# The relationship between religiosity and new product adoption

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## Abstract

**Purpose** – This paper aims to investigate the relationship between religiosity and new product adoption (NPA) among Muslim consumers.

**Design/methodology/approach** – A total of 300 questionnaires were distributed to university students. Religiosity represented the independent variable and was measured using five dimensions: ideological, ritualistic, intellectual, consequential and experimental dimensions. NPA represented the dependent variable.

**Findings** – Religiosity affects NPA among Muslim consumers; their beliefs influence how and what products they adopt.

**Originality/value** – This is the first paper to investigate the relationship between religiosity and NPA, not only in Pakistan but also in the entire Islamic market. Moreover, this is a relatively new issue that remains largely undiscovered by researchers worldwide. This paper will help to emphasize its importance and implications to business decisions.

**Keywords** Religion, New products, Consumer behaviour, Islam, Pakistan

**Paper type** Research paper

## Corrigendum

*This paper was initially published under the authorship of Mr Ateeq ur Rehman. Subsequently it was agreed between Mr Ateeq ur Rehman and Dr Shahbaz S. Gill that the contribution to this work by Dr Gill should have merited Dr Gill's inclusion as an author. This has now been corrected on the online version of the paper – please ensure that any further citation of this paper includes both authors. Table I uses as its source Shabbir M.S. (2007) "Islamic Religiosity Index". This source information has now been added to Table I. Shabbir M.S. (2007) has also been added to the list of references at the end of the article.*

## 1. Introduction

Religious commitment plays an important role in people's lives through shaping their beliefs, knowledge, and attitudes. Different religious groups such as Muslims, Christians, Buddhists, and others with other religious orientations have differing beliefs. These beliefs cannot be avoided when a society is analyzed (Fam *et al.*, 2002). These religious commitments and beliefs influence the feelings and attitude of people towards consumption (Jamal, 2003). For example, in England, the consumption pattern of the Indian society as compared to the indigenous white British society is different due to commitment to specific communal or religious groups (Lindridge, 2005). Furthermore, it is the religion which specifies prohibited and non-prohibited things which influence the consumer's consumption decision. For example, beef is prohibited in Hinduism while

in Islam it is not forbidden. The consumption of pork is prohibited in both Islam and Judaism but it is allowed in Christianity. In effect, religion influences what consumers belief, what they like, and what they dislike (Fam *et al.*, 2002).

Although religion is one of the most significant forces in the lives of people stating what is religiously acceptable and likeable and what is not, and despite the fact that religious works are the best sellers of all time, the influence religion has on new product adoption (NPA) remains under researched. The main purpose of this research is to fill this knowledge gap through collecting evidence from the second largest Muslim country in the world, Pakistan, through analyzing the impact of consumer religiosity on consumers NPA. More specifically, it seeks to answer the question of: does a relationship exist between religiosity and NPA among Muslim consumers?

Since the impact of religiosity on NPA is a new research topic, especially within the Islamic markets, the results of this study will provide a significant contribution towards a better understanding of the Muslim consumer's attitude in relation the adoption of new products. Such an understanding will help both, marketers in designing their marketing practices according to their Muslim consumers' convictions, and academicians in their research endeavors.

### 1.1 Islam
"Islam" is an Arabic word which means absolute surrender to *Allah* (God). In Islam the source of power is *Allah* and all the creation (matter, energy, and life) obeys his laws. The Islamic system of life is called *Shari'ah*. There are basic foundational keys of Islam (submission to the will of God): *Iman* (believe), *Salat* (Prayer), *Fasting*, Zakat (alms giving), and *Hajj* (pilgrimage to Macca). In Islam, forbidden things are named *haram* while permissible things are called *halal*.

According to Malik (2001) the Prophet presents himself as practical man, giving guidance in every situation related to the human social life. He gives the practical shape of *Adal* (Justice), honesty, and *Ibadah* (Worship) which are elaborated by his actions. The source of the Muslim's knowledge is the *Quran*, Prophet's acts and, *Ijma* (accepted under the *Shariah* laws by consensus of opinion).

