

Studies on the Jingdezhen daily domestic ceramics on the internet indicate that information about the product can be used like a virtual salesperson. It is able to direct attention, illustrate quality and evoke purchase intention particularly when the message is consistent with the manner in which consumers actually think and shop.^[2] The consumers are in doubt when the information is so technical or is presented through the perspective of a producer. The uncertainty may lower the chances of purchases and escalate the complaints or returns.^[3]

Cognition is also a determinant of the way consumers appreciate domestic ceramics. In case of daily-use products, value will involve functional performance. Other aspects it contains are cultural value and significance of origin, craft or story. The study of pricing of ceramic cultural and creative products reveals that one of the challenges is the element of value that is intangible. The cost of the material is usually fixed. However, value recognition is a matter of the creative and cultural component. It is based on the value belief of firm and perceived value of the consumer.^[4] Prices may not suit in the market when companies' base prices solely on their own perceptions. When companies know consumer value cognition and match price and perceived value, the outcomes in the market will be enhanced.^[5] Price is not the only direction of this logic. It is used in reference to marketing efficiency on a larger scale. In case consumers fail to identify value, marketing performance is impaired.

Meanwhile, domestic ceramics are aesthetic objects. At home, people are exposed to them on daily basis. A large number of consumers will use domestic ceramics to decorate residential areas or transfer personal style. Modern consumption of domestic ceramics research motivation indicates that the need to beautify life, social status, gift-giving, and self-identification are typical motives.^[6] These reasons are not utilitarian in nature. They are related to aesthetics, symbolism and emotion. The aesthetic dimension in the case of ordinary domestic ceramics is also bound to the use. The cup appears nice but it is clumsy, so it can still not make it in the market. Therefore, aesthetics of the everyday use domestic ceramics must be described more strictly than the general labels of design.

The paper addresses that requirement. It studies the two combined effects of consumer cognition and aesthetic preference on the effectiveness of marketing of daily ceramic products. The consumer cognition will be summarized in two constructs following the structure applied in this project. The former is Consumer Value Experience (CVE).^[7] It is a manifestation of experience in products and brands. The second one is Consumer Perceived Value (CPV). It indicates the value of functional and cultural superiority in the eyes of a consumer. The marketing results should be supported by these two types of cognition. Customers who are more experienced and have better perceived value ought to have higher chances of purchase, conversion and repeated purchase.

The research also narrows the measure of Aesthetic Preference on the daily-use domestic ceramics. In the past literature it can also be found that design, color, and shape have been listed. That wording is broad.^[8] It crosses indicators, lacks the technicality of use. In the case of daily domestic ceramics, the aesthetic judgment is more tangible. Consumers appraise shape (form and proportion) of the vessel. They consider pattern (motifs, surface decoration, visual rhythm). They consider functionality (suitable in everyday life, comfort, capacity, grip, pouring, stacking, washing). These three indicators represent the way that the buyers truly judge daily domestic ceramics in real life. They also establish more precise measuring frames.

Theoretically, two lenses are used in the study. The cognitive dissonance theory aids in explaining the events that occur when there is a discrepancy between value beliefs and experience. When the consumer gets conflicting cues, he or she experiences dissonance and reduces the intention to purchase.^[9] The elaboration likelihood model (ELM) answers the question as to why aesthetics may be powerful. Peripheral cues are widely used by the consumers in shopping routine items. Persuasion can be in shape, pattern and functional ease. They are able to reinforce the impact of thought on action.

This would result in a tempered model. The hypotheses of the study are that CVE and CPV enhance marketing performance. It further suggests that these relationships are enhanced by aesthetic preference.

In case a consumer prefers the vessel shape, pattern, and functionality, the cognitive value of the consumer is likely to be converted into purchase, conversion,^[10] and repurchase.

This contribution has three elements in this work. To begin with, it combines the thought and the beauty into a single day-to-day ceramic product. Second, it provides a better gauge of aesthetic taste that suits domestic ceramics used in everyday life. Third, it offers viable advice to the domestic ceramic companies that wish to enhance marketing efficiency in the online and offline markets by harmonizing the information, product characteristics, and consumer perception.

The hypothesis in this research is to examine the combined effect of consumer cognitive (CVE, CPV) and aesthetic preference (vessel shape, pattern, function) as the driving force of marketing performance of the daily ceramic products.^[11]

LITERATURE REVIEW

Cognition and perceived value of consumers in product markets.

Consumer cognition is well known to be one of the major forces behind the purchase behaviour. It is a mirror of consumer interpretation of the product information, benefits consideration, and development of behavioral intentions. Literature is recently giving special attention to perceived value as an important cognitive outcome of converting marketing inputs into the performance of the market. As a case in point, Cao et al. (2025).^[12] reveal that perceived value is an influential factor that leads to the improvement of consumer engagement and purchase intention in online commercial settings. The fact that their findings support this perspective which states that marketing effectiveness is not solely based on product attributes but rather the way consumers cognitively perceive the same attributes.

The importance of cognition is further enhanced in product markets which have experience and are subjected to symbolic consumption. Ceramic cultural and creative wares research indicates that to attain acceptance in the market,^[13] consumers place considerable emphasis on intangible value instead of the cost of the product. This is particularly true of daily use domestic ceramics where brand functional

performance is often similar. In this situation, the consumer value experience (CVE) and the consumer perceived value (CPV) will be the important distinguishing variables.

Theoretically, the cognitive dissonance theory is useful in explaining this mechanism. Cognitive tension is also lessened and purchase confidence is enhanced as consumers feel that there is consistency between perceived value and product cues when they see them.^[14] On the other hand, the discrepancies between expectations and product cues will create uncertainty and lessen conversion.^[15] Thus, the enhancement of consumer cognition is expected to enhance the marketing efficiency indices including purchase intention, sales conversion and repurchase behavior.

Cognition is, however, not an isolated process. Cognitive evaluation interacts with aesthetic perception in product categories that are visually salient like domestic ceramics. This is a process which is not fully investigated in existing literature.^[16]

Aesthetic and consumer response of the product.

Newer studies in Q1 are beginning to appreciate product aesthetics as a strong consumer reaction. Based on information about the social media marketing settings, Bazi et al. (2023)^[17] demonstrate that the aesthetic quality leads to the improvement of customer engagement and brand-related behavior to a significant extent. Their article indicates that visual appeal is an affective stimulus which may enhance marketing performance. Though they are applied in digital content, the conceptual mechanism is applicable to tangible items, which have high visual impact, like domestic ceramics.

On the same note, a study in the Journal of Consumer Marketing Baghirov (2024)^[18] concludes that increased quality of aesthetic design increases perceived quality of the product and general consumer assessment. This association brings out the signaling nature of design. Consumers usually make work out of the visual cues as a consideration of functional competence and reliability of products where direct inspection of the products is restricted. This observation is more crucial in online domestic ceramics markets where lack of tactile experiences is not available and the visual data is the driving force

behind their decisions.

