



INVESTIGATING THE ROLE OF TANGIBLE ATTRIBUTES OF SMARTPHONES IN
DEVELOPING BRAND ASSOCIATION AMONG UNIVERSITY STUDENTS - EMERGING
TRENDS IN AN EMERGING ECONOMY

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Abstract

Grounded in utilitarian value theory (Chitturi et al., 2007) and symbolic consumption theory (Belk, 1988), this study examines how functional and aesthetic attributes of smartphones shape brand associations, moderated by user image congruence. This study used a cross-sectional research design to find the causal effect and relationship among variables at a specific point in time. The sample for the study is selected based on psychographics segmentation and through stratified random sampling. A structured, closed-ended questionnaire was used to collect the data from respondents. The collected data were then analysed and interpreted through descriptive statistics by using the SPSS software package. Regression and correlation analyses were applied to check the causal effect and strength of the relationship among variables. The findings of the study reveal that product design attributes, like functional and aesthetic attributes, have a significant impact on constructing brand associations among smartphone users. Findings also highlight that user image congruence helps in flourishing brand association among users. User Image Congruence as an important part of the product also helps in building up the product design's attributes-brand association relationship. This study is limited to two key attributes of a product design, and its scope can be expanded by enriching the model with other attributes, like symbolic attributes of product design, and/or by adding non-product-related attributes. Similarly, this study investigated the conceptual model by using only one technological product, i.e., a smartphone, and the scope of the study can be extended to other technological products that people use daily and that can act as a possible contributor to developing brand association.

Keywords: Brand Association, Product Design, Aesthetic Attributes, Functional Features, User Image Congruence, Smartphones, Pakistan.

JEL Codes Classification: M31, D12, L63, O33

1. Introduction

In the era of ubiquitous digital connectivity, smartphones have become integral to both functional tasks and self-expression. As a central artifact in daily life, their design plays a pivotal role not only in utility but also in shaping user identity. Particularly in emerging markets like Pakistan, where smartphone adoption among youth is rapidly growing, understanding the branding impact of design attributes becomes essential.

The customer perceives products based on their product design (Keller, 1998). Product design is a major part of a brand, and it is the holistic shape, form, or overall look of a product in combination with



tangible and intangible traits like aesthetics/beauty of a product, its appearance, colour, etc. . and its function like its capabilities or to perform a primary task, physical features or functional usefulness, etc. (Boztepe, 2007; Desmet and Hekkert, 2007; Bloch 2011). Prior studies have shown that firms with rich investment in product design R. & D. can position better position themselves in the marketplace by introducing innovative and unique products as compared to others (Hertenstein *et al.*, 2005). Product design has three major dimensions (Bloch, 2011; Homburg *et al.*, 2015), these dimensions are based on certain properties of the product, i.e., its attributes, etc.

Attributes are the features that define a product (Keller, 1993). Customers perceive a product through its design-related attributes that help the product perform the necessary functions. Functional attributes are the tangible aspects of product design that focus on the physical look or usefulness of a product or the product's aptness to perform its primary task. Similarly, the aesthetics attribute is also a tangible trait of a product design that focuses on the customer's perception of the product's beautification, its appearance, its look, etc. (Sprott *et al.*, 2009; Al-Abdallah *et al.*, 2013). A product design's self-expressive trait (intangible aspect) allows the consumer to express their identity by using the product. People associate the product with them and express different traits. People use the brand as a means of communication about themselves, i.e., what type of person they are or want to be (Keller, 1998).

As this expression of people through product design's attributes in the form of product, for example, the one who drinks Mountain Dew shows he is adventurous; is a cognitive process of matching the image of the product/brand called product/brand image (or user imagery i.e. reflection of product or brand's personality especially attributes or traits or characteristics as stereotyped perception or in the form of generalized use of the product) with of the product/brand user's image (reflection of human personality traits or characteristics) called user's image congruence (Graeff, 1996; Aaker, 1997; Boyer, 1996 and Keller, 1998; Bower, 1999).

