Research on the post-purchase behaviour tendency of the product quality to customers in fast-selling marketing

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Abstract
Based on an analysis of the influence of the quality of fast-selling products on customers’ shopping behaviour, this paper discusses the research on the influence of various factors on customers’ shopping behaviour. According to modern scientific methods and literature, theoretical research and social factor analysis, from three angles, namely corporate image, product/service image, and consumer image, six important indicators, such as corporate image, product style and value, consumer characteristics, user’s buying feeling, corporate philosophy and corporate values, are determined, which are the key factors that influence people’s choice behaviour. Considering the key factors in the quality of fast-selling products and the weight of their influence on users’ choice behaviour, according to the development trend of the fast-selling-product industry, this paper provides appropriate guidance on shaping and ensuring the quality of enterprises’ products. Suggestions on image-building and maintenance of fast-selling products are as follows: the image-building of fast-selling products must pay attention to quality, the shaping of brand culture and the practice of brand image communication management.

Keywords: fast-selling products, commodity quality, shopping behaviour, data analysis

1 Introduction
With the development of China’s market, the consumption power of urban people has been enhanced, the social consumption structure has been continuously improved, and the consumption of fast-selling goods has become increasingly obvious [1–3]. Faced with the strong consumption potential of our domestic consumer market and the strong entry of overseas fast-selling products, although fast-selling products must often become the first choice of our domestic consumption with its trendy product design, close-to-the-people product price and quick-response business model [4,5]. Therefore, it is not only of theoretical significance but also of practical application value to conduct a comprehensive and in-depth inquiry into the quality components of fast-selling goods and their influence on consumers’ choice behaviour [6].
Foreign scholars’ research on product quality mainly focuses on its meaning, characteristics, structure, calculation mode, etc. [7, 8], but there is still no unified cognition. However, the components of the product are not simple and fixed, but a kind of cognition that is constructed by a variety of psychological factors in the mind of consumers themselves [9]. Many scholars are more inclined to extend the scope of products to product characters, product community culture and even other national images, and any ideas of consumers themselves can be used as components of products [10, 11]. This very broad concept of commodity quality also confuses the direction and focus of scientific research to a certain extent. The research on the influence mechanism of brand development and consumption in China is mostly focused on the stage of shopping and not buying, and the research tackles various issues [12]. In addition, some research results on customer buying process mainly focus on the positive effect or proof of social and historical factors on customer’s buying behaviour [13]. Some problems related to customers’ shopping behaviour that can be analysed are mostly concentrated in some developed countries. However, because of the differences in the characteristics of various types of goods and the characteristics of Chinese consumers, the above results are not completely suitable for the Chinese market [14].

The fast-moving consumer goods (FMCG) industry belongs to the consumer group with high consumption frequency, short usage time and certain universality; so, it has a large demand for convenient consumption behaviour, which leads to many types and multifarious marketing methods in the industry. Due to the co-existence of various channels between traditional industry and new industry, the concentration of the FMCG industry will gradually increase and its competitiveness will be increasingly enhanced [15, 16]. Commodities have become the key strategy for companies to gain competitive advantage. A large number of results of empirical research show that commodity quality has a positive effect on a company’s operating performance [17]. Compared with durable goods, the biggest feature of fast-selling goods is the low price; so, the competition between industries is fierce. Quality is also used as a barometer to measure the economic health of enterprises [18, 19]. However, service is one of the important determinants of commodities. Therefore, the relationship between service and commodity quality is an important research topic.

2 The overall situation of the FMCG market

2.1 Expounding the related concepts of fast-selling products

Fast-selling enterprises attach importance to repurchase and urgently retain high-quality repeat customers, so that such consumers can ‘come back’ to buy their own goods [20]. Because the concept of ‘fast-selling products’ is for merchants to deeply study the consumption regularity of such products, the concept of ‘fast-selling products’ is only within the research scope of merchants and will not have any negative impact on consumers themselves.

