Full Length Research Paper

Analysis of the factors affecting customers' purchase intention: The mediating role of perceived value

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Present economic situation has escorted the companies to the worst competitive era, so in this scenario, the focus of the consumer goods manufacturing companies is on customer purchase intention for capturing the major chunk of consumer market. The aim of this study is to explore the factors affecting the customer purchase intention. The main focus of this study is to measure the mediating effect of customer perceived value between three independent variables (customer knowledge about product, celebrity endorsement and product packaging/design) and customer purchase intention. This paper describes that customer knowledge about product; celebrity endorsement and product packaging have significant relationship with purchase intention. This is a quantitative study. A questionnaire was used to collect data. A pilot study was conducted for finalizing the questionnaire. Sample size of this study is 220. Findings of this study show that customer knowledge, celebrity endorsement and product packaging/design have significant relationship with purchase intention while the mediating role of perceived value was not found significant.

Key words: Customer knowledge, celebrity endorsement, product packaging/design, perceived value, purchase intention.

INTRODUCTION

The present economic crisis which started in the United States, stretched over the whole world. As a result, it has escorted the companies to the worst competitive era and the companies are making more efforts for their endurance.
Zaal (2009) concluded that the current economic situation has compelled companies to operate efficiently and effectively by creating the right products for the right market than just lean on favorable market conditions to raise profit margins. The main purpose of this study is to investigate the factors affecting customer purchase intention depending on the customers' perceived value about the product. The focus of this research is to explore this behavior in consumer products, shampoo. Previous studies mostly focused on direct relation of different factors with purchase intention, while in this study, we examined the role of perceived value as a mediating variable.

The study of purchasing process is a complicated study. In the purchasing process, buyer decides to purchase a particular product. Several factors effect buyer purchasing decision to buy a particular product such as knowledge about product, quality of product, price, packaging/design, celebrity endorsement, fashion, family relation with the product when he plans to purchase a product for the first time.

The importance of the present study is very great because the present study is about the purchase intention in which the relationship of customer knowledge, product packaging, and celebrity advertisement lead to the perceived value of the product and that perceived value of the product leads to the purchase intention. In other words, perceived value is playing a mediating role between the three independent variables; customer knowledge, celebrity endorsement and product packaging; and the dependent variable,

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purchase intention. Other authors like Franz et al. (2006) describe that knowledge about the product has direct influence on consumer purchase intention. In addition they concluded that the perceived value is positively associated with purchase intention (Chen, 2007).

LITERATURE REVIEW

More than any other factor, perceived value is the prime factor for purchase intention. Customer Knowledge about product, product packaging/design and celebrity endorsement are factors that have indirect relationship with purchase intention while the direct relationship with the perceived value of the product. When making a purchase of any product, customers often rely on personal memory/knowledge to make decision. The study of Satish and Peter (2004) elucidate that customer knowledge about the product play a vital role in product purchase decision. Similarly, other studies also describe customer knowledge as a prime factor for decision making (Rao and Monroe, 1988). In a bit different style, customer knowledge is important for building customer response or evaluation about the product that may be called as product perceived value (Satish and peter, 2004). Feng et al. (2006) elucidate that, consumer psychology perception openly reflects consumer viewpoints on product knowledge and consumer knowledge of a product can help consumers to make their decisions effectively. Customer knowledge is indeed significantly correlated with many valuable dimensions and customer purchase intention depends on many valuable factors, so, we predict:

H_1: Customer knowledge about product has significant relation with purchase intention.
H_2: Perceived value mediates the relationship between the customer knowledge about product and purchase intention.
H_3: Celebrity endorsement has significant relation with purchase intention.
H_4: Perceived value mediates the relationship between the celebrity endorsement and purchase intention.
H_5: Product packaging/design of product has significant relation with purchase intention.
H_6: Perceived value mediates the relationship between the product packaging/product design and purchase intention.

Product packaging/outlook or design is another important factor that escort to the product perceived value. Generally, there are two thoughts about packaging. One is to prepare the product packaging very simple while the other is to prepare a colorful impression which is used for product on sight attraction. Product packaging/product design has strong influence on consumer perceived value, resulting in intention to purchase (Ann, 2008).

Other studies like Michae (1974) describe that product packaging is a major attribute of customer perceived value of the product. Accordingly packaging and communication have in depth relation with consumer goods consumption (Beltas et al., 2006). Khalid et al. (2006) suggest that customer attraction obtained through emotions is often extracted by product's packaging/design, art, clothing, and consumer goods; therefore, designers must consider emotions in packaging/product design. Belleau (2007) says if the product packaging/design shows it is reliable and versatile, then it will increase the perceived value of the customers.

