

Psychographic and Demographic Profiles of Credit Card and Non-Credit Cardholders in Urban Malaysia

Indar Kaur d/o Dan Singh
Md. Nor Othman

ABSTRACT

The study attempts to delineate the demographic and lifestyle characteristics of male credit card holders and non-holders in Malaysia. The two groups are compared using seven demographic and eight lifestyle variables. The results indicate that credit card holders tend to be slightly older, married with children, have higher level of education and income, and are either professionals or work in a managerial capacity. The lifestyle profiles indicate that card holders tend to be low in their disbelief in credit, more self confident, socially active, risk oriented and less price conscious in their purchase behaviour.

ABSTRAK

Kajian ini bertujuan mengenal pasti perbezaan di antara ciri-ciri demografi dan gaya hidup pemegang kad kredit lelaki dengan yang bukan pemegang kad kredit. Perbandingan dibuat melalui tujuh variabel demografi dan lapan variabel gaya hidup. Keputusan kajian menunjukkan bahawa pemegang kad kredit umumnya adalah agak lebih berumur, sudah berkahwin dengan mempunyai anak, mempunyai taraf pendidikan dan pendapatan yang lebih tinggi dan bekerja dalam bidang profesional, pengurusan dan perniagaan. Profil gaya hidup mendapati pemegang kad kredit lebih mempercayai pembelian secara kredit, lebih mempunyai keyakinan diri, agak aktif dalam bidang sosial, agak berorientasikan risiko dan kurang kepekaan harga di dalam kelakuan pembelian mereka.

INTRODUCTION

Credit card is fast becoming an important medium of exchange in Malaysia. It was first introduced into the country in 1973 (Lee 1985). Within a decade, there were about 120,000 credit card holders (Ngam 1983). This figure had more than doubled to about 280,000 in 1989 (New Straits Times 1989). Recent years saw a proliferation of credit card companies entering the Malaysian market (Foo 1991). The stiff competition posed by new entrants is bound to

make the credit card business tougher in the coming years. Competition is based mainly on additional features and facilities the card issuers are willing to offer to their customers. The success of the credit card business would require effective marketing strategies, which obviously would depend on an indepth knowledge of the consumer and buyer motivation behind credit card purchases.

Most of the studies on the lifestyles of credit card holders had been carried out in the United States. It would be interesting to know if differences exist in the lifestyle profiles of credit card holders and non-holders in a non-Western society such as Malaysia. Based on the results of the study, appropriate marketing strategies could be designed to reach and service the market more effectively.

The purpose of this study is to provide an insight into the consumer profile of credit card holders in Malaysia, along their demographic and lifestyle characteristics. It is hoped that the study will be able to discriminate between credit card holders and non-holders based on these characteristics¹.

STUDY BACKGROUND

Both the credit card² and lifestyle research are relatively new areas that have gained wide acceptance and increasing importance in recent years. Lifestyle has been recognised as an important determinant of consumer behaviour (Assael 1992). Recognising the amount of information it can provide when designing marketing strategies, more and more marketers are now relying on lifestyle research to assist them in making better marketing decisions.

Numerous marketing research studies have been conducted on specific products/services in the U.S. Examples of the products studied include computers, automobiles, fast foods, beer and soaps (see for examples Cook and Mindak 1984, Evans 1959, Hlavacek and Ames 1986). Credit card has also been studied extensively in the U.S. Research on credit card in the past mainly examined the demographic and lifestyle characteristics of cardholders vis-a-vis non-holders.

DEMOGRAPHIC CHARACTERISTICS

In Malaysia, most credit card companies require card applicants to have a monthly income of at least RM2,000 to be eligible for credit card membership (see Baidura 1993). As such, one would expect cardholders in Malaysia to come from the middle- to high-income groups. They would also be expected to be older, have higher than average education level, and hold a rather

respectable position in their organisations. As one gets older, his/her income tends to increase due to seniority or working experience. Malaysians earning more than RM2,000 a month are in general more educated than those earning less than RM2,000 monthly.

Similar characteristics have been found in earlier studies in the U.S. U.S. cardholders generally have higher income when compared with non-holders (Mathews and Slocum 1969; Slocum and Mathews 1970; Plummer 1971; Awh and Waters 1974; Garcia 1980; Kinsey 1982). For example, Plummer (1971), in the first lifestyle research on credit card holders, found that the proportion of credit card holders was higher among the higher income group as compared to the lower income group.

Two studies, one by Plummer (1971) and another by Awh and Waters (1974), found that the holders of credit card tend to have higher education as compared to the non-holders. Cardholders are more likely to be professionals (Plummer 1971; Kinsey 1982). Both of these variables, education and occupation, are closely related to income.

With respect to age, Plummer (1971) and Awh and Waters (1974) found that card holders tend to be younger when compared with non-holders. Kinsey (1982), however, found that the probability of holding cards increased with age until age 50 and then declined.

