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MEASURING FACTORS DETERMINING PRIVATE LABEL PURCHASE

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Abstract

Indian retail sector has become competitive with the emergence of organized retail players. Currently retailers are focusing on developing their own brands or private labels to enhance customer loyalty, to add diversity and for better margins. The study primarily looks into understanding the consumer preference for private labels or store brands in breakfast cereals, snacks category (biscuits and traditional snacks) and to measure the factors that determine the store brand purchase in these categories. Consumer responses are collected from the city of Mysore (India) using structured questionnaire. Five point Likert scale is used to measure the factors that determine private label purchase. Confirmatory factor analysis (CFA) is done for developing a measurement model for factors that determine private label purchase in breakfast cereals and snacks category. Private label brand price (PLB) and perceived quality have significant relationship between them. Price consciousness, private label brand price is found to have considerable influence on value consciousness. Product familiarity has substantial impact on value consciousness and perceived quality. Store image is shaped in consumer minds on the basis of private label brand price, price consciousness and perceived quality of private labels.

Keywords: Private labels, store brands, price, price consciousness, perceived quality, store image, value consciousness, product familiarity and shelf space allocation

1. INTRODUCTION

Store brands or private labels are any brand to be produced and owned by the retailer which is sold exclusively in retailer's outlet only (Kumar & Steenkamp, 2007). Retailer's intention to develop private labels can be attributed to the higher percent margins that private labels or store brands can provide (Hoch & Banerji, 1993). Private labels or store brands are developed by retailers as an option to drive customers to their retail outlets (Singhi & Kawale, 2010). Private labels have been studied extensively in developed economies like USA and Europe but not in case of emerging economies like India (Saraswat *et al*., 2010; Diallo, 2012). According to Nielsen (HT, 2013), India's private label market is estimated to grow to USD 500 million by 2015. Categories like packaged foods, refined edible oils, breakfast cereals, ketchups and sauces account for 75% of total sales of private labels (HT, 2013). So this makes these categories attractive to organized retailers to develop their own private labels or store brands. Even though private label preference is increasing it requires an in depth study to understand the major factors that influence the consumer purchase.

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2. LITERATURE REVIEW

Private label purchase is determined by many factors. When we consider food segment in general, there are multiple factors that can influence the purchase. These factors may vary depending on the individual category in the food segment.

Price is an important factor determining the private label purchase. Price is one of the extrinsic cues which determine the private label purchase in food products (Burger & Schott, 1972; Richardson *et al.*, 1994).

When we consider factors like shopping behavior and category involvement consumers tend to be price sensitive in the purchase of products in grocery and general merchandise (Baltas, 1997). Sinha and Batra (1999), and Batra and Sinha (2000) found that category price consciousness is a highly significant predictor of private label purchase in food categories like canned tomatoes, frozen orange juices, ground coffee etc. Consumers tend to be less price conscious in categories where the perceived risk is high and price unfairness exist between national brands and private labels.

Private label price should not be link to the national brands price and whole sale price, the pricing need to be based on its quality and variable cost. So retailers should launch private labels with different prices targeting different consumer segments (Choi & Coughlan, 2004). Mendez *et al.* (2008) and Nencyz-Thiel and Romaniuka (2009) concluded that private label is distinguished from other brands because of its price in food category.

The purchase of private labels in breakfast cereals is determined by the price sensitivity among lower income shoppers for value private labels and higher income shoppers for National brands respectively (Jin *et al.*, 2010). Berges *et al.* (2013) confirmed that consumers are sensitive to price when they purchase high quality private labels compared with national brands in categories like pasta, biscuits and jam.

Price consciousness and impulse buying determine private label purchase in food and grocery items (Singh & Agarwal, 2013). The other factors like store loyalty and value consciousness also determine private label purchase. Machavolu and Raju (2013) concluded that price is one major factor followed by quality that determine private label purchase in food and apparel segment. Sathya (2013) found that price, quality, store name, promotions, extrinsic and intrinsic cue determine purchase in food and grocery segment among consumers.

Perceived quality has an important role to play in determining the private label purchase. It can affect the consumer perceptions about private labels.

Hoch and Banerjee (1993) considered consumer driven, retailer driven, national manufacturer driven factors and its effect on private label success in food and frozen foods. The study concluded that high level intrinsic quality is important than price for private labels.

