Original Article

Human Nature Research Publisher

http://hnpublisher.com

Impact of Brand Anthropomorphism on Brand Loyalty through Brand Personality

Qamar-un-Nisa¹, Mehr-un-Nisa²

¹Lecturer, Lahore College for Women University Lahore, Pakistan. ²Lecturer, Department of Economics, Lahore College for Women University Lahore, Pakistan. Correspondence: <u>mehru.economist@gmail.com²</u>

ABSTRACT

Study Objective: Brand anthropomorphism is a relatively new strategy which helps to build strong relationships between consumers and the brand Loyalty. This study aims to find out the impact of brand anthropomorphism on its dimensions (human body lineaments, human facial physiognomy, and self-brand congruity) and brand loyalty through the mediation of brand personality by collecting responses from the customers of fast food brands in the Lahore city of Pakistan.

Methodology: The sample size of the study is comprised of 351 consumers of fast food brands in the Lahore city, including McDonalds, Hardees and KFC. Data is collected through survey by convenience sampling. Reliability test results reveal that instrument used in this research is reliable. Prior to the study the normality and multicolinearity tests are applied.

Results/Findings: The findings provide the positive relationship between brand anthropomorphism, brand personality and brand loyalty in the Lahore city of Pakistan. The results of linear regression provided that there is significant relationship between brand anthropomorphism attributes human body lineaments, human facial physiognomy and self-brand congruity with brand Loyalty. In addition, mediation analysis provides that brand personality fully mediates between relationships of brand anthropomorphism and human body lineaments with brand loyalty. However, human facial physiognomy and self-brand congruity relationship with brand loyalty is not significantly mediated by brand personality.

Implication: This study proves that brand anthropomorphism is successful strategy so other brands of different category like makeup, clothing etc. can also use anthropomorphic features to develop consumer loyalty.

Keywords: Brand Anthropomorphism, Brand Personality, Brand loyalty.

Introduction

Consumer perception of brands as human entities may have important consequences in the area of branding because through humanlike features consumers relate these brands with their own personality traits (Puzakova, 2012). In modern marketing, physical entities like use of animals, humans or pictorial representation help to create brand image (Brown, 2010).



Article History

Received: April 29, 2023

Revised: June 25, 2023

Accepted: June 27, 2023

Published: June 30, 2023 Other related factors can help companies in building their customer base and determine the effective marketing techniques which will have strong and positive outcomes (Calabro, 2014; Fangxuan, *et al.* 2023).

Companies use components of brands like name, logo and tagline in the process of brand personality which in turn makes a brand more appealing for customers. One of the ways to create brand identification is brand anthropomorphism. In fact, marketers often boost this strategy of anthropomorphizing by creating brand characters, mascots, and spokespersons¹ (Aggarwal, 2012; Wang, 2008; Thanh & Phuc, 2023). A number of studies have investigated the relationship between brand personality and brand loyalty or other promotional strategies like celebrity endorsement that are used to make the brand image in consumer mind, but brand anthropomorphism has been largely ignored. This study explores brand anthropomorphism with different dimensions of promotional effectiveness which create positive image of brand for consumer. In addition, brand personality dimensions support to make appropriate consumer perception of brand image. These measurements explain the consumer perception for brand characteristics. Anthropomorphism theory, self-expression theory and personification develop brand character tactics which are beneficial in developing brand-customer relationships (Delbaere et al, 2011; Huang & Mitchell, 2014).

There are some significant objectives behind this study that help to investigate the impact of brand anthropomorphism on brand loyalty through brand personality having human body lineaments, human facial physiognomy and self-brand congruity in case of Pakistan. Moreover, this particular study is based on brand anthropomorphism which could investigate mediating relationship of brand personality and brand Loyalty.

One line of literature supports the association of brand anthropomorphism and brand personality while the other line has examined the brand personality to brand loyalty. The unique aspect of this research is to investigate the relationship among brand anthropomorphism, brand personality and brand loyalty which could be beneficial for researchers and marketers to investigate how modify branded products as anthropomorphized, and whether this strategy impacts consumers' perceptions and feature of these products. This examination will incorporate a commitment in past studies in the Pakistani context.

This study discourses significant gap by investigating the relationship among brand anthropomorphism, brand personality and brand loyalty. This exploration holds value for both researcher and practitioner to recognize the potential anthropomorphization of branded products and its influence on consumer perceptions and assessment. In Pakistani markets, very less marketing strategies are being practically applied, which can benefit the whole brand image for longtime period.

Previous research examined the association between brand anthropomorphism attribution and brand personality whereas this research finds that how brand anthropomorphism, brand personality and brand loyalty relate in Pakistani context. The findings of this research add value to the existing literature and add up in this important gap by reviewing a relationship between brand anthropomorphism with brand personality and brand loyalty, which could be useful for researchers and marketers to investigate how branded products can be anthropomorphized, and whether this strategy impacts consumers' perceptions and evaluations of these products.

Markets focus on celebrity endorsement to promote their brands which increases financial burden and it is also a time taking marketing strategy to implement it annually or seasonally. The link discussed under this study develops brand personality dimension and its role in shaping perception into brand image. Highly popular brands of fast food chains i.e. McDonald's, KFC and Hardee's having vast customer base in Pakistan and operating in highly competitive environment.

¹ for example in Pakistan Qmobile hire 'Mahira Khan' as their spokesperson of their brand

While designing their brands, companies can add anthropomorphic features of body lineaments, physical feature and congruity which will enable their product more attractive and relatable to customers that they can easily remember and can differentiate to other brands like McDonald's show whole human statue of a human outside, everyone can remember it at once and can easily compare it to the other fast food chain.

This study is organized into 6 sections. Section-2 discusses previous literature. Section-3 comprised of Method and section-4 gives details of data and sample. In Section- 5, the data analysis is discussed. Section-6, concludes and recommends suggestions.

Literature Review

Anthropomorphism is the use human like features in objects that affect human perception about nonhuman objects, like automobile car parts that designed using anthropomorphic features as headlights that resemble human faces (Landwehr *et al.*, 2011). The perception of brands with different attributes related to human characteristics is supported by Gestalt theory. Anthropomorphism refers to human attributes its characters and applying human behavior in non-human objects (Rauschnabel & Ahuvia., 2014; Sreejesh & Anusree., 2017; Calabro, 2014). Anthropomorphized product occurs in different ways of product's external appearance, (human body shape like bottle) perception of product regarding self-congruity develop through characteritics and behavior includes physical appearance, emotional attachment, mental state and motivations (Guido & Peluso., 2015; Epley & Waytz., 2008; Portal et al., 2018). Strategy to use symbolic words in product or promotion can effect positively on consumer observation and beneficial for those companies who develop unique brand traits through uncommon features (Bernritter et al., 2016; Chung & Park, 2017; Delbaere, McQuarrie & Phillips, 2011).

