

## Self-esteem, money attitude, credit card usage, and compulsive buying behaviour

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### Abstract

The study aims to analyse the impact of self-esteem, money attitude, and credit card usage behaviour on compulsive buying behaviour of working women. The study uses cross sectional design with electronic survey methods (e-survey) involves 60 working women that use credit card. The Pearson correlation and multiple regression analysis are used as statistical tools. The result indicates that power prestige, anxiety, retention-time, and credit card usage behaviour significantly correlate to compulsive buying behaviour. Furthermore, compulsive buying behaviour is positively influenced by credit card usage behaviour. This paper suggests the Indonesian government to provide consumers education on aspects of financial planning and using credit card properly.

### Abstrak

Tujuan penelitian ini adalah untuk menganalisis *self-esteem*, *money attitude*, dan perilaku penggunaan kartu kredit terhadap perilaku pembelian kompulsif pada wanita bekerja. Penelitian ini menggunakan desain *cross sectional* dengan metode survei elektronik (e-survey) yang melibatkan 60 wanita bekerja pengguna kartu kredit. Penelitian ini menggunakan analisis korelasi Pearson dan regresi linier berganda. Hasil penelitian menunjukkan bahwa *power prestige*, *anxiety*, *retention-time*, dan perilaku penggunaan kartu kredit berhubungan nyata dengan perilaku pembelian kompulsif. Selain itu, perilaku penggunaan kartu kredit berpengaruh positif nyata terhadap perilaku pembelian kompulsif. Pemerintah Indonesia khususnya Otoritas Jasa Keuangan harus memberikan edukasi kepada konsumen mengenai aspek *financial planning* dan penggunaan kartu kredit secara bijak.

### Introduction

The usage of electronic payment cards, including credit card, in Indonesia has been increasing as has been recorded by Bank Indonesia in 2014. The records show that the number of shopping transactions with payment system by the usage of credit cards has increases from 2013 to 2014 at three percent. The increase shows a positive trend of shopping activity in the community, especially on credit card users. Goldsmith (2010) proposed a concept of family resource management which is defined as the process of using resources by individuals or families to achieve the goal. One important management which has to be applied by family is financial management. On financial management, credit management is the biggest problem owned by both individual and family.

Buying is a powerful symbol for compulsive buyers, as an emotional role, particularly for women. This helps compulsive buyers to handle a number of factors including boredom, stress, low self-esteem, and depression (Ergin, 2010). A compulsive buyer has relatively lower self-esteem than non-compulsive buyers (Kothari & Mallik, 2015). Understanding attitudes towards money is very important because these attitudes shape human behaviour (Durvasula & Lysonski, 2007). The attitude towards money affects compulsive buying behaviour on consumers (Al-amoodi, 2006; Durvasula & Lysonski, 2007; Hafez, El Sahn, & Farrag, 2013; Roberts & Jones, 2001). Factors that motivate credit card users in the usage of credit cards consists of two factors that is the advantages that contains practical variable, special discounts and rewards, ease of backup current funds, facilities and services, as well as buy now and pay later scheme (Sulistiyawaty, 2010). A consumer can continue to use his credit card to purchase goods and services or take cash until the limit of credit (credit line) is reached. This will

increase the purchasing power, so that consumers who obtain credit resources will have the opportunity to increase consumption of various products and services that result in negative consumption behaviour.

Although credit card users are dominated by men, with the chance of 7.29 times than women, women are more vulnerable to purchase compulsively (Black, 2007; Dittmar, 2005; Li, Unger, & Bi, 2014; Verheij, 2014). Moreover, working women are more vulnerable to purchase compulsively than non-working women (Manchanda, 2012). It becomes the background why the use of credit cards and compulsive buying behaviour in women is an interesting topic to be analysed. Credit cards usage is the misuse behaviour in using credit cards. Compulsive buying behaviour is the behaviour owned by person who does the purchase due to intrinsic factors such as stress, anxiety, and a strong urge to make unplanned purchase. Based on the background, this study aims to: (1) identify the characteristics of the individual, self-esteem, money attitude, credit card usage behaviour and compulsive buying behaviour on working women; (2) analyse the relationship between individual characteristics, self-esteem, money attitude and credit card usage behaviour by compulsive buying behaviour on working women; (3) analyse the influence of individual characteristics, self-esteem, and money attitude towards credit card usage behaviour in working women; and (4) analyse the influence, self-esteem, money attitude, and credit card usage behaviour to the compulsive buying behaviour in working women.

