Original Research Article

The Impacts of Future Orientation and Financial Literacy on Personal Financial Management Practices among Generation Y in Malaysia: The Moderating Role of Gender

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ABSTRACT

This paper investigated the relationship between future orientation and financial literacy toward personal financial management practices among Generation Y in Malaysia, particularly amongst those who were born between 1980 and 2000 coming from Sabah, Sarawak, Selangor, Kuala Lumpur, Johor, and Penang. A total of 146 valid questionnaires were used for the analysis carried out in this paper. Data was analyzed using the Structural Equation Modelling (SEM) technique using Partial Least Squares (PLS). The outcomes displayed that future orientation and financial literacy have significantly positive effect on personal financial management practices. Nonetheless, gender does not have a moderating role between financial literacy and future orientation on personal financial management practices among Generation Y in Malaysia. The study's outputs may serve as guidelines by the Malaysian government agencies and policy makers, apart from extending the body of knowledge to shed some light on personal financial management practices. The findings of the study also offer an alternative approach in addressing the escalating bankruptcy issues faced by Generation Y in Malaysia.

1. INTRODUCTION

The main cause of bankruptcy in Malaysia from the year 2012 until 2016 can be traced to the problem of poor personal financial management practices, as depicted in the report published by Malaysia Department of Insolvency (MDI) [8]. Bankruptcy is far from being a new phenomenon in Malaysia; yet, this issue has blown out of proportion with the increasing number of bankruptcies announced annually. Based on the report published by the Depart MDI [8], the total bankruptcy cases recorded in the year 2010 were 18,119 cases, while 22,351 cases were recorded in the year 2014, which reflects an increment by 23.3 percent for merely 4 years. In year 2015, the total recorded cases decreased by 17.42 percent, but hiked again by 6.13 percent in the year 2016.

The worrisome argument refers to the fact that most of those declared bankrupt are derived categorically from the Generation Y, wherein this problem has been highlighted by the Malaysian Financial Planning Council (MFPC) (2016); it has been claimed that 11 youths are

declared bankruptcy on a daily basis since 2011 [33]. According to MDI (2018) [8], from 2010 until 2017, a total of 41,913 bankruptcy cases involved those below 34 years old in Malaysia. This scenario does not reflect a good prospect for Malaysia's future generation, particularly as Malaysia is in the midst of Economic Transformation Program (ETP) toward becoming a developed-nation by 2020 [33], Besides, this situation is harmful to Malaysia's youth generation due to deteriorating personal consumption that may indirectly affect their future.

The Star [42] reported that Malaysia has one the highest household debt (89.1 percent) as a portion of the gross domestic product (GDP) amongst developing economies in the Asia. As reported by Bank Negara Malaysia (BNM) [3], the household debt in Malaysia exhibited an increasing trend from 2009 (72.40%) until 2015 (89.10%). The high level of debt would not prove to be a positive indicator for fellow Malaysians as they are burdened with debt throughout their lifetime. According to Manulife Investor Sentiment Index [34], Malaysian youths are more likely to incur debt once they have graduated from university or started working. Most Malaysians, especially the youth, are presumed to become bankrupt due to a lack of discipline in managing their finances properly as most of them do not have savings for unexpected events, such as accidents, inflation, and retrenchment [29]. A study by MISI [34] found that Malaysians often fail to manage their cash flow due to poor financial management practices.

Hence, one can conclude that the main reason for facing personal financial problems amongst Generation Y in Malaysia is due to failure in managing personal finance that has led to bankruptcy cases and financial difficulties. Therefore, it is important to determine the factors that impacts personal financial management practices among Generation Y in Malaysia to better aid the associated authorities or agencies in taking proper actions that are required to overcome the financial problems faced by Generation Y and to avoid bankruptcy among Generation Y in Malaysia.

1.1 Objectives

This paper was thus conducted with the following specific objectives:

1. To investigate if financial literacy and future orientation have positive impacts toward personal financial management practices among Generation Y in Malaysia.

2. To examine the moderating role of gender on the relationship between financial literacy and future orientation toward personal financial management practices among Generation Y in Malaysia.