In another research, Fung et al. (2004) says that packaging/design of the product can hold consumer's pleasure feelings. Furthermore, packaging is an important part of the company reputation that plays a major role in communicating the product image and better packaging shows that it is a quality product (Dileep Kumaar M.).

Subhadip (2006) describes that "celebrity endorsements can be traced back to the 1870s when Reverend Henry Ward Beecher (brother of famous litterateur Harriet Beecher Stowe) endorsed Waltham watches in a print advertisement in Harpers Weekly" for those people who trust celebrity, watch television and use internet more frequently (Couldry et al., 2007). Wykes (2007) says that media and celebrity sites have links and prop-up selling goods. Many researchers have emphasized the importance of celebrity attractiveness in the celebrity advertisement and it comes through the celebrity's attachment with the product. In addition, celebrity endorser should be relevant to the product to which endorser is going to advertise, as well as argue with solid and logic reasoning about the product and that he/she truly likes the product (David and Benedikte, 2004). In contrast, effective and loyal celebrities working in movies are taking part in politics, and due to their loyalty with the profession, people accepted them and they were elected. For example, in America, entertainment celebrities have entered politics and most of the people achieved their targets and at this stage, political figures realized the fact and started taking part in the media and entertainment channels (Timothy, 2005). On the other hand, James (2002) says that in contemporary terms, celebrity function or process has enhanced potential value a celebrity can claim.

The concept of perceived value implies a relation between a customer/consumer and the product (Payne and Holt, 2001). In this study, perceived value is pre purchase estimate of product with respect to quality, price and design, etc. Improvement about product knowledge, prominent and attractive product design and packaging, and effective celebrity advertisement, leads to customer perceived value. Tung et al. (1994) argue that perceived value has been proposed as mediating construct with
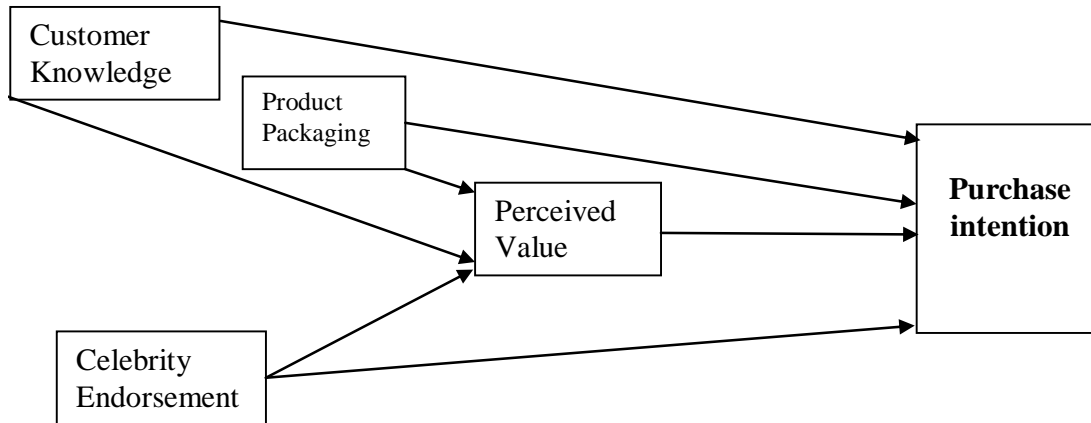
Figure 1. Study model.

Table 1. Reliability of variables.

Variables	Reliability (Chronbach alpha)	Number of items
Customer knowledge (about product)	0.521	3
Celebrity endorsement	0.517	5
Product packaging/design	0.882	4
Perceived value	0.731	3
Purchase intention	0.762	4

purchase intention. It is decided that higher the perceived value about the product, higher the purchase rate of product. As explained by James (2002), the higher level of perceived value will lead to purchase intention. The knowledge about product reaches a certain level, consumer goes for assessment and evaluation process, and makes a purchase decision after comparison and judgment (Nan-Hong, 2007). Perceived value directs customer to the purchase intention. Other studies also support this phenomenon like Tun-zong et al. (1994) who says that purchase intention is positively influenced by perceived value. Customer estimate the product value through different sources like customer knowledge about product, celebrity endorsement, product packaging, friends, family members, colleagues and many other sources.