LIFESTYLE CHARACTERISTICS

Numerous studies have found that there are some relationships between brands/products and consumer lifestyle (see Wells 1975; Wells and Tigert 1971; Ziff 1971). Since cardholders differ from nonholders in a number of demographic characteristics, one would expect the two groups to differ in some lifestyle characteristics. Previous research on cardholders have found that there are some relationships between ownership of credit card and a number of lifestyle variables. Among the lifestyle variables examined in previous research were attitude towards credit, attitude towards credit card, participation in social activities, achievement orientation, and appearance consciousness.

Past studies have found that credit card holders tended to have a favourable attitude towards credit and credit card as compared to non-holders (Mathews and Slocum 1969; Slocum and Mathews 1970; Awh and Waters 1974; Kinsey 1982). Mathews and Slocum (1969) and Slocum and Mathews (1970) found that card-holders have a favourable attitude towards the use of credit when purchasing. Awh and Waters (1974), on the other hand, found cardholders not only have a more positive attitude towards the use of credit when purchasing, they also have a positive attitude towards the use of credit card.

Previous studies also found that cardholders tend to be more socially active and achievement oriented than non-holders (Plummer 1971; Mathews and Slocum 1969). They also tend to be more appearance conscious and risk-oriented than non-holders (Plummer 1971).

Based on the above studies, the demographic profile of the credit card holder in the United States can be drawn, i.e., one having a higher income, a higher education, a professional, and relatively younger in age than non-holders. The lifestyle profile shows the cardholder to be socially active, risk-oriented person, who values appearance, and has a positive attitude towards credit and credit cards. The question of interest in this study is whether the above consumer profile is applicable in the Malaysian context, i.e., 'Is the Malaysian cardholder similar to his U.S. counterpart?' Does the profile of the Malaysian credit card holder, reflect a socially active, risk oriented person who is concerned with his appearance and is contemporary in outlook? Is he travel oriented, status conscious and interested in purchasing exclusive items?

This study proposes to identify the demographic and lifestyle profiles of Malaysian credit card holders versus that of non-holders and to see if it concurs with the findings of similar studies in the United States. The profiles would enable marketers to design more effective marketing strategies directed at a particular segment of the market.

RESEARCH METHODOLOGY

This section outlines the methodology employed in the study. The study was carried out by utilising the survey approach. This section provides a description of the sampling procedure, the design of the research instrument, and the data collection procedures.

SAMPLING PROCEDURE

This study was confined to the residents in the Kuala Lumpur/Petaling Jaya area having the following criteria: (a) males, (b) aged 21 and above, and (c) earning RM2,000 or more per month. These criteria were specified as discussions with credit card companies and banks revealed that most card issuers required applicants (i.e. the principal cardholders) to be at least 21 years old and have a monthly income of at least RM2,000 to be eligible for credit card membership (see Baidura 1993). It was also found that women cardholders by and large were supplementary cardholders, with their respective husbands being the principal cardholders. The principal cardholders are responsible to settle all the charges associated with the card.

The sample was chosen from five urban residential areas, i.e., Subang Jaya, Bangsar Park, Damansara Jaya, Damansara Utama, and Taman Tun Dr. Ismail. These areas were chosen as they represented the larger and better known areas of residence. Demographically, these five areas were felt to provide a better racial mix as well as a well spread range of houses (terrace, semi-detached, bungalows) reflecting different income ranges of the residents. In each of these areas, the sample was randomly selected. Only those who fulfilled the above three criteria were chosen as respondents. A screening question, on income and age, was used to identify eligible respondents.

RESEARCH INSTRUMENT AND DATA COLLECTION

The survey instrument was a nine page questionnaire. The questionnaire consisted of two sections. Section I was designed to measure the psychographic characteristics of the respondents. This section consisted of 49 activity, interest and opinion (AIO) statements on a seven-point Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Section II was designed to collect the demographic information of the respondents. This section also contained questions related to credit card ownership and frequency of usage.

Section I of the questionnaire was developed to measure certain salient lifestyle characteristics based on the findings of past research on credit cards. Among others, these covered respondent's involvement in social activities, entertainment, credit purchases, concern with appearance/fashion, price consciousness, involvement in social/voluntary organisations, risk orientation and their attitude towards credit and credit cards.

Items for the AIO statements utilised in the study were derived from several sources. These include items developed by Wells and Tigert (1971), Plummer (1971), Kinnear and Taylor (1976) and Awh and Waters (1974). In addition, several items were developed by the researchers. Some of the original statements were modified so as to be more reflective of the local situation. Ten items on credit card usage were taken from Plummer (1971) study. Several items were borrowed from the AIO library developed by Wells and Tigerts (1971). These consisted of items measuring fashion/appearance consciousness, self confidence and achievement orientation, and price consciousness. From Kinnear and Taylor's (1976) study, four items measuring risk orientation were taken. From Awh and Waters' (1974) study, items measuring attitude towards credit and attitude towards credit cards were adopted.