People make associations in connection with different brands in their minds. Such associations act as a meaning for the brand in memory, which the consumers may recall later. This process of making connections or associations related to a brand in the form of informational nodes in the minds of consumers is called brand association (Henry, 2004). Kressmann *et al.* (2006) posit that consumers evaluate products and make purchases based on information about their product design attributes that they perceive as important to them. Product attributes are the basis of product design (Bloch, 2011), and people make a purchase decision based on product design's attributes, which they consider as important to them (Kumar *et al.*, 2015).

So, such importance based on product design attributes as a part of a consumer's memory helps consumers to remember and recall them in future purchases. Similarly, if the image associated with the product is also congruent with an image of the product's user (consumer) then in light of the above theory such matching also has a positive impact on the consumer's memory as a product that facilitates image congruency usually remembered more and recall in future purchase (Aaker, 1991; Keller, 1998; Lee and Back, 2008; Kressmann *et al.*, 2006; Rodriguez *et al.*, 2012).

2. Literature Review and Hypotheses Development

A product is any tangible/intangible item that is designed to satisfy a consumer's specific needs (Palmer, 2000). The organization designs a product with certain attributes and offers it to its customers (Franzak *et al.*, 2014). Customers purchase such products by following certain motives, which are their benefits (Bloch, 2011).

Brand Association

Brand Associations serve as a meaning for a product's user, which is linked in the form of information in the memory associated with a brand (Henry 2004). It helps the consumer in searching and dealing with information related to products/brands (Boisvert, 2011). It provides the consumer with a reason to purchase a product, as most users use pre-linked information from memory in the form of product attributes and relevant benefits to fulfill their various desires/wants (Len *et al.*, 2007).

Attributes as a part of Product Design

Product design is the product's overall look or characteristics/traits of a product, such as the aesthetics of a good or service, its style, appearance, aesthetics, that communicate brand identity through visual language



(Schroeder, 2018); and the function of a product, including its capabilities, physical benefits that the product provides, features, etc. Ergonomics and battery life are critical functional attributes in emerging markets (see Rahman et al., 2023). As such, a single attribute or in combination with other ones make up the whole product (Luchs and Swan, 2011). The properties and dimensions that define a product are called attributes of a product design (Keller, 1993). Product design has three dimensions that have been discussed empirically in the past literature (see Bloch, 2011). According to Homburg *et al.* (2015, product design has three major attributes such as functional, aesthetic, and symbolic attributes. Through design, the consumer gets the first impression of the product and can quickly gain awareness about the product's advantages. In addition, the consumers infer different product attributes through their product design (Bloch, 1995; Al-Abdallah *et al.*, 2013).

Functional Attributes of Product Design

Functional attributes as a part of the product play an important role in the overall product's evaluation, in making consumer preferences, and in producing consumer responses (Norman, 2004; Boztepe, 2007; Bloch, 2011). Consumers prefer to buy a product providing physical benefits. The functionality of a product can result in utilitarian benefits (Chitturi *et al.*, 2007, 2008). Hoegg and Alba (2011) experimentally investigated the effect of the physical form of a product in producing functional benefits. The findings of their work revealed that customers are attracted to product functional features like its shape, material composition, and proportion.

According to Aaker *et al.* (1992) explained the importance of a product's attributes in terms of the benefits and satisfaction that it provides concerning consumer needs is explained. Authors also argued that experience with the product for its utility generates perceptions and associations about that product. Based on this discussion, we will assume that if a consumer perceives the product design as functional, then it will have a positive impact on the brand association. So, our developed hypothesis is as follows:

H₁: Functional attributes of smartphone design positively influence brand association.

This is grounded in utilitarian value theory (Chitturi et al., 2007), where practical performance features like battery life and processing speed enhance perceived brand credibility and memorability.

Aesthetic Attributes of Product Design

According to the author, designers not only need to focus on the appearance of the product but also emphasize the beauty that a product can provide to its users (Overbeek *et al.*, 2003). Aesthetically gratifying design stimulates the human sensory organ, the eyes, thus helping in building a strong brand, and as a result, consumers develop an emotional attachment to that product (Lindstrom, 2005; Vincent, 2005). According to Kotler *et al.* (2006) Style of a product describes the product's look and appearance. Previous research has shown that the aesthetics of the product can influence the overall evaluation process of consumers (Yamamoto and Lambert, 1994; Brunner *et al.*, 2016).

