

**A SURVEY OF THE IMPACT OF VISUAL PACKAGING, PERCEIVED QUALITY AND VALUE OF PRODUCT ON BRAND PREFERENCE AND PURCHASE INTENTION OF CUSTOMERS**

**Mahdi Kafiabadi, Abdul Rahim Rahimi\***

Department of Business Management, Faculty of Management and Accounting, Tehran South Branch, Islamic Azad University, Tehran, Iran.

\*Corresponding Author

**ABSTRACT**

The present study aimed to explain the effect of visual packaging, quality and perceived value of product on brand preference and purchase intention of customers of food by path analysis. To do this, 411 food customers were included in the present study. They responded to the questionnaires of visual packaging, quality and perceived value of product, brand preference and customers purchase intention. For data analysis, Pearson correlation coefficient and path analysis are done with Lisrel software. The results of path analysis showed that the effect of visual packaging on perceived quality, brand preference and purchase intention was significant. The effect of perceived quality of product on perceived value, brand preference and purchase intention was significant. The effect of perceived value of product on brand preference and purchase intention was significant. The indirect effect of visual packaging on brand preference and purchase intention was significant. Indirect effect of perceived quality of product on brand preference and purchase intention was significant. The indirect effect of perceived value of product on purchase intention was significant. Finally, the results of effect of visual packaging, quality and perceived value, product on brand preference and food customers purchase intention were emphasized.

**KEYWORDS:** Brand preference, Perceived value, Purchase intention of customers, Quality, Visual packaging.

**INTRODUCTION**

Today, food industry companies are developed increasingly. In this method, the buyer selects the required goods among different brands. Thus, identification of effective variables on behavior of customers to purchase is of great importance for most of organizations and companies namely food companies. Because it provides costs reduction and profit increase and is effective on most of functional fields in organizations. The present study attempts to explain the effect of visual packaging, perceived quality and value of product on brand preference and purchase intention of customers. Products with various packaging in retailer and big stores provided the wide choice for users. The importance of packaging design in such competitive market is increased as packaging is turned into the main instrument of communication and branding (Parhizi Gashti, 2004). A review of literature shows that there are four elements in packaging effective on purchase intention of user (Silayoi and Speece, 2007). These four elements are divided into two groups: Visual and informational elements. Visual elements include some dimensions as color/graphic, size, form and images on packaging and are effective on emotional dimension of decision making. Informational elements as the information about product and technology in packaging and is effective more on cognitive dimension of decision making. Thus, we can explain the role of visual dimensions of packaging on user purchase decision. The studies show that visual packaging is effective on perceived quality of product, perceived value, brand preference and purchase intention of customers (Sehrawet and Kundu, 2007; Wang 2013; Yamuh 2005; Goncalves and Ricardo, 2008; Shabani, 2006). Briefly, the goal of marketing is fulfillment of customers' needs. The user behavior deals with explanation of selection, purchase and using and consuming goods, services, ideas or experiences by people, groups and organizations to fulfill their needs. The main problem of present study is explanation of the effect of visual packaging, quality and perceived value of product on brand preference and purchase intention of customers in food. Attracting the satisfaction of user and creating value for him is of great importance and a few organizations can achieve it. This requires exact identification of user and his desires. The first requirement to achieve competitive advantage as basic factor for success of organization is identification of consumer behavior and preference. On the other hand, the findings of studies showed that packaging had high importance in distinction in consumption products and had important effect on behavior of users (McNeal and Ji, 2003). Another significance of study is that the effect of visual packaging on brand preference and purchase intention of customers is not conducted by mediating role of product perceived value and quality namely in Iran. It is hoped that this study can present useful results and is effective on improving food industry in the country. The present study aimed to explain the effect of visual packaging, perceived quality and value of product on brand preference and purchase intention of customers.

## Theoretical basics

A review of literature shows that there are four elements in packaging effective on purchase intention of user (Silayoi and Speece, 2007). These four elements are divided into two groups: Visual and informational elements. Visual elements include some dimensions as color/graphic, size, form and images on packaging and are effective on emotional dimension of decision making. Informational elements as the information about product and technology in packaging and is effective more on cognitive dimension of decision making. Thus, we can explain the role of visual dimensions of packaging on user purchase decision. The studies show that visual packaging is effective on perceived quality of product, perceived value, brand preference and purchase intention of customers (Sehrawet, and Kundu, 2007; Wang 2013; Yamuh 2005; Goncalves and Ricardo, 2008; Shabani, 2006). Later, the concept of each of existing basics is defined. Visual packaging: It refers to some dimensions as color, graphic, size, form and location of images and information on product packaging as effective on emotional dimension of decision making (Wang, 2013). To measure visual packaging, revised questionnaire of Anderwood (2003) by Edward Wang (2013) is used. This questionnaire is composed of five items. Perceived quality: Received quality is defined as “user perception of general quality or superiority of a product or service compared to other choices”. Received quality is not real quality of product, it is mental evaluation of customer to product (Keler, 1993). TO measure perceived quality, the questionnaires of Pappu et al., (2005) and Buil et al., (2013) are applied. This questionnaire is composed of 5 items. Perceived value: Perceived value is defined as customer evaluation of costs and benefits of purchasing a product or service. Iglesias & Guilen (2004) consider perceived value as training what is received and paid. To measure perceived value, Cronin et al., (2000) questionnaire is applied. This questionnaire is composed of three items. Brand preference: Behavioral tendency of a customer to prefer a brand compared to other brands. In other words, brand preference indicates customer dependence on specific brand as affecting its selection compared to other brands and in case of lack of access of brand, the customer prefers the brand to other brands (Tranva et al., 2005). To measure brand preference, Chang, H. H., and Liu (2009) and Buil & Eva questionnaires are applied. This questionnaire is composed of 6 items. Purchase intention: The customer intention to purchase required cases of specific brand or company (Ha, S., and Stoel, 2009). To measure purchase intention, the questionnaires of Ardam et al., (2006) and Buil et al., (2013) are applied. This questionnaire is composed of 4 questions.