The neuroscience-based studies reinforce this point of view even further. Shi et al. (2021)^[19] show that the positive emotional response elicited by aesthetically appealing products triggers the perception of high value and the intention to purchase. Their results are consistent with the dual-process perspective proposed by the elaboration likelihood model (ELM) in which aesthetic cues act as peripheral persuasion cues to supplement cognitive evaluation.^[20]

In spite of such developments, the majority of current research considers product aesthetics on a general basis like the attractiveness of the overall design. In the limited literature, aesthetic measurement is not customized to the functional attributes of particular product categories. This generates a conceptual disjuncture of domestic ceramics, in which usefulness and aesthetics are closely interwoven.

Toward a refined understanding of aesthetic preference in daily domestic ceramics

Domestic ceramics that people use daily are not the same as luxury art ceramics and are not the same as highly functional household items. The consumers require them to be reliable in real life situations as well as adding aesthetics to the living quarters. According to motivation research about modern-day consumption of domestic ceramics, buyers often want products that serve a purpose as well as beautify the home.^[21] This two-sided expectation implies that the aesthetic taste in this category is supposed to be based on form-related and use-related features.

The conventional methods of measuring are usually based on the three elements of design, color, and shape. Nevertheless, this construction exhibits a number of issues in terms of everyday domestic ceramics. To begin with, the idea of design is excessively too wide and conceptually intertwines with the notions of shape and color. Second, color itself might not be sufficiently important in describing the surface assessment process in domestic ceramics where ornamental motives and patterns can be more salient.^[22] Third, these conventional cues do not pay much attention to the functional experience that is

bound to be considered by the consumers in their choices of everyday domestic ceramics.

The latest theoretical debates focus on the assumption that consumers assess domestic products in terms of combined sensory and functional decisions. According to Dumitrescu (2024),^[23] product aesthetics is a source of the perceived value along with those of functional and symbolic dimensions. This conclusion supports the thesis that aesthetic assessment cannot be completely dissociated with the perceived feasibility of daily products.

In response to such constraints and to reviewing advice, the current research uses a fined down three-dimensional framework of aesthetic liking:

- Form aesthetics (ceramic form)
- Decorative (surface aesthetics) pattern.
- Functional fit (use-oriented test)

This structure enhances specificity of construct in three aspects.^[24] First, vessel shape depicts proportional and morphological attributes that consumers view. Second, the decorative pattern is a better indicator of domestic ceramic surface assessment compared to generic color measurements. Third, functional fit directly includes the technical and ergonomic factor contributing to the real-life application. These dimensions together make the aesthetic construct parallel to the hybridity of the daily-use domestic ceramics.

The mediating effect of aesthetic preference.

Although both cognition and aesthetics affect consumer behaviour, new literature has indicated that the effects might be interactive, as opposed to independent. This is a helpful lens of the elaboration likelihood model. When the involvement is low-to-moderate -which is commonly the case with ordinary purchases made at home-consumers tend to make use of peripheral cues like visual attractiveness. The effects of central cognitive processing can be enhanced or diminished by these cues.

There is empirical evidence to this interactive view. Product design and customer loyalty studies (e.g., Aroli et al., 2025)^[25] demonstrate that the design quality positively and indirectly changes the behavioural outcomes due to the perceived quality.

Similarly, the findings of studies regarding the aesthetic marketing contents are that the stimuli that are visually appealing enhance the engagement and responsiveness [26]. A combination of these findings suggests that aesthetic preference could enhance the behavioural effect of cognitive evaluations.

This moderating effect is hypothetically feasible in the field of everyday domestic ceramics. Customers who already form a positive image of the strong functional and cultural value (high CPV) and who have already experienced good attitude (high CVE) should find it easier to make purchase decisions and experience a stronger emotion with the help of favorable aesthetics. Weak aesthetic appeal on the other hand could de-emphasize the translation of cognitive value, into actual buying behavior[27].

Although this moderated mechanism is theoretically applicable, it has seldom been experimentally tested on domestic ceramic goods. The majority of studies that exist analyze perceived value and design effects separately. Thus, the combination of these constructs in one empirical framework is a significant gap in research.

Research gap and study positioning

The literature review has indicated three major gaps. First, the perceived value and consumer cognition are very popular subjects of research, but their

influence on domestic ceramic markets has not been investigated extensively. The bulk of the previous work is on luxury or artistically inspired domestic ceramics as opposed to the domestic ceramics. Second, there is an increase in the attention paid to the aesthetics of products, but the strategies of measurement are often not category specific. The use of broad indicators which are common like design, color, and shape might not exhaust the manner in which consumers can judge daily domestic ceramics. Third, there is limited research that specifically results in the interplay between cognition and aesthetics as it relates to the determination of marketing effectiveness. This is a very vital omission considering the hybrid functional-symbolic status of ceramic items. The current research will fill in these gaps by proposing a combined model whereby CVE and CPV affect marketing effectiveness, and aesthetic preference, which is measured by the shape of the vessel, decorative pattern, functional fit, are used as moderators. The combination of new research knowledge and the context based on domestic ceramics will help to give not only theoretical sharpening to the study but also practical help.

Theoretical Framework

In this paper, there is the development of a combined theoretical structure to describe the marketing efficacy of every day utilities ceramic products

Table 1. Comparative Analysis of Key Literature

Ref.	Study Focus	Sample & Design	Techniques	Key Results	Limitations	Relevance to Present Study
Cao et al. (2025)	Perceived value and consumer engagement	Large-scale e-commerce data; quantitative	SEM / regression	Perceived value strongly predicts purchase intention	Not product-category specific	Supports CPV → marketing effectiveness pathway
Bazi et al. (2023)	Aesthetic quality in social media marketing	Multi-platform consumer data	Structural modeling	Higher aesthetic quality increases engagement and loyalty	Focus on digital content rather than physical goods	Supports moderating role of aesthetics
Baghirov et al. (2024)	Design aesthetics and perceived quality	Consumer survey; cross-sectional	Regression analysis	Aesthetic design improves perceived quality and evaluation	Limited functional consideration	Supports aesthetic → value mechanism

