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Assessment of Self-Rated Consumer Knowledge among Low Income Housing Residence in Malaysia

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ABSTRACT

Data from the 2008 Consumer Empowerment in a Globalized Market were used to examine factors associated with giving good self-rating on consumer knowledge and to identify the gap between self-rated and actual consumer knowledge among low income housing residence in Selangor and the Federal Territory of Kuala Lumpur.—Those who claimed to know their rights and responsibilities as consumers and knew about the Consumer Protection Act 1999 are more likely to have good self-rated consumer knowledge. However, those in the lowest 20% income quintile and middle 20% income quintile are less likely than the top 20% income quintile to have good self-rated consumer knowledge. A high percentage of the respondents knew about and correctly stated their rights and responsibilities as consumers. On the contrary, only a few knew about the legislation that protected consumers and redress mechanism, indicating that they were not quite well-versed with a 'higher level' of consumer knowledge which is vital for their empowerment in the marketplace.

Keywords: Consumer Economics, consumer knowledge, consumer competency, low income consumers

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INTRODUCTION

The notion of *caveat venditor*, a Latin term for "sellers beware", was a warning to traders that the voice of consumers demanding for their rights in the marketplace was growing. It was the principle of consumer protection when consumer movement gathered momentum in the early days

(Fernandez, 2004). Since then, consumer protection efforts have evolved and shaped by the current needs of the nation, although the focus is still championing consumer interests.

In the face of rapid technological advancement, accelerating globalization and market liberalization, consumer protection becomes even more important. Consumers face new challenges and threats. For example, consumers are confronted with goods and services flooding the local markets as never before. It is reported that medium-size supermarkets in Malaysia in 2001 carried about 22,000 types of products as compared to about 9000 goods in 1991 (Hazurainah, 2001). In hypermarkets, however, the selection of goods is even wider as such an establishment carried at least around 70,000 types of goods (Hazurainah, 2001). Therefore, consumers' knowledge and skills are put to test everyday as decision making becomes more complicated.

Consequently, various parties, including the Malaysian government and various consumer interest groups, have joined efforts to protect consumers in the market. The protection comes in the forms of enforcement of laws and regulations and establishment of various channels for consumer redress. However, such efforts would be futile if consumers do not utilize the facilities to their advantage due to their ignorance or refusal to advocate their rights in the market. Therefore, it is important that consumers be educated so that they can play their roles and command respect from the sellers (thus, *caveat vanditor*).

As a step towards changing consumer behaviour, there is a need to evaluate the current state of consumer knowledge. Hence, this study attempted to assess basic consumer knowledge among low income housing residence. The objectives of the study were to assess self-rated consumer knowledge, to identify factors influencing such assessment, to determine consumers' actual knowledge related to consumer rights and responsibilities, laws that protect consumers and the channel for consumer redress, and to identify the gap between self-rated and actual consumer knowledge among low income housing residence. The low income housing residence was of interest because they mostly consisted of those with limited discretionary income and low educational level and whom are frequently identified as vulnerable consumers because they are more susceptible to deception in the market (e.g. Garman, 2003; Hogg et al., 2007). Hence, assessment of consumer knowledge among this particular group is especially important so that consumer education programme should be tailored to their needs.

LITERATURE REVIEW

Consumer Rights and Responsibilities

A right is an entitlement to something or to be treated in some particular ways (Garman, 2003). As such, provisions of consumer rights are vital as they empower people to protect themselves in the market. In 1962, the President of the United States, John F. Kennedy, moved a bill on consumer rights after recognizing the importance of consumers in the American economy (Miller & Stafford, 2001). The four rights that the Congress recognized were: the right to choice, the right to information, the right to safety and the right to be heard (Fernandez, 2004; Miller & Stafford, 2001).

By 1983, the differing concerns between North and South saw the expansion of the four to eight consumer rights (Fernandez, 2004; Garman, 2003; Miller & Stafford, 2001). The additional four are: the right to basic needs, the right to redress, the right to a safe and healthy environment and the right to consumer education. Since then, consumer movement worldwide has embraced the right-based paradigm. Some countries including Malaysia have now accepted the eight rights in the definition of consumer protection and welfare (Fernandez, 2004).

Consumer rights come with responsibilities. However, lists of such responsibilities were not specifically produced. Hence, literature on the issues was not unanimous in identifying consumer responsibilities. For example, Garman (2003) stated that consumers are generally responsible to do the following: assert their consumer rights when seeking value for money in marketplace transactions, know what questions to ask and ask them, and complain when not satisfied. Miller and Stafford (2001), on the other hand, listed the following consumer responsibilities: to give correct information, to report defective goods, to report wrongs incurred in consumer dealings, to keep within the law when protesting and to accept the consequences of consumer own decisions.

Unfortunately, according to Alhabeeb *et al.* (1997), consumers generally tend to accept and fight for their rights more than to accept and be committed to their responsibilities.