This Research investigates the positive impacts of brand anthropomorphism on consumer's brand and product assessments (Delbere et al., 2011). Its more challenging in modern markets, for firm to distinguish their brands in competitive market, therefore marketing and consumer psychology literature on this concept helps to provide practical implications that may be suggested to the marketers in order to adopt anthropomorphic strategies (Hutton & Fosdick, 2011). Consumers consider brands as interactive partners and allocate different characters to brands (Aggarwal& McGill, 2012). Customers who love the specific brand easily identify brand through name, logo, slogan, color, symbol, packaging or its representation (Cheung et al., 2019; Surucu et al., 2019) they positively response brand's activities (Dalma et al., 2019). Products with anthropomorphic features are more effective for creating positive brand personality on consumer mind as compare to non-anthropomorphic products; these positive interactions have ability to communicate consumers of different personality which leads to brand loyalty (Aggarwal, 2012). Anthropomorphic consumer perceptions also influenced by consumer from different cultural values. Moreover, marketers use anthropomorphization as a tool to improve consumer-brand relationship (Anais, Csilla & Nina, 2016). Marketers develop their brand more attractive with memorable attributes for consumer. In marketing, anthropomorphism develops when marketers use humanlike features to the brand and consumer imagined these nonhuman brands as actual humans (Aggarwal, 2012).

Brand loyalty is theoretical behavior represents creation of brand anthropomorphism strategy. Empirical literature highlights the rational and effective dimensions of brand loyalty (Portal *et al.*, 2018; Vernuccio, M., Patrizi, M., & Pastro, A. 2021). Brand personality thus, supporting customer loyalty towards specific brand, in case of implementation of effective marketing approaches. Marketers develop and continue strong consumer-brand relationship because as a result of consumers' brand loyalty, companies could achieve more financial benefits (Fournier, Breseale & Fetcherin, 2012).

Brands with similar personality characteristics attract more consumers having similar personality traits; hence marketers are advised to create a brand image that people can associate with human-like traits. Previous studies explain that consumer have strong intellectual thinking though they notice anthropomorphic features when they perceive brand, products and objects in all fields (Aggarwal, 2012). Avis *et al.*, (2012) explain consumer perceive brands with anthropomorphic and animistic object that closely related to human like entities. Social Science researchers have measured anthropomorphizing an

automatic psychological process that does not change among individuals. In the literature of conventional marketing, the impact of brand anthropomorphism observed the different results like brand perception (Aggarwal & McGill, 2007), brand evaluation (Delgado Ballester *et al.*, 2017) and consumer emotional attachment. Literature has been concentrated on interaction between brand anthropomorphism and brand personality in the industry of hotels, restaurants and destinations (Han *et al.*, 2020; Su & Reynolds., 2017). There is major gap in explaining implementation of brand anthropomorphism in hospitality and tourism (Han *et al.*, 2020).

Aggarwal and McGill (2012) argue that brands are inanimate objects with less value and worth by human; therefore it is necessary to associate these with something that consumers may consider as worthy. Studies have provided the positive and negative impact of product anthropomorphism on product appearance (Chandler & Schartz, 2010; Fernandez & Lastovicka, 2011; Landwehr, McGill & Hermann, 2011). Consumers associated with particular brand personality dimension in turn affects customer satisfaction and loyalty in diverse cultures (Su & Tong, 2016). One of the most dominating antecedents of brand personality is brand identification built through various techniques, i.e., anthropomorphism. On the other hand, one of the main consequences of a developed brand personality is brand loyalty (Park *et al.*, 2010).

Consumer brand relationship develops strong success of the business. Repeated purchase of a same brand develops strong attitudinal behavior. Brand loyalty related to the consumer attachment with the specific brands that develop through brand personality and preferences (Hee & Myung, 2012). Consumers choose brand having anthropomorphic characteristics which develop a link between brand personality and emotional brand attachment (Maehle et al., 2011). Anthropomorphized brand could be positively related to brand personality (Guido, 2014). Whereas, anthropomorphize elements develop brand personality and loyalty as consumer relate their self-image and brand image components (Calabro, 2014). Product becomes meaningful with a brand name, but understanding level of the consumer may be different according to their culture. Fournier (2016) summarized that materialistic consumer and those who show a high interpersonal anxiety and avoidant style tend to attach to brand and to compensate interpersonal insecurity.

The literature discussed the correlation between brand anthropomorphism and brand personality but it lacks the link among brand anthropomorphism, brand personality and brand loyalty in the context of major brands in Pakistan. The findings of this research will add value to the existing literature and contribute in important gap by reviewing a relationship between brand anthropomorphism with brand personality and brand loyalty which may helps researchers and businesses by considering the strategy of anthropomorphism in branded products for positive consumer perception and modification of products.

Methodology

Considering the literature and past studies about brand anthropomorphism, brand personality and brand loyalty, the variables are constructed through a framework. The variables are explained and measured to investigate the relationships. A five point Likert scale was used during the questionnaire survey for this study (1 stands for 'Strongly Disagree' and 5 stands for 'Strongly Agree') on sample of 351 for both male and females (age limit= 15-25 are 45%, 26-35 are 48% and between 36-above are 6.5%) general consumers of fast food chain in Lahore city. The selected fast food chains are McDonald, KFC, and Hardees; the most competitive brands. Respondents filled these questionnaires regarding their preferred food brand. The questionnaire was designed following the Gianluigi Guido (2014) 12-item scale of brand anthropomorphism having three dimensions: Human Body Liniments, Human Facial Physiognomy and Self-Brand congruity, Brand personality dimensions (five dimensions)² (scale by Aaker (1997) included 15 items that brief the five-brand personality dimensions and three-item scale of brand loyalty as "I consider myself to be loyal to this branded product; this branded product would be my first choice and I

² Sincerity: down to earth, honest, wholesome and cheerful; Excitement: daring, spirited, imaginative and up-to-date;

Competence: reliable, intelligent and successful; Sophistication: upper-class and charming: outdoorsy and tough for Ruggedness

will not but other products if this branded product is available at the store" adopted from Yoo and Donthu, (2001). 5 point Likert scale was used where 1 stands for 'Strongly Disagree' and 5 stands for 'Strongly Agree' for respondent's gender, qualifications, age group and marital status.