2.2 The evolution of the FMCG market

This paper combs the evolution of the consumer market from four aspects: the whole FMCG market, food and beverage, beauty cosmetics and brands. The general trend of FMCG consumption is slowly rising, and the consumption level of related categories that improve people’s quality of life is rising rapidly [21, 22]. Although the domestic sales of FMCG in China dropped in the first three quarters compared with the same period of last year, the overall consumption level has steadily recovered due to the continuous development of the domestic middle class and the return of residents’ consumption under the control of epidemic travel. After a steady growth of around 5% per year and a stagnation period of economic growth in 2020, in the first 9 months of 2021, the total sales volume and sales volume of global FMCG products will increase by 3.3% and 3.6%, respectively [23]. Although the growth rate is slow, the gap between price growth rate and China’s inflation rate will still narrow compared with that in 2020.
2.3 The process of consumers’ purchasing behaviour

Because of the differences in commodity characteristics and importance, people spend different amounts of time and spirit in making shopping decisions for various commodities, and the consumption process changes accordingly. However, when people choose a certain product, people usually have a decision-making process, which is different due to the differences in the types of commodities purchased and the types of consumers served, but there are still certain rules [24]. The typical purchasing decision-making steps are mainly divided into five aspects: determining demand, obtaining information, comparing and evaluating, choosing actions and post-purchase reaction (Figure 1).

Fig. 1 Flow chart of purchasing decision behaviour

In fact, people do not stipulate that consumers have to go through these five stages when purchasing every product. The shopping process of some goods may be relatively simple, but consumers themselves will skip one stage or reverse another [25, 26]. As a relatively comprehensive shopping process, it tells about all kinds of considerations and activities made by consumers themselves when they are faced with brand-new markets or more complicated shopping situations [27].

3 Research methods

Firstly, this paper selects famous foreign fast-selling products with a relatively mature market to conduct field investigation, compares the related sub-images of the products first and then makes a comprehensive analysis, taking the consumers who have experienced fast-selling products as the main investigation object, and conducts an investigation [28]. Then, correlation analysis and factor analysis are used to distinguish the important indicators that affect consumers’ shopping behaviour. Using regression analysis method, taking consumers’ shopping willingness as the dependent variable, regression equations are established for different independent variables of the key commodity quality index. Finally, by comparing the influence weights of the key factors on consumers’ shopping behaviour, according to the development of the fast-selling-product industry, some reasonable suggestions are provided for the shaping and the guarantee of enterprise commodity quality [29].
4 Research structure and assumptions

4.1 Model construction

Consumer’s purchasing activity is a very complicated and changeable process. Consumer’s own psychology, economic and social environment and various factors of enterprise marketing are the three main factors that affect consumer’s choosing activities [30]. At the same time, the influence of various factors on consumer groups’ choices is quite complicated. If the process of consumer groups’ choices is examined again, the whole research structure will change dynamically, and it is difficult to capture the correlation between them. Although these research results are comprehensive, they contain a huge amount of research information, and the results of scientific research cannot explain the actual consumer groups’ choices [31]. The understanding of in-depth research results will also be simpler and more credible, and the significance of this main factor in the commodity model will be obvious.

After-sales service reliability has a strong influence on the quality of goods, which is also reasonable. Therefore, after-sales service reliability also represents the most critical interest that consumers seek when purchasing in stores [32]. However, the quality of service facilities and the environmental conditions have a strong influence, and suitable working conditions and convenient service facilities are also the main influencing factors for the formation of consumer satisfaction. To some extent, this shows that Chinese consumers’ satisfaction with supermarket services is deeply influenced by their attention to the experience of the supermarket hardware environment. The importance of ‘serving customers from the perspective of consumers’ is also very strong, which shows that they pay more attention to the personalised enjoyment they get from shopping in supermarkets [33].

After comparing various commodity theory models, it is found that Bell’s model provides a comprehensive evaluation of commodities, which can basically cover all the information on commodities. According to the market environment of fast-selling products and their image characteristics, Bell’s model is used to divide the product quality of fast-selling products into three aspects: enterprise image, product image and user image, thus forming a theoretical model suitable for this study, as shown in Figure 2.

![Fig. 2 Main influencing factors of consumers’ purchasing behaviour](image)

![Fig. 3 Commodity quality correlation diagram](image)
4.2 Research hypothesis

Based on the above theoretical considerations, Bell put forward that commodity quality can be characterised by three seed images: commodity quality, product or service image and user image, and the author also intends to take these three dimensional images as the starting point and provide the basic assumptions of this survey [34] (Figure 3).