Some items were modified to reflect the local situation. As examples, four items from Plummer's (1971) study were modified. Item 'I do more things socially than most of my friends' was modified to 'I am involved in more social activities than most of my friends'. In the pretest, respondents had some difficulty understanding the original statement. Item 'I enjoy going

to concerts' was changed to 'I enjoy going to parties' to reflect a more local environment. Similarly, item 'I expect to be a top executive within the next 10 years' was changed to 'I expect to reach the highest point of my career within the next 10 years'. To be more specific, 'on TV' was added to Plummer's original item 'There is too much emphasis on sex today'.

After an examination and evaluation of the promotional material on credit cards produced by several credit card companies, eight new items were developed by the researchers. Examples of these items are:

- * I entertain (my friends, associates, etc.) quite frequently.
- * I prefer to buy quality goods even though they may be higher priced.
- * I like to purchase exclusive or branded items.
- * My social status is an important part of my life.

When designing the questionnaire, the items measuring the various constructs were placed randomly throughout Section I. It was felt that this would require more thought and seriousness from the respondents. Furthermore, a check on the consistency of the responses would provide an indication of the reliability of the responses.

Before the actual survey, a pilot test was conducted using ten respondents that had similar characteristics with the final sample. The final questionnaire was developed based on the feedback from this pilot test.

The actual survey was conducted over a four week period with the help of a number of research assistants. The self-administered drop-off method of data collection was employed. Research assistants were required to begin the interview with the first two questions of Section II to assess the eligibility of the selected respondents. Only those who met the sample criteria were given the questionnaire.

RESEARCH RESULTS

This section presents the findings of the survey. It begins with a description of the general characteristics of the sample. This is followed by a discussion on the demographic characteristics of card holders and non-holders. The result of the factor analysis is then presented. An analysis, using t-tests and discriminant analysis, of the demographic and lifestyle profiles of the two groups is then presented.

SAMPLE CHARACTERISTICS

From a total 350 questionnaires distributed, 250 responses were returned (a response rate of about 71 per cent). Since the questionnaires were distributed

personally by a team of research assistants, the high response rate was considered to be normal. Of these, nine questionnaires were not usable due to incomplete information. The data were analysed using a sample of 241 respondents. Of the 241 respondents, 156 (64.7 per cent) were card holders and 85 (35.3 per cent) non-holders. The sample was fairly representative of the racial composition of the population in the Kuala Lumpur/Petaling Jaya area. In terms of age, the sample ranged from 22 to 71 years old, with mean age at 39. Nearly half or 45.6 per cent of the respondents earned between RM2,001 - RM3,000 per month. In terms of marital status, the largest group fell into the married-with-children category, forming 64.3 per cent of the respondents.

As the sample was restricted to males earning above RM2,000 per month it was not surprising that most of the respondents were highly educated with nearly 70 per cent possessing at least a university qualification, and 16 per cent a diploma qualification.

In line with the income criteria for the sample, about 60 per cent of the respondents were either professionals or working in a managerial/administrative capacity. However, a substantial proportion, i.e., 11.2 per cent were found to be running their own business.

HOLDERS AND NON-HOLDERS OF CREDIT CARDS: A DEMOGRAPHIC COMPARISON

Using the Chi-square analysis, significant differences (at $p < .05$) were found between credit card holders and non-holders in five different demographic variables: personal monthly income, household monthly income, marital status, education, and occupation (see Table 1). Race was marginally significant at $p < 0.10$, while variable age was not significant.

TABLE 1: Demographic characteristics of cardholders and non-holders
(in percentage)*

Characteristics	Holder	Non-Holder
<u>Age</u>		
21 - 29	13.5 (53.8)	21.2 (46.2)
30 - 39	37.8 (62.1)	42.4 (37.9)
40 - 49	30.1 (62.1)	20.0 (37.9)
50 and above	8.6 (67.4)	16.5 (32.6)
Mean Age	40	37.6

X^2 not significant

(Continued)

Characteristics	Holder	Non-Holder
<u>Personal Monthly Income</u>		
RM2001 - RM3000	32.7 (46.4)	69.4 (53.6)
RM3001 - RM4000	33.3 (73.2)	22.4 (26.8)
RM4001 - RM5000	16.0 (83.3)	5.9 (16.7)
RM5001 and above	17.9 (93.3)	2.4 (6.7)
X ² significant at p < .05		
<u>Household Monthly Income</u>		
RM2001 - RM3000	17.3 (44.3)	40.0 (55.7)
RM3001 - RM4000	27.6 (58.1)	36.5 (41.9)
RM4001 - RM5000	21.2 (70.2)	16.5 (29.8)
RM5001 and above	34.0 (89.8)	7.1 (10.2)
X ² significant at p < .05		
<u>Marital Status</u>		
Single	17.9 (49.1)	34.1 (50.9)
Married without children	10.3 (55.2)	15.3 (44.8)
Married with children	71.8 (72.3)	50.6 (27.7)
X ² significant at p < .05		
<u>Race</u>		
Malay	35.9 (58.3)	47.1 (41.7)
Chinese	41.0 (71.4)	30.6 (28.6)
Indian	16.0 (58.1)	21.1 (41.9)
Others	5.0 (90.9)	1.2 (9.1)
X ² marginally significant at p < .10		