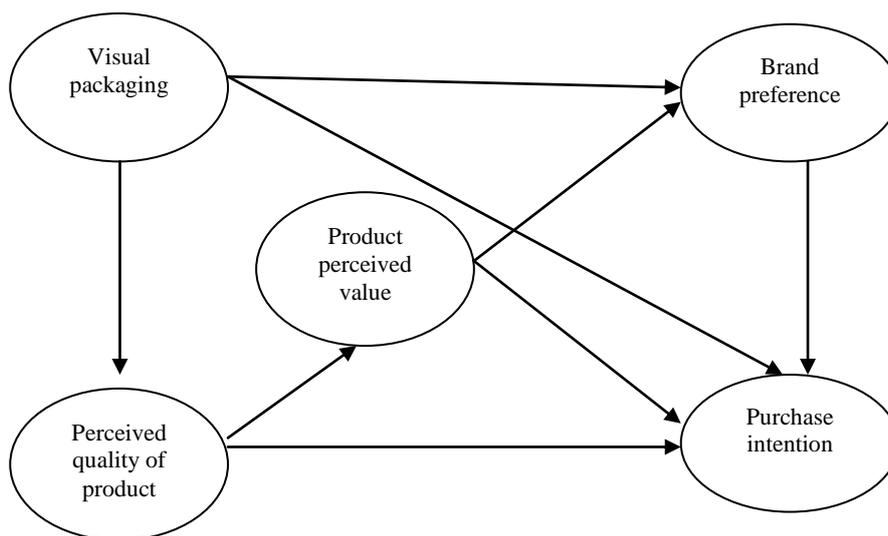
## Review of Literature

Wang (2013) in a study explained the effect of visual packaging on perceived value and quality of product and brand preference in food industry. The results showed that visual packaging had direct, positive and significant impact on perceived quality of product and brand preference. Perceived quality of product had direct, positive and significant effect on brand preference. Also, it was effective indirectly via perceived value of product on brand preference. Cronin, Brady & Hult (2000) in a study explained the effects of quality, value and customer satisfaction on consumer behavioral intentions in service environments” and showed that these variables were effective on behavioral decisions of customers. In addition, there was a positive correlation between quality, value and satisfaction of customer. In the study of McNeal, J. U., and Ji, M. F (2003) packaging color of products and their selection method by pre-school children in Scotland based on their age and gender and three levels of food products was explained. The results of study showed that there was high correlation between visual dimensions of packaging as color and brand recalling and different packaging selection of food. This study concludes that there is no list of brands in the mind of children and visual dimensions of packaging as a code of name of brands are associated in their mind. Ranjbarian et al., (2012) conducted a study to develop customer orientation culture in chain stores and discussion on the relationship between perceived value, perceived quality, and customer satisfaction and re-purchase intention. The study is survey. The study population is customers of chain stores of Refah, Shahrvand and Etkā in Tehran city. The sample is 491 of customers of the stores. The data collection measure is questionnaire and structural equations modelling are used for analysis of collected data. Findings of study showed that in chain stores, perceived quality was effective on perceived value and customer satisfaction and re-purchase intention. In addition, perceived value was effective on customer satisfaction and re-purchase intention. Customer satisfaction was effective on re-purchase intention. Finally, the proposed model explained the relationship between perceived quality, perceived value, and customer satisfaction and re-purchase intention in chain stores effectively. Fiz, Zarei and Zargar (2011) conducted a study to explain the relationship between quality of services, perceived value of services and customers satisfaction in Raja Railway Company. The results showed that service adequacy was effective on perceived value of services and customers’ satisfaction and perceived value had mediating role in effect of these two variable on customer satisfaction. In addition, perceived value of services had direct and significant effect on passengers’ satisfaction. Bidokhti et al., (2011) in a study evaluated the “effect of

services quality on loyalty of passengers in air transportation industry by *AIRQUAL model*". The results of study showed that there was a positive and significant association between *AIRQUAL model dimensions* and passengers' satisfaction and passengers' satisfactions led into re-purchase and recommendation of company to other people and it was shown that the passengers using the company services again recommend the company to others.

**Conceptual model and study hypotheses**

Figure 1 shows conceptual model of study. In this model, visual packaging is considered as independent variable, product perceived quality, perceived value and brand preference as mediating variables and purchase intention as dependent variable.



