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An investigation on important factors influencing consumer purchase: A case study of food products

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#### CHRONICLE

#### ABSTRACT

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Keywords: Food product Consumer behavior Taste Quality of packaging This paper presents an empirical investigation to study the effect of five factors on purchasing food product including brand and reputation, being green product producer, quality of packaging, taste of food products and materials used in products. The study designs a questionnaire consists of 20 questions, distributes 440 questionnaires among some consumers who were regular customers of food chains in west part of city of Tehran, Iran and managed to collect 225 properly filled ones. The study uses binomial test to verify five hypothesis of the survey and it has confirmed the effects of four variables including brand and reputation, quality of packaging, taste of food products and materials used in products. In our survey, there are some positive and meaningful correlations among different pairs of five variables of the survey where the highest correlation is between materials used in products and quality of packaging (r=0.606, Sig. = 0.000) and between Quality of packaging and being green product producer (r=0.545, Sig. =0.000).

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#### 1. Introduction

Building a brand plays essential role on the success of products and services and it is always important to find important factors influencing on consumer behavior on purchasing a particular product (Aaker, 1996, 2001, 2011; Bailey & Ball 2006; Bandyopadhyay & Martell, 2007; Beverland & Farrelly, 2010; Eertmans et al., 2006). During the past few years, there have been various studies on detecting important factors influencing consumer behavior. Arora and Stoner (2009), for instance, used a mixed method to explore product personality as well as detecting personality dimensions of two retails stores, Target and Wal-Mart, and two athletic brands, Adidas and Nike and their findings disclosed lack of convergence in personality dimensions. Brand personality plays essential role on a brand identity. Azoulay and Kapferer (2003) explained that the current scales of brand personality would not in fact measure brand personality, but it could merge a number of dimensions of brand

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identity, personality being only one of them, which require to be kept separate both on theoretical grounds and for practical implementation.

Back (2005) explored the impacts of image congruence on customers' post-purchasing behaviors, concentrating specifically on customer satisfaction and brand loyalty in the lodging industry. They reported that social and ideal social image congruence had substantial direct impacts on customer satisfaction and indirect impacts on attitudinal brand loyalty. Back and Parks (2003) presented a brand loyalty model involving cognitive, affective, and conative brand loyalty and customer satisfaction. They recommended that customer satisfaction had a significant indirect impact on behavioral brand loyalty when mediated by attitudinal brand loyalty, including cognitive-affective-conative brand loyalty stages. Juan Beristain and Zorrilla (2011) investigated the relationship between store image and store brand equity. The results stated retailers to impact all components of store brand equity, essentially through its commercial and strategic dimension could use that store image.

Buil et al. (2011) explored the relationships between two central elements of marketing communication programs including advertising and sales promotions and their effect on brand equity creation. More specifically, the study concentrated on advertising spend and individuals' behaviors toward the advertisements. They also studied the impacts of two types of sales promotions, monetary and non-monetary promotions. They reported distinctive impacts of monetary and non-monetary promotions on brand equity and demonstrated that companies could optimize the brand equity management process by considering the relationships existing between the various dimensions of brand equity. Dekhili and d'Hauteville (2009) investigated the effect of the region of origin on the perceived quality of olive oil by presenting an experimental approach using a control group.

### 2. The proposed study

In this paper, we present important factors influencing consumer intention on purchasing food products in city of Tehran, Iran. The proposed study of this paper considers the following five hypotheses (Prescott et al., 2002; Piggford et al., 2008; Fotopoulos et al., 2009),

- 1. Brand name influences consumer intention to purchase a food product.
- 2. Strong commitment on green market planning influences consumer intention to purchase a food product.
- 3. Packaging plays important factor on purchasing food product.
- 4. The taste of food products influences consumer intention to purchase a food product.
- 5. Using good materials in food products influences consumer intention to purchase a food product.

The proposed study designed a questionnaire similar to Fotopoulos et al. (2009) in Likert scale and first requested some experts to verify the questionnaire content. The questionnaire consists of 20 questions where 4 questions are assigned for each question. The sample size is selected as follows,

$$N = Z_{\alpha/2}^2 \frac{p \times q}{e^2},\tag{1}$$

where N is the sample size, p=1-q represents the probability,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. For our study we assume  $p=0.5, z_{\alpha/2}=1.96$  and e=0.01, the number of sample size is calculated as N=220. In this survey, we have distributed 440 questionnaires and managed to collect 245 filled ones where 225 were appropriate for our survey. The population of the study includes all regular consumers who lived in west part of city of Tehran, Iran and they were regular customers of food chain stores.

Cronbach alphas have been calculated for Reputation and brand, Being green product producer, Quality of packaging, Taste of food products and Materials as 0.718, 0.853, 0.762, 0.744 and 0.782, respectively. These components are well above the minimum acceptable limit of 0.70, which validates the overall questionnaire.

## 2.1. Personal characteristics of the participants

In our survey, 52% of the participants were female while 48% of them were male. Fig. 1 shows details of other personal characteristics of the participants. As we can observe from Fig. 1, most participants in our survey were middle age; they were employees of the government, had some university background and finally maintained an average income. Table 1 demonstrates the summary of some statistics about the people who took part in our survey.

