Investigating the Effect of Gender Role Attitude on the Relationship Between Dimensions of Religiosity and New Product Adoption Intention

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Abstract: The purpose of this paper is to present the effect of gender role attitude on the relationship between new product adoption (NPA) and different religiosity dimensions. More than 600 questionnaires were distributed, of which 460 were useful. The survey method was employed using a sample of 460 Muslim students of both gender, studying at different educational-levels of university. The findings of the study revealed that gender role attitude did not affect the relationship between religiosity and NPA. Our findings found no confirmation of relationship between religiosity and NPA among female and male. This could be because of attributed to the selected product category. These results may have implications for marketers, specifically for export and import to Muslim markets. The limitation of this study is to assess a selected product category. It will be useful for future research studies to select various product categories. Most Muslim Iranian consumers are not interested in importing and marketing leather products into Iran. Leather marketers should use more specific awareness advertising for introducing the products.

Key words: Religion • Gender • New product adoption • Islam • Muslim consumer • Iran

INTRODUCTION

The significance of religion to human beings in so many dimensions of daily living is an important area of enquiry for researchers. Nevertheless, the importance of religion as an area of focus has not been a worldwide effort [1].

The influence of religious beliefs on individual and social behavior is well documented. However, a review of the pertinent literature showed only a handful of studies that directly examined the influence of religion on marketing communications [2].

Max Weber (1905) was the first to identify the significant role that religion plays in social change [3].

In 1962, Reinhard (1962) observed that religion in our nations' policy packages had to be seriously considered for social change and development. Religion has once again become a major player in public policy and today's power plays are greatly influenced by religious ideology [4].

More generally, the religious practices in a society influence men/women decision-making roles, as well as societal institutions and customs [5].

Although religion is one of the most significant forces in the lives of people, stating what is religiously acceptable and preferred and what are not and despite religious works being the best marketers of all time [6].

Consumers' new product adoption (NPA) behavior is of fundamental interest to marketing managers and researchers, because of its role in new product diffusion processes [7].

Moreover, the role of external influences, such as the opinions of leaders, can be influenced [8].

Understanding what differentiates visionary customers who adopt products earlier in the process from more pragmatic customers in the mainstream market has been suggested as the key to new product marketing [7]. Also, religiosity may be investigated in relation to product type, such as leather products, electronics, durables, etc [6].

Less attention has been given to the relationship between religiosity and consumer purchase decisions. Furthermore, no multidimensional study has ever been reported investigating the religious dimension and orientation that correlates with purchasing roles [5].

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Increased globalization along with greater diversity within organizations has made the question of the influence of gender role attitude on the relationship between religiosity and new product adoption and few studies have examined precursors that might affect the investigation of the gender role attitude on relationship between dimensions of religiosity and new product adoption.

Different gender groups have differing beliefs. These religious commitments and beliefs influence the feeling and attitude of people toward consumption and new product adoption. This research is, therefore, designed to investigate the effect of gender role attitude on relationship between dimensions of religiosity and new product adoption intention.

Gender Role Attitude: Beliefs exist in every society on the roles are appropriate for each gender and both men and women are expected to have or to develop characteristics consistent with one's assigned role. Gender stereotypes are often used to support the traditional gender roles and are closely connected to surrounding culture, that is, they reflect cognitive beliefs about differences between masculinity and femininity that the members of particular culture share [9]. An extensive body of research conducted in the west has identified several determinants that influence the formation of gender role attitudes, a vast a continuum that ranges from traditional to non-traditional attitudes. Harris and Firestone define non-traditional gender roles as "those roles that do not reinforce or conform to 'expected' differences in roles for man and woman".

Studies have shown that socialization (i.e., siblings, parents and groups) and life experiences contribute to formation of gender role attitudes as well as to their transmission across generation in which children model their attitudes and behavior on those of significant others, particularly, mothers. Related studies in the area have revealed gender stereotypes in many developed countries that delight high rates of educational attainment levels [10].

For instance, in Iran; there are visible signs of expansion in women's role in the economy during the past two decades; and along with rapid increase in their educational attainment, declines in fertility and family size are observed. These changes are taking deeper roots as the demographic transition changes the relations within the family, between partners and between parents and children, making it possible for families to invest more intensively in the education and well-being of the next generation [11].

