

Generation Y Muslim Female and Male Decision Making Styles in Malaysia: Are They Different?

Nor Khasimah Aliman^{1*}, Zailin Zainal Ariffin², Shareena Mohamed Hashim³

¹Faculty of Business Management, Universiti Teknologi MARA, Seri Iskandar Campus, Perak, Malaysia

²Faculty of Defence Studies and Management, National Defence University of Malaysia, Malaysia

³Academy of Language Studies, Universiti Teknologi MARA, Seri Iskandar Campus, Perak, Malaysia
nka980@perak.uitm.edu.my¹

*Corresponding author

Abstract- Previous studies have suggested that demographics, including gender, education level, religiosity and nationality affect consumer behavior. This research explores the influence of gender on the shopping behavior of Generation Y Muslim consumers in Malaysia. The structured questionnaire was distributed to a sample of 500 consumers aged between 18 and 34. Completed data from 486 respondents were analyzed using descriptive and inferential statistics, while factor analysis and ANOVA were conducted to identify construct validity and differences in segment groups. Results indicated that eight decision-making style factors were identified for young Muslim consumers. There are significant differences between male and female consumers related to Brand Consciousness, Brand Loyalty, Recreational Consciousness and Value-Impulsiveness. However, male consumers are similar to the females with respect to Fashion-Fun Consciousness, Quality Consciousness, Confused by Over-Choice and Imperfectionism. Implications for retailers and marketing practitioners as well as recommendations for future research are also discussed.

General Terms- Decision Making Styles

Keywords- Muslim Gen Y; Gender; Consumer Decision Making Styles (CDMS); ANOVA; Malaysia

1. INTRODUCTION

The study of consumers' decision making styles holds the key to understanding their purchasing behavior. Marketers and advertising agencies have long relied on consumers' decision making styles information to segment the markets (Durvasula et al., 1993[15]; Quester & Lim, 2003[42])[42]. Investigations into consumer decision-making are well established in the marketing and consumer behavior research. Many researchers (Areni & Kiecker, 1993[4]; Shim, 1996[48]; Miller, 1998[31]; Fan & Xiao, 1998[17]; Mitchell & Walsh, 2004[33]; Bakewell & Mitchell, 2006[7]; Kavas & Yesilada, 2007[26]; Yasin, 2009[59]; Mokhlis, 2009[35]; Mishra, 2010[32]; Seyyed Ali et al., 2011[46]) have examined the decision-making styles of consumers in the developed (US, New Zealand, Germany and British) and developing countries (China, Turkey, Malaysia, India and Iran). Those studies used either the original Consumer Styles Inventory (CSI) developed by Sproles and Kendall (1986)[51] or the modified versions which included items to suit different cultural orientations (e.g. Tai, 2005)[53]. Sproles and Kendall (1986)[51], who employed 40 items pertaining to affective and cognitive orientation in decision making, grouped the styles or traits into eight dimensions: 1) Perfectionism or High-quality Consciousness; 2) Brand Consciousness; 3) Novelty-Fashion Consciousness; 4) Recreational, Hedonistic Shopping Consciousness; 5)

Price or Value for Money Shopping Consciousness; 6) Impulsiveness; 7) Confused by Over-Choice; and 8) Habitual or Brand Loyal Orientation.

A few studies have found that gender has a significant impact on buying behavior, citing notable differences between the decision making styles of male and female consumers (Bakewell & Mitchell, 2003[5]; Mitchell & Walsh, 2004[33]; Yasin, 2009[59]). However, the number and scope of such studies are relatively few and limited. Even more limited are studies which delve into the purchasing behavior of male and female Muslim youths. Thus, this study is aimed at answering the following research questions: 1) Does gender influence the consumer decision making styles of young adult Muslim consumers? 2) Are there any differences in the decision making styles of male and female Muslim youths? Since there is currently a dearth of research investigating the Muslim youth decision making styles, the findings of this study will add to the growing knowledge in this area and provide implications on segmentation and expanding business across cultures.

2. PAST LITERATURE

2.1 Generation Y and shopping

Generation Y, also known as the Millennials or echo-boomers, refers to the demographic cohort following Generation X. Although there is no single definition nor

precise dates used to define Generation Y, a few researchers (Bakewell & Mitchell, 2003[5]; Broadbridge et al., 2007[8]; Morton, 2002[37]) use birth years ranging from 1977 to 1994 to classify this group of consumers. Others consider those born between 1980 and 1994 to be members of Generation Y (Archana & Heejin, 2008)[3]. Kapoor and Solomon (2011)[25] define Generation Y as youths who are born between 1980 and 1999, while William (2008)[58] and Tay (2011)[54] agree that the members of Generation Y are born between 1980 and 2000. In the Malaysian context, Generation Y refers to individuals born from 1980 onwards and who entered the workforce after 1 July 2000 (PricewaterhouseCoopers, 2009). The multi-racial Generation Y segment make up 10.8 million (38.2%) of the country's population (Department of Statistics, 2010)[13].

Generation Y is an important emerging consumer market segment due to the sheer magnitude of the group. The statistics in 2009 revealed that this group of population will represent approximately 26 to 30 % of the total global consumer market, equivalent to trillions of dollar market worldwide (Ang, Leong, & Lee, 2009)[1]. Generation Y consumers have greater spending power (Cui, Trent, Sullivan, & Matiru, 2003)[12] since they have high income at their disposal (Morton, 2002)[37]. They are savvy consumers because they are often early adopters of new technologies and are extensive users of the Internet. In the food service industry, the Generation Y consumer group represents the key market segment due to the eating habits and lifestyle of its members. In addition, Gen Y is important for marketers because of the impact that they have on their families' purchase decisions (Renn & Arnold, 2003)[43].