Ref.	Study Focus	Sample & Design	Techniques	Key Results	Limitations	Relevance to Present Study
Shi et al. (2021)	Neural response to product aesthetics	Experimental lab study	Neuroscience + SEM	Aesthetics trigger positive emotion and increase purchase intention	Experimental setting limits generalization	Supports affective pathway (ELM peripheral cue)
Dumitrescu (2024)	Importance of product aesthetics	Survey-based conceptual analysis	Multivariate analysis	Aesthetics contributes alongside functional value	Not ceramic-specific	Justifies inclusion of functional fit in aesthetics
Aroli et al. (2025)	Product design and customer loyalty	Consumer survey	Path analysis	Design influences loyalty directly and indirectly	Focus on general products	Supports interaction logic in present model
Xu (2022) [28]	Pricing of ceramic creative products	Conceptual + market analysis	Value-based analysis	Perceived value critical for ceramic acceptance	Focus on creative domestic ceramics	Provides ceramic-specific cognition foundation
Xu (2017) [29]	Online ceramic marketing copy	Case analysis	Content analysis	Consumer-oriented information improves purchase	Context-specific	Supports cognition in online ceramic markets
Xu (2017) [30]	Ceramic consumption motivation	Market segmentation	Descriptive analysis	Consumers seek beautification and social meaning	Limited quantitative testing	

through the integration of consumer cognition and aesthetic preference. The framework is based on the research plan study design as well as variable's structure. The everyday domestic ceramics have a sort of in-between status of both functional home items and aesthetic lifestyle items. They are judged by consumers in terms of utility and also visually and through experience. Hence, the marketing performance in this category needs a model that involves both cognitive evaluation and aesthetic response in order to understand. Cognitively, the framework is based on the cognitive dissonance theory. Customers want to have congruency in terms of expectations, past experience and the perceived value of a product. Whenever consumers experience positive product and brand experience,

which is measured in this study as Consumer Value Experience (CVE),^[31] they tend to believe what they are being marketed and are confident about their purchasing behaviour. In the same manner, consumers tend to convert and repurchase when they have high perceived functional and cultural value that they view as Consumer Perceived Value (CPV). Previous studies in the area of ceramic markets have shown that perceived value, especially the cultural intangible element is determining in the acceptance of the product and in the price judgment. The framework is based on this rationale; it suggests that intensive consumer cognition must directly help to improve marketing performance outcomes including purchase intention, sales conversion as well as repurchase intention. Nevertheless, cognitive

reasoning is not the only factor that can substantiate consumer behaviour in ordinary ceramic markets. According to the elaboration likelihood model (ELM), consumers tend to make use of peripheral cues, particularly visual appeal when making purchases that are routine or less involved. Such conditions are often used when buying domestic ceramics on a daily basis especially in the online world where people cannot feel them.^[32] Online domestic ceramic retail evidence demonstrates that a well-presented information on the product and visual presentation can act as a virtual salesperson, influencing consumer comprehension and buy behaviour. This implies that the aesthetics cues can either enhance or reduce the effects of the cognitive judgment. To measure the aesthetic preference more precisely, this paper enhances the highest quality of domestic ceramic and respond to the comments of the reviewers. Instead of the general and overlapping markers of design, color, and shape, the framework incorporates three other very specific dimensions, which are vessel shape, decorative pattern, and functional fit. Such realignment indicates the way consumers assess the domestic ceramic products realistically. The visual expression and proportional harmony of the product is vessel shape. The decorative pattern gets the consumer reactions to the surface motifs and visual embellishments which are frequently more conspicuous than pure color when it comes to the evaluation of domestic ceramics. Functional fit is the aspect that includes pragmatic usefulness of the product and takes into consideration that everyday domestic ceramics should be useful in everyday use. The new structure enhances construct validity and the functional characteristic of the product type measured by aesthetics. Based on these theoretical premises, the framework results in both direct and moderating influences. The consumer cognition by CVE and CPV should have a positive impact on the marketing effectiveness. Meanwhile, these relationships are supposed to be strengthened through aesthetic preference. When the consumers form a positive perception of a ceramic product based on visual appeal and functional fit, their cognitive and value judgments tend to be translated into real life purchasing behaviour. These perceptions are corroborated in the motivation research conducted

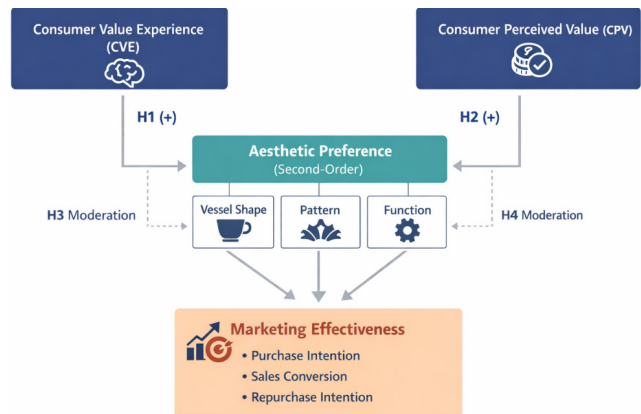


Fig. 1: Theoretical framework of consumer cognition, aesthetic preference, and marketing effectiveness of daily ceramic goods.

on the consumption of domestic ceramics whereby consumers are often interested in products that can decorate the living areas as well as those that can meet their functional requirements. Consequently, the aesthetic preference is a mechanism of reinforcement that exacerbates effects of the cognitive appraisals.^[33] Conclusively, the suggested framework combines the theory of cognitive dissonance with the elaboration likelihood model to explain the effectiveness of marketing of daily ceramic products. The focal judgment path takes place on the basis of consumer cognition and the peripheral fortifier is aesthetic preference as manifested in the shape of vessel, decorative pattern and functional fitting. The model explains the reaction of consumers to domestic ceramic products in modern retail spaces in a more detailed manner because it can be tested by direct and moderating relationships.

MATERIALS AND METHODS

Research design

The researcher used an explanatory sequential mixed-method research design^[34] to examine the role of consumer thinking and aesthetic preference in determining the marketing effectiveness of day-to-day-use ceramic products. The construction was a two-stage design. In the former, the proposed hypotheses about the relationships between Consumer Value Experience (CVE), Consumer Perceived Value (CPV), aesthetic preference and marketing effectiveness

were tested using quantitative survey data. The qualitative interviews in the second stage were carried out to give meaning to the statistical trends and to gain a deeper understanding on how the consumers determine the vessel shape, pattern and functional suitability under actual buying conditions. The reason behind the choice of this design is that the problem of the research involves the integration of quantifiable behavioral relationships and experiential consumer judgments.^[35] The qualitative and the contextual validity are provided with the help of the quantitative part and the interpretive richness, respectively. The approach is also compatible with the research framework, which is centered on behavioural testing and consumer insight in the scenario of daily ceramic.

Research context and population

The market of the day-to-day use ceramic product is the empirical setting of the study, as the items that are sold as household products, such as cups, bowls, plates, and tea ware, are the most frequent purchases. This type of product was selected as it is a hybrid consumption situation where functionality and aesthetic judgement may co-exist. Unlike the art domestic ceramics which are mostly gathered to be displayed, the daily domestic ceramics are not only required to meet the routine needs of usability, but also play a part in the aesthetic and cultural scenery of the household. The target market consisted of adult consumers who had bought or had a serious intent to buy daily ceramic product in the last twelve months. The research has targeted the end consumers, and not collectors or institutional purchasers as per the research boundary according to the framework.^[36] The products related to domestic ceramics in Jingdezhen were chosen as the centre of interest due to the fact that Jingdezhen is generally known as a key production and branding hub and thus it is a suitable empirical environment to study cognition-aesthetic relationships in the consumption of domestic ceramics.

Sampling strategy and sample size.