Islam: The religion of Islam is based on the acceptance of and obedience to the teachings of God revealed to his last prophet, Muhammad. Muslims believe in one, unique, incomparable God, who has neither a son nor a partner and that none has the right to be worshipped but Him alone.

He is the true God and every other deity is false. He has the most magnificent names and sublime perfect attributes. No one shares his divinity, nor His attributes [12].

Islam is the third of three largest monotheistic religions, the other to being Judaism and Christianity. Muslims believe that the Qur'an is God's word as revealed to the prophet Mohammad through the angel Gabriel.

There are five basic beliefs of Islam: 1) Belief in one God. (Allah is the Arabic word for God, it is not a separate god from the Judea-Christian version); 2) Belief in prophethood (Muhammad and the prophets before him); 3) Belief in God's justice; 4) Belief in the Imams of God (shi'ite belief); 5) Belief in the Day of judgment.

There are five major duties of Muslims: 1) Prayers five times a day-morning, noon, afternoon, sunset and night; 2) The pilgrimage to Mecca(Hajj) once in their lifetime, if physically and financially able; 3) Fasting during the month of Ramadan; 4) Give to the Poor (Zakat); 5) Strive in the way of God(Jihad).

According to Islam, there are five major Prophets: Adam, Solomon, John, Ishmael and Isaac. Muslims worship God directly. Religious leaders do not have any divine characteristics; people and objects are not "holy". It is, in fact, sacrilegious to worship anything or anyone outside of God. Muslims, unlike Christians, do not believe Jesus was God's son, rather he was a prophet. The Qur'an contains much of the basic information told in the Bible's Old Testament and in the Torah. Women dress modestly out of reverence for God, not for men. Muslim women are not more submissive than non-Muslim women as some argue. In fact, Muslim women have been historically treated better than women in other cultures. For example, women in Islam were given the right to vote about, 1,400 years ago, centuries before women of other cultures. However, like many other cultures, patriarchal culture can corrupt Muslim culture [13].

Knowledge acquisition is an important pursuit among Muslims. Seeking knowledge to raise intellectual superiority is given top priority. Islam has awoken the believer to the value and the function of his mind, to the necessity to think peculiarly, carefully, logically and critically [14].

In addition to, Islam expects the believer to honor the benefit derived from the blessings of Allah made available in the form of natural resources [15].

Although Islam began in the Arabian Peninsula, there are Muslim communities throughout the world, from Mexico to the Philippines, with historically large populations in Africa, southeastern Europe and central and southern Asia. More Muslims actually live east of Saudi Arabia than in the Middle East, the largest predominantly Muslim country being Indonesia. Consequently, not all Muslims are Arab; rather many are Persian, African, European and Asian. However, all Muslims are encouraged to study classical Arabic, as the Quran is only rightly understood in language in which it was revealed [16].

Religiosity: Religion, as an aspect of culture, has considerable influence on people's value, habits and attitudes and it greatly influences lifestyle, which in turn affects consumer decision behavior. As Peterson and Roya commented, one function of religion is to provide a source of meaning and purpose for people. Religion can provide a framework which makes life understandable and interpretable [5].

Attempts to understand religion and religiosity, from the individual or personal perspective, are naturally the domain of psychologists of religion [1].

Religion is a system of institutionalized sacred values clustered around questions of "ultimate meaning". From this broad definition two typologies are sprung. One, based on the connected dimensions of religious commitment, i.e., experiential, ideological, ritualistic, intellectual, consequential seems to be pedestrian. But the others based on the types of religious experience stemming from the perceived relationship to the supernatural, i.e., the confirming, ecstatic, responsive, revelation has great promise for further research [17].

The Dimensions of Religiosity: Religion is far from being a monolithic, homogeneous and whole. The observation that individuals and groups are highly religious in one respect, but rank low in other respects, strongly indicates that religion, at least in the loose sense of the usage of the term and in a nontechnical sense, is a multidimensional phenomenon. As John Wilson (1978) summarizes the development of the 60s and 70s, "the gradual recognition of this and concerted efforts to identify and measure these dimensions represent one of the most significant advances in the recent sociology of religion."