Perceived quality differential is one of the major factors that determine the private label purchase in products like cheese, cookies, flour, frozen pizza, jams, jellies and ketchup (Sethuraman & Cole, 1999; Sethuraman, 2000). Perceived quality differential is lower when consumer's familiarity with the store brand increases. So it has to be reduced to increase private label proneness. Perceived quality can determine the purchase of private label and it is having positive relationship with price when category risk and retail image is high (Sheinin and Wagner, 2003).

Quality has a significant role in determining the store brand preferences in grocery category among consumers (Baltas & Argouslidis, 2007). Advertising and packaging are found to be significant in determining the consumption rate of store brands.

Koshy and Abhishek (2008) provided the insight that consumer's quality perceptions can be improved by introducing public quality labels recognized by consumers which can ensure adequate quality levels for private labels. Consumer perception study by (Beneke, 2010) revealed that perceived quality is one of the major factors influencing the private label purchase in food based private brands in categories like tinned goods, cookies, flour and sugar. Perceived quality is influenced by packaging. Bishnoi and Kumar (2009) concluded that quality consciousness, novelty seeking, price-value consciousness, brand consciousness, habitual, brand and store loyal determine the purchase of store brands in packaged food category. Abhishek (2011) looked into the role of demographic variables and psychographic variables like quality variation and perceived value for money and found that these factors can determine private label purchase in apparels. Sharma *et al.* (2011) found that there is a significant difference in quality between national and private brands and store image is a key factor that determines the purchase.

Singh and Singh (2014) found that quality and brand image determines consumer preference of private labels in apparel segment. Permarupan *et al.* (2014) found that familiarity and perceived quality as major factors that determine store brand purchase in general. Gala and Patil (2013) concluded that low quality is one factor that reduces PL purchase. Nandi (2013) looked into private label purchase confirmed that quality and reliability are the major factors that regulate private label purchase in categories like durables, personal care, apparels and consumable products.

Familiarity is one among the major factors that influence store brand purchase. This is determined by product knowledge and brand comprehension. Store brand familiarity increase with the information available about it which can increase store brand proneness due to reduction in perceived risk and perceived quality variation associated with these brands in products like margarine (Bettman, 1974).

Private label products have limited brand recognition compared to recognized brand due to lack of information in general merchandise category among consumers (Wolinsky, 1987). This can hinder familiarity of the products which can affect the product purchase. Non store brand prone consumers show less familiarity with the brands and tend to believe that store brands are low value and low quality products in grocery category (Dick *et al.*, 1995). So familiarity of store brands needs to be enhanced by promotional campaigns to increase the store brand purchase.

Further study by Richardson *et al.* (1996) examined the effect on familiarity on household store brand proneness in food products. Familiarity with retailer's private label brands is critical for private label proneness. The effect of familiarity on store brand purchase intention is partially mediated by perceived quality (Sheau-Fen *et al.*, 2011). Age moderates the effects of performance risk, physical risk, familiarity and perceived quality.

Store image has a significant role in determining the purchase of private labels. The consumer perception about the image of the store has a direct effect on the brand image of the private label which can determine the purchase. Store image has different dimensions which need to be understood to create favorable image in consumer minds.

Store image is defined in the shopper's mind, partly by the functional qualities and partly by an aura of psychological attributes by Martineau (1958). The major factors that determine the store image includes layout, architecture, symbols, colors, advertising and sales personnel.

Store image attributes considered by Chowdhury *et al.* (1998) are taken to study the impact of store image among consumers in grocery category by Collins-Dodd and Lindley (2003). Store brands are seen as extensions of the store image and contribute to store differentiation in the minds of consumers. Martenson (2007) concluded that store image, ambience, assortment and price dimension influence the store loyalty and satisfaction. The study stated that factors like store loyalty and satisfaction can be channelized to enhance private label purchase in categories like gourmet and lunch food. Private label attitude is determined factors like positive store image and money attitude regarding retention and distrust among consumers (Liu and Wang, 2008).

Chandon *et al.* (2011) concluded that store image perceptions and private label price image perceptions along with factors like value consciousness and perceived quality determine the private label purchase in food and groceries. Store image has direct and indirect influence on the consumer perceptions which can affect store brand purchase.

Value consciousness is an important factor that determines the private label purchase. Value is perceived by consumers differently. Some consumers perceive value as low price, some others as the benefits they receive from the products, quality they get for the price they pay and what they get for what they pay (Zeithaml, 1988).

