Asian Social Science
www.ccsenet.org/journal.html
Vol. 5, No. 12
December 2009

Decision-Making Styles of Young Malay, Chinese and Indian Consumers in Malaysia

Safiek Mokhlis (Corresponding author)
Faculty of Management and Economics, Universiti Malaysia Terengganu
21030 Kuala Terengganu, Malaysia
Tel: 60-9-668-3164 E-mail: safiek@umt.edu.my

Hayatul Safrah Salleh
Faculty of Management and Economics, Universiti Malaysia Terengganu
21030 Kuala Terengganu, Malaysia
Tel: 60-9-668-3417 E-mail: hayatul@umt.edu.my

Abstract

Although consumer decision-making style represents a relatively consistent pattern of cognitive and affective responses, culture has been proven to impact significantly on individual values and attitudes, thus, culture is expected to have a significant influence on consumer decision-making styles. This paper investigates the decision-making styles of young Malay, Chinese and Indian consumers in Malaysia using Consumer Style Inventory (CSI) developed by Sproles and Kendall (1986). An examination of the psychometric properties of CSI shows some similarities and differences in consumer decision-making styles among the three ethnic groups, suggesting that ethnicity affects shopping behavior. Identification of new traits exclusive to each ethnic group suggests that CSI cannot be applied without considering the cultural factors.

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

1. Introduction

This study presents the findings from an exploratory study of consumer decision-making styles in Malaysia using the Consumer Styles Inventory (CSI) developed by Sproles and Kendall (1986). A consumer's decision-making style has been defined as "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). Sproles (1985) proposed 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.

Based on his review of previous literature, Sproles (1985) identified 50 items related to consumers' cognitive and affective orientation towards shopping and buying. Employing a factor analysis technique, Sproles found that six out of nine traits were confirmed to be present. Sproles and Kendall (1986) refined this inventory and accordingly developed a more parsimonious scale consisting of 40 items. The Consumer Style Inventory (CSI) that they developed consists of eight mental characteristics of decision-making styles, as depicted in Table 1.

Since its introduction, there has been a series of investigation aimed at testing the generalizability of the CSI across different countries: the USA (Lysonski, Durvasula & Zotos, 1996; Wickliffe, 2004), South Korea (Hafstrom, Chae & Chung, 1992; Wickliffe, 2004), China (Fan & Xiao, 1998; Hiu, Siu, Wang & Chang, 2001), New Zealand (Durvasula, Lysonski & Andrews, 1993; Lysonski et al., 1996), Greece (Lysonski *et al.*, 1996), India (Lysonski et al. 1996; Canabal, 2001), Germany (Walsh, Mitchell & Thurau, 2001), UK (Mitchell & Bates, 1998), South Africa (Radder, Li & Pietersen, 2006), Turkey (Gonen & Ozmete, 2006), Brazil (Dos Santos & Fernandes, 2006), Iran (Hanzaee & Aghasibeig, 2008) and Malaysia (Mokhlis, 2009; Wan Omar *et al.* 2009). These studies confirmed varying portions of the original CSI, indicating that the US eight factors are not consistent in other cultures.

Whereas many studies investigated decision-making styles across different countries, to date, no research has been conducted to determine consumer decision-making styles across different ethnic groups within a national boundary. Radder *et al*.'s (2006) study is the only exception that examines decision-making styles of Chinese, Motswana and Caucasian students in South Africa. In Malaysia, two published studies on decision-making styles are identified, namely Mokhlis (2009) and Wan Omar et al. (2009), both of which sampled the student market. While these two studies provided important insights into consumer behavior within the specific context of Malaysia, the studies did not looked at ethnic variation in consumer decision-making styles. It is believed that ethnic groups in Malaysia may also have certain distinctive characteristics in terms of decision-making styles that could be of equal interest to both researchers and marketers.

The purpose of this study is to examine consumer decision-making styles of the three main ethnic groups in Malaysia namely Malay, Chinese and Indian. The aim is to demonstrate that consumer decision-making styles differs according to consumers' ethnicity and that consumer behavior can be predicted from an understanding of the cultural personality of consumers.