Simply, it can be said that Charles Glock's fundamental article of 1959 took up ideas which had been discussed at the turn of the century by Hall (1891), Starbuck (1899) and Leuba (1912, 1925), who distinguished religious beliefs (as the Core category) from religious works (morals), practices (ritual) and feeling (emotions).

In an attempt at greater analytical rigor, Glock replaced these empirical fields with more abstract dimensions, as closely intertwined but analytically independent and mutually irreducible aspects of religion. In other words, much as physical bodies are mapped under three and only three dimensions (Vis. Length, breadth and height) and thus become subject to precise measurement, religion too should finally become amenable to analytical rigor and subject to precise measuring. The first and indispensable step towards this goal is to explore the dimension under which empirical religious phenomena will have to be mapped.

Glock (1959) renamed the original four dimensions into experiential (feelings), ritualistic (practice), ideological (belief) and consequential (works) dimensions which he subsequently (1965) supplemented by the intellectual dimension (knowledge), an addition which he owed to Fukuyama (1961). A short glimpse at Fukuyama's nomenclature is instructive.

He adopted none of Glock's labels, but rather named his own dimensions the cognitive, cultic, creedal and devotional dimension and excluded Glock's consequential dimension.

Furthermore, two of Fukuyama's dimensions (i.e., the creedal and the cultic) conspicuously concur with Fichter's (1951, 1969) division of religion into social communion, creed, code of conduct and cult. Fichter thus would seem to have a legitimate claim to priority and to a remarkable degree of conceptual poignancy at that. In subsequent developments, Stark and Glock (1968) revised their adding particularism and ethicalism as subsidiaries to belief and since remained silent. Finally, in an endeavor to round out and to synchronize the extant research in this field, verbit (1970) suggested a concordance of six dimensions: ritual, doctrine (belief), emotion (feelings), ethic (consequences) and community, thus establishing a concordance to include Fichter (1951) and Lenski (1961). A synopsis of the dimensions of religious commitment is shown in Table 1 [18].

The Ideological Dimension: The ideological dimension is constituted by the fundamental beliefs to which a religious person is expected and often required to adhere.

Table 1: Dimensions of religiosity Commitment a Synopsis

Stanley Hall 1891						
Edward Starbuck 1899	----	beliefs	works	practice	----	feelings
James Leuba 1922, 1925						
Fichter 1951, 1969	communion	(creed)	code of conduct	cult	----	(creed)
Fukuyama 1961	----	creedal	----	cultic	cognitive	devotional
Charles Glock 1965	----	Ideological	consequential	ritualistic	intellectual	experiential
Glock and Starck 1968	particularism	Belief	ethicalism	practices	knowledge	experience
Verbit 1970	community	doctrine	ethics	ritual	knowledge	Emotion

Source: [16]

The Ritualistic Dimension: The ritualistic dimension encompasses the specific acts of worship and devotion people perform to express their religious commitment.

The Intellectual Dimension: The intellectual dimension refers to the expectation that a religious person will posses some knowledge of the basic tenets of their faith and sacred scriptures.

The Experimental Dimension: The experimental dimension includes all those feelings, perceptions and sensations, whether felt by an individual or a person or religious group, that involve some type of communication with God or a transcendental Being.

The Consequential Dimension: The consequential dimension encompasses the secular effects of religious belief, practice, experience and knowledge on the individual. It includes all those religious prescriptions which specify what people ought to do and the attitudes [19].

New Product Adoption: Consumer's new product adoption (NPA) behavior is of fundamental interest to marketing managers and researchers, because of its role in new product diffusion processes. Understanding what differentiates visionary customers who adopt a product earlier in the process from more pragmatic customers in the mainstream market has been suggested as the key to new product marketing in today's high-tech era [9].

Rogers' (2003) diffusion of innovation framework is one of the best-known [20].

He identifies five sequential stages in innovation adoption: (1) an individual gains knowledge of an innovation through social network, (2) forms an attitude toward it, (3) decides to adopt or reject it, (4) implements it and (5) confirms the decision [21].

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system [20].