Enabling Environment for Consumer Protection in Malaysia

In Malaysia, a concerted effort was carried out by various parties to ensure effective and comprehensive protection of consumers in the market. Consumer associations such as the Consumer Associations of Penang (CAP), the Muslim Consumers Association of Malaysia (PPIM) and the Federation of Malaysian Consumers Associations (FOMCA) have been actively championing the consumer interest in the market through advocacy, lobby for policy change and consumer education. In addition in the recent years, consumer protection has become a prioritized agenda of the Malaysian government. The Ministry of Domestic Trade and Consumer Affairs (MTDCA), which was later renamed as The Ministry of Domestic Trade, Cooperatives and Consumerism (MDTCC), was established in 1990 to balance the interest of both sellers and consumers. Consequently, a few new consumer-related legislations (e.g. Consumer protection Act 1999) and policies have been implemented and agencies have been established since 1990s.

Consumer-related Legislations

In an effort to establish a more consumerfriendly market, Malaysia has enforced a total of 35 consumer-related legislations even prior to 1990s. For example, the Trade Description Act 1972 prohibits false or misleading trade descriptions and false or misleading indication regarding the prices of goods (Koh & Loke, 1977). The Sale of Food and Drug Ordinance 1952, on the other hand, provides for the specifications of general labelling the labelling which indicates permitted preservatives and colouring additives, as well as the preparation and storage of the particular foodstuff (Koh & Loke, 1977).

Unfortunately, despite their noble efforts to protect consumers, each of these legislations suffers from various weaknesses such as inadequate coverage of consumer abuses and lack of enforcement. In addition, each of the laws falls under the jurisdiction of various government agencies, depending on the functions performed by the respective ministries. Therefore, consumers are often confused by the multiplicity of legislations under various ministries (Fernandez, 2004).

Consumer Protection Act 1999

The Consumer Protection Act (CPA) 1999 provides for the overall protection to consumers, the establishment of the National Consumer Advisory Council and the Tribunal for Consumer Claims (Legal Research Board, 2005). The provisions of this act cover areas not covered by other existing consumer-related laws, which it generally cuts across all aspects of consumer protection. This act provides simple, inexpensive redress to consumer grievances and relief of a specific nature. Under the Consumer Protection Act 1999, consumer rights granted cannot be taken

away and notwithstanding conditions in any agreement that consumers have signed (Ministry of Domestic Trade and Consumer Affairs, 1999).

The Tribunal for Consumer Claims

The tribunal, which became effective beginning November 15, 1999, was established under section 85, Part XII, of the Consumer Protection Act 1999. Prior to the establishment of the Tribunal, hearings for all consumer disputes were brought before a small claim court. Nevertheless, legal process often takes time and involves high monetary costs. Consequently, consumers get discouraged to pursue their claims against businesses, especially if it involves small claims (Muhamad & Haron, 2001). The establishment of the Tribunal overcomes this problem as its objective is to facilitate (i.e. hearing and determining) consumer claims for any loss with respect to the purchase of goods and services in a speedier manner at a minimal cost possible. However, consumer claims brought before the Tribunal must not exceed RM25,000 or that it must not be accrued for more than three years (Muhamad & Haron, 2001).

The Tribunal for Homebuyer Claims

The Tribunal for homebuyer claims provides a redress channel for buyers for homes bought from a licensed developer (other than a commercial development). However, home buyers must bring upon their claims for any loss or matter concerning any interest as a homebuyer to the Tribunal not later than twelve months after the date of issue of Certificate of Fitness for Occupation or expiry of defects liability period under the Housing Development (Control and Licensing) Act 1966 [Act 118] (National House Buyers Association, 2009). The Tribunal accepts claims for up to RM25,000. The Tribunal imposes criminal penalties for enforcement of awards. In more specific, it is an offence if developers fail to comply with the Tribunal's award within the specified period. The penalties are a fine up to RM5, 000 or an imprisonment of up to two years, or both; and a fine up to RM1,000 per day if the offence continues after conviction (National House Buyers Association, 2009).

Relationship between Socioeconomic Characteristics and Consumer Knowledge

Consumers protect themselves and try to achieve their interests in the market by securing, protecting and asserting their consumer rights. Unfortunately, while some people are efficient in ensuring that their rights as consumers are uphold, others are not. According to Kaplan (1991), the state of one's knowledge about an issue, significantly impacts upon one's decision making. In more specific, people dislike, thus tend to avoid situations where they have insufficient knowledge to guide their behaviours and where the possibility of confusion is great (Kerney & DeYoung, 1995). Thus, this explains why some people may choose not to assert their rights as consumers such as making complaints or seeking redress, when they feel that they do not know enough about their rights and the mechanics and channel of seeking redress.

In other words, consumer knowledge is a precursor to consumer actions, thus, ensuring consumer suaveness and resiliency in the market.

Previous studies (e.g. Haron & Paim, 2008; Mukhtar, 1995) found a significant association between socio-demographic characteristics and consumer knowledge and skills. According to Mukhtar (1995), consumers with higher income and education have more knowledge and skills that they more frequently file complaints compared to other groups.