2. LITERATURE REVIEW

2.1 Personal Financial Management Practices

Personal financial management practices refer to a process that people use to handle their financial needs such as planning their finance, retirement, loans, and cash management in order to achieve their financial wellbeing [12]. Typically, personal financial management practices are demonstrated through various attitudes and financial behavior which include personal debt levels [28] assistance in the share market [43], the capability to increase and effectively handle wealth [20,41] as well as the ability to calculate financial products with lower fees (e.g. Mutual funds) [16]. Prior studies have shown that personal financial management practices are one of the most important determinants that possess a positive correlation with financial well-being [20,45]. Hence, one can assume that whoever practices

88 good personal financial management practices will eventually have excellent financial
89 wellbeing themselves.
90
2.2 Financial Literacy
92
93 According to Garman and Forgue [13], financial literacy is the knowledge regarding facts on
94 personal finances. In addition, Lusardi and Mitchell [29] defined financial literacy as having
95 adequate economic information and making the right decisions about financial matters such
96 as wealth build-up, debt, financial development, and pensions. Remund [39] further
97 elaborated financial literacy as the ability of a person to understand and use financial
98 matters to his or her advantage. Australian Securities and Investments Commission (ASIC)
99 [1] found that financial literacy is a necessary financial skill required among individuals to
100 improve their standard of living and financial well-being. Past studies have emphasized the
101 importance of financial literacy in financial behavior [17, 28]. Based on the argument of
102 Garman and Forgue [14], the key to good personal financial management is said to be
103 financial literacy. Therefore, this paper intends to investigate if financial literacy can impacts
104 the personal financial management practices among Generation Y in Malaysia. As such, this
105 study outlines the following hypothesis:
106
107 H1:   Financial literacy positively impacts personal financial management practices among
108   Generation Y in Malaysia.
109
2.3 Future Orientation
111
112 Future orientation is concerned with individuals who tend to be involved in thinking about the
113 future [40], and the ability to do well in the future [35]. Accordingly, future orientation portrays
114 the degree to which one participates in future-oriented behavior such as planning, saving,
115 and deferral of gratification [23,40]. In the context of future orientation, people gain more
116 motivation to change their lives for the better and gain sufficient flexibility for these changes
117 in order to produce advantageous outputs and more opportunities in the future [36]. An
118 individual that possess a higher level of future orientation is presumed to plan for future-
119 oriented financial behavior and events such as retirement planning [21] and saving [44] well
120 as apart from putting more thought and planning to achieve positive outcomes [19]. This also
121 suggests one to avoid negative attitudes not getting involved in any type of behaviors that
122 may risk his or her future personalities [7]. Therefore, this paper intends to investigate if
123 future orientation and personal financial management practices do have a relationship with
124 one another. As such, this study establishes the following hypothesis:
125
126 H2:   Future orientation positively impacts personal financial management practices
127 among Generation Y in Malaysia.
128
2.4 Gender
130
131 Prior researchers have determined that there is an association between socio-demographic
132 variables and financial matters, which led to the different sets of beliefs held and practices
133 executed regarding money by both males and females [15, 24]. Previous studies found that
134 men had more knowledge and were interested in learning about financial matters when
135 compared to women [4,25,26]. Meanwhile, previous studies have also found that women are
136 more knowledgeable in financial matters which led them to become more worried about their
137 financial futures and performed better financial management [24,27]. This leads to the
138 conclusion that there is a difference between male and female when it comes to handling
139 financial matters. Therefore, this paper intends to examine the moderating role of gender

between financial literacy and future orientation towards personal financial management practices. As such, this study introduces the following hypothesis:

H3:   Gender strengthens the relationship between financial literacy and personal financial management practices among Generation Y in Malaysia.

H4:   Gender strengthens the relationship between future orientation and personal financial management practices among Generation Y in Malaysia.

3. METHODOLOGY

3.1 Research Design

This paper employed both deductive and quantitative approaches. The use of primary data through cross-sectional survey design was adopted to identify the relationships between the variables, along with convenience sampling under non-probability sampling. To achieve these objectives, this paper would employ the online survey method as the data collection tool.