(continued)

Characteristics	Holder	Non-Holder
<u>Education</u>		
Low	11.5 (78.3)	5.9 (21.7)
Middle	12.8 (40.8)	34.1 (59.2)
High	75.6 (69.8)	60.0 (30.2)
X^2 significant at $p < .05$		
<u>Occupation</u>		
Professional	32.1 (68.5)	27.1 (31.5)
Technical	7.1 (47.8)	14.1 (52.2)
Managerial/Administrative	35.3 (77.5)	18.8 (22.5)
Sales/Marketing	6.4 (47.6)	12.9 (52.4)
Supervisory	1.3 (33.3)	4.7 (66.7)
Teacher/Lecturer	1.3 (20.0)	9.4 (80.0)
Own Business	14.1 (81.5)	5.9 (18.5)
Others	2.6 (40.0)	7.1 (60.0)
X^2 significant at $p < .05$		

Notes: * Figures in parentheses are to be read horizontally.

As expected, ownership of credit card was considerably greater among those with higher income (both in terms of personal or household monthly income). Credit card holders also tended to be higher amongst those who were married-with-children as compared to single or married-without-children groups. Credit card holders also tended to be highly educated, and worked in a professional or managerial capacity. The tendency of Chinese to hold a credit card was also found to be higher than that of the Malays or Indians. The current study, thus, confirmed the findings of earlier studies with respect to income, education, and occupation (see Plummer 1971, Awh and Waters 1974, Kinsey 1982).

It was also found that credit card holders, in general, possessed more than one card. The four most popular cards were Visa (68.6 per cent), American Express (50.0 per cent), MasterCard (39.1 per cent), and Diners (14.7 per cent). Only 1.3 per cent of the respondents owned cards other than these. The study also found that most of the respondents were light users (i.e., using the card less than three times in an average month) or average users (i.e., using the card between three to nine times in an average month) of the cards. Only 22.5 per cent of the respondents used the card more than 10

times in an average month. About one-third of the respondents used the card less than three times in an average month.

LIFESTYLE DIMENSIONS

Factor analysis was performed on the 49 lifestyle statements to identify the underlying dimensions measured by the statements. The principal components analysis extracted 13 factors with eigenvalues of 1.0 and above. The total variance explained was 62.7 per cent. As one of the goals of factor analysis is to represent relationship among sets of variables parsimoniously, it was felt that the 13 factors initially extracted were too large to be useful. Using the scree plot, it was determined that eight factors would be sufficient to adequately represent the data (Norusis 1985; Hair et al. 1992). The plot showed a break between the steep slope of the earlier factors and the gradual trailing off of the rest of the factors at about the eighth factor. The eight factors accounted for 50.9 per cent of the total variance.

To obtain more interpretable factors, the data were rotated using the orthogonal (varimax) criterion. Only items with factor loading of 0.35 and above were included in the subsequent analysis. Table 2 presents a summary of the results of the varimax-rotated factor analysis.

TABLE 2. Factor loadings for lifestyle items

Item/Factor	Loadings
<u>Factor 1: Credit Disbelief</u>	
Credit/charge cards should be used only in case of an emergency	0.77
Credit should be used only in case of an emergency	0.73
I dislike all credit/charge cards	0.65
To buy anything (other than a house or car) on credit is unwise	0.64
Credit/charge cards are safe and risk free	-0.61
A person should not buy unless he has the cash	0.58
I buy many things with a credit/charge card	-0.58
Credit buying is good because it allows present enjoyment rather than future enjoyment	-0.55
Credit/charge cards provide a needed service	-0.51
<u>Factor 2: Swinger/Achievement Oriented</u>	
I like to think of myself as a bit of a swinger	0.65
I usually have one or two outfits of the latest style	0.61

(continued)

Item/Factor	Loadings
I enjoy going to parties	0.60
I like to stick to traditional ways of doing things	-0.59
I have some old fashioned tastes and habits	-0.55
My greatest achievements are ahead of me	0.48
I stay home most evenings	-0.46
I expect to reach the highest point of my career within the next 10 years	0.40
<u>Factor 3: Appearance Conscious</u>	
I like to purchase exclusive or branded items	0.66
An important part of my life and activities is dressing smartly	0.66
I am very concerned with my appearance	0.63
I prefer to lead a glamorous life	0.60
My social status is an important part of my life	0.51
When I must choose between the two, I usually dress for fashion rather than comfort	0.51
I shop a lot for specials	0.40
<u>Factor 4: Self-Confident</u>	
I think I have more self confidence than most people	0.77
I think I have a lot of personal ability	0.74
I like to be considered a leader	0.67
I am more independent than most people	0.65
<u>Factor 5: Conservative Outlook</u>	
Investing in the stock market is too risky	0.61
Debt is bad	0.59
A woman's place is in the home	0.57
There is too much emphasis on sex on TV today	0.46
Movies should be censored	0.43
Young people have too many privileges these days	0.43

