The Impact Of Brand Management On The Design Strategy Of Daily-Used Nixing Pottery

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Abstract

Nixing Pottery is one of the "Four Famous Potteries" in China, and its firing technique is considered a Chinese intangible cultural heritage. Its design primarily mimics the Yixing Pottery among these "Four Famous Potteries". Due to its low popularity, it is difficult to achieve sustainable development of its firing technique and culture through sales. This study aims to explore visual design strategies for today's daily-used Nixing products, starting from the preferences of target consumers, in order to find design approaches that align with the sustainable development of Nixing Pottery. The research was conducted using survey questionnaires, quantitative analysis, and design practices. Firstly, based on the aesthetic preferences of target consumers aged 20-39, designs for daily-used Nixing Pottery products were created. Secondly, a product satisfaction survey was conducted using a Likert scale to verify the established model and the feasibility of the design strategies for daily-used Nixing Pottery. Our research findings indicate that, despite competitive market objectives positioning and in management, the aesthetic perception of simple form has no influence on product design. However, overall, brand management and aesthetic perception have a significant positive impact on the final product design. Products based on the design strategy of Daily-used Nixing Pottery, using this model, are accepted and purchased by consumers. The research on the design strategy of Daily-used Nixing Pottery products discussed in this paper not only serves Nixing Pottery, but also provides a reference for the design of other traditional handicraft products.

Keywords: Daily-used Nixing Pottery, Brand Management, Product Design, Aesthetic Cognition, Traditional Handicrafts.

Introduction

With a history spanning 1300 years, Nixing Pottery, which is daily-used, is one of the "Four Famous Potteries" in China (Yixing Pottery, Nixing Pottery, Jianshui Pottery, Rongchang Pottery). It is a product with a national geographical indication, and its firing technique is a representative project of China's intangible cultural heritage. Since 2003, the local government has established a Nixing Pottery department to provide guidance to Nixing Pottery enterprises. Every three years, a "Three-Year Action Plan for the Development of Qinzhou Nixing Pottery Industry" (www.qinzhou.gov.cn) is formulated to foster the growth of the Nixing Pottery industry.

Inspired by local materials and imitating the Yixing Pottery, the Daily-used Nixing Pottery, influenced by the Yixing Pottery - the foremost of the "Four Famous Potteries" - was developed around 1850 AD, earning the name Yixing Ware. Later, to differentiate it from Yixing Zisha Pottery, it was renamed after a homophonic sound as "Nixing Pottery" (Huang, 2022). The styles of the "Top Ten Famous Pots," which Nixing Pottery has imitated, embody millennia of traditional Chinese aesthetics and serve as a tangible expression of Chinese traditional culture.

As followers of pottery, our daily-used Nixing Pottery products fall under the same category. Yixing Pottery products hold a prominent position in consumers' minds. Nixing Pottery aims to closely keep up, but second-tier brands frequently fall into the trap of doing the opposite. They try to copy the leading brands, aiming to stand firm in the market by "doing better". Despite the fact that Nixing Pottery and Yixing Pottery products exhibit no discernible difference in functionality or quality, they fall short in addressing consumers' psychological concerns. Why do consumers still need Nixing Pottery when they already have Yixing Pottery that can fulfill their practical and spiritual needs? To ensure the sustainable development of

the Nixing Pottery firing technique, new designs are essential to capture the target consumers' minds.

The objective of this paper is to merge the brand management positioning theory with aesthetic cognitive theory, adopting a consumer-centric approach, and through the theoretical model, to investigate the visual design strategies of today's Daily-used Nixing Pottery products. Furthermore, the author corroborates the practicality of the theoretical model through product satisfaction gained from design practices.

In summary, the author primarily focused on two issues during the research process:

- What are the products aimed at young consumers aged 20-39 that are commonly used in daily life?
- Are the theoretical models and design strategies valid based on theoretical assumptions? Which factors play a crucial role?

Literature Review

Product design

Product design refers to the process of transforming a certain purpose or need into a specific physical form or tool, and it is a creative activity that expresses a plan, a planning assumption, or a problem-solving method through a specific carrier. In this process, the shape of the product is demonstrated in a flat or three-dimensional form through the combination of various elements such as lines, symbols, numbers, and colors (Li, 2009). The concept of product design has been jointly developed and improved by numerous experts and scholars, who believe that user-centered product design is a productivity that relies on innovation.