3.2 Population and Sampling

Total of 41,913 bankruptcy cases involving those who aged 34 years old and below, which indicated that the bankruptcy cases among Generation Y in Malaysia kept on increasing from 2010 to 2017. Based on the Malaysian perspective, Generation Y can be defined as those individuals who are born between 1981 and 2001 (17 years old to 37 years old on 2018 during the data collection of this study) [46]. Hence, this prompted the selection of Generation Y as the main target to be studied as the respondents in this study. Based on the report, the current total population of Generation Y in Malaysia is 12,774,790 (November 2018) [9]. Therefore, the respondents for this study are those born between the years 1981 to 2001 and were selected from the different states of Malaysia such as Sabah, Sarawak, Selangor, Kuala Lumpur, Johor, and Penang. These six states were chosen due to their location and also based on the report of having the highest number of bankruptcy cases in Malaysia from 2013 to 2017 [9]. The Malaysian respondents are derived from two regions: East and West of Malaysia where West of Malaysia consists of three regions which is Northern region (Penang), Central region (Kuala Lumpur and Selangor), and Southern region (Johor). Meanwhile, East of Malaysia is comprised of two regions which are Sabah and Sarawak. In addition, based on the statistics revealed by MDI [9], the highest number of bankruptcy cases recorded from 2013 until 2017 was in Selangor (27,051 cases), followed by Johor (14,582 cases), Kuala Lumpur (13,561 cases) and Penang (6,879 cases).

For the sample of size of respondents, the G*Power 3.1 software package was employed in this study to calculate the required minimum sample size [10]. The effect size parameters applied in this paper using G*Power was (0.15) (medium), alpha (α) 0.05 with the power of (1-β) 0.99 (maximum), and it involved two predictors [18]. Hence, the optimum sample that has been calculated by G*Power based on the aforementioned parameters for this study is 146 participants from Generation Y in Malaysia.

3.3 Variables Measurement

Financial Literacy: The measurement of financial literacy was adopted and adapted from Lusardi, Punam, and Adam [30], which embedded 3 items (i.e. interest rate, inflation, and risk diversification). This measurement was initially designed for the 2004 health and retirement survey (HRS) and currently, it serves as the benchmark to measure financial

193 literacy in a number of surveys [31]. This measurement tests the knowledge of fundamental
194 financial concepts [31], wherein only one answer is required to be chosen by the
195 respondents for each items.
196
197 **Future Orientation:** The measurement of future orientation was adopted and adapted from
198 Polonsky, Vocino, Grimmer and miles [38]. The measurement for future orientation has four
199 items that use the Likert scale ranging from 1 (Strongly disagree), 2 (Disagree), 3 (Neither),
200 4 (Agree), and 5 (Strongly agree) that are used to evaluate the degree of future orientation in
201 each item.
202
203 **Personal Financial Management Practices:** The measurement of personal financial
204 management practices was adopted from both Joo and Garman [22]. The measurement for
205 the variable in this study has eight items employing the Likert scale ranging from 1 (Strongly
206 disagree), 2 (Disagree), 3 (Neither), 4 (Agree), and 5 (Strongly agree) that are used to
207 examine the degree of personal financial management practices in each item.
208
209 ### 3.3 Data Analysis Method
210
211 The statistical methods employed in this study were Statistical Package for the Social
212 Sciences version 22.0 (SPSS 22.0) and Smart Partial Least Squares 2.0 (SmartPLS 2.0).
213 This study used SPSS 22.0 to measure the frequency of each variable. Next, this study
214 utilized the partial least square structural equation modelling (PLS-SEM) as the preferred
215 method tool of statistical analysis. PLS-SEM can be applied when the research objective is
216 to predict relevant constructs [18]. Based on this reasoning, the objective of this study is
217 indeed parallel with the objective of PLS-SEM, which is to predict factors that impacts
218 personal financial management practices among Generation Y in Malaysia. Thus, the PLS-
219 SEM techniques were selected to analyze the research model via SmartPLS 2.0 software.
220 This study embedded a two-stage approach, namely measurement model assessment and
221 structural model assessment [2], which reflect the adequate way to report PLS-SEM
222 outcomes [5].
223
224 ## 4. RESULTS AND DISCUSSION
225
226 ### 4.1 Profile of Analysis
227
228 **Table 1.   Demographic profile of the participants (N=146)**
229