In a study assessing elderly complaint behaviours, Haron and Paim (2008) found that the elderly were relatively ignorant about their rights as consumers and agencies available to help them in getting redress. Therefore, when they encountered problems in the market, a significant percentage of the elderly in the study reported to have done nothing or not knowing where to turn to in order to solve their problems. In addition, elderly consumers were more easily satisfied, thus complained less than younger consumers did [American Association of Retired Person (AARP), 1994].

Haron and Paim (2008) also found that elderly males were found to be more knowledgeable about their rights as consumers, Tribunal for Consumer Claims and Tribunal for Homebuyers Claim than elderly females. Elderly males were also found to be significantly different from their female counterparts in terms of their understanding about the Consumer Protection Act 1999. Consequently, a

higher percentage of the elderly females in the study reported to have fallen prey to injustices in the market, such as fraud, compared to their male counterparts.

RESEARCH METHODS

Data

The data were obtained from a study on "Consumer Empowerment in a Globalized Market", funded by the Ministry of Higher Education under the Fundamental Research Grant Scheme. The survey, which was conducted in the third quarter of 2008, covered the state of Selangor and the Federal Territories of Kuala Lumpur. Both places were chosen because Selangor is the most industrialised state and Kuala Lumpur is a metropolitan area in the Peninsular. Thus, residents in both areas were more likely to be greatly exposed to various consumer related programmes conducted by various organisations.

The state of Selangor consisted of nine districts; i) Petaling, ii) Gombak, iii) Ulu Langat, iv) Sabak Bernam, v) Kuala Selangor, vi) Ulu Selangor, vii) Klang, viii) Kuala Langat and ix) Sepang. The district of Kuala Selangor, a non-metropolitan city which consisted of nine subdivisions, was randomly selected to represent the state of Selangor. Within the district of Kuala Selangor, three subdivisions (namely, Kuala Selangor, Jeram, and Bukit Rotan) were randomly selected. Similarly, three zones within the Federal Territories of Kuala Lumpur (namely, North, Central and South Kuala Lumpur) were randomly selected. The list and map of the housing areas were

obtained from the municipal council office in each location.

The study collected data from residents of low cost housing in both areas. The rationale was that residents of low cost housing were more likely to be low income households whom not only may have lower purchasing power compared to the average Malaysians but also lower educational background. As such, they may be more disadvantaged in the market and are vulnerable and susceptible to deception and fraud. The list of low cost housing in each area was obtained from their respective municipal councils. A total of 450 respondents in Kuala Lumpur and 350 respondents in Kuala Selangor were identified for the study. However, only 317 and 300 respondents for Kuala Lumpur and Kuala Selangor were respectively and successfully interviewed by trained enumerators using a set of questionnaires. Thus, the response rates of the study were 70.4% and 85.7% for Kuala Lumpur and Kuala Selangor, respectively. The total number of the respondents participated in this study was 617. All the questionnaires collected were usable.

Variable Measurement

The dependent variable coding was based on the respondents' answer to the question: "How do you rate your consumer knowledge?" The respondent's assessment of own consumer-related knowledge was measured using a 10-scale rating. In this study, self-rating of consumer knowledge was divided into two groups, namely, "poor"

(rating of 1 to 5) and "good" (rating of 6 to 10). "Good" self-rated consumer knowledge was coded as 1 and 0 if otherwise. The reference group was self-rating of "good" consumer knowledge.

The independent variable included a few specific questions that assessed the actual knowledge of consumers on the following: consumer rights, consumer responsibilities, consumer legislation, Consumer Protection Act 1999 (CPA), Tribunal of Consumer Claims (TCC) and Tribunal of Homebuyers Claims (THC). For the consumer right, the respondents who answered "No" to the question, "Do you know your rights as a consumer" would be coded as 1 and 0 if otherwise. A similar coding was also assigned to the questions on consumer responsibilities.

As for the questions on consumer legislation, CPA, TCC and THC, the respondents were presented with the three-option answers, namely, "No, I don't know," "I've heard of it but don't know much," and "I know." For the purpose of the study, however, those who answered "I've heard of it but don't know much" were grouped together with the "No, I don't know" group due to their very limited knowledge of the subject. Then, the "I don't know" group was coded as 0 and 1 if it was otherwise.

Education was used as proxy to measure the exposure and access to consumer related information. Since the respondents have had moderate levels of education, it was categorized as 1 if they have less than a secondary education, 2 if they have a secondary school education and 3 if they have more than secondary education level. The reference category comprised of those who have more than secondary education.

Income quintile was used in place of household income to represent measure household economic resources and to capture household economic position relative to others in the study. The income quintile was calculated based on the categories of the household income level. The household income consisted of the total amount of earning reported from the main employment and supplementary jobs of all earners in the households. Household income was measured as a monthly amount in Malaysian Ringgits (RM). There were 5 income groups representing 20% of the total respondents in each group. The income quintile was treated as categorical variable coded as 1 through 5. Meanwhile, the top 20% income quintile is the reference group.