2. Methods

2.1 The Instrument

The questionnaire consisted of Sproles and Kendall's (1986) 40-item Likert scaled Consumer Style Inventory (CSI). The instrument researchers used was Consumer Style Inventory (CSI) developed by Sproles and Kendall (1986). Each item was answered by a 5-point Likert scale; 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.

2.2 The Subjects

The study was carried out in Malaysia. Among examples of plural societies, Malaysia shows an unusually balanced ethnic structure of two dominant groups, the Malays who make up 53.4 per cent and the Chinese who make up 26 per cent. As well there are 7.7 per cent Malaysians of Indian ethnic origin (Department of Statistics Malaysia, 2005). Due to the cultural differences that exist in the origins of different communities, there is a noticeable absence of homogeneity in the behavior of consumers in Malaysia where the nature of its domestic market is highly characterized by the "ethnically segmented consumer markets" (Mohd. Salleh, Teo & Pecotich, 1998, p. 481). Such unique characteristic provides a particularly appropriate context for this study from which a sample representing diverse ethnic consumer groups can be drawn from its population.

A convenience sample of 600 undergraduate students was selected from a public university with an enrollment of over 6,000 students in the state of Terengganu, Malaysia. Respondents were given a copy of the questionnaire to complete outside class hours, together with assurances regarding the anonymity and confidentiality of their data. They were informed that their participation was voluntary and could be withdrawn at any stage. Completed questionnaires were returned to the authors the following week. Of 560 students responded to the survey, 73 questionnaires were rejected. The final sample consisted of 487 undergraduate students. The ethnic breakdown is as follows: Malay, n = 260 (53.4 per cent); Chinese, n = 115 (23.6 per cent) and Indian, n = 112 (23 per cent).

Although student samples are not representative of all cross-sections of the population, they are considered appropriate for cross-cultural theory testing. Using a relatively more homogeneous group such as undergraduate students is particularly helpful to minimize 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. education, age, income and social class) is reduced when respondents are homogeneous across demographic and behavioral characteristics, thus resulting in less "extraneous variation" (Peterson, 2001). Sherman *et al.* (1999) also support the use of students as subjects within consumer research and confirm its acceptance by stating that 86 per cent of the articles published in the *Personality and Social Psychology Bulletin* used students as their human subjects.

3. Analysis and Results

This study utilized exploratory factor analysis (EFA) with principal component method to extract a small number of latent variables (factors) from a large number of observed variables (40-items on the CSI). The varimax procedure of orthogonal rotation, generally regarded as the "best" and most commonly used (Hair *et al.* 1998) was applied on the principal component solutions. This procedure was favored for this study since it minimizes correlation across factors and maximizes within the factors. Varimax procedure gives a clearer separation of the factors and has proven very successful as an analytic approach to obtaining an orthogonal rotation of factors (Hair et al. 1998).

To assess the internal consistency of each factor group obtained, a reliability analysis was conducted by calculating the

Cronbach's alpha for each factor. The assumption behind this approach was that the items of a measure work together as a set and should be capable of independently measuring the same construct. The items should be consistent in what they indicate about the concept being measured. For consistency, it was decided that reliability should not lower than 0.5, the minimum acceptable level suggested by Kerlinger and Lee (2000).

3.1 Validation of the Sproles and Kendall's Eight Factor CSI Model

The 40-item CSI inventory was factor analyzed using data from the three samples. For the purpose of comparing the factor solution with Sproles and Kendall's (1986) findings, a constrained eight-factor solution was extracted. The 40 items were attributed to the respective factors according to the eight factors. Table 2 presents the results of factor analysis for the three samples compared with the results of the original Sproles and Kendall model. The solution explained a total variance of 47.3 per cent in the Malay sample, 55.1 per cent in the Chinese sample and 51.1 per cent in the Indian sample. These figures were higher than that of Sproles and Kendall (1986) whose eight-factor solution explained only 46 per cent.

In general, the eight-factor structure of the CSI was not completely replicated in all three Malaysian samples. Of the 40-item inventory, 57.5 per cent of the items in the Malay sample, 55 per cent in the Chinese sample and 45 per cent in the Indian sample loaded on the Sproles and Kendall (1986) specified factors.

