB products offered
SBPIM2: All SB products present in this store seem less expensive than elsewhere

*Value consciousness*

VC5: I generally shop around for lower prices on products, but they still must meet quality requirements before I buy them.

*Attitude towards store brands*

ATSB1: Considering value for the money, I prefer SBs to national brands.

*SB purchase intention*

SBPIN4: I will buy SB products the next time I need a product.

*SB choice*

SBCH2: I preferred to buy SB products when I made my purchases.
References


Figures

Figure 1. Conceptual model with partial mediation
Figure 2. The path diagram of the validated partial mediation model

- Store image perceptions to SB choice
- SB price-image to SB choice
- Value consciousness to SB choice
- Attitude towards SBs to SB choice

Path coefficients:
- Store image perceptions to SB purchase: 0.19*
- SB price-image to SB purchase: 0.42*
- Value consciousness to SB purchase: 0.32*
- Attitude towards SBs to SB purchase: 0.66*
- SB purchase to SB choice: 0.30*
- SB price-image to SB choice: 0.21*
- Value consciousness to SB choice: 0.28*
- Attitude towards SBs to SB choice: *p < 0.01.

* indicates statistical significance at the 0.01 level.
### Table 1: Means, standard deviations and correlations between the constructs (N2=266)

<table>
<thead>
<tr>
<th>Constructs (number of items)</th>
<th>Means</th>
<th>Std. Dev.</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Store image perceptions (4)</td>
<td>3.84</td>
<td>1.52</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) SB price-image (4)</td>
<td>3.90</td>
<td>1.41</td>
<td>.50*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Value consciousness (4)</td>
<td>3.70</td>
<td>1.60</td>
<td>.74*</td>
<td>.59*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Attitude towards SB (4)</td>
<td>4.06</td>
<td>1.57</td>
<td>.62*</td>
<td>.60*</td>
<td>.65*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) SB purchase intention (4)</td>
<td>3.57</td>
<td>1.60</td>
<td>.57*</td>
<td>.63*</td>
<td>.60*</td>
<td>.72*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(6) SB choice (4)</td>
<td>3.67</td>
<td>1.47</td>
<td>.65*</td>
<td>.73*</td>
<td>.68*</td>
<td>.73*</td>
<td>.74*</td>
<td>1</td>
</tr>
<tr>
<td>Constructs</td>
<td>Codes and measurement items (1)</td>
<td>Stand. Loadings (2)</td>
<td>( \rho^2 ) (3)</td>
<td>AVE</td>
<td></td>
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<td>-----------------------------------</td>
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</tr>
<tr>
<td>Store image perceptions ( \alpha = .85 ), ( \rho = .85 )</td>
<td>SIP1 - The store would be a pleasant place to shop.</td>
<td>.78</td>
<td>.54</td>
<td>.58</td>
<td></td>
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<tr>
<td></td>
<td>SIP2 - I have an attractive shopping experience with this store.</td>
<td>.77</td>
<td></td>
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<td></td>
<td>SIP5 - The store carry high quality merchandise.</td>
<td>.72</td>
<td></td>
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<tr>
<td></td>
<td>SIP6 - The store has helpful salespeople.</td>
<td>.80</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>SBPIM3 - I think that SBs in this store are low priced compared to other stores.</td>
<td>.78</td>
<td>.53</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SBPIM4 - In this store, I can make a good deal with SBs compared to other stores.</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>SBPIM5 - I think SB prices in this store are attractive compared to other stores.</td>
<td>.80</td>
<td></td>
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<tr>
<td></td>
<td>SBPIM6 - I can make savings with SB in this store.</td>
<td>.74</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Value consciousnes s ( \alpha = .91 ), ( \rho = .91 )</td>
<td>VC1 - I am very concerned about low prices, but I am equally concerned about product quality.</td>
<td>.90</td>
<td>.54</td>
<td>.72</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>VC2 - When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money.</td>
<td>.78</td>
<td></td>
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<tr>
<td></td>
<td>VC3 - When purchasing a product, I always try to maximize the quality I get for the money I spend.</td>
<td>.85</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>VC4 - When I buy products, I like to be sure that I am getting my money’s worth.</td>
<td>.88</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Attitude towards SBs ( \alpha = .85 ), ( \rho = .85 )</td>
<td>ATSB2 - For most product categories, the best buy is usually the SB.</td>
<td>.71</td>
<td>.53</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATSB3 - I love it when SBs are available for the product categories I purchase.</td>
<td>.84</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATSB4 - When I buy a SB, I always feel that I am getting a good deal.</td>
<td>.77</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>ATSB5 - In general, SBs are good quality products.</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB purchase intention ( \alpha = .89 ), ( \rho = .89 )</td>
<td>SBPIN1 - The probability that I would consider buying SBs is high.</td>
<td>.90</td>
<td>.54</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>SBPIN2 - I would purchase SBs next time.</td>
<td>.80</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>SBPIN3 - I would consider buying SBs.</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SBPIN5 - I have decided to buy SBs whenever possible.</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB choice ( \alpha = .84 ), ( \rho = .84 )</td>
<td>SBCH1 - I bought SBs during my shopping trip.</td>
<td>.82</td>
<td>.54</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SBCH3 - I looked for SB in my shopping trip.</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SBCH4 - My shopping cart contained SBs for several products.</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>SBCH5 - SB products was the good choice for me.</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Items deleted from the analysis are presented at the end of the article.