4.2.1 Commodity quality

Consumers can combine all the information about the products of enterprises and the experience of using enterprises to convert products into commodities. When Chinese consumers know about the quality of commodities, quality occupies a very key position, which has an indirect effect and influence on the choice of commodities. Therefore, the following assumptions are given:

**H 1:** Commodity quality affects consumers’ purchasing behaviour.

**H 2:** Product quality affects user image.

4.2.2 Product or service image

When choosing goods, consumers seek their corresponding inner images from their memories with the help of certain psychological connections and then make purchasing decisions [35]. In some underdeveloped places, the influence of the image of goods and services on consumers’ choice activities is particularly prominent. Therefore, the following assumptions are given:

**H 3:** Product or service image affects consumers’ purchasing behaviour.

**H 4:** Product or service image affects the quality of goods.

**H 5:** The image of goods and services affects the image of users.

4.2.3 User image

According to the concept of the reference theory, the reference group is actually the social individual or the masses used for reference and evaluation after the social individual has made his/her choice or consumption decision. When consumers choose shopping methods or consume goods, they not only pay attention to whether the goods meet their needs but also take into account the attitude of the reference group towards the goods, thus gaining psychological and spiritual recognition. Thus, the following assumptions can be given:

**H 6:** User image will affect consumers’ shopping behaviour.

4.3 Theoretical model problems and assumptions

In the study of the influence of the quality of fast-selling products on the shopping behaviour of consumer groups, the author first used Bell’s measurement model, including the product quality, product and service representation and user representation, and then added some related background variables, such as the characteristics of consumer groups. In the process of consumers’ purchase, it is generally stipulated that seven hypotheses should be provided to study the influence of these factors on the shopping index when making purchase decisions. The research model structure is as follows (Table 1).

Partial least squares (PLS) modelling theory is applied to the analysis and modelling of customer post-purchase behaviour (PPB) intention. Without losing generality, we define independent variable data table X and dependent variable data table Y as follows:

\[ X = (X_1, X_2, \ldots, X_p) = \begin{pmatrix} x_{11} & x_{21} & \cdots & x_{p1} \\ x_{12} & x_{22} & \cdots & x_{p2} \\ \vdots & \vdots & \ddots & \vdots \\ x_{1n} & x_{2n} & \cdots & x_{pn} \end{pmatrix} \] (1)
Table 1 Questionnaire design

<table>
<thead>
<tr>
<th>Variable</th>
<th>Specific indicators</th>
</tr>
</thead>
</table>
| Products and services     | 1. Is the style of fast-selling products fashionable?  
2. The price of fast-selling goods is close to your consumption level.  
3. The quality of fast-selling products is reliable.  
4. Pay attention to strengthening the style positioning of fast-selling products.  
5. Fast-selling products cover all family members  
6. The quality of service personnel is high.  
7. Products use psychological pricing.  
8. Rich variety of products |
| User image                | 1. Most people who use fast-selling products are younger.  
2. People who use fast-selling products are educated.  
3. People who use fast-selling products are low-income people.  
4. People who use fast-selling products have high quality of life. |
| Consumers’ willingness to buy | 1. If I buy this product, I will pay attention to product quality or product service.  
2. I will recommend this product if there are relatives and friends who need it.  
3. I will insist on buying this product  
4. I don’t think there is any other product to replace this product.  
5. I will buy new products. |
| Personal basic data       | 1. Your gender  
2. Your age  
3. Your educational background  
4. Your monthly income |

\[ Y = (Y_1, Y_2, \cdots, Y_q) = \begin{pmatrix} y_{11} & y_{21} & \cdots & y_{q1} \\ y_{12} & y_{22} & \cdots & y_{q2} \\ \vdots & \vdots & \ddots & \vdots \\ y_{1n} & y_{2n} & \cdots & y_{qn} \end{pmatrix} \tag{2} \]

PLS combines the characteristics of non-model cognitive methods such as principal component analysis, canonical correlation analysis and multiple regression modelling methods. The basic principle is as follows. First, the first PLS components \( t_1 \) and \( u_1 \) are extracted from data tables \( X \) and \( Y \), respectively, and \( t_1 \) and \( u_1 \) are required to represent the data variation information in data tables \( X \) and \( Y \), respectively. According to the principle of principal component analysis, the variance of \( t_1 \) and \( u_1 \) is reached.