Mookerjee (2001) supports this argument about the reliability and the confidence on the source through which customer perceived his purchase decisions. The three personal sources specified are family members, friends and office acquaintances.

Model

The independent variables selected for this study are; customer knowledge about product; celebrity endorsement; product packaging/design. The mediating variable considered in this study is perceived value and the dependent variables analyzed in this is purchase intention (Figure 1).

RESEARCH METHODOLOGY

The research described in this study adopts quantitative method. Pilot study was conducted for the evaluation of the questionnaire. Before pilot study, questionnaire was sent to 20 respondents and they were asked to comment critically and feedback was used to improve the quality (wording, style, addition, deletion, etc) of the questionnaire. After that, questionnaire was filled by 40 respondents for pilot testing. The population of our study consists of the employee of public sector of Pakistan. The research questionnaire is about the consumer goods, shampoo. The questions used measurement by likert scale of 1 to 5. At the final stage, two hundred and fifty (250) questionnaires were circulated, out of which 230 were returned. Two hundred and twenty questionnaires were found valid. Therefore size of our sample is 220 and the population of our research is self earning and self spending people. Regression analysis was executed to get the results.

RESULTS

Regression process was executed to get results. The model was divided into three stages and each stage has three parts. Results show that the instrument is reliable to test the model and result can be generated through regression analysis (Table 1).

In the Table 2, customer knowledge (CK_mean) has

Table 2. Correlation analysis.

Statistic		CK_mean	CE_mean	PP_mean	PV_mean	PI_mean
CK_mean	Pearson correlation	1	0.560**	0.711**	0.602**	0.695**
CE_mean	Pearson correlation	0.560**	1	0.744**	0.674**	0.634**
PP_mean	Pearson correlation	0.711**	0.744**	1	0.846**	0.770**
PV_mean	Pearson correlation	0.602**	0.674**	0.846**	1	0.709**
PI_mean	Pearson correlation	0.695**	0.634**	0.770**	0.709**	1

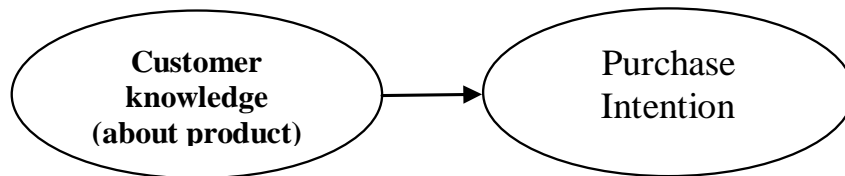** Correlation is significant at the 0.01 level (2-tailed).

Figure 2. Figure 2 . The relation between customer knowledge and purchase intention, customer knowledge is taken as independent variable and purchase intention is taken as dependent variable.

Table 3. The regression relation of customer knowledge(independent variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.695[a]	.484	.481	.49913

Predictor: (constant), CK mean

Coefficients[a]

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	1.235	.206		5.997	.000
CK mean	.709	.050	.695	14.287	.000

a.   Dependent variables:PI mean

significant relation with customer purchase intention and this relation is 69.5% at 0.01 levels. Celebrity endorsement (CE_mean) has significant relation with customer purchase intention and this relation is 63.4% at 0.01 levels. Product purchase/design (PP_mean) has significant relation with customer purchase intention and this relation is 77% at 0.01 level and perceived value (PV_mean) has significant relation with customer purchase intention (PI_mean). After the correlation analysis, in the first step, regression analysis was performed on independent and dependent variables (Figure 2, Table 3).

In the model summary, R^2=0.484, explaining the model at approximately 48.4%, beta value is 0.695 explaining the variation intensity of independent variable on dependent, well.

In the second step, customer knowledge, perceived value and purchase intention are used in regression to measure the mediating effect (Figure 3, Table 4). In the model summary, R^2=0.615, this is explaining the model approximately 61.5%, beta value is 0.422 and 0.455, which is fairly good and it is explaining the variation intensity of independent variable on dependent in each
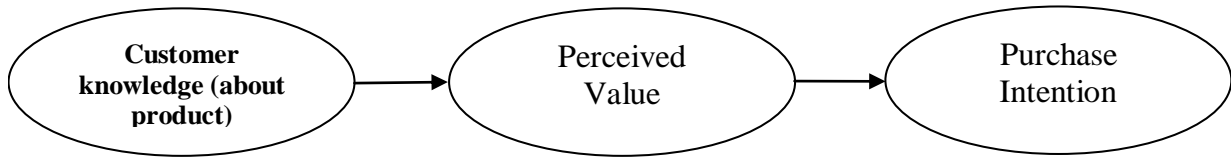
Figure 3. The relationship of customer knowledge (independent variable) and purchase intention(dependent variable), whereas perceived value treated as mediating variable between independent and dependent variable.