Measurement Scale

The 12-item scale of brand anthropomorphism questionnaire developed which was also used in previous research. The questionnaire borrowed from Gianluigi Guido (2014). Brand personality scale includes 15 items summarizing the five-brand personality dimensions (Aaker et al., 1997). A three-item scale of brand loyalty was also taken from Yoo and Donthu, (2001). Moreover, five point Likert scale is developed in which 1 stands for 'Strongly Disagree' and 5 stands for 'Strongly Agree'.

Data and Sample

Data is collected with some respondent's general information like name (optional), age, education, marital status both gender male and female. Total 351 complete questionnaires form our final sample of respondents for this study. According to Roscoe & Sikran (1975), 351 sample size is suitable in this study. Convenient sampling is used for this study to get responses from actual consumers. Acording to Ozdemir *et al.*, (2011) convenience sampling technique is suitable for the study to get responses from related respondents easily.

Various statistical techniques are applied for data analysis. To investigate the reliability of the data the Cronbach's alpha values are given and discussed. Normality test values are reported to decide whether data is normal or not. Pearson Correlation technique is applied to observe the relationship among variables. In addition, Ordinary Least Square regression technique is applied to find the significance of variable relationship. Hayes test is applied on model-4, for mediation analysis.

Data Analysis

Various statistical techniques are applied for the data analysis of this study. Cronbach's alpha technique is applied in order to check the reliability of data. The normality test is applied to observe the data distribution. Furthermore, the correlation of variables is measure by applying the Pearson Correlation test. The Ordinary Least Square regression technique is applied to examine the relationship among the study variables. Lastly, Hayes test is applied to measure the mediating link among the variables.

Data Description

Description of collected data includes the composition of data which shows frequency distribution of the data. Composition of sample can be described by demographics. The composition by each demographic is given below:

Qualification	Frequency	Percentage
Under-graduate	130	37
Graduate	154	44
Post Graduate	67	19

Table 1: Data Composition by Qualification

Table 2:	Data Co	mposition	by Mar	ital Status
1 4010 2.		nposition	0 9 11 100 1	nen Stenno

Marital Status	Frequency	Percentage
Single	259	74
Married	73	21
Widow	19	5.4

 Table 3: Data Composition by Age Group

Age	Frequency	Percentage
15-25	158	45
26-35	170	48
Above 36	23	6.5

Respondents of this study are general consumers of fast food chain; selective population for this survey is 351. Data is composite of both male and female representation. Respondents related to their marital status are 74% single, 21% married and 5.4% are window out of total 100% respondents. According to the age groups, respondents belong to different age groups like respondents between age limit 15-25 are 45%, 26-35 are 48% and between 36-above are 6.5% of total 100% respondents. Similarly, respondents related to different educational level are 37% of under-graduate, 44% of graduate and 19% of post-graduate from 100% of respondents.

Variables	Min	Max	Mean	Std. Deviation
Brand Anthropomorphism	1.00	5.00	3.104	.964
Brand Personality	1.00	4.00	3.458	.607
Brand Loyalty	1.00	5.00	3.788	.950
Human Body Lineaments	1.00	5.00	2.847	1.238
Human Facial Physiognomy	1.00	5.00	3.181	1.160
Self-Brand Congruity	1.00	5.00	3.243	1.154

The number of total data is 351 in which minimum score is 1.00, 1.13, 1.00, 1.00, 1.00 and 1.00. In maximum score in this is 5.00, 4.60, 5.00, 5.00, 5.00 and 5.00 respectively. The means of brand anthropomorphism (3.1045), brand personality (3.4568), brand loyalty (3.788), human body lineaments (2.847) and human facial physiognomy (3.181) are given in table-4. Similarly, their standard deviations are also mentioned. Brand personality has the minimum mean score of 1.13 with standard deviation 4.60 as compared to brand loyalty which has the highest mean of 3.788 with a standard deviation of 0.950. These means indicate that most of the values lie within the 'agree' to 'disagree' continuum, and that majority of the respondents have not opted for extreme opinions on the items in the questionnaire. Thus, these variables have less deviation from their respective means.

Reliability

Reliability of each instrument is examined by using the Cronbach's Alpha technique. Cronbach Alpha is most suitable test to measure reliability of the instrument. The minimum acceptable value of Cronbach alpha is 0.60 (Nunnaly *et al.*, 2004).

Variables	Variables Construct		Cronbach's alpha
Independent	Brand Anthropomorphism	12	.928
Dependent	Brand Loyalty	3	.854
Mediating	Brand Personality	15	.850

Table 5: Cronbach's alpha values

The Cronbach's alpha shown in table-5 depict that all the measures used are reliable. Brand anthropomorphism (0.928) has highest reliability followed by Brand Loyalty (.854) and Brand Personality (0.850).

Normality Test

Normality shows the distribution of data in the study. Histograms with normality curve depict the normality of data. Brand anthropomorphism normality shown in figure 2 with a bell shape curve. Bell

shape of the curve shows that there is normal distribution of data with mean (3.10) and standard deviation (.965). Brand personality normality shown in figure 3 with a bell shape curve. Bell shape of the curve shows that there is normal distribution of data with mean (3.46) and standard deviation (.607). Brand loyalty normality shown in figure 4 with a bell shape curve. Bell shape of the curve shows that there is normal distribution of data with mean (3.79) and standard deviation (.95).

