

Impact of Product Packaging Cues on Product Quality Perceptions: Empirical Evidence from Pakistani Shopping Malls

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ABSTRACT

This paper develops and tests a theoretical model of the effects of nutritional label and brand name on consumers' product quality perceptions in Pakistani consumer market. The basic aim of the study is to investigate the extent to which consumers form quality perceptions from product packaging cues. The survey method was employed to collect data from 487 Pakistani consumers in Islamabad and Rawalpindi region using mall intercept method. Five-point Likert scale is used to measure all the dimensions of variables. Descriptive and regression analyses are performed using SPSS and PLS. Cronbach alpha measure is used for all the variables to ensure internal consistency. The finding indicates that brand name as well as nutritional label exerted significant influence on product quality perceptions. Investigating the impact of nutritional label and brand name in Pakistani consumer market is a contemporary and worthwhile topic that shall have noteworthy contribution in prevailing literature as well as to the marketers.

Keywords: *Product Quality Perception; Nutritional label; Brand Name; Product Packaging Cues.*

I. INTRODUCTION

It is frequently assumed that the provision of cues on the product packages leads to the perception development regarding the quality of the product. The evidence of has been provided by Teisl *et al.* (2001) that the consumers' quality perceptions are being altered by taking packaging cues into consideration. The visual and verbal elements present on the food

package are termed as the cues which give a preconception to buyer at the point of sale regarding the quality. Moreover, in the topical arena of food marketing, the packaged food producers are displaying nutritional labels in addition to other labels like brand name and price tag (Onozoka *et al.*, 2014). Further it is argued by Muth *et al.* (2013) that the nutritional label allows the consumer to assess the quality of the product. On the similar foundations Trifts *et al.* (2013) along with Chandon & Wansink (2007) suggested that the nutritional content labels present evidence regarding the quality of enclosed product prior to the actual usage of the product. The ambiguity regarding the quality of the product persuades the consumers to make use of nutritional label for making inference. As the food packaging labels are associated with the sense of quality of the product, the nutritional label could be one of the quality cues influencing the quality perceptions. In the modern age, consumers like to make informed decisions. Wijngaart (2002) argue that nutritional label is a valued tool to help the consumers in making informed choices. Grunert and Wills (2007) highlight the importance of nutritional labelling by claiming them to be effective and efficient mode of marketing. Teisl and Levy (1997) argue that nutritional labels not only provide quality information but allow the consumers to switch to healthier options of food instead of unhealthy foods.

Brand name is effective in creating product quality perceptions and it establishes the intentions of buyers towards the products. It is also a key element for the

long term success of relationships (Sharma & Garg, 2016). With the brand name, buyers generally have to spend very less time to perceive the quality of the product (Randhawa *et al.*, 2017). The stout relationship between brand name and product quality perceptions motivates the frequent buying behavior (Mishra *et al.*, 2017). It has been argued by (Lewis *et al.*, 2016) that relation between the brand name and product quality perception is vital as well complex issue and it should be probed closely in various markets.

II. LITERATURE REVIEW

A. Nutritional Label and Perceived Product Quality

The nutritional labels on the food packages are utilized by the consumers as an extrinsic cue to assess the quality of the product (Fenko *et al.*, 2016). According to signaling theory the cues and stimuli present in the shopping environment are responsible for the perceptions of the consumers (Talati *et al.*, 2016). Particularly, certain empirical studies have found a connection between the nutritional labels and perceived product quality (Darkawa 2014; Rundh, 2013; Walters & Long 2012). Other studies have proved that nutritional labels cast a positive impact on the perceived product quality (Grunert *et al.*, 2016; Bialkova *et al.*, 2016). Specifically, the studies have verified that the food labels on the food packages in European market have verified that perceived food quality is impacted by the nutritional labels (Verhoef *et al.*, 2016; Oliveria *et al.*, 2016).

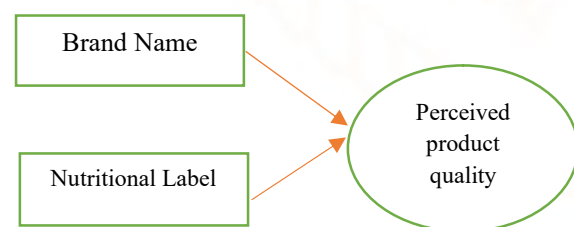
B. Brand Name and Perceived Product Quality