Robertson holds that the critical factor in defining an item as innovation should be its effect on established patterns of consumption. In most marketing cases, new products have minimal disruptive impact on the status quo consumption patterns. These kinds of new products may be defined as continuous innovation [22].

Firms use business strategy to outline the fundamental steps that they plan to follow in order to accomplish their goals [23].

New products may diffuse rapidly or slowly. Personality characteristics have an intuitive appeal for explaining the rate of diffusion of innovation. The rate of diffusion may depend on product characteristics the consumer perceives [22]. Although there is not yet a coherent theoretical frame for understanding strategies for promoting new product adoption in uncertain environments [24]. Ostlund found perception to be a better predictor of adoption than personal characteristics. When consumers encounter a new product, to make an adopting decision, they evaluate the new product by knowledge of that product category and the incoming information on the new ones. In the adoption process of a new product, there would be a matching elaboration between the buyer's perceived situational characteristics and the product attributes [22]. Slyke, Belanger and Comunale (2004) studied the general adoption determinants of Rogers such as relative advantage, compatibility and complexity and found that all the attributes have a positive relationship with the intention to use a new product [25].

Practices that have proven successful in a particular culture and market environment may not be directly transferable to another setting [26].

Also, 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 [6]. We depict the model in Figure 1.
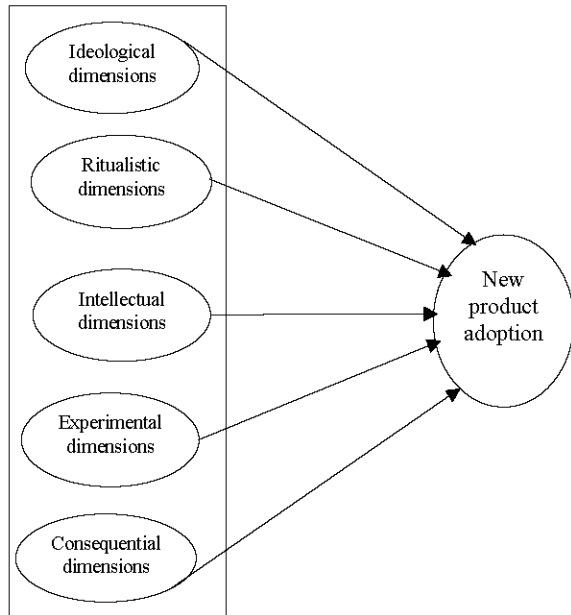
Fig. 1: Conceptual model
Source: [6]

Hypothesis: On the basis of the above theoretical literature, it can be hypothesized that:

H1: The Ideological dimensions of religiosity influence directly NPA among gender (female and male) role attitude.

H2: The Ritualistic dimensions of religiosity influence directly NPA among gender (female and male) role attitude.

H3: The Intellectual dimensions of religiosity influence directly NPA among gender (female and male) role attitude.

H4: The Experimental dimensions of religiosity influence directly NPA among gender (female and male) role attitude.

H5: The Consequential dimensions of religiosity influence directly NPA among gender (female and male) role attitude.

MATERIALS AND METHODS

Data Collection: Data was collected through different universities of Iran. A convenient and economical sampling method was used to obtain respondents, as this method is convenient and economical [27].

A pilot study was performed to test the suitability of instrument.

A total 29 questionnaires were distributed among respondents, collected and analyzed. The results of the pilot study showed an overall cronbach's of. 86.

Attempts were made to maintain an even ratio of men and women. More than 600 questionnaires were distributed, of which 460 were useful. It was found that the perfect of males to females was 50:50. The survey method was employed using a sample of 460 Muslim students of both gender studying at different educational-level of university. The respondents lived in three major cities across Iran. The questionnaire took eight to ten minutes to complete. A portion of the questionnaires were gathered by employers that were trained and instructed on how to administer the survey instrument and to include respondents with different demographic profiles. The data collection was conducted over a three week period on both weekdays and weekend.

Measurement Instrument: The instrument comprised of three sections. The first section consisted of a new version of Glock and Stark's (1965) five dimensions of Religiosity used to measure respondent Religiosity [15].