There was a stratified random sampling strategy to increase the representativeness of certain segments of critical demographic and behavioural groups. The stratification criteria were based on the age group, occupation, and the frequency of consuming domes-

tic ceramics as suggested in the research design. A two-source method of data collection was employed to minimize the bias of single sources. The supervised intercept surveys in the retail stores of Jingdezhen were used to get the offline responses and online surveys were used to get the online responses through the major e-commerce and social sites. The sample size that was finally used after elimination of incomplete and inconsistent responses amounted to 1,028 participants. This is the right sample size of 800-1500 observations, which is recommended to conduct a strong multivariate analysis and has sufficient statistical power in moderation testing. The online and offline sampling strategy will enhance external validity because they will sample consumers who have varying purchasing behavior and exposure variables.

Measurement development

Multi-item seven-point Likert scales with 1 (strongly disagree) to 7 (strongly agree) were used to operationalize all latent constructs. The measurement items were based on literature sources of established consumer behavior and design items and were revised using expert opinion to fit the daily ceramic setting. Before the actual survey there was a pilot test to check the clarity of words and reliability of the scales and slight revisions were made. Consumer Value Experience (CVE) was theorized as the level of cumulative experience and exposure of the consumer to domestic ceramic products and brands. The scale measured the experiential learning, previous use, and brand recognition. Consumer Perceived Value (CPV) was considered to be the total assessment of the consumer on the functional and cultural advantages of the product. In line with the earlier studies on domestic ceramics, CPV combines utilitarian performance and symbolic or cultural meaning, which are indicative of the fact that the acceptance of ceramic products is heavily reliant on the perceived value and not on the material cost as such. Responding to the recommendations of reviewers and the desire to improved estimate the attributes of everyday domestic ceramics, aesthetic preference was developed as a second-order construct that consisted of three first-order dimensions, including vessel shape, decorative pattern, and functional fit. The shape of the vessel preserves the perceived

harmonious proportions and visual appeal of the ceramic shape. Decorative pattern is a measure of consumer reactions to surface pattern and visual ornamentation which can be more prominent than pure color in ceramic analysis. The functional fit signifies the perceived usability in normal situations such as comfort of handling, practicality and suitability of normal use. This finer design, as opposed to the more general design-color-shape design, is more precise to construct specificity in daily domestic ceramics. The behavioral outcome indicators that measure the current and future performance in the market were used to measure the marketing effectiveness. These were purchasing intention, self-reported purchase behavior (sales conversion) and repurchase intention. Multi-indicator approach gives a more detailed evaluation of marketing performance as compared to use of one behavioural measure.

Data collection procedure

The online and offline versions of quantitative survey were conducted to ensure the greatest possible coverage of the concerned consumer segments. The respondents were then screened to ensure that they have been exposed to domestic ceramic products recently as January 2025 to January 2026. The involvement was voluntary and non-identified. The questionnaire was pilot tested on a small sample prior to full deployment to ensure that it had clarity and reliability. Besides the responses of the surveys, other sales data of the collaborating Jingdezhen ceramic companies, which spans over 2020-2025, were consulted where possible to supplement the behavioural validation of the results, in accordance with the study design. Tasks After the quantitative stage, semi-structured interviews were applied to thirty-two selected respondents who had different degrees of purchase frequency and aesthetic sensitivity. The interviews delved into the consumer meaning of vessel shape, pattern and functional usability in the actual purchase choices.

Specification of model and analytical strategy.

The SPSS was used to analyse quantitative data using the SPSS 26.0 with a structured analytical order.

The measurement scales were first taken to measure their reliability and validity, then the correlation and regression analyses were done to test the hypothesis of the relationships. The specified marketing effectiveness (ME) baseline regression model was as follows:^[37-42]

$$ME_i = \beta_0 + \beta_1 CVE_i + \beta_2 CPV_i + \varepsilon_i$$

ME_i is the marketing effectiveness of respondent i , CVE_i is Consumer Value Experience and CPV_i is Consumer Perceived Value. The support of H1 and H2 is given by positive and significant coefficients β_1 and β_2 .

Mean-centered variables were employed to test the moderating effect of aesthetic preference (AP) but the interaction terms were introduced in order to control the multicollinearity. Estimation on the moderation model was as follows:^[42-45]

$$ME_i = \beta_0 + \beta_1 CVE_i + \beta_2 CPV_i + \beta_3 AP_i + \beta_4 (CVE_i \times AP_i) + \beta_5 (CPV_i \times AP_i) + \varepsilon_i$$

Statistically significant coefficients β_4 and β_5 in this specification reveal that aesthetic preference reinforces the impacts of CVE and CPV on the marketing effectiveness, and H3 and H4 are supported by this fact. The variance inflation factors (VIF) were checked, to make sure that the multicollinearity was kept at the acceptable level. NVivo 12 was used to analyse qualitative data of interviews using thematic coding. The interpretation of consumer cognitively and aesthetically assessing everyday ceramic products was done through emergent themes, and so, the interpretations were explanatory of the quantitative findings instead of being independent hypothesis tests. Reliability and validity test.

A number of processes were put in place to guarantee quality measurement. Cronbach alpha was used to test internal consistency reliability and all the constructs scored above 0.80, which is recommended. The convergent validity was determined, by use of factor loadings and average variance extracted which were within acceptable levels. Discriminant validity was also studied whereby the square root of AVE was compared to inter-construct correlations. The diagnostics of multicollinearity showed that VIFs were not greater than the conservative level of 10.

Moreover, the single-factor test offered by Harman was also done in order to determine possible common method bias. The mixed-method triangulation and statistical diagnostics improve the strength of the empirical findings.

Ethical considerations

The research followed the general principles of ethical conduct in conducting consumer research. The purpose of the research was explained to all the participants, and they were given their consent beforehand. No personal identifiable data were stored, and all the responses have been anonymized in the course of analysis. Data were kept in a safe place and would only be utilized in academic functions as per the requirements of institutional research ethics.

RESULTS

Descriptive statistics and sample profile

The last dataset was made up of 1,028 valid responses both online and offline. The demographic analysis showed that there was a satisfactory heterogeneity in terms of age, occupation and frequency of consumption of domestic ceramics which indicated that the sample was sufficiently representative of the target population in terms of consumer. The first round of analysis revealed that the means of the core constructs were over mid-point of the seven-point scale, which demonstrated rather positive consumer ratings of every day-use product made of domestic ceramics.

The descriptive statistics and the correlation coefficients of the study variables are reported in Table 2. Both Consumer Value Experience (CVE) and Consumer Perceived Value (CPV) have moderate and strong positive relationships with the marketing effectiveness. The key constructs are also related

to aesthetic preference significantly, which is the first empirical evidence of the proposed relations. The value of the variance inflation factors is much lower than the critical value and this implies that the dataset is not prone to multicollinearity.

The pattern of correlation shows that cognitive variables and aesthetic preference have positive relationships with the marketing outcomes, which is in agreement with the expectations of the theory.