College students alone represent the most lucrative market segment although a majority of them are unemployed and are thus financially dependent on study loans and parental support. Businesses are seeking to capture this market segment because these students are embarking on a transition period which is a turning point that can change their previous shopping behaviors (Mishra, 2010)[32]. While this segment is a potentially lucrative target for many marketers, it is also complex and requires further investigation. As such, in many consumer behavior studies involving youths and young-adult population, respondents were selected among college/university students. One aspect of college students' shopping behavior that interests many researchers in the field is their decision-making styles. In China, Kwan et al. (2004)[28] distributed questionnaires to 180 male and female University students in Beijing, Shanghai and Guangzhou to identify the decision making styles of young Chinese consumers. A research examining cross-cultural differences in consumer decision making styles in Singapore by Leo et al. (2005)[29] included Singaporean and Australian samples with the mean age of 21 to 36 years. In the United Kingdom, Bakewell and

Mitchell (2006)[7] conducted research on the decision making styles of female and male undergraduates aged between 18 and 22 years. Mishra (2010)[32] used 425 postgraduates to study decision making styles among youth-adult consumers in India. In Malaysia, Mokhlis (2009)[35] selected 400 public university undergraduates as research respondents for his investigation into the influence of gender on male and female consumers' shopping styles. In essence, the researchers found that these young adult consumers are different, yet alike in their shopping or decision making styles behavior.

2.2 Consumer decision making styles

According to Sproles and Kendall (1986, p. 276)[51] consumer decision-making styles (CDMS) refer to "the pattern, mental and cognitive orientation towards buying and shopping that shape the consumers' choice to buy something or reject them". Durvasula et al. (1993)[15], on the other hand, define decision-making styles as a mental orientation describing how a consumer makes choices. Investigations on CDMS can be categorized into the following approaches: the psychographic/lifestyle approach (Well, 1974)[56]; the consumer typology approach (Kenson, 1999[27]; Ownbey & Horridge, 1997[39]; Shim & Kotsiopoulos, 1996[47])[47]; and the consumer characteristics approach (Sproles & Sproles, 1990[52]; Walsh et al., 2001[55]). Presently, the best and most comprehensive model that measures consumers' characteristic traits is the Consumer Styles Inventory (CSI) developed by Sproles. The CSI, which was developed to measure shopping attitudes and behaviors for personal goods, describes consumers as having eight traits:

- i) Perfectionist, high-quality consciousness – referring to those consumers who search carefully and systematically for the best quality products;
- ii) Brand consciousness – focusing on consumers who buy the more expensive, well-known brands;
- iii) Novelty-fashion consciousness – referring to consumers who like new and innovative products;
- iv) Recreational, hedonistic consciousness – focusing on consumers who find shopping as a pleasant activity and shop just for the fun of it;
- v) Price conscious and "value-for-money" consciousness – those with high consciousness of sales prices and lower prices in general;
- vi) Impulsiveness – those who tend to buy at the spur of the moment and appear unconcerned about how much they spend;
- vii) Confused by over choice – those consumers who experience an information overload because there are too many brands and stores from which to choose;
- viii) Habitual, brand-loyal – those consumers who have favorite brands and stores, and keep on choosing these repetitively.

It is important to note that there is a general consensus among researchers that decision-making styles can vary across cultures from market to market or from segment to segment. For instance, the CSI used by Mokhlis (2009)[35] on a Malaysian sample yielded different results due to the cultural differences, implying that CSI in its original form cannot be generalized without some modification. In fact, Sproles and Kendall (1986)[51] have recommended using the inventory with different population groups to determine the generality of its applicability. As such, further investigation carried out to determine the cross-cultural applicability of the CSI could contribute to the existing body of knowledge.

2.3 Gender, shopping behavior and decision making styles

Some researchers suggest that both male and female youth are interested in shopping and that it is an activity carried out actively by both genders. Others, however, theorize that gender differences are fundamental to understanding purchasing behavior. Areni and Kiecker (1993)[4] and Prince (1993)[41] conclude that compared to women, men are more independent, confident, externally motivated, competitive, and more willing to take risks especially with money. Shoaf et al. (1995)[49] maintain that men show a weaker sensitivity to the opinions of their friends, and they commonly make careless decisions (Campbell, 1997)[9]. In one study, teenage boys were found to be more utilitarian, whereas teenage girls are more social conscious (Shim, 1996)[48]. Men also spend less time shopping than women and generally do not take responsibility for food and clothing purchases (Miller, 1998)[31]. Men were also reported to be less interested in clothing and fashion (Cox & Dittmar, 1995)[11], and they do not perceive shopping as being pleasant and desirable as compared to female consumers (Dholokia, 1999)[14].

Bakewell and Mitchell (2004)[6] revealed that male shoppers have twelve decision making styles, whereas females have eleven. Besides the eight styles identified by Sproles and Kendall (1986)[51], four other new styles for males have emerged in their study: Time-energy Conserving, Confused Time Restricted, Store Loyal /Price Seeking and Store Promiscuous. For the female shoppers, the three additional new styles were Bargain Seeking, Imperfectionism and Store Loyal. These findings further lend support to the widely held view that male consumer decision making styles are different from those of their female counterpart.