The demographic variables in this study were age, gender, and marital status. Age was a continuous variable. Gender was coded as 1 if female, and this would be 0 if otherwise. Marital status was coded 1 if not married, and 0 for otherwise.

Empirical Model

The model dependent variable was selfrated consumer knowledge. Since the response in this model was binary in nature, logistic regression was used to estimate the effect of the independent variables on the log odds of rating their knowledge as good or bad. The logistic model was specified as:

Log [P/1-P] =
$$\beta_0 + \beta_1$$
 Right +
 β_2 Resp + β_3 Laws
+ β_4 CPA + β_5 CTrib
+ β_6 H T r i b +
 β_7 Edu + β_8 Quintile +
 β_9 N o n M e t r o +
 β_{10} Age + β_6 Male +
 β_7 NotMarried + e

Where, P was the probability that a respondent rated her/his consumer knowledge as good or bad (rating the consumer knowledge as bad was the reference group).

Variables 1 to 6 measured the following: variable "Right" measures if the respondents know their right as consumers; "Resp" measures if the respondents know their responsibilities as consumers; "Laws" measures knowledge of consumer legislation; "CPA" measures if they know about Consumer protection Act 1999; "CTrib" measures their knowledge about the Tribunal of Consumer Claims, and "HTrib" measures their knowledge about the Tribunal of Homebuyers Claims.

The variable "Edu" represented the respondents' education, "Inc" represented the level of household's economic resources, "NonMetro" represented the location, "Age" represented the respondents' reported age at the time of data collection, "Male" represented the variable on gender and the respondent's marital status was represented by non-married group ("NotMarried").

FINDINGS AND DISCUSSION

Socio-Demographic Characteristics of the Respondents

A total of 617 respondents from the ethnic Malays participated in the study. About 55% of the respondents were from the metropolitan Kuala Lumpur, while 275 respondents or about 45% lived in a non-metropolitan (Kuala Selangor) area. A total of 320 (52%) respondents consisted of adult males. The mean age of these respondents was 44 years old (s.d = 12.23), whom were mostly married (85%). The average household size was 4.74 persons (s.d=1.85), with an average number of earner of 1.58 (s.d=0.63) per households.

The majority (44%) of the respondents had secondary school education. About 36% reported to have had less than secondary education, while 20% indicated that they obtained higher than secondary education such as a diploma. The mean monthly household income for the sample was RM2,232.93 (s.d = 1668.61), with a median income of RM1,700. The mean income for this sample was significantly lower than that of the National average of about RM3,249 for Malaysia in general, and RM3,956 for urban areas in 2004 (Ninth Malaysia Plan, 2006). However, when assessed against the Poverty Line Income (PLI) of respective areas (i.e. Kuala Lumpur and Selangor), only 11% of the respondents fell below the PLI, and were thus categorized as poor households. Therefore, the majority of the respondents were consisted of low income group households.

Self-Rated Consumer Knowledge

Table 1 presents the respondents' own rating of their consumer knowledge. Almost two-third (61.7%) of the respondents rated their consumer knowledge as good, while 34.5% thought that their consumer knowledge was poor. Only a small percentage were reported at both extreme – i.e. 1.7% reported their consumer knowledge as "doing poorly" and 2.3% rated their consumer knowledge as very good. As the respondents might underor over-estimate their self-assessment on their consumer knowledge, the study cross-checked their assessments through a series of questions presented in the following paragraph.

TABLE 1 Self-Rated Consumer knowledge

How do you rate your consumer knowledge?	Frequency (n=615)	Percentage (%)
Poor	222	36.09
Good	393	63.90

Actual Status of Consumer Knowledge

The set of actual consumer knowledge assessed included consumer rights, responsibilities, policy and legislation, CPA, Tribunal of Consumer Claims and Tribunal of Homebuyer Claims. Table 2 summarizes the actual status of consumer knowledge of the respondents. In general, majority of the respondents were not ignorant of their rights and responsibilities. In specific, almost two-third (i.e. 64.7%) reported that they know their rights as consumers. The remaining percentage (35.3%) of the respondents claimed they did not know

their rights as consumers. Interestingly, some who might have claimed to know their rights as consumers did not know what their responsibilities were. Compared to about two-thirdof the respondents who knew their rights as consumers, only slightly more than half (57.4%) indicated that they knew their responsibilities as a consumer, while 42.5% indicated otherwise. This finding is consistent with the comment by Alhabeeb, Mammen and Gary (1997) that consumers tend to fight for their rights more than to accept to their responsibilities.

Consumers must perform their responsibilities to secure their rights. For example, consumers have the right to redress or are entitled to swift and fair remedies for wrongs that are done. However, consumers have the responsibility to seek redress or should pursue remedies when products do not meet expectation (Lowe *et al.*, 2008). As such, there is still much to be done by consumer educators to ensure that the consumers understand that knowing their rights alone will not help them much unless they do something to claim it.