The brand name assists the consumers to recognize the product with much ease; hence it works as memory cue allowing the consumer to recollect the information regarding the product (Winkielman *et al.*, 2000). The brand is responsible for the formation of quality perceptions about the product of the certain brand and these perceptions play a crucial role in final decision making of the consumer (Winkielman *et al.*, 2000). The brand has been studied a major marketing tool b various researchers. According to Chadwick & Holt (2015) brand gives consumer an additional value and prestige and marketers use it as a tool for gaining competitive advantage. By looking at scenario of Pakistani consumer behaviour regarding the brand preferences, the food brands are considered to be higher in quality then loose food items (Akhtar *et al.*,

2016). According to Verhoef *et al.* (2002), the greater the difference between the perceived quality of branded food items and loose food items, the higher would be the preference of consumer to buy branded food. Due to increasing literacy level of females, more contribution of females in workforce and rapid urbanization, the purchasing power is gradually increasing (Lee *et al.*, 2011). The gradual increase in the purchase power is enhancing the consumption of branded packaged products is increasing in Pakistan (Khan & Nasr, 2010). Although, there is an increasing trend of branded packaged products, but there is a lack of comprehensive study in Pakistani consumer market (Zeb *et al.*, 2011). Additionally, the need of investigating the impact of brand name on food package relative to the other food packaging cues has been stressed upon (Grewal *et al.*, 2015).

III. THEORETICAL FRAMEWORK

The present study focus is on the impact of nutritional label and Halal logo as signals from the consumer point of view of product quality perception as these food packaging cues have been referred to be used as frequently by the consumers (Chaya *et al.*, 2016; Bailey., 2017). Previous researches stressed that packaging cues have an impact on consumers' choice. As a matter of fact, packaging cues are suggested to have great impact as a means of direct communication (Peters and Badrie, 2005). A package is acknowledged as a marketing communication tool as packages convey meanings directly to consumers when the decision to purchase is being made. As such, it is commonly accepted that packaging cues convey meanings about the product and its quality (Garber *et al.*, 2000; Rothschild, 1987). Even though the fact that packages convey meanings is well acknowledged, it seems that there are few scholarly studies focusing on food packaging as a means of communicating the unobserved quality (Underwood, 2001; Garber, 1995).



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frequently by the consumers (Oijen *et al.*, 2016; Chaya *et al.*, 2016; Bailey *et al.*, 2016). Previous research stresses that packaging cues have an impact on consumers' choice. As a matter of fact, packaging cues are suggested to have great impact as a means of direct communication (Peters, 1994). A package is acknowledged as a marketing communication tool as packages convey meanings directly to consumers when the decision to purchase is being made. As such, it is commonly accepted that packaging cues convey meanings about the product and its quality (Garber *et al.*, 2000; Rothschild, 1987). Even though the fact that packages convey meanings is well acknowledged, it seems that there are few scholarly studies focusing on food packaging as a means of communicating the unobserved quality (Underwood, 2001; Garber, 1995; Gordon *et al.*, 1994). Based on the proposed theoretical framework, following hypotheses are drawn which will be put to further analyses

H₁: Brand Name casts a significant impact on product quality perception.

H₂: Nutritional label casts a significant impact on product perceived quality.

IV. METHODOLOGY

Islamabad and Rawalpindi are selected as sample because they are major big cities of Pakistan having a dense and diverse number of people as inhabitants from all over the country. As the capital of Pakistan, Islamabad is the most developed city. It has up to date amenities and infrastructure and enormous number of educational institutes. Islamabad, the capital city of Pakistan is in the federal capital territory of Pakistan. It is the most diverse and metropolitan city of the country. Being the capital of Pakistan Islamabad comprises of all the head offices of the major companies of Pakistan, has around 16 public and government universities and a wide range of employment opportunities. The estimated population of Islamabad in 2016 was 1433000 (Worldometer, 2016). Despite of its establishment in 1960's Islamabad has settled well and grown in population steadily. Rawalpindi is the neighbor city of Islamabad and termed as twin cities. Together they form Islamabad- Rawalpindi metropolitan area. Rawalpindi has a population of approximately 2.506 million which diverse from all over the country.

A. Data Collection

After calculating the sample proportions city wise, from the list of shopping malls, major shopping centres were selected from both cities based on the high customer turnout, geographical coverage and popularity. To get the results which will be generalizable and representative, the chosen random sampling technique should be appropriate. The strategy used in this study is collecting data from general consumer using systematic random sampling via mall intercept method. This sampling involves in drawing every nth element in the population starting with random number between 1 and n (Sekeran, 2003).

