The Effects of Mental Image of Brands on Consumers' Reluctance for Purchase in Gray Markets: A Case Study in Mobile Market In Hamadan Province

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Abstract

Gray markets are the markets that have products with real brand names which can be only identified and defined through selling them in unauthorized channels. Gray markets imply distributing branded products by unauthorized individuals. In other words, gray markets are the markets in which entering the products to the market by the manufacturer is not planned. In this research, the hypothesis has been come up with studying the effects of mental image of brands on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province using triangular mental image of brands of Yu et al (2000) and Nurjaya et al (2007) in which the mental image of brands variable is divided in to three factors, brand associations, brand differentiation and brand loyalty. This research was done by using descriptive survey method in the statistical population of the study (including all mobile consumers in Hamadan province). The most important tools for collecting data was a questionnaire prepared and designed by using questionnaires in books, articles and websites and its reliability was equal to the 0.912 unit. The results showed that all the hypotheses were accepted. The analysis and comparison of the results of hypotheses test and the model of mental image brand indicated the main hypothesis brand image variable has a direct impact of 0.760 on consumers' reluctance to buy in mobiles gray markets. And also, brand associations with a number equals to 0.710 unit has the most impact among the three factors of mental image of the brand on the consumer reluctance to buy in gray markets.

Keywords: mental image of the brand, brand associations, brand differentiation, brand loyalty, consumer reluctance to buy in gray markets.

Introduction

Gray markets (parallel imports) are formed when a company produces a product in the parent company as well as in several other countries. The products may be sold by the subsidiary branches in foreign countries by foreign distributors in the gray markets. These distributors offer the products to the market of the product manufacturer as well.

Although the gray markets products have similar brand products within the same company but the quality of most of these components may vary (Doaei et al., 2008). Gray markets usually include unauthorized distributors and dealers who make the programs of authorized distribution channels disrupted and ineffective through buying products in cheap markets and sell them in more expensive markets. Most international companies are more concerned about gray markets because the markets bring about reducing the sale of legal channels, and make pricing and distribution strategies disrupted. On the other hand, disrupting price stability, damaging the marketing channels and destroyed the image of the brand, are the problems reported by managers of international brands (Walters & Twin, 1989).

The concept of the brand or the mental image of the brands: according to Aker and Keller model, brand equity is resulted in brand loyalty, perceived quality and brand association and its awareness. Keller interpreted the brand equity as a different knowledge based brand impact on consumer response to the brand marketing (Lee and Beck, 2010). According to Aker, "brand value

based on customer orientation", is contiguous set of valuable assets and obligations related to the brand. Final consumer regards the brand value as increased value of the product and its brand name.

Brand equity: brand equity and its measurement are one of the most important concepts in business activities and the most important and challenging issues for managers and academic researchers. The word brand has many meanings. Brand name implies a logo, a sign and trade mark and the identity or business name. It also improves the value of a particular product or service and indicates all tangible and intangible characteristics of businesses (Parasad and Dave, 2000).

Place and importance of the brand mentality and perception: in today's highly competitive environment, the mentality and distinctive image of a product is very important. As products become more complex and markets crowded, when consumers decide to buy, they often rely on the actual characteristics of a product and the image of the product built in their minds. According to Aker, "customer benefit" is a perception that marketers can use to differentiate their products from the other ones product. Marketers can benefit from consumers' positive perceptions from one brand to increase their market share, to prepare attractive advertisements and marketing their own products in future. Dean (2004) defined perception of a brand as anything from a brand that is associated with memory. He believes that the perception supporting the three following objectives are valuable:

- Make a distinction;
- Make a positive desire towards a brand;
- Help consumers while restoring data.

Perceptions of a brand help consumers to judge about its value. For example, the country of origin has impact on consumers' judgments about whether or not the products are valuable (Cateora, 1996).

Statement of the problem

Price plays a major role in influencing customers' behavior. The degree to which consumers focus on paying lower prices is called price awareness and looking for lower prices is one of the common behaviors to obtain benefits such as better prices for the goods or attempts to make transaction attractive (Alford, Bruce L. Biswas, Abhijit, 2002).