Good consumers must also be aware of the public policies and regulations that affect them. This is especially important as they have the right to have their interest be considered in the formulation of laws and policies (Lowe *et al.*, 2008). Unfortunately, about 71% of the respondents did not know about Consumer Policy in Malaysia, while 25% others reported that they had heard of it but did not know much about it. Of those who claimed to know about it were actually given answers that were contrary

TABLE 2
Respondents' actual status of their consumer knowledge

	Respondents' knowledge			
Items: DO YOU KNOW?	TOTAL (n=617)	No, I don't know	I've heard of it but don't know much	I know
	Freq (%)	Freq (%)	Freq (%)	Freq (%)
Your rights as a consumer?	617	218 (35.3)	NA	399 (64.7)
Your responsibilities as a consumer	616	262 (42.5)	NA	354 (57.4)
Consumer Policy in Malaysia	617	436(70.7))	166 (24.9)	15 (2.4)*
Legislations that protect consumer?	614	376 (60.9)	166 (26.9)	72 (11.7)
Consumer Protection Act 1999	616	411 (66.6)	178 (28.8)	27 (4.4)
Tribunal of Consumer Claims	616	395 (64.0)	167 (27.1)	54 (8.8)
Tribunal of Homebuyer Claims	616	464 (75.2)	123 (20.0)	29 (4.7)

Note: * Out of 15 respondents who stated they knew about consumer policy in Malaysia, NONE really understood what such policy is. Thus, the respondents provided odd answers such as "Buying wisely" and "sort of some agencies".

to their claims.

Similarly, only a small percentage (11.7%) of the respondents knew about the legislations that protect consumers in Malaysia. More than half (60.9%) of the respondents reported that they were not aware of such legislation, while 27% indicated that they had heard of such legislation but not knowing much about them. Specific to Consumer Protection Act 1999 (CPA), about 2/3 of the respondents indicated that they were not aware of the Act (66.7%), while 28.8% claimed that they had heard of it but did not know much about it. This is very unfortunate since CPA was enacted more than 10 years ago and that despite rigorous efforts to familiarise consumers with the CPA, it is yet to be known widely among consumers. Even more unfortunate is that consumer educators cannot even start to discuss about legal literacy when most consumers do not even know the existence of such laws that could

protect them when they are taken advantage of in the market.

The Tribunal of Consumer Claims was established under the provision of Consumer Protection Act 1999 under the jurisdiction of the Ministry of Domestic trade, Cooperative and Consumerism. The Tribunal for Homebuyer Claims, on the other hand, was established under the Housing Development (Control and Licensing) Act 1966, and amended in 2002 under the jurisdiction of the Ministry of Housing and Local Government. The study indicated that slightly above 75% and 64% of the respondents did not know about the Tribunal for Homebuyer Claims and Tribunal of Consumer Claims, respectively. Meanwhile, a moderate percentage (between 20% and 27%) of the respondents only had a slight idea about the respective tribunals and a very small percentage of the respondents actually knew about such tribunals. Both tribunals provide cheaper, speedy and

effective redress channels for consumers who encounter problems with goods and services they purchased in the market. Hence, it is vital for the government bodies and consumer educators to ensure that information about both tribunals be widely disseminated to consumers. In addition, such tribunals must be established in areas where it can be easily accessed by both urban and rural consumers alike. For the purpose of this article, consumer knowledge on their rights, responsibilities and consumer-related legislations will be further elaborated in the subsequent paragraph.

Knowledge about Consumer Rights

Those who claimed to know their rights as consumers were asked to list all the consumer rights that they knew about and these are summarized in Table 3. The study found that the highest percentage (52.1%) of the respondents knew about the consumer right to redress, followed by the consumer right to basic needs (50.9%) and the right to information (50.4%) and the right to choose

(47.7%). However, only one-fourth (25.3%) indicated that they knew about the right to safety, followed by the right to be heard/represented (16.6%), the right to consumer education (14.4%) and the right to healthy environment (14.4%).

Knowledge about Consumer Responsibilities

Consumers who indicated that they knew consumer responsibilities were required to list out such responsibilities. Unfortunately, 70 out of 399 respondents who claimed to know what the consumer responsibilities were failed to provide proper answers. Table 4 presents all the consumer responsibilities reported by the respondents who indicated that they knew what their responsibilities are as consumers. The study found that the respondents' responses on consumer responsibilities could be categorized into three groups, namely, responsibilities associated with before the purchase, after the purchase and other activities. For the "before purchase" activities, a total

TABLE 3
List of consumer rights reported by respondents

Consumer Rights	Frequency (n=399)*	Percentage (%)†
1. The rights to basic needs	203	50.9
2. The right to safety	101	25.3
3. The right to information	201	50.4
4. The right to choose	190	47.7
5. The right to be heard/representation	66	16.6
6. The right to redress	207	52.1
7. The right to consumer education	57	14.4
8. The right to healthy environment	39	9.8

Note: * For those who said that they knew what the consumer rights are. †The respondents were allowed to list all the consumer rights that they knew about. Hence, a higher percentage indicates more respondents know about that particular right.

of 62 respondents (18.8%) listed that the consumers were responsible in preparing budgets as a way to control their purchases. About 17.9% suggested that the consumers were responsible in exercising care and diligence in their selection of goods and services in the market to avoid losses and so on. Besides that, 7.6% listed that consumers should equip oneself with relevant knowledge and becoming street-

smart when buying things such as by searching for information, being aware of the current market price of product one wanted to buy, etc. The remaining 3.34% generally stated that consumers were responsible to make use of their dollar vote or power in the market.