Maximum extraction conditions:

\[ \text{Var}(t_1) \rightarrow \text{max} \tag{3} \]
\[ \text{Var}(u_1) \rightarrow \text{max} \tag{4} \]

At the same time, due to the need for regression modelling, \( t_1 \) needs to have the maximum explanatory power to \( u_1 \). According to the principle of typical correlation analysis, when the correlation coefficient between \( t_1 \) and \( u_1 \) reaches the maximum, \( t_1 \)'s explanatory power to \( u_1 \) reaches the maximum, that is:

\[ r(t_1, u_1) \rightarrow \text{max} \tag{5} \]

At the same time, considering the above two factors, the PLS regression analysis, i.e. the maximum covariance of \( t_1 \) and \( u_1 \) is the extraction condition:

\[ \text{Cov}(t_1, u_1) = \sqrt{\text{Var}(t_1) \cdot \text{Var}(u_1) \cdot r(t_1, u_1)} \rightarrow \text{max} \tag{6} \]
The above comprehensive analysis can summarise the PLS modelling algorithm as follows:

- Standardised independent variable data table and dependent variable data table are obtained from the original data tables $X$ and $Y$.

$$E_0 = (E_{01} E_{02} \cdots E_{0p})$$

$$F_0 = (F_{01} F_{02} \cdots F_{0q})$$

(1) $w_i = E_{i-1}^T \cdot u_i$

(2) And standardise $||w_i|| = 1$

(3) $t_i = E_{i-1} \cdot w_i$

(4) $b_i = u_i^T \cdot t_i / ||t_i||$ and standardise $||b_i|| = 1$

(5) $F_{\text{residual}} = F_i - b_i \cdot t_i \cdot u_i^T$

(6) $E_{\text{residual}} = E_i - t_i \cdot p_i^T$

(7) Another $i = i + 1$, $E_{i-1} = E_{\text{residual}}$, $F_{i-1} = F_{\text{residual}}$

(8) Turning back to Step (1), after all PLS components are extracted, there are:

$$E_0 = t_1 \cdot p_1^T + t_2 \cdot p_2^T + \ldots + t_m \cdot p_m^T$$

$$F_0 = t_1 \cdot b_1^T + t_2 \cdot b_2^T + \ldots + t_m \cdot b_m^T$$

Because $t_1$ is a linear combination of $E_{0j}$, and $F_{0k}$ is a linear combination of $t_i$, $F_{0k}$ is written in linear combination form about $E_{0j}$

$$(i = 1, 2 \cdots m; \quad j = 1 \sim p; \quad k = 1 \sim q)$$

According to the reverse process of standardisation, reducing $E_0 F_0$ to $xy$ includes the following steps:

$$F_{0k} = \alpha_{1k} \cdot E_{01} + \alpha_{2k} \cdot E_{02} + \cdots + \alpha_{pk} \cdot E_{0p} \quad (k = 1 \sim q)$$

$$Y_k = \alpha_{1k} \cdot X_1 + \alpha_{2k} \cdot X_2 + \cdots + \alpha_{pk} \cdot X_P + C \quad (k = 1 \sim q)$$

According to the customer value (CV) theory, when the perceived utility for customers is higher than the perceived cost, the calculation formulas of perceived value for risk-averse customers and risk-oriented customers are as follows:

$$U^a = U - U \left( e^{d_{SC}} - 1 \right) - U \left( e^{d_{MC}} - 1 \right) - U \left( e^{d_{PC}} - 1 \right) - U \left( e^{d_{RC}} - 1 \right) - U \left( e^{d_{EC}} - 1 \right)$$

$$U^n = \frac{U}{SC} - \frac{U}{MC} - \frac{U}{PC} - \frac{U}{RC} - \frac{U}{EC}$$
First of all, the value of online search can be obtained by calculating the difference between online search utility and search cost.

Yes. Based on the above literature analysis and the AHP method, this paper obtains that the search utility perceived by customers online is

\[ U^s = U_Q^s + U_P^s + U_C^s = 0.4PQ + 0.3SQ + 0.3CN \]  

(23)

Through the extreme value test, the determination of coefficient is reasonable and feasible. Therefore, the online search cost perceived by customers can be obtained as shown in the following formula.

\[ C^s = U \left( e^{\frac{1}{s^2}PQ} - 1 \right) + U \left( e^{\frac{1}{s^2}CN} - 1 \right) + U \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(24)

