Consumer Decision-Making Styles in Malaysia: An Exploratory Study of Gender Differences

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Abstract

The purpose of this study is to investigate the differing approaches of male and female Malaysian consumers toward shopping and buying activities. The research used Sproles and Kendall's (1986) Consumer Style Inventory (CSI) on a sample of 386 Malaysian males and females. Exploratory factor analysis was used to understand the decision-making styles of both genders. New traits were identified for male and female consumers that were in contrast with the original CSI factors. Implications and directions for future research are provided based on the results.

Keywords: Decision-making styles, Consumer Style Inventory (CSI), Malaysia

1. Introduction

Market segmentation is an essential element of marketing. Goods can no longer be produced and sold without considering consumer needs and recognising the heterogeneity of those needs (Wedel & Kamakura, 2000). The earliest attempts at market segmentation were usually based on demographics. While there are many ways to segment a market, the marketing of products and services today is still predominantly based on demographic features of consumers. A reason for the popularity of demographic segmentation is the possible correlation between demographic characteristics and specialised consumer activities such as shopping and buying. Products such as clothing and personal care are designed, targeted and promoted with either men or women in mind. Another reason for the popularity of demographic segmentation is that demographics are usually well-defined, and above all, are amongst the easiest to measure (Pol, 1991). A considerable amount of data is readily available from reliable sources such as government agencies which gather demographic information that can be used to segment potential consumers.

Several demographic variables may be used to segment consumer markets, among the commonly used by marketers include income, age, gender, ethnicity, marital status and household size. Among these variables, gender has been and continues to be one of the most popular forms of market segmentation for a significant proportion of products and services. Marketing scholars (Meyers-Levy & Sternthal, 1991; Darley & Smith, 1995) argue that gender-based segmentation, especially if it is based on biological sex per se, meets several of the requirements for successful implementation: the

segments were easy to identify, easy to access, and large enough for consumer products and services to be marketed profitably. Numerous studies in the past have provided considerable evidence that gender relates to consumers' perceptions, attitudes, preferences and purchase decisions (Fischer & Arnold, 2004; Slyke, Comunale & Belanger, 2002; Mitchell & Walsh, 2004; Bakewell & Mitchell, 2006).

Because gender has been identified in much literature on consumer shopping behavior as a significant factor in understanding consumer behavior and as a fundamental market segmentation index for companies to meet their customers' needs and wants, marketers should strive to understand the gender differences in decision-making styles. Research addressing the issue of gender differences in decision-making styles could help marketers to find better ways of communicating with both sexes and to guide marketing mix decisions (Mitchell & Walsh, 2004).

This research will contribute to the body of consumer behavior literature by investigating the decision-making styles of male and female consumers in Malaysia using the Sproles and Kendall's (1986) 40-item Consumer Style Inventory (CSI). Specifically, this research will examine the interrelationships among observed variables and subsequently, a model of interrelationships will be created by means of exploratory factor analysis.

2. Review of Literature

Previous studies agree that a consumer decision-making style is "a patterned, mental, cognitive orientation towards shopping and purchasing, which constantly dominates the consumer's choices. [...] these traits are ever-present, predictable, central driving forces in decision-making" (Sproles, 1985, p. 79). He proposes that consumers adopt a "shopping personality" that is relatively enduring and predictable in much the same way as psychologists view personality in its broadest sense. The underlying idea is that consumers engage in shopping with certain fundamental decision-making styles including rational, brand conscious, quality conscious, brand loyal and impulsive shopping.

Based on his review of previous literature, Sproles (1985) has identified 50 items related to consumers' cognitive and affective orientation towards shopping activities. Employing a factor analysis technique, Sproles found that six out of nine traits were confirmed to be present. Sproles and Kendall (1986) have refined this inventory and accordingly developed a more parsimonious scale consisting of 40 items. The Consumer Style Inventory (CSI) that they have developed consists of eight mental consumer style characteristics:

