THE INFLUENCE OF FINANCIAL LITERACY, DEBT AND DEMOGRAPHIC FACTORS ON FINANCIAL WELL-BEING

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Abstract

This study aims to determine the influence of financial literacy, debt and demographic factors on financial well-being in the Central and Northern Zone of Malaysia. Data was collected through the distribution of a questionnaire to individuals working in Perak, Selangor, Kuala Lumpur and Putrajaya. A total of 403 respondents were used as samples. Descriptive analyses include frequency, percentage and mean of the variables. For inferential analysis, linear regression was used to identify the influence of the independent variables an on dependent variable. The findings show that financial literacy, debt and demographic factors (gender, age and education) contribute towards financial well- being. However, out of the five variables, only financial literacy, debt and age have significant relation with financial well-being. They are financial literacy, debt and age. These findings are useful for the policy makers in introducing integral comprehensive plan through government bodies and non-governmental organization such as Malaysia Education Ministry, Debt Management Agency (AKPK) and employer especially in helping each individual to achieve financial well-being.

Keywords: Financial Literacy, Debt and Financial Well-Being

1. Introduction

According to Lusardi and Mitchell (2011a), for those who want to succeed in society today, they have to be financially literate and being able to manage all their finances. Fraczek and Klimontowicz (2015) emphasize that financial literacy and education levels are one of the capabilities for managing everything related to finance. Debt is also said to be a factor that can affect financial literacy as it will cause a person to face life inequality and work instability (Zaimah Ramli, Sarmila Md. Sum & Habib Ismail, 2013).

Individuals with good level of financial knowledge will have a positive impact on their life in the long term (Azwadi Ali, Mohd Shaari Abd Rahman & Alif Bakar, 2015). Furthermore, financial literacy can improve individual's well-being on three main aspects - one's psychological, emotional and physical (Norvilitis, Merwin, Osberg, Roehling, Young & Kamas, 2006). Thus, financial literacy is closely linked to debt and financial well-being of an individual.

2. Problem Statement

Early research (Volpe, Chen & Liu, 2006; Dowling, Corney & Hoiles, 2009 & Dahlia Ibrahim et al., 2010) found that the level of knowledge regarding financial planning were low among school students, university level and working individuals. Based on a research on 16-18 year olds conducted by Charles Schwab and Co. Inc. (2011), only 35% know how to check the accuracy of bank statement and 31% know how to calculate credit card interest. Previous studies showed that many young people who are not able to manage their finances effectively will face difficulties in life (CFPB, 2013).

A research by Maznita Mokhtar and Azman Ismail (2013) of household debt in Malaysia showed an increase of 33% in 1998 to 55% in 2011 through the banking loan sector. It is even more alarming to find that the increase in debt is due to personal consumption. Research on financial well-being focusing on female teachers, married public-sector workers and dual-income family in public-sector workers were conducted by Zaimah Ramli et al. (2013) and Zaimah Ramli et al. (2014). Effective financial planning will help individual to have a better life. This statement emphasizes on reducing financial difficulties and raise saving awareness to a higher level (Joo & Grable, 2004; Dowling, Corney & Hoiles, 2009; Mohamad Fazli Sabri & MacDonald, 2010). A research conducted on financial saving by Cho (2009) stated that 68% of the surveyed Malaysian workers lack savings.

3. Conceptual Framework

This research adapted the conceptual framework by Delafrooz and Paim (2011). The records will examine the relationship between financial literacy, debt and demographic factors with financial well-being in (Figure 1). The researcher modified the variables used by Delafrooz and Paim (2011) according to the feasibility of the research. Based on the conceptual framework below, the researcher sets financial well-being as dependent variable and other variables as independent variables.