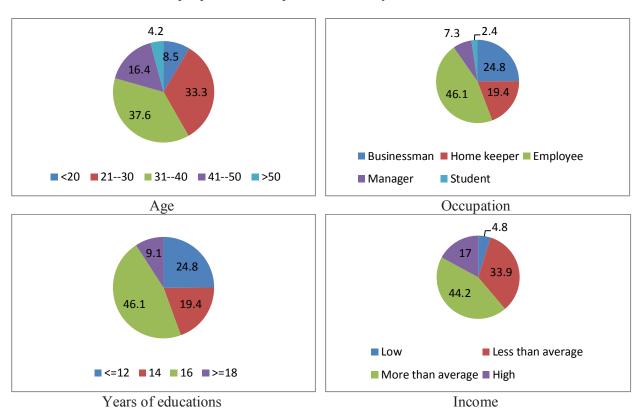


Fig. 1. Personal characteristics of the participants in terms of percentage

**Table 1**The summary of some basic statistics

	Mean	Standard deviation	Variance
Brand and reputation	3.652	0.781	0.61
Being green product producer	3.186	0.967	0.935
Quality of packaging	3.831	0.715	0.511
Taste of food products	4.177	0.641	0.41
Materials used in products	4.08	0.764	0.584

As we can observe from the results of Table 1, taste of the food products maintains the highest mean, followed by materials used in products, quality of packaging, brand and reputation and being green marketers. The proposed study uses binomial test to verify different hypotheses of the survey and next we present details of our findings.

## 3. The results

In this section, we present details of our finding on testing various hypotheses of the survey. Table 2 demonstrates details of our survey on performing binomial test.

As we can observe from the results of applying binomial test, four variables of brand name and reputation, quality of packaging, taste of food products and materials used in products are confirmed when the level of significance if five percent but being green marketing planning did not have any impact on consumer to purchase the products. We have also examined the relationship between different components of the survey and Table 3 demonstrates the results of Pearson correlation test.

**Table 2**The summary of binomial test

Hypothesis		Group	Sample	Percentage	Prob.	Sig	Result
Brand reputation and name	Effective	1	171	0.76	0.5	0	Confirmed
	Not effective	0	54	0.24			
	Total		225	1			
Being green product producer	Effective	1	107	0.48	0.5	0.9	Not confirmed
	Not effective	0	118	0.52			
	Total		225	1			
Quality of Packaging	Effective	1	192	0.85	0.5	0	Confirmed
	effective Not	0	33	0.15			
	Total		225	1			
	Effective	1	212	0.94	0.5	0	Confirmed
Taste of produced foods	effective Not	0	13	0.06			
•	Total		225	1			
Materials used in products	Effective	1	194	0.87	0.5	0	Confirmed
	effective Not	0	30	0.13			
	Total		224	1			

According to the results of Table 3, there are some positive and meaningful correlations among different pairs of five variables of the survey. In fact, the highest correlation is between materials used in products and quality of packaging (r=0.606, Sig. = 0.000) and between Quality of packaging and being green product producer (r=0.545, Sig. =0.000).

**Table 3**The summary of Pearson correlation test

	Brand reputation	Being green product	Quality of	Taste of produced	materials used in
	and name	producer	Packaging	foods	products
Brand reputation and name	1.000				
Being green product producer	0.470	1.000			
Quality of Packaging	0.489	0.545	1.000		
Taste of produced foods	0.228	0.250	0.442	1.000	
Materials used in products	0.342	0.462	0.606	0.487	1.000

### 3.1. The first hypothesis: The effect of brand name

The first hypothesis of this survey is associated with the relationship between brand name and consumer interest towards the food product. According to our survey, 76% of the participants believed that brand name creates good motivation to purchase a product. Therefore, the first hypothesis of this survey has been confirmed.

## 3.2. The second hypothesis: The effect of green marketing planning

The second hypothesis of this survey is associated with the relationship between green marketing planning and consumer interest towards the purchasing the food product. According to our survey,

only 48% of the participants believed that green marketing planning creates good motivation to purchase a product. Therefore, the first hypothesis of this survey has not been confirmed.

## 3.3. The third hypothesis: The effect of packaging

The third hypothesis of this survey is associated with the relationship between packaging and consumer interest towards purchasing the food product. According to our survey, 85% of the participants believed that packaging creates good motivation to purchase a product. Therefore, the third hypothesis of this survey has been confirmed.

### 3.4. The fourth hypothesis: The effect of taste

The fourth hypothesis of this survey is associated with the relationship between food taste and consumer interest towards purchasing product. According to our survey, 94% of the participants believed that food taste creates good motivation to purchase a product. Therefore, the fourth hypothesis of this survey has been confirmed.

# 3.5. The fifth hypothesis: The effect of material used

The fifth hypothesis of this survey is associated with the relationship between material used in product and consumer interest towards purchasing the product. According to our survey, 87% of the participants believed that material used creates good motivation to purchase a product. Therefore, the fifth hypothesis of this survey has been confirmed.

#### 4. Conclusion

In this paper, we have presented an empirical investigation to study the effect of five factors on purchasing food product including brand and reputation, being green product producer, quality of packaging, taste of food products and materials used in products. The study designed a questionnaire, distributed it among some experts and, through some statistical test, the survey has confirmed the effects of four variables including brand and reputation, quality of packaging, taste of food products and materials used in products.

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