Previous studies confirmed that consumers will prefer to buy the aesthetically pleasing product. Experience with a satisfied product because of its design attributes creates an overall positive perception in the mind of the consumer. According to Zhang (2015), consumers assign meaning in the form of perceived components to a product called brand association. Considering such discussion, we can assume that the product becomes part of the memory if the consumer perceives the product design as aesthetically appealing; hence, our developed hypothesis follows:

H₂: Aesthetics has a positive relationship with brand associations.

Users Image Congruence, Product Design Attributes, and Brand Association

User image congruence is a phenomenon of psychological comparison between product image and the user's self-image is called user image congruence (UIC) (Sirgy & Su, 2000; Sirgy *et al.*, 1997; and Jamal & Mohammed, 2007). UIC's role varies across cultures (see Sung et al., 2020). Product images are also called brand image or user imagery. Parker (2009) discussed user imagery as a stereotyped perception of the "generalized" user of a brand, depicted by human characteristics associated with that brand user. For example, wearing a Nike cap, someone may feel "confident". Researchers have agreed with the argument that the consumer makes observations and analyses based on unique personalities that the brands communicate to them (Aaker, 1997; Plummer, 2000; Sutherland *et al.*, 2004). Authors also argued that marketer should



position their brands with an image of the specific brand user so that possible brand association can develop (Jamal and Muhammad, 2007).

This study shows that user image congruence has an impact on building brand associations. As a result, we can assume that the presence of congruence between the product's image (reflection of subjective perception about product's attributes) and the user's image results in building a more powerful brand association, i.e. if a product has functional/aesthetic attributes and its image is also congruent with the user self-image.

Hence, the following two hypotheses are developed:

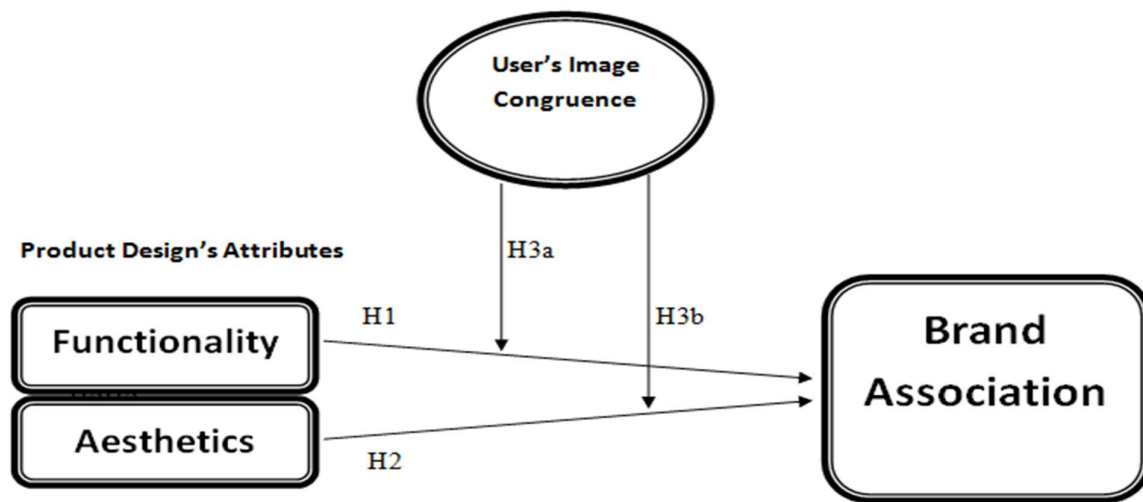
H3a: User image congruency as a moderator positively impacts the relationship between functionality and brand association.

H3b: User image congruency as a moderator positively impacts the relationship between aesthetics and brand association.