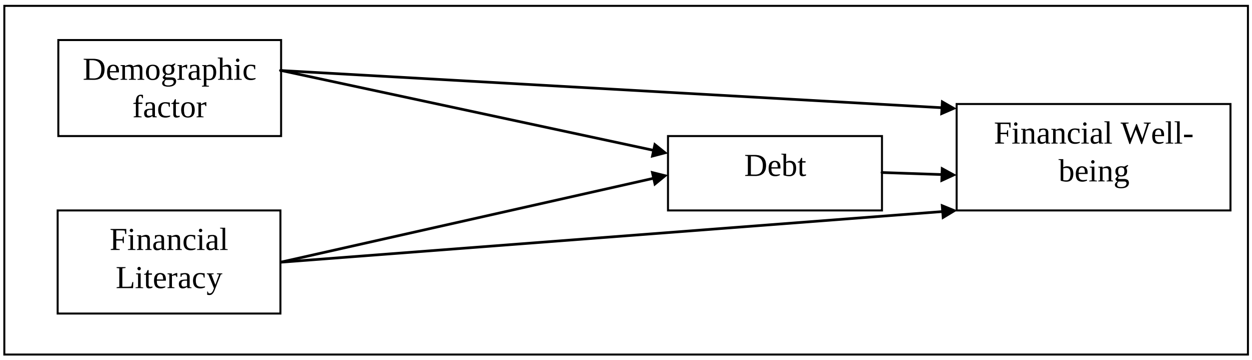

Figure 1: Conceptual Framework of Research

4. Objectives of the Research

The main objective of this research is to study the influence of financial literacy, financial debt and demographic factor on financial well-being among employee in Central and Northern Zone, Malaysia.

The specific objectives of the research are as follows:

1) To determine the level of financial literacy, debt and financial well-being among working individual in the Central and Northern Zone, Malaysia

2) To determine the influence of financial literacy, debt and demographic factors (gender, age and education) on financial well-being among working individual in Central and Northern Zone, Malaysia

5. Research Hypothesis

The hypotheses that are investigated in this research are:

Ho1: There is no influence of financial literacy, debt and demographic factors (gender, age and education) on financial well-being among employee in Central and Northern Zone, Malaysia.

6. Literature Review

Individuals with good level of financial knowledge will have a positive impact on their life in the long term (Azwadi Ali, Mohd Shaari Abd Rahman & Alif Bakar, 2015; Amer Azlan Abdul Jamal, Wijaya Kamal Ramlan, Mohd Rahimie Abdul Karim, Rosle Mohidin & Zaiton Osman, 2015). According to Thums, Newman and Xiao (2008), young people aged 20 to 24 years old are facing debt problems and their level of confidence in debt management is very low. The lack of confidence is due to low level of income and education (Thums et al., 2008). The statement is also supported by Gathergood (2012). This will cause them to face instability in the future (Mohamad Fazli & Mumtazah, 2010). Russell's research (2011) proved that there are four factors that influence financial well-being. However, the factor that related to this research is gender. The finding of Zaimah (2011) showed that age factor does influence financial well-being. A person with high level of financial well-being is associated with good financial management in terms of spending and savings (Rath et al., 2010).

Increased financial literacy will also increase the financial well-being of a person (Holland, Goodman & Stich, 2008; Kumaran, 2013). A survey conducted by the Center for Research and Consumer Resources (CRRC) (2012) pertaining to the behaviour and financial practices of young workers. This research shows that 37% of them admitted to spend more than the monthly income. The problem is said to be due to lack of knowledge related to financial management and financial planning. A good level of financial knowledge will influence individual in making a wise decision before spending (Bell & Lerman, 2005). Financial management skills are associated with the career level of the individual. The better of the career level, the better will be the financial level. Pursuing desired luxury has caused most households to live on debt. The high cost of living is seen not to match the level of careers and the level of income they earned. This statement is explained in the research of Abdul Basit Hodari et al. (2014).

7. Methodology

This research uses a quantitative approach to test the proposed hypothesis. A total of 403 respondents consisting of individuals working in Perak, Kedah, Federal Territory of Kuala Lumpur and Federal Territory of Putrajaya. This research uses a set of questionnaire to acquire data from the respondents. The questionnaire consists of five parts, A, B, C and D. Part A consists of demographic factors which are gender, age, state and level of education. Sections B, C and D consists items related to financial literacy, debt and financial well-being.

The questionnaire is adapted from previous research (Nuraini Abdullah, Mohamad Fazli Sabri, Husniyah Abdul Rahim, Mohd. Amim Othman, Afida Mastura Muhammad Arif & Nurul Farhana Zakaria, 2013; Mohamad Fazli Sabri, Jariah Masud, Mohd Amim Othman, Paim, L., 2006; Zaimah Ramli, Sarmila Md Sum, Azima Abdul Manaf, Suhana Saad, Novel Lyndon, Mohd Yusof Hussain & Sivapalan, 2012; and Zaimah Ramli, Sarmila Md. Sum & Habib Ismail, 2013).

A pilot research was conducted on 15 public workers are teachers at Sekolah Menengah Kebangsaan Seksyen 19, Shah Alam and 15 private employees at The Everly Hotel, Wilayah Persekutuan Putrajaya Through it, all the shortcomings in questionnaires distributed to the respondents can be improved to suit the objectives of the research. Based on the pilot research, it was found that the overall alpha value of 45 items from all three variables which are financial literacy, debt and financial well-being is 0.827. This shows that the items are reliable and can be used in the research.