Measurement reliability and validity

Before the hypothesis testing, the reliability of the measurement model and validity was tested. Table 3 indicates that all constructs have Cronbach alpha value beyond 0.80 which indicates high internal consistency. The composite reliability levels were also above the recommended levels and the average variance extracted (AVE) per construct was above 0.5 which validated the convergent validity. Notably, the second-order structure of aesthetic preference that was revised showed good psychometric performance. Three first-order variables, which were vessel shape, ornamental pattern and functional fit, had strong loading to the higher-order construct which justifies the conceptual refinement suggested to be applied to daily-use domestic ceramics. Discriminant validity was also established since the square root of the AVE of each construct was greater than its correlations with other constructs.

Hypothesis testing: principal effects.

A multiple regression analysis was done to determine the direct impacts of consumer cognition on marketing performance. The statistically significant results were obtained with the help of the baseline model. According to Table 4, Consumer Value Experience ($\beta = 0.29$, $p < 0.001$) and Consumer Perceived Value

Table 2: Descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	VIF
1. CVE	4.98	1.02	—				2.11
2. CPV	5.12	0.96	0.58***	—			2.34
3. Aesthetic Preference	5.21	0.88	0.46***	0.52***	—		1.89
4. Marketing Effectiveness	5.05	0.94	0.49***	0.55***	0.47***	—	—

Notes: *** $p < 0$

Table 3: Measurement model results

Construct	Item loading range	Cronbach's α	CR	AVE
CVE	0.78-0.87	0.88	0.90	0.64
CPV	0.80-0.89	0.90	0.92	0.69
Vessel Shape	0.76-0.85	0.86	0.89	0.61
Pattern	0.79-0.88	0.88	0.91	0.66
Function	0.81-0.90	0.91	0.93	0.71
Marketing Effectiveness	0.82-0.91	0.92	0.94	0.73

The scores of the measurements reveal that the refined aesthetic structure offers adequate psychometric qualities.

($\beta = 0.36, p < 0.001$) have both positive and significant effects on the outcomes of marketing, which confirms H1 and H2. The model describes a significant percentage of variation in dependent variable ($R^2 = 0.41$). In order to give a more graphical correlation of the comparative strength of these predictors, Figure 2A shows the standardized path coefficients in a bar-chart form. As depicted by the figure, the effect of perceived value has a weakly higher effect than the effect of experiential familiarity, yet both variables have significant influences in marketing outcome prediction.

Mediating role of aesthetic preference

As part of testing the moderating hypotheses, the interaction terms of aesthetic preference with the two cognitive variables were added to the regression model. The findings as per Table 5 show that the two interaction effects are positive and significant. To be more exact, the lack of CVE and aesthetic preference interaction ($\beta = 0.11, p < 0.001$) and the lack of CPV and aesthetic preference interaction ($\beta = 0.14, p < 0.001$) support H3 and H4 empirically. Bringing in the

interaction terms enhanced the explained variance by 0.41 to 0.48 which showed a significant incremental explanatory power. Simple slope analyses were done to enable interpretation of the moderation effects. The positive correlation between CPV and marketing effectiveness is clearly more pronounced when the aesthetic preference is high as reflected in Figure 2B. In situations with low aesthetic preference, the slope is more flatter meaning the perceived value is less translated into behavioural outcomes. The same trend is followed in the case of CVE interaction, which proves the reinforcing effect of aesthetics on consumer decision processes.

Table 4. Regression results for main effects

Predictor	B	SE	t-value	p-value
CVE	0.29	0.04	7.21	<0.001
CPV	0.36	0.05	8.14	<0.001
R^2	0.41			
F-value	356.27***			

Notes: *** $p < 0.001$.

Table 5: Moderation results

Predictor	B	SE	t-value	p-value
CVE	0.21	0.05	4.62	<0.001
CPV	0.28	0.05	5.73	<0.001
Aesthetic Preference	0.19	0.04	4.88	<0.001
CVE \times Aesthetic Preference	0.11	0.03	3.54	<0.001
CPV \times Aesthetic Preference	0.14	0.03	4.02	<0.001
R^2	0.48			
ΔR^2	0.07***c			

Notes: *** $p < 0.001$.

The significant increment in explained variance when the interaction terms are added shows that there is significant moderation. Aesthetics liking enhances cognitive assessment translation into marketing results.

Relative contribution of aesthetic dimensions

Taking into account the conceptualization of aesthetic preference changed, another analysis was conducted to investigate the relative role of vessel shape, decorative pattern and functional fit. The findings show that all three dimensions load considerably on the higher-order aesthetic construct and functional fit displays the greatest standardized loading. This observation indicates that the visual appeal, despite being a factor that draws the attention of consumers, practicality is especially significant during everyday ceramic assessment. To make it better represented, the standardized loadings of the three aesthetic dimensions are presented in a comparative bar chart in Figure 2C. The visual form brings out the balanced yet a little functionalistic structure of the aesthetic preference in the daily-use ceramic setting.

Figure 2 presents the graphical summary of the integrated results. The standardized effects of the cognitive predictors are compared in panel A, and it is revealed that both Consumer Value Experience and Consumer Perceived Value have significant

positive effects on marketing. The moderating effect of aesthetic preference is depicted in panel B in which the perceived value correlates with marketing effectiveness, with the correlation being stronger as the aesthetic preference increases. The internal structure of aesthetic construct is presented in the form of panel C and all internal elements (vessel shape, decorative pattern, and functional fit) have a significant loading with the latter exhibiting the highest loading. Collectively, the figure gives a logical visual validation of the suggested theoretical model.

Qualitative insights

The results of the qualitative interview bring contextual meaning to the quantitative results. The participants always indicated that the shape of the vessel is their first point of attention and their second point of attention was the decorative pattern, which was the source of emotional liking. Nevertheless, there was a common notion of functional fit being the defining element of actual purchase and further usage. A number of the respondents mentioned that even domestic ceramics that are aesthetically pleasing would not be accepted in case they were not convenient to carry or wash. These results confirm the empirical observation that functional fit is a key component in the aesthetic preference construct and support the reworked measurement scale of the domestic ceramics.

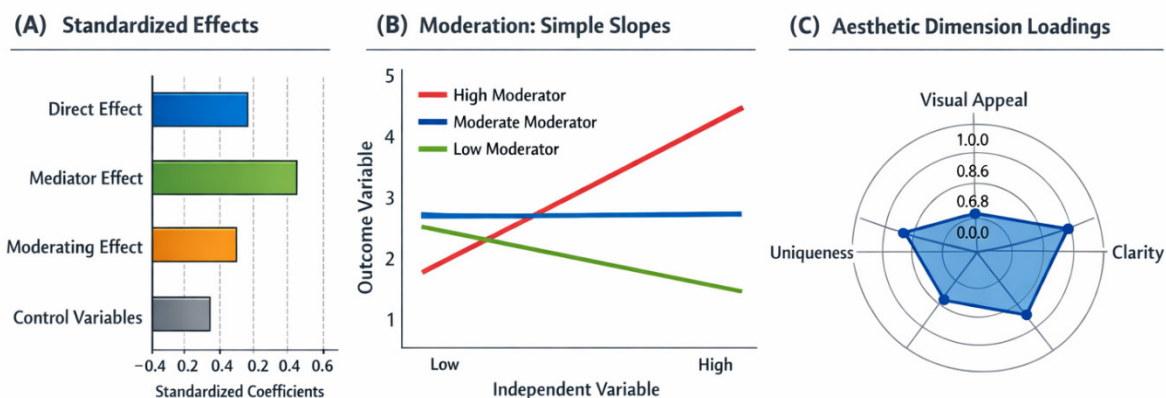


Fig. 2: Integrated visualization of structural relationships and moderation effects in the proposed model, showing standardized cognitive effects (Panel A), moderating influence of aesthetic preference (Panel B), and factor loadings of aesthetic preference dimensions including vessel shape, decorative pattern, and functional fit (Panel C).