Demographic Variable	Category	Frequency	Percentage
Gender	Male	79	54.1%
	Female	67	45.9%
Age	17-19 years old	7	4.8%
	20 – 29 years old	118	80.8%
	30 – 36 years old	21	14.4%
Marital	Single	109	74.7%
	Married	31	21.2%
	Separated	6	4.1%
Ethnicity	Malay	49	33.6%
	Chinese	14	9.6%
	Indian	15	10.3%
	Bumiputera Sabah	35	24.0%
	Bumiputera Sarawak	22	15.1%
	Others	11	7.5%
Occupation	Public sector	55	37.7%

	Private sector	35	24.0%
	Self-employed	25	17.1%
	Student	31	21.2%
Educational	SPM and below	13	8.9%
	STPM / Diploma	40	27.4%
	Bachelor's Degree	69	47.3%
	Master's Degree	21	14.4%
	Doctorate Degree	3	2.1%
	Certificate	0	0.0%

Table 1 presents the demographic profiles of the 146 respondents for this study, which comprised of 79 males (54.1 percent) and 67 females (45.9 percent). Respondents from the Malay ethnicity were the most dominant with 33.6 percent which is followed by: Bumiputera Sabah at 24 percent, Bumiputera Sarawak at 14.4 percent, Indian at 10.3 percent, Chinese at 9.6 percent, and others at 7.5 percent. In terms of education background, a majority of the respondents (47.3 percent) held a bachelor degree followed by: 27.4 percent with STPM/Diploma qualification, 14.4 percent with master's degree, 8.9 percent for SPM level and below, while the lowest was 2.1 percent with doctorate qualifications.

4.2 Measurement Model

The first stage of data analysis in PLS-SEM is an analysis of the measurement model. As such, the convergent validity and discriminant validity are assessed in the measurement model [18]. Convergent validity evaluates by using indicator loadings, composite reliability (CR), and average variance extracted (AVE) [18]. As recommended by hair, Hult, Ringle and sarstedt [18], the scores for loading, AVE, and CR must exceed 0.6, 0.5, and 0.7, respectively. Table 2 tabulates that all scores for loading, AVE, and CR exceeded the recommended figures. Hence, it can be seen that the convergent validity for the measurement model was acceptable. Table 3 displays the square roots of AVE for the constructs along the diagonal, which seemed larger than the correlations shared between the constructs. Thus, discriminant validity was achieved.

Table 2.   Measurement model

Construct	Item	Loadings	AVE	CR
Financial literacy	FL	1.000	1.000	1.000
Future orientation	Ft1	0.920	0.732	0.915
	Ft2	0.924		
	Ft3	0.739		
	Ft4	0.824		
Gender	Gender	1.000	1.000	1.000
Financial practice	Fp5	0.778	0.518	0.810
	Fp6	0.629		
	Fp7	0.792		
	Fp8	0.664		

Note : fp1, fp2, fp3, and fp4 were deleted due to low loading.

Table 3.   Discriminant validity of measurement model

	Financial literacy	Financial practice	Future orientation	Gender
Financial literacy	1.000			
Financial practice	0.229	0.719		
Future orientation	0.100	0.386	0.855	
Gender	-0.127	-0.140	-0.147	1.000

Note: the diagonals represent the square root of the ave, while the off-diagonals represent the correlations

4.3 Structural Model Assessment

After determining the measurement model, the next stage of data analysis in PLS-SEM is to examine the structural model. As suggested by Hair et al. [18] the aspects of beta, t-value, R2, effect sizes (f2), and predictive relevance (Q2) should be incorporated in order to assess the structural model.

Table 4 summarizes the outcomes of the structural model analysis (hypotheses testing). The results showed that financial literacy (H1) (β =0.164, p<0.05) has positively significant effect towards personal financial management practices. Next, the results showed that future orientation (H2) (β =0.338, p<0.01) also has positively significant effect towards personal financial management practices.

The outcomes presented in Table 6 indicate that the interaction effects between financial literacy and gender (H3), and between future orientation and gender (H4) toward personal financial management practices were insignificant, thus signifying nil moderating effect being observed.