Table 1: Reliability Analysis of Research Instruments

Variable	Number of Items	Alpha Cronbach
Financial Literacy	15	0.892
Debt	15	0.862
Financial Well-being	15	0.728

8. Research Findings

Data analysis will involve descriptive statistical analysis (percentage) and inference statistical analysis (regression analysis).

8.1 Respondents' background

Table 2 below shows the respondents' background. 53.1% of the respondents are women. 65.5% of respondents are 20-30 years old and 49.9% holds Bachelor Degree. The total number of respondents for the state (residence) is based on sampling quota in research. Sampling size is determined by using Krejcie and Morgan Table (1970).

Table 2: Respondents' Background

		Numbers (N)	Percentage (%)
Gender	Men	189	46.9
	Women	214	53.1
Age	20 – 35	264	65.5
	36 – 49	94	23.3
	≥ 50	45	11.2
State (Residence)	Perak	138	31.3
	Kedah	123	29.3
	W. P. Putrajaya	8	4.7
	W. P. Kuala Lumpur	115	34.7
Education Level	Primary School	1	0.2
	Secondary School	523	13.2
	Certificate/Diploma	122	30.3
	Bachelor Degree	201	49.9
	Master/PHD	26	6.5

8.2 The level of financial literacy, debt and financial well-being

Table 3 shows the level of financial literacy among respondents is 69.0% which is at a high level. Table 4 shows the distribution of respondents who answered the questions on financial literacy accurately. The findings show that respondents who answered accurately to the statement "The balance sheet shows the financial position" is the highest among other statements which is 98.8%. Followed by the statement of "The loan repayment period affects overall cost of the loan". There is 393 from 403 respondents who answered correctly in this statement.

In addition, there were three statements that were answered incorrectly by respondents and were below 50 per cent. There are "Employment Provident Fund (EPF) cannot cover for post-retirement life" (16.6%), "Saving is the remaining of the income after it has been deducted from expenses" (30.8%) and "The guarantors of a loan is also declared bankruptcy "(32.3%). This shows that the respondents were not disclosed by either financial base.

Table 3: Financial Literacy Scoring

Score	Frequency (N)	Percentage (%)
Low (0-5)	0	0
Medium (6-10)	125	31
High (11-15)	278	69
Min=2.690, SD=0.463		
Total	403	100

Table 4: Analysis of Financial Literacy

No.	Statement	True (%)	False (%)
B1	Buying merchandize on credits would reduce purchasing power in the future.(Answer: True)	289 (71.7)	114 (28.3)
B2	There is no charge for cash withdrawals via credit card. (Answer: False)	33 (8.2)	370 (91.8)
B3	Owners of credit cards can purchase without limits.(Answer: False)	23 (5.7)	380 (94.3)
B4	Using credit card to get cash has the lowest finance charge.(Answer: False)	191 (47.4)	212 (52.6)
B5	Increasing in price would reduce purchasing power.(Answer: True)	378 (93.8)	25 (6.2)
B6	Individuals declared bankrupt can not apply for loans above RM1,000. (Answer: True)	372 (92.3)	31 (7.7)
B7	I can take a loan for investment.(Answer: True)	361 (89.6)	42 (10.4)
B8	Saving is the remaining of the income after it has been deducted from expenses.(Answer: False)	279 (69.2)	124 (30.8)
B9	Buying insurance is the best from of investment. (Answer: True)	335 (83.1)	68 (16.9)
B10	Individuals are considered bankrupt if they cannot afford a debt of RM30,000.(Answer: True)	205 (50.9)	198 (49.1)
B11	Employment Provident Fund (EPF) cannot cover for post-retirement life. (Answer: False)	336 (83.4)	67 (16.6)
B12	All type of investment always yields profit. (Answer: False)	46 (11.4)	357 (88.6)
B13	The guarantor of a loan is also declared bankrupt.(Answer: True)	130 (32.3)	273 (67.7)
B14	The loan repayment period affects the overall cost of the loan.(Answer: True)	393 (97.5)	10 (2.5)
B15	The balance sheet shows the financial position.(Answer: True)	398 (98.8)	5 (1.2)

The mean distribution and standard deviation of employee debt levels in Central Zone and North Zone are shown in Table 5. The findings show that mean score of this group is between 1.583 to 3.769 and the average mean is 3.169. Based on the mean interpretation, this finding is at a high level. In this study, statement “Failed to make any loan because the unsatisfactory credit report” was a high mean of (mean=3.769, sd=0.450). Whereas, the statement “Saved when run out of money” showed a low mean score (mean=1.583, sd=0.846).