(continued)

Item/Factor	Loadings
<u>Factor 6: Socially Active</u>	
I am an active member of more than one social or voluntary organisation	0.69
I am often invited to social functions	0.62
I am involved in more social activities than most of my friends	0.60
I entertain (my friends, associates, etc.) quite frequently	0.57
<u>Factor 7: Risk Oriented/Innovative</u>	
I like stimulation and changes	0.72
I often try new and different things	0.65
Taking chances can be fun	0.57
I prefer to buy quality goods even though they may be higher priced	0.52
<u>Factor 8: Price Conscious/Bargain Shopper</u>	
I fear the consequences of overspending with a credit/charge card	0.62
A person can save a lot by shopping around for bargains	0.60
I often compare prices before purchasing	0.37
I usually watch the advertisements for announcements of sales	0.38

Notes : * Only factor loadings greater than 0.35 are shown

When analysing the items in the factors, some interpretable dimensions can be identified (see again Table 2). Factor 1, labelled “credit disbelief”, clearly typifies a negative attitude towards credit in general and credit cards in particular. Factor 2, named the “swinger/achievement oriented”, portrays those who enjoy parties, are more contemporary in outlook and achievement oriented. The appearance conscious (Factor 3) shows an orientation towards attire, appearance and the purchase of exclusive or branded items as a sign of social status. Factor 4, labelled the “self confident”, reflects those who project self confidence and are likely to display leadership characteristics.

Factor 5 depicts consumers who are more conservative or traditional in outlook: while Factor 6, the “socially active”, portrays those with an orientation towards involvement in social organisations and functions. The “risk oriented/innovative” individual (Factor 7) enjoys trying new things and taking chances, while the “price conscious/bargain shopper” (Factor 8) pays close attention to prices and special sales to benefit from bargain purchases.

The component items of each factor were tested for internal consistency reliability using Cronbach’s coefficient alpha. Overall, the alpha scores ranged

from 0.53 to 0.83 (see Table 3). According to Nunnally (1978), the values were quite acceptable in an exploratory research.

TABLE 3. Lifestyle Dimensions and internal reliability coefficients

Factor	Lifestyle Dimension	Number of Items	Alpha Coefficient
1	Credit Disbelief	9	0.83
2	Swinger/Achievement Oriented	8	0.78
3	Appearance Conscious	7	0.75
4	Self-Confident	4	0.66
5	Conservative Outlook	6	0.67
6	Socially Active	4	0.68
7	Risk Oriented/Innovative	4	0.73
8	Price Conscious/Bargain Shopper	4	0.53

An analysis of the lifestyle characteristics of credit card holders and non-holders along the eight dimensions portrayed by the survey data was carried out through a comparison of the mean values for the two groups using t-tests. Table 4 provides the summary results of the analysis. The differences in group means were statistically significant in five out of the eight lifestyle dimensions. The dimensions were credit disbelief, self confident, socially active, risk oriented/innovative, and price conscious. No difference was found between the two groups in swinger/achievement oriented, appearance conscious, and conservative outlook dimensions.

TABLE 4. Group mean scores for lifestyle dimensions of credit card holders and non-holders*

	Card Holder	Non-Holder	Sig.**
Credit Disbelief	32.13	44.04	.00
Swinger/Achievement Oriented	32.62	32.94	.79
Appearance Conscious	29.59	28.91	.50
Self Confident	26.23	24.89	.01
Conservative Outlook	25.71	26.58	.36
Socially Active	16.76	14.96	.01
Risk Oriented/Innovative	19.74	18.44	.04
Price Conscious/Bargain Shopper	18.79	20.19	.01

Notes: *Higher scores represent greater agreement with the attributes.

**Level of significance using t-test.

From the table, a profile of the credit card holders and non-holders can be drawn up. Specifically, the credit card holders did not disbelieve in credit, but rather had a more positive attitude towards credit as well as credit cards. They tended to agree more than the non-holders about the positive attributes of credit and credit cards and disagree more strongly than non-holders with regard to the negative aspects of credit and credit cards.

Compared to the non-holders, credit card holders were more active socially, both in terms of attending and organising social functions and involvement in social organisations. Card holders were also more self confident and risk oriented/innovative relative to non-holders, and thus more innovative. However, cardholders were less price conscious in their purchasing behaviour. The non-holders, on the other hand, were credit disbelievers, having a more negative attitude towards credit and credit cards. They were less active socially, less innovative but more price conscious, i.e., placing more emphasis on bargain purchases.

There seemed to be no significant difference between card holders and non-holders in three dimensions: swinger/achievement oriented, appearance conscious and conservative outlook.