Burton *et al.* (1998) looked into factors like value consciousness, price-quality perceptions, deal proneness, brand loyalty, risk averseness, coupon usage and response to advertised sale items and their impact on private label purchase. They concluded that private label purchase is determined by value consciousness and deal proneness but price-quality perceptions and brand loyalty has no effect on purchase.

Value consciousness and personality traits like prestige sensitivity and need for cognition determine private label purchase in products like cheese, bread, pasta and ketchup (Bao & Mandrik, 2004). Value consciousness contributes positive to store brand perceptions and purchase (Harcar *et al.*, 2006; Kwon *et al.*, 2008) in grocery and food products. Value consciousness and prior experiences have a significant influence on the consumer perceptions about store brand which can influence the purchase decision in grocery category (Kara *et al.*, 2009).

Private label consumers tend to be value consciousness and focus on low price of store brands in food and groceries (Chandon *et al.*, 2011). Value consciousness has a moderating effect on the quality perception of private labels which can influence the purchase intention of private labels (Bao *et al.*, 2011). Value consciousness is a factor that varies across the consumer. Some segment of consumers focusses on the low price aspect and others on the quality aspect. So retailers need to devise strategy which ensures optimal quality and value pricing based on the target segments which can improve the consumer proneness to private labels.

Shelf space allocation is a factor that indirectly affects the purchase of private label purchase. Shelf space allocation can enhance the visibility of private labels or store brands. Retailers always place their store brands in shelves adjacent to national brands. Dursun *et al.* (2011) found that shelf space allocation contributes significantly in enhancing product familiarity and perceived quality. Zameer *et al.* (2012) stated that private labels are placed near to national brands to make consumer perceive that they are high quality products. So shelf space is having an indirect effect on private label purchase.

From the existing literature we can conclude that the major factors that determine the private label purchase include consumer factors like price consciousness, perceived quality, product familiarity, value consciousness, product factors like price, quality and store factors like Store image, shelf space allocation and assortment.

2.1. Objectives of the study

The objectives of the study include:

a) To understand the consumer preference for private labels or store brands in breakfast cereals and snacks category.
b) To measure the factors that determine the store brand purchase in these categories.
c) To analyses the relationship existing between consumer factors, product factors and store factors in categories like breakfast cereals and snacks.

2.2. Hypothesis: factors and relationship

One of the major focus of any research study is to understanding the factors, analyses the relationship of these factors and its influence to the particular event or phenomenon. Private label

purchase is determined by product factors, store factors and above all consumer factors. The study focused into understanding the interrelationship between these factors which can provide valuable insights for the retailers. The following hypothesis are formulated to study the relationship.

H1: Private label price can determine the perceived quality associated with private labels.
H2: Consumer price consciousness can have significant association with private label price and perceived quality which can affect private label purchase.
H3: Value consciousness of the consumer is dependent on price consciousness, perceived quality and private label price.
H4: Product familiarity can affect the value consciousness and perceived quality.
H5: Store image is shaped by product factors like private label price and consumer factors like price consciousness and perceived quality.

3. METHODOLOGY

Consumer responses are collected from Mysore. The data collection is done using structured questionnaire which has 39 items which measured different factors that determine private label purchase in breakfast cereals and snacks (Biscuits and Traditional snacks). Five point Likert scale is used to measure the factors. The response is collected from consumers at organised retail outlets and households. Data analysis was conducted using SPSS V 21.

Table 1: Reliability Statistics of the questionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.774	0.872	39

Source: Based on Primary data

The reliability statistics (Cronbach's alpha) of the questionnaire has a value of 0.774 (see Table 1) which means high reliability or high internal consistency.

3.1. Sample size

Convenience sampling is used to collect the data from the respondents. It's a non-probability sampling technique in which elements have been selected from the target population on the basis of their accessibility or convenience to the researcher (Ross, 2005). The total sample size of the study is 330 respondents. Out of 330 samples, 296 responses are considered for the final analysis based on two criteria: a) store brand awareness b) store brand preference (see Table 2). Incomplete responses are not considered for further analysis. The response of consumers with both store brand awareness and preference are considered for the final analysis.