Glock's (1959) new naming scheme for the original four dimensions of religiosity (ritual, consequential, ideological, and experiential) were employed in two item subscales, yielding an eight-item multiple-choice instrument.

Each item was scored from 0 (option indicating least religiosity) to 4 (option indicating greatest religiosity) with the exception of the "attendance at religious services" question. This item was categorized according to four meaningful breaks in the response distribution. Some of the items were reverse worded and can be randomly ordered to minimize any kind of obvious systematic structure. Items of an ideological nature contained the verb "believe" whereas experiential items are oriented towards "feelings" [28].

Responses to all 22 items were based on a five point likert scale, which ranged from" strongly agree " to "strongly disagree".

The second section consisted of a scale of new product adoption in form of a four item, seven point likert-type scale, measuring the inclination to buy a new product as soon as it available.

There is also a sense of urgency to purchase the product earlier than other people (references). There are direct and indirect versions of the scale; as shown in "scale item" the difference between the two has to do with whether the items are responded to in the first person (direct version) or the third person (indirect version).

A high score on the direct version of the scale suggests the respondent has a strong intention to purchase the new product as soon as it is on the market.

A high score on indirect version of the scale indicates that a respondent believes the typical member of the referent group (e.g., the student) would highly want to be among the first to adopt the product [29, 30].

This work used as five point likert-type scale and direct version of scale to measure the tendency to buy a new product as soon as it is available. Also the new products selected were leather goods, such as shoes, bag and clothes.

The items that measured the new product adoption were four questions such as "I would like to buy a leather goods to day if possible" and "I will try to buy one of the products as soon as I can", etc.

The third section consisted of the information about demographics (religion, sex, age and education).

RESULTS AND DISCUSSION

An overview of respondent characteristics is provided in table 2.

As evident from the data, female and male respondents' contributions were 50:50 percent. The sample size also revealed that a largest age group respondents in the range of 18 to 22 years old (49 percent), about 32.8 percent of the young adults in the sample size were 22 to 25 years old, 11.1 percent of the sample were 26 to 29 years old and finally 6.1 percent of the sample was about 30 years old and older.

In terms of break down by education, the sample consisted of 33 students (7.2 percent) enrolled tact level,

about 314 students (66.3 percent) were enrolled at the bachelor level, 100 students (21.7 percent) were enrolled at the masters level and 13 students (2.8 percent) were enrolled at the PhD level.

Preliminary Analyses: Cronbach's alpha was first used to assess the reliability of religiosity scale [15].

Preliminary results showed that, overall, cronbach's alpha of religiosity was 0.88 and for NPA was 0.81, which is satisfactory.

The reliability for each dimension of religiosity was also measured, as shown in Table 3 and Table 4.

Respondents were also asked about the validity of questionnaire and, according to their advice; some unclear aspects of the questionnaire were revised.

Hypothesis Testing: Independent sample Pearson correlation tests were used to determine any significant differences between gender group status (i.e., female and male group). The results on the dimensions of religiosity and new product adoption are shown in table 5 and figure 1.

Previous research showed that there is a significant correlation between the dimensions religiosity and new product adoption (Rehman and shabbier, 2010).

Therefore this paper investigated the effect of gender role attitude on the relationship between dimensions of religiosity and new product adoption. According to the results, there was no significant correlation between the ideological dimensions of religiosity and NPA among the female group (r =-.086, p<5%) and also no significant correlation between the ideological dimension of religiosity and NPA among male group either (r =. 026, p< 5%), so, according to the result, H1 was rejected.

Table 2: Respondents Demographics

	N	Percent	CF(%)
Demographics			
Gender			
Female	230	50	50
Male	230	50	100
Age group			
18-22	227	49.3	40.3
22-25	151	32.8	82.2
26-29	54	11.1	93.9
30 or more	28	6.1	100
Education status			
Tact	33	7.2	7.2
Bachelor	314	68.3	75.4
Master	100	21.7	97.2
PHD	13	2.8	100

