Purchase intention of products with Islamic labels under time pressure

Mohsen Akbari1*, Mohammad Hasan Gholizadeh2, Masoomeh Zomorrodi3

1*Assistant Professor, University of Guilan, Iran,
2Associate Professor, University of Guilan, Iran,
3MSc. Business Administration, University of Guilan, Iran

ABSTRACT

The aim of this research is an investigation into the effect of using an Islamic symbol in food packaging through considering the effects of time pressure, and Involvement on Muslim consumers' purchase intention. The data gathered through questionnaire were processed using partial least-squares (PLS) method. Results represented positive and significant impact of Islamic symbol in food packaging on Muslim consumers' purchase intention. Also, the effects of time pressure as a moderating variable of relationship between religious symbol and purchase intention is supported. Findings showed that the more people were under time pressure, the more they showed themselves willing to shop by seeing religious symbol on packaging and their purchase intention was increased. Further data analysis also revealed that the moderating effect of Involvement of consumers was not confirmed. This highlights that Involvement of consumers relating to food had no effect on enhancement of their purchase intention in case of seeing a religious symbol. These results involve practical tips for food packaging designers and international marketers who are interested in increasing customers' interests in products and promotion of their products in Islamic markets.

Correspondence:
akbarimohsen@gmail.com

Introduction

Marketing is a set of processes that identifies and satisfies the consumer's needs. At each step of these processes, the company tries to do better than its competitors and gain more customers. Due to this, the need for greater understanding of consumers' behavior is obvious for everyone. A review of the related literature indicates that traditional analysis has focused only on intrinsic characteristics of product. However, this does not meet the requirements of
markets changing drastically. Besides, the consumers are affected by the external characteristics of products. Recent studies suggest that the physical characteristics of a product can affect the attention of a purchaser to a product by trying to get him to buy it (Enneking, Neumann, & Henneberge, 2007). Important elements that shape the appearance of package include letters, colors, graphic, label, logo, and symbol. In fact, appropriate and effective use of these elements can have a positive effect on consumer's purchase intention.

Nowadays, with the passage of production-orientated era, there are different types of products with different properties which cause each individual to make different decisions in product selection process. Identifying consumers' purchasing behavior has been a major concern of producers, especially food producers. The point that a buyer enters a mall or food store and goes straight to pick a certain product among several different brands arranged on the shelves acknowledges the importance of this issue. Therefore, understanding the factors that influence consumer purchase behavior helps the producers release their products to the markets according to the demands of customers. Many marketing researchers including Weza (2002) mentioned that the customers' behaviors in this day and age not only depend on economic features of products, but also the social and cultural implications in the form of symbols affect the consumers' purchase intention. Hence, researchers argue about the importance of visual symptoms in packaging; because consumers are often under time pressure and when they select among competing brands, they have limited attention (Pieters & Warlop, 1999). According to Bottomley and Doyle (2006) and Creusen and Schoormans (2005), visual form of product packaging plays a vital role in consumers' decisions. This growing emphasis on product packaging has enhanced the motivation of carrying out more research in the effectiveness of packaging design to assist companies overcome the competition between brands (Young, 2002). The present study thought to examine the effect of using an Islamic symbol in food packaging through considering the effects of time pressure, and Involvement on Muslim consumers’ purchase intention.

Packaging
To date, marketers have tried to enhance the knowledge and willingness of customers for purchasing and they went through this experience by taking advantage of various sciences, especially art and its usage in packaging. This highlights that packaging plays a crucial role in marketing (Underwood, 2003; Vazquez, Bruce, & Studd, 2003). Ditcher (1957) goes as far as to call packaging as a silent seller for attracting customers. Moreover, Edvinsson (2002)
considered packaging as an intangible asset. Many researchers have discussed the importance of visual symptoms in packaging arose from the lack of time available for individuals due to various personal reasons, namely conditions of employment, income, education, and the number and age of children. As a result, they may make their choice based on the obvious signs on packages which does not require large amount of time to be spent (Herm, 2011). Time pressure can result in shifting from emphasis on product information label to visual characteristics of product (Coulson, 2000). Important elements which make up visual characteristics of a product include font, color, graphic, label, logo, and symbol. The appropriate and effective use of these elements can affect consumer choice (Derosia, 2008; Peracchio & Meyers-Levy, 2005).