Table 5: Analysis of Debt

No.	Statement	Never (%)	Sometimes (%)	Often (%)	Always (%)	Mean	Standard Deviation
C1	I use savings for daily expenses.	10 (2.5)	323 (80.1)	36 (8.9)	34 (8.4)	2.945	0.520
C2	I cannot pay the utility bills (electricity, water and phones).	260 (64.5)	138 (34.2)	3 (0.7)	2 (0.5)	3.628	0.528
C3	I owe to paying medical expenses.	283 (70.2)	118 (29.3)	2 (0.5)	0 (0)	3.697	0.471
C4	I make a loan for a more luxurious life.	122 (30.3)	269 (66.7)	12 (3.0)	0 (0)	3.273	0.509
C5	I failed to make any loan because the credit report was not satisfactory.	315 (78.2)	83 (20.6)	5 (1.2)	0 (0)	3.769	0.450
C6	I always receive notice for bill payment.	220 (54.6)	171 (42.4)	4 (1.0)	8 (2.0)	3.496	0.624
C7	I owe to other individuals before the monthly salary.	231 (57.3)	166 (41.2)	5 (1.2)	1 (0.2)	3.556	0.536
C8	I keep less than 10% of my monthly income.	21 (5.2)	172 (42.7)	172 (42.7)	38 (9.4)	2.437	0.735
C9	I make a loan with the closest contact to pay debt.	219 (54.3)	174 (43.2)	9 (2.2)	1 (0.2)	3.516	0.557
C10	I spend more than my income.	81 (20.1)	304 (75.4)	17 (4.2)	1 (0.2)	3.154	0.480
C11	I have no cash for an emergency.	181 (44.9)	204 (50.6)	13 (3.2)	5 (1.2)	3.392	0.615
C12	I save when I run out of money.	16 (4.0)	47 (11.7)	93 (23.1)	247 (61.3)	1.583	0.846
C13	I rely on side work, commissions / bonuses and overtime work for living.	76 (18.9)	143 (35.5)	67 (16.6)	117 (29.0)	2.442	1.099
C14	Half of the monthly income earned I used to pay all debt.	59 (14.6)	262 (65.0)	61 (15.1)	21 (5.2)	2.891	0.704
C15	I sell jewellery / valuables to pay off debt.	311 (77.2)	87 (21.6)	4 (1.0)	1 (0.2)	3.757	0.468
	Overall mean					3.169	0.609

The mean distribution and standard deviation of financial well-being for the four states involved are Perak, Kedah, W. P. Putrajaya and W. P. Kuala Lumpur as shown in Table 6. The findings show that mean score of this group is between 1.943 to 3.772 and the average mean is 2.916. Therefore, the mean shows at a moderate level. In this study, the statement "I always make a lease to get the cash" record the highest value (mean=3.772, sd=0.438).Whereas, the statement "I often deal with insufficient wages" showed a low mean score (mean=1.943, sd=0.392).

Table 6: Analysis of Financial Well-being

No.	Statement	Never (%)	Sometimes (%)	Often (%)	Always (%)	Mean	Standard Deviation
D1	I satisfied with the current financial level I have.	109 (27.0)	207 (51.4)	62 (15.4)	25 (6.2)	2.007	0.841
D2	I confident with the financial level at retirement age.	129 (32.0)	187 (46.4)	60 (14.9)	27 (6.7)	1.963	0.859
D3	I often deal with insufficient wages.	111 (27.5)	215 (53.3)	66 (16.4)	11 (2.7)	1.943	0.739
D4	I have a problem with paying monthly bills.	204 (50.6)	185 (45.9)	14 (3.5)	0 (0)	3.472	0.565
D5	I can provide cash immediately in an emergency.	50 (12.4)	264 (65.5)	70 (17.4)	19 (4.7)	2.144	0.683
D6	I make expenses according to requirements rather than needs.	35 (8.7)	297 (73.7)	52 (12.9)	19 (4.7)	2.864	0.623
D7	I often disagree with the couple or family regarding finances.	174 (43.2)	210 (52.1)	18 (4.5)	1 (0.2)	3.382	0.584
D8	I cannot focus on the job.	172 (42.7)	222 (55.1)	6 (1.5)	3 0.7)	3.397	0.561
D9	Debt experienced affects my relationship with my spouse and family.	146 (36.2)	249 (61.8)	8 (2.0)	0 (02)	3.342	0.515
D10	I always make a lease to get cash.	314 (77.9)	86 (21.3)	3 (0.7)	0 (0)	3.772	0.438
D11	My work performance declined cause of financial problems.	195 (48.4)	207 (51.4)	1 (0.2)	0 (0)	3.481	0.505
D12	Financial problems affect my health.	165 (40.9)	235 (58.3)	2 (0.5)	1 (0.2)	3.400	0.515
D13	I often depressed thinking about financial problems.	140 (34.7)	254 (63.0)	9 (2.0)	1 (0.2)	3.323	0.523
D14	I worried about my current financial level.	82 (20.3)	254 (63.0)	49 (12.2)	18 (4.5)	2.993	0.711
D15	I believe I can manage my finances well.	57 (14.1)	221 (54.8)	91 (22.6)	34 (8.4)	2.253	0.801