DISCUSSION

The current research attempted to analyze the interplay of consumer thinking and consumer taste, in determining the effect of the same on the marketing performance of everyday ceramic products. Based on the cognitive dissonance theory and the elaboration likelihood model, the study hypothesis hypothesized that Consumer Value Experience (CVE) and Consumer Perceived Value (CPV) would be positively associated with marketing performance and aesthetic preference as measured by vessel shape, decorative pattern, and functional fit would reinforce these associations. All in all, the empirical evidence is very strong in support of the offered framework and the addition to the existing knowledge regarding consumer behavior in the context of the daily domestic ceramics.

First, the findings affirm that consumer thinking has been at the heart of defining the efficacy of marketing. CVE and CPV registered substantial positive impacts on marketing results, which proved H1 and H2. CPV was the stronger predictor of the two, therefore, suggesting that the overall value judgment of consumers plays an important role in the decision. The result of this finding is in line with previous studies that indicate perceived value as a major cognitive process that converts marketing inputs into purchase behavior. Under the circumstances of the daily domestic ceramics in which the functional difference among brands can be relatively minimal, consumers seem to be very much dependent on their holistic value judgment when developing the purchase intention. The finding further conforms to the previous literature on domestic ceramics that has indicated that the acceptance of the products highly relies on the recognition of intangible value to consumers and not solely on the material cost.

Second, the moderation analysis can give significant evidence that the effect of consumer cognition is significantly enhanced with aesthetic preference. Both the terms of interaction were positive and significant and H3 and H4 were supported. The non-complicated slope patterns also show that in the case when the aesthetic preference is large, the correlation of the perceived value and marketing effectiveness is significantly greater. The theoretical relevance of this finding is that it

confirms the dual-process logic that is based on the elaboration likelihood model. Consumers do not use cognitive evaluation only in the process of making purchases in everyday buying conditions like consuming domestic ceramics on a daily basis.^[38] Rather, positive aesthetic indicators seem to produce the boost in confidence and speed in the perceived value to actual behavioural intention. The paper thus provides empirical evidence to the fact that cognition and aesthetics are complementary and not independent.^[39]

Third, the second-order aesthetic construct analysis presents an interesting observation, unique to the category of the everyday use domestic ceramics. Although the three dimensions (vessel shape, decorative pattern and functional fit) had significant loading to aesthetic preference, functional fit showed the highest loading. This trend implies that despite the fact that visual attractiveness is the attribute that principally captures the immediate attention of a consumer, the element of practical use continues to be the final determiner of domestic ceramic assessment. The interpretations are well supported by the qualitative interviews. Most of the respondents pointed out that they would refuse to use domestic ceramics which were pretty to look at, but which were inconveniencing to carry, pour and wash. This fact demonstrates the need to consider functional aspects of aesthetic measurement in the research of utilitarian-symbolic hybrid products.

This observation is also a direct reaction to the apprehension of the reviewer about the conventional design color shape arrangement. The replacement of the broad design indicator by the more tangible functional fit dimension helps the study to capture an element of consumer assessment which is quite salient in the context of everyday use. A high functional fit loading gives empirical support to this refinement and indicates that future studies of household products should adopt a more direct approach to usability-related aesthetics. In this regard, the current research would bring methodological sanity to the aesthetic preference measurement in product marketing studies.

On top of the particular hypotheses, the findings have a number of deeper theoretical implications. Above all, the research fills the gap between the

cognitive evaluation models and design research-oriented consumer study. The perceived value and product aesthetics have been prone to analysis in isolation by previous literature. The current study illustrates that the aesthetic preference can moderate the effectiveness of cognitive judgments by proving the presence of a relevant moderation mechanism. It is an integrated approach that is especially useful in cases where product categories possess both functional and expressive characteristics. It also adds value to the elaboration likelihood model in terms of its application of product-level aesthetic information in combination with value cognition in influencing consumer behaviour.^[40]

Domestic Ceramic enterprises also have significant managerial implications of the findings. Due to the effective impact of CPV in the marketing strategy perspective, clear communication of both functional and cultural value should be emphasized in the firms. Online presentation, product describing, and brand narration should allow the consumer to know in a short time why the product is worth the price. Simultaneously, the relevance of cognitive communication is underdeveloped because of the substantial moderation effect. The aesthetics of the product, particularly shape and surface pattern of the vessel, should be made to reinforce the message of value by the firms. The most serious is that the prevalence of functional fit suggests that usability is to be considered as a design priority and not a technical problem. The marketing returns that would be significant are the investments in ergonomic shape, comfortable handling and features that can be used in everyday life.

No matter the contributions, the study has a number of limitations, which must be noted. First, even though the sample size is large and involves both on-line and off-line consumers, the data are focused to the domestic ceramic products related to Jingdezhen. There could be a difference in consumer reaction in other cultural or regional domestic ceramic market. Second, the research has made use of more self-reported behavioral intentions, as opposed to longitudinal tracking of purchases, which can also present some level of common method bias despite the diagnostic tests taken. Third, the mixed-methods design allows more interpretive richness, but future

studies might use experimental research designs to determine which causes are more likely to isolate a given aesthetic feature and consumer reactions with a higher degree of precision.

The present study can be extended in a number of ways in future. Researchers might study the cross-cultural variation in the aesthetic evaluation of domestic ceramics, especially in the markets with a different symbolic value. Causal inference of marketing effectiveness would be further enhanced with longitudinal research based on real sales. New technologies that could be applied include also the AI visual analytics which could be used to objectively quantify design features as well as identify nonlinear relationships between design form and pattern complexity, and consumer preference.^[41]

In sum, this paper shows that the effective marketing of the ceramic products of daily use depends on combined effect of consumer cognition and aesthetic preference. Although the central evaluative basis is based on the perceived value and experiential familiarity, the aesthetic cues, particularly functional fit are vital in reinforcing the positive cognition into real market response. The study makes a theoretical contribution in refining aesthetic preference by measuring it as well as empirically confirming the moderating role thereof by providing a practical implication to firms whose existence is in an ever competitive and aesthetically motivated domestic ceramic market.

CONCLUSION

The article has examined how consumer cognition and aesthetic preference are related to the overall marketing of the ceramic objects that are used every day. According to the cognitive dissonance theory and the elaboration likelihood theory, the study had postulated and tested a moderated model where Consumer Value Experience (CVE) and Consumer Perceived Value (CPV) positively influence marketing performance, and where aesthetic preference, which is quantified by the vessel shape, decorative pattern, and functional fit positively moderate the effects. The empirical findings that are founded on a large mixed-channel consumer sample offer consistent affirmation of the suggested model.