Table 4 The regression relation of customer knowledge(independent variable), perceived intention(mediating variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.785[a]	.615	.612	.43166

The regression relation of customer knowledge

Coefficients[a]

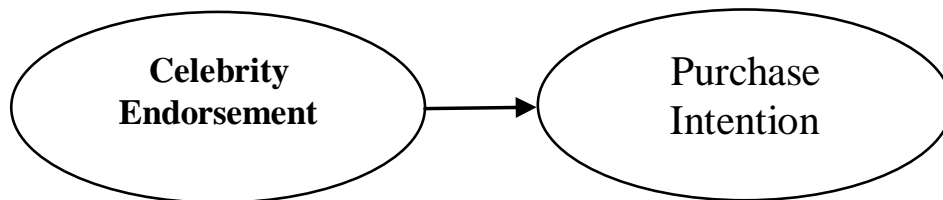| Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	.397	.203		1.959	.051
CK mean	.430	.054	.422	7.997	.000
PV mean	.469	.054	.455	8.629	.000

a.   Dependent variables: PI mean

Figure 4. Showing the relation of celebrity endorsement(independent variable) and purchase intention(dependent variable).

case.

Regression analysis was performed on celebrity endorsement (IV) and purchase intention (DV) (Figure 4, Table 5). In the model summary, R^2=0.402, explaining the model as approximately 40.2%, beta value is 0.634, explaining the variation intensity of independent variable on dependent and it is significant.

In the second step, customer knowledge, perceived value and purchase intention are used in regression to measure the mediating effect (Figure 5, Table 6). In the model summary, R^2=0.547, explaining the model at approximately 54.7%, beta values are 0.287 and 0.515, explaining the variation intensity of independent

variables on dependent variables well.

First, reliability analysis, and then, regression analysis were performed on product packaging/design (IV) and purchase intention (DV) (Figure 6, Table 7). In the model summary R^2=0.59, explaining the model approximately 59.2%, Beta value is 0.770 explaining the variation intensity of independent variable on dependent is significantly. In the second step, product packaging/design, perceived value and purchase intention are used in regression to measure the mediating effect (Figure 7, Table 8). In the model summary, R^2=0.604, explaining the model at approximately 60.4%, beta values are 0.599 and 0.202, explaining the variation

Table 5. The regression relation of celebrity endorsment(independent variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.634[a]	.402	.400	.53687

a.   Pridictors: (constant), CE mean

Coefficients[a]

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	.705	.285		2.469	.014
CE mean	.853	.070	.634	12.118	.000

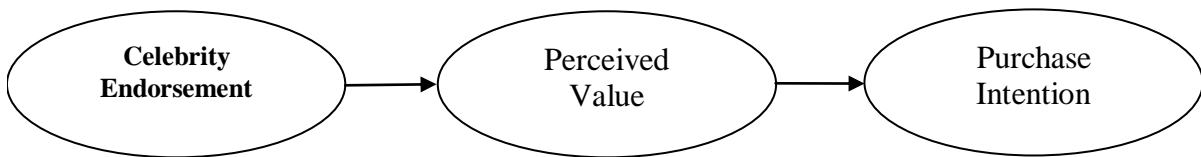a.   Dependent variable: PI mean

Figure 5. Relationship among celebrity endorsement (independent variable), perceived values(mediating variable) and purchase intention(dependent variable).

Table 6 The regression relation of celebrity endorsement (independent variable), perceived value(mediating variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.
Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.740[a]	.547	.543	.46841

predictor: (constant), PV mean, CE mean

Coefficients[a]

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	.341	.253		1.347	.179
CE mean	.386	.083	.287	4.647	.000
PV mean	.531	.064	.515	8.329	.000

a. Dependent variable: PI mean

intensity of independent variables on dependent variables well. The impact of all three independent variables is tested together on dependent variable(purchase intention). This can be done with multiple regression
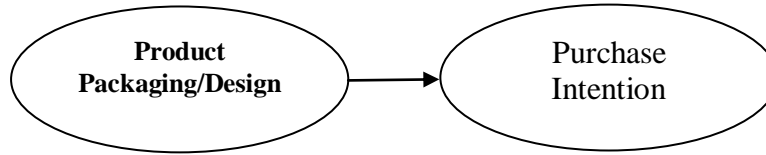
Figure 6. Showing the relation of product packaging/design (independent variable) and purchase intention(dependent variable)