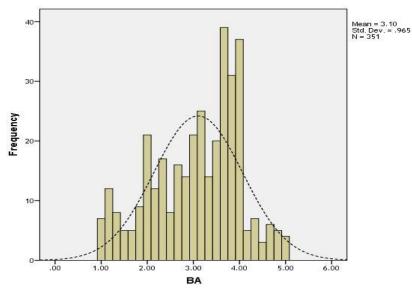


Figure 1. Brand Anthropomorphism

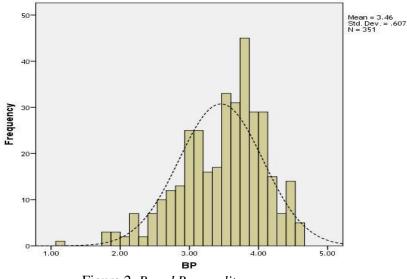


Figure 2. Brand Personality

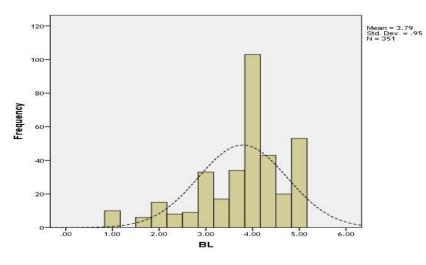


Figure 3. Brand Loyalty

Correlation

Correlation test measures the direction of relationship between two variables. Pearson correlation method provides coefficients of correlation (r), which shows the strength of relationship. All the coefficients of correlation among study variables are given below in Table-6.

The relationship between brand anthropomorphism is weak but significantly positive with brand personality (0.132), and brand loyalty (0.206), strong and significant with human body lineaments (.818), human facial physiognomy (.928) and self-brand congruity (.778) as they are its dimensions. Brand personality has significant relationship with brand loyalty (.399), human body lineaments (.140), human facial physiognomy (.105) and insignificant with self-brand congruity (.098; weak but positive). Brand loyalty relationship is weak but significantly positive with human body lineaments (.154), human facial physiognomy (.190) and self-band congruity (.176).

S.No.	Variables	1	2	3	4	5	6
1	Brand Anthropomorphism	1					
2	Brand Personality	0.13*	1				
3	Brand Loyalty	0.21*	0.40*	1			
4	Human Body Lineaments	0.81**	0.14**	0.42**	1		
5	Human Facial Physiognomy	0.93**	0.21*	0.20**	0.70**	1	
6	Self-Brand Congruity	0.78**	0.09	0.71**	0.42**	0.59**	1

Table 6: Coefficients of Correlation

**P<0.01, *P<0.05 Source: Authors

Multicolinearity

Multicolinearity refers to the significant relationship between two independent variables, meaning that two variables move in the same direction. The measure of Variance Inflation Factor (VIF) provides the inconsistency of coefficients which are affected by multicolinearity. Tolerance is another measure which provides that the test value less than 0.1 is the evidence of no multicolinearity (Menard, 1995). The statistics of both tests in table-7 reveal that all VIF and Tolerance values are less than 10 and 0.1 respectively. The statistics are the evidence of no multicolinearity.

 Table 7: Multicolinearity

Variable	Tolerance	VIF
Brand Personality	.979	1.022
Human Body Lineaments	.513	1.951
Human Facial Physiognomy	.410	2.438
Self-Brand Congruity	.657	1.522

Hypothesis Testing

Table 8: Brand Anthropomorphism with Brand Loyalty (ANOVA)

Variable	R	\mathbf{R}^2	Adj R ²	Standard Error	F	Sig	Beta	Т	Sig
Human Body Lineaments	0.154	0.24	0.21	0.941	8.44	0.004	0.15	2.91	0.004
Human Facial Physiognomy	0.190	0.36	0.31	0.934	13.12	0.000	0.190	3.62	0.000
Self-Brand Congruity	0.176	0.31	0.94	0.941	11.21	0.001	0.176	3.45	0.001
Brand Anthropomorphism	0.206	0.43	0.41	0.93	15.51	0.000	0.206	3.94	0.000

H₁: Brand anthropomorphism will have a significant relationship with brand loyalty

Regression analysis indicates that the F value is 15.513 with significant value 0.000 when P<0.05. The P value show the significance that means this model is significant. The B coefficient value is .203 shows that one unit of brand anthropomorphism positively changes .203 units in brand loyalty. After this, t value is 3.939, sig=.000, p<.05. T value shows that there is difference in means of brand loyalty and brand anthropomorphism. The R² value is .040 which shows that there is 4% change occurs in brand loyalty due to brand anthropomorphism. That shows there is significant relationship of brand anthropomorphism on brand loyalty. P value show that this relationship between brand anthropomorphism and brand loyalty is significant, that's mean hypothesis H₁, brand anthropomorphism will have a significant relationship with brand loyalty is accepted.

Model	Unstandardi	zed Coefficients	Standardized Coefficients	Т	Sig
	В	Std. Error	Beta		
Constant	3.157	0.168		18.826	0.000
HBC	0.203	0.052	0.206	3.939	0.000

Dependent variable: BL

H_{1a}: Human Body Lineaments will have a significant relationship with brand loyalty

Regression analysis shows that the F value is 8.440 with significant value 0.004 when P<0.05. The P value show the significance that means this model is significant. The B coefficient value is 0.118 showing that one unit of human body lineaments changes 0.118 units of brand loyalty. After this, t value is 2.905, sig=.000, p<.05.t value shows that there is difference in means of brand loyalty and Human Body Lineament. The R² value is .024 which shows that there is 2.4% change occurs in brand loyalty due to Human Body Lineaments. Result shows that there is significant relationship of human body lineaments with brand loyalty. P value show that this relationship between human body lineaments and brand loyalty is significant, that's mean hypothesis H_{1a}, Human body lineaments will have a significant relationship with brand loyalty is accepted.

Table	10:	Coej	fficients
-------	-----	------	-----------

Model	Unstandardiz	zed Coefficients	Standardized Coefficients	Т	Sig
	В	Std. Error	Beta		
Constant	3.452	0.126		27.401	0.000
HBL	0.118	0.041	0.154	2.905	0.004

Dependent variable: BL

H1b: Human Facial Physiognomy will have a significant relationship with brand loyalty

Regression analysis shows that the F value is 13.121 with significant value 0.000 when P<0.05. The P value show the significance that means this model is significant. The B coefficient value is 3.292 which shows that one unit of human facial physiognomy brings 3.292 units increase in brand loyalty. After this, t value is 22.591, sig=.000, p<.05. T value shows that there is difference in means of brand loyalty and Human Facial Physiognomy. The R² value is 0.33 which shows that there is 33% change in brand loyalty occurs due to Human facial physiognomy. Result shows that there is significant relationship of human facial physiognomy and brand loyalty. P value show that this relationship between human facial physiognomy will have a significant relationship with brand loyalty is accepted.