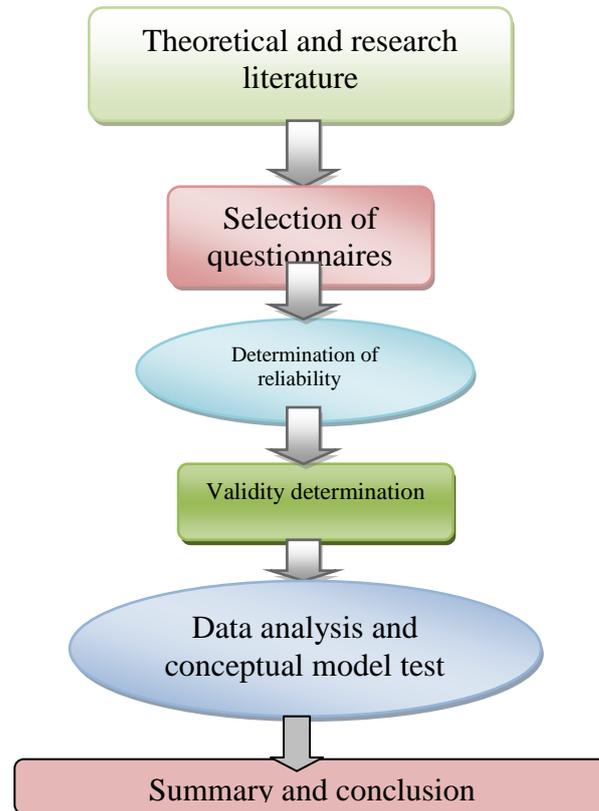
**Figure 1- Conceptual model of study**

**Study hypotheses include**

- Visual packaging has direct effect on perceived quality of product.
- Visual packaging has direct effect on brand preference.
- Visual packaging has direct effect on purchase intention.
- Perceived quality of product has direct effect on product perceived value.
- Perceived quality of product has direct effect on brand preference.
- Perceived quality of product has direct effect on purchase intention.
- Perceived value of product had direct effect on brand preference.
- Perceived value of product had direct effect on purchase intention.
- Brand preference has direct effect on purchase intention.
- Perceived quality of product has mediating role in relationship between visual packaging with brand preference and purchase intention.
- Product perceived value has mediating role in relationship between product perceived quality with brand preference and purchase intention.

**Study method**

Different types of study are divided based on a) Purpose and nature of study, b) data collection method (Sarmad, Bazargan and Hejazi, 2007). The results of present study can be used to identify effective variables on purchase intention of customers and it is applied in terms of purpose and nature of study. The present study is correlation and structural equations in terms of data collection method as the relationship between variables is evaluated in causal model framework. The stages of present study are shown in Figure 2 as graphic.



**Figure 2-epitmal model of study**

**Study population and sample**

The study population is food users in Tehran city. In the present study, the sample size is infinite and the sample is 384 by Cochran’s formula. Thus, 384 food users in Tehran city are selected as sample. To be sure of returning 384 questionnaires, due to exclusion or incomplete questionnaires by some people, 450 questionnaires are selected among food consumers.

Cochran’s formula for infinite population:

$$n_0 = \frac{z_{\alpha/2}^2 pq}{d^2} \tag{1}$$

Where, t=percentage of standard error of confidence interval, d= degree of reliability or god probable precision, s=A ratio of population without definite attribute, N=number of people in population

$$\tag{2}$$

$$n_0 = \frac{(1/96)^2 (0/5 \times 0/5)}{(0/05)^2} = 384$$

The evaluation of validity and reliability of measures of study.

In this study, to evaluate reliability, Cronbach’s alpha coefficient is used. Cronbach’s alpha coefficients are shown in Table 1. As shown, all coefficients are at good level.

**Table 1- Cronbach’s alpha coefficient of study variables**

Cronbach’s alpha	Variables
0.75	Visual packaging
0.83	Perceived quality
0.84	Perceived value
0.83	Brand preference
0.86	Purchase intention

**Data analysis methods**

To analyze the data of study, inferential and descriptive tests are applied. In descriptive section, the percent, mean and standard deviation and in inferential section, Pearson correlation test and structural equations model are applied. To analyze the data of study, SPSS, LISREL software are used.

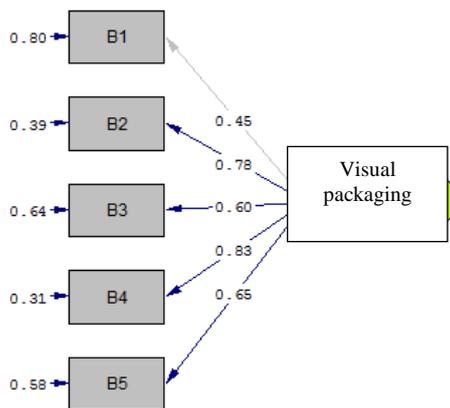
**Study results**

**Confirmatory factor analysis**

To enter path analysis, at first study measures are used to determine validity of construct. To verify each of variables and items , confirmatory factor analysis is applied. This model is based on a strong empirical and theoretical foundation. It determines which variables are correlated with which factors and which factors are correlated with which factors. By determining fit of pre-defined factor model, confirmatory method tests the optimal consistency of observed and theoretical factor structures for the dataset.