3.2. Respondent's profile

Table 2: Respondents profile at a glance

Particulars	Range	No of respondents	% of Respondents
Gender	Male	137	46.2
	Female	159	53.7
Income (Indian Rupees)	<2 L	163	55.1
	2-3L	51	17.2
	3-5L	56	18.9
	>5L	26	8.8
Occupation	Employed	193	65.2
	Unemployed	103	34.8

Source: Based on primary data

Out of the 296 valid respondents we have 137 Males (46.2%) and 159 Females (53.7%). If we analyses the occupation pattern 193 respondents are employed and 103 are unemployed which includes homemakers, retired people and students. 163 respondent's income less than 2 lakhs which

includes students, homemakers, government, private company employees and retired people etc. 17.2 % of respondents have an income of more than 2 lakhs but less than or equal to 3 lakhs and 18.9 % of respondent's income range from more than 3 lakhs but less than or equal to 5 Lakhs. Nearly 9 % of respondents have an income more than INR 5lakhs.

3.3. Measuring factors moderating Private label purchase –EFA approach

Exploratory factor analysis (EFA) is conducted to understand the influence of different items, to reduce the dimensions and combine them as different factors for further analysis. After EFA, Confirmatory factor analysis (CFA) needs to be done for developing a measurement model for factors that determine private label purchase. The different factors considered for the analysis include a) Price b) Perceived quality c) Familiarity d) Store Image e) Value consciousness f) Shelf space allocation g) Assortment. Principal Component Analysis (PCA) was used in the extraction of factors.

The minimum KMO value should be 0.5 (Kaiser, 1974) to do the factor analysis. KMO value less than 0.5 should be omitted from factor analysis (Hair *et al.*, 2009). Bartlett's test of sphericity investigates the extent of correlation in the variables and its suitability for factor analysis. If the significance value is less than our alpha level, we can conclude that there is a correlation among the variables and it's appropriate to conduct factor analysis.

The factors with lower communality values need to be removed. Communalities should be a minimum of 0.6 when sample size is greater than 250 (Kaiser's criterion). But Velicer and Fava (1998) suggested that in social science we have low to moderated communalities in the range of 0.4 to 0.7. So the lower limit for communalities was taken as 0.4. The acceptable limit of factor loading is 0.30 - 0.40 range (Positive or Negative) (Hair *et al.*, 2009). The factors with component loadings and communalities in this range are retained for further analysis.

KMO value ranged from 0.5 -0.67 which is in the acceptable range for conducting a factor analysis. Bartlett's test of sphericity results showed that $p < 0.05$ for all variables which means that variables are correlated which makes factor analysis valid.

Based on the EFA results (Refer Appendix: Table3), items price 2, 5, 6 is grouped as one factor - private label brand price (PLB price). The items price 3, 4 is combined as price consciousness. Items quality 7, 8, 9 grouped as perceived quality. The remaining items quality 10, 11 as quality beliefs and 12, 13, 16 as Quality indicators. Quality 15 was retained as a single factor which is private label quality. The two items measuring value consciousness are excluded due to lower communalities (VC- 29, VC-30 – 0.167, 0.286).

57 % of variance is explained by two factors that measure price factors. 63 % of variance is explained by four factors of quality and perceived quality. Two items in the factor product familiarity explains around 70% of the variance. 72.2% of the variance is explained by one factor of store image. Value consciousness which includes two items (two items removed) measures around 62.8% of the variance. 46.3% of variance is measured by three items of assortment. Shelf space allocation is measured by two items which explains 71.1% of the variance.

3.4. Confirmatory factor analysis model

Confirmatory factor analysis (CFA) is done using AMOS. CFA is primarily theory or hypothesis driven (Albright & Park, 2009). It helps to understand and verify the factor structure helps to test the relationship between observed variables and their underlying latent constructs (Suhr, 2006). It's a special application of SEM (Structural equation modelling) which is termed as covariance structure (McDonald, 1978) or the linear structural relationship (LISREL) model (Joreskog & Sorbom, 2004).

Sivo *et al.* (2006), Garver and Mentzer (1999) and Hoelter (1983) proposed a critical sample size of 200 for SEM to provide sufficient statistical power for data analysis. The current study has a sample size of 296 which is more than the critical sample size. The minimum loadings need to be 0.4 to be

retained for further analysis or loadings which are comparatively lower loadings need to be rejected (Bowen and Guo, 2011).

Primary CFA is conducted using all the factors. The items with lower loadings are removed. Based on the criteria, factors with loadings 0.4, more than 0.4and significant paths are retained for further analysis (See Figure 1).

