

**The Influences of Future Orientation and
Financial Literacy on Personal Financial
Management Practices among Gen Y in
Malaysia: The Moderating Role of Gender**

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.

Keywords: Financial Literacy; Future Orientation; Gender; Gen Y; Bankruptcy; Personal Financial Management Practices.

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

35 declared bankruptcy on a daily basis since 2011 [33]. According to MDI (2017) [8], from
36 2010 until 2016, a total of 37,048 bankruptcy cases involved those below 34 years old in
37 Malaysia. This scenario does not reflect a good prospect for Malaysia's future generation,
38 particularly as Malaysia is in the midst of Economic Transformation Program (ETP) toward
39 becoming a developed-nation by 2020 [33]. Besides, this situation is harmful to Malaysia's
40 youth generation due to deteriorating personal consumption that may indirectly affect their
41 future.

42
43 The Star [42] reported that Malaysia has one the highest household debt (89.1 percent) as a
44 portion of the gross domestic product (GDP) amongst developing economies in the Asia. As
45 reported by Bank Negara Malaysia (BNM) [3], the household debt in Malaysia exhibited an
46 increasing trend from 2009 (72.40%) until 2015 (89.10%). The high level of debt would not
47 prove to be a positive indicator for fellow Malaysians as they are burdened with debt
48 throughout their lifetime. According to Manulife Investor Sentiment Index [34], Malaysian
49 youths are more likely to incur debt once they have graduated from university or started
50 working. Most Malaysians, especially the youth, are presumed to become bankrupt due to a
51 lack of discipline in managing their finances properly as most of them do not have savings
52 for unexpected events, such as accidents, inflation, and retrenchment [29]. A study by MISI
53 [34] found that Malaysians often fail to manage their cash flow due to poor financial
54 management practices.

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

63 64 **1.1 Objectives**

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66 This paper was thus conducted with the following specific objectives:

- 67
68 1. To investigate if financial literacy and future orientation have positive influences
69 toward personal financial management practices among Gen Y in Malaysia.
- 70
71 2. To examine the moderating role of gender on the relationship between financial
72 literacy and future orientation toward personal financial management practices
73 among Generation Y in Malaysia.

74 75 **2. LITERATURE REVIEW**

76 77 **2.1 Personal Financial Management Practices**

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79 Personal financial management practices refer to a process that people use to handle their
80 financial needs such as planning their finance, retirement, loans, and cash management in
81 order to achieve their financial wellbeing [12]. Typically, personal financial management
82 practices are demonstrated through various attitudes and financial behavior which include
83 personal debt levels [28] assistance in the share market [43], the capability to increase and
84 effectively handle wealth [20,41] as well as the ability to calculate financial products with
85 lower fees (e.g. Mutual funds) [16]. Prior studies have shown that personal financial
86 management practices are one of the most important determinants that possess a positive
87 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

91 **2.2 Financial Literacy**

92

93 According to Garman and Fogue [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 Fogue [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 influence
104 the personal financial management practices among Generation Y in Malaysia. As such, this
105 study outlines the following hypothesis:

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107 H1: Financial literacy positively influences personal financial management practices
108 among Generation Y in Malaysia.

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110 **2.3 Future Orientation**

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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:

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126 H2: Future orientation positively influences personal financial management practices
127 among Generation Y in Malaysia.

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129 **2.4 Gender**

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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

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

142

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

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

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149 3. METHODOLOGY

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151 3.1 Sample

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153 This paper employed deductive and quantitative approaches. The use of primary data
154 through cross-sectional survey design was adopted to identify the relationships between the
155 variables, along with convenience sampling under non-probability sampling. The
156 respondents were selected from the states of Sabah, Sarawak, Selangor, Kuala Lumpur,
157 Johor, and Penang. These six states were chosen due to their location and records of
158 having the highest number of bankruptcy cases in Malaysia for the year 2013 to 2017 [9].
159 The respondents in Malaysia are derived from two regions: east and west Malaysia. West
160 Malaysia consists of three regions; Northern (Penang), Central (Kuala Lumpur and
161 Selangor), and Southern (Johor). As for East Malaysia, it is comprised of two regions: Sabah
162 and Sarawak. Based on the statistics revealed by MDI [9], the highest number of bankruptcy
163 cases recorded from 2013 until 2017 was in Selangor (27,051 cases), followed by Johor
164 (14,582 cases), Federal Territories (13,561 cases) and the Pulau Pinang (6,879 cases).

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166 The G*Power 3.1 software package was employed in this study to calculate the required
167 minimum sample size [10]. The effect size parameters applied in this paper using G*Power
168 was (0.15) (medium), alpha (α) 0.05 with the power of (1- β) 0.99 (maximum), and it involved
169 two predictors [18]. Hence, the optimum sample that has been calculated by G*Power based
170 on the aforementioned parameters for this study is 146 participants from Generation Y in
171 Malaysia. This research used the online survey method as the data collection tool.

172

173 3.2 Variables Measurement

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175 **Financial Literacy:** The measurement of financial literacy was adopted and adapted from
176 Lusardi, Punam, and Adam [30], which embedded 3 items (i.e. interest rate, inflation, and
177 risk diversification). This measurement was initially designed for the 2004 health and
178 retirement survey (HRS) and currently, it serves as the benchmark to measure financial
179 literacy in a number of surveys [31]. This measurement tests the knowledge of fundamental
180 financial concepts [31], wherein only one answer is required to be chosen by the
181 respondents for each items.