Economist Joseph Alois Schumpeter posited that innovation is the process of introducing a "new combination" of productive factors and production conditions into the production system, which he referred to as "creative destruction." He emphasized that innovation encompasses several situations, namely product innovation, production method innovation, market innovation, and organizational innovation. The aim of innovation is to generate fresh value. Product design is one of the means through which value is created (Schumpeter, 2020). Creativity, as the catalyst of innovation, possesses profound perceptual attributes that facilitate the transformation of aesthetic perception into purchasing behavior, ultimately leading to brand recognition in the market. It necessitates the organization and management of the entire design chain. Product design is founded on the creativity of the innovator,

leveraging existing research findings in creature creation and humanities to integrate innovative concepts, and formulating a logical, original, and practical process for innovation practice (Zhang, 2020). Product design is a crucial aspect of innovation development, hence the strategy of product design is intimately linked to brand innovation. William J. Mitchell (1995) believes that product appearance design must harmonize the product's appearance and function through modeling design, line design, and proportional design, while ensuring that product functionality is met, resulting in an organic unity. Product appearance design must adhere to aesthetic and artistic principles, utilizing color, shape, material, and other elements to craft an appearance that embodies both aesthetic and artistic value, ultimately exhibiting a distinctive design style and brand image. Therefore, the unique design style plays an important role in promoting the brand image and sustainable development of Daily-used Nixing Pottery.

From the perspective of current brand management, if product designs are tailored to anticipate customer aesthetic preferences, this will greatly enhance customer satisfaction and reflect the competitiveness of the product in the market.

Aesthetic cognition

Aesthetic cognition is one of the unique cognitive abilities of humans, which is the ability to perceive and understand beauty. This ability is gradually formed through long-term aesthetic practice and contemplation. aesthetic cognition necessitates the fusion of sensibility and rationality, enabling one not only to discern superficial aesthetic phenomena through sensory experience but also to discern and interpret the profound essence and value of beauty through rational thought and analysis(Zhu,2006).

Aesthetic cognition is not a form of perceptual knowledge, but rather a rational approach to cognition. It surpasses both conceptuality and practicality, standing as an autonomous, transcendental experience (Kant,1790). The famous Maslow's pyramid of needs also suggests that aesthetic cognition serves as a means of self-actualization and self-expression that surpasses physiological needs and safety needs (Maslow, 1954). Product aesthetic design aims to satisfy consumers' higher-level spiritual needs through perceptual means, following the satisfaction of basic product functions (Norman, 2007). When designing a product's appearance, it's crucial to consider market competition and consumer behavior. Targeted designs are carried out based on various market positioning and consumer groups. Simultaneously, designers must endeavor to engage consumers and enhance the

competitiveness of the product in the market via innovative and personalized designs (Mitchell, 2000). For enterprises, innovative thinking is the way to enhance innovation ability, design is considered the axis of the wheel, rather than a simple link in the chain, the role of design thinking is emphasized, and it is believed that people should be placed at the center of the story, putting people first (Brown, 2015).

Modernist aesthetics advocates the design of new products that are simple, rustic, practical, and convenient, shaping the look and style of modernist design (He, 2019). Product design invariably reflects the material survival status and spiritual pursuit of people in the era it is created, irrespective of whether it manifests in the form of commercial art or pure art (Lu, 2018). In our contemporary society, characterized by the rapid advancement of technology, shifts in lifestyle and production methods, and the flourishing of multiculturalism, there have been fundamental shifts in consumer needs.

Current scholars generally believe that aesthetic perception is a fusion of emotional and rational aspects. To find aesthetic needs suitable for target consumers, it's important to discuss consumers' appreciation for Daily-used Nixing Pottery products from both emotional and rational levels. While Daily-used Nixing Pottery products cannot surpass Yixing Purple Pottery, they meet the spiritual and aesthetic needs of consumers in their era. Under modernist aesthetics, Daily-used Nixing Pottery provides a design direction that deviates from the traditional Yixing Pottery aesthetic.

Brand management

The brand positioning theory and brand identity theory are related to consumer demand for products (Kotler, 1997). Brand positioning theory suggests that a brand does not exist independently, but rather is a concept established in the minds of consumers. It posits that brand positioning is the process by which a brand establishes a unique image and position in the minds of consumers, positioned along three dimensions: competitive objectives, consumer needs, and market demands (Ries and Trout, 2021). Brand management involves formulating corresponding product strategies and positioning based on varying levels of demand to meet consumer needs and expectations (Keller, 2017).