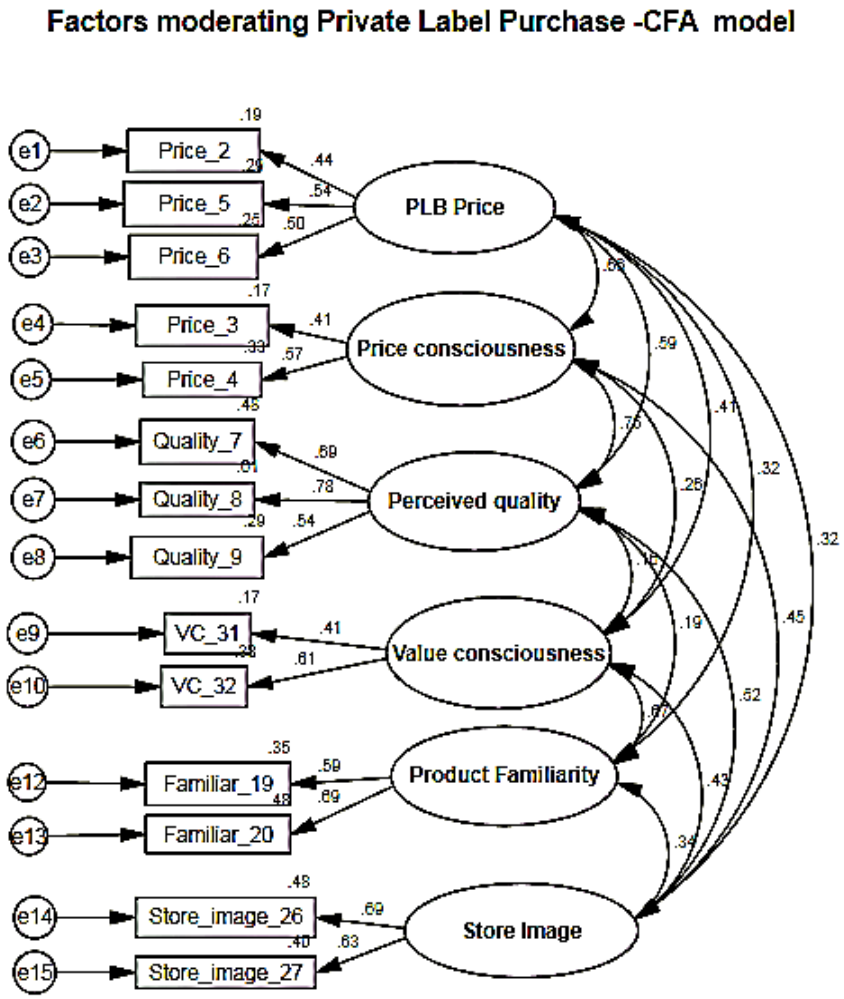

Figure 1: Confirmatory factor analysis (CFA) Model

Source: Based on primary data

4. RESULTS: CFA

Confirmatory factor analysis (CFA) results showed that all paths are highly significant ($p<0.001$). The standardized regression weights for all items ranged from 0.41 to 0.78 which is the acceptable range.

The fit indices considered include Goodness of fit indices (GFI, AGFI), Incremental fit indices (CFI and TLI) and Badness of fit indices (Standardized RMR-Root Mean Square Residual and RMSEA-Root Mean Square Error of approximation). χ^2 and Normed or Relative $\chi^2$are also reported to estimate the model fit.

χ^2 value is 119.953 and df = 63 and p value is 0.00. The normed χ^2 considers sample size which is the χ^2/df ratio. The value is 1.90 which is less than proposed value of 2 (Ullman, 2001) which indicates a good fit. The GFI (0.947) AGFI (0.91) which means the model has a good fit. The incremental fit indices CFI is 0.91, IFI is 0.915and TLI is 0.872 which are indicators of good to moderate fit for the model (Naor *et al.,* 2008). The standardized RMR value is 0.053 and RMSEA value is 0.055 which is in the range of fit criteria proposed for good models (Hu and Bentler, 1999) (see appendix, Table 5, 6, 7].