Anic et al. (2010)[2] identified eight decision making styles among their sample of 304 undergraduates in the Republic of Macedonia. A comparison between the genders revealed differences in four styles: Brand Consciousness, Novelty/Fashion Consciousness, Recreational/Hedonistic Shopping Consciousness and Habitual/Brand Loyal. Female consumers appear to be

less 'brand conscious' and 'brand loyal', but are more 'novelty and fashion conscious' and more interested in 'hedonistic shopping'. These results are in line with two other empirical studies by Sproles and Kendall (1986)[51] and Wesley, LeHew and Woodside (2006)[57].

In Iran, Hanzae and Aghasibeig (2008)[22] identified ten male and eleven female decision-making styles among Generation Y consumers. However, nine styles were found to be common for both genders: Novelty/Fashion Consciousness, Quality Consciousness, Recreational/Hedonistic Shopping Consciousness, Confused and Carelessness by Over-Choice Styles, Time-Energy Conserving, Brand Consciousness, Careless, Habitual/Brand-Loyal and Low-Price Seeking. Another study conducted in Iran by Seyyed Ali et al. (2011)[46] using students from Tehran University and Azad University identified seven decision making styles. Out of the seven, males and females were found to be statistically significant in four decision-making styles: Perfectionism Consciousness; Novelty/Fashion Consciousness; Recreational/Hedonistic Consciousness; and Impulsiveness/Carelessness.

Yasin (2009)[59] who surveyed 612 male and female consumers in Turkey ranging in age from 18 to 46 found statistically significant differences on four styles related to Brand Consciousness, Novelty/Fashion Consciousness, Recreational/Hedonistic Shopping Consciousness, and Confusion from Over-Choice. Compared to males, the female consumers' agreement on Brand Consciousness, Novelty/Fashion Consciousness, Recreational/Hedonistic Shopping Consciousness, and Confused by Over-Choice styles were higher.

A study conducted in Malaysia by Mokhlis and Salleh (2009)[34] revealed that male and female youths (both Muslim and non-Muslim) have eight and nine styles respectively. Six of those styles were similar for both genders: Quality Consciousness; Brand Consciousness; Fashion Consciousness; Confused by Over-Choice; Satisfying; and Value Seeking. In 2010, Mokhlis conducted another study in Malaysia using 477 students of different religious backgrounds. For the Muslim sub-sample (n=260), an eight-factor solution was extracted. The eight factors were Fashion Conscious, Quality Conscious, Impulsiveness, Recreational Conscious, Confused by Over-Choice, Brand Conscious, Value Conscious and Brand Loyal. However, the study did not identify differences between the male and female Muslim consumers. As such, the findings of the present study could fill the gap in this area and thus enrich the knowledge about the shopping behavior of Muslim young adults in Malaysia. A recent study by Madani et al. (2012)[30] on young Malaysian adults identified four factors representing their decision making styles: Novelty/Brand Consciousness; Perfectionist/High-Quality Consciousness; Recreational/Hedonistic Consciousness; and Impulsive/Careless Consumer. These results are

dissimilar to those reported by Mohklis (2009)[35]; (2010)[36], and no attempt was made to identify differences between the decision making styles of the male and female respondents.

Recent studies have shown that apart from gender, culture is also a strong predictor of consumer decision making styles. Solka, Jackson and Lee (2011)[50] compared the decision making styles of Generation Y consumers in a previously planned economy country (Poland) and a country identified as a capitalist market driven country (United States) using Jackson and Lee's (2010)[23] Consumer Decision Making Styles (CDMS) instrument. Inter-cultural differences between young UK and US male and female undergraduates were also reported by Bakewell and Mitchell (2006)[7] in their later study. Males appear more brand conscious compared to females. Young male shoppers also show the Perfectionism and Recreational Shopping Consciousness traits, which explain why male shoppers are effective in their shopping activities. Additionally, although the study found that some men do perceive shopping as a form of leisure, they are confused about which shops to visit, and are therefore identified as having the Confused Time-Restricted traits. The results of these studies suggest that decision making styles do vary between genders and cultures, implying that the same marketing technique that is effective in reaching females in one culture will not be as effective in reaching females in another culture.

3. METHODOLOGY

3.1 Measurement and scale

To measure the shopping behaviour styles, the Consumer Styles Inventory (CSI) developed by Sproles and Kendall (1986)[51] was employed with some modification adopted from Leo et al. (2005)[22]. Also included were a few items developed by the researchers to suit the Muslim respondents. A total 43 items were used to measure the eight different styles of consumer decision making: Perfectionism/Quality Consciousness (8 items), Brand Consciousness (7 items), Price/Value Consciousness (3 items), Fashion/Novelty Consciousness (5 items), Recreation/Enjoyment Consciousness (8 items), Impulsiveness/Carelessness (4 items), Confused by Over Choice (4 items) and Brand Loyal/Habitual (4 items). A five-point Likert scale statements ranging from "Strongly Disagree" (1) to "Strongly Agree" (5) was used.

Seven questions were developed to gather demographic information. These include gender, ethnicity, age, education level, status, income level and residence. Both nominal and ordinal scales were used to measure these variables.