The R^2 increased to 0.009 after the moderator interactions were integrated into the model, which resulted in a change of 19.9 percent. The effect size, f^2, of both financial literacy and future orientation toward personal financial management practices appeared to have small effect (financial literacy) and medium effect (future orientation) respectively [6]. In addition, the predictive relevance of the model was assessed by using the blindfolding procedure. According to Fornell and Cha [11], if Q^2 values exceed 0, the model is said to have sufficient predictive relevance. In this study, the Q^2 value was 0.087, which is greater than 0, and thus, the predictive relevance was confirmed.

Table 4.   Result of the structural model (Hypotheses testing)

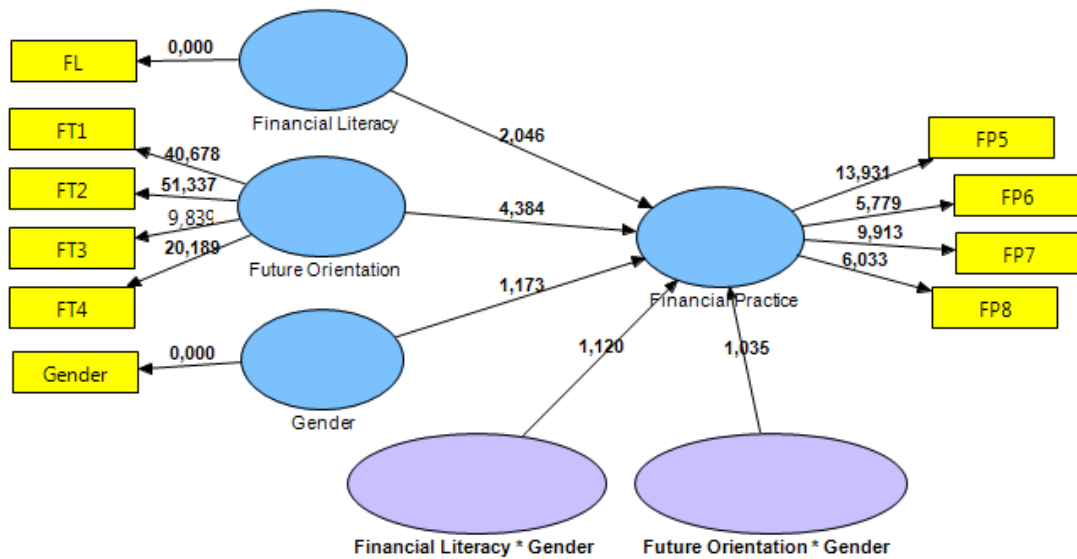| H	Relationship	Std. Beta	Std. Error	t-value	Decision	R^2
H1	Financial Literacy -> Financial Practice	0.164	0.080	2.046*	Supported	0.190
H2	Future Orientation -> Financial Practice	0.338	0.077	4.384**	Supported	
H3	Financial Literacy*Gender -> Financial Practice	0.076	0.068	1.120*	Not Supported	0.199
H4	Future Orientation*Gender -> Financial Practice	0.063	0.061	1.035*	Not Supported	