Violating Islamic values is named a crime while earning through *halal* (*Shariah*-compliant) is considered an act of worship. *Riba* (interests) is prohibited in Islam and Muslims should not earn through charging interests. In addition, Islam prohibits earning the abnormal profit from business transactions and forbids the accumulation of wealth.

*Halal* products are those that are *Shariah* compliant, i.e. do not involve: the use of *haram* (prohibited) ingredients, exploitation of labor or environment, and are not harmful or intended for harmful use. Muslims are obliged by religion to clearly scrutinize products to make sure they are *halal*. And, they are strongly encouraged by the Islamic teachings to shy away from consumables that are doubted.

### 1.2 New product adoption
New product adoption (NPA) by a consumer is affected by his perception of many factors. These include product uniqueness, innovativeness, and functionality. Research findings show that consumers are more willing to acquire a new product if they feel that it is innovative and performs as it is expected to perform (Hirunyawipada and Paswan, 2006). Being knowledgeable about the new product also influences consumers' decision to accept or reject such a product; consumers with less knowledge tend to avoid purchasing (Lai, 1991). The role of knowledge in the adoption of new products is vital. For example, research in agriculture shows that farmers having more information about a new technology tend to accept it much faster than those who are less informed.

The impact of religion on various human aspects has been investigated by many researchers in the social sciences (Jackson, 1995; Bonne, 2007; Yun *et al.*, 2008; Montgomery, 2002; Anderson *et al.*, 2000). Such literature shows the importance of religion in the social life of human beings. Religious commitment impacts consumers' likes and dislikes. Consumers consider buying new products if these products do not violate or contradict their consecrated ideas (Yun *et al.*, 2008).

Religious commitment affects consumers' orientations regarding consumption patterns, as well as their social behavior.

Consumers are influenced by different factors when trying to decide on whether or not to acquire a new product. Although many of these factors have been thoroughly studied, religion, as an influential factor in consumers' lives, remains largely neglected in this particular area.

To investigate the relationship between these two variables religiosity was treated as the independent variable while NPA was treated as the dependent variable, i.e. supposed to be influenced by religion. Figure 1 shows the model that was constructed to explain the hypothesized relationship between the study variables.

Generally, religion can be defined as a strong belief in a supernormal power that controls human destiny or an institution to express belief in a divine power. However, a more precise definition was needed in order to carry out this study. Therefore, the model used to operationalized religiosity was that in accordance with Glock (1972) in which religiosity has been operationally defined as having five dimensions: ideological, ritualistic, intellectual, consequential, and experimental. The ideological dimensions include the overall beliefs associated with a religion. For example, beliefs about God, Prophet, fate, etc. ritualistic dimensions include the actions prescribed by religion such as: prayer, fasting, pilgrimage, etc. Intellectual dimensions refer to an individual's knowledge about religion. Consequential dimensions refer to the importance of religion while experimental dimensions describe the practicality of the religion.

To conclude, the previous discussions about the relationship between the two variables is summarized in the following hypothesis:

*H1.* Religiosity has significant impact on NPA.

## 2. Methodology

In order to investigate the relationship between religiosity and NPA, a structured questionnaire was circulated among students in the International Islamic University (IIU) in Pakistan, using convenience sampling method. The main reason for choosing this particular university was to get a sample composed of Muslim students from different countries. The IIU student body is multinational and includes students from all over the Islamic world, which allows for a better understanding of the effects of religiosity on the wider Muslim community, not just the country where this study has been carried out, Pakistan.

The questionnaire took seven to ten minutes to fill. It was comprised of 31 items. A five-points Likert scale from was used to measure the intensity of responses, where 1 meant strongly disagree and 5 meant strongly agree. The demographic profile included three items: income, age, and education level.

A pilot study was conducted to test the suitability of the instrument. A total of 25 questionnaires were circulated among respondents, collected, and analyzed. The results of the pilot study show an overall Cronbach's alpha of 0.78. Other initial results show a mean correlation between religiosity and NPA of 0.30.