As it is pointed out, most of the marketing researchers including Weza (2002) acknowledge that, nowadays, the consumers' behaviors does not depend only on economic features of products and the social and cultural implications in the form of symbols affect the consumers' purchase intention. In non-marketing studies, direct and unconscious influence of religious symbols has been proved. The researchers found that these symbols were effective in both physical and mental state of participants (Weisbuch-Remington, Mendes, Seery, & Blascovich, 2005). The expansion of these studies in the field of marketing implies that religious symbols on packaging can affect consumer's perception of product and his purchase intention.

At the point of sale, the images on packaging are a strategy of reflecting differences for attracting the attention of purchaser. This issue is particularly important in relation with ephemeral products which often require the selection process with low Involvement. In this case, when information is expressed in the form of images, individuals' tend to make faster and more effective decisions.

Symbolism in Consumer's Behavior

Semiotics, the study of symbols and their meanings, is created to analyze how people acquire meaning through the use of symbols. Symbols include words, motions, images, products, and abbreviations that a person uses to transfer information to other one. The study of semiotics dates back to the time before Socrates (Mick, 1986). In fact, some have argued that what separates mankind from others is his extraordinary ability in the use of symbols (Boulding, 1956). The field of semiotics has intimate relationship with the whole era of promotion strategy in marketing.
The study of semiotics is an important aspect of empirical perspectives about consumer's behavior. Hence, in order to understand how people react emotionally to symbols in the environment, we must have an understanding of shared meaning for different symbols. Semiotics in relation to a number of areas of consumer behavior involves the use of Freud's symbolism in advertising, the use of symbols to express self, and cross-cultural communication. Researchers who work on semiotics emphasize that the meaning is partly determined by cultural context within which symptoms are located.

**Religious Symbols**

The critical importance of packaging design is increasing in today's competitive market. Therefore, packaging has become the primary means and main tool of communication and branding. Consumer's perception of the nature of the product affects his choice through the communication elements of packaging and this is the key to the success of marketing strategies. Therefore, to achieve more effective communicative goals of product packaging, producers should be aware of consumers' reactions to their packaging and adopt their designs with consumer's perception process.

The use of symbols in the packaging of products conveys product characteristics even when the product itself does not. Symbol represents an idea, object, or concept. The most important feature of symbol is its power of association. This power of association creates a state in which the effect of symbols is formed according to the impact of ideas. And if this state is broad and its influence is deep, its impact and importance will increase. Religion is a set of beliefs, do’s and don'ts, and a set of assigned and generalized values that is considered as one of the most effective psychological supports which is able to provide certain level of meaning to life and in certain situations, religion can save people from the sense of suspense and frivolity (Harooni, 2012). Due to this, in each religion, religious symbol is a sign that recalls a particular religion for its addressees.

Koenig, McClough, and Larson (2001) describe religion as an organized system of beliefs, experiences, religious orders, and symbols that defines a spiritual identity to a person and guides an individual in a society. Mokhlis (2009) refers to religion as one of the most comprehensive and effective social structures that considerably influences the attitudes, values, and people's behavior at both personal and social levels. He also states that religion is a personal matter.
Product Involvement

Product involvement is an individual's general level of interest in something. Mitchell (1970) defines Involvement as an internal state variable which represents the amount of arousal, interest, and enthusiasm generated by a driver or by a specific situation. In a similar perspective, Cahan and Davis (1987) have defined Involvement as mind power activation of an individual during a particular time period. Generally, the element which seems to be identical in all these definitions is the definition of Involvement in the product as the degree of interest in something. Fast-moving consumer goods (FMCG) are products that are sold quickly and at relatively low cost. Most of FMCG involve low levels of Involvement. As defined by Coutler, Price, and Feick (2003) consumers with low level of Involvement are not widely in search of information about brands, evaluation of products characteristics, and making an important decision about a particular brand. One reason for this is taking lower risks. This consideration implies that these products are not actually very important. The lack of basic evaluations results in the inability to recognize significant differences among famous brands. Its consequence is weakening the habit of brand loyalty (Mittal, 1989). Conversely, those who have greater Involvement tend to have stronger allegiance to a brand. However, the role of time pressure cannot be ignored.

Time Pressure

With a sharper increase among singles and with decrease in the number of extended families, some behavioral changes occur which lead to the reduction of time available for individuals. Time limitation for consumers is influenced by several personal traits. Conditions of employment, income, education, and the number and age of children are among these traits. When consumers purchase under high levels of time pressure, despite their intentions, they tend to purchase smaller amount of products. It is clear that in such situations, a strategy to attract customers quickly who are under the time pressure for purchasing would be highly effective in their decision (Coulson, 2000).