Based on previous empirical studies, the study build a research framework (Figure 1) to explain the correlations among individual characteristics (age, length of education, monthly income, monthly expenses, marital status, and family size), self-esteem, money attitude (power prestige, anxiety, distrust, and retention time), and credit card usage (number of credit cards held, frequency of use of credit cards, the intended use of credit cards, the type of credit card used, the technique of payment to the bank, and the use of credit cards) and compulsive buying behaviour each other's. The study also explains the effect of individual characteristics, self-esteem, and money attitude on credit card usage and their effects on compulsive buying behaviour.

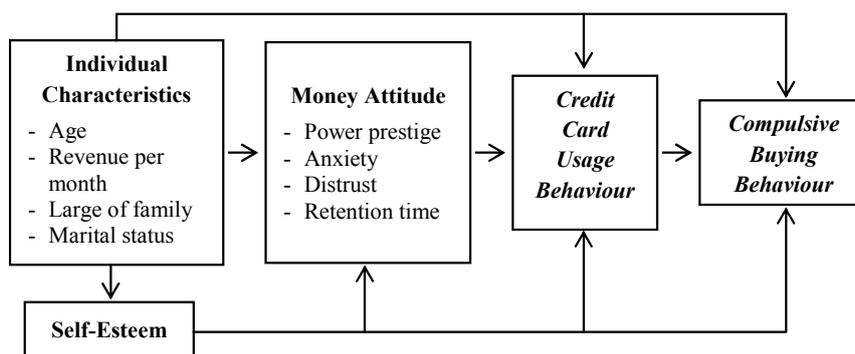


Figure 1: Research model of study

**Methods**

The study uses cross sectional design with an electronic survey methods (e-survey) using Google Form of Google Drive. Linking questionnaire were prepared, informed, and disseminated through the communities in social media, such as Facebook, WhatsApp, Line, and BBM. The study involves only 60 women due to the difficulty to get sample who meet the specific requirements as follows: (1) was credit card users, and (2) answered the questionnaire completely. After spreading the questionnaires in some social media, only 60 ones back and could be processed further.

The data were obtained from the questionnaire online. Reliability test will be conducted to test the consistency of the instrument, while the validity of the tests will be carried out to test the validity of this study. Instrument of self-esteem variables has a Cronbach alpha of 0.840 with 9 valid questions; Cronbach alpha value of 0.887 with 9 valid questions for power prestige; Cronbach alpha value of 0.620 with 5 valid questions for anxiety variable; Cronbach alpha value of 0.527 with 6 valid questions for distrust variable; Cronbach alpha value of 0.860 with 7 valid questions for retention time, while Cronbach alpha value of 0.673 with 11 valid questions for variable of credit card usage, as well as Cronbach alpha value of compulsive buying behaviour was 0.809 with 16 valid questions. Data analysis used in this study was Microsoft Office Excel and Statistical Product also Service Solutions (SPSS) for Windows. The measurement as describe by Table 1.

Scores of each variable were then indexed into a 0-100 scale and descriptive analysis (frequency, average, standard deviation, minimum, and maximum values) and inferential analysis (Pearson correlation test and multiple linear regression model). Multiple linear regression analysis will be used to analyse the influence of individual characteristics, self-esteem and money attitude (power prestige, anxiety, distrust, and retention time) on credit card usage behaviour on working women. The model of multiple linear regression is as follows:

$$Y_1 = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 D_1 + \beta_5 X_4 + \beta_6 X_5 + \beta_7 X_6 + \beta_8 X_7 + \beta_9 X_8 + \varepsilon \quad (1)$$

where

$Y_1$  = credit card usage behaviour

$a$  = constant

$\beta$  = regression coefficients

$X_1$  = age (years)

$X_2$  = revenue per month (rupiah)

$X_3$  = family size (persons)

$D_1$  = marital status (0 = not married; 1 = married)

$X_4$  = self-esteem (index)

$X_5$  = power prestige (index)

$X_6$  = anxiety (index)

$X_7$  = distrust (index)

$X_8$  = retention time (index)

$\varepsilon$  = error

**Table 1: Variables and their measurement**

Variables/Items	Measurement	Scale of Measurement
Self-esteem	Self-esteem by Rosenberg (1965) in Mannarini (2010)	1 (strongly disagree) –4 (strongly agree)
Money attitude	Money Attitude Scale (MAS) proposed by Yamauchi & Templer (1982)	1 (strongly disagree) –4 (strongly agree)
Credit card usage	Credit card scale of Robert and Jones (2001)	1 (strongly disagree) –7 (strongly agree)
Compulsive buying behaviour	Modified from the scale of Edwards, (1993); Faber & O'Guinn (1992)	1 (strongly disagree) –7 (strongly agree)