1) *Perfectionistic, high-quality conscious consumer* – a characteristic measuring the degree to which a consumer searches carefully and systematically for the best quality in products
2) *Brand conscious, "price equals quality" consumer* – measuring a consumer's orientation to buying the more expensive, well-known brands
3) *Novelty-fashion conscious consumer* – a characteristic identifying consumers who appear to like new and innovative products and gain excitement from seeking out new things
4) *Recreational, hedonistic consumer* – a characteristic measuring the degree to which a consumer finds shopping a pleasant activity and shops just for the fun of it
5) *Price conscious, "value-for-money" consumer* – a characteristic identifying those with particularly high consciousness of sale prices and lower prices in general
6) *Impulsive, careless consumer* – identifying those who tend to buy on the spur of the moment and appear unconcerned how much they spend or getting "best buys"
7) *Confused by overchoice consumer* – a characteristic identifying those consumers who perceive too many brands and stores from which to choose, experiencing information overload in the market
8) *Habitual, brand-loyal consumer* – a characteristic indicating consumers who have favorite brands and stores, who have formed habits in choosing these repetitively.

Since its introduction, a series of investigation has been conducted aimed at testing the generalisability of the CSI within a single country (e.g. Korea: Hafstrom, Chae & Chung, 1992; China:

Fan & Xiao, 1998; Hiu, Siu, Wang & Chang, 2001; New Zealand: Durvasula, Lysonski & Andrews, 1993; India: Canabal, 2001; Germany: Walsh, Mitchell & Thurau, 2001; Walsh & Vincent, 2001; UK: Mitchell & Bates, 1998; South Africa: Radder, Li & Pietersen, 2006; Turkey: Gonen & Osmete, 2006; Kavas & Yesilada, 2007; Malaysia: Wan Omar *et al.* 2009; Taiwan: Hou & Lin, 2006; Brazil: Dos Santos & Fernandes, 2006) as well as across different countries (e.g. USA, New Zealand, India and Greece: Lysonski, Durvasula & Zotos, 1996; China and Macau: Ng, 2005; USA and Korea: Wickliffe, 2004). These studies confirm varying portions of the original CSI factors while none of them reproduced all eight completely.

Few other studies have attempted to thoroughly explore the antecedents and consequences of consumer decision-making styles. McDonald (1993) investigated the roles of shopper decision-making styles in predicting consumer catalogue loyalty. Shim and Koh (1997) examined the effects of socialisation agents and social-structural variables on adolescent consumer decision-making styles. Salleh (2000) analysed consumers' decision-making styles dimensions across different product classes. Wesley, LeHew and Woodside (2006) explored how consumers' decision-making styles relate to their shopping mall behavior and their global evaluations of shopping malls. Cowart and Goldsmith (2007) investigated the influence of consumer decision-making styles on online apparel consumption by college students. More recently, Kwan, Yeung and Au (2008) explored the effects of lifestyle characteristics on consumer decision-making styles of young fashion consumers in China.

Bakewell and Mitchell (2003) examined the decision-making styles of adult female Generation Y consumers in the UK. Five meaningful and distinct decision-making groups were identified in their study: "recreational quality seekers", "recreational discount seekers", "trend setting loyals", "shopping and fashion uninterested" and "confused time/money conserving". In their later study on decision-making styles of male consumers in the UK (Bakewell & Mitchell, 2004), all of the original eight traits plus four new traits namely; store-loyal/low-price seeking, time-energy conserving, confused time-restricted and store-promiscuity were identified. Their study also demonstrated the potential of the CSI for segmenting markets as meaningful and distinct groups of male consumers with different decision-making styles.

Three previous studies have reported gender differences in decision-making styles of consumers. Mitchell and Walsh (2004) compared the decision-making styles of male and female shoppers in Germany. The researchers confirmed the construct validity of all eight CSI factors for female shoppers and four of the factors for male shoppers. They subsequently concluded that male individuals were slightly less likely to be perfectionists, somewhat less novelty and fashion conscious, and less likely to be confused when making purchases than their female counterparts.

Bakewell and Mitchell (2006) undertook a similar study in the UK. Using a sample of 480 male and female undergraduate students, they found that nine decision-making styles were common to both genders. In addition, three new male traits (store-loyal/low-price seeking, confused time-restricted and store-promiscuity) and three new female traits (bargain seeking, imperfectionism and store loyal) were also identified in their study.

A recent study conducted by Hanzaee and Aghasibeig (2008) in an Iranian setting also indicated that Generation Y male and female consumers differ in their decision-making styles. However, of the 10-factor solution confirmed for males and 11-factor solution for females, nine factors were found to be common to both genders. The authors regarded this similarity as a result of the changing gender roles in modern Iran.