Table 3: Reliability statistics of religiosity

Variables (items)	Cronbach's alpha
Overall religiosity	
Ideological dimensions	0.90
• I have firm belief in all basic ideological dimensions of Islam	
• Muhammad (PBUH) is his last prophet	
• I believe there is only one Allah (God)	
Ritualistic dimensions	0.88
• 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	0.77
• I never offer Sajjada saint's graves	
• 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	0.78
• 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 hurts others	
• I always try to help those who need my help	
Experienceional dimensions	0.60
• I feel sorrow and dissatisfaction when I do something against my faith	
• I have feelings of being tempted by devil	
• I have feelings of being afraid of Allah	
• I have feelings of being punished by Allah for something doing wrong	
• I feel pleasure by seeing others following Islamic teaching	

Note: items related to dimensions of religiosity Source: [6, 15]

Table 4: Reliability statistics of NPA

Variables (items)	cronbach's alpha
New product adoption (NPA)	0.66
• I would like to buy a leather product today, if possible.	
• I will try to buy one of the leather products as soon as I can.	
• I am likely to be one of the first students to buy a leather product	
• I will probably purchase one of the new products soon after they are on the market.	

Note: five point likert scale: 1-strongly disagree; 5-strongly agree Source: [24, 25]

Table 5: Results of analysis

Pearson correlation test	new product Adoption (NPA)			
Construct/Items	female N= 230		male N= 230	
Statistical index correlation sig correlation sig				
Ideological dimension	-0.86	.196	.026	.699
Ritualistic dimension	-0.22	0738	0.30	.656
Intellectual dimension	.034	.612	-.048	.469
Consequential dimension	.066.	320	.060	.361
Experimental dimension	.078	.238	.014	.832

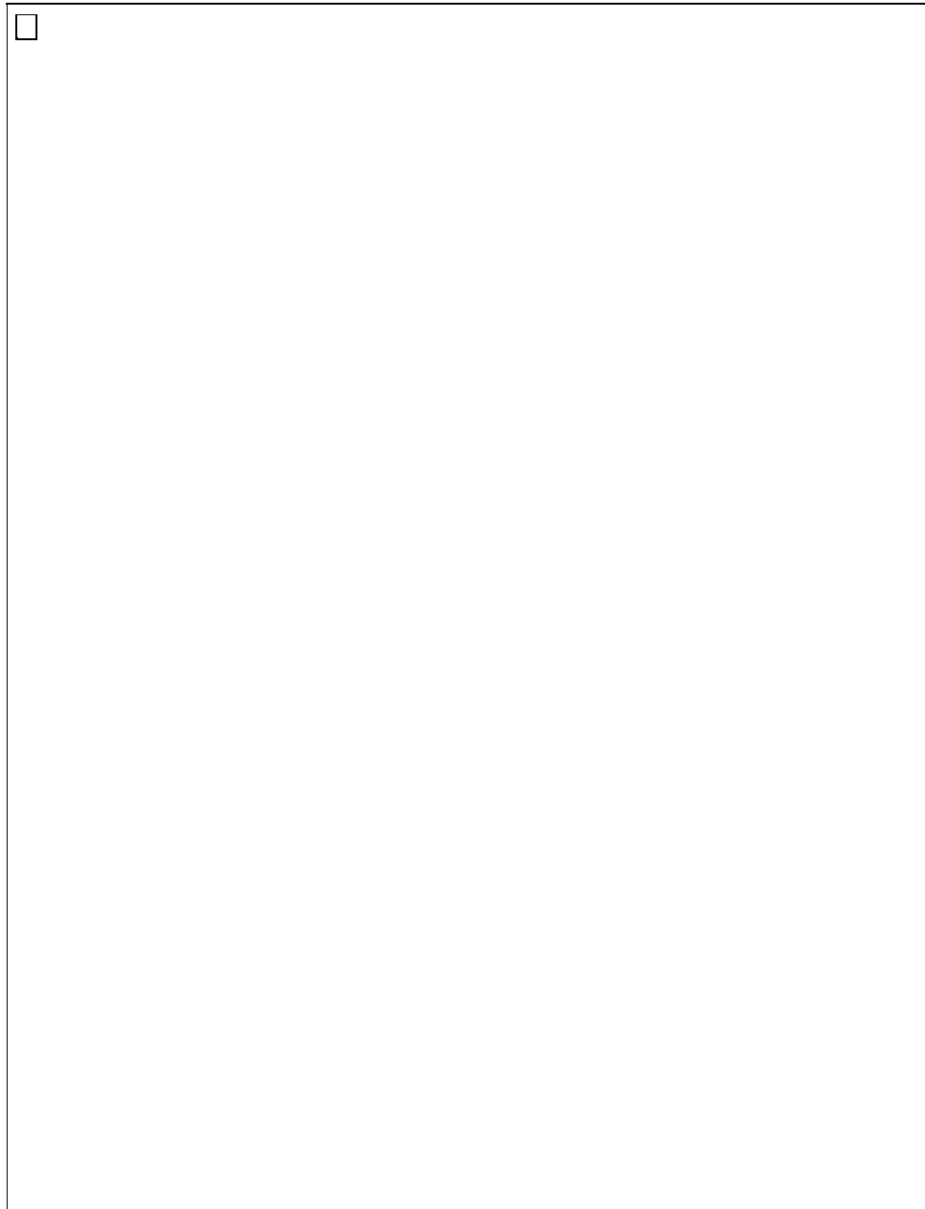Notes: correlation is significant at the %5 level (two-tailed)