**Confirmatory factor analysis of visual packaging**

Figures 3, 4 show the output of standardized coefficients and t-value of Lisrel for visual packaging.



Chi-Square=11.01, df=5, P-value=0.05128, RMSEA=0.054

**Figure 3-Lisrel output for visual packaging variable**

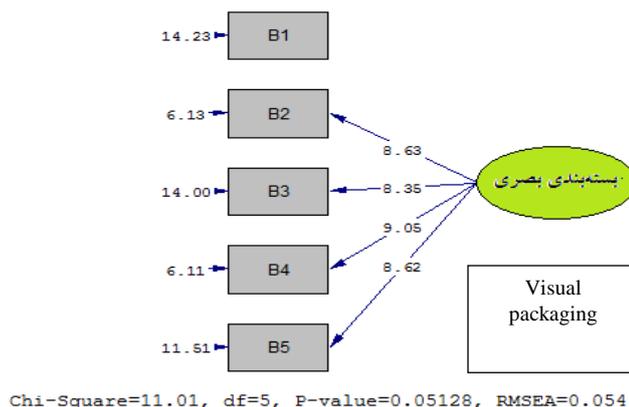


Figure 4- Output of t-value for packaging variable

Based on Lisrel output in Table 2,  $\chi^2/df$  is 2.20 and  $\chi^2/df$  is smaller than 3 and it shows good fit of model. Also, RMSEA is less than 0.08 and in the presented model, this value is 0.054. GFI, AGFI, CFI and NFI indices should be above 0.9 and are higher than determined value in the model. Thus, data of study have good fit with factor structure of this scale and this shows consistency of questions with visual packaging variable.

Table 2- Fit indices of visual packaging

Estimation	Feature
2.20	Chi-square to degree of freedom( $\chi^2/df$ )
0.054	Root Mean Square Error of (RMSEA) Approximation
0.99	Goodness of fit index(GFI)
0.97	Adjusted goodness of fit index(AGFI)
0.99	Comparative fit index(CFI)
0.98	Normed fit index(NFI)

Confirmatory factor analysis of perceived quality

Figures 5, 6 show the output of standardized coefficients and t-value of Lisrel for perceived quality.

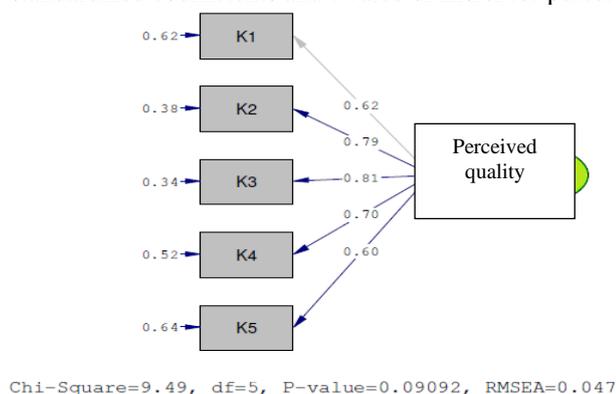
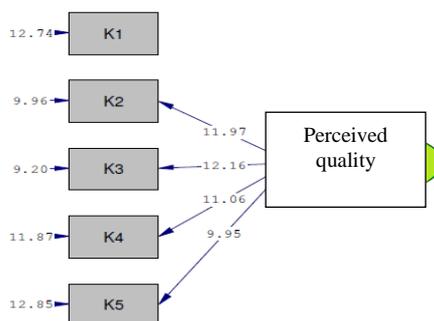


Figure 5- Lisrel output for perceived quality



Chi-Square=9.49, df=5, P-value=0.09092, RMSEA=0.047

**Figure 6- Lisrel t-value output for perceived quality variable**

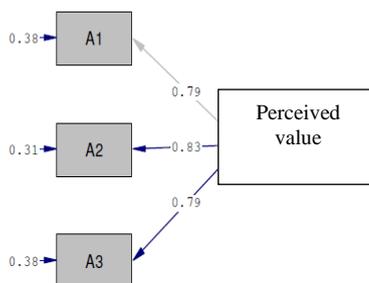
Based on Lisrel output in Table 3,  $\chi^2/df$  is 1.90 and  $\chi^2/df$  is smaller than 3 and it shows good fit of model. Also, RMSEA is less than 0.08 and in the presented model, this value is 0.047. GFI, AGFI, CFI and NFI indices should be above 0.9 and are higher than determined value in the model. Thus, data of study have good fit with factor structure of this scale and this shows consistency of questions with perceived quality variable.

**Table 3- Fit indices of perceived quality scale**

Estimation	Feature
1.90	Chi-square to degree of freedom( $\chi^2/df$ )
0.047	Root Mean Square Error of (RMSEA) Approximation
0.99	Goodness of fit index(GFI)
0.97	Adjusted goodness of fit index(AGFI)
1	Comparative fit index(CFI)
0.99	Normed fit index(NFI)

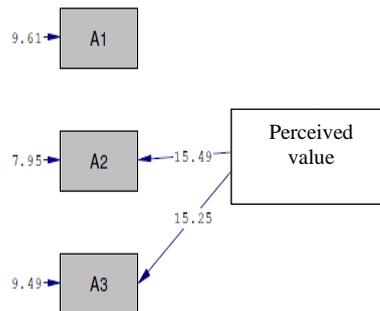
**Confirmatory factor analysis of perceived value**

As shown in Figures 7, 8 of standardized coefficients output and Lisrel t-value for perceived value are reported.