The category strategy theory emphasizes that brands pioneer and dominate an entirely new product category, thereby shaping unique category perception in consumers' minds (Aaker, 2004). Concepts such as brand differentiation, brand loyalty, and brand reputation aim to reinforce the brand's

leading position and differentiated advantages. By focusing on the high-end market and pursuing design innovation, the brand's leadership and differentiated advantages can be strengthened, thereby transforming the product into a valuable commodity (Isaacson, 2011).

Both theories involve the consumer's demand and preference for products, and emphasize how brands should match and relate to consumer needs.Brand management targeted at categories can help brands form unique cognitive and competitive advantages in consumers' minds. Daily-used Nixing Pottery products can design new styles based on the needs of target consumers in design, becoming a category of new design styles.

The relationship between brand management, aesthetic perception, and product design

In summary, the product needs to be purposefully designed around brand management and consumer aesthetic perception. Therefore, the theoretical relationship postulated in this study is: brand management determines the target consumer group, the aesthetic perception of the target consumer group determines product design, and product design aids in establishing effective brand management (see Figure 1).

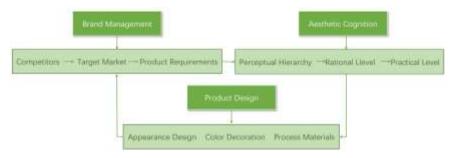
Figure 1: Hypothesized Theoretical Relationships (drawn by author)



Based on the relationship between brand management, aesthetic perception, and product design in Figure 1, this study demonstrates through the satisfaction of Daily-used Nixing Pottery products that the relationship between product design based on brand management, brand management, and

aesthetic perception is proportional. According to the assumed theoretical relationship, the process of product design strategy for Daily-used Nixing Pottery is as follows:

Figure 2: Flowchart of Design Strategy for Daily-used Nixing Pottery (drawn by the author)



Material and Methods

Research Method

This study employs the literature method for qualitative analysis of relevant data. The questionnaire survey method is utilized for quantitative analysis of the data. The design case method is employed to verify the research hypotheses.

Sampling

Qinzhou City, located in the Guangxi Zhuang Autonomous Region, is the origin of raw materials for Daily-used Nixing Pottery. The main users of Nixing Pottery are concentrated in the Guangxi Zhuang Autonomous Region, and the survey area of this study is limited to this region. According to the data from the seventh national census in 2020 (every five years) on the government website of the Guangxi Zhuang Autonomous Region (www.gxzf.gov.cn), the resident population of the whole region is 50,126,804. Based on the age range of youth in the All-China Youth Federation, people aged 20-39 are considered as youth, totaling 12,737,390, accounting for 25.41%.

The sampling method was based on the YAMANE sampling formula proposed by Japanese statistician Yamane in 1967: n=N/(1+N*e2), where n represents the sample size, N represents the population size, and e represents the expected sampling error (Almeda, Capistrano, Sarte, 20101).Random sampling was conducted among the population aged 20-39 in the Guangxi Zhuang Autonomous Region. The error margin was set at 5%, so the sample size was approximately 400 (people) by n=16138873/(1+16138873*0.052).

Research Steps

Step 1: Product design practice. Based on the strategy flow customized by the assumed model, the product design of Dailyused Nixing Pottery is carried out according to the aesthetic preferences of the age group of 20-39 years old.

Step 2: Conduct a product satisfaction survey on the finished products of design practice, verify whether the visual design of Daily-used Nixing Pottery products is successful, and derive a data model between the variables.

Results

Design of Modernist Daily-used Nixing Pottery

Modern aesthetics originates from the modernist movement, characterized by its design features: advocating the integration of art, industry, and craftsmanship, advocating functionalism, opposing any decoration, geometric line decoration, and advocating standardized mass production (Wang, 2015). The art aesthetic of young people is characterized by personalization, liberalization, and innovation: pursuing unique artistic styles and expressions, breaking the boundaries and constraints of traditional art. The aesthetic of young people is an important driving force for the development of contemporary social culture, while modernist aesthetics has had a profound impact on the aesthetic of young people. The product design in this study will be based on modern aesthetics, and the visual design of Daily-used Nixing Pottery products will be carried out from three aspects: shape appearance, color decoration, and material craftsmanship.