Using the mean correlation to determine the overall sample size, according to Cohen (1983), if the correlation is 0.30 then to find 95 percent correct result there must be a standard sample
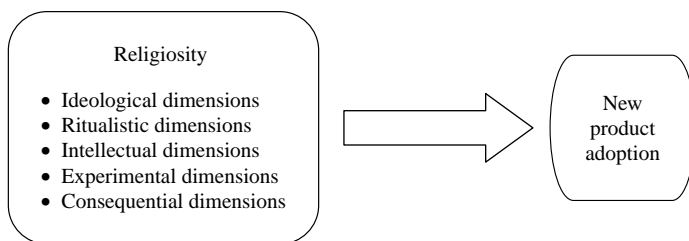


**Figure 1.**
Conceptual model

size of 139 respondents. Since a larger sample size in this particular study would enhance the results even further, a sample of 300 respondents were used.

## 3. Results

A total of 300 questionnaires were distributed among the respondents to investigate the relationship between religiosity and NPA. Results show that the overall Cronbach's alpha of religiosity was 0.67 and for NPA was 0.56, which is satisfactory. The reliability for each dimension of religiosity was also measured as shown in Table I.

Table II shows the demographic profile of the respondents. Age of respondents in this sample were under 18 = (8), 19-25 = (223), 26-35 = (61), and 36-50 = (1). In addition, nearly 4.1 percent of the respondents were below the graduation level, 59.7 percent of the respondents were at graduation

| Variables (items[a]) | Cronbach's alpha |
|---|---|
| *Overall religiosity* | 0.67 |
| *Ideological dimensions* | 0.51 |
| I have firm belief in all basic ideological dimensions of Islam | |
| Muhammad (PBUH) is His last Prophet | |
| I believe there is only one *Allah* | |
| *Ritualistic dimensions* | 0.61 |
| I regularly offer prayer five times a day | |
| I fast regularly during Ramadan | |
| I regularly recite the *Holy Quran* | |
| I believe that I am obliged to perform Hajj if I meet the prescribed criteria | |
| *Intellectual dimensions* | 0.57 |
| I never offer *Sajjda* saint's graves | |
| I always keep my self away from earning through *haram* (prohibited) means | |
| I always try to avoid minor and major sin | |
| I know the basic and necessary knowledge about my religion | |
| I always try to follow Islamic junctions in all matters of my life | |
| *Consequentional dimensions* | 0.77 |
| It is my duty to give respect to others and give them their rights according to Islamic injunctions | |
| I try to avoid any activity, which hurt others | |
| I always try to help those who need my help | |
| I try to be honest and fair with others | |
| I always avoid humiliating others because Islam does not allow doing so | |
| *Experienceional dimensions* | 0.62 |
| I feel sorrow and dissatisfaction when I do something against my faith | |
| I have feeling of being tempted by devil | |
| I have feeling of being afraid of *Allah* | |
| I have feeling of being punished by *Allah* for something doing wrong | |
| I feel pleasure by seeing others following Islamic teaching | |
| *NPA* | 0.56 |
| I prefer to buy products recommended by friends and neighbors | |
| It is important to reduce expenses and put money in my savings account | |
| I never care about other people's opinions on the products I buy | |
| I will buy products I love despite negative opinions from friends and family members | |
| I will buy what I feel good about and never care about other's opinions | |
| If things can still function, I will not buy new ones to replace them | |

**Table I.**
Reliability statistics

**Note:** [a]Items related to questionnaire
**Source:** Shabbir, M.S. (2007), "Islamic Religiosity index"

| Characteristic | Frequency | Percentage | CF (%) |
| --- | --- | --- | --- |
| *Age* | | | |
| Under 18 | 8 | 2.7 | 2.7 |
| 19-25 | 223 | 76.1 | 78.8 |
| 26-35 | 61 | 20.8 | 99.7 |
| 36-50 | 1 | 0.3 | 100 |
| *Education* | | | |
| High school | 4 | 1.4 | 1.4 |
| Inter level | 8 | 2.7 | 4.1 |
| Bachelor's degree | 175 | 59.7 | 63.8 |
| Master | 95 | 32.4 | 96.2 |
| Doctoral | 11 | 3.8 | 100 |
| *Income (Pak rupee)* | | | |
| Up to 5,000 | 187 | 63.8 | 63.8 |
| 6,000-10,000 | 35 | 11.9 | 75.8 |
| 11,000-15,000 | 26 | 8.9 | 84.6 |
| 16,000-20,000 | 11 | 3.8 | 88.4 |
| 21,000 and above | 34 | 11.6 | 100 |