The first hypothesis explored the relationship between private label price and perceived quality (Private label brand price ↔ Perceived quality, $p<0.001$) which means there is significant relationship between these two factors. So H1 is accepted. The study looked into association of price consciousness with private label brand price and perceived quality (Price consciousness ↔ Private label price and Perceived quality, $p<0.001$) which proves that there is strong association between these latent constructs which means H2 is accepted. Value consciousness is influenced by price consciousness, private labelbrand price and perceived quality ($p<0.05$, $p<0.01$ and $p>0.05$). From the above result we can conclude that price consciousness, private label price influences the value consciousness and perceived quality is not having any significant influence. So H3 will be partially accepted for two factors price consciousness and private labelbrand price. Consumer familiarity with private labels can affect the value consciousness and perceived quality. The results showed product familiarity ↔value consciousness, $p < 0.001$ which means that familiarity has highly significant effecton consumer factor like value consciousness. Product familiarity has a significant influence on perceived quality of private labels ($p<0.05$). So H4 is accepted. Store image is formed by the influence of product factors like private label brand price and consumer factors like price consciousness and perceived quality (Store Image ↔ Private label price, $p<0.01$), (Store Image ↔Price consciousness and Perceived quality, $p< 0.001$) which means price consciousness and perceived quality can play highly significant impact on shaping the store image. Private label brand price has substantial influence on store image. This results indicates that H5 can be accepted.

4.1. Construct reliability and validity

Construct reliability (CR) is one of the aspect that determine accuracy of the items in measuring the construct. The value has to be more than 0.7 to be reliable (Hair *et al.,* 2006). It's not an absolute standard and values below 0.7 are acceptable if the research is exploratory in nature (Hair *et al.,* 2006). The Average variance extracted (AVE) is one of the measure for convergent validity. The AVE value has to be at least 0.5 (Hair *et al.,* 2006). The reliability value (see Appendix, Table 8) ranged from 0.8 to 0.9 which confirms that constructs have high reliability. The AVE measured is in the range of 0.6 to 0.8 which is in the acceptable range.

4.2. Convergent and discriminant validity

Convergent validity can be estimated by considering the CR values and AVE values. Both CR and AVE values are greater than proposed limits of 0.7 and 0.5 which establishes the convergent validity.

Discriminant validity is measured by comparing variance extracted estimates and the squared correlation estimate. The variance extracted estimates should be greater than the squared inter correlation estimate (Fornell and Larcker, 1981). The AVE value range from 0.6 - 0.8 and the squared inter correlation estimate is in the range of 0.02-0.5 which confirms discriminant validity (se Appendix, Table 9).

4.3. Results and managerial implications

From the study we could find that consumer awareness about private labels are high. One of the significant observation is in categories like breakfast cereals consumer familiarity is high for national brands compared with store brands. 48% of respondents prefer store brands in snacks category, 0.04% in breakfast cereals and 47.8% will prefer to have store brands in both categories. Private label preference for breakfast cereals can be low in a non-metro city like Mysore because of higher

preference for traditional breakfast food items. One of the insights we could make out of this study is that snack is one category in which store brands can gain market share.

Price plays a major role in consumers' perceptions of store brand quality (Dick *et al.,* 1996, Nencyz-Thiel & Romaniuka, 2009). The study confirms that private label price and perceived quality have significant relationship. Research and theory confirms that value consciousness is influenced by price consciousness, private label price and perceived quality. Private label consumers are value conscious and focus on low prices (Chandon *et al.,* 2011).Value consciousness has a moderating effect on the quality perception of private labels which can influence the purchase intention of private labels (Bao *et al.,* 2011). But the result shows price consciousness, private label price influences the value consciousness and perceived quality is not having any significant influence. One conclusion we can make out from the results is that price serve as an indicator for quality which can influence value consciousness resulting in private label purchase. So retailers need to take a tactical approach when they price private label brands in categories like Breakfast cereals and snacks. One major implication for retailers is that they need to ensure that they maintain competitive price and optimal quality for private labels when compared with national brands.

Consumer's product familiarity can influence perceived quality. Familiarity with store brands can affect the quality perceptions about private labels (Dick *et al.,* 1995). The result also confirms that product familiarity has a significant influence on perceived quality. Retailers need to ensure that consumers are familiar with store brands in these categories. Especially in categories like breakfast cereals and snacks (Biscuits and traditional snacks) product familiarity can drive consumers to compare it with national brands which can influence private label purchase. The familiarity can be enhanced by in store promotions and providing private label samples to consumers which can help them to experience the value and quality private label brands can offer compared with national brands.