*Note: **p<0.01, *p<0.05*

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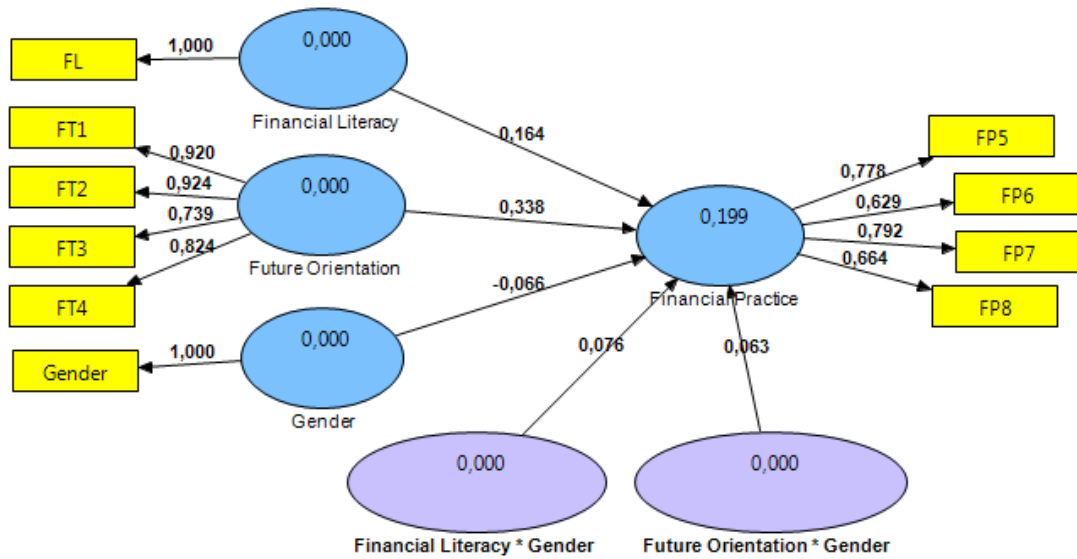
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299 **Figure. 1. Path Coefficients of Financial Literacy, Future Orientation, Gender and**
300 **Financial Practices**
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302
303 **Figure 2. Bootstrapping of Path Coefficients of Coefficients of Financial Literacy,**
304 **Future Orientation, Gender and Financial Practices**
305
306 **5. DISCUSSION**
307
308 This paper found that H1 was accepted, which proves that there is positive relationships
309 between financial literacy and personal financial management practices among Generation

310 Y in Malaysia. The finding of this study is consistent with a previous study indicating that the
311 key to personal financial management practices is the ownership of financial literacy [14].
312 Hence, one can assume that individuals with better financial literacy are deemed to perform
313 better in regards to personal financial management practices, when compared to those with
314 lower financial literacy.
315
316 Furthermore, this paper also found that future orientation (H2) has a positive relationship
317 with personal financial management practices among Generation Y in Malaysia. This
318 particular finding is consistent with previous studies in which an individual with future
319 orientation presumed to plan for future-oriented financial behavior and events such as
320 retirement planning and saving [21,44]. In other words, individuals that think about the future
321 would plan their finances more carefully as they want to have effective personal financial
322 management practices.
323
324 Finally, the results of studies found that gender does not play a moderating role in the
325 relationships between financial literacy (H3) and future orientation (H4) towards personal
326 financial management practices among Generation Y in Malaysia. The result of this finding
327 is in contrast with previous studies where both male and female were found to have different
328 practices on financial-related matters [4,24,25,26,27]. Additionally, the finding of the studies
329 also shows that different practices on personal financial management practices among male
330 and female do not exist among the Generation Y in Malaysia.
331

6. CONCLUSION

334 The study outcomes project that financial literacy and future orientation would have
335 significantly positive effects on personal financial management practices. However, gender
336 does not play any moderating role between financial literacy and future orientation on
337 personal financial management practices among Generation Y in Malaysia. As it can be
338 seen based on the finding of the studies, both genders of Generation Y have the same level
339 of thinking for future undertaking as well as possessing similar decision making skills to
340 improve their standard of living. Furthermore, both gender also require to have the
341 necessary financial skills in order to face the challenging tasks towards the current uncertain
342 social-economics environment in Malaysia. Therefore, the Malaysian Government should
343 take more positive action towards the Generation Y particularly the financial education
344 among Generation Y insist of mass market as overall. Indirectly, this would help to educate
345 the Generation Y to learn further regarding the financial matters which can assist and guide
346 them to make better financial decisions in the future. Besides that, the findings also
347 contribute towards the body of knowledge to offer a better idea in regards to personal
348 financial management practices, apart from being an alternative in the attempt of seeking a
349 solution to curb the escalating the current bankruptcy issue faced by Generation Y in
350 Malaysia.
351

7. RECOMMENDATIONS

354 Concerning the present study findings it is recommended that financial literacy and future
355 orientation should be taken into consideration to meet the information needs and help
356 educated Generation Y in Malaysia. The outputs retrieved from this study can serve as
357 guidelines by the Malaysian government agencies and policymakers to implement new
358 subject in the academic field as a medium to teach about financial matters, efficient
359 counseling as well as replacing the existing policies which are more focused on Generation
360 X. Additionally, future researchers also should consider expanding toward other factors,
361 such as money attitude and financial socialization agent, which may unravel other relevant

influential factors in the light of personal financial management practices among Generation Y.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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