In conclusion, prior studies provide convicting evidence that consumers' decision-making styles varies by genders. Meanwhile, none of these studies have focused on Generation Y male and female consumers in Malaysia. It is believed that male and female consumers in Malaysia may also have certain distinctive characteristics in terms of their decision orientation towards shopping and buying that could be of equal interest to both researchers and marketing practitioners. This study fills this gap by studying the differences in decision-making styles based on gender in the Malaysian context.

3. Procedure

3.1. Instrument

Self-administered questionnaire was employed to gather data for this study. The questionnaire consisted of Sproles and Kendall's (1986) 40-item Likert scaled Consumer Style Inventory (CSI). All scales were measured on a 5-point Likert-type scales ranging from 1 (strongly disagree) to 5 (strongly agree). The reliabilities of the CSI Scale, according to Sproles and Kendall (1986), ranged from 0.48 to 0.76. The items were randomly ordered in a self-administered CSI instrument to counterbalance possible order effects. In addition, some demographic questions were included in the questionnaire.

3.2. The Subject

The questionnaire was self-administered to a non-probability sample of 400 male and female undergraduates in a public university in Terengganu, Malaysia. Using a relatively more homogeneous group such as undergraduate students is particularly helpful to minimise random error that might occur by using a heterogeneous sample such as the general public (Calder, Philips & Tybout, 1981). This is because the likelihood of error within the measurement model being inflated by situational factors inherent in diverse samples (e.g. age, income and social class) is reduced when respondents are homogeneous across demographic and behavioral characteristics (Assael & Keon, 1982).

Of 400 questionnaires distributed, three hundred and eighty-six questionnaires were deemed usable for data analysis. The sample consists of 31.6 per cent males and 68.4 per cent females. The over representation of female respondents is expected since the population of female students in universities in Malaysia is 60 per cent females and 40 per cent males (Ministry of Higher Education Malaysia, 2009). The median age of respondents is 21 years (+ s.d. 1.45). In terms of ethnic group, about 67.4 per cent of the respondents were Malay, 31.3 per cent were Chinese and 1.3 per cent were Indian.

4. Analysis

Exploratory principal components analysis with a varimax rotation was used to summarise the items into an underlying set of male and female decision-making factors. As noted by De Vaus (2002), such factors are not single measurable entities but are constructs of a number of other directly observable variables. By factor analysis, these observable variables can be clustered into factors, each reflecting an underlying property, which is commonly shared by a certain group of variables (De Vaus, 2002). It also helps to validate that respondents are able to distinguish between the various variables despite the similarity of the items questioned.

To identify the "right" number of factors, several alternative solutions were compared. Looking at the amount of explained variance, the eight, nine and ten-factor solutions were seen as most expressive. However, taking into account the interpretability of the factors obtained, it can be concluded that the eight-factor solution for male and nine-factor solution for female proves to be most appropriate (i.e. all items are logically associated with their factors). For both samples, the value of KMO statistics were higher than the acceptable limit of 0.5 (Hair *et al.* 2005) and Bartlett's tests were significant, indicating the suitability of data for factor analysis. The eight male decision-making traits accounted for 59.2 per cent of the variance and had a range of eigenvalues of 1.18 to 3.74. The nine-factor solution for females had a range of eigenvalues of 1.11 to 5.17, which accounted for 55.3 per cent of the variance.

The male eight factor solution shows that five of the eight CSI original factors plus three new male factors were found. The nine factor solution for females found support for six of the eight CSI original factors plus three new factors, two of which similar to males. The factor structure of the male and female models is presented in Table 1.

To assess the internal consistency of each factor group obtained, a reliability analysis was conducted by calculating the Cronbach's alpha for each factor (Table 1). For consistency, it was decided that reliability should not lower than 0.4, the same level used by Sproles and Kendall (1986).