The design appearance adopts a relative curve combination. Curves can convey a sense of softness, fluidity, and naturalness, making the design more dynamic and dynamic, and can evoke emotions such as comfort, relaxation, and pleasure. The cognitive psychological characteristics of young people like to pursue personalized products. Therefore, the author used an inclined design method on the traditional shape, visually producing a non-symmetrical shape change. Non-symmetrical designers are a unique form of design with unique charm and aesthetic value, creating a unique visual effect and artistic feeling by breaking the traditional symmetry.

Color decorative grade materials are used. Complementary colors have a strong sense of separation, so using complementary color matching design can effectively enhance the contrast of the overall color scheme, create a sense of distance, and can express special visual contrast and balance effects. When used well, it can make the work feel lively and full of vitality (Stroud, 2005). Nixing Pottery belongs to purple pottery. The color usually changes according to the firing

temperature and additives during the firing process. When the temperature increases from low to high, the color changes from red to purple. The more carbon elements produced during the firing process, the deeper the color (Technical code of pratice for nixing pottery production, T/GXAS 050—2019). The complementary color of purple is yellow, so when color matching, use yellow wood, such as teak, as the pot handle. The wood has been waxed, and the texture and touch are more delicate, with a warm yellow color. The actual product is shown in Figure 3.

Figure 3: One-legged Tea Set (By Author)



Huang Jian, a Master Artisan and a recipient of the title of Guangxi Nixing Pottery Craftsman Master, believes that the design of the Nixing Pottery products used for daily purposes in this study adheres to the modern aesthetic of geometric curvaceous shapes, avoids excessive decoration, and is conducive to mass production methods in industrialization. It visually aligns with modern aesthetic perceptions, emphasizes personalization and ever-changing physical features, and opposes rigid designs.

Product satisfaction survey results

This questionnaire survey was conducted using the online questionnaire platform of Daily-used Nixing Pottery, with a total of 452 questionnaires distributed and 452 actually retrieved. All retrieved questionnaires were fully completed, with no missing questions, and the retrieval rate was 100%. After excluding questionnaires with a completion time of less than 120 seconds and those outside the age range of the survey, the actual valid questionnaires were 402. Since the questionnaire survey used a scale format, all items belonged to continuous numerical data, which is assumed to follow a normal distribution. Therefore, linear regression analysis was mainly used for analysis.

Among the 402 subjects surveyed, the proportion of females to males is 11% higher. The subjects are mainly concentrated in the age group of 20-29, accounting for 62.4%. The subjects are mainly concentrated in the bachelor's degree group, accounting for 64.2%, indicating a certain level of knowledge and cognitive ability. In terms of monthly income, the results

are generally consistent with the actual social situation. Among them, 61.4% of the subjects are aware of Daily-used Nixing Pottery. The specific results are shown in Table 1.

Table 1: Sample Demographic Characteristics

| | Option | Frequency | Percentage (%) |
|-------------------------------|---------------------------|-----------|----------------|
| Gender | Male | 179 | 44.5 |
| Gender | female | 223 | 55.5 |
| A = 0 | 20-29 | 251 | 62.4 |
| Age | 30-39 | 151 | 37.6 |
| | High School | 8 | 2.0 |
| | College degree | 36 | 9.0 |
| Education | Undergraduate | 258 | 64.2 |
| background | Master's degree candidate | 90 | 22.4 |
| | Doctoral candidate | 10 | 2.5 |
| | ≤2500 | 113 | 28.1 |
| | 2501-4000 | 57 | 14.2 |
| Monthly income | 4001-5500 | 74 | 18.4 |
| | 5501-10000 | 130 | 32.3 |
| | ≥10001 | 28 | 7.0 |
| Do you know | Yes | 247 | 61.4 |
| Daily-used Nixing Pottery? | No | 155 | 38.6 |

The Cronbach α reliability coefficients of each variable and the overall scale of the questionnaire are 0.889, 0.886, 0.870, and 0.943, respectively. All values are above 0.8, indicating good reliability of the scale. The detailed results are shown in Table 2.