Multiple linear regression analysis will also be used to analyse the effect of self-esteem, money attitude (power prestige, anxiety, distrust, and retention-time) and credit card behaviour usage to the compulsive buying behaviour in working women. The linear regression model can be expressed as follows:

$$Y_2 = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \quad (2)$$

Description:

$Y_2$  = compulsive buying behaviour

$a$  = constant

$\beta$  = regression coefficients

$X_1$  = self-esteem (index)

$X_2$  = power prestige (index)

$X_3$  = anxiety (index)

$X_4$  = distrust (index)

$X_5$  = retention time (index)

$X_6$  = credit card usage behaviour (index)

$\varepsilon$  = error

## Results and Discussion

### Individual characteristics

The results show that 70% of working women belong to the category of young adults with an average age of 35 years. Most of working women (86.7%) are at undergraduate level of education. In addition, about 8.3 percent of working women are graduated from high school. The average length of education owned by

working women is 16.18 years. Based on some studies conducted by Black (2007); Dittmar (2005); Li et al. (2014); and Verheij (2014), it is found that gender positively affected the compulsive buying behaviour which tends to be higher in women than men. Research done by Dittmar (2005); Ergin (2010); and Saleem & Salaria (2010) stated that there was a significant effect of age to compulsive buying behaviour and it mostly affected are young consumers.

About 65% of working women has income of more than Rp7.500.000. The average income of working women is Rp12.055.000. about 58.3% of working women has monthly expenditure of less than Rp9.375.000. About 36.7 percent of working women has spent money between Rp9.375.001 to Rp18.750.000 per month. The average expenditure per month is Rp9.333.333. Grouping income is conducted by using average calculation. The high average income of working women is relatively influenced by the type of job of working women which was varied, such as Civil Servants employees (PNS), private employees, and entrepreneur. A study conducted by Dittmar (2005) stated that education and financial variables (income and expenditure of individuals) were not related to compulsive buying behaviour. The results show that 68.3 percent of working women are married, while the rest (31.7%) are not married. In addition, the results also show that 78.3 percent of working women have a big family in small category. About 20 percent of working women have a big family in medium category, and the rest (1.7%) had a large family in large category. The average number of family members of working women is 3.8 people.

### **Self-esteem**

According to Rosenberg (1979) in Omar, Rahim, Wel, & Alam (2013) self-esteem is a self-evaluation of the quality or the worth of one's self as a human being and a positive level of self-concept. About 70 percent of working women have self-esteem in high category. The remaining 30 percent of working women have self-esteem in very high category with an average score of self-esteem of working women of 74.13. (Dittmar & Drury, 2000) state that purchase has a role to increase self-confidence and self-image of someone which both are component of self-esteem. Study of Omar et al. (2013) mentioned that credit card users who have low self-esteem are more vulnerable to misuse their credit cards.

### **Money attitude**

Attitudes toward money are things that will have an impact on all areas of a person's life which includes the habit of saving, shopping, the performance of a work, political ideology, charity, and the attitude towards the environment (Phau & Woo, 2008). Money attitude is divided into four dimensions, namely power-prestige (authority), anxiety, distrust, and retention time. Lejoyeux, Benhaim, Betizeau, Lequen, & Lohnhardt (2011) explain that the power-prestige is the tendency to use money to influence and impress others. Retention-time assesses the propensity for careful financial planning. Distrust is feeling hesitant, suspicious and hesitant attitude towards situations involving money. Anxiety is how the money can be viewed as a source of anxiety. The biggest average score of money attitude was at retention-time dimension with an average value of 68.17. In addition, the smallest average score was at power prestige dimension with an average value of 26.72. The total of average score of money attitude was 44.60.

### **Credit card usage behaviour**

The results of analysis show that 71.7 percent of working women has one credit card. In addition, 25 percent of working women has two credit cards, while the remaining 1.7 percent of working women has three and four credit cards. This finding in line with study of Omar et al. (2013) and Phau & Woo (2008) that people of Malaysia and Australia mostly have only one credit card. Compulsive buyers are more likely to rely on credit cards than non-compulsive buyers, they are more likely to have lots credit cards and use little on cash as payment method and to maximize financial limit (Black, 2007). About 85% of working women uses credit cards for less than 40 times per year. About 13.3 percent of working women uses credit cards for 40 to 80 times per year, compared to Omar et al. (2013) finding that the Malaysian people use credit cards once a week (36.7%) or 48 times per year. The remaining 1.7 percent of working women uses credit card more than 80 times per year. This results show that of the seven options of intended usage of credit cards, shopping for a particular item has the greatest proportion (76.7%). The second largest option is monthly shopping (40%), followed by other options. In this case, the samples may choose more than one answer. This finding is in line with Omar et al. (2013) that the intended use of the largest credit card is

for shopping (52.7%), in addition to shopping for food and drink (groceries), business, personal reasons, and entertainment.