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

**Figure 7- Lisrel output for perceived value**

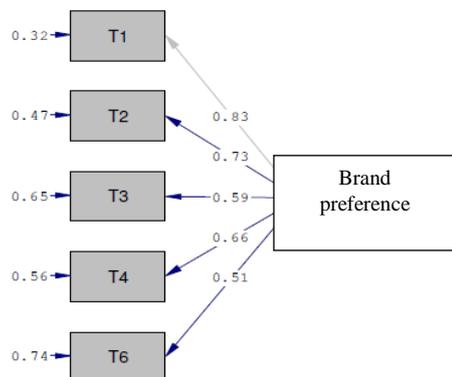


Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Figure 8- Output of LISrel t-value for perceived value

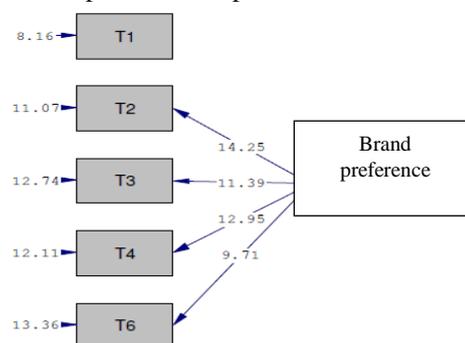
Confirmatory factor analysis of brand preference

Figures 9, 10 show the output of standardized coefficients and t-value of lisrel for brand preference. Question 5 is eliminated due to low and insignificant factor load.



Chi-Square=13.31, df=5, P-value=0.02060, RMSEA=0.064

Figure 9-LISrel output for brand preference variable



Chi-Square=13.31, df=5, P-value=0.02060, RMSEA=0.064

Figure 10- Lisrel output for brand preference variable

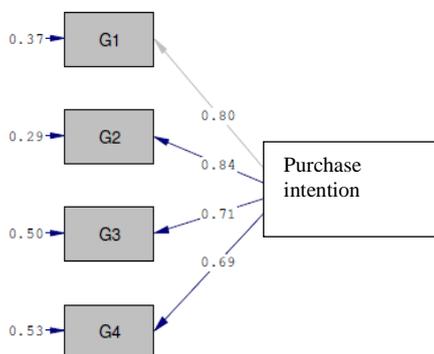
Findings of brand association fit in Table 4 show that CFI,GFI, NFI,RMR , RMSEA have acceptable level and goodness of fit shows that the data of study have god fit with factor structure of this scale and this shows consistency of questions with brand preference structure.

Table 4- Fit indices of brand preference

Estimation	Feature
2.66	Chi-square to degree of freedom( $\chi^2/df$ )
0.064	Root Mean Square Error of (RMSEA) Approximation
0.99	Goodness of fit index(GFI)
0.96	Adjusted goodness of fit index(AGFI)
0.99	Comparative fit index(CFI)
0.98	Normed fit index(NFI)

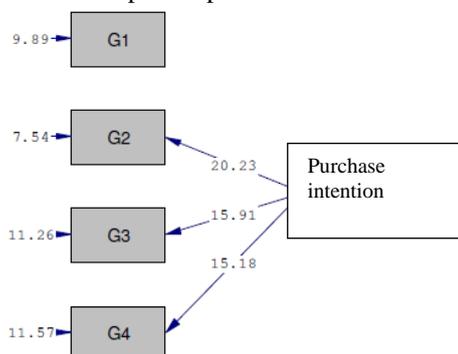
**Confirmatory factor analysis of purchase intention**

Figures 11, 12 show output of standardized coefficients and t-value of Lisrel for purchase intention.



Chi-Square=0.17, df=2, P-value=0.91921, RMSEA=0.000

Figure 11-Lisrel output for purchase intention



Chi-Square=0.17, df=2, P-value=0.91921, RMSEA=0.000

Figure 12-Lisrel output for purchase intention variable

Findings of creativity fit indices in Table 5 show that CFI,GFI, NFI,RMR , RMSEA indices have acceptable level and the goodness of fit shows that the data of study have good fit with factor structure of this scale and this shows consistency of questions with purchase intention.

**Table 5- Fit indices of purchase intention**

Estimation	Feature
0.085	Chi-square to degree of freedom( $\chi^2/df$ )
0.000	Root Mean Square Error of (RMSEA) Approximation
1	Goodness of fit index(GFI)
1	Adjusted goodness of fit index(AGFI)
1	Comparative fit index(CFI)
1	Normed fit index(NFI)

**Descriptive indices of study variables**

The indices of descriptive statistics are shown in Table 6 including mean and standard deviation for the studied variables in the study.