The crucial point in the present study is that although many researchers have classified the products according to the consumer's Involvement, but they have not paid close attention to the division of consumers. Involvement can be used to divide consumers into low, moderate, and high involvement groups. However, groups of people with different levels of Involvement will have different responses to the marketing mix components about a particular product (Shwu-Ing, 2002).
Conceptual Model and Research Hypotheses

The conceptual model of the study is presented as follows:

![Conceptual model of research](image)

Research Hypotheses

The following hypotheses guided the study:

H1: Adding an Islamic religious symbol on food packaging affects Muslim consumers' purchase intention.

H2: The level of consumers' Involvement in the product affects the relationship between the religious symbol and purchase intention.

H3: The level of consumers' time pressure affects the relationship between the religious symbol and purchase intention.

The Study

According to the purpose of the study, this research was practical and regarding the nature and method, it was descriptive and survey study. Considering the aim of this study and for selecting a desired product and a symbol which could be used in packaging, inferential statistics method was used. Inferential statistics is a method that the researcher tries to gather people's ideas about a certain topic or behavior in order to observe their beliefs (Lee & Murphy, 2005). With this aim in mind, inferential statistics was carried out in two stages: The first stage was for selecting the desired product and the second stage was to determine the appropriate symbol for using in packaging. Therefore, a sample size of 40 students of Guilan University was selected and a questionnaire was distributed among them. Respondents were presented with 7 groups of products and asked to rank them from their own perspectives based on the extent of products' relationships with Islam.
The result of this survey was the selection and use of packed fast foods which had the least relation with Islam. In the next phase, we interviewed 6 religious experts and 7 symbols were identified as Islamic symbols. Then, 40 students were presented with a questionnaire and asked to report their extent of agreement separately on the use of any of these symbols in dates and fast foods packaging. As a result, one of the symbols which gained the higher point for both date and fast food packaging was used in packaging design of the final questionnaire.

Participants
The population of the study consisted of all students of Guilan University which included 17000 individuals. Using Morgan's Table, total of 376 subjects were determined as the sample of the study. Since the moderating variable required a sufficient number of samples for both groups of individuals with high and low levels of time pressure, we increased the number of samples to 702 individuals. The questionnaire was distributed among participants and a total of 654 were returned and used for analysis.

Instruments
This study was carried out through a survey method using questionnaire as the main instrument. The questionnaire was divided into three sections. In the first section, the respondents were asked to answer demographic questions related to gender, religion, and education; the second section consisted of three parts, namely questions related to consumers' Involvement in the product, questions about time pressure, and questions related to purchase intention.

Validity and Reliability of the Questionnaire
To assess the validity of the questionnaire, we checked the validity of the content. Also, for designing an authentic questionnaire we applied the experts' ideas and made some improvements and modified some questions. In order to assess the reliability of the questionnaire, the value of Cronbach's alpha was obtained for each indicator and all were above 0.7. Therefore, the reliability of the questionnaire was acceptable.

Results
For analyzing the models in SEM with partial least squares approach (PLS-SEM), some steps, namely checking model fit and then testing the research hypotheses are involved. The
first step, assessing model fit, is done in three parts: Fitness of measurement model, fitness of structural model, and fitness of general model.

Table 1  
**Load Factor Coefficients**  
<table>
<thead>
<tr>
<th>Components</th>
<th>Observed Variables</th>
<th>Load Factor Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Symbol</td>
<td>RS1</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>RS2</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>PL1</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>PL2</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>PL3</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>PL4</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>PL5</td>
<td>0.82</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>Inv1</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Inv2</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Inv3</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>Inv4</td>
<td>0.79</td>
</tr>
<tr>
<td>Involvement</td>
<td>TP1</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>TP2</td>
<td>0.95</td>
</tr>
</tbody>
</table>

In order to investigate the fitness of measurement models in SmartPLS2 software, reliability, convergent validity, and divergent validity were defined. Reliability of indices were also determined in three ways through exploring the factor loading coefficients, coefficients of Cronbach's alpha, and combined reliability. The results of the fitness of measurement model are shown in Tables 1, 2, 3, and 4.