Table 11: Coefficients

Model	Unstandardiz	zed Coefficients	Standardized Coefficients	Т	Sig
	В	Std. Error	Beta		
Constant	3.292	0.146		22.591	0.000
HFP	0.156	0.043	0.190	3.622	0.000

Dependent variable: BL

H1c: Human Body Congruity will have a significant relationship with brand loyalty

Regression analysis shows that the F value is 11.208 with significant value 0.001 when P<0.05. The P value show the significance that means this model is significant. The B coefficient value shows that one unit of human body congruity brings 0.166 units of positive change in brand loyalty. After this, t value is 3.348, sig=.001, p<.05. T value shows that there is difference in means of brand loyalty and self-brand congruity. The R² value is .028 which shows that there is 2.8% change in brand loyalty due to Self-brand congruity. That shows there is significant relationship of self-brand congruity on brand loyalty. P value show that this relationship between human body congruity and brand loyalty is significant, that's mean hypothesis H_{1c}, human body congruity will have a substantial relationship with brand loyalty is accepted.

Table	12:	Coefficients
-------	-----	--------------

Model	Unstandardiz	zed Coefficients	Standardized Coefficients	Т	Sig
	В	Std. Error	Beta		
Constant	3.257	0.166		19.588	0.000
HBC	0.166	0.050	0.176	3.348	0.001
D 1 111 D	r				

Dependent variable: BL

Mediation Effect

The process of Andrew F. Hayes is used to examine the mediation effect of brand anthropomorphism on brand loyalty with the relationship of brand personality. To test the Hypothesis H₂, brand personality mediates between brand anthropomorphism and brand loyalty we carried out this analysis.

H2: Brand personality will mediate the relationship between brand anthropomorphism and Brand loyalty

Variables	R	R2	F	Sig	SE	В	Т	P-value
Step 1-Model sum	mary an	d Coeffici	ent of Brar	nd Anthrop	oomorphis	m		
Constant					0.213	3.19	29.48	0.00
Brand					0.082	0.08	2.48	0.013
Anthropormophism					0.082	0.08	2.48	0.015
	0.14	0.42	11.16	0.013				
Step 2- Model sun	ımary ar	nd Coeffic	ient of Bra	nd Persona	ality and B	rand Anth	ropomor	phism
Constant					0.28	0.26	4.35	0.000
Brand Personality					0.07	0.59	7.74	0.000
Brand					0.05	0.15	2.20	0.050
Anthropormophism					0.05	0.15	3.20	0.059
· · ·	0.42	0.32	39.01	0.000				

Table-13: Mediation analysis with Brand Anthropomorphism as Independent Variable

Outcome variable: BL

In Step 1 of the mediation model, the regression of brand anthropomorphism with brand personality is significant, B =.082, t=2.48, p<.05. Per unit change of brand anthropomorphism brought .082 units change in brand personality with an overall change of 1.7%. This fulfills the pre-requisite of the independent-mediator significant relationship for the mediation analysis. Step 2 showed that the regression analysis of brand anthropomorphism and brand loyalty with brand personality as mediator in which the indirect path with brand personality is significant (b =.59, t=7.74, p<0.05) showing full mediation whereas the direct path of brand anthropomorphism with brand loyalty is insignificant (b =.15, t=3.20, p=0.05). Brand personality is significant mediator between brand anthropomorphism and brand loyalty.

H2a: Brand personality will mediate the relationship between Human Body Lineaments and Brand loyalty

Table-14: Mediation analysis with Human Body Lineaments as Independent Variable

Variables	R	R2	F	Sig	SE	В	Т	P-value
Step 1-Model summ	ary and Co	efficient of	Human Bo	dy Lineam	ents			
Constant					.0807	3.2616	40.4387	.0000
Human Body					.0686	.0686	.0260	.0087
Lineaments					.0080	.0080	.0200	.0087
	.1399	.019	6.9624	.0087				
Step 2-Model summ	ary and Co	efficient of	Brand Per	sonality an	d Human B	ody Linear	nents	
Constant					.2776	1.4871	5.3573	0.000
Brand Personality					.0773	.6026	7.7989	0.000
Human Body					0270	0766	2.0227	0.420
Lineaments					.0379	.0766	2.0227	.0439
	.4109	.1689	35.3550	.0000				

The Hayes test is applied to measure the mediation effect of human body lineaments on brand loyalty with the relationship of brand personality. To test the Hypothesis H_{2a}, brand personality mediates between human body lineaments (HBL) and brand loyalty. In Step 1 of analysis of the model the regression of HBL with brand personality is significant, b = .0686, t=0.0260, p<.05. Per unit change of HBL brought .0686 units change in brand personality with an overall change of 1.9%. This fulfills the pre-requisite of the independent-mediator significant relationship for the mediation analysis. Step 2 showed that the regression analysis of HBL and brand loyalty with brand personality as mediator in which the indirect path with brand personality is significant (b = .602, t=7.79, p<.05) showing partial mediation as the direct

path of brand anthropomorphism with brand loyalty is also significant (b =.076, t=2.02, p<.05). Brand personality is significant partial mediator between HBL and brand loyalty.

H2b: Brand personality will mediate the relationship between Human Facial Physiognomy and Brand loyalty

Variables	R	R2	F	Sig	SE	В	Т	P-value
Step 1-Model summ	ary and Coe	efficient of	Human Fac	cial Physiog	gnomy			
Constant					.0943	3.2813	34.7974	.0000
Human Facial Physiognomy					.0279	.0552	1.9802	.0485
	.1054	.011	3.9212	.0485				
Step 2-Model summ	ary and Coe	efficient of	Brand Pers	onality and	l Human E	ody Linear	nents	
Constant					.2844	1.3245	4.6576	0.000
Brand Personality					.0764	.5997	7.8540	0.000
Human Facial Physiognomy					.0400	.1228	3.0749	.0023
	.4258	.181	38.5444	.0000				

Table-15: Mediation analysis with Human Facial Physiognomy as Independent Variable

The Hayes test statistics measure the mediation of human facial physiognomy (HFP) on brand loyalty with the relationship of brand personality. To test the Hypothesis H2b, brand personality mediates between HFP and brand loyalty. In Step 1 the regression of HFP with brand personality is significant, where b = .055, t=1.98, p<.05. Per unit change of HFP brought .055 units change in brand personality with an overall change of 1.1%. This fulfills the pre-requisite of the independent-mediator significant relationship for the mediation analysis. Step 2 showed that the regression analysis of HFP and brand loyalty is significant (b = .599, t=7.85, p<.05) showing partial mediation as the direct path of HFP with brand loyalty is also significant (b = .122, t=3.07, p<.05). Brand personality is significant partial mediator between HFP and brand loyalty.