Table 2 also shows the reliability coefficients across the three samples for various factors, as measured by Cronbach's alpha. Coefficient alphas for the eight-factor model across the three samples were generally low, with only three out of eight factors in each case having good internal consistency reliabilities. The *Recreational*, *Price Conscious* and *Brand Loyal* factors had poor alpha coefficients (below 0.5) across the three samples, which suggest that items did not measure these factors effectively and that scale items need re-designing to improve measurement of the trait.

3.2 Generation of a Modified CSI Model

In a bid to identify a more appropriate model for the Malaysian situation, the data were factor analyzed without constraining the factor solution. Factor models consisting of six, seven, eight and nine factors each were scrutinized to find the optimum solution. Only items that contextually fitted the factor and which had a factor loading of 0.4 and higher were included in the subsequent analysis.

Tables 3, 4 and 5 reports the results of EFA using principal component analysis with varimax rotation for the Malay, Chinese and Indian samples respectively. All factors had eigenvalues greater than one, which is a rule often used in judging the adequacy of the factor solution. Based on the factor analysis (factor loadings), the findings only incorporate the use of 25 of the original items for the Malay sample, 29 items for the Chinese sample and only 18 items for the Indian sample. Variations in the reliability (Cronbach alphas) for constructs also exist for each of the factors across the three samples.

For the Malay, an eight-factor solution was extracted with eigenvalues ranging from 1.15 to 4.09, which accounted for 59.1 per cent of the variance. Seven of the eight original CSI traits plus one new Malay factor were found (see Table 3). Except for factor 8 (*Confused by Overchoice*), the reliability coefficients were all above 0.5.

Factor 2, entitled *Value Conscious*, was identified as a new factor among this sample group. Four items loaded positively onto this factor, two of which from the *Impulsive, Careless*, and another two from *Price Conscious* constructs. This trait describes people who concern with how much they spend and would shop carefully to find the best value for money. The reliability for this factor was 0.5.

In the case of Chinese sample, an eight-factor solution was identified which accounted for 62.7 per cent of the variance and had a range of eigenvalues of 1.11 to 5.24. Seven of the eight original CSI traits plus one new factor exclusive to Chinese were found (shown in Table 4). Except for factors 7 (*Price Conscious*) and 8 (*Careless*), the reliability coefficients were all above 0.5.

Factor 6, entitled *Shopping Avoidance*, was identified as a new factor exclusive to this sample group. The factor is a combination of one item from the *High-Quality Conscious* and *Recreational, Hedonistic* constructs developed by Sproles and Kendall (1986). The sign of loadings for these two items was negative, suggesting the existence of consumers who dislike shopping and thus shop around very little because they make shopping trips fast. This factor approximates to an opposite of the *Recreational, Hedonistic* consumer trait. The alpha coefficient for this factor was 0.66.

A six-factor model best fitted the Indian sample. The factors had a range of eigenvalues of 1.16 to 3.04 and together accounted for 61.8 per cent of the variance. Only five of the eight original CSI traits plus one new factor were found (see Table 5). Except for factor 6 (*Careless*), the reliability coefficients were all above 0.5.

Factor 5, entitled *Satisfying*, was identified as a new factor exclusive to Indian sample group. Three items loaded positively onto this factor; two of which from the *High Quality Conscious* and one from the *Recreational, Hedonistic* constructs. This factor is best described by one item: "A product doesn't have to be perfect or best to satisfy me". Those

scoring high on this factor could be expected to be willing to sacrifice quality in order to avoid spending much time shopping. The alpha coefficient for this factor was 0.53.

When looking at inter-ethnic similarities, five decision-making traits appear to be common across the three samples namely *Fashion Conscious, Quality Conscious, Careless, Recreational* and *Confused by Overchoice*. The reliability coefficients for these factors across the three sample groups were all above 0.5 with the exception of *Careless* for both the Chinese and Indian samples, and *Confused by Overchoice* for the Malay sample.

4. Conclusion

This study was a first attempt at verifying the generalizability of Sproles and Kendall's CSI across three ethnic groups within a Malaysian retail environment. The results revealed some interesting patterns in the decision-making traits of young Malay, Chinese and Indian consumers. Eight meaningful factors resulted for the Malay and Chinese samples, and six for the Indian sample. Five common decision-making traits (*Fashion Conscious, Quality Conscious, Careless, Recreational* and *Confused by Overchoice*) were confirmed across all three sample groups, albeit with different item loadings. In addition, three new decision-making traits were identified; one for each sample group, namely *Value Conscious*, *Shopping Avoidance* and *Satisfying*.