For the "after purchase" activities, the respondents listed the following as consumer responsibilities: making complaints and/

TABLE 4
List of consumers' responsibilities reported by the respondents

Consumers' Responsibility	Frequency (n=329*)	Percentage
Before purchase:		
Prepare budget so that they are in control of what they buy (e.g. prepare a budget; consider if you can afford it)	62	18.84
Exercise care and intelligence in their selection such as through price comparison and avoidance of counterfeit goods etc (e.g. consumer must compare price; get value for money product)	59	17.93
Equipping oneself with relevant knowledge and becoming street smart when buying things such as by searching for information, being aware of the current market price of product one wants to buy etc (e.g. study the product; read labels and learn about nutritional content; ensure the product you buy is safe and in good condition)	25	7.60
Make use of consumer's dollar vote or power in the market (e.g. refuse to buy if it is expensive; boycott; buy Malaysians)	11	3.34
After purchase:		
Making complaints and /or reports to relevant authorities such as about price of goods (especially for controlled items), defective goods or frauds (e.g. complaints to retailers when the product is not working; make police report when becomes a victim of fraud)	126	38.30
Ensuring their problems/ issues are resolved (e.g. make sure defective product is replaced or exchanged; return defective products to sellers)	16	4.86
Others:		
Knowing and asserting consumer rights (e.g. must know about consumer rights to avoid being deceived)	16	4.86
Being responsible citizen (e.g. take good care or public facilities; tenants must take care of their rented house; participate in consumer campaign)	9	2.74
Sensitive to current events affecting consumers (e.g. aware about current development	5	1.52

Note: * 25 respondents who claimed to know what consumer responsibilities are had either refused to state what they thought of consumer responsibilities or that they provided unrelated statement, such as (verbatim) "the consumers are always right."

or reports to relevant authorities when things did not seem right in the market such as the price of goods especially for controlled items, defective goods or fraud were listed by the respondents (38.3%), and to ensure their problems/issues were resolved (4.86%). Other responses listed by the respondents regarding consumer responsibilities are: "knowing and asserting consumer rights" (4.9%); "being responsible citizens" (2.7%); and "sensitive to current events affecting consumers" (1.5%).

Knowledge about Consumer Protection Legislations

About 11.7% of the respondents who stated that they knew about such legislations were asked to list down all the consumer protection legislations that they knew of. Unfortunately, 6 respondents declined to provide any answers. Table 5 presents the legislations listed by some of the respondents. The study indicated that the most well-known laws to the respondents

were Price Control Act 1946 (53%), followed by Consumer Protection Act 1999 (30.3%). A small proportion (ranging from 1.5% to 6%) of the respondents who reported they knew about consumer protection listed the following legislations: Control of Supplies Act 1961 (Revised 1973), Food Act 1983, Trade Description Act 1972, Housing Developer Act (Control and License), 1966 (Reviewed 1973, 1972). About 7.5% of the respondents provided vague answers such as quoting Control Act, which was not identifiable.

Factors Associated with the Probability of Self-rated Consumer Knowledge

The multivariate logit result on self-rated consumer knowledge is shown in Table 6. The -2Log Likelihood (-2LL) value for the full model of the logit regression is 751.326. The Omnibus Test of Model Coefficient indicated that the logit regression model fit the data at $\alpha = 0.001$. This means that the independent variable significantly

TABLE 5 A list of consumer legislations stated by the respondents

List of laws and regulations	Frequency (n=66)	Percentage† (%)
Definite answers		
Price Control Act 1946	35	53.0
Consumer Protection 1999	20	30.3
Supplies Act 1961 (Revised 1973)	4	6.1
Food Act 1983	3	4.5
Trade Description Act 1972	3	4.5
Housing Developer Act (Control and License), 1966 (Reviewed 1973, 1972)	1	1.5
Vague answer (e.g. Control Act, Standard)	5	7.5

Note: *Six respondents who stated that they knew about the consumer-related laws and regulations refused to provide answers. †The respondents were allowed to list all the consumer protection legislations that they knew about. Hence, a higher percentage indicates that more respondents know about that particular right.

improves the ability to predict having good self-rated consumer knowledge ($\chi 2 = 46.927$, df = 16, N=617, p < 0.0001). The Hosmer and Lemeshow Test with chisquare value of 10.31 was not significant ($\alpha = 0.244$). Therefore, the model does not

differ significantly from the observed data. In other words, the model is predicting the real-world data fairly well.