(2) All of the factor loadings are significant at \( p < .01 \).

(3) Highest squared correlation between the construct of interest and other constructs.
Table 3: Fit indexes, standardized coefficients and hypothesis testing

<table>
<thead>
<tr>
<th>Fit indexes</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>( \chi^2 / \text{df} )</th>
<th>CAIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2 ) (df), ( p )-value</td>
<td>.074</td>
<td>.91</td>
<td>.90</td>
<td>2.46</td>
<td>974.57</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypotheses and paths</th>
<th>Estimates</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effects</td>
<td>Standardized estimates</td>
<td></td>
</tr>
<tr>
<td>H1+ : Store image perceptions ( \rightarrow ) SB purchase intention</td>
<td>.19*</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H3+ : Store image perceptions ( \rightarrow ) SB price-image</td>
<td>.50**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H4+ : SB price-image ( \rightarrow ) SB purchase intention</td>
<td>.42**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H5+ : SB price-image ( \rightarrow ) SB choice</td>
<td>.39**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H7+ : Value consciousness ( \rightarrow ) SB purchase intention</td>
<td>.32**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H8+ : Value consciousness ( \rightarrow ) SB choice</td>
<td>.21*</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H10+ : Value consciousness ( \rightarrow ) Attitude towards SBs</td>
<td>.66**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H11+ : Attitude towards SBs ( \rightarrow ) SB choice</td>
<td>.28**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H12+ : SB purchase intention ( \rightarrow ) SB choice</td>
<td>.30**</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Indirect effects</td>
<td>Bootstrap estimates</td>
<td></td>
</tr>
<tr>
<td>H2+ : Store image perceptions ( \rightarrow ) SB price-image, SB purchase intention ( \rightarrow ) SB choice</td>
<td>.31* [.19 ; .44]</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H6+ : SB price-image ( \rightarrow ) SB purchase intention ( \rightarrow ) SB choice</td>
<td>.12* [.05 ; .24]</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H9+ : Value consciousness ( \rightarrow ) attitude towards SBs, SB purchase intention ( \rightarrow ) SB choice</td>
<td>.27* [.14 ; .43]</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

\(* p < .01, ** p < .001\).
Table 4: Summary of MANOVA and ANOVA results

<table>
<thead>
<tr>
<th>Item</th>
<th>Low</th>
<th>High</th>
<th>Item</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBPIN1</td>
<td>3.52 (1.77)</td>
<td>4.04 (1.84)</td>
<td>SBCH1</td>
<td>3.14 (1.48)</td>
<td>4.12 (1.92)</td>
</tr>
<tr>
<td>SBPIN2</td>
<td>3.53 (1.51)</td>
<td>3.70 (1.57)</td>
<td>SBCH3</td>
<td>3.37 (1.61)</td>
<td>4.19 (1.93)</td>
</tr>
<tr>
<td>SBPIN3</td>
<td>3.63 (1.71)</td>
<td>3.88 (1.83)</td>
<td>SBCH4</td>
<td>3.06 (1.55)</td>
<td>3.97 (1.83)</td>
</tr>
<tr>
<td>SBPIN5</td>
<td>3.18 (1.50)</td>
<td>3.55 (1.78)</td>
<td>SBCH5</td>
<td>3.28 (1.63)</td>
<td>4.19 (1.76)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Means (Stand. Dev.)</th>
<th>Overall results Wilks’ Lambda (F-value)</th>
<th>Dependent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store familiarity</td>
<td>0.89 *</td>
<td>3.21 n.s.</td>
<td>25.10 *</td>
</tr>
</tbody>
</table>

*p<.01; ns= not significant.