The proposed framework based on theory is illustrated in Figure 1, given below:

Figure 1

Proposed research framework based on the theory



Source: Authors' compilations

3. Research Methodology

Data for the study were collected by using a self-administered closed-ended questionnaire through a sample size of 384, which was selected on a psychographic basis. A total of 396 questionnaires were collected out of 423 distributed amongst the students in the universities of Rawalpindi and Islamabad within one month, thereby achieving a 92% response rate. Questionnaires were distributed by using a proportional stratified random sampling technique and then reduced to an acceptable sample of 384 respondents. The age bracket of the study sample included in the study was between 21 to 30 years old and was holding a smartphone with the necessary conditions. This aligns with Pew Research Center's (2022) definition of 'digital-native' consumers, who are typically aged 18–29 and exhibit pervasive technology adoption.

According to Hair et al. (2022), a five-point scale is robust for capturing design perceptions. The questionnaire's content validity was reviewed by academic experts, while reliability was ensured via Cronbach's alpha ($\alpha > 0.88$ for all constructs). Data normality, multicollinearity, and common method bias were tested prior to inferential analysis.

The questionnaire encompasses three sections. Section A contains the respondent's details, which include questions about the demographic profile, age, gender, etc. Section B included questions about which brand of smartphone was used by the respondents, and the price of their smartphone, etc. Section C included questions about the importance of aesthetics and functional attributes in product design, the importance of



UIC in developing brand association, and questions about UIC affecting the aesthetic/functional attributes-brand association relationship. All the questions used in section C were adapted from past studies of Akkucuk and Esmaeili (2016), Jinzhao Lu and Yingjiao Xu (2015), Al-Abdallah *et al* (2013), Osman *et al* (2012), Jamal and Mohammad (2010). Items used in section C are then adapted according to the field of this study. A five-point Likert Scale (as shown in the Appendix) was used with options 1 to 5 to measure the items associated with variables.

The internal consistency of the scale was also checked by the reliability test. Face validity is checked by supervisors, researchers, and industry experts to get their input regarding items used in the questionnaire. Data was then analysed using statistical tools like descriptive statistics, multiple correlations, and regression analysis through computer software such as SPSS 20. According to Wijaya (2013), the correlation technique is used to find how the variables are correlated to one another.

Regression analysis describes the magnitude of the strength of the relationship among variables of interest. Similarly, the causal effect of independent variables over dependent variables can also be determined by using this technique (Goh *et al*, 2016). This study comprised two independents (FA & AA), one moderating (UIC), and one dependent variable (BA). To test hypotheses 1 and 2, we applied linear regression. To test hypotheses, i.e., H3a and H3 b, we applied Barron and Kenny's (1986) steps, by using the following rules:

1. There must be a relationship between the independent (IV) and dependent variable (DV).
2. There must be a relationship between the moderator (M) and the dependent variable (DV).
3. The product of moderator (M) and independent variable (IV) must affect the dependent

variable (DV), that is

4. Results and Analysis

According to Table 1, 55.2% of respondents were males, while 44.8% were females out of a total of 384 respondents. All the respondents were students studying in the universities of Rawalpindi and Islamabad between the ages of 21 to 30 years. Among 384 respondents, 62.2% were between the ages of 21 to 25 years, while 37.8% were between the ages of 26 to 30 years.

Table 1

Demographics

	Frequency	%
Gender		
Male	212	55.2
Female	172	44.8
Age		
21-25 years old	239	62.2
26-30 years old	145	37.8

Source: Authors' compilations

Table 2 shows interesting statistics from respondents regarding one of the questions asked: Which factor is most important in purchasing a smartphone in your opinion? According to the Table, 27.6% of respondents preferred design while purchasing a smartphone, and 32.3% preferred attributes while purchasing smartphones.

Table 2

Reliability Analysis

	Frequency	Percent	Valid Percent	Cumulative Percent
Design	106	27.6	27.6	27.6
Attributes	124	32.3	32.3	59.9
Benefits	65	16.9	16.9	76.8
Price	47	12.2	12.2	89.1
Other	42	10.9	10.9	100
Total	384	100	100	



Source: Authors' compilations To measure the internal consistency of the scales used in the study via Cronbach's α , we used reliability analysis. As Goh *et al.*, 2016 stated, if Cronbach's α values exceeded the criterion of 0.700, then all constructs can be used confidently. Table 3 below shows that Cronbach's α values range between 0.883 and 0.889 > 0.70 , suggesting that the instruments used in the study to measure all constructs are reliable, consistent, and error-free.