3.2 Sampling

The sample for the present study was selected among Generation Y Muslims who make up the approximately

10.8 million youths (Muslim and non-Muslim) within the ages of 15 to 34 in Malaysia. However, only those aged between 18 and 32 were selected as research respondents due to their greater appropriateness for the questionnaire methodology. This segment of the population comprises mainly students and working adults.

Following Roscoe's recommendation (1975), a sample size of 500 youths was targeted. The decision was consistent with the rule of thumb method suggested by Hair et al. (2006, p. 136)[19] which states that the minimum sample size should be ten times the number of variables measured.

This sample size (500) was bigger than those of other similar studies: Anic et al. (2010)[2] – 304 respondents; Mishra (2010)[32] – 425 postgraduate students; Mokhlis and Salleh (2009)[34] – 386 undergraduate students; and Madahi et al. (2012)[30] – 325 Malaysian young-adult female and male consumers.

3.3 Pilot test and Data collection

Pilot test was conducted with 43 items using the five-point Likert scale. A sample of 30 was chosen to verify the items used. A similar questionnaire was later self-administered to a non-probability via convenience sampling using a sample of 500 respondents. The respondents included undergraduates, public and private sector employees as well as young entrepreneurs. These respondents were enrolled as full-time students at different universities in Malaysia, working in different organizations or running their own businesses in various locations throughout the country.

3.4 Hypotheses testing

The following hypotheses were tested using ANOVA analysis:

H1: Gender influences the decision making styles of Muslim youth.

H2: Male and female Muslim youths are significantly different in certain dimensions of their decision-making styles.

4. RESEARCH FINDINGS

4.1 Respondents Profile

The number of female respondents (289) was higher than their male counterparts (197). See Table 1. The data also indicate that all respondents were Muslim but not all were Malays. Some were Chinese, Indian or indigenous Muslims. About 76.3 per cent of the respondents fell within the 21-30 age group, and more than 60 per cent had degree-level qualification.

College/university students made up 59.7 per cent of the sample while the remaining (49.3 per cent) were non-students. Since a majority of the respondents were students, 64 per cent of them earned monthly incomes of between RM0-RM1000. The 91(18.7%) respondents who earned more than RM3000 per month were considered as belonging to the middle-income group in Malaysia. Most

of the respondents were residing in urban areas which mean that they had easier access to malls and big shopping venues.

4.2 Factor Analysis and Discussion

Following the disconfirmation of Sproles and Kendall’s (1986)[51] original model, exploratory factor analysis was conducted to assess the construct validity.

Exploratory factor analysis identified the Eigenvalue, KMO and Barlett’s Test score. Consistent with Sproles and Kendall’s, principle components analysis with varimax rotation method was performed and the number of factors was determined based on the eigenvalue criterion ($\lambda > 1$).

TABLE 1. Demographic Characteristics of Respondents (n = 486)

Characteristic	n	%	Characteristic	n	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	197	40.5	Malay	468	96.3
Female	289	59.5	Chinese	10	2.1
			Indian	6	1.2
			Others	2	0.4
<i>Age</i>			<i>Education level</i>		
20 yrs and below	81	16.7	Primary	1	0.2
21-25	262	53.9	Secondary	11	2.3
26 - 30	109	22.4	SPM/MCE/STPM	50	10.3
31-34	34	7.0	Diploma	88	18.1
			Degree	294	60.5
			Postgraduate	42	8.6
<i>Status</i>			<i>Income per month</i>		
Students	290	59.7	RM0-RM1000	311	64.0
Private employees	122	25.1	RM1001-RM2000	53	10.9
Public employees	59	12.1	RM2001-RM3000	31	6.40
Entrepreneur	4	0.8	RM3001-RM4000	49	10.1
Others	11	2.30	More than RM 4000	42	8.60
<i>Residence</i>					
Urban	318	65.4			
Rural	168	34.6			

Barlett’s Test of Sphercity was found to be statistically significant (7270.09, $p = 0.00$) and the Kaiser-Meyer-Olkin (KMO) value was 0.838. This indicates that the sample was suitable for factor analytic procedures (Hair et al., 2006). Factor loadings for decision making styles items are shown in Table 2. Out of the 43 items, 42 items had a factor loading score of 0.40 or more, and were considered for further analysis (Chen et al., 2002[10]; Kwan et al., 2004[24]).

Principal component analysis revealed the presence of eleven factors (42 items) with eigenvalues exceeding more than 1, explaining 60.37 per cent of the total variance, which exceeds the 60% threshold used in social sciences (Hair et al., 1995). For the eight factors (33 items), the variance was valued at 52.56 per cent, which satisfies the percentage of variance criterion for social science (Hair et al., 1998). In other studies, the variance are: Sproles and Kendall (1986)[51] - 46 per cent; Fan & Xiao (1998) - 35 per cent; Ghodeswar (2007)[18] - 57 per cent; and Yasin (2009)[59] - 57.06 per cent.