**Table 6- Descriptive indices of study variables**

SD	Mean	Variables
0.81	3.22	Visual packaging
0.87	2.97	Perceived quality
0.99	2.94	Perceived value
0.78	3.57	Brand preference
1.006	3.17	Purchase intention

**Normality test of study variables**

In this test, if significance level is bigger than error value,  $\alpha=0.05$ , H1 is supported, otherwise H0 is supported. H0:The data are not normal (they are not of normal population). H1:The data are normal (they are of normal population)

**Table 7- Kolmogorov-Smirnov test for study variables**

Sig (Significance level)	Value	Variable
0.500	0.827	Visual packaging
0.989	0.445	Perceived quality
0.485	0.837	Perceived value
0.480	0.840	Brand preference
0.702	0.706	Purchase intention

As significance level for study variables is bigger than 0.05, H1 is supported and we can say the collected data are normal.

**Correlation coefficient of variables**

To identify the relationship between present variables, Pearson correlation coefficient is applied. The findings of correlation coefficient are shown in Table 8. As shown in Table 8, correlation coefficient of visual packaging is positive and significant with perceived quality ( $r=0.54$ ), perceived value ( $r=0.37$ ), brand preference ( $r=0.37$ ) and purchase intention ( $r=0.40$ ) at level  $P<0.01$ . Correlation coefficient of perceived quality is positive and significant with perceived value ( $r=0.57$ ), brand preference ( $r=0.35$ ), purchase intention ( $r=0.43$ ) at level  $P<0.01$ . The correlation

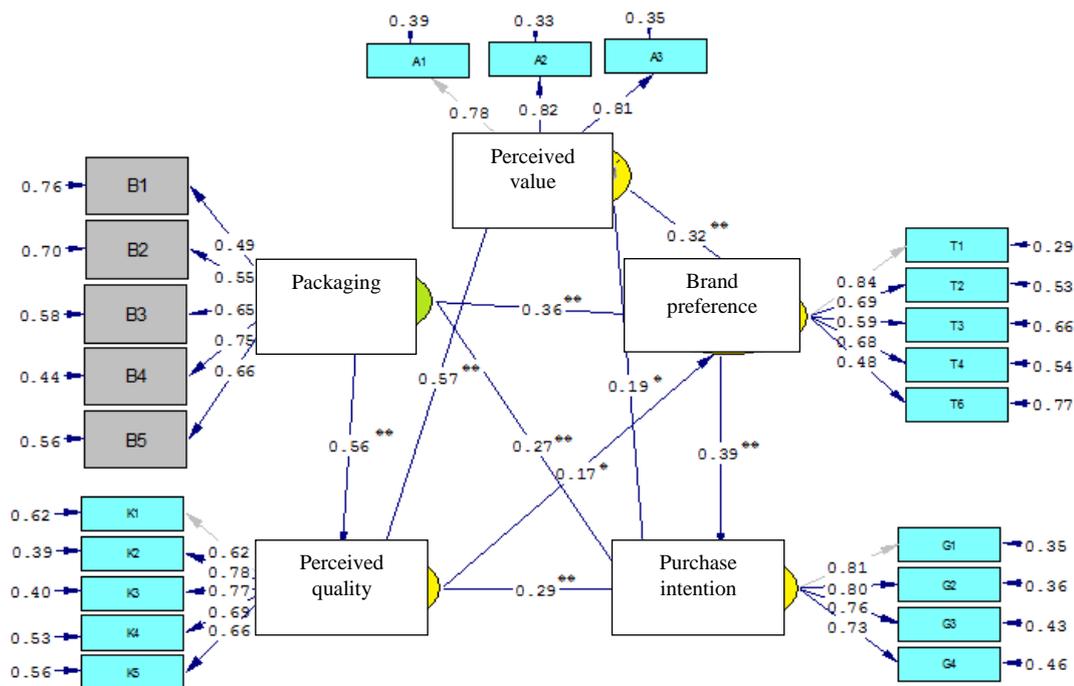
coefficient of perceived value is positive and significant with brand preference ( $r=0.38$ ), purchase intention ( $r=0.39$ ) at level  $P<0.01$ . Correlation coefficient of brand preference is positive and significant with purchase intention ( $r=0.49$ ) at level  $P<0.01$ .

**Table 8-Correlation matrix of study constructs**

Purchase intention	Brand preference	Perceived value	Perceived quality	Visual packaging	Variables
				1	Visual packaging
			1	**0.54	Perceived quality
		1	**0.57	**0.37	Perceived value
	1	**0.38	**0.35	**0.37	Brand preference
1	**0.49	**0.39	**0.43	**0.40	Purchase intention