Table 2: Reliability Analysis of the Scale

| Variable | Clonbach Alpha | Number of Items |
|-------------------------|-------------------|--------------------|
| Aesthetic Cognition | 0.889 | 7 |
| Product Design | 0.886 | 6 |
| Brand Management | 0.870 | 4 |
| Scale Overall | 0.943 | 17 |

The model fit test results indicate that CMIN/DF (Chi-square degrees of freedom ratio) = 3.558, indicating good model

fit.RMSEA (Root Mean Square Error of Approximation) = 0.080, indicating good model fit.Additionally, the IFI, TLI, and CFI all reached excellent levels of over 0.9.Therefore, based on the comprehensive analysis results, it can be concluded that the CFA model has good fit.Detailed results are presented in Table 3

Table 3: Model Fit Test

| Indicator | Reference Standard | Value |
|-----------|--|-------|
| CMIN/DF | 1-3 are excellent, 3-5 are good | 3.558 |
| RMSEA | Excellence is defined as < 0.05 , good is defined as < 0.08 | 0.080 |
| IFI | Excellence is defined as \leq 0.05, good is defined as \leq 0.08 | 0.930 |
| TLI | Excellence is defined as \leq 0.05, good is defined as \leq 0.08 | 0.917 |
| CFI | Excellence is defined as $<$ 0.05, good is defined as $<$ 0.08 | 0.930 |

On the premise that the model has a good fit, the convergent validity (AVE) and composite reliability (CR) of each dimension of the scale will be further tested. The test process calculates the standardized factor loadings of each item in the corresponding dimension through the established CFA model. In this scale validity test, the AVE values of each dimension have reached over 0.5, and the CR values have reached over 0.7, indicating that each dimension has good convergent validity and composite reliability. The specific results are shown in Table 4.

Table 4: Confirmatory Factor Measurement Model

| Path relationship | | Estimate | AVE | CR | |
|-------------------|---|----------------------------|-------|--------|--------|
| AC7 | < | Aesthetic Cognition | 0.764 | | |
| AC6 | < | Aesthetic Cognition | 0.751 | | |
| AC5 | < | Aesthetic Cognition | 0.77 | | |
| AC4 | < | Aesthetic Cognition | 0.754 | 0.5385 | 0.8906 |
| AC3 | < | Aesthetic Cognition | 0.74 | | |
| AC2 | < | Aesthetic Cognition | 0.713 | | |
| AC1 | < | Aesthetic Cognition | 0.636 | | |
| PD1 | < | Product Design | 0.69 | | |
| PD2 | < | Product Design | 0.765 | | |
| PD3 | < | Product Design | 0.744 | 0.5718 | 0.8887 |
| PD4 | < | Product Design | 0.785 | 0.5716 | 0.0007 |
| PD5 | < | Product Design | 0.835 | | |
| PD6 | < | Product Design | 0.709 | | |
| BM4 | < | Brand Management | 0.879 | | |
| BM3 | < | Brand Management | 0.862 | 0.6446 | 0.8778 |
| BM2 | < | Brand Management | 0.78 | | |

BM1 <--- Brand Management 0.674

In this study, the Pearson correlation coefficient test was used to examine the discriminant validity. The standardized correlation coefficients between each variable were all below 0.85, indicating that there is no collinearity among the variables and that they have good discriminant validity. The P values between each dimension of each variable were all less than 0.01, showing a significant positive correlation. The means of the three variables were 4.21, 4.18, and 4.02, respectively. All of these means were significantly higher than the neutral score of 3. The P value of the single-sample T test was less than 0.05, indicating that the results of the three variables were positive. The design of Daily-used Nixing Pottery products in this study was successful. Specific results are shown in Table 5.

Table 5: Correlation Test Results of Various Dimensions of the Scale

| Variable | 1 | 2 | 3 | Mean ± Standard Deviation | Test Valu e | Т |
|-----------------------|---------|---------|---|---------------------------------|-------------------|--------|
| 1.Aesthetic Cognition | 1 | | | 4.21±0.60 | 3.00 | 40.278 |
| 2.Product Design | 0.769** | 1 | | 4.18±0.62 | 3.00 | 38.256 |
| 3.Brand Management | 0.666** | 0.688** | 1 | 4.02±0.71 | 3.00 | 28.597 |

**. 0.01 level (two-tailed), the correlation is significant. Since it is a 5-point Likert scale, a score of 3 represents neutrality, so the test value is 3.