A fairly good results were obtained for the Malay and Chinese sample groups despite some items did not have acceptable scores to fit with both the eight-factor and modified models. The inventory however did not seem to be applicable to the Indian dataset, with only 18 out of 40 items loaded onto six factors. It appears that the CSI in its original configuration could not be applied to different cultures without modifications. The identified traits were therefore generalizable to some extent across populations, but did vary between cultural groups which support the general view that consumer decision-making processes are culturally dependent. To International market researchers and marketers, this finding poses a warning that instruments validated in one county on limited samples are not immediately applicable to other countries. The dimensions and items included in the inventory need to be tested before being used in another country setting or a modified model of decision-making traits may be necessary to more adequately account for the consumer behavior and retail environment of another culture (Walsh *et al.* 2001).

On a final note, this research was clearly based on the student consumer cohort aged 19-25 and thus the results did not represent the Malaysian population in general. Other segments, such as non-students, who may have different decision-making orientations, should be investigated. Also, additional studies comparing decision-making styles of other ethnic consumers as well as from different regions of Malaysia might produce interesting findings.

References

Calder, B. J., Philips, L. W. & Tybout, A. (1981). Designing research for application. *Journal of Consumer Research,* 8(Sept), 197-207.

Canabal, M. E. (2001). Decision making styles of young South Indian consumers: An exploratory study. *College Student Journal,* 36(1), 12-19.

Department of Statistics Malaysia. (2005). *General Report of the Population and Housing Census 2000*. Kuala Lumpur: Department of Statistics Malaysia.

Dos Santos, C. P. & Fernandes, D. V. D. H. (2006). Evaluation of the Consumer Style Inventory (CSI) scale in the Brazilian context. *Revista de Administracao Mackenzie,* 7(2), 11-38.

Durvasula, S., Lysonski, S. & Andrews, J. C. (1993). Cross-cultural generalizability of a scale for profiling consumers' decision-making styles. *Journal of Consumer Affairs,* 27(1), 55-65.

Fan, J. X. & Xio, J. J. (1998). Consumer decision-making styles of young-adult Chinese. *Journal of Consumer Affairs,* 32(2), 275-294.

Gonen, E. & Osemete, E. (2006). Decision-making styles of young Turkish consumers. *Journal of the Home Economics Institute of Australia,* 13(1), 26-33.

Hafstrom, J. L., Chae, L. S. & Chung, Y. S. (1992). Consumer decision-making styles: Comparison between United States and Korean young consumers. *Journal of Consumer Affairs,* 26(1), 146-158.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2005). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Hanzaee, 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.

Hiu, A. S. Y., Siu, N. Y. M., Wang, C. C. L. & Chang, L. M. K. (2001). An investigation of decision-making styles of consumers in China. *Journal of Consumer Affairs,* 35(2), 326-345.

Kerlinger, F. M. & Lee, H. (2000). *Foundations of behavioral research* (4th ed.). Stamford: Wadsworth.

Lysonski, S., Durvasula, S. & Zotos, Y. (1996). Consumer decision-making styles: A multi-country investigation. *European Journal of Marketing,* 30(12), 10-21.

Mitchell, V. W. & Bates, L. (1998). UK consumer decision-making styles. *Journal of Marketing Management,* 14, 199-225.

Mohd. Salleh, A. H., Teo, B. & Pecotich, A. (1998). Malaysia: consumer behaviour and the future. In A. Pecotich & C. J. Schultz II (Eds.), *Marketing and consumer behaviour in East and Southeast Asia* (pp. 451-492). Australia: McGraw-Hill Book Co.

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.

Peterson, R. A. (2001). On the use of college students in social science research: Insights from a second order meta-analysis. *Journal of Consumer Research,* 28(13), 450-462.

Radder, L., Li, Y. & Pietersen, J. J. (2006). Decision-making styles of young Chinese, Motswana and Caucasian consumers in South Africa: An exploratory study. *Journal of Family Ecology and Consumer Science,* 34, 20-31.