Table `1: Shopping centres within city limits

City	Mall	Criteria for selection
Islamabad	Centaurus Mall	Geographical coverage, High customer turnout, Popularity
Islamabad	Beverly Center	
Islamabad	Kohsar Market	
Rawalpindi	CSD Mall	
Rawalpindi	CSD Super Mall	
Rawalpindi	Green valley premium Hyper mart	
Rawalpindi	Rafy Mall	

B. Data Analysis Strategy

Data analysis will be done by using combination of descriptive and inferential analysis. SPSS has been used to carry out the descriptive analysis to obtain a general understanding as well as for profiling the respondents. SPSS will be used for summarizing the data, making various tabular presentations and for measuring the frequency of occurrence of the outcomes. On the other hand, for making predictions from the data, inferential analysis was conducted using SEM.

C. Descriptive Analysis

The descriptive analysis was performed in order to describe the primary features of the data set. The descriptive analysis was performed by looking at every variable and its dimensions. Sekeran and Bougie (2010) state that descriptive analysis is basically explained via mean, standard deviation,

variance in order to obtain a general view about how the respondents have responded to questionnaire.

Table 2 (APPENDIX) shows the mean and standard deviation values of the data. The mean values of the data range from 3.7436 and 4.103 which are among the acceptable range. The values of standard deviation also lie in tolerable range of 0.5746 and 0.67987.

D. Reliability Test

The values of factor loading demonstrate the strength of each item on its respective construct. According to Fornell & Larker (1981) suggestion, the items with loading higher than 0.50 or more is acceptable for multivariate analysis. (APPENDIX)

E. SEM Path Analysis

This study implants structural equation modelling (SEM) for hypothesis testing. Two most popular approaches in SEM are covariance based approach and variance based approach. AMOS, LISERAL use covariance based approach however variance based approach is being used by partial least squares. Covariance based CBSEM is confirmatory in nature however variance based VBSEM is prediction oriented. Models with complex nature and numerous latent and manifest variables can be estimated easily. According to Chin *et al.* (2003) SEM is capable of running hierarchical models, or moderating and mediating effects. Vinzi *et al.* (2010) states causal relationship of the model is calculated among the latent variables estimated by means of observed indicators named as manifest variables. Table 4 shows the values of path coefficients

Table 4: Path Coefficient

	Coefficient	T-Statistics	P values
Brand Name > PQ	0.298	5.287	0.000
Nutritional Label>PQ	0.083	1.748	0.081

The T statistics and P value evidently show that the Brand Name as well as Nutritional label has an evident and significant relationship with perceived quality.

V. CONCLUSION AND DISCUSSION

In modern time of food marketing, food packaging cues are playing a vital role in consumer behavior. Food packaging cues enables the consumers to develop the quality perceptions. Questionnaire method was adopted to collect the data from the consumers of Islamabad and Rawalpindi. The current study approves that H1 Brand Name has a significant relationship with perceived product quality. These findings are in line with the limited previous findings of (Mohammad *et al.*, 2011; Othman *et al.*, 2016). On the other hand, nutritional label was found to have stout nexus with perceived product quality, accepting the second hypothesis of the study. The results confirmed the findings of (Huang and Lu, 2016; Appelhans *et al.*, 2017).

VI. LIMITATIONS OF THE STUDY

This particular study has adopted packaged food sector for study. The cities of Islamabad and Rawalpindi were selected to collect data and the sample of 480 consumers was used. The future researchers can expand the number of cities to more cities of Pakistan as well as similar kind of study could be generalized to other products other than packaged foods.

VII. IMPLICATIONS

From the standpoint of practitioners, this study provides a significant contribution in the form of understanding the mindset of consumers in a shopping situation. It may also assist the marketers to devise the marketing strategies to create favorable product perceptions and long-term relations with the consumers.

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Table 2: Descriptive Statistics

Construct	N	Minimum	Maximum	Mean	Standard Deviation
Nutritional Label	478	1	5	3.7436	0.66230
Brand Name	478	1	5	4.103	0.5746
Perceived Product Quality	478	1	5	4.0753	0.67987

Table No: 3 Reliability Coefficient

Serial No	Construct	Cronbach Alpha	No .of Items	Items	Alpha if item is deleted
1.	Nutritional label	0.707	7	NL1	0.631
				NL2	0.663
				NL3	0.690
				NL4	0.733
				NL5	0.650
				NL6	0.668
				NL7	0.672
2.	Brand Name	0.836	9	BN1	0.820
				BN2	0.825
				BN3	0.821
				BN4	0.811
				BN5	0.821
				BN6	0.823
				BN7	0.812
				BN8	0.810
				BN9	0.828
3.	Perceived quality	0.851	9	PQ1	0.874
				PQ2	0.872
				PQ3	0.867
				PQ4	0.870
				PQ5	0.862
				PQ6	0.863
				PQ7	0.860
				PQ8	0.869
				PQ9	0.875