Products and pricing are the core attributes of the supermarket store image (Theodoridis & Chatzipanagiotou, 2009).Store image influences the perceived product quality of PLB in breakfast cereal (Venkateswaran & Mahalakshmi, 2010; Beneke *et al.,* 2015).So the study looked into the influence of factors like private label price, price consciousness and perceived quality on store image and vice versa. The results confirmed that there is significant relationship between these factors. Store image can influence the consumer confidence in private labels which determine the attitude and purchase towards private labels. Retailers need to create a favorable store image by devising an appropriate pricing strategy for private labels by increasing the quality, variants of private labels and improving the in store atmosphere factors. The image factor can influence the quality perceptions, prestige factor and store loyalty which can be vital in influencing the purchase decision.

4.4. Limitations and scope for future research

The current study is limited to one city only so future research can consider multiple cities which can provide better outlook about factors determining private label purchase. The other important thing with respect to the current research is, its focus is primarily on breakfast cereals and snacks, so you cannot generalise this model and apply to other categories. So inclusion of more categories can give a better range for the model. The major factors considered for the study include private label brand price, perceived quality, value consciousness, product familiarity and store image. The model cannot address the relationship of perceived risk, shelf space allocation, instore promotions, store loyalty andother factors. So there is scope of constructing a model with all these factors which can provide a better presepective about the inter relationship between these factors. The study didn' t explored the realtionship between category factors, demographic factors and private label purchase which can be considered for further research.

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Appendix

Items and Constructs measured

Item Code/No	Constructs	Items used for Measurement
2	Price and Price Related factors	Price is one factor that determines the brand choice in food category.
3		Low price is not always a criterion for choosing food brands because of quality risk
4		When shopping food items, I compare the prices of different brands to be sure I get the best value for money in breakfast cereals and snacks.
5		I found in this store low prices and value in all private labels in food brands compared to other stores in this category.
6		I prefer private label brands due to relatively high prices of national brands in this category.
7	Perceived Quality & Quality indicators/factors	Quality is a major factor than price that determines purchase in food category.
8		Quality perception determines the purchase of brands.
9		We can relate quality with price of the brands in snacks.
10		I think low price doesn't mean low quality always in categories like breakfast and snacks.
11		I believe private label brands have good quality.
12		Packaging can influence quality perceptions in snacks.
13		Private label cereals can offer same quality and value like other brands.
15		Taste, freshness and flavour determine purchase of brands. (Breakfast cereals and Snacks).
16		Private label Brand name can influence the purchase intention (Breakfast cereals and snacks.)
19	Product Familiarity	Familiarity can enhance the confidence which determines purchase of private labels in breakfast cereals and snacks.
20		Low familiarity can affect the preference of private label brands in this category.
26	Store Image	The quality of products and pricing influence the store image.
27		Store image is an important factor that determines the preference of private labels in food category (Breakfast cereals and Snacks).
29	Value consciousness	Value for money is important for brands in food category
30		Private label offers value for money compared to national brands.
31		Low price and good quality is the value that private label brands offer
32		Value consciousness affects the purchase intention of private labels in food category (Breakfast cereals and Snacks).
33	Assortment	The store offers a wide assortment in food category like breakfast cereals and snacks.
34		No of variants is important factor that determine purchase in this category.
35		I purchase store brands because of the variants available in this category.
37	Shelf space	I purchase store brands if they are kept eye level.

38	allocation	I purchase store brands only if they are kept at eye level which are kept along the shelves of top brands.

Table 3: Summary Table –EFA results

Factor\Construct	Items/Components	KMO value	Communalities	Factor loadings
PLB Price	Price 2	0.628	0.436	0.607
	Price 5		0.544	0.738
	Price 6		0.484	0.695
Price consciousness	Price 3		0.794	0.884
	Price 4		0.593	0.61
Perceived quality	Quality 7	0.676	0.676	0.826
	Quality 8		0.709	0.819
	Quality 9		0.524	0.684
Quality Beliefs	Quality 10		0.732	0.848
	Quality 11		0.507	0.523
	Quality 12		0.744	0.674
Quality Indicators	Quality 13		0.701	0.813
	Brand name 16		0.47	0.437
Quality 15	Quality 15		0.697	0.821
Product Familiarity	Familiarity 19	0.5	0.705	0.84
	Familiarity 20		0.705	0.84
Store Image	Store Image 26	0.5	0.722	0.85
	Store Image 27		0.722	0.85
Value consciousness	VC-29	0.532	0.167	0.409
	VC-30		0.286	0.534
	VC-31		0.533	0.73
	VC-32		0.436	0.66
Assortment	Assort33	0.584	0.428	0.654
	Assort34		0.454	0.674
	Assort35		0.509	0.714
Shelf space allocation	Shelf space 37	0.5	0.711	0.843
	Shelf space 38		0.711	0.843