Factor loadings can be calculated by assessing the correlation between the indices of a component. If the value is equal to or greater than 0.4, it suggests that the variance between the components and its indices is greater than the variance of measurement error and the validity of the measurement model tends to be acceptable (Hulland, 1999). As can be seen from Table 1, factor loading coefficients for all questions were greater than 0.4 and the measurement model demonstrated acceptable reliability.

Table 2  
**Cronbach's Alpha, Combined Reliability, and Convergent Validity**  
<table>
<thead>
<tr>
<th>Title</th>
<th>Latent Variables</th>
<th>Cronbach's Alpha (α ≥ 0.7)</th>
<th>Combined Reliability (α ≥ 0.7)</th>
<th>Average Variance Extracted (AVE ≥ 0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS</td>
<td>Religious Symbol</td>
<td>0.87</td>
<td>0.94</td>
<td>0.88</td>
</tr>
<tr>
<td>PI</td>
<td>Purchase Intention</td>
<td>0.92</td>
<td>0.94</td>
<td>0.75</td>
</tr>
<tr>
<td>Inv</td>
<td>Involvement</td>
<td>0.87</td>
<td>0.89</td>
<td>0.69</td>
</tr>
<tr>
<td>TP</td>
<td>Time Pressure</td>
<td>0.88</td>
<td>0.94</td>
<td>0.89</td>
</tr>
<tr>
<td>Inv*Rs</td>
<td>Involvement × Religious Symbol</td>
<td>0.91</td>
<td>0.79</td>
<td>0.40</td>
</tr>
<tr>
<td>TP*RS</td>
<td>Time Pressure × Religious Symbol</td>
<td>0.91</td>
<td>0.94</td>
<td>0.71</td>
</tr>
</tbody>
</table>

As Table 2 represents, all the three criteria, considering the latent variables, had gained a considerable amount. Due to this, the suitability of the reliability and convergent validity was confirmed.
The third criterion of exploring the fitness of measurement models is convergent validity. The results related to convergent validity is represented in Table 3. For this test, the mean variance between components was used. If the correlations between the components tend to be smaller than the root of this value, the divergent validity can be confirmed. Diagonal values of Table 3 illustrate the root mean variance of components, and since the diagonal values were higher than their correlations of the corresponding column, the structural validity was confirmed.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Involvement</th>
<th>Purchase Intention</th>
<th>Religious Symbol</th>
<th>Religious Symbol × Involvement</th>
<th>Religious Symbol × Time Pressure</th>
<th>Time Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.17</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Symbol</td>
<td>0.11</td>
<td>0.59</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Symbol × Involvement</td>
<td>0.06</td>
<td>0.11</td>
<td>0.155</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Symbol × Time Pressure</td>
<td>0.077</td>
<td>-0.2</td>
<td>-0.28</td>
<td>0.19</td>
<td>0.32</td>
<td>0.006</td>
</tr>
<tr>
<td>Time Pressure</td>
<td>0.32</td>
<td>0.42</td>
<td>0.47</td>
<td>0.13</td>
<td>0.16</td>
<td>0.94</td>
</tr>
</tbody>
</table>

According to the algorithm of data analysis in PLS method, after investigating the fitness of measurement models, we need to consider the fitness of the structural model of research. The coefficient of determination is a criterion which measures the fitness of the structural model of the study. By calculating the coefficient of determination, it could be verified that what percentage of the total variance of the dependant variable is due to the variance of other variables. Also, it is worth noting that whatever this value is closer to 100 per cent, it indicates that the variables presented in the model have greater effect on dependant variable. Therefore, the value of more than 50 per cent is acceptable.

In the current study, the coefficient of determination for purchase intention was 58 per cent, including that almost 58 per cent changes of purchase intention was because of religious symbol and time pressure. Therefore, according to the utility of Cronbach's alpha indices, composite reliability, and validity and coefficient of determination tests, it can be claimed that the structural model of measurement tool possessed relative desirability.

**Fitness of General Model**

Goodness of Fit (GoF) was developed by Tenenhaus, Amato, and Esposito (2004) and it is calculated according to the following formula:

$$ GoF = \sqrt{\text{Communalities} \times R^2} $$
Using the values obtained by the software and the above formula, GOF value was equal to 0.65. According to three values of 0.01, 0.25, and 0.36 which were known as weak, medium, and strong values for GOF (Wetzels, Odekerken-Schroder, & Van Oppen, 2009), the fitness of general model was verified.