Sherman, R. C., Buddie, A. M., Dragan, K. L., End, C. M. & Finney, L. J. (1999). Twenty years of PSPB: Trends in content, design and analysis. *Personality and Social Psychology Bulletin,* 25(2), 177-187.

Sproles G. B. & Kendall, E. L. (1986). A methodology for profiling consumers' decision-making styles. *Journal of Consumer Affairs,* 20(2), 267-279.

Sproles, G. B. (1985). From perfectionism to fadism: Measuring consumers' decision-making styles. *Proceedings, American Council on Consumer Interests*, 79-85.

Walsh, G., Mitchell, V. W. & Thurau, T. H. (2001). German consumer decision making styles. *Journal of Consumer Affairs,* 35(1), 73-95.

Wan Omar, M., Mohd Ali, M. N., Hussin, Z. & Abdul Rahim, H. (2009). Decision orientations towards shopping and buying among young-adult Malays in the universities. *International Journal of Business and Management,* 4(7), 26-30.

Wickliffe, V. P. (2004). Refinement and re-assessment of the consumer decision-making style instrument. *Journal of Retailing and Consumer Services,* 11, 9-17.

Table 1. Consumer style characteristics

Trait	Description	Alpha
Perfectionistic, high-quality conscious	A characteristic measuring the degree to which a consumer searches carefully and systematically for the best quality in products	0.74
Brand conscious, "price equals quality"	measuring a consumer's orientation to buying the more expensive, well-known brands	0.75
Novelty-fashion conscious	A characteristic identifying consumers who appear to like new and innovative products and gain excitement from seeking out new things	0.74
Recreational, hedonistic	A characteristic measuring the degree to which a consumer finds shopping a pleasant activity and shops just for the fun of it	0.76
Price conscious, "value-for-money"	A characteristic identifying those with particularly high consciousness of sale prices and lower prices in general	0.48
Impulsive, careless	Identifying those who tend to buy on the spur of the moment and appear unconcerned how much they spend or getting "best buys"	0.48
Confused by overchoice	A characteristic identifying those consumers who perceive too many brands and stores from which to choose, experiencing information overload in the market	0.55
Habitual, brand-loyal	A characteristic indicating consumers who have favorite brands and stores, who have formed habits in choosing these repetitively	0.53

Table 2. Consumer style characteristics: Eight factor model

	Factor loadings			
	USA	Malay	Chinese	Indian
Factor 1 – Perfectionistic, High-Quality Conscious	(α = 0.74)	(α = 0.43)	(α = 0.29)	(α = 0.59)
Getting very good quality is very important to me	0.68	0.68	0.71	0.61
When it comes to purchasing products, I try to get the very best or the perfect choice	0.66	0.57	0.50	0.70
In general, I usually try to buy the best overall quality	0.62	0.55	0.56	0.65
I make special effort to choose the very best quality products	0.61	0.60	0.59	0.63
I really don't give my clothing purchases much though or care	-0.54	-0.16	-0.11	-0.09
My standards and expectations for products I buy are very high	0.54	0.41	0.20	0.27
I shop quickly, buying the first product or brand I find that seems good enough	-0.41	0.28	0.14	-0.07
A product does not have to be perfect, or the best, to satisfy me	-0.41	0.18	-0.32	0.05
No. of item loadings 0.4 and above	8	5	4	4
Factor 2 – Brand Conscious, "Price Equals Quality"	(α = 0.75)	(α = 0.67)	(α = 0.77)	(α = 0.45)
The well-known national brands are best for me	0.63	0.70	0.61	0.32
The more expensive brands are usually my choice	0.61	0.65	0.61	-0.07
The higher the price of a product, the better its quality	0.59	0.62	0.62	0.56
Nice department and specialty stores offer me the best products	0.57	-0.09	0.43	0.25
I prefer buying the best-selling brands	0.54	0.72	0.62	0.46
The most advertised brands are usually very good choices	0.48	0.48	0.62	0.13
No. of item loadings 0.4 and above	6	5	6	2
Factor 3 – Novelty-Fashion Conscious	(α = 0.74)	(α = 0.65)	(α = 0.68)	(α = 0.61)
I usually have one or more outfits of the very newest style	0.75	0.77	0.50	0.41
I keep my wardrobe up-to-date with the changing fashions	0.70	0.54	0.69	0.56
Fashionable, attractive styling is very important to me	0.64	0.42	0.72	0.51
To get variety, I shop different stores and choose different brands	0.50	0.58	0.10	-0.03
It's fun to buy something new and exciting	0.46	-0.03	0.16	0.71
No. of item loadings 0.4 and above	5	4	3	4
Factor 4 – Recreational, Hedonistic	(α = 0.76)	(α = 0.35)	(α = 0.34)	(α = 0.43)
Shopping is not a pleasant activity to me	-0.70	-0.38	0.68	0.22
Going shopping is one of the enjoyable activities of my life	0.70	0.31	0.69	0.14
Shopping the stores wastes my time	-0.69	-0.54	0.75	-0.46
I enjoy shopping just for the fun of it	0.66	0.44	-0.34	0.07
I make my shopping trips fast	-0.64	-0.18	0.65	-0.01
No. of item loadings 0.4 and above	5	2	4	1
Factor 5 – Price Conscious, "Value for Money"	(α = 0.48)	(α = 0.25)	(α = 0.29)	(α = 0.15)
I buy as much as possible at sale prices	0.66	0.17	-0.28	-0.06
The lower price products are usually my choice	0.56	-0.01	0.06	-0.49
I look carefully to find the best value-for-money	0.54	-0.12	0.02	-0.20
No. of item loadings 0.4 and above	3	0	0	1
Factor 6 – Impulsive, Careless	(α = 0.48)	(α = 0.50)	(α = 0.32)	(α = 0.28)
I should plan my shopping more carefully than I do	0.55	0.56	0.01	-0.41