Table 7 Model summary The regression relation of product packaging/design (independent variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.770[a]	.592	.591	.44338

a.   Pridictors: (constant), PP mean

Coefficients

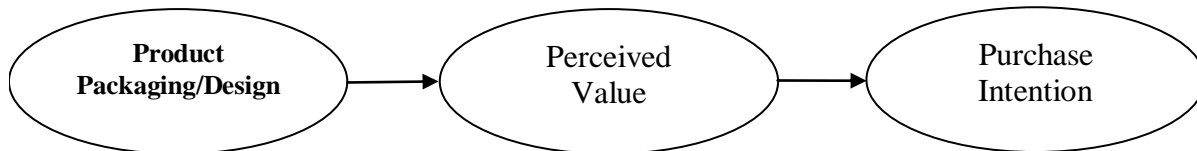| Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	.681	.196		3.467	.001
PP mean	.810	.045	.770	17.802	.000

a.   Dependent variable: PI mean

Figure 7. Relationship among product packaging/design (independent variable), perceived values(mediating variable) and purchase intention(dependent variable).

analysis as shown in Table 9.

Result shows that product packaging (beta = 0.713, p-value = 0.232) makes significant impact on purchase intention of consumers. Customer knowledge (beta = 0.701, p-value = 0.010) was also a significant predictor on purchase intention. Same results for celebrity endorsement (beta = 0.612, p-value = 0.112); it has high effect on purchase intention.

Results show that three hypothesis (H_1, H_3 and H_5) are accepted and the remaining three (H_2, H_4 and H_6) are rejected.

Findings of this study narrate that independent variables, customer knowledge about product, celebrity endorsement and product packaging/design have significant relationship with the customer purchase intention while the mediating variable mentioned in this study has no mediating affect on the independent variables, so we can say that mediating relation in the given scenario (model) does not exist.

CONCLUSION

The study's main objective was to explore the relationship between the independent variables (customer knowledge about product, celebrity endorsement and product packaging/design) and customer purchase intention as well as the mediating role of perceived value on purchase intention. The current economic crisis started in the United States and stretched over the whole world. Therefore, it has escorted the companies to the worst competitive era where cut throat

Table 8. Model summary The regression relation of product packaging/design (independent variable), perceived value(mediating variable) and purchase intention(dependent variable). Results include beta value, t-value, significance value and R square.

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.777[a]	.604	.600	.43808

a.   Predictors: (constant), PV mean, PP mean

Coefficients[a]

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	St. Error	Beta		
(constant)	.569	.199		2.861	.005
PP mean	.630	.084	.599	7.468	.000
PV mean	.208	.083	.202	2.512	.013

a.   Dependent variable: PI mean

Table 9. Table 9 Multiple regression analysis Multiple regression analysis of product packaging, customer knowledge, celebrity endorsement (independent variables) with purchase intention(dependent variable). Results include beta value, t-value, significance value and standard error.

	Coefficients[a]					
Model	Unstandardized coefficients		Standardized coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1.279	0.576			3.917	0.000
PP_mean	0.882	0.311	0.713		17.407	0.232
CK_mean	0.720	0.525	0.701		13.090	0.010
CE_mean	0.811	0.221	0.612		10.648	0.112

a.Dependent variable: PI_mean.

competition prevails in the business environment. So, companies make more efforts for their continued existence. The current economic situation has compelled companies to operate efficiently and effectively by creating the right products for the right market than just lean on favorable market conditions to raise profit margins. The main purpose of this study was to investigate the factors affecting customer purchase intention depending on the customers' perceived value about the product. And the focus of this research was to explore above behavior in consumer products. This study also examined the role of perceived value as mediating variable.

In order to come up with a reliable and valid research, this paper pilot study was conducted for questionnaire development and improvement. The sample size was two hundred and twenty which was considered as an average size of the sample in such type of studies. Type of population was self earning and self spending people.

Data related to all variables were found reliable. Correlation showed that all the variables have significant result. All the three independent variables have significant relationship with dependent variable. When mediating effect was checked, it did not change the beta value and the significant level, so the mediation role of mediator perceived value did not exist. In this study, we have measured the relationship of three different variables with customer purchase intention. Research on this topic is very scanty. This study may be generalized, expanding the canvas of population type and size.

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