The fact that consumers use prices in legal channels as a preferential price is justifiable and gray markets use lower prices benefits to attract customers. Most researchers claim that the difference in prices is an important factor when buying from gray markets (Molahosseini et al, 2011). Consumers face two main types of risks when buying in gray markets: First, the possibility of the goods of black market or counterfeit goods may be increased by gray markets. Consumers who purchase goods from the gray markets must accept the risk of the possibility of purchasing counterfeit products and suffer different types of risks including the performance of financial issues, security, social, psychological and the risk of time / opportunity. The second risk appears after purchasing which involves the loss of services and legal distributor guarantee. Some managers ask their distributors not to give all services or increase the cost of services to grey markets goods in order to increasing the risk and the consumers' cost to prevent the rapid spread of the gray markets (Lowe and MacKrohan, 1989). With regard to the above mentioned facts, in the present study, the main problem is to study if the mental image of brands has any impact on consumers' reluctance to buy in gray markets.

The importance and necessity of the research

Nowadays, because of the diversity of people's interests, organizations are always looking for new products to satisfy their interests. One of the major problems faced by companies is to choose a proper brand for their products of products in order to differentiate them from their competitors'. The strategy of brand extension is one way for the companies to name their products

so that eight out of ten new products will be introduced to the market in this way (Chen and Chen, 2000). Gray markets (parallel imports) make the brand value reduced due to frequent sales with low price, availability of some instructions in a foreign language, a lack of replacement parts in the countries in which the gray markets are formed or products with poor quality. Given the serious consequences of the gray markets, managers must identify appropriate strategies to deal with the markets and given the prevailing circumstances, apply the appropriate strategies. The best way to fight against the gray markets is preventing its development by using active and powerful strategies. Turning in to a brand or the consumers have mental images of a particular brand can make the consumers reluctant to buy from the gray markets which is really important and is a renewed emphasis on branding and branding.

Research purposes

- Identifying the effects of mental image of brands on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;
- Identifying the effects of brand associations on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;
- Identifying the effects of brand differentiation on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;
- Identifying the effects of brand loyalty on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;

Research hypotheses

The main hypothesis

- Mental image of brands has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province

Sub- hypothesis

- The first sub-hypothesis: brand association has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;
- The second sub-hypothesis: brand differentiation has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province;
- The third sub-hypothesis: brand loyalty has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province.

Review of literature

Ang, et al (2001) in their study found that consumers who are more aware of the value of a product, have better attitude towards gray markets goods in compare to the consumers are less aware of the value of a product. Garretson, et al (2002) in their study found that knowledge of value is positively correlated with attitude. Dowling & Staelin (1994) in their study found that consumers feel more uncertain when they are going to buy. Hoyer and MacInnnis (2001) in their study suggested, Gray market is the market whose consumers are older than 65 years and are called adult consumers requiring more healthy products. In a study conducted by Ahmadabadi (2003), the factors affecting customers' loyalty were identified and ranked as follow: 1) Factors relating to the physical characteristics of the branch; 2) factors related to the availability of branches; 3) factors related to services; 4) factors related to the staff. Zahedi (2012) in his study entitled "coping with the gray markets at the supply levels and the role of government suspended organization" found that grey markets makes the brand value worthless due to repeated sales with low price, the instructions in a foreign language, lack of replacement parts in the country in which the gray market is formed or products with low quality, getting used to violating trade laws passed by state and the failure in

supporting domestic production, reduction of income tax and import duties. In a study, Quinn and Paula (1991) reviewed US exporters and found that %64 of parallel imports is sold at low prices. When the gray markets are selling at the same time along a legal channel, the consumers with awareness from the higher prices might prefer a lower price in the gray markets (Zahedi, 2012). Another group of researchers have been defined the gray markets from another approach (parallel imports) (Hoyer and MacAnis, 2001).