The results of the testing hypotheses and the research model in terms of path coefficients are briefly presented in Table 4 and it clearly indicates that five of the seven paths assumed were meaningful at 0.5 level and two other paths were not meaningful. In the present study, the diagram was used to better show the relationship between the variables of the research. Figure 2 illustrates the t-test statistics and path coefficients of model which are representative of the relationship between the components of the research and latent variables and also it shows the relationship of latent variables with each other.

In this diagram, each rectangle represents a component of the questions in the questionnaire and each oval constitutes a latent variable. The numbers written between the ovals represent the values of t-test statistics for each latent variable which reflect the effects of latent variables on the dependent variable. If these coefficients are greater, it shows that factor had strong impact on dependent variable. If they acquire the value of 1.96 or more than it, they are representative of significant path coefficients. Numbers in parentheses indicates the path coefficients.

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient</th>
<th>T-Statistics</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of Religious Symbol on Purchase Intention</td>
<td>0.466</td>
<td>*13.357</td>
<td>Supported</td>
</tr>
<tr>
<td>Effect of Involvement on Purchase Intention</td>
<td>0.007</td>
<td>0.374</td>
<td>Not supported</td>
</tr>
<tr>
<td>Moderator Effect of Involvement on the Relationship between Religious Symbol and Purchase Intention</td>
<td>-0.220</td>
<td>1.193</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Effect of Time Pressure on Purchase Intention</td>
<td>0.166</td>
<td>*4.547</td>
<td>Supported</td>
</tr>
<tr>
<td>Moderator Effect of Time Pressure on the Relationship between Religious Symbol and Purchase Intention</td>
<td>-0.150</td>
<td>*5.213</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*Hypotheses were rejected and verified at the 95 per cent level of confidence

As it can be seen from Table 4, t-statistics were more than 1.96 for three of the four research hypotheses. Due to this, first, second, and fourth hypotheses were confirmed. The first hypothesis testing suggested that according to t-statistics, religious symbol had positive and significant impact on purchase intention and the relationship between the two variables was a direct and linear relationship.
According to t-statistics for the effect of time pressure on purchase intention and also considering the moderating effect of time pressure, it can be stated that time pressure moderated the effect of religious symbol on purchase intention.

**Discussion and Conclusion**

Packaging, because of its unmatched attractions, can function as a convincing and highly efficient tool in decision making process of purchasing. Perhaps that is why some experts have called marketing "sale processor" (Warde, 1999).

The proposed conceptual model is represented to measure the impact of the use of religious symbols on food packaging on Muslim consumers' purchase intention. One other feature of the present study was that it examined the effect of time pressure which consumers face while shopping and it investigated the effect of consumers' level of Involvement in the product on the relationship between religious symbol and purchase intention. Considering the structural model, the variables against the purchase intention could determine almost 85 per cent of changes in purchase intention.

As the data analysis revealed, the use of religious symbol in food packaging had positive and significant effect on customers' purchase intention. Also, given that the moderating effect of time pressure on the relationship between religious symbol and purchase intention was confirmed, and since path coefficient between time pressure and purchase intention was positive, it can be stated that if the time pressure was high when consumers intended to buy food, they were more willing to buy food which included religious symbols on its packaging.

In the present study, the moderating effect of consumers' Involvement on the relationship between religious symbol and purchase intention was not verified. Moreover, the Involvement neither had effect on purchase intention, nor it modified the intensity of relationship between religious symbol and purchase intention. When the consumers' Involvement about a product is low, visual symptoms on the packaging become more important for them and in this case, they pay less attention to the information written on the packaging. This study focused exclusively on university students who are representative of young and educated consumers of society. So, it is expected to select all geographic areas of the country as sample to provide deeper insight into the effects of religious symbols. In this study, only one symbol was used for packaging. The use of other symbols may result in different outcomes. It is recommended to examine the effects of other symbols to ensure obtaining the same results. Also, the impact of the use of religious symbol on packaging was
only examined in food industry. Conducting research in other industry may lead to achieving different results. It is even possible to get different results by choosing other products in food industry. So, it is suggested to replicate this study in other industries, namely cosmetics, hygiene products, and clothing. In the current study, the influence of religion was considered as a cultural factor on consumer's behavior. Due to this, it is suggested to investigate the impact of other cultural factors on consumer's behavior.

References