Table 1: Results of factor analysis for males and females

Items	Factor loadings	
	Male	**Female**
Common factors:		
Factor 1$_C$ – Quality Consciousness	(α = 0.62)	(α = 0.64)
Getting very good quality is very important to me	0.725	0.750
When it comes to purchasing products, I try to get the very best or the perfect choice	0.431	0.658
In general, I usually try to buy the best overall quality	0.595	0.642
I make special effort to choose the very best quality products	0.537	Satisfying
Factor 2$_C$ – Brand Consciousness	(α = 0.66)	(α = 0.77)
The well-known national brands are best for me	(1, 0.548)	0.734
The more expensive brands are usually my choice	0.513	0.605
The higher the price of a product, the better its quality	0.549	0.645
Nice department and specialty stores offer me the best products	n/a	0.687
I prefer buying the best-selling brands	0.733	0.717
The most advertised brands are usually very good choices	0.785	0.470
Factor 3$_C$ – Fashion Consciousness	(α = 0.64)	(α = 0.67)
I usually have one or more outfits of the very newest style	0.531	0.757
I keep my wardrobe up-to-date with the changing fashions	0.767	0.716
Fashionable, attractive styling is very important to me	0.818	0.642
To get variety, I shop different stores and choose different brands	n/a	0.416
Factor 4$_C$ – Confused by Overchoice	(α = 0.44)	(α = 0.61)
There are so many brands to choose from that I often feel confused	n/a	0.711
Sometimes it is hard to choose which stores to shop at	n/a	0.555
The more I learn about product, the harder it seems to choose the best	0.510	0.680
All the information I get on different products confuses me	0.714	0.675
Factor 5$_C$ – Satisfying	(α = 0.34)	(α = 0.3)
A product does not have to be perfect, or the best, to satisfy me	0.705	0.683
I make special effort to choose the very best quality products	Perfectionistic	–0.490
Shopping is not a pleasant activity to me	0.704	Shopping avoidance
Factor 6$_C$ – Value Seeking	(α = 0.59)	(α = 0.41)
I should plan my shopping more carefully than I do	0.798	n/a
The lower price products are usually my choice	0.613	Price conscious
I really don't give my purchases much though or care	Time-Energy	–0.656
I look carefully to find the best value for the money	0.463	0.593
I take time to shop carefully for best buys	0.500	0.587
I make shopping trips fast	Time-Energy	–0.461
Male factors:		
Factor 1$_M$ –Brand Loyal	(α = 0.38)	
I have favorite brands I buy over and over	0.751	
Once I find a brand I like, I stick with it	0.506	(2, 0.487)
Factor 2$_M$ – Time-Energy Conserving	(α = 0.52)	
Shopping the stores wastes my time	0.730	
I really don't give my purchases much thought or care	0.674	
I make shopping trips fast	0.494	
I go to the same stores each time I shop	0.402	
Female factors:		
Factor 1$_F$ – Price Consciousness		(α = 0.3)
I buy as much as possible at sale prices		0.521
The lower price products are usually my choice		0.665
I carefully watch how much I spend		0.542
Factor 2$_F$ – Recreational		(α = 0.43)

Going shopping is one of the enjoyable activities of my life		0.635
Shopping the stores wastes my time		−0.695
I enjoy shopping just for the fun of it	(3, 0.492)	0.462
It's fun to buy something new and exciting		0.461
Factor 3F – Shopping Avoidance		(α = 0.37)
I shop quickly, buying the first product or brand I find that seems good enough		0.762
Shopping is not a pleasant activity to me		0.512

Notes: Values in parentheses represent suggested factors and corresponding loadings.
The factors explained a total variance of 59.2 per cent in the male sample and 55.3 in the female sample. Across the sample, the eigenvalues of all the factors is greater than 1.
n/a = not applicable (factor loadings < 0.4).

5. Results

Of eight male factors and nine female factors, six were similar for both males and females: quality consciousness, brand consciousness, fashion consciousness, confused by overchoice, satisfying and value seeking. Furthermore, it is interesting to note that the first four styles identified for both genders are similar to those for U.S. young consumers confirmed by Sproles and Kendall (1986). Each of these factors appear to be stable (all had acceptable alpha values) and these are most likely to be confirmed in any future study. Although there are some differences in items loading on each factor, the overall decision-making styles are similar. Tables 3 and 4 compare the factors identified in this and previous studies. A brief description of each of the factors is given below.

5.1. Common Factors

Factor 1C: Quality consciousness. Three items were identical in both samples. However, the item "I make special effort to choose the very best quality products" which loaded onto this factor for males, loaded onto satisfying for females. High scorers on this factor tend to maximise quality and to get the best choice.