Based on the correlation analysis in the previous section, it is concluded that there is a significant correlation between product design, brand management, and aesthetic perception. Further investigation is needed to examine the impact of brand management and aesthetic perception on product design.

The statistical method selected is regression analysis. As the questionnaire used in this survey is a five-item Likert scale, which is a continuous numerical variable, linear regression analysis was chosen. The independent variables are brand management and aesthetic perception, and the dependent variable is product design. The model fitting is good, with an adjusted R-square value of 0.646. The closer the R-square value is to 1, the better the fitting. The degree of influence of the independent variable on the dependent variable in this regression analysis reached 64.6%, which means that 64.6% of the change in the dependent variable was caused by the dimensions of the two independent variables. The specific results are presented in Table 6.

Table 6: Results of Linear Regression Analysis

| | В | Beta | Т | Р | VIF |
|----------------------------|-------|-------|---------|-------|-------|
| (Constant) | 0.663 | | 5.013 | 0.000 | |
| Aesthetic Cognition | 0.574 | 0.558 | 14.004 | 0.000 | 1.797 |
| Brand | 0.274 | 0.317 | 7.947 | 0.000 | 1.797 |
| Management | | | | | |
| R^2 | | | 0.646 | | |
| F | | | 366.113 | | |
| Р | | | < 0.001 | | |
| DW | | | 2.135 | | |

The linear regression model of this study is significant, with F=366.113 and P<0.001<0.05. Therefore, at least one of the two independent variables can significantly affect the dependent variable. The test of the regression coefficients of the two independent variables can ultimately lead to:

Aesthetic Cognition can significantly positively affect product design, with an impact coefficient of 0.558 (T=14.004, P=0.000<0.05), that is, the higher the value of Aesthetic Cognition, the higher the value of product design. The quantitative relationship between the two is: for every 1-point increase in the value of Aesthetic Cognition, the value of product design increases by 0.558 points.

Brand Management can significantly positively influence product design, with an influence coefficient of 0.317 (T=7.947, P=0.000<0.05), that is, the higher the value of Brand Management, the higher the value of product design. The quantitative relationship between the two is: for every 1-point increase in the value of Brand Management, the value of product design increases by 0.317 points.

Finally, the linear regression equation can be obtained as follows:

Product Design=0.663+0.574×Aesthetic Cognition +0.274×Brand Management

The VIF values of the two independent variable dimensions in the linear regression are all less than 5, indicating that there is no multicollinearity between the independent variable dimensions, and the multicollinearity diagnosis has been passed. The Durbin-Watson (DW) = 2.135, which is very close to 2, indicating that there is no serial correlation between the independent variable dimensions, and the serial correlation diagnosis has been passed.

The SEM model path relationship hypothesis test results of product design influencing factors were ultimately obtained.In this study's path hypothesis relationship test, the P value between each pair of variables was less than 0.05.Paths H1-H3 were all established, and they had significant positive impacts.

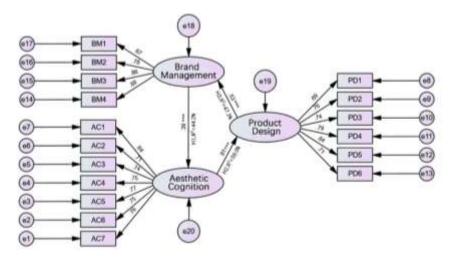
The specific items represent different dimensions in the variables. In aesthetic cognition, AC1 and AC2 respectively represent the simplicity and uniqueness of the product's form. The influence of these two factors on product design satisfaction is not significant. In brand marketing, except for BM1, which represents the needs of the target consumers, the other three items represent the influence of the two dimensions of competitive positioning and target market on product design satisfaction, which is not significant. The detailed analysis data is shown in Table 7. Figure 4 displays the results of the structural equation model.