The classification table indicated that overall, 68.63% of the participants were predicted correctly. The independent

TABLE 6
Multivariate Logit results on the self-rated consumer knowledge

Variables	β	Std Error	Wald	Sig level	Exp (β)
Respondent's Actual knowledge on the following:					
Consumer rights (Ref: Don't know) Know about it	0.61	0.21	8.83	0.00	1.85
Consumer responsibilities (Ref: Don't know) Know about it	0.41	0.20	4.29	0.04	1.50
Consumer legislation (Ref: Don't know) Know about it	0.01	0.31	0.00	0.97	1.01
Consumer protection Act 1999(Ref: Don't know) Know about it	1.51	0.62	5.96	0.01	4.51
Tribunal of Consumer Claims (Ref: Don't know) Know about it	-0.44	0.41	1.14	0.29	0.65
Tribunal of Homebuyers Claims (Ref: Don't know) Know about it	-0.01	0.52	0.00	0.98	0.99
Respondent's education (Ref: higher than secondary school) Less than secondary school Secondary school	0.41 0.35	0.30 0.25	1.81 1.91	0.18 0.17	1.50 1.42
Household income Quintile (Ref: Fifth 20 percent) First 20 percent Second 20 percent Third 20 percent Fourth 20 percent	-1.05 -0.49 -0.64 -0.42	0.31 0.31 0.31 0.30	11.51 2.50 4.32 1.91	0.00 0.11 0.04 0.17	0.35 0.61 0.53 0.66
Location (Ref: metropolitan) Non-metropolitan	-0.14	0.18	0.57	0.45	0.87
Age of respondent	0.00	0.01	0.03	0.87	1.00
Gender (Ref: female) Male	-0.21	0.19	1.23	0.27	0.81
Marital status (Ref: married) Not married	-0.17	0.25	0.47	0.49	0.84
Intercept	0.50	0.67	0.55	0.46	1.64
-2 Log Likelihood	751.326				

Note: R-squared =0.074 (Cox and Snell) 0.101 (Negelkerke)

Model χ^2 (16) = 46.927, p < 0.0001

variables were better at predicting those who would rate their consumer knowledge as good (90.33%) compared to those who would rate their consumer knowledge as bad (29.68).

Generally, however, the value of the R-square is fairly low. Appoximately 7% and 10% of the variations in rating one's consumer knowledge as good could be predicted by the independent variables.

Table 6 indicates that the odd for those who knew about the consumer rights to rate themselves as having good consumer knowledge was 1.85 times as high as the odd for those who did not know about consumer rights. Similarly, the odd for those who knew about the consumer responsibilities to rate themselves as having good consumer knowledge was 1.5 times as high as the odd for those who did not know about consumer responsibilities. As for Consumer Protection Act 1999 (CPA), the odd for those who knew about CPA to rate themselves as having good consumer knowledge was 4.51 times as high as the odd for those who did not know about CPA.

The negative coefficient showed that the odd for those who were in the lowest 20% income quintile to not rating their consumer knowledge as good were 0.35 time as high as the odd for those who were in the top 20% income quintile. Similarly, the odd for those who were in the middle 20% income quintile to not rating their consumer knowledge as good was 0.53 time as high as the odd for those who were in the top 20% income quintile.

CONCLUSION

Consumer rights and responsibilities can be used to protect consumers in their pursuit of satisfaction in the market. However, consumers bear the sole responsibility of knowing and utilizing their rights as well as knowing, accepting and honouring their responsibilities. In short, consumers must ensure that they have sufficient knowledge and skills to enable them to protect and advocate for themselves in the market. The study generally found that majority of the respondents rated their consumer knowledge as good. The odd of rating one's consumer knowledge as good was in fact higher among those who knew their consumer rights, consumer responsibilities, Consumer Protection Act and those who were in the top 20% income quintile.

Even though good self-rating of consumer knowledge may provide an indication that consumers are generally more well-educated in the consumption aspects and that consumer education campaign and programmes were effectively done, it may not objectively reflect the real picture of the level of consumer knowledge (much less consumer competency) among Malaysians. This is because knowledge was assessed subjectively via their perception. Hence, one may under- or over-estimate such assessment. In other words, one may think that he or she knows a lot, while in fact what one knows is only superficial or that one's consumer knowledge is rather shallow. This is especially proven in this study. As such, there exists a gap between self-rated and actual consumer knowledge

among Malaysians.

In addition, while the majority of the consumers reported to have known their rights and responsibilities as consumers, most of them still do not possess higher level of consumer knowledge such as redress channel and consumer protection legislations. In short, Malaysian consumers generally possess a very basic knowledge related to consumers but fail almost miserably on a relatively higher level of knowledge such as seeking redress. This is very unfortunate as the full benefits of the existing legislations can only be achieved when consumers are not only aware but also use their knowledge of the laws and regulations designed to protect their rights.