Factor 1 represents “Fashion Consciousness” which comprises six items, explaining 17.33 percent of the variance with eigenvalues of 7.45. Factor 2, known as “Quality Consciousness/Perfectionism” and consisting of four items, contributes 8.45 percent of the total variance

with eigenvalues of 3.64. Factor 3 which measures “Confused by Over Choice” comprises four items. Factor 4 which contributes 5.20 percent of the total variance with eigenvalues of 2.24 is related to “Brand Consciousness” and consists of five items. The fifth factor representing “Brand Loyalty” and consisting of three items, explains 4.20 percent variance with eigenvalues of 1.81. Factor 6, known as “Recreational Shopping Consciousness” and consisting of four items, contributes 3.92 percent of the total variance with eigenvalues of 1.69. Factor 7 and 8 are newly emerged factors. Factor 7 contributes 3.74 percent of the total variance with eigenvalues of 1.61 and was renamed as “Value-Impulsiveness”. It consists of four items. Finally, Factor 8 which comprises three items was renamed as “Imperfectionism” and explains 3.09 percent of variance with eigenvalues of 1.33 respectively. Factors 9, 10 and 11 were dropped from subsequent analysis as the alpha scores were too low (< 0.50). In sum, eight factors were found to represent the decision making styles of Muslim youths in Malaysia. This result is consistent with Mokhlis (2010)[36] even though the two factors of Value-Impulsiveness and Imperfectionism in this study were not found in the said study.

The alpha values were calculated (see Table 2) to assess the internal consistency reliabilities of the scales. The

alpha scores fell within the range of 0.60 – 0.80. Five variables had above 0.70 Cronbach’s alpha values while three factors had less than 0.70 alpha scores. According to Sekaran and Bougie (2013)[45], the closer the Cronbach’s alpha is to 1, the higher its internal consistency reliability. Thus, the alpha scores for the present study can be considered as acceptable and good.

4.3 Analysis of variance (ANOVA) and discussion

ANOVA was run on the eight factors to identify the differences between male and female decision making styles. Table 3 indicates that male and female Muslim youths were significantly different ($p < 0.05$) in four factors of consumer decision making styles: Brand Consciousness; Brand Loyalty; Recreational Consciousness; and Value-Impulsiveness.

TABLE 2. Factor Analysis Results (n = 486)

Factor	Factor Loading	Alpha score	Eigenvalues	Variance (%)
Factor 1(Fashion Consciousness) FC34 I keep my wardrobe up-to-date with the changing fashions. FC35 I usually have at least one outfit of the newest style. FC36 Fashionable, attractive styling is very important to me. FC37 For variety I shop in different stores and buy different brands. FC38 It's fun to buy something new and exciting. EJ13 I shop just for fun.	0.755 0.814 0.784 0.718 0.530 0.411	0.838	7.451	17.328
Factor 2 (Quality Consciousness) QC19 In general, I usually try to buy items of the best overall quality. QC20 I make a special effort to choose the very best quality goods/services. QC21 I have very high standards and expectations for the goods/services I buy. QC22 Getting very good quality of goods/services is very important to me.	0.764 0.793 0.770 0.799	0.832	3.635	8.454
Factor 3 (Confused by Over-Choice) COC39 There are so many brands to choose from that I often feel confused. COC40 All the information I get on different goods/services confuse me. COC41 The more I learn about goods/services, the harder it seems to choose the best. COC42 Sometimes it's hard to choose which stores to shop.	0.730 0.775 0.798 0.744	0.814	2.717	6.319
Factor 4 (Brand Consciousness) BC27 The most advertised brands are usually good choices. BC28 I prefer buying the bestselling brands. BC29 The higher the price of the goods/services, the better the quality. BC30 Good quality department stores and specialty stores offer the best. BC31 I usually buy well-known brands.	0.701 0.732 0.705 0.613 0.442	0.768	2.237	5.201
Factor 5 (Brand Loyalty) BL50 I have favorite brands that I buy every time. BL51 When I find a brand I like, I buy it again and again. BL52 I go to the same stores each time I shop.	0.693 0.810 0.678	0.726	1.807	4.202
Factor 6 (Recreational-Consciousness) EJ11 Shopping is not a pleasant activity. EJ12 Shopping is very enjoyable to me. EJ14 Shopping in different stores is a waste of time. BC33 I do not buy a western brand.	0.688 0.654 0.668 0.402	0.627	1.685	3.919
Factor 7 (Value-Impulsiveness) PC44 I usually buy the lower priced products. PC45 I buy as much as possible at sale price.	0.586 0.652	0.602	1.609	3.742

IB46 I frequently purchase on impulse.	0.621			
IB47 I often make purchases I later wish I had not.	0.427			
Factor 8 (Imperfectionism)		0.627	1.329	3.090
QC23 A product doesn't have to be exactly what I want or the best on the market to satisfy me.	0.511			
QC24 I really don't give my purchases much thought or care.	0.658			
QC25 I usually shop quickly, buying the first goods/services or brand that seems good enough.	0.734			
Factor 9		< 0.50	1.234	2.569
EJ15 I spend little time deciding on the goods/services and brands I buy.	-0.457			
EJ16 I prefer shopping at Muslim stores.	0.703			
EJ18 I prefer shopping at stores that are located at a non-congested area.	0.662			
Factor 10		< 0.50	1.149	2.673
BC32 The well-known national brands of goods/services are best for me.	0.538			
BC33 I do not buy a western brand.	-0.578			
IB48 I should spend more time deciding on the goods/services I buy.	0.402			
Factor 11		< 0.50	1.105	2.569
QC26 I seek the 'halal' sign when buying food items.	0.680			
IB47 I often make purchases I later wish I had not.	-0.400			
IB49 I carefully watch how much I spend.	-0.539			
42			Total	60.367

Note: Significant at the 0.05 level

Compared to Muslim males, females appeared to be less Brand Conscious, Brand Loyal and Value-Impulsive. In contrast, females scored higher on Recreational Consciousness as compared to the male youths. This may explain why females consider shopping as a pleasant experience, and they shop just for the fun of it. No

significant differences ($p > 0.05$) were found in the four other factors. In other words, both the male and female Muslim youths share the following traits: Fashion Consciousness, Quality Consciousness, Confused by Over-Choice and Imperfectionism. Therefore, H1 and H2 were supported.