Table 7: Results of the SEM model path relationship hypothesis test for product design influencing factors

| Path Sequence Number | Path relationship | | | Estimate | S.E. | C.R. | Р | R ² |
|----------------------------|------------------------|---|------------------------|----------|-------|------------|-------|----------------|
| H1 | Aesthetic Cognition | < | Brand Management | 0.703 | 0.047 | 12.74 1 | *** | 44.2% |
| H2 | Product Design | < | Aesthetic Cognition | 0.714 | 0.054 | 10.12 2 | *** | 59% |
| Н3 | Brand Management | < | Product Design | 0.223 | 0.035 | 4.169 | *** | 47.3% |
| | Product Design | < | AC1 | 0.041 | 0.026 | 1.592 | 0.111 | |
| | Product Design | < | AC2 | 0.013 | 0.024 | 0.554 | 0.58 | |
| | Product Design | < | AC3 | 0.052 | 0.026 | 1.979 | ** | |
| | Product Design | < | AC4 | 0.08 | 0.03 | 2.668 | *** | |
| | Product Design | < | AC5 | 0.075 | 0.032 | 2.3 | ** | |
| | Product Design | < | AC6 | 0.071 | 0.026 | 2.73 | *** | |
| | Product Design | < | AC7 | 0.131 | 0.026 | 4.952 | *** | |
| | Product Design | < | BM1 | 0.117 | 0.025 | 4.76 | *** | |
| | Product Design | < | BM2 | 0.015 | 0.026 | 0.592 | 0.554 | |
| | Product Design | < | BM3 | 0.04 | 0.031 | 1.282 | 0.2 | |
| | Product Design | < | BM4 | 0.045 | 0.031 | 1.439 | 0.15 | |

At the 0.01 level (two-tailed), ***. At the 0.05 level (two-tailed), **. The correlation is significant.

Figure 4: Structural Model (drawn by the author)



Discussion

The design of Daily-used Nixing Pottery has always been seeking better ways for sustainable development of its firing techniques. The government has a planned custom development strategy to promote the development of the Nixing Pottery industry. Schools specialize in training Nixing Pottery technicians with modern aesthetics. However, there is little research on the brand management, design aesthetics, and consumer psychology of Nixing Pottery, and there is no interdisciplinary integration of brand management, aesthetic perception, and product design.

Therefore, the purpose of this study is to develop a product design theoretical model that includes brand management and aesthetic cognition for Daily-used Nixing Pottery. Based on the product design practice of Daily-used Nixing Pottery, the feasibility of product strategies based on the assumed theoretical model is verified. The results of this study indicate that there is a significant positive impact among the three assumed relationships between the constructed concepts, therefore the research model is generally reasonable. Our model indicates that if the target consumers are positioned through brand management, and the aesthetic cognitive characteristics of the target consumers are targeted for product design, the target consumers are willing to purchase Daily-used Nixing Pottery products, thereby helping the sustainable development of Nixing Pottery firing skills.

Christopher Wilk believes that modernist designers oppose excessive decoration and embellishment, and advocate for simplicity, geometricization, and rationalization of forms. (Wilk, 2008) Charles Eames' furniture and products reflect the geometric, minimal, and comfortable characteristics of

modernist design. German industrial designer Dieter Rams advocates for a design philosophy of simplicity, geometricization, and functionalism. American inventor and designer Buckminster Fuller advocates for solving problems with the most simplified forms and structures. These famous modernist designers all believe that one of the main characteristics of modernist design is simplicity. However, in our research, it was not found that young people aged 20-39 preferred the simple shapes in modernist design, as shown in Table 7. Young people aged 20-39 do not care about the simplicity of the design of Daily-used Nixing Pottery products. In terms of other dimensions, complementary color combinations and different material combinations are in line with modernist aesthetic characteristics, with strong contrasts highlighting individuality. In terms of shape, the asymmetric shape of the product is unique, meeting the needs of young people who pursue individuality.

In this study, it was found that the dimension of target market competition positioning in brand management positioning theory has a minor impact on product design. The consumer's demand for product design has an impact on the final product design, indicating that the design of the product itself is the most influential factor in consumer satisfaction with the product.

Our findings suggest that, although brand management, competition positioning, and market goals in aesthetic perception of simplicity have no influence on product design, overall, brand management and aesthetic perception have a significant positive impact on the final design of the product. The product design strategy practice based on the data structure model of this study for Daily-used Nixing Pottery is accepted and purchased by consumers.

Authors' Contributions

Throughout the entire research process, Leng Jiaqian was responsible for planning, designing the product, analyzing the data, and writing all content except for the section on data interpretation; Pastraporn Thipayasothorn was in charge of writing the section on data interpretation; and Thanate Piromkan was responsible for developing and writing the survey questionnaire based on the literature review.

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