Table 3

Reliability Analysis

Variables	Cronbach's Alpha	No. of Items
Functional Attributes (FA)	0.889	5
Aesthetic Attributes (AA)	0.888	5
User Image Congruence (UIC)	0.883	5
Brand Association (BA)	0.885	5

Source: Authors' compilations

Correlation Analysis

Correlation analysis is done to inspect the strength of the relationship among the four variables used in the study, such as brand association, functional attributes, aesthetic attributes, and user image congruence. The mean score of all items for a construct was sum-up and this score was then used to measure the correlation and multiple regression. Wijaya, 2013) asserted that when the value of $r = 0.50-1.0$ or $r = -0.50$ to -1.0 , it indicates a highly dependable relationship.

Table 4 below depicts that the correlations analysis of functional attribute, aesthetic attribute, and user image congruence with the brand association were significant at 0.01 and were positively correlated, with ranges from 0.406 to 0.787. As per the Table below, user image congruence showed the strongest correlation with brand association (i.e., $r = 0.787$, $p < 0.01$), followed by aesthetic attribute ($r = 0.686$, $p < 0.01$), and functional attribute ($r = 0.491$, $p < 0.01$). Hence, this data summarizes that there is no multi-collinearity problem detected in the research. Further, the average score for all the constructs used in the study ranges from 3.550 to 4.090 on a five-point Likert scale of 1 = strongly disagree to 5 = strongly agree. According to Hair *et al.* (2019), VIF values < 5 and tolerance > 0.1 indicate no multicollinearity.

Table 4

Multiple Correlation and Descriptive Analysis

Variables	1	2	3	4	Mean	SD	Max	Min
1)Functional Attributes (FA)	1				4.09	0.035	5	1
2)Aesthetic Attributes (AA)	.654**	1			3.82	0.036	5	2
3)User Image Congruence (UIC)	.406**	.649**	1		3.59	0.047	5	1
4)Brand Association (BA)	.491**	.686**	.787**	1	3.55	0.043	5	2

*Note: **Correlation is significant at the 0.01 level (two-tailed)*

Source: Authors' compilations

Regression Analysis

Linear regression was performed separately, one after one, with brand association entered as the dependent variable and functional attribute and aesthetic attribute as independent variables to test H1 and H2. To apply the second rule of Barron and Kenny's step, linear regression was performed with brand association (as a dependent variable) and user image congruence as a moderating variable. The linear regression results are shown in the combined Table V below. The adjusted $R^2=0.239$, 0.470, and 0.618 indicated consecutively that functional attributes, aesthetic attributes, and user image congruence explained 24 percent, 47 percent, and 62% of the variance with brand association. The *F-values* of 121.194, 340.068, and 620.658 are significant at the level of 0.001, which demonstrates that the model used in the study subtly fits the data we collected through questionnaires. The collinearity statistics depicting each of the VIF values to < 10 and tolerance values greater than 0.10 validated that there were no multi-collinearity issues among the independent variables used in the study. Thus, the model also qualifies the data collected for the study.



Table 5

Linear Regression Analysis in the Combined Table

--	Adjusted R^2	F value	Standardized Coefficients	T	Sig.	Collinearity Statistics	
						Tolerance	VIF
Functional Attributes	0.239	121.194	0.491	4.988	0.000	0.572	1.749
Aesthetic Attributes	0.47	340.068	0.686	2.326	0.000	0.396	2.525
User Image Congruence	0.618	620.658	0.787	8.91	0.000	0.578	1.731