Table II.
Demographical characteristics of respondents

level, about 32.4 percent were enrolled in master degree, and the remaining 3.8 percent of total sample were enrolled in PhD degrees. Further, the income level of 63.8 percent of total respondents was up to Rs 5,000, which is not much but typical for a student sample, 11.9 percent of respondents had income level of Rs 6,000-10,000, 8.9 percent of the total respondents were earning from 11,000 to 15,000, 3.8 percent had income between 16,000-20,000 and 11.6 percent were earning above 20,000.

To investigate the relationship between religiosity and NPA, the data were subjected to regression and correlation analysis. The results are shown in Table III which clearly demonstrates that there is a relationship between the independent and the dependent variable (religiosity and NPA). The correlation value of 0.237 is significant at the 0.01 level, which supports the study hypothesis (religiosity has significant impact on NPA).

The hypothesis is also supported by result shown in Table III. Furthermore, the model is statistically significant; $p < 0.01$ and $t$-value is 4.16 which is $>2$. In addition, the $F$-value is 17.3, which is also $>4$ and $p$-value is 0.000. Further results about the mean and standard deviation are provided in the Appendix Tables A1 and A2.

## 4. Discussion and conclusion
The main objective of the research was to investigate the impact of religiosity among Muslim consumers on NPA. Needless to say, all the respondents were Muslims. The findings provide evidence that a relationship exists between these two variables.

The results of this study have important implications for both marketers and managers. Since evidence shows religiosity among Muslim consumers affects their attitude towards the adoption of new products, decision makers need to take that into consideration when introducing new products to Muslim markets. Decision makers need to study their markets carefully if they are to establish a strong presence in these markets. If consumers in these markets are more religious, then the new products and the way these products are promoted need to be prepared in accordance with the spiritual and religious dictations and influences that those consumers acknowledge.

| | Mean | $r$ (NPA[a]) | Beta | $t$-value | $F$ | Sig. |
| --- | --- | --- | --- | --- | --- | --- |
| Religiosity | 4.01 | 0.237[*] | 0.23 | 4.161 | 17.3 | 0.000[*] |

**Notes:** [*]Correlation is significant at the 0.01 level (two-tailed), $p < 0.01$; [a]NPA, new product adoption

Table III.
Regression analysis (religiosity on NPA)

Since this area of consumer research remains largely undiscovered, researchers have a plethora of issues that they can investigate. For example, differences in religiosity among the various religious groups and the effect of these differences on NPA represent a rich field of study. Comparative religiosity and NPA is also a very interesting area to investigate. Moreover, religiosity can be investigated in relation to product type, i.e. consumables, electronics, durables, etc. or, it can be investigated in relation to country of origin, since many people have positive or negative religious-based sentiments towards certain countries.

A major limitation of this study is that all respondents were university male students with limited disposable income. Therefore, it is anticipated that the strength of their beliefs leans towards idealism, which is also a characteristic of student populations. It is important to note that the consumption patterns and believes of consumers tend to change with the increase in their income. What people say that they would do when they are at a certain income level might be significantly different than that if they move to the next level. Therefore, a more heterogeneous sample composed of different individuals with different incomes, education, and age will be a better predictor of the strength of the relationship between religiosity and NPA.

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**Further reading**

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**Appendix**

| Cronbach's alpha | Reliability statistics Cronbach's alpha based on standardized items | Items |
|---|---|---|
| 0.669 | 0.642 | 293 |

Table AI. Reliability statistics

| | Item statistics Mean | SD | $n$ |
|---|---|---|---|
| Ideological dimensions | 4.9807 | 0.12027 | 293 |
| Ritualistic dimensions | 4.1451 | 0.62438 | 293 |
| Intellectual dimensions | 4.2833 | 0.58230 | 293 |
| Consequentional dimensions | 4.5331 | 0.48189 | 293 |
| Experienceional dimensions | 4.5304 | 0.47951 | 293 |

Table AII. Descriptive statistics

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