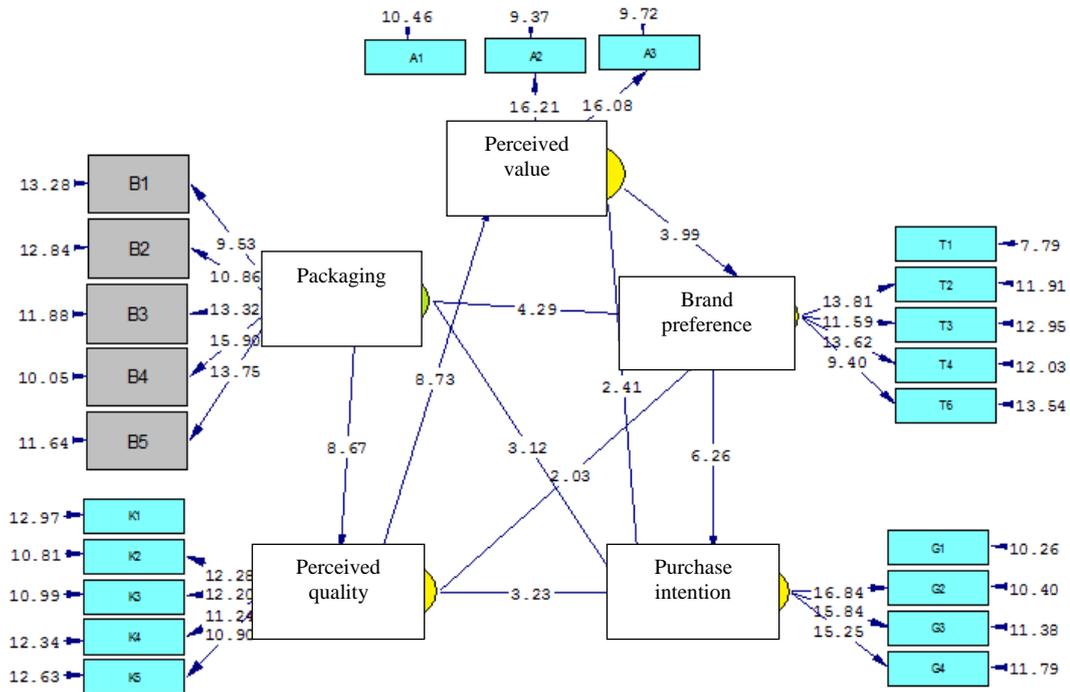
\*  $p < 0.05$  \*\*  $p < 0.01$

Figure 13 shows tested model with standardized values on each of paths. The findings show that all path coefficients are positive and significant.



Chi-Square=446.43, df=200, P-value=0.00000, RMSEA=0.055  
(\*  $p < 0.05$  \*\*  $p < 0.01$ )

**Figure 13- Standardized coefficients of tested model**



Chi-Square=446.43, df=200, P-value=0.00000, RMSEA=0.055

Figure 14-Test t-value coefficients of study) \* p < 0.05 \*\* p < 0.01(

Table 9- Estimation of standardized coefficients of direct, indirect, total and explained variance of model

Explained variance	Total effect	Indirect effect	Direct effect	Path
35%	**0.39 **0.31 **0.54 **0.71	- **0.12 **0.25 **0.44	**0.39 *0.19 **0.29 **0.27	On purchase intention from Brand preference Perceived value Perceived quality Visual packaging
26%	**0.32 **0.35 **0.55	- **0.18 **0.19	**0.32 *0.17 **0.36	On brand performance from Perceived value Perceived quality Visual packaging
32%	**0.57 **0.32	- **0.32	**0.57 -	On perceived value from Perceived quality Visual packaging
31%	**0.56	-	**0.56	On perceived quality from Visual packaging

\* p < 0.05 \*\* p < 0.01

T-values above  $\pm 1.96$  to  $\pm 2.58$  are significant at level 0.05 and t coefficients above  $\pm 2.58$  are significant at level 0.01. As shown in Figure 5, t-values of perceived quality path to brand preference and perceived value to purchase intention are positive and significant at level 0.05. The t-values of the rest of paths are above 2.58 and it shows that coefficients of all variables are significant at level 0.01. In addition, the direction of path coefficients and t-coefficients is positive in all variables and it shows the positive and significant effect. Table 9 shows the coefficients of direct effect, significance level and explained variance of study.

As shown in Table 9, 35% of purchase intention variance, 26% of brand preference variance, 32% of perceived value and 31% of perceived quality variance are explained by existing variables in the study model. In Table 10, the results of indirect effects to evaluate hypotheses 10, 11 and 12 are reported.

**Table 10- The results of indirect effects**

t-value	Path coefficients	Hypotheses
1.98	0.10	The effect of visual packaging on brand preference via perceived quality
3.02	0.16	The effect of visual packaging on purchase intention via perceived quality
3.63	0.18	The effect of perceived quality on brand preference via perceived value
1.97	0.11	The effect of perceived quality on purchase intention via perceived value
3.36	0.13	The effect of perceived value on purchase intention via brand preference

As shown in Table 10, the indirect effect of visual packaging on brand preference  $\beta=0.10$  is positive and significant at level  $p<0.05$ . The indirect effect of visual packaging on purchase intention  $\beta=0.16$  is positive and significant at level  $P<0.01$ . The indirect effect of perceived quality of product on brand preference  $\beta=0.18$  is positive and significant at level  $P<0.01$ . Indirect effect of perceived quality of product on purchase intention  $\beta=0.11$  is positive and significant. Indirect effect of perceived value of product on purchase intention  $\beta=0.13$  at level  $p<0.01$ . Fit indices for the tested model in Table 11 show that RMSEA index in the estimated model with 0.055 has acceptable level and other fit indices as CFI, GFI, NFI, AGFI as 0.99, 98.94, 0.0 and 0.92 are at good level and the goodness of fit shows that the data of study with factor structure has good fit.

**Table 11-Fit indices of fitted model**

X2/df	RMSEA	CFI	GFI	NFI	AGFI
2.23	0.055	0.99	0.94	0.98	<b>0.92</b>

**Hypothesis test of study**

First hypothesis: Visual packaging has direct effect on perceived quality of product.