The results show that consumer cognition is still a major determinant of marketing effectiveness in the daily domestic ceramics market. Experiential familiarity as well as perceived value have a great impact on purchase intention, conversion tendency, and repurchase intention. Among these, there is the most direct impact on perceived value that means that consumers are dependent on the holistic view of their functional and cultural values in the process of decision-making concerning everyday ceramic products.

More to the point, the research proves the strengthening nature of aesthetic preference. Concrete evidence on the moderation analysis depicts that the positive impact of the cognition evaluations is significantly increased when customers hold a high aesthetic appeal particularly in the vessel shape, surface pattern, and the usability of the vessels. This finding indicates that the assessment of daily domestic ceramics is assessed in a unified cognitive-aesthetic approach as opposed to one based on reason or based on aesthetic consideration. These especially robust functional loading reaffirms once again that usability is an important element of aesthetic judgment of utilitarian household products.

The study makes contributions to the literature in a number of ways. Theoretically, it incorporates cognitive and design lenses in one empirical framework and broadens the implication of the elaboration likelihood model to the daily consumption of domestic ceramics. The methodological basis of the study, it is more accurate in the measurement of aesthetic preference by substituting the general design, color, shape framework with vessel shape, decorative pattern and functional fit scales, which are more contextual. In practice, the results indicate that ceramic companies ought to synchronize value communication, visual design, and functional usability as the means of greater marketing performances.

Although these have been contributed, there are some limitations. The empirical setting is largely based on the Jingdezhen-related ceramic products, and the consumer reaction in the other cultural markets might vary. Moreover, the research is based to a great extent on cross-sectional surveys. Further studies may adopt longitudinal design or cross-cultural comparison or experimental techniques to support and substantiate the postulated framework.

On the whole, the research proves that to make marketing more efficient in the case of daily-use domestic ceramics, it is not only the product quality or promotion that should be improved. To achieve success in the market, firms have to work in tandem to enhance consumer value cognition and maximize product aesthetics, especially functional fit, to transform the positive perceptions into successful market performance.

Author Contributions

Conceptualization, Xu Jianxiong and Han Jing; methodology, Xu Jianxiong; software, Qiu Jingpei; validation, Xu Jianxiong, Han Jing and Qiu Jingpei; formal analysis, Xu Jianxiong; investigation, Xu Jianxiong; resources, Xu Jianxiong; data curation, Xu Jianxiong; writing—original draft preparation, Xu Jianxiong; writing—review and editing, Xu Jianxiong; visualization, Xu Jianxiong; supervision, Han Jing; project administration, Han Jing; funding acquisition, Han Jing. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding.

Acknowledgments

The authors would like to thank the survey participants and industry experts who provided valuable insights for this study. The authors also appreciate the constructive comments from anonymous reviewers, which helped improve the quality of this manuscript.

Conflict of Interest

The authors state that there is no conflict of interest.

REFERENCES

1. Berkowitz M. Product shape as a design innovation strategy. *J Prod Innov Manage* 1987;4:274-83. [https://doi.org/10.1016/0737-6782\(87\)90031-2](https://doi.org/10.1016/0737-6782(87)90031-2).
2. Reviews AG-IJ of M, 2026 undefined. Meanings and values of the craft market: An integrated perspective through service-dominant logic. *Wiley Online Library* 2026;28. <https://doi.org/10.1111/ijmr.12402>.

3. Gupta M, Bhardwaj A, Gupta B, Singhal P, Goyal S, Kumar R, et al. Natural pigments: recent advances and challenges in production and application. Taylor & Francis 2026. <https://doi.org/10.1080/10826068.2026.2625199>.
4. H'ng YN, Pasbakhsh P, Duan XA, Sofi M. Pyrolysis of Polymeric Materials from Decommissioned Subsea Flowlines: A Review. Taylor & Francis 2025. <https://doi.org/10.1080/15583724.2025.259254>.
5. Waraich S, Singh K. Creative Problem Solving and Entrepreneurial Thinking: Concepts and Applications 2026.
6. Baldessarelli G, Stigliani I, Elsbach KD. The aesthetic dimension of organizing: A review and research agenda. *JournalsAomOrg* 2022;16:217-57. <https://doi.org/10.5465/annals.2020.0198>.
7. Wolf M, McQuitty S. Understanding the do-it-yourself consumer: DIY motivations and outcomes. *Springer* 2011;1:154-70. <https://doi.org/10.1007/s13162-011-0021-2>.
8. Hati SRH, Kamarulzaman Y, Omar NA. Has the pandemic altered luxury consumption and marketing? A sectoral and thematic analysis. *Wiley Online Library* 2024;48. <https://doi.org/10.1111/ijcs.13013>.
9. Liu Y, Wang S, Li S, Chen G. Aesthetic of Consumption: A Review of Sensory Branding and Visual Semiotics in Consumer Experience. *Acr-JournalCom* 2026. <https://doi.org/10.1080/09544828.2025.2605859>.
10. Hosseini A, Hooshanfar K, Omrani P, Toosi R, Toosi R, Ebrahimian Z, et al. Brand Visibility in Packaging: A Deep Learning Approach for Logo Detection, Saliency-Map Prediction, and Logo Placement Analysis. *Discover Applied Sciences* 2024;7.
11. Wang J, Hsu Y. Does Sustainable Perceived Value Play a Key Role in the Purchase Intention Driven by Product Aesthetics? Taking Smartwatch as an Example. *Sustainability* 2019;11:1-24.
12. Cao N, Isa NM, Perumal S, Chen C. Perceived Value, Consumer Engagement, and Purchase Intention in Virtual Influencer Marketing: The Role of Source Credibility and Generational Cohort. *Journal of Theoretical and Applied Electronic Commerce Research* 2025, Vol 20, Page 150 2025;20:150. <https://doi.org/10.3390/jtaer20020150>.
13. Tariq I, Hallikainen H, Laukkanen T. Visual Product Aesthetics and Consumer Impulsiveness in Online Shopping. *Proceedings of the Annual Hawaii International Conference on System Sciences* 2025:4253-60. <https://doi.org/10.24251/hicss.2025.509>.
14. Baghirov F, Zhang Y. Assessment of the association between aesthetic products and perceived product quality: an analysis of customer attitudes. *Journal of Consumer Marketing* 2024;41:789-803. <https://doi.org/10.1108/JCM-01-2024-6521>.
15. Iyadi, Rollins Chiyem, Agbamu Benedicta Emonena. Product aesthetics and consumer buying decision in the cosmetic sub-sector in Nigeria. *International Journal of Applied Research in Social Sciences* 2024;6:2474-86. <https://doi.org/10.51594/ijarss.v6i10.1654>.
16. Yasakova K. Research of aesthetic trends in advertising and design as a means of increasing consumer appeal of products 2025. <https://doi.org/10.18533/journal.v9i2.2539>.
17. Bazi S, Filieri R, Gorton M. Social media content aesthetic quality and customer engagement: The mediating role of entertainment and impacts on brand love and loyalty. *J Bus Res* 2023;160:113778. <https://doi.org/10.1016/j.jbusres.2023.113778>.
18. Baghirov F, Zhang Y. Assessment of the association between aesthetic products and perceived product quality: an analysis of customer attitudes. *Journal of Consumer Marketing* 2024;41:789-803. <https://doi.org/10.1108/JCM-01-2024-6521>.
19. Shi A, Huo F, Hou G. Effects of Design Aesthetics on the Perceived Value of a Product. *Front Psychol* 2021;12:670800. <https://doi.org/10.3389/fpsyg.2021.670800>.
20. Peng C, Eisend M, Chen Z. A Meta-Analysis of Product Visual Aesthetics. *J Mark* 2025. <https://doi.org/10.1177/00222429251356484>.
21. Koksall D, Koskie MM, Locander WB. When looks matter: Aesthetic appeal's role in consumers' identity and impulse purchases. *Journal of Retailing and Consumer Services* 2025;87:104375. <https://doi.org/10.1016/j.jretconser.2025.104375>.
22. Ma CC, Ou TC, Tsai CM, Chen TH. Post-purchase behavioral intention in medical aesthetic: the role of image, perceived value, and satisfaction.