Source: Authors' compilations

A detailed examination of the β coefficients of regressions highlighted that all postulated hypotheses were supported at a p-value less than 0.05. More specifically, H₁ posits that functional attributes have a positive impact on brand association. The Table above demonstrates that the results were significant ($\beta_1=0.491$, t-value=4.988, $p<0.05$). Thus, H₁ was sustained, and the functional attribute has an impact on the brand association. H₂ proposes that aesthetic attributes had a positive impact on brand associations. Results were also significant ($\beta_2=0.686$, t-value=2.326, $p<0.05$), implying H₂ was maintained. Here, this study confirmed the first rule of Barron and Kenny's (1986) steps, i.e., there must be a relationship between independent and dependent variables. Now, the second rule of Barron and Kenny's step was confirmed from the Table above, that the relationship of the moderator (user image congruence) was also found significant with the dependent variable at ($\beta_3=0.787$, t-value=8.910, $p<0.05$). The stronger effect of aesthetic attributes aligns with symbolic consumption theory, indicating that smartphones serve as markers of social identity in youth subcultures. Based on the above data in the Table, the highest standardized β appeared for user image congruence, followed by aesthetic attribute and functional attribute of product design, respectively.

That is, if functional attributes, aesthetics of product design, and user image congruence are impacted by brand association. To confirm the third rule of Barron and Kenny's steps, this study used linear regression separately with brand association (as DV) and the product of the moderator with the functional attribute and aesthetic attribute, respectively. Linear regression outcomes are shown in the combined Table VI below:

Table 6

Linear Regression Analysis

	Adjusted R^2	F-value	Standardized Coefficients	T-value	Sig.
FA x UIC	0.62	625.152	0.788	16.998	0.000
AA x UIC	0.616	614.423	0.785	22.052	0.000

Note: FA = Functional attribute, and AA = Aesthetic Attribute used as Independent Variables

UIC = User Image Congruence used as a Moderating Variable

Source: Authors' compilations

The adjusted R^2 of 0.620 and 0.616 indicated that the product of functional attributes with user image congruence and the product of aesthetic attributes with user image congruence, both explained 62% of the variance in the brand association. The F-values of 625 and 614 are significant at the level of 0.001, which indicates that the model is appropriate and fits the collected data. A closer examination of the standardized β coefficients of the linear regressions revealed that all asserted hypotheses were supported at $p<0.05$. More specifically, it confirmed the third rule, that the product of the independent variable with the moderating variable has a significant relationship with the dependent variable at ($\beta_1=0.788$, and $\beta_2=0.785$, at $p<0.05$).

5. Discussion of Results

This study examined the effects of product design attributes (functional and aesthetic attributes) in developing brand association by using user image congruence as a moderator among smartphone users between 21 to 30 years of age in Pakistan. Empirical output confirmed that functional and aesthetic attributes of product design play a significant role in developing brand associations among smartphone users in Pakistan. The study also confirmed that user image congruence significantly impacts product design attributes (such as aesthetic and functional attributes) and brand association relationships. The output also demonstrated that the



relationship as proposed in H1 and H2 is positive and significant, which supports the results that are consistent with the study of Brunner *et al.* (2016).

The results demonstrated that the relationship as hypothesized in H3a and H3b is positive and significant, which reveals that smartphone users prefer key attributes of product design, i.e., functionality and aesthetics. Similarly, the study also demonstrated that smartphone users prefer a smartphone that depicts their personality and their image. In short, smartphone users between the ages of 21 to 30 in Pakistan consider smartphones that have attributes of functionality and aesthetics and match their image. These results show relevance to the work of Rodriguez *et al.* (2012). Further investigation of the model highlights that attributes are an important part of product design and positively impact the consumer's memory match between the product's attributes and the product user's image. It is also an important phenomenon as such products easily become part of the memory; thus, helping in powerful brand association (Bloch, 1995; Graeff, 1996; Kressman *et al.*, 2006). Unlike Western markets (Smith *et al.*, 2021), Pakistani youth appear to prioritize aesthetics over functionality. So, the designers could integrate eco-friendly materials to align with growing environmental consciousness among youth (Khan & Abbas, 2023), which also aligns with Goal 3.2 of Pakistan's 2025 Digital Vision.