H2c: Brand personality will mediate the relationship between Self Brand Congruity and Brand loyalty

Variables	R	R2	F	Sig	SE	В	t	P-value
Step 1-Model summ	ary and Co	efficient of	f Self Brand	Congruity	r			
Constant					.1074	3.26	30.43	.0000
Self-Brand					.032	.058	1.83	.0480
Congruity					.032	.038	1.65	.0480
	.0975	.009	3.3511	.0680				
Step 2-Model summ	ary and Co	efficient of	f Brand Per	sonality an	d Self Bra	nd Congrui	ity	
Constant				-	.2932	1.285	4.383	0.000
Brand Personality					.0764	.603	7.891	0.000
Human Facial					0450	120	2.942	0047
Physiognomy					.0459	.130	2.842	.0047
	.4221	.178	37.7281	.0000				

Table-16: Mediation analysis with Self Brand Congruity as Independent Variable

The Hayes test values capture the effect of self-brand congruity (SBC) on brand loyalty with the relationship of brand personality. To test the Hypothesis H_{2c} , brand personality mediates between self-brand congruity and brand loyalty. The regression of SBC with brand personality is significant, b =.058, t=1.83, p<.05. Per unit change of brand anthropomorphism brought .058 units change in brand personality with an overall change of 0.9%. This fulfills the pre-requisite of the independent-mediator significant relationship for the mediation analysis. Step 2 showed that the regression analysis of SBC and brand loyalty with brand personality as mediator in which the indirect path with brand personality is significant

(b =.603, t=7.8918, p<.05) showing partial mediation as the direct path of SBC with brand loyalty is significant (b =.1305, t=2.8429, p<.05). Brand personality is significant partial mediator between SBC and brand loyalty.

Variable	Effect	LLCI	ULCI
Human Body	.0413 ID	.0133	.0803
Lineaments	.0766 D	.0021	.1511
Human Facial	.0331 ID	0009	.0726
Physiognomy	.1228 D	.0443	.2014
Self-Brand Congruity	.0353 ID	0025	.0806
	.1305 D	.0402	.2208
Brand	.0491 ID	.0594	.2488
Anthropomorphism	.1541 D	.0040	.0989

Table 17: Direct and Indirect Effect of Variables

ID: Indirect Effect, D: Direct Effect

LLCI: lower limit confidence interval; ULCI: upper limit confidence interval

Brand anthropomorphism has indirect effect of .0491 with confidence interval from .0594 to .2488 which is significant and it indicates that our hypothesis 2 is accepted. Human Body Lineaments have indirect effect of .0413 with confidence interval from .0133 to .0803 which shows that the mediation path is significant hence we accept our hypothesis 2a. Human Facial Physiognomy has indirect effect of .0331 with confidence interval from -.0009 to 0.0726 since the interval has a value of zero in between it our results for indirect path are insignificant indicating that hypothesis 2b is not accepted. Self-Brand Congruity has indirect effect of .0353 with confidence interval from -.0025 to .0806 which also has a value of zero in between therefore our results are insignificant and hypothesis 2c is not accepted (Hayes, 2009).

Table-14 shows that brand anthropomorphism, human body lineaments, human facial physiognomy and self-brand congruity have significant relationship with brand loyalty. Consumers positively relate these brands with humanlike features and develop their loyalty towards them. Brand personality positively mediates the relationships of brand anthropomorphism and human body lineaments with brand loyalty. It does not however significantly mediates between human facial physiognomy, self-brand congruity and brand loyalty.

Symbolic representation and different aspects of intangible brand help to understand irrational behavior about selecting brand when they choose a specific product (Lorenz, 2008). According to the previous researches, symbolic representation uses of brands show consumer preference about specific brands that similarly match with their own personality characteristics (Govers & Schoormans, 2005). Advertising research help to view consumer brand relationship through an interpersonal perspective (Aaker, Fournier & Brasel, 2004; Aggarwal & McGill, 2007; Kim & McGill, 2011; Puzakova, Kwak & Recereto, 2013). Previous empirical literature, (Guido & Pelous, 2014) examined positive link among brand anthropomorphism, brand loyalty and brand personality in Italy. Feling (2005) describe human traits attribution of nonhuman objects and events are called anthropomorphism.

Table 18: Summary of Hypothesis Testing Results

Hypotheses	Results
H1: Brand anthropomorphism will have a significant relationship with brand loyalty	Accepted
H1a: Human Body Lineaments will have a significant relationship with brand loyalty	Accepted
H1b: Human Facial Physiognomy will have a significant relationship with brand loyalty	Accepted
H1c: Self-brand Congruity will have a significant relationship with brand loyalty	Accepted
H2: Brand personality will mediate the relationship between brand anthropomorphism and	Accepted
Brand loyalty.	_
H2a: Brand personality will mediate the relationship between Human Body Lineaments	Accepted
and Brand loyalty	
H2b: Brand personality will mediate the relationship between Human Facial Physiognomy	Rejected
and Brand loyalty	
H2c: Brand personality will mediate the relationship between Self-Brand Congruity and	Rejected
Brand loyalty	

Source: Author

Conclusion and Implications

Companies use components of brands, such as name, logo and tagline in the process of brand personality which in turn makes a brand more appealing for customers. One of the ways to create brand identification is brand anthropomorphism. Brand anthropomorphism can be measured through various dimensions including attributes of humanlike features, characteristics, intentions, emotions and imagination. This concept helps marketers to develop new brands, redesign the previous products and suggest attractive advertisement strategies for brand.

This study aims to find out the impact of brand anthropomorphism on its dimensions (human body lineaments, human facial physiognomy, and self-brand congruity) and brand loyalty through the mediation of brand personality by collecting responses from the customers of fast food brands in the Lahore city of Pakistan. The findings of the analysis reveal that brand personality mediates brand anthropomorphism and brand loyalty. This relationship is further tested by measuring three dimensions of brand anthropomorphism (human body lineaments, human facial physiognomy, and self-brand congruity). The mediation among brand anthropomorphism, brand personality and brand loyalty proved using two dimensions: human body lineaments, human facial physiognomy. Whereas, this mediation relation did not confirm in case of self-brand congruity.