Because the customer-perceived value can be obtained by calculating the difference between perceived utility and perceived cost, the customer-perceived online search value can be obtained:

\[ V^s = U^s - C^s = 0.4PQ + 0.3SQ + 0.3CN - U^s \left( e^{\frac{1}{s^2}PQ} - 1 \right) - U^s \left( e^{\frac{1}{s^2}CN} - 1 \right) - U^s \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(25)

With the same method as above, we can get the utility function and cost function of customers in the purchasing process.

\[ U^p = U_Q^p + U_P^p + U_S^p = 0.54PQ + 0.16CN + 0.3SQ \]  

(26)

\[ C^p = U \left( e^{\frac{1}{s^2}PQ} - 1 \right) + U \left( e^{\frac{1}{s^2}CN} - 1 \right) + U \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(27)

Customer’s perceived online shopping value:

\[ V^p = U^p - C^p = 0.54PQ + 0.3SQ + 0.16CN - U^p \left( e^{\frac{1}{s^2}PQ} - 1 \right) - U^p \left( e^{\frac{1}{s^2}CN} - 1 \right) - U^p \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(28)

The perceived utility and cost for customers after purchase are as follows:

\[ U^a = U_Q^a + U_C^a + U_S^a = 0.65PQ + 0.1CN + 0.25SQ \]  

(29)

\[ C^a = U \left( e^{\frac{1}{s^2}PQ} - 1 \right) + U \left( e^{\frac{1}{s^2}CN} - 1 \right) + U \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(30)

Customer’s perceived online post-purchase value:

\[ V^a = U^a - C^a = 0.65PQ + 0.1CN + 0.25SQ - U^a \left( e^{\frac{1}{s^2}PQ} - 1 \right) - U^a \left( e^{\frac{1}{s^2}CN} - 1 \right) - U^a \left( e^{\frac{1}{s^2}SQ} - 1 \right) \]  

(31)

4.4 Questionnaire design process

4.4.1 Draw up a questionnaire

Summarising the above research results, first, a questionnaire survey was designed based on the Bell model, and finally all the measurement indexes were confirmed. From among the three levels, each specific investigation index system of fast-selling products and commodity quality is designed respectively, and six indexes are provided according to the user image. At the same time, this questionnaire also sets five indicators according to the intensity of consumers’ shopping intention. Finally, the personal information of the participants in the questionnaire survey set four indicators: disposable income, gender, age and educational background.

4.4.2 Feasibility test of survey questionnaire

After completing the first draft of the questionnaire, the editor hired nearly 20 students from different disciplines in the school to participate in the pre-research stage and discussed the problems with the students. Finally, the editor communicated with the tutor, further revised it and determined the final version of the questionnaire (Table 2).
Table 2  Statistical table of payment for questionnaire distribution

<table>
<thead>
<tr>
<th>Issuing place</th>
<th>Number of questionnaires issued</th>
<th>Questionnaire recovery quantity</th>
<th>Recovery rate (%)</th>
<th>Effective questionnaire quantity</th>
<th>Effective rate (%)</th>
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<tr>
<td>Wanda Plaza</td>
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<td>95</td>
<td>88</td>
<td>93</td>
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<tr>
<td>Walmart</td>
<td>100</td>
<td>91</td>
<td>91</td>
<td>83</td>
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<tr>
<td>Carrefour</td>
<td>100</td>
<td>97</td>
<td>97</td>
<td>93</td>
<td>96</td>
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<td>Amount</td>
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<td>94</td>
<td>264</td>
<td>93</td>
</tr>
</tbody>
</table>

4.4.3 Choose research methods

This questionnaire survey is a mostly manual procedure. Manual survey can communicate directly with participants, so as to obtain real and effective survey data. The survey object of this paper is mainly fast-selling products, and the sample is consumers who have experience in fast-selling products. In order to ensure the scientific selection of survey data, taking into account time and economic requirements, a survey was conducted around Wanda Plaza from January 2022 to March 2022.

4.5 Statistical analysis methods used in this paper

Based on the purpose of data analysis and the requirements of the analysis process, this study used EXCEL software and SPSS data management software to carry out resource management and data analysis. The methods adopted include the following five.