TABLE 3. ANOVA results (n=486)

Decision making styles	Items	Male (n=197)	Female (n=289)	F-value	p-value
1. Fashion Consciousness	6	3.079	3.065	0.061	0.806
2. Perfectionism/Quality Consciousness	4	3.976	4.035	0.996	0.319
3. Confused by Over Choice	4	3.476	3.465	0.026	0.872
4. Brand Consciousness	5	3.424	3.216	10.711	0.001
5. Brand Loyalty	3	3.521	3.295	10.508	0.001
6. Recreational Consciousness	4	3.112	3.390	19.273	0.000
7. Value-Impulsiveness	4	3.246	3.062	9.022	0.003
8. Imperfectionism	3	2.863	2.965	2.222	0.137
	33				

Note: Significant at the 0.05 level.

4.4 Comparison with Other Studies

Even though no comparison can be made between the present results and previous studies due to respondent differences, some of the differences found between the male and female Muslim consumers' decision making styles can still be explained. Studies done in Turkey,

Macedonia, Iran and Malaysia suggest that the male and female consumers are significantly different in four decision making styles (see Table 4).

Yasin (2009)[59] reported that Turkish males and females are significantly different with respect to Novelty-Fashion Consciousness, Confused by Over-Choice, Brand

Consciousness, and High-quality Consciousness. In the Republic Macedonia, Anic et al. (2010)[2] revealed that four dimensions (Brand Consciousness, Novelty-Fashion Consciousness, Recreational-Hedonistic, and Habitual-Brand Loyal) significantly differentiate between male and female consumers. In Iran, Seyyed Ali et al. (2011)[46] conclude that male and female consumers are different in the following traits: Perfectionism Consciousness, Novelty-Fashion, Recreational-Hedonistic, and Impulsiveness-Carelessness. The present study suggests that Muslim youths (male and female) in Malaysia are significantly different in four styles: Brand Consciousness, Brand Loyalty, Recreational Consciousness, and Value-Impulsiveness.

5. CONCLUSIONS AND IMPLICATIONS

Numerous studies have demonstrated that the use of the original CSI or its adapted versions in different countries and cultures would yield varied results whereby the number of decision making styles dimensions may be different or similar to the eight in the original CSI. The present research found eight dimensions of decision

making styles among Muslim youths in Malaysia. Out of those dimensions, male and female youths are significantly different in four dimensions: Brand Consciousness, Brand Loyalty, Recreational Consciousness, and Value-Impulsiveness. However, they are similar in four other dimensions: Fashion Consciousness, Quality Consciousness, Confused by Over-Choice and Imperfectionism. From these findings, the researchers conclude that the differences in their decision making styles mean that male and female Generation Y consumers react differently to marketing strategies. Thus, an effort to segment these consumers correctly will better assist advertisers and marketers in their promotional efforts to target these groups of consumers. Another key finding of this study is that both male and female Generation Y Muslim shoppers are fashion conscious and they pursue quality in their purchases. Thus, producers and retailers should continue to introduce the latest designs while improving the “quality” aspect to their labels in order to capture and retain these shoppers.

TABLE 4. Comparison of decision making styles by gender

Yasin (2009) n=602 Turkey	Anic et al. (2010) n=304 Macedonia	Seyyed Ali et al. (2011) n=600 Iran	Present study (2015) n=486 Malaysia
<ol style="list-style-type: none"> 1. Novelty-Fashion Conscious* 2. Confused by Over choice* 3. Brand Conscious* 4. Recreational 5. High-Quality Conscious* 6. Price Conscious 7. Environmental and Health Conscious 8. Impulsive 9. Brand-Loyal 	<ol style="list-style-type: none"> 1. Perfectionist, High-Quality Consciousness 2. Brand Consciousness* 3. Novelty, Fashion Consciousness* 4. Recreational, Hedonistic* 5. Price Conscious 6. Impulsive Consumer 7. Confused by Over Choice 8. Habitual, Brand-Loyal* 	<ol style="list-style-type: none"> 1. Perfectionism Consciousness* 2. Novelty and Fashion* Consciousness 3. Recreational and Hedonistic* Consciousness 4. Price and value consciousness 5. Impulsiveness and carelessness* 6. Confused by Over Choice 7. Habitual and brand loyal 	<ol style="list-style-type: none"> 1. Fashion Consciousness 2. Quality Consciousness/ Perfectionism 3. Confused by Over Choice 4. Brand Consciousness* 5. Brand Loyalty* 6. Recreational Consciousness* 7. Value-Impulsiveness* 8. Imperfectionism

Notes: All factors are listed according to the research findings
*Factor that show significant different between male and female

5.1 Limitations and Future Research

One of the findings of this study is the confirmation that gender is a predictor of consumer decision making styles among the Muslim Generation Y cohort. Further research should embark on the Muslims of the Baby Boomers generation and investigate the differences and similarities between the two generational cohorts. Also, future studies that investigate only religiously homogeneous groups of consumers should be conducted in other settings. In addition, even though CSI can be employed to investigate

Muslim decision-making styles, effort should be taken to develop and validate the Muslim Consumers Styles Inventory (MCSI).