I am impulsive when purchasing	0.53	-0.06	-0.05	0.06
I often make careless purchases I later wish I had not	0.52	-0.12	0.58	0.25
I take time to shop carefully for the buys	-0.51	0.73	-0.14	0.08
I carefully watch how much I spend	-0.43	0.38	0.28	-0.03
No. of item loadings 0.4 and above	5	2	1	1
Factor 7 – Confused by Overchoice	(α = 0.55)	(α = 0.44)	(α = 0.71)	(α = 0.56)
There are so many brands to choose from that I often feel confused	0.68	0.52	0.68	0.58
Sometimes it is hard to choose which stores to shop at	0.61	0.66	0.57	0.61
The more I learn about product, the harder it seems to choose the best	0.53	0.35	0.80	0.67
All the information I get on different products confuses me	0.44	0.52	0.67	0.28
No. of item loadings 0.4 and above	4	3	4	3
Factor 8 – Habitual, Brand Loyal	(α = 0.53)	(α = 0.41)	(α = 0.35)	(α = 0.27)
I have favorite brands I buy over and over	0.70	0.42	0.17	0.37
Once I find a brand I like, I stick with it	0.60	0.27	-0.07	0.67
I got to the same stores each time I shop	0.58	0.67	0.14	0.55
I change brands I buy regularly	-0.48	0.05	-0.23	-0.04
No. of item loadings 0.4 and above	4	2	0	2

Table 3. Factor analysis of the CSI: Malay sample

Items	Factor Loadings	% of variance	Cronbach alpha
Factor 1 – Brand Conscious			
I prefer buying the best-selling brands	.746	10.76	0.74
The well-known national brands are best for me	.733		
The higher the price of a product the better its quality	.722		
The more expensive brands are usually my choice	.696		
The most advertised brands are usually very good choices	.450		
Factor 2 – Value Conscious			
I should plan my shopping more carefully than I do	.731	8.16	0.50
I take time to shop carefully for best buys	.713		
I look carefully to find the best value for the money	.684		
I carefully watch how much I spend	.566		
Factor 3 – Fashion Conscious			
I usually have one or more outfits of the very newest style	.752	7.8	0.70
I keep my wardrobe up to date with the changing fashions	.745		
Fashionable, attractive styling is very important to me	.716		
Factor 4 – Quality Conscious			
Getting very good quality is very important to me	.683	7.26	0.54
I make special effort to choose the very best quality products	.635		
In general, I usually try to buy the best overall quality	.597		
Factor 5 – Careless			
I often make careless purchases I later wish I had not	.761	6.64	0.52
I am impulsive when purchasing	.670		
There are so many brands to choose from that I often feel confused	.568		
Factor 6 – Brand Loyal			
I go to the same stores each time I shop	.728	6.6	0.54
I have favorite brands I buy over and over	.679		
Once I find a product or brand I like, I stick with it	.608		
Factor 7 – Recreational			
Shopping the stores wastes my time	-.833	6.4	0.60
Shopping is not a pleasant activity to me	-.696		
Factor 8 – Confused by Overchoice			
The more I learn about product, the harder it seems to choose the best	.719	5.45	0.35
All the information I get on different products confuses me	.713		