Table 3  Reliability analysis value of overall statistical data

<table>
<thead>
<tr>
<th>Measuring problems</th>
<th>Scale mean value</th>
<th>Scale variance</th>
<th>Overall correlation of correction</th>
<th>Cronbach’s-alpha value</th>
<th>Partial alpha levels</th>
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<tbody>
<tr>
<td>Products and services</td>
<td>Question 1</td>
<td>140.70</td>
<td>100.40</td>
<td>0.27</td>
<td>0.85</td>
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<tr>
<td></td>
<td>Question 2</td>
<td>140.63</td>
<td>99.49</td>
<td>0.69</td>
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<tr>
<td></td>
<td>Question 3</td>
<td>140.61</td>
<td>102.52</td>
<td>0.55</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>Question 4</td>
<td>140.69</td>
<td>96.9</td>
<td>0.61</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Question 5</td>
<td>140.70</td>
<td>100.14</td>
<td>0.61</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Question 6</td>
<td>140.59</td>
<td>97.39</td>
<td>0.46</td>
<td>0.88</td>
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<td></td>
<td>Question 7</td>
<td>140.67</td>
<td>98.94</td>
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<td>Question 8</td>
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<tr>
<td>User image</td>
<td>Question 1</td>
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<td>99.65</td>
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<td>Consumers’ willingness to buy</td>
<td>Question 1</td>
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<td>97.51</td>
<td>0.55</td>
<td>0.84</td>
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<td></td>
<td>Question 2</td>
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<td>100.78</td>
<td>0.60</td>
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</tr>
<tr>
<td>Personal basic data</td>
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<td>140.59</td>
<td>103.75</td>
<td>0.53</td>
<td>0.82</td>
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<tr>
<td></td>
<td>Question 2</td>
<td>140.70</td>
<td>101.24</td>
<td>0.30</td>
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<tr>
<td></td>
<td>Question 3</td>
<td>140.67</td>
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<td>0.38</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Question 4</td>
<td>140.67</td>
<td>100.78</td>
<td>0.60</td>
<td>0.90</td>
</tr>
</tbody>
</table>
4.5.1 Reliability and validity analyses

The quality of the questionnaire method depends on the authenticity and applicability of the data. Most of the questions in this question are in the form of data scale. Firstly, the validity and reliability of the research are analysed according to the data obtained in the scale to determine the authenticity and validity of the research. The reliability of 50 questionnaires collected in the previous period was tested, and the test results are shown in Table 3. The data shows that the reliability coefficients of the questionnaire all meet the requirement that Cronbach $\alpha$ is $>0.7$. It shows that the questionnaire items are consistent with the corresponding dimensions.

4.5.2 Descriptive statistics

The role of descriptive statistical analysis of factors is to show the aggregation degree and dispersion of original statistics and to summarise and master the factors as a whole. In this study, the mean of the sample number is used to describe the aggregation trend of numbers, and the standard deviation of the sampled numbers is used to describe the discrete trend of numbers.

4.5.3 Correlation analysis

Correlation analysis is mainly used to judge the close correlation between two variables, and the degree and manner of their close relationship. This project mainly adopts SPSS correlation analysis method and applies correlation statistical analysis to the data results in the questionnaire.

After all variables are imported, the reliability test by SPSS shows that the $\alpha$ value is 0.848, which means that the overall reliability of the survey data is good and reliable. After testing the data of product or service image, user image, consumer’s buying behaviour and consumer’s own characteristics, the $\alpha$ value of each part is $>0.8$, so the data is reliable (Table 3).

Correlation analysis is used to study whether there is some kind of dependency between objects, as well as to calculate and analyse the specific dependency. Through correlation analysis, we can clearly find the correlation value between different variables. Now, three variables, namely product attributes (PAs), CV and PPB, are analysed by SPSS software, and the results are shown in Table 4. According to the table, the first correlation

<table>
<thead>
<tr>
<th>Canonical correlation analysis</th>
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<td>1</td>
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<td>2</td>
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<tr>
<td>3</td>
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</tbody>
</table>

CV, customer value;
FMCG, fast-moving consumer goods;
PA, product attribute

Table 5 Correlation analysis and test results between FMCG PA and PPB

<table>
<thead>
<tr>
<th>Canonical correlation analysis</th>
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<tbody>
<tr>
<td>1</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>6</td>
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</tbody>
</table>

FMCG, fast-moving consumer goods;
PA, product attribute;
PPB, post-purchase behaviour
Table 6  Regression analysis of FMCG PA and PPB

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standardised coefficient B</th>
<th>Standardisation coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.129</td>
<td>0.123</td>
<td>1.875</td>
<td>0.047</td>
</tr>
<tr>
<td>Product properties</td>
<td>0.064</td>
<td>0.064</td>
<td>1.875</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Dependent variable: PPB

FMCG, fast-moving consumer goods; PA, product attribute; PPB, post-purchase behaviour

coefficient between PA and CV is 0.5, and the second canonical correlation coefficient is 0.343. The canonical correlation coefficient and significance test results show that the first and second canonical correlation coefficients are significant when $\alpha = 0.05$, which indicates that the PAs are positively correlated with CV (Table 4).