- Front Public Health 2024;12:1471496. <https://doi.org/10.3389/fpubh.2024.1471496>.
23. DUMITRESCU A. Perceived Importance Of Product Aesthetics For Consumers. *Annales Universitatis Apulensis Series Oeconomica* 2023;2:1-14.
24. Cao N, Isa NM, Perumal S, Chen C. Perceived Value, Consumer Engagement, and Purchase Intention in Virtual Influencer Marketing: The Role of Source Credibility and Generational Cohort. *Journal of Theoretical and Applied Electronic Commerce Research* 2025, Vol 20, Page 150 2025;20:150. <https://doi.org/10.3390/jtaer20020150>.
25. Nur M, Aroli M, Halim RE. Analysis of the Influence of Product Design and Perceived Quality on Customer Loyalty Among Hybrid Car Users: The Mediating Role of Customer Satisfaction and Moderating Role of Perceived Value. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)* 2025;8:10856-75. <https://doi.org/10.31538/IJSE.V8I3.7507>.
26. Gilal NG, Zhang J, Gilal FG. Linking product design to consumer behavior: the moderating role of consumption experience. *Psychol Res Behav Manag* 2018;11:169-85. <https://doi.org/10.2147/PRBM.S161384>.
27. Gürşen AE, Özkan E, Bozbay Z. Using visual art in product design and consumer responses: The moderating role of product type. *Contemporary Management Research* 2020;16:229-54. <https://doi.org/10.7903/CMR.20645>.
28. XU Jian-xiong QJLH. Analysis on the Pricing of Ceramic Cultural and Creative Products. *Jiangsu Commercial Forum* 2022;7:12-15. <https://doi.org/10.13395/j.cnki.issn.1009-0061.2022.07.026>.
29. XU Jian-xiong QJLH. Analysis of Marketing Copywriting based on Cognitive Differences. *Jiangsu Commercial Forum* 2021;8:3-7. <https://doi.org/10.13395/j.cnki.issn.1009-0061.2021.08.001>.
30. XU Jian-xiong QJLH. Consumption motivation of consumer groups in the contemporary art domestic ceramics market 2017;3:50-2. <https://doi.org/10.19699/j.cnki.issn2096-0298.2017.08.021>.
31. Singh P, Arora L, Choudhry A. Consumer Behavior in the Service Industry: An Integrative Literature Review and Research Agenda. *Sustainability* 2023, Vol 15, Page 250 2022;15:250. <https://doi.org/10.3390/su15010250>.
32. Dagalp I, Södergren J. On Ads as Aesthetic Objects: A Thematic Review of Aesthetics in Advertising Research. *J Advert* 2024;53:126-47. <https://doi.org/10.1080/00913367.2023.2183286>.
33. Gupta M, Bhardwaj A, Gupta B, Singhal P, Goyal S, Kumar R, et al. Natural pigments: recent advances and challenges in production and application. Taylor & Francis 2026. <https://doi.org/10.1080/10826068.2026.2625199>.
34. Chen G, Yu Z, Xie Y, Liu Z, Yu C. Factors Perspective: An Empirical Study Based on Wuhan City Emoji. BooksGoogleCom 2025. <https://doi.org/10.1080/09544828.2025.2567155>.
35. Primus C. Domestic ceramics in Dentistry: Materials, Manufacturing, and Clinical Applications 2025.
36. Hu Y. Investigating the opportunities and challenges of museums' use of social media to engage Chinese audiences 2025.
37. Hu J, Applications XZ-C-AD&, 2025 undefined. The Integration and Innovative Practice of CAD Technology and Big Data Analysis in Contemporary Daily Ceramic Design. *Cad-JournalNet* 2025;22:250-63. <https://doi.org/10.14733/cadaps.2025.S9.250.263>.
38. Murshid, N., & Kim, Y. (2026). Hybrid Zigbee-LP-WAN communication model for smart urban infrastructure. *Journal of Wireless Sensor Networks and IoT*, 3(1), 62-70.
39. Liu Y, Wang S, Li S, Chen G. Exploring the Integration of Chinese Traditional Elements in Visual Communication and Its Influence on Cultural Identity and Public Perception: A review. *Peta-ResearchCom* 2026. <https://doi.org/10.1080/09544828.2025.2605859>.
40. Sindhu, S. (2025). Blockchain-enabled decentralized identity and finance: Advancing women's socioeconomic empowerment in developing economies. *Journal of Women, Innovation, and Technological Empowerment*, 1(1), 19-24.
41. Kachhara H, Bhalla NA. Digital Goldsmith: evaluating the traditional methods and exploring the potential of binder jetting 3D process for the Indian gold jewellery industry. *Springer* 2025;58:9. <https://doi.org/10.1007/s13404-025-00361-1>.

42. Wijekoon A, Ranaweera A, Martin BAS. Upcycling: a systematic review and research agenda. *EmeraldCom* 2025. <https://doi.org/10.1108/JMH-08-2024-0123>.
43. Klabi, H., & Smith, O. L. M. (2023). Ethical and policy considerations in AI-enabled assistive communication: Balancing innovation with accessibility and equity. *Journal of Intelligent Assistive Communication Technologies*, 1(1).
44. Huang W, Abdul Rahman AR, Gill SS, Raja Ahmad Effendi RAA. Furniture design based on cultural orientation: a thematic review. *Taylor & Francis* 2025;12:2442811. <https://doi.org/10.1080/23311983.2024.2442811>.
45. Ariunaa, K., & Al-Jame, F. (2026). Green construction technologies: A comprehensive review of sustainable building materials, energy-efficient design strategies, and lifecycle assessment frameworks. *Innovative Reviews in Engineering and Science*, 3(1), 127-135.