The profile of the Malaysian credit card holders do resemble the cardholders in the United States in some aspects, while there are also striking differences in certain psychographic dimensions among the two. In terms of attitude towards credit, the Malaysian profile does fit in with the findings of Awh and Waters (1974) and Kinsey (1982) that active card holders have a more positive attitude towards credit cards and credit. Similarly, the socially active, risk-oriented card holder matches Plummer's (1971) profile of the 'active suburban' who is more risk oriented. However, contrary to the findings in the U.S. (see Plummer 1971), Malaysia's credit card holders and non-holders did not differ in terms of appearance consciousness and conservative outlook. When compared to non-card holders Malaysia's cardholders also did not differ with respect to achievement orientation. In contrast, Mathew and Slocum (1969) found that the U.S. cardholders were more achievement oriented than the non-holders.

As compared to earlier findings, this study identified two new dimensions differentiating card holders and non-holders. The dimensions were self confidence and price consciousness. Cardholders tended to have more self-confident and less price conscious than non-holders.

In summary, the psychographic profile describes the Malaysian credit card holder as one who has a more favourable attitude towards credit and credit cards, has more self confident, more socially active, more innovative and more willing to take risks. He is not too price conscious, probably preferring the convenience of credit cards more than bargain purchases. These characteristics match with his higher income, higher education and higher social class status. This profile has important marketing implications,

especially in terms of designing advertising themes and message content directed at cardholders.

DISCRIMINANT ANALYSIS

As mentioned earlier, one of the primary objectives of this study was to identify variables that distinguish credit card holders and non-holders and to determine the degree of importance of these variables. While the test of significance of the differences between the mean values of the characteristics provides an initial insight into the differences between the two groups, it fails to recognise the interrelationships that may exist among variables. The linear discriminant analysis takes into consideration such interrelationships and also enables the researchers to examine all the variables simultaneously. It determines the weights of each variable in such a way that the linear combinations of all variables will best discriminate between credit card holders and non-holders.

The discriminant model consisted of fifteen variables, i.e., seven demographic variables and eight psychographic factors. The summary results of the discriminant analysis for this model are contained in Table 5. As can be noted from the table, the discriminant function correctly classified 79.25 per cent of the respondents into their actual groups. The group centroids (means) indicated a fairly high degree of separation. However, the eigenvalue, canonical correlation and Wilk's Lambda were only moderate.

TABLE 5. Results of discriminant analysis between cardholders and non-holders

Discriminant Function	Eigen-value	Canonical Correlation	Wilk's Lambda	Chi-Square Significance
1	0.6325	0.6224	0.6126	0.000
Standardised Discriminant Coefficient		Group centroid		
Variable	Coefficient	Holders	Non-Holders	
X1 Age	0.01506	-0.5846	1.07291	
X2 Personal Monthly Income	0.12191			
X3 Household Income	-0.69252			
X4 Marital Status	0.13970			

(continued)

Standardised Discriminant Coefficient		CONFUSION MATRIX		
Variable	Coefficient	Actual Group	Predicted Member	
			User	Non-User
X5 Race	-0.16953			
X6 Education	0.02470			
X7 Occupation	0.06785			
F1 Credit Disbelief	0.90051			
F2 Swinger/Ach. Orien.	-0.08105			
F3 Appearance Conscious	0.33656			
F4 Self Confident	-0.18228			
F5 Conservative	-0.15326			
F6 Socially active	-0.09702	Holder	78.2%	21.8%
F7 Risk Oriented	-0.04142	Non-Holder	18.8%	81.2%
F8 Price Conscious	-0.14999			
		Percentage correctly classified: 79.25		

The standardised discriminant coefficients have been used as indicators of the relative importance of the variables as discriminators (see Green, Tull and Albaum 1988). Based on this, the data showed credit disbelief to be the most important variable, followed by the household income variable. Of tertiary importance was appearance conscious, followed by self confident and the race variables, respectively.

A stepwise discriminant analysis was performed to provide an initial insight into the discriminating power of the variables. Table 6 shows the summary results of the stepwise discriminant analysis. Seven of the fifteen variables were included in the analysis, of which four were psychographic factors and three demographic variables. The first to enter the analysis was the psychographic variable credit disbelief, indicating the importance of attitude towards credit for credit card usage. This was followed by the household monthly income variable. The third to enter the analysis was appearance conscious although it was earlier found that there was no statistically significant difference among the cardholders and non-holders on this dimension. This was followed by the self-confident and price conscious dimensions respectively. Race and marital status were the other two demographic variables entered into the analysis. The eigenvalue, canonical correlation and Wilk's Lambda were all found to be moderate at about 0.6.

TABLE 6. Stepwise discriminant analysis: summary results

Step	Entered	Wilk's Lambda	Significance	Label
1	F1	0.71531	0.000	Credit Disbelief
2	X3	0.65671	0.000	Household Income
3	F3	0.64415	0.000	Appearance Conscious
4	F4	0.63700	0.000	Self Confident
5	F8	0.63098	0.000	Price Conscious
6	X5	0.62562	0.000	Race
7	X4	0.62164	0.000	Marital Status

Function	Eigenvalue	Canonical Correlation	Wilk's Lambda	Significance
1	0.6086	0.6151	0.6216	0.000

As can be noted from a comparison of Tables 5 and 6, the first four variables to be entered into the stepwise analysis were the same as the four most important variables ranked according to the standardised discriminant coefficient. The ranking of the other variables, however, differed under the two methods.