About 65 percent of working women uses Visa, 50 percent of working women uses Mastercard, and the rest uses other credit cards. In this case, the working women may choose more than one option, if they have more than one credit card. In the method of payment category, most of working women (81.7%) pay the bills by full payment. In addition, 21.7 percent of working women chooses to pay bills by instalments method that paid for 10 percent of the bill (minimum payment). The remaining 1.7 percent of working women uses other methods. In this category, the samples can choose more than one answer.

The usage of credit cards is a portrait of women working behaviour in using credit cards. In this case, the lower the scores obtained, the wiser working women in using their credit cards. Most of working women (85%) were at a very low level in the usage of a credit card. The remaining 15 percent of working women was at low level in the usage of a credit card. The average score of the usage of credit cards used by working women was 11.03. Interview results showed that the low level of credit card usage was caused by samples using credit cards only at urgent time when it requires credit card as a means of payment, such as the purchase of air tickets, booking hotels, or the purchase of certain goods. Additionally, samples said that credit card gave benefit when purchasing imported goods through e-commerce such as E-bay, Amazon and others. Hussin, Kassim, & Jamal, (2013) said that 71.1 percent of credit card users in Malaysia use a credit card for accommodation and hotel reservation.

### **Compulsive buying behaviour**

The results show that 68.3 percent of working women are at low level. In addition, 30 percent of working women are at very low levels, and the remaining 1.7 percent of working women is at high level. The average of compulsive buying behaviour of working woman is 29.79. Interview results show that the low level of compulsive buying behaviour is caused by working women tend to buy goods that were necessary and needed appropriate planning.

### **Factors associated with compulsive buying behaviour**

The variable of individual characteristics, self-esteem, money attitude, and credit card usage behaviour are analysed using Pearson correlation test to see its relationship with variable of compulsive buying behaviour. Variable of money attitude on the dimensions of power prestige has a positive relationship with compulsive buying behaviour ( $r = 0.284$ ;  $p < 0.05$ ). It means that the more often money was seen as power by working women, the higher the compulsive buying behaviour done by working women. Anxiety dimension was positively associated with compulsive buying behaviour ( $r = 0.435$ ;  $p < 0.01$ ). It means that the higher the anxiety level of working women toward money, the higher the level of compulsive buying women is. Retention-time dimension has a negative relationship with compulsive buying behaviour ( $r = -0.394$ ;  $p < 0.01$ ). It means that the better their financial planning for the future, the lower the level of compulsive buying working women do. In addition, variable of credit card usage showed a positive relationship with compulsive buying behaviour ( $r = 0.635$ ;  $p < 0.01$ ). In this case, the higher the score of credit card usage, the more often working women misuse their credit card. It means that the more often working women misuse their credit cards, the higher the compulsive buying behaviour done by working women. A study conducted by Hafez et al. (2013) shows that power prestige, anxiety, retention time, distrust, quality, and credit card usage to have a relationship with compulsive buying behaviour. Phau & Woo (2008) show that anxiety, distrust, and the retention time are not related to compulsive buying behaviour.

### **Factors influence credit card usage behaviour**

The results of regression analysis show that Adjusted R-square 0.175. This means that 17.5 percent of credit card usage can be explained by the variables studied, while the remaining 82.5 percent is explained by other variables not studied, such as: knowledge, perception (Ismail, Amin, Syaheri, & Hashim, 2014), and needs (Ludlum et al., 2012). Partially, there is a negative influence between the length of working women education to credit card usage ( $\beta = -0.398$ ;  $p < 0.05$ ). It means that the longer education taken by working women, the more reducing points of credit card usage by 1.472 points. Furthermore, there is a positive influence between dimension of anxiety to credit card usage ( $\beta = 0.385$ ;  $p < 0.05$ ). The higher the anxiety level of working women to money, the more increasing points of credit card usage by 0.259 points are (Table 2).