Source: Based on primary data

CFA Results

Table 4: Correlation matrix

Construct		Construct	Estimate	p value
Value consciousness	<-->	Store Image	0.435	***
Price consciousness	<-->	Store Image	0.451	***
PLB Price	<-->	Store Image	0.317	0.007
Perceived quality	<-->	Product Familiarity	0.189	0.028
Perceived quality	<-->	Store Image	0.520	***
PLB Price	<-->	Price consciousness	0.657	***
PLB Price	<-->	Perceived quality	0.591	***
Price consciousness	<-->	Perceived quality	0.749	***
PLB Price	<-->	Value consciousness	0.411	0.003
Value consciousness	<-->	Product Familiarity	0.669	***
Product Familiarity	<-->	Store Image	0.343	0.002
PLB Price	<-->	Product Familiarity	0.321	0.006
Price consciousness	<-->	Value consciousness	0.260	0.046
Perceived quality	<-->	Value consciousness	0.158	0.120

****: P <0.001 **Source:** Based on primary data

CFA Fit indices

Table 5: RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	0.053	0.947	0.911	0.568
Saturated model	0.000	1.000		
Independence model	0.180	0.648	0.594	0.561

Source: Based on primary data

Table 6: Incremental fit indices

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	0.836	0.763	0.915	0.872	0.911
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000

Source: Based on primary data

Table 7: RMSEA (Root mean square error of approximation)

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	0.055	0.040	0.070	0.266
Independence model	0.155	0.144	0.165	0.000

Table 8: Construct reliability and validity

Item	Construct	Estimate	Square of Loadings	Sum of Square of Loadings	Sum of Loadings	Error Term	Square of Sum of Loadings	Square of Sum of loadings +error terms	SSL+ error terms	Construct Reliability	AVE
Price_3	Price consciousness	0.59	0.35	0.51							
Price_4	Price consciousness	0.40	0.16		0.99	0.13	0.98	1.12	0.64	0.88	0.79
Quality_9	Perceived quality	0.54	0.29								
Quality_8	Perceived quality	0.78	0.61	1.37	2.01	0.18	4.03	4.37	1.72	0.92	0.80
Quality_7	Perceived quality	0.69	0.48			0.16					
Familiar_20	Product familiarity	0.64	0.41								
Familiar_19	Product familiarity	0.64	0.41	0.82	1.28	0.19	1.64	1.84	1.02	0.89	0.81
Store_image_27	Store image	0.63	0.40								
Store_image_26	Store image	0.69	0.48	0.88	1.33	0.19	1.76	1.95	1.07	0.90	0.82
VC_32	Value consciousness	0.61	0.38								
VC_31	Value consciousness	0.41	0.16	0.54	1.02	0.18	1.04	1.22	0.72	0.85	0.75
Price_6	PLB price	0.47	0.22								
Price_5	PLB price	0.54	0.29	0.74	1.49	0.22	2.21	2.67	1.19	0.83	0.62
Price_2	PLB price	0.47	0.22			0.23					

Source: Based on primary data

Table 9: AVE and squared inter correlation –SIC (Discriminant Validity)

Construct		Construct	Estimate	SIC	Construct	AVE
Value consciousness	<-->	Store Image	0.435	0.19	Price consciousness	0.79
Price consciousness	<-->	Store Image	0.451	0.20	Perceived quality	0.80
PLB Price	<-->	Store Image	0.317	0.10	Store Image	0.82
Perceived quality	<-->	Product Familiarity	0.189	0.04	Product familiarity	0.81
Perceived quality	<-->	Store Image	0.52	0.27	Value consciousness	0.75
PLB Price	<-->	Price consciousness	0.657	0.43	PLB price	0.62
PLB Price	<-->	Perceived quality	0.591	0.35		
Price consciousness	<-->	Perceived quality	0.749	0.56		
PLB Price	<-->	Value consciousness	0.411	0.17		
Value consciousness	<-->	Product Familiarity	0.669	0.45		
Product Familiarity	<-->	Store Image	0.343	0.12		
PLB Price	<-->	Product Familiarity	0.321	0.10		
Price consciousness	<-->	Value consciousness	0.26	0.07		
Perceived quality	<-->	Value consciousness	0.158	0.02		

Source: Based on primary data