Factor 2C: Brand consciousness. This factor measures consumers' decision orientation towards purchasing the well-known, best selling brands. Males and females scoring high on this factor also appear to believe that the higher the price of a product, the better its quality.

Factor 3C: Fashion consciousness. Three and four items loaded onto this factor for males and females respectively. This factor describes the tendency of both sexes to keep their wardrobe up-to-date with the changing fashions. This factor is consistent with Mitchell and Walsh (2004) and Bakewell and Mitchell (2006).

Factor 4C: Confused by overchoice. Two items loaded onto this factor for males and four items for females. High scorers on this factor are likely to experience difficulties in choosing the best products due to information overload.

Factor 5C: Satisfying. This factor is best described by one item: "A product doesn't have to be perfect or best to satisfy me". Males and females scoring high on this factor could be expected to be willing to sacrifice quality in order to avoid spending much time shopping. However, the alpha values of 0.34 for males and 0.3 for females indicates this factor is not a reliable scale and was not confirmed in the previous studies.

Factor 6C: Value seeking. Two items were identical in both samples: "I look carefully to find the best value for the money" and "I take time to shop carefully for the best buys". The high negative loading on the statement that purchases are made without much thought indicates strong tendency to maximise values.

5.2. Male Factors

In addition to six common factors discussed above, two factors were found for males namely brand loyal and time-energy conserving.

Factor 1$_M$: Brand loyal. This factor consists of two items and was only confirmed for males. Male consumers scoring highly on this factor tend to have favorite brands and will use these habitually. The Bakewell and Mitchell (2006) UK male data also confirmed the presence of this trait despite having low reliability ($\alpha = 0.09$).

Factor 2$_M$: Time-energy conserving. This factor was not found for females and characterises males who often save energy by making shopping trips fast and shopping in the same stores. They don't give their purchases much thought; believing that going shopping is a waste of time. This factor is similar to the time-energy conserving trait identified by Bakewell and Mitchell (2006) in the UK, albeit associated with a different set of items.

Table 2: Comparison with previous studies: male decision-making traits

Mitchell & Walsh (2004)	Bakewell & Mitchell (2006)	Hanzaee & Aghasibeig (2008)	Present study
Brand conscious (0.76)	Recreational (0.56)	Fashion conscious (0.83)	Quality consciousness (0.62)
Perfectionism (0.76)	Perfectionism (0.47)	Perfectionistic, high quality conscious (0.73)	Brand consciousness (0.66)
Impulsiveness, carelessness (0.69)	Brand consciousness (0.76)	Recreational, hedonistic (0.74)	Fashion consciousness (0.64)
Confused by overchoice (0.71)	Novelty/fashion consciousness (0.73)	Confused and carelessness by overchoice (0.69)	Confused by overchoice (0.44)
Enjoyment-variety seeking (0.64)	Confused by overchoice (0.64)	Time-energy conserving (0.75)	Satisfying (0.34)
Satisfying (0.75)	Price/value consciousness (0.36)	Brand conscious (0.69)	Value seeking (0.59)
Fashion-sale seeking (0.67)	Impulsive/careless (0.26)	Careless (0.42)	Brand loyal (0.38)
Time restricted (0.47)	Habitual, brand loyal (0.09)	Habitual, brand loyal (0.47)	Time-energy conserving (0.52)
Economy seeking (0.48)	Time-energy conserving (0.66)	Non-perfectionistic/ brand indifference (0.38)	
	Confused time restricted (0.32)	Low price seeking (0.45)	
	Store loyal/low price seeking (0.36)		
	Store promiscuous (0.35)		

Note: The reliability coefficients are presented in parentheses

5.3. Female Factors

Three female factors were found in addition to the six common factors namely price consciousness, recreational and shopping avoidance.

Factor 1$_F$: Price consciousness. Three items loaded onto this factor. Females scoring highly on this factor can be characterised as those who are conscious of sale prices and often choose the lower price products. It is comparable to price/value consciousness trait previously identified by Bakewell and Mitchell (2006).

Factor 2$_F$: Recreational. Four items loaded onto this factor. High scorers on this factor find seeking out new things pleasurable, and they shop just for the fun of it. This factor is consistent with Mitchell and Walsh's (2004) and Bakewell and Mitchell's (2006) characterisation of a recreational consumer.