Therefore, the implications of such findings are two-folds. First, the government should adopt a consumer policy that does not only concern itself about ensuring protection by way of formulating consumer rules and regulations. Instead, it should be complemented with a cooperative effort by the government and consumer groups in disseminating consumer information and knowledge so that consumers are aware of the power at their hands in the market. Secondly, a specific philosophy on consumer education should be inscribed in the formulated consumer policy. That is, the content of a consumer educational program must be designed in such a way that it follows different aims of achieving a set of "ladder of consumer competency" which shares a similar spirit of the typology of consumer education, as explained by McGreagor (2005), over a period of time. As such, at the very early state, the government may focus on providing basic knowledge or specifically teaching "consumer survival skills in the market." The content of the education programme at this level should emphasise mostly on educating consumers about their rights, responsibilities and redress any channel available. Later, as the consumer society progresses, consumer education programme should focus not only on "consumer-self" but should push for the realization of the impacts of their consumption on others such as on the environment and social justice. In short, the general aim of the national consumer education content is to push for a higher consumer competency level among its consumer society. Hence, the government and other relevant parties will be able to assess their performance in terms of achieving certain level of consumer competency in a period of time. Consequently, it helps to inform the policy makers and ensure that that they are on the right track in terms of consumer protection.

Even though the model fit the data, the R-squared which measured the associations between the predictors and the outcome (i.e. reporting one's consumer knowledge as good) is not very strong, and this indicates weaknesses in the model. Therefore, it is suggested that future research should include other variables such as exposure to consumer education and participation in consumer interest groups such as consumer association.

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REFERENCES

- Alhabeeb, M. J., Mammen, S., & Gary, S. (1997). Assessment of consumers' knowledge of selected laws and regulations. *The Journal of Consumer Education*, 15, 36-42.
- American Association of Retired Persons (AARP). (1994). The behaviour of older consumers: *A report on the 1993 Survey of Older Consumer Behaviour*. Washington, DC: AARP.
- Legal Research Board. (2005). Consumer Protection Act 1999 (Act 599) and Regulations. Petaling Jaya: International Law Book Services.
- Fernandez, J. M. (2004). Contested space?: FOMCA's engagement with the government, Selangor, Malaysia: Federation of Malaysian Consumers Association (FOMCA).
- Garman, E. T. (2003). *Consumer Economic Issues in America* (8th Ed.). Mason, OH: Thomson Custom Publishing.
- Haron, S. A., & Paim, L. (2008). How mature consumers handle unpleasant experience in the market? *Malaysian Journal of Consumer and Family Economics*, 11, 85-94.
- Hazurainah, Y. (2001, December). Usah Keliru Ketika Membuat Pilihan. *Mingguan Wanita*, pp. 12-13.
- Hogg, M. K., Howells, G., & Millman, D. (2007). Consumers in the knowledge-based economy (KBE): What creates and/or constitute consumer vulnerability in KBE. *Journal of Consumer Policy*, 30, 151-158.

- Kaplan, S. (1991). Beyond rationality: Clarity-based decision making. In T. Garling & G. Evans (Eds.), *Environment, Cognition and Action* (pp. 171-190). New York: Oxford University Press.
- Kerney, A. R., & DeYoung, R. (1995). A knowledge-based interventions for promoting carpooling. Environment and Behaviors, 27, 650-681.
- Koh, T. S., & Loke, L. L. (1977). Consumer education: A comprehension reader for Malaysian secondary schools. Penang, Malaysia: Consumer Association of Penang.
- Lowe, R. E., Malouf, C. A., & Jacobson, A. R. (2008).

 Consumer Education and Economics (6th Ed.).

 Glenco, CA.: MacGraw Hill.
- McGregor, S. (2005). Sustainable consumer empowerment through critical consumer education: A typology of consumer education approaches. *International Journal of Consumer Studies*, 29(5), 437-447.
- Miller, R. L., & Stafford, A. D. (2001). *Economic Issues for consumers* (9th Edition). Belmont, CA: Wadsworth/Thompson Learning.
- Muhamad A. A. M., & Haron, S. A. (2001). Consumer Redress through the Tribunal for Consumer Claims. *Jurnal Pengguna Malaysia (Malaysian Journal of Consumer)*, 4, 47-72.
- Ministry of Domestic Trade and Consumer Affairs. (1999). Retrieved on May 18, 2009, from http://www.kpdnhep.gov.my/index.php?option=com_content&task=view&id=352&Itemid=372.
- National House Buyers Association. (2009). Retrieved on May 18, 2009 from http://hba.org.my/laws/tribunal_reg/2002/2002-trib-reg.htm.
- Sakina Shaik Ahmad Yusoff. (2007). Siri Perkembangan Undang-undang Malaysia Jilid 6: Undang-undang komersial dan pengguna. Kuala Lumpur: Dewan Bahasa dan Pustaka.