6. REFERENCES

[1] Ang, E., Leong, H.Y. & Lee, K. S. (2009). Gen Y – technically Savvy, Available from: <http://biz.thestar.com.my/news/story.asp?file=/2009/10/24/business/4771567&sec=business> (accessed 10 August 2011).

- [2] Anic, I. D., Suleska, A. C. & Rajh, E. (2010). Decision-making styles of young-adult consumers in the Republic of Macedonia. *Economics Istraživanja*, 23(4), 102–113.
- [3] Archana K. & Heejin, L. (2008). Age differences in mobile service perceptions: Comparison of generation Y and baby boomers. *Journal of Services Marketing*, 22 (7), 568–577.
- [4] Areni, C. S. & Kiecker, P. (1993). Gender differences in motivation: Some implication for manipulating task-related involvement. In Costa Janeen Arnold, (Ed.). *Gender consumer behaviour*. Salt Lake City, Utah, University of Utah: Printing Service, 30–43.
- [5] Bakewell, C. & Mitchell, V. W. (2003). Generation Y female consumer decision-making styles. *International Journal of Retail & Distribution Management*, 31(2), 95–106.
- [6] Bakewell, C. & Mitchell, V. W. (2004). Male consumer decision-making styles. *International Review of Retail, Distribution and Consumer Research*, 14 (2) (April), 223–240.
- [7] Bakewell, C. & Mitchell, V. W. (2006). Male versus female consumer decision making styles. *Journal of Business Research*, 59, 1297–1300.
- [8] Broadbridge, A. M., Maxwell, G. A., & Ogden, S.M. (2007). Students' view of retail employment: Key findings from Generations Ys. *International Journal of Retail & Distribution Management*, 35 (12), 982–992.
- [9] Campbell, C. (1997). Shopping pleasure and the sex war. In Falk, P. and Campbell, C. (Ed.), *The shopping experience?* London, Sage.
- [10] Chen, Z. X., Tsui, A. S. & Farh, J. L. (2002). Loyalty to supervisor vs. organizational commitment: relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, 75, 339–356.
- [11] Cox, J. & Dittmar, H. (1995). The functions of clothes and clothing (dis)satisfaction: A gender analysis among British students. *Journal of Consumer Policy*, 18, 237–265.
- [12] Cui, Y., Trent, E. S., Sullivan, P. M., & Matiru, G. N. (2003). Cause-related marketing: how generation Y responds. *International Journal of Retail and Distribution Management*, 31 (6), 310–320.
- [13] Department of Statistics Malaysia. (2010). *General Report of the Population and Housing Census 2000*. Kuala Lumpur: Department of Statistics Malaysia.
- [14] Dholokia, R. R. (1999). Going shopping: Key determinants of shopping behaviours and motivations. *International Journal Retail Distribution Management*, 27 (4), 154–165.
- [15] Durvasula S., Lysonski, S. & Andrews, J. C. (1993). Cross-cultural generalizability of a scale for profiling consumers' decision-making styles. *The Journal of Consumer Affairs*, 27 (1), 55–65.
- [16] Erickson, T. J. (2008). *Plugged In: The Generation Y Guide to Thriving at Work*. Boston, MA: Harvard Business Press.
- [17] Fan, J. X. & Jing, J. Xiao (1998). Consumer decision making styles of young-adult Chinese. *The Journal of Consumer Affairs*, 32 (2), Winter, 275–294.
- [18] Ghodeswar, B. M. (2007). Consumer decision-making styles among Indian students. *Alliance Journal of Business Research*, 3, spring, 38–48.
- [19] Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- [20] Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- [21] Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (1995). *Multivariate data analysis* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- [22] Hanzae, K. H. & Aghasibeig, S. (2008). Generation Y female and male decision-making styles in Iran: Are they different? *International Review of Retail, Distribution and Consumer Research*, 18 (5), 521–537.
- [23] Jackson, V. P. & Lee, M. Y. (2010). Generation Y in the global market: A comparison of South Korean and American female decision making styles. *Journal of the Korean Society of Clothing and Textiles*, 34 (6), 902–912
- [24] Kamaruddin, A. R. & Kamaruddin, K. (2009). Malay culture and decision making styles: An investigation on religious and ethnic dimensions. *Jurnal Kemanusiaan*, 14 (2), 37–50.
- [25] Kapoor, C. & Solomon, N. (2011). Understanding and managing generational differences in the workplace. *Worldwide Hospitality and Tourism Themes*, 3 (4), 308–318
- [26] Kavas, A. & Yesilada, F. (2007). Decision making styles of young Turkish consumers. *European Journal of Economics, Finance and Administrative Sciences*, 9, 73–85.
- [27] Kenson, K. M. (1999). A profile of apparel shopping orientation segments among male consumers. Unpublished MA thesis, California State University Long Beach.
- [28] Kwan, C. Y., Yeung, K. W., & Au, K. F. (2004). Decision-making behaviour towards casual wear buying: A study of young consumers in mainland China. *Journal of Management and World Business Research*, 1 (1), 1–10.
- [29] Leo, C., Bennett, R., & Charmine, E. J. Hartel (2005). Cross-cultural differences in consumer decision-making styles. *Cross Cultural Management*, 12 (3), 32–62.
- [30] Madahi, A., Sukati, I., Mazhari, M. Y., & Rashid, W. N. (2012). Consumer decision making styles amongst