Table 4. Factor analysis of the CSI: Chinese sample

Items	Factor Loadings	% of variance	Cronbach alpha
Factor 1 – Brand Conscious			
The well-known national brands are best for me	.691	9.91	0.77
I prefer buying the best selling brands	.669		
The higher the price the better its quality	.667		
The most advertised brands are usually very good choices	.652		
The more expensive brands are usually my choices	.584		
Nice department and specialty stores offer me the best products	.547		
Factor 2 – Recreational			
Shopping is not a pleasant activity to me	-.833	9.57	0.61
Shopping the stores wastes my time	-.741		
Going shopping is one of the enjoyable activities of my life	.707		
Its fun to buy something new and exciting	.585		
I enjoy shopping just for the fun of it	.510		
Factor 3 – Confused by Overchoice			
The more I learn about products, the harder it seems to choose the best	.795	9.19	0.76
There are so many brands to choose from that often I feel confused	.681		
Sometimes its hard to choose which stores to shop	.672		
All the information I get on different products confuses me	.671		
Factor 4 – Fashion Conscious			
I keep my wardrobes up to date with the changing fashions	.824	8.76	0.74
Fashionable attractive styling is very important to me	.707		
I usually have one or more outfits of the very newest style	.703		
Factor 5 – Quality Conscious			
Getting very good quality is very important to me	.713	7.46	0.58
I make special effort to choose the very best quality products	.611		
In general I usually try to buy the best overall quality	.587		
I take time to shop carefully for best buys	.528		
I carefully watch how much I spend	.504		
Factor 6 – Shopping Avoidance			
I shop quickly, buying the first products or brand I find that seems good enough	.852	5.84	0.66
I make shopping trips fast	.744		
Factor 7 – Price Conscious			
The lower the price products are usually my choice	.776	5.65	0.38
I look carefully to find the best value for the money	.522		
Factor 8 – Careless			
Often I make careless purchases I later wish I had not	.697	5.28	0.29
I should plan my shopping more carefully than I do	.622		

Table 5. Factor analysis of the CSI: Indian sample

Items	Factor Loadings	% of variance	Cronbach alpha
Factor 1 – Quality Conscious			
When it comes to purchasing products, I try to get the very best or the perfect choice	.753	13.05	0.70
In general, I usually try to buy the best overall quality	.626		
Getting very good quality is very important to me	.689		
I make special effort to choose the very best quality products	.659		
Factor 2 – Fashion Conscious			
I keep my wardrobe up-to-date with the changing fashions	.819	11.36	0.68
I usually have one or more outfits of the very newest style	.746		
Fashionable, attractive styling is very important to me	.704		
Factor 3 – Recreational			
Shopping is not a pleasant activity to me	-.810	10.28	0.60
Shopping the stores wastes my time	-.745		
I enjoy shopping just for the fun of it	.658		
Factor 4 – Confused by Overchoice			
The more I learn about product, the harder it seems to choose the best	.731	9.72	0.54
Sometimes it is hard to choose which stores to shop at	.707		
There are so many brands to choose from that I often feel confused	.562		
Factor 5 – Satisfying			
A product does not have to be perfect, or the best, to satisfy me	.743	9.46	0.53
I really don't give my clothing purchases much though or care	.676		
I make my shopping trips fast	.638		
Factor 6 – Careless			
I often make careless purchases I later wish I had not	.743	7.89	0.41
I take time to shop carefully for the buys	-.718		