Overall mean	2.916	0.631

8.3 *The influence of financial literacy, debt and demographic factors (gender, age and education) on financial well-being*

Referring to Table 7, adjusted R^2 for this regression analysis is 0.425 which means 42.5 percent change in the dependent variable which is financial well-being is due to changes or influenced by independent variables which are financial literacy, debt and demographic factors (gender, age and education). The results also show that when all independent variables are combined, the financial well-being variable is significantly affected whereby the value p=0.000 is smaller than the confidence level p<0.05 with F=43.409. The significant contributions toward financial well-being come from financial literacy, debt and demographic factors.

The unstandardized coefficient value is the value used in forming the regression method equation. The simple positive value of F shows a significant correlation analysis of the variables in this research. This means that between five independent variables, there are several variables that will form the relationship with the financial well-being. Researcher will use regression coefficient analysis to investigate and find out which variables can affect dependent variables. The finding showed that debt and age does influence the well-being level whereby the regression analysis results are p=0.000, p<0.005. Research of Zaimah (2011) was also consistent with the finding of the researcher which shows that age and income factors affect the level of well-being of working individuals.

Despite higher educational attainment, the level of financial literacy remains low. International studies by Lusardi and Mitchell (2011b) on financial literacy also explored how financial knowledge related to retirement planning. Based on the countries studied, individuals with high levels of financial knowledge are more likely to make retirement plans. Thus, this research reveals that financial literacy will influence individuals to plan their retirement. Research findings by Taft, Hosein, Mehrizi and Roshan (2013) showed that respondents with higher financial literacy will succeed in their business and personal lives, low financial difficulties and high holdings in long-term savings and investments.

Table 7: Multiple Regression Analysis of Financial Literacy, Debt and Demographics Factors (gender, age and education) on Financial Well-Being

	Unstandardized Coefficient	Standardized Coefficient	Sig.
	B	Beta	
Constant	1.022		0.002
Financial Literacy	-0.273	-0.056	0.118
Debt	0.220	0.326	0.000
Gender	0.522	0.479	0.000
Age (36-49 years)	0.460	0.046	0.213
Age (≥ 50 years)	1.024	0.141	0.000
Education Level (Degree)			
Education Level (Master/PHD)	-0.036	-0.006	0.878

Dependent variable: Financial Well-being, R^2=0.435, Adjusted R^2=0.425, F=43.409, Sig.=0.000, $p < 0.05$

9. Conclusion

The research indicates that financial literacy is an important aspect to individuals in achieving their financial well-being. With good financial literacy, every individual can use it in their daily lives. It can also change their behavior in managing their money. Each individual will use their money more prudently and will prioritize the needs as well as the importance of the spending.

10. Future Research Proposal

This research can be focused on broader aspects such as financial literacy being broken down into various angles. It can be the level of knowledge of respondents in relation to the stock, investment and insurance. Debt can also be detailed in relation to the amount of current debts by debtor. On the financial well-being, satisfaction on the current financial level can be look into. In addition, this research only looks at the differences in demographic factors (gender, age and education) on financial literacy, debt and the well-being of selected individuals.

Therefore, in future research, it is proposed that demographic factors such as states, employment sector, career level, monthly income, types of debts and so on can be taken into account so that more findings will be obtained. The sample of this research only consists of four states which are Perak, Kedah, Putrajaya and Kuala Lumpur. All respondents were determined based on the highest and lowest average of monthly salaries and wages. In other words, the financial level taken into account is based on several previous studies that include bankruptcy issues such as Kaviyarasu Elangkovan and Ahmed Razman Abdul Latiff (2013) and Nazni Noordin et al. (2012). Next research can be done on all levels of salaries and wages of all working individuals and not just focusing on these four states alone. Therefore, comparison between findings can be made.

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