Brand with humanlike entities as brand anthropomorphism have not studied previously in case of Pakistan. This study introduced new area that is different from celebrity endorsement and suitable for this area. In the study of the measures and conceptualization of the brand anthropomorphism with development of brand personality and brand loyalty were studied.

Consumer's perceptions of brands as human may have important implications in the area of branding (Puzakova, 2012; Gianluigi Guido, 2015). Without developing brand image or personality as a perception it is not possible to create loyal behavior. Brand personality dimensions between relationship of brand anthropomorphism and brand loyalty compulsory in this manner. New research opening new fields of branding concepts and consumer perceptions towards brands motivate researchers to find out the relationships.

Practically marketers can follow this strategy in their brand because consumers have good impression towards use of these strategies. Mostly fast food chains are making these humanlike entities in their brands (Like McDonald using human statue and Hardees using smiley associated to humanlike entity), other businesses can also use this technique for making their brand unique and attractive for consumers. These days, marketers are developing branding concept in Pakistan. Consumers demand product as brands, with something new or unique characteristics. Using celebrities for brand is more expensive for

marketers; they need some new cheap strategies. This concept helps marketers to develop products with new characteristics, re-design the products and making the effective communication strategies for specific brands. This study gives them reliable strategy with findings that is suitable in Pakistani marketers from consumer responses. New promotional strategies are developing in Pakistani markets,

New promotional strategies suggested in this research are needed in Pakistani markets due to high competition which in turn will help marketers to develop unique brand image for customers.

Limitation

This study contains some limitation. Income level is not taken in this survey; however, it is important because it determines how a consumer is capable of purchasing branded products. Possible common method can be biased due to the use of Likert scale which may affect the study results. Therefore, a multimethod or multisource data is recommended for future researchers in order to deal with these problems. Study based on specific brands that is expressing delimitation. Generalizability is limited to fast food chain only; we can take brands from various fields such as, cosmetics, drinks, hoteling and electronics. In this study, we have chosen consumers of specific age group and qualifications.

Acknowledgments

None

Conflict of Interest

Authors declared no conflict of interest.

Funding Source

Authors received NO funding to conduct this study.

ORCID iDs

Qamar-un-Nisa ¹ https://orcid.org/0000-0001-5585-8344 Mehr-un-Nisa ² https://orcid.org/0000-0002-9562-4291

References

- Aaker, J., Fournier, S., & Brasel, A. (2004). When good brands do bad. *Journal of Consumer Research*, 31(1), 1-16.
- Aaker, J.L. (1997). Dimensions of brand personality. Journal of Marketing Research, 34(3), 347-356.
- Aggarwal, P., & McGill, A. L. (2007). Is that car smiling at me? Schema congruity as a basis for evaluating anthropomorphized products. *Journal of Consumer Research*, *34*(4), 468–479.
- Aggarwal, P., & Mcgill, A. L. (2012). When Brands seems human, do human's act like Brands? Automatic behavioral priming effects of Brand anthropomorphism. *Journal of Consumer Research Incorporation*, 39(2), 307-323.
- Anais, G., Csilla, H., & Nina, B. (2016). That's embarrassing: Effects of brand anthropomorphism intimate disclosure. *Business & Economics Science*.
- Avis, M., Aitken, R., & S. Ferguson. (2012). Brand relationship and personality theory: Metaphor or consumer reality? *Marketing Theory*, 12(3), 311-331.
- Bernritter. S. F., Verlegh. P. W. J., & Smit, E. G. (2016). Why nonprofits are easier to endorse on social media: The role of warmth and brand symbolism. *Journal of Interactive Marketing*, *33*, 27-42.

- Brown, S. (2010). When the wild brands are: Some thoughts on anthropomorphic marketing, *The Marketing Review*, *10*(3), 209-224.
- Calabro, K. (2014). Humanizing brand personalities. Journal of Undergraduate Research in Communications.
- Chandler, J., & Schwarz, N. (2010). Use does not wear ragged the fabric of friendship: Thinking of objects as alive makes people less willing to replace them. *Journal of Consumer Psychology*, 20(2), 138-145.
- Cheung, M. L., Pires, G. D., & Rosenberg IIIP. J. (2019). Developing a conceptual model for examining social media marketing efects on brand awareness and brand image. *International Journal of Economics and Business Research*, 17(3), 243–261.
- Cheung, M. L., Pires, G. D., & Rosenberg IIIP. J. (2019). Developing a conceptual model for examining social media marketing effects on brand awareness and brand image. *International Journal of Economics and Business Research*, 17(3), 243–261.
- Chung, S. and Park, J. (2017), "The influence of brand personality and relative brand identification on brand loyalty in the European mobile phone market", *Canadian Journal of Administrative Sciences*, 34(1), 47-62.
- Dalman, M. D., Buche, M. W., & Min, J. (2019). The differential influence of identification on ethical judgment: The role of brand love. *Journal of Business Ethics*, 158(2), 875–891.
- Delbaere, M., McQuarrie, E. F., & Phillips, B. J. (2011). Personification in advertising: Using a visual metaphor to trigger anthropomorphism. *Journal of Advertising*, 40, 121-130.
- Delgado-Ballester, E., Palazon, M., & Pelaez-Munoz, J. (2017). This anthropomorphized brand is so loveable: The role of self-brand integration. *Spanish Journal of Marketing ESIC*, 21(2), 89–101.
- Epley, N., Waytz, A.& Cacioppo, J.T. (2007). On seeing human: A three-factor theory of anthropomorphism. *Psychological Review*, 114(4), 864-886.
- Faizan, A., Seden, D., Muslim, A., Kashif, H., & Kisang, R., (2021). Brand anthropomorphism, love and defense: does attitude towards social distancing matter? *The Service Industries Journal*, 41(2), 58-83.
- Fangxuan (Sam) Li., Qianqian Su., Jiantao Guan., Guojie Zhang. (2023). Communicate like humans? Anthropomorphism and hotel consumers' willingness to pay a premium price, *Journal of Hospitality and Tourism Management*, 56, 482-492.
- Feling, T. H., & Lukas, P. F. (2005). An examination of brand personality through methodological triangulation. *Journal or Product and Brand Management*, 13(2), 148-162.
- Fernandez, K. V., & Lastovicka, J. L. (2011). Making magic: Fetishes in contemporary consumption. Journal of Consumer Research, 38(2), 278-299.
- Fournier, P. (2016). Muslim Marriage in Western Courts. University of Ottawa, Canada.
- Fournier, Susan, Michael, Breazeale, & Marc Fetscherin. (2012). Consumer-brand relationships. *Theory* and Practice, Routledge.
- Golossenko, A., Pillai, K. G., & Aroean, L. (2020). Seeing brands as humans: Development and validation of a brand anthropomorphism scale. *International Journal of Research in Marketing*, 37(4), 737–755.
- Govers, P. C. M., & Schoormans, J. P. L. (2005). Product personality and its influence on consumer preference. *Journal of Consumer Marketing*, 22(4), 189-197.