The first correlation coefficient between PA and CV is 0.636, and the second canonical correlation coefficient is 0.551. The canonical correlation coefficient and significance test results show that the first and second canonical correlation coefficients are significant when $\alpha = 0.05$, which indicates that PAs are positively correlated with PPB (Table 5).

Regression analysis is used to reveal the relationship between independent variables and dependent variables. We performed linear regression between PA, PPB and CV, and the results are shown in Table 6.

Regression analysis shows that there is a significant relationship between PA and PPB, and the non-standard regression coefficient is 0.119, i.e. PPB is positively correlated with PA, which verifies hypothesis H1. Secondly, from the analysis results, the non-standard regression coefficient for CV and PPB is 0.206, which verifies hypothesis H2. Finally, the analysis results show that there is a positive relationship between CV and PA, and the non-standard regression coefficient is 0.539, which verifies hypothesis H3.

5 Suggestions on image-building and maintenance of fast-selling products

5.1 The image-building of fast-moving products must pay attention to quality

In the long run, for brand development, fast-selling products should pay attention to the material of products, improve the quality from the source of the industrial chain and promote the overall improvement of product quality. Especially in the process of brand development, only by grasping the balance between speed and quality, truly establishing a good brand image and fashion with quality assurance can we stand the test of the market and be recognised by consumers.

5.2 The shaping of brand culture

Product competition and brand competition are the main aspects of enterprises’ marketing activities. Product competition is mainly reflected in the degree of functional satisfaction, while brand competition lies in satisfying consumers’ emotional and psychological demands. Brand culture plays an important role in enhancing a brand’s cultural competitiveness.

5.3 Pay attention to the practice of brand image communication management

I hope that the products used by Bai Ji can be branded with Bai Ji, which can reflect Bai Ji’s unique personality, interests and mood, and the brand personality can realise this desire of consumers. The concept and personality of the brand impress consumers’ hearts by satisfying their psychological needs, and they have a desire to buy and become loyal customers.
6 Conclusion

6.1 Summary

From the perspective of consumers, based on Bell’s model, this study divides the image of FMCG into three dimensions, namely company image, product/service image and user image, and explores the relationship between them and their influence on consumers’ purchasing behaviour, so as to provide a reference for FMCG enterprises in shaping and maintaining their brand image. Through the correlation analysis of survey data and empirical research of questionnaire survey and data analysis, the following conclusions are drawn: the attributes of FMCG products are positively correlated with PPB and CV. In other words, the image of products and services, as well as the image of companies and users, has a significant impact on consumers’ purchasing behaviour. Consumers evaluate the attractiveness of the market offerings according to the characteristics and quality of products, the combination and quality of services and the appropriate price of the offerings. When purchasing products, consumers are most concerned about product quality and price, which serve as the basis for decision-making.

6.2 Limitations of the research

Based on Bell’s model, according to the characteristics of fast-selling products and the reality of China’s consumer market, this study designed a questionnaire on the influence of fast-selling products’ image on consumers’ purchasing behaviour, in order to explore the role and weight of each dimension of fast-selling product image on consumers’ purchasing behaviour, and drew some conclusions through empirical analysis. Throughout the whole research process, due to the limitation of the author’s ability and time, there are some shortcomings in the paper.

- The research design is insufficient: On the basis of synthesis of the research of relevant scholars, the author, according to his own understanding and considering the applicability of the research, will inevitably miss something.

- Limitations of sample range: Due to the limitation of conditions, this study concentrated on several large shopping malls but did not go to other cities. Compared with the huge consumer groups of fast-selling products, the sample size was small.

- The use of a single research method: Due to the time limit, this paper only uses SPSS software for statistical analysis of the data but has not tried other statistical analysis software to verify the hypothesis. Different analysis methods may lead to different conclusions.

References

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