- young generation in Malaysia. *European Journal of Social Sciences*, 30(2), 263–275.
- [31] Miller, D. (1998). *A theory of shopping*. Oxford: Blackwell Publishers, Ltd.
- [32] Mishra, A. A. (2010). Consumer decision-making styles and young-adult consumers: An Indian Exploration. *Isletme Arastirmalari Dergisi*, 2/3, 45–62.
- [33] Mitchell, V. W. & Walsh, G. (2004). Gender differences in German consumer decision-making styles. *Journal of Consumer Behavior*, 3 (4), June, 331–346.
- [34] Mokhlis, S. & Salleh, H. S. (2009). Consumer decision-making styles in Malaysia: An exploratory study of gender differences. *European Journal of Social Sciences*, 10 (4), 574–584.
- [35] Mokhlis, S. (2009). An investigation of consumer decision-making styles of young-adults in Malaysia. *International Journal of Business and Management*, 4(4), 140–148.
- [36] Mokhlis, S. (2010). Religious contrasts in consumer shopping styles: A factor analytic comparison. *Journal of Business Studies Quarterly*, 2 (1), 52–64.
- [37] Morton, L. P. (2002). Targeting generation Y: Segmenting publics. *Public Relations Quarterly*, 47 (2), 46–48.
- [38] Nagu, S. U., (2009, Sept 6). Careers: What works for Generation Y, [NST Online] News Straits Times.
- [39] Ownbey, S. F. & Horridge, P. E. (1997). Acculturation levels and shopping orientations of Asian-American consumers. *Psychology & Marketing*, 14 (1), 1–18.
- [40] Pricewaterhouse Cooper (2009). *Malaysia's Gen Y unplugged*. Kuala Lumpur: Pricewaterhouse Cooper.
- [41] Prince, M. (1993). Women, men and money styles. *Journal of Economics Psychology*, 14. 175–182.
- [42] Quester, P. & Lim, A. L. (2003). Product involvement/brand loyalty: is there a link? *Journal of Product & Brand Management*, 12 (1), 22 – 38.
- [43] Renn, K. A. & Arnold, K. D. (2003). Reconceptualizing Research on College Student Peer Culture, *The Journal of Higher Education*, 74 (3), May/June, 261–291
- [44] Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences*. New York: Holt, Rinehart and Winston.
- [45] Sekaran, U. & Bougie, R. (2013). *Research Methods for Business: A Skill Building Approach*. West Sussex: John Wiley & Sons, Ltd.
- [46] Seyyed Ali, M. K., Seyedreza, S. & Faraz, S. (2011). Decision-making styles of young Iranian consumers. *Business Strategy Series*, 12 (5), 235–241.
- [47] Shim, S. & Kotsiopoulos, A. (1996). A typology of apparel shopping orientation segments among female consumers. *Clothing and Textiles Research Journal*, 12, 73–85.9
- [48] Shim, S. (1996). Adolescent consumer decision making styles: The consumer socialization perspective. *Psychology Marketing*, 13 (6), 547–569.
- [49] Shoaf, F. R, Scattone, J., Morrin, M., & Maheswaran, D. (1995). Gender differences in adolescent compulsive consumption. In Kardes Frank, R. Sujan Mita (Ed.). *Advances in Consumer Research*, 22, Provo, Utah, Association for Consumer Research, 5000-5004.
- [50] Solka, A., Jackson, V. P & Lee, M. (2011). The influence of gender and culture on Generation Y consumer decision making styles. *The International Review of Retail, Distribution and Consumer Research*, 21(4), 391–409.
- [51] Sproles G. B. & Kendall, E. L. (1986). A methodology for profiling consumers' decision-making styles. *Journal of Consumer Affairs*, 20 (2), 267–279.
- [52] Sproles, E. K. & Sproles, G. B. (1990). Consumer decision-making styles as a function of individual learning styles. *Journal of Consumer Affairs*, 24 (1), 134–147.
- [53] Tai, S. H. (2005). Shopping styles of working Chinese Females. *Journal of Retailing and Consumer Services*, 12, 191–203.
- [54] Tay, A. (2011). Managing Generational Diversity at the Workplace: Expectations and Perceptions of Different Generations of Employees. *African Journal of Business Management*, 5 (2), 249 –255.
- [55] Walsh, G. & Vincent, W. (2001). German market mavens' decision-making styles. *Journal of Euro-Marketing*, 10 (4), 83–108.
- [56] Well, W. D. (1974). *Life Style and Psychographics*, Chicago: American Marketing Association.
- [57] Wesley, S., LeHew, M. & Woodside, A. G. (2006). Consumer decision-making styles and mall shopping analysis and the comparative method. *Journal of Business Research*, 59, 535–548.
- [58] William J. S. (2008). Generations X, Y, Z and the Others. *The Journal of the Household Goods Forwarders Association of America, Inc.*, 11, 9–11.
- [59] Yasin, B. (2009). The role of gender on Turkish consumers' decision-making styles. *Advanced in Consumer Research*, VIII, 301–308.