Methodology
Statistical population, determining sample size and sampling method
The statistical population of the study was mobile consumers in Hamadan province. The number of 384 individuals needed as our sample were obtained by Morgan Table and due to the extensive nature of the population, the samples were randomly chosen by multi-stage cluster sampling and. Thus, at the first step Hamadan province was divided into four geographic regions of North, South, East, and West and each region was divided into different areas. Then the questionnaires were distributed in these areas according to the proportion of the population in each region. In multistage sampling, the population was divided into areas and the areas between them were selected. Then in the next stages the greater areas were gradually sampled (Danaifar et al, 2010).

Instruments of the study
Two questionnaires were used in this study. In order to evaluate the variable of mental images of brands due to lack of standard questionnaires consistent with the research model, the questionnaires available in books, articles, and websites designed and interpreted by the researcher were used. The questionnaires contain 12 questions connected with the three dimensions of the model in the following way: questions 1 to 4 are about the index of brand associations, questions 5 to 8 are about the index of brand differentiation, questions 9 to 12 are about the index of brand loyalty. In order to evaluate the variable of the consumers' reluctance to buy in mobiles grey markets, the researcher designed and interpreted a questionnaire by utilizing the questionnaires available in books, articles, and websites about the consumers' reluctance to buy. The questionnaire contains 16 questions measured four aspects of the research variable in the following way: questions 1 to 4 are about the index of drawing attention, questions 5 to 8 are about the index of creating interest, questions 9 to 12 are about the index of creating wishes, and questions 13 to 16 are about the index of propelling.

Results and conclusion
Statistical analysis of main research hypothesis
Mental image of brands has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province. To test the main hypotheses of this study, a simple linear regression was used.

Table 1: Summary of the regression model

Estimated standard error	Adjusted determination coefficient	Determination coefficient	Multiple correlation coefficient	Source
0.41237	0.577	0.578	0.760	1

Model determination coefficient is 0.578 which means that about % 58 of the variable "consumers' reluctance to buy in gray markets" is explained by the variable "mental images of brand". This means that if mental images of brand increases %1, the desire to buy mobile in gray markets in Hamadan province reduce about % 58. The multiple correlation coefficient model is 0.760.

Table 2: Coefficients of regression model

Significance level	T-statistics	standardized coefficients	Not standardized coefficients		variables
		Beta	Standard deviation	B	
0.000	9.499	0.760	0.104	0.986	Constant amount
0.000	22.879		0.031	0.715	Mental images of brand

As it is seen in the above table (coefficients of regression model) the null hypothesis of the coefficient of the independent variable and the constant amount due to significant level which is zero, was rejected. So the model changes into the following formula: $\hat{y}= 0.986+0.715x$. The variable "mental images of brand" has direct impact (0.760) on the variable "consumers' reluctance to buy in mobiles markets". This means that if the variable of "mental images of brand" improves one unit, about 0.760 of consumers' desire to buy in gray markets will be created. Therefore, it can be concluded that mental image of brands has impact on consumers' reluctance to buy in gray markets of mobile market in Hamadan Province.

Statistical analysis of the first sub-hypothesis

Brand association has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province.

Table 3: Summary of the regression model

Estimated standard error	Adjusted determination coefficient	Determination coefficient	Multiple correlation coefficient	Source
0.44720	0.503	0.504	0.710	1

Model determination coefficient is 0.504 which means that about % 50 of the variable "consumers' reluctance to buy in gray markets" is explained by the variable "brand association". This means that if brand association increases %1, the desire to buy mobile in gray markets in Hamadan province reduce about % 50. The multiple correlation coefficient model is 0.710.

Table 4: Coefficients of regression model

Significance level	T-statistics	standardized coefficients	Not standardized coefficients		variables
		Beta	Standard deviation	B	
0.000	19.260	0.710	0.087	1.668	Constant amount
0.000	19.696		0.025	0.497	Mental images of brand

As it is seen in the above table (coefficients of regression model) the null hypothesis of the coefficient of the independent variable and the constant amount due to significant level which is zero, was rejected. So the model changes into the following formula: $\hat{y}= 1.668+0.497x$. The variable "brand association" has direct impact (0.710) on the variable "consumers' reluctance to buy in mobiles markets". This means that if the variable of "brand association" improves one unit, about 0.710 of consumers' desire to buy in gray markets will be created. Therefore, it can be concluded that brand association has impact on consumers' reluctance to buy in gray markets of mobile market in Hamadan Province.