Findings of Table 9 show that effect of visual packaging on perceived quality  $\beta=0.56$  is positive and significant at level  $p<0.01$ . Thus, first hypothesis is supported and visual packaging has positive and significant effect on perceived quality.

Second hypothesis: Visual packaging has direct effect on brand preference.

Findings of Table 9 show that effect of visual packaging on brand preference  $\beta=0.36$  is positive and significant at level  $p<0.01$ . Thus, second hypothesis is supported and visual packaging has positive and significant effect on brand preference.

Third hypothesis: Visual packaging has direct effect on purchase intention.

Findings of Table 9 show that effect of visual packaging on purchase intention  $\beta=0.27$  is positive and significant at level  $p<0.01$ . Thus, third hypothesis is supported and visual packaging has positive and significant effect on purchase intention.

Fourth hypothesis: Product perceived quality has direct effect on perceived quality of product.

Findings of Table 9 show that effect of Product perceived quality on perceived value  $\beta=0.57$  is positive and significant at level  $p<0.01$ . Thus, fourth hypothesis is supported and Product perceived quality has positive and significant effect on perceived value.

Fifth hypothesis: Product perceived quality has direct effect on brand preference.

Findings of Table 9 show that effect of Product perceived quality on brand preference  $\beta =0.17$  is positive and significant at level  $p<0.01$ . Thus, fifth hypothesis is supported and Product perceived quality has positive and significant effect on brand preference.

Sixth hypothesis: Product perceived quality has direct effect on purchase intention.

Findings of Table 9 show that effect of Product perceived quality on purchase intention  $\beta =0.29$  is positive and significant at level  $p<0.01$ . Thus, sixth hypothesis is supported and Product perceived quality has positive and significant effect on purchase intention.

Seventh hypothesis: Product perceived value has direct effect on brand preference.

Findings of Table 9 show that effect of Product perceived value on brand preference  $\beta =0.32$  is positive and significant at level  $p<0.01$ . Thus, seventh hypothesis is supported and Product perceived value has positive and significant effect on brand preference.

Eighth hypothesis: Product perceived value has direct effect on purchase intention.

Findings of Table 9 show that effect of Product perceived value on purchase intention  $\beta =0.32$  is positive and significant at level  $p<0.01$ . Thus, eighth hypothesis is supported and Product perceived value has positive and significant effect on purchase intention.

Ninth hypothesis: Brand preference has direct effect on purchase intention.

Findings of Table 9 show that effect of Brand preference on purchase intention  $\beta =0.39$  is positive and significant at level  $p<0.01$ . Thus, ninth hypothesis is supported and Brand preference has positive and significant effect on purchase intention.

Tenth hypothesis: Product perceived quality has mediating role in relationship between visual packaging and brand preference and purchase intention.

Findings of Table 10 show that indirect effect of visual packaging on brand preference  $\beta=0.10$  is positive and significant at level  $P<0.05$ . Indirect effect of visual packaging on purchase intention  $\beta=0.16$  is positive and significant at level  $P<0.01$ . Thus, tenth hypothesis of study is supported and product perceived quality has mediating role in relationship between visual packaging and brand preference and purchase intention.

Eleventh hypothesis: Product perceived value acts mediating role regarding the perceived quality or product with brand preference and purchase intention. Findings of Table 10 show that indirect effect of product perceived quality on brand preference  $\beta=0.18$  is positive and significant at level  $P<0.01$ . The indirect effect of product perceived quality on purchase intention  $\beta=0.11$  is positive and significant at level  $P<0.05$ . Thus, 11<sup>th</sup> hypothesis is supported and perceived value has mediating role in relationship between product perceived quality and brand preference and purchase intention. Hypothesis 12: Brand preference has mediating role in relationship between perceived value of product and purchase intention.

Findings of Table 10 show that indirect effect of product perceived value on purchase intention  $\beta=0.13$  is positive and significant at level  $P<0.01$ . Thus, hypothesis 12 is supported and brand preference has mediating role in relationship between product perceived value and purchase intention.

## CONCLUSION

Generally, the results showed that the effect of visual packaging was positive and significant on perceived quality, brand preference and purchase intention. The effect of product perceived quality was positive and significant on perceived value, brand preference and purchase intention. The effect of perceived value was positive and significant on brand preference and purchase intention. The effect of brand preference was positive and significant on purchase intention. Indirect effect of visual packaging on brand preference was positive and significant. In addition, the indirect effect of visual packaging on purchase intention was positive and significant. Indirect effect of product perceived quality on brand preference was positive and significant. In addition, indirect effect of product perceived quality on purchase intention was positive and significant. The indirect effect of perceived product value on purchase intention was positive and significant. Thus, brand preference had mediating role in relationship between perceived value of product and purchase intention. Also, the results of study showed that 35% of purchase intention variance, 26% of brand preference, 32% of perceived value and 31% of perceived quality variance were explained by existing variables in the present study model. The present study supported the role of visual packaging on product perceived quality, brand preference and purchase intention. Thus, it is proposed that managers of food industry apply good colors for packaging, good writing style for packaging and satisfactory brands on packaging, suitable sizes for packaging and suitable graphics can be used to affect the product perceived quality, brand preference and purchase intention of customers.

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