Factor 3$_F$: Shopping avoidance. This factor consists of two items only and is exclusive to females. High scorers on this factor find shopping unpleasant and thus they tend to shop quickly by

buying the first brands or products that seem good enough. This factor approximates to an opposite of the recreational trait.

Table 3: Comparison with previous studies: female decision-making traits

Mitchell & Walsh (2004)	Bakewell & Mitchell (2006)	Hanzaee & Aghasibeig (2008)	Present study
Perfectionism (0.77)	Recreational (0.38)	Fashion conscious (0.80)	Quality consciousness (0.64)
Brand consciousness (0.79)	Perfectionism (0.64)	Brand conscious (0.79)	Brand consciousness (0.77)
Novelty-fashion consciousness (0.73)	Brand consciousness (0.76)	Confused and carelessness by overchoice (0.71)	Fashion consciousness (0.67)
Recreational, hedonism (0.69)	Novelty/fashion consciousness (0.79)	Quality/value conscious (0.62)	Confused by overchoice (0.61)
Time-energy conserving (0.50)	Confused by overchoice (0.71)	Recreational/ Hedonistic (0.72)	Satisfying (0.3)
Impulsiveness, carelessness (0.71)	Price/value consciousness (0.39)	Perfectionistic, high quality conscious (0.57)	Value seeking (0.41)
Confused by overchoice (0.79)	Impulsive/careless (0.48)	Time-energy conserving (0.75)	Price consciousness (0.3)
Variety seeking (0.37)	Habitual, brand loyal (0.43)	Variety seeking (0.35)	Recreational (0.43)
Quality consciousness (0.56)	Bargain seeking (0.59)	Habitual, brand loyal (0.42)	Shopping avoidance (0.37)
	Imperfectionism (0.40)	Low price seeking (0.48)	
	Store loyal (0.31)	Careless (0.25)	

Note: The reliability coefficients are presented in parentheses.

6. Implications and Future Research

One of the key findings of this study is the confirmation of gender differences in decision-making styles among young-adult consumers. In addition to four decision-making styles that were found common to both genders and similar to the original CSI factors (quality consciousness, brand consciousness, fashion consciousness and confused by overchoice), the study has identified two new common factors (satisfying and value seeking), and five exclusive factors namely brand loyal and time-energy conserving for males and price consciousness, recreational and shopping avoidance for females. Five male factors and six female factors were found similar to the original CSI factors identified by Sproles and Kendall (1986).

Comparative of this study with the previous ones (refer to Tables 2 and 3) indicate that the initial Sproles and Kendall's eight factor model are not entirely consistent in other cultures. Some of the factors have higher reliability in some cultures, and lower reliabilities in others. Additionally, this and all three previous studies have identified new factors exclusive to males and females. The identification of new consumer traits for both genders, apart from those traits identified by Sproles and Kendall, provides direct support for previous studies that concluded that the CSI in its original configuration cannot be applied without considering the socio-cultural factors among a wide domain of cultures and that this instrument needs to be developed to be applicable in multiple countries (Mitchell & Walsh, 2004; Bakewell & Mitchell, 2006; Hanzaee & Aghasibeig, 2008). Given considerable differences in the factor structures of decision-making styles between males and females, it may be necessary to develop a more gender-specific CSI through exploratory study to develop new scale that will be more relevant to each gender (Mitchell & Walsh, 2004).

The factor models for both males and females accounted for satisfactory percentages of the total variance explained (over 50 per cent in both cases), but there is still some variance in the data which remains unexplained. In addition, of the eight factor solution confirmed for males, two factors (satisfying and brand loyal) and three factors of the eight factor solution confirmed for females

(satisfying, price consciousness and shopping avoidance) had a poor reliability score (below 0.4), indicating that the items used to measure these constructs are poor. Thus it may be necessary for future research to probe each item of the scale exhibiting poor reliability in order to generate new items to improve the internal consistency of the factors.

As with all research projects, the findings presented are characterised by limitations that restrict the extent to which they can be reliably generalised. The data analysis was limited to undergraduate student segment in Malaysia only. Future research could incorporate data from customer groups from different countries and regions to seek the extent to which shopping styles are valid and generalisable.

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