DISCUSSION

Lifestyle research is a relatively new area in Malaysia. However, it is fast gaining popularity (Ho 1988). This paper is one of the first few attempts to examine the lifestyle of a specific product. It can contribute to our understanding of men's lifestyle and its relationship to the usage of a specific product, viz credit card.

The study found that cardholders and non-holders are indeed different demographically and psychographically in a number of areas. Demographically, as income increases the incidence of holders of credit card increases. In terms of marital status, higher percentage of cardholders tends to come from the married-with-children group. When the education level is compared, greater percentage of cardholders comes from the high education group.

The study also found that professionals, managers and businessmen tend to own credit card more than the other occupational groups. However, the two groups, cardholders and non-holders, do not differ significantly in two demographic characteristics, namely age and race.

Psychographically, cardholders differ from non-holders in five out of eight dimensions identified. Cardholders tend to be low in their disbelief in credit as compared to non-holders. They are more self confident, socially active, risk oriented and less price conscious than non-holders of credit card. The results of the study have several marketing implications. The findings that cardholders are demographically different from non-holders can be used to assess and evaluate the size of existing and potential markets. Such information can also be used to identify the demographic segments at which marketing strategies should be directed. The study shows that the percentage of Malays and Indians holding credit card is still small. Ownership amongst singles is also low as compared to the married respondents. With increased affluence amongst Malaysians in recent years, credit card companies might want to increase their efforts to encourage these demographic groups to hold credit card.

A knowledge of the psychographic information is valuable to credit card businesses in designing promotion strategy. This information can help develop the most appropriate messages and the themes that should be directed at the existing as well as potential customers. The study shows that cardholders are socially active, risk oriented, innovative and not price conscious. They also believe in credit purchasing. These characteristics seem to support the current practice of credit card companies of encouraging mail order buying. A cursory observation of a number of recent brochures/sales pamphlets sent by credit card companies, such as American Express, MasterCard and Visa, showed that credit card companies promote new products through mail order. Most of the products were innovative products not yet available in the market. In the sales offer, customers can either make a single payment or make, in most cases, three instalment payments. This observation seems to mesh well with the findings of this study. Since credit holders are innovative, risk oriented and not price conscious the selling of innovative products through mail might be acceptable to credit card holders. They are also willing to buy in credit.

The existence of major differences between cardholders and non-holders implies that credit card promoters may have to consider the two groups as two different "markets" in which two distinct strategies should be pursued. Different promotional programmes need to be developed to encourage present cardholders to be more active in card usage and to attract non-holders to become cardholders. Insight obtained on their respective needs and lifestyles could be used to design better communication programmes to meet the objectives of marketing to these separate markets.

The findings that credit disbelief dimension is the most significant dimension in differentiating between credit card holders and non-holders also have major implications. The data suggest that non-holders usually disbelieve in credit while card holders tend to have a more favourable attitude towards credit and credit cards. In the short run, to attract non-holders, the credit card companies can emphasize on the convenience aspect of holding a credit card. A cardholder need not carry a large amount of money in their pocket. It is also a safe form of payment. In the long run, credit card companies must try to overcome customers' unfavourable attitudes and disbelief in credit. This can be done by outlining the advantages of buying in credit. Through buying in credit, a consumer can own a product without having to wait.

LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

Although the research results show important and interesting characteristics that distinguish cardholders from non-holders, the study has a number of limitations. These limitations should provide directions for future research. First, the sample consisted of only males. With increased education, more and more females have entered the job market. The market behaviour of female cardholders, as principal cardholders, rather than a supplementary cardholders, are expected to be different from their male counterparts. Female consumers have different product needs. Their lifestyle behaviours are known to be different from male consumers (see Assael 1992; Sales and Marketing Digest 1989). Future research needs to be done in order to understand the lifestyle characteristics of female cardholders and compare them with their male counterparts.

Second, the study was only confined to residents in and around the capital city of Kuala Lumpur. How generalisable is the results, is open to debate. However, researchers believe that regional differences do affect consumer behaviour (see Assael 1992; Md. Nor and Ong 1994; Advertising Age 1986). This study could be replicated using a larger sample and covering a broader area so that a more generalisable result could be obtained.

Third, only eight lifestyle dimensions were analysed in this study. It is possible that other psychographic variables might also be able to differentiate the two groups. Lifestyle characteristics that might differentiate between cardholders and non-holders include travel orientation, brand consciousness and conspicuous consumption. Future research can examine these characteristics.

Lastly, no comparison of lifestyles across ethnic groups was attempted in this study. Researchers have argued that cultural differences do contribute to lifestyle differences (Assael 1992; Md. Nor and Ong 1993; Md. Nor 1994).

To provide a better guide to marketers in a multi-racial country like Malaysia, future research needs to address this issue.

FOOTNOTES

¹In this paper, the terms "lifestyle" and "psychographics" have been used interchangeably (see Mowen 1993).