Statistical analysis of the second sub-hypothesis

Brand differentiation has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province.

Table 5: Summary of the regression model

Estimated standard error	Adjusted determination coefficient	Determination coefficient	Multiple correlation coefficient	Source
0.48199	0.424	0.424	0.651	1

Model determination coefficient is 0.424 which means that about % 42 of the variable "consumers' reluctance to buy in gray markets" is explained by the variable "brand differentiation". This means that if brand differentiation increases %1, the desire to buy mobile in gray markets in Hamadan province reduce about % 42. The multiple correlation coefficient model is 0.651.

Table 6: Coefficients of regression model

Significance level	T-statistics	standardized coefficients	Not standardized coefficients		variables
		Beta	Standard deviation	B	
0.000	14.340		0.108	1.550	Constant amount
0.000	16.757	0.651	0.032	0.542	Mental images of brand

As it is seen in the above table (coefficients of regression model) the null hypothesis of the coefficient of the independent variable and the constant amount due to significant level which is zero, was rejected. So the model changes into the following formula: $\hat{y} = 1.550 + 0.542x$. The variable "brand differentiation" has direct impact (0.651) on the variable "consumers' reluctance to buy in mobiles markets". This means that if the variable of "brand differentiation" improves one unit, about 0.651 of consumers' desire to buy in gray markets will be created. Therefore, it can be concluded that brand differentiation has impact on consumers' reluctance to buy in gray markets of mobile market in Hamadan Province.

Statistical analysis of the third sub-hypothesis

Brand loyalty has impact on consumers' reluctance to buy in gray markets of Mobile market in Hamadan Province.

Table 7: Summary of the regression model

Estimated standard error	Adjusted determination coefficient	Determination coefficient	Multiple correlation coefficient	Source
0.53187	0.296	0.298	0.546	1

Model determination coefficient is 0.298 which means that about % 30 of the variable "consumers' reluctance to buy in gray markets" is explained by the variable "brand loyalty". This means that if brand loyalty increases %1, the desire to buy mobile in gray markets in Hamadan province reduce about % 30. The multiple correlation coefficient model is 0.546.

Table 8: Coefficients of regression model

Significance level	T-statistics	standardized coefficients	Not standardized coefficients		variables
		Beta	Standard deviation	B	
0.000	14.801		0.122	1.802	Constant amount
0.000	12.740	0.546	0.037	0.471	Mental images of brand

As it is seen in the above table (coefficients of regression model) the null hypothesis of the coefficient of the independent variable and the constant amount due to significant level which is zero, was rejected. So the model changes into the following formula: $\hat{y} = 1.802 + 0.471x$. The variable "brand loyalty" has direct impact (0.546) on the variable "consumers' reluctance to buy in mobiles

markets". This means that if the variable of "brand loyalty" improves one unit, about 0.546 of consumers' desire to buy in gray markets will be created. Therefore, it can be concluded that brand loyalty has impact on consumers' reluctance to buy in gray markets of mobile market in Hamadan Province.

Recommendations of the study

- Planning to provide useful information by the legal and authorized representatives of mobile brands;
- Compilation and Installation brochures in prestigious stores in shopping malls and publication of a catalog containing information on a services of different brands of Mobile Phones;
- Increasing the number and level of representatives of reputable mobile brands in the city and country and offering new products with proper sales tariffs in accordance with the income level of customer;
- Offering services by Mobile representatives in places like airports and crowded routes;
- Teaching employees and salespersons of mobile brands the correct and honest behavioral techniques in official markets;
- Creating and strengthening research and development units in the mobile phone companies;

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