- Guido, G., & Peluso, A. M. (2015). Brand anthropomorphism: Conceptualization, measurement, and impact on brand personality and loyalty. *Journal of Brand Management*, 22(1), 1–19.
- Han, B., Wang, L., & Li, X. (2020). To collaborate or serve? Effects of anthropomorphized brand roles and implicit theories on consumer responses. *Cornell Hospitality Quarterly*, 61(1), 53–67.
- Hee, J. L., & Myung, S. K. (2012). The effect of brand experience on brand relationship quality. *Academy* of Marketing Studies Journal, 16(1), 87-98.
- Hee-Eun, H., Ge-Qi, C., & Chang-Hyun, J. (2021). The role of human brands in consumer attitude formation: Anthropomorphized messages and brand authenticity, *Cogent Business & Management*, 8(1), 1923355.
- Huang, H., Mitchell, V., & R. Elliot. (2012). Are consumer and brand personalities the same? *Psychology* & *Marketing*, 29(5), 334-349.
- Hutton, Graeme, & Maggie Fosdick. (2011). The globalization of social media: Consumer relationships with brands evolve in the digital space. *Journal of Advertising Research*, 51(4), 564-570.
- Kim, Sara, & Ann, L. McGill. (2011). Gaming with Mr. Slot or gaming the slot machine? Power anthropomorphism and risk perception. *Journal of Consumer Research*, 38(1), 94-107.
- Landwehr, J. A. (2011). The effect of friendly and aggressive facial expressions on product liking and sales. *Journal of Marketing*, 75(3), 132-14.
- Landwehr, J. R., McGill, A. L., & Herrmann, A. (2011). It's got the look: The effect of friendly and aggressive facial expressions on product liking and sales. *Journal of Marketing*, 75(3), 132-146.
- Lorenz, C. D., Travesset, A., & Anderson, J. A. (2008). General purpose molecular dynamics fully implemented on graphics processing units. *Journal of Computational Physics*, 10(227), 5342-5359.
- Maehle, N., Otnes, C., & Supphellen, M. (2011). Consumer perceptions of the dimensions of brand personality. *Journal of Consumer Behavior*.
- Menard, S. (1995). Applied logistic regression analysis. 54(1), 17-24.
- Nunnally, J. C., Bernstein, J. H. (1994). Psychometric theory. New York: McGraw Hill.
- Ozdemir, R. S., Kenneth, O., St. Laouis, & Topbas, S. (2011). Public attitudes towards stuttering in Turkey. *Journal of Fluency Disorders*, *36*(1), 262-267.
- Park, J. K. & D. R. John. (2010). Got to Get You into My Life: Do brand personalities rub off on consumers? *Journal of Consumer Research*, 37(4), 655-669.
- Portal, S., Abratt, R., & Bendixen, M. (2018). Building a human brand: Brand anthropomorphism unravelled. *Business Horizons*, 61(3), 367–374.
- Puzakova, M (2012). Brands as humans: Positive and negative of brand anthropomorphism. Drexel University.
- Puzakova, M., & Aggarwal, P. (2018). Brands as rivals: Consumer pursuit of distinctiveness and the role of brand anthropomorphism. *Journal of Consumer Research*, 45(4), 869–888.
- Puzakova, M., Kwak, H., Rocereto, J. F. (2013). When humanizing goes wrong: The detrimental effect of brand anthropomorphization amid product wrong doings. *Journal of Marketing*, 79(4), 56-76.
- Rauschnabel, P. A., & Ahuvia, A. C. (2014). You're so lovable: Anthropomorphism and brand love. *Journal of Brand Management*, 21(5), 372–395.

- Roscoe, J.T. (1975). Fundamental Research Statistics for the Behavioral Sciences. Holt, Rinehart and Winston, New York.
- Sarkar, A., Sarkar, J. G., & Bhatt, G. (2019). Store love in single brand retailing: The roles of relevant moderators. Measurement, and impact on brand personality and loyalty', *Journal of Brand Management*, 22(1), 1-19.
- Sreejesh, S., & Anusree, M. R. (2017). Effects of cognition demand, mode of interactivity and brand anthropomorphism on gamers' brand attention and memory in adver games. *Computers in Human Behavior*, 70, 575–588.
- Su, J. and Tong, X. (2016). Brand personality, consumer satisfaction, and loyalty: a perspective from denim jeans brands. *Family and Consumer Sciences Research Journal*, 44(4), 427-446.
- Su, N., & Reynolds, D. (2017). Effects of brand personality dimensions on consumers' perceived selfimage congruity and functional congruity with hotel brands. *International Journal of Hospitality Management*, 66, 1–12.
- Surucu, O., Ozturk, Y., Okumus, F., & Bilgihan, A. (2019). Brand awareness, image, physical quality and employee behavior as building blocks of customer-based brand equity: Consequences in the hotel context. *Journal of Hospitality and Tourism Management*, 40, 114–124.
- Tam, K., Lee, S., & Chao, M. M. (2013). Saving Mr. Nature: Anthropomophism enhances connectedness to and protectiveness toward nature. *Journal of Experimental Social* Psychology, 49(1), 514–521.
- Thanh, N. N. Dan., & Phuc, N., T. (2023). Does brand anthropomorphism and brand intimacy matter to assess consumers' engagement successfully? *Cogent Business & Management*, 10-2.
- Vernuccio, M., Patrizi, M., & Pastore, A. (2021). Delving into brand anthropomorphisation strategies in the experiential context of name-brand voice assistants. *Journal of Consumer Behavior*, 1–10.
- Wang, X., & Yang, Z. (2008). Does country of origin matter in the relationship between brand personality and purchase intention in emerging economies? *International Marketing Review*, 25(4), 458-474.
- Yoo, B., & Donthu, N. (2001). Developing and validating multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.