Fig. 1: Results of model testing

The results also indicates there was no significant correlation between the ritualistic dimension of religiosity and NPA among female (r =. 022, p<5%) and male (r = 30, p<5%). Therefore H2 was rejected.

Based on the evidence, was not any significant correlation between intellectual dimension of religiosity and NPA among female (r =. 034, p<5%) and male (r =. 048, p<5%). Therefore, H3 was rejected.

Furthermore, there was no significant correlation between the consequential dimension of religiosity and NPA among female (r =. 066, p<5%) and male (r = %60, p<5%), so H4 was rejected.

Finally, there was no significant correlation between the experimental dimension and NPA among female (r =. 078, p<5%) and male (r =. 014, p<5%). Therefore H5 was rejected.

Discussion, Implication and Limitation: The main purpose of this paper is to present the effect of gender role attitude on the relationship between new product adoption (NPA) and different religiosity dimensions. These are the ideological, the ritualistic, the experiential, the intellectual and the consequential dimensions. This paper used a different new product adoption scale;

this scale specifies the type of product category and, in this study, leather products such as leather clothes, shoes, wallets, handbags are selected. In this paper investigated the correlation between new product adoption and different dimensions among Muslim females and males in Iran. No such study has been down on this scale, specifically among different genders.

Similarly the studies by Rehman and Shabbir (2010) in Pakistan reported that there is a significant correlation between the dimensions religiosity and new product adoption [6]. However, the results of this paper showed that there is no significant correlation between the dimensions religiosity and new product adoption among gender role attitude, that is, Muslim female and male have almost the same attitude about the dimensions religiosity and new product adoption such as leather products.

From another perspective, in the light of the modernizing role of education on gender role attitudes one might predict that both universities and education provide college students with the opportunity to adopt egalitarian gender role attitudes. So it is important that Muslims are regulated by respective Islamic rules [10]. It was startling to find Muslims of Iran pay attention less to variations in gender role attitudes compared to religion and new product adoption variables.

These results may have implications for marketers, manufactures and businessmen, specifically for export and import to Muslim markets. According to the results, most Muslim Iranian consumers are not interested in importing and marketing leather products into Iran. Marketers should advertise, more specifically, to promote awareness of new products, because consumers are not aware of sports shoes that are manufactured with leather. For instance, marketers should pay attention to increase segmentation, targeting and positioning of leather in Iranian markets, otherwise they might fail in their marketing.

The limitation of this study was to assess a selected product category. While respondents were filling the questionnaire, it was specified that most of Muslim consumers in Iran are not interested in leather products. There are different reasons that researchers could investigate. It will be useful for future research studies to select various product categories. Therefore, if someone was not interested in a particular product category, he or she may have other choices and marketers are facing challenges in selecting various product categories. Furthermore, future research should consider how to use indirect versions of scale for new product adoption.

Future research should also be conducted with more representative groups who reflect broader demographical characteristics. We also suggest that more studies among various countries with different cultural backgrounds and economic development are needed to understand and compare the many different elements that may affect Muslim consumer behavior.

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