6. Conclusion and Recommendations

This study affirms the centrality of functional and aesthetic attributes in enhancing brand association among young Pakistani smartphone users. The moderating effect of user image congruence underscores the need for personalization in product positioning. These insights support the integration of consumer identity frameworks in brand strategy, particularly in tech-driven youth markets. The conclusion of the study has clarified which factors strongly influence brand association among young smartphone consumers between the ages of 21 to 30 years, which has rarely been covered in the past in the literature in the Pakistani context. Findings would surely help marketers and practitioners formulate effective strategies to build up a brand association to achieve competitive advantage and sustain businesses, especially for the smartphone user market. According to the results of the regression analysis summarized, all the asserted study hypotheses are supported theoretically. Empirically, marketers, design experts, and practitioners should put more emphasis on the functional and aesthetic features of product design in designing smartphones for consumers. Similarly, by using this model, companies can conduct surveys and identify important functional and aesthetic factors that may influence the overall evaluation/perception of the product. This model can also be used by companies that may modify their products so that they can be accepted more among the masses. The findings of the study are beneficial for effective market segmentation, targeting, and positioning of the product, and could promote consumer demand. This model is also useful for companies in developing strategies to create a competitive edge and to get an appropriate position in the market, which leads them to rise in sales, develop an effective brand image, and increase brand equity in the minds of consumers.

Importantly, the empirical output offers academic contributions to the existing body of knowledge on consumer behaviour. The same proposed model can be tested for several other technological products, which may reveal different significant results. Adding/replacing moderators, such as brand image, to the existing model may reveal important results. The addition of a mediator may reveal important research insights. Functional attributes like ergonomics characteristics of the product did not get enough attention in the past; addition/replacement of this in the present model may reveal important research insights. Similarly, the field of product design is not limited to attributes only; there are many other important aspects of product design. The brand association may be enhanced by working on other aspects of product design, which ultimately may add important knowledge to the overall theory of product design and brand association. In addition to this, the debate about making an ideal product is continuing. This study highlights three important aspects: functionality, aesthetics, and user image congruence that make the product memorable from the customer's perspective, but does not end here.

This study set out to examine the influence of tangible product design attributes—specifically functional and aesthetic features—on the development of brand association among university students in Pakistan, with user image congruence (UIC) introduced as a moderating variable. Empirical evidence from



384 university students aged 21–30 confirms that both functional and aesthetic attributes significantly contribute to brand association. Additionally, the moderating role of user image congruence was found to intensify the relationship between these attributes and brand association, indicating that consumers tend to associate more strongly with brands that reflect their self-image and preferences.

These findings validate the theoretical assumption that product design is more than a physical construct—it is a vehicle for identity expression and consumer-brand bonding. Products that are not only functionally superior but also aesthetically pleasing and personally relatable are more likely to become embedded in consumers' memory, thus enhancing brand association. This insight is particularly valuable for marketers and product designers in the smartphone industry who are targeting the youth demographic.

Practical Implications

For Marketers and Brand Managers: Invest in understanding target consumer identities and align smartphone branding with the self-image of young users. This alignment can significantly enhance emotional connection and brand recall.

For Product Designers: Prioritize both functional performance (e.g., battery life, camera quality, processor speed) and visual/aesthetic appeal (e.g., screen design, colour, form factor) to ensure strong brand differentiation.

For Strategic Planners: Use this model to identify market segments based on psychographic alignment (e.g., image-conscious youth vs. function-oriented users) and tailor offerings accordingly.

Theoretical Contributions and Future Research

This study adds to the growing literature on consumer-brand relationships by demonstrating the synergistic role of product attributes and user image congruence in shaping brand associations in emerging markets. Future studies could extend this model by incorporating symbolic or intangible attributes of product design, testing the framework on other technological products such as laptops and wearables, introducing mediating variables such as brand trust, emotional attachment, or satisfaction, and exploring cross-cultural comparisons to assess the generalizability of user image congruence across diverse consumer segments.

In summary, the interplay of functionality, aesthetics, and user alignment is a strategic cornerstone in brand building, especially in dynamic, youth-driven markets like Pakistan. Designing smartphones that resonate with both practical needs and personal identity can substantially enhance brand equity and long-term consumer loyalty.

Authors Contributions

All authors participated in ideation, development, and writing the manuscript. All authors read and approved the final manuscript.

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this article.

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Informed Consent

Informed consent was obtained from all participants.

Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

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