**Table 2:** Factors influenced credit card usage behaviour

Variables	Non standardized	Standardized	Sig.
	coefficient	coefficient	
	B	Beta	
Constant	15.229		0.422
Age(X) (years)	0.071	0.076	0.695
Length of education (X) (years)	-1.472	-0.398	0.012*
Individual income (X) (rupiah)	9.784E-7	0.245	0.132
Family size (X) (persons)	-1.178	-0.156	0.274
Marital status (dummy 0= not married; 1= married)(D)	-1.524	-0.073	0.648
Self-esteem (X) (index)	0.018	0.022	0.887
Power prestige (X) (index)	-0.037	-0.056	0.744
Anxiety (X) (index)	0.259	0.385	0.023*
Distrust (X) (index)	0.223	0.222	0.097
Retention-time (X) (index)	-0.068	-0.091	0.558

Note: *Adjusted R Square*=0.175; F value= 2.209; p = 0.034\*; significant at p < 0.05

Multiple linear regression analysis results show that the length of years of education and dimension of anxiety significantly influence credit card usage. This is consistent with Sulistiawaty (2010) who finds that the higher the education level, occupation and household spending of oneself, the higher frequency of their credit card usage is.

#### Factors influence the compulsive buying behaviour

Results of regression analysis show that the value of Adjusted  $R^2$  to test the effect on compulsive buying behaviour is 0.519. This means that 51.9 percent of compulsive buying behaviour can be explained by the variables in this study, while the remaining 48.1 percent was explained by other variables which were not examined in this study. Partially, there are negative effects and real-time retention dimension toward compulsive buying behaviour ( $\beta = -0.351$ ;  $p < 0.01$ ). Furthermore, there is a positive influence on credit card usage to the compulsive buying behaviour ( $\beta = 0.606$ ;  $p < 0.01$ ). Thus, the variable of credit card usage has the highest influence (Table 3).

**Table 3:** Factors influenced compulsive buying behaviour

Variables	Non standardized	Standardized coef-	Sig.
	coefficient	ficient	
	B	Beta	
Constanta	36.141		0.002
Self-esteem (X) (index)	0.067	0.078	0.492
Power prestige (X) (index)	-0.010	-0.015	0.896
Anxiety (X) (index)	0.114	0.160	0.195
Distrust (X) (index)	-0.081	-0.076	0.432
Retention-time (X) (index)	-0.276	-0.351	0.002**
Credit card usage(X) (index)	0.638	0.606	0.000**

Note: *Adjusted R*=0.519; F=11.613; p value=0.000; \*\*significant at p<0.01

From the table we can see that a point increase of retention-time reduces compulsive buying behaviour by 0.276 points. A point increase of credit card usage raises compulsive buying behaviour by 0.638 points. Regression analysis results show that the prestige power, anxiety, and distrust have no effect on compulsive buying behaviour. This result is not in accordance with the studies of Al-amoodi (2006); Durvasula & Lysonski (2007); Roberts & Jones (2001).

Based on the research results, credit card usage and retention-time dimension significantly affect compulsive buying behaviour, so hopefully government (Financial Services Authority) can provide education to consumers about aspects of financial planning. In addition, working women are expected to be able to use credit cards wisely. Several attempts to use credit cards wisely are as follows: having credit cards as many as it is needed, always checking the list of transactions listed in the monthly bill, limiting the credit

card as much as it is needed and according to the ability to pay, avoiding the usage of greater interest to pay more than the minimum amount, and avoiding compromising the family's main needs to consume the goods/services that are not needed.

### Conclusion

Self-esteem which owned by working women was categorized at high level. In the variable of money attitude, working women were at the lower level of retention-time dimension. They tended to make financial planning for the future which was at the highest average and anxiety as the tendency of working women to see money as a source of anxiety was at the lowest average. Working women were classified at very low level in using credit card. It means that working women were already wise in using their credit cards. Compulsive buying behaviour of working women was categorized at low level. Power prestige, anxiety, retention time, and credit card usage behaviour are associated with compulsive buying behaviour. Length of education period and anxiety had negative and was positive influence on credit card usage behaviour, respectively. It means that the higher the education level of working women, the lower the rate the compulsive buying behaviour was. The higher the tendency of working women to see money as a source of anxiety, the higher the rate of compulsive buying behaviour was. In addition, retention-time and credit card usage behaviour had negative and positive influence on compulsive buying behaviour, respectively. The more working women do financial planning for the future, the lower the compulsive buying behaviour was. The wiser working woman in credit card usage, the lower the compulsive buying behaviour was. In a subsequent study, it is expected to add intensity aspect of shopping and product categories which are often purchased by consumers to provide a clearer portrait of shopping behaviour, especially on women.

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