²For the purpose of this study, credit cards will incorporate both the charge cards and bank credit cards (see Foo 1991).

REFERENCES

- Advertising Age*. 1986 (June 16). Mapping Regional Marketing Differences. S-32.
- Assael, H. 1992. *Consumer Behavior and Marketing Action*. Boston, Massachusetts: PWS-Kent Publishing Co.
- Awh, R.Y. & Waters, D. 1974. A Discriminant Analysis of Economic, Demographic and Attitudinal Characteristics of Bank Charge Card Holders: A Case Study. *Journal of Finance* 29:973-980.
- Baidura, A. 1993 (March 29). Credit Card Holders More Restrained Now. *New Straits Times*, 16.
- Cook, V.J. & Mindak, W. 1984 (Spring). A Search for Constants: The 'Heavy User' Revisited! *Journal of Consumer Marketing*, 80-90
- Evans, F.B. 1959 (October). Psychological and Objective Factors in the Prediction of Brand Choice: Ford versus Chevrolet. *Journal of Business*, 340-369.
- Foo, S.L. 1991 (May 5). Ownership of Credit Cards: Ways You Gain *New Sunday Times*, 29.
- Garcia, G. 1980 (March). Credit Cards: An Interdisciplinary Survey. *Journal of Consumer Research* 6: 327-336.
- Green, P.E., Tull, D.S. & Albaum, D. 1988. *Research for Marketing Decisions*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Hair, J.E., Anderson, R.E., Tatham, R.L. & Black, W.C. 1992. *Multivariate Data Analysis*. New York: Macmillan Publishing Company.
- Hlavacek, J.D. & Ames, B.C. 1986 (Fall). Segmenting Industrial and High-Tech Markets. *Journal of Business Strategy*, 39-50.
- Ho, S.B. 1988 (April 16). Psychographics: Seeing Consumers in Colour. *Malaysian Business*, 43-44.
- Kinney, T.C. & Taylor, J.R. 1976 (November). Psychographics: Some Additional Findings. *Journal of Marketing Research* 13: 422-425.
- Kinsey, J. 1982 (September). Determinants of Credit Card Accounts: An Application of Tobit Analysis. *Journal of Consumer Research* 8: 172-182.
- Lee, Y.L. 1985. *Evaluation of Credit Risks Using Socio-Economic and Demographic Characteristics: An Empirical Study of Credit Card Holders in West Malaysia*, MBA Dissertation, Kuala Lumpur: Universiti Malaya.
- Mathews, H.L. & Slocum, J.W. 1969 (January). Social Class and Commercial Bank Credit Card Usage. *Journal of Marketing* 33:71-78.

- Md. Nor, O. 1994 (April). Tabiat Media Generasi Muda Melayu Bandar: Satu Kajian Perbandingan Dengan Bukan Melayu. *Alam Melayu* 2: 56-82.
- Md. Nor and Ong, F.S. 1993 (March). Leisure Activities of Young, Urban, Malaysian Adults: Implications for Marketers. *Malaysian Management Review* 28: 33-53.
- Md. Nor & Ong, F.S. 1994. A Study of Residential (Tariff A) Consumers of Electricity: An Urban-Rural Comparison, a Research Report submitted to the International Institute for Energy Conservation, Asia Office, Bangkok, Thailand.
- Mowen, J.C. 1993. *Consumer Behavior*, New York: Macmillan Publishing Company.
- New Straits Times*. 1989 (August 12). Ministry to Oversee Credit Card Firms, 1.
- Ngam, S.M. 1983. (July) Plastic Money Fast Catching O. *Malaysian Business*, 118-121.
- Norusis, M.J. 1985. *SPSSX Advanced Statistics Guide*, New York: McGraw-Hill Book Company.
- Nunnally, J.C. 1978. *Psychometric Theory*, New York: McGraw Hill Book Company.
- Plummer, J.T. 1971 (April). Life Style Patterns and Commercial Bank Credit Card Usage, *Journal of Marketing* 35: 35-41.
- Sales and Marketing Digest*. 1989 (June). Female Car Buyers, 3.
- Slocum, J.W. Jr. and Mathews, H.L. 1970 (April). Social Class and Income as Indicators of Consumer Credit Behavior, *Journal of Marketing* 34: 69-74.
- Wells, W.D. 1975 (May). Psychographics: A Critical Review. *Journal of Marketing Research* 12: 196-213.
- Wells, W.D & Tigert, D.J. 1971 (August). Activities, Interests and Opinions. *Journal of Advertising Research* 11: 27-35.
- Ziff, R. 1971 (April). Psychographics for Market Segmentation, *Journal of Advertising Research* 2: 3-9.

Indar Kaur d/o Dan Singh
Maktab Kerjasama Malaysia
103 Jalan Templer
P.O Box 60
46700 Petaling Jaya
Malaysia

Md. Nor Othman
Faculty of Economics & Administration
Universiti Malaya
Lembah Pantai
59100 Kuala Lumpur, Malaysia