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183 **Future Orientation:** The measurement of future orientation was adopted and adapted from
184 Polonsky, Vocino, Grimmer and miles [38]. The measurement for future orientation has four
185 items that use the Likert scale ranging from 1 (Strongly disagree), 2 (Disagree), 3 (Neither),
186 4 (Agree), and 5 (Strongly agree) that are used to evaluate the degree of future orientation in
187 each item.

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189 **Personal Financial Management Practices:** The measurement of personal financial
190 management practices was adopted from both Joo and Garman [22]. The measurement for
191 the variable in this study has eight items employing the Likert scale ranging from 1 (Strongly

192 disagree), 2 (Disagree), 3 (Neither), 4 (Agree), and 5 (Strongly agree) that are used to
193 examine the degree of personal financial management practices in each item.

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195 **3.3 Data Analysis Method**

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197 The statistical methods employed in this study were Statistical Package for the Social
198 Sciences version 22.0 (SPSS 22.0) and Smart Partial Least Squares 2.0 (SmartPLS 2.0).
199 This study used SPSS 22.0 to measure the frequency of each variable. Next, this study
200 utilized the partial least square structural equation modelling (PLS-SEM) as the preferred
201 method tool of statistical analysis. PLS-SEM can be applied when the research objective is
202 to predict relevant constructs [18]. Based on this reasoning, the objective of this research is
203 indeed parallel with the objective of PLS-SEM, which is to predict factors that influence
204 personal financial management practices among generation Y in Malaysia. Thus, the PLS-
205 SEM techniques were selected to analyze the research model via SmartPLS 2.0 software.
206 This research embedded a two-stage approach, namely measurement model assessment
207 and structural model assessment [2], which reflect the adequate way to report PLS-SEM
208 outcomes [5].

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210 **4. RESULTS AND DISCUSSION**

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212 **4.1 Profile of Analysis**

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Table 1. Demographic profile of the participants (N=146)

Demographic Variable	Category	Frequency	Percentage
Gender	Male	79	54.1%
	Female	67	45.9%
Age	16-19 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%

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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

219 Malay ethnicity were the most dominant with 33.6 percent which is followed by: Bumiputera
 220 Sabah at 24 percent, Bumiputera Sarawak at 14.4 percent, Indian at 10.3 percent, Chinese
 221 at 9.6 percent, and others at 7.5 percent. In terms of education background, a majority of the
 222 respondents (47.3 percent) held a bachelor degree followed by: 27.4 percent with
 223 STPM/Diploma qualification, 14.4 percent with master's degree, 8.9 percent for SPM level
 224 and below, while the lowest was 2.1 percent with doctorate qualifications.
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226 4.2 Measurement Model

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

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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		

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

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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

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

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4.3 Structural Model Assessment

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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.

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

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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.

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The R² 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, f², 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 Q² values exceed 0, the model is said to have sufficient predictive relevance. In this study, the Q² 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)

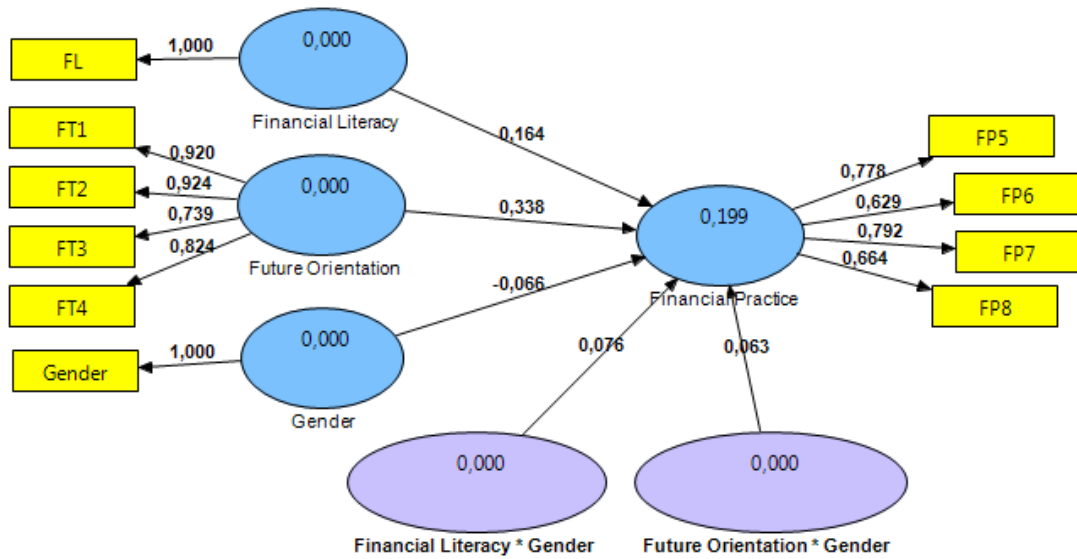
H	Relationship	Std. Beta	Std. Error	t-value	Decision	R ²
H1	Financial Literacy -> Financial Practice	0.164	0.080	2.046*	Supported	0.190
H2	Future Orientation -> Financial Practice	0.338	0.077	4.384**	Supported	
H3	Financial Literacy*Gender -> Financial Practice	0.076	0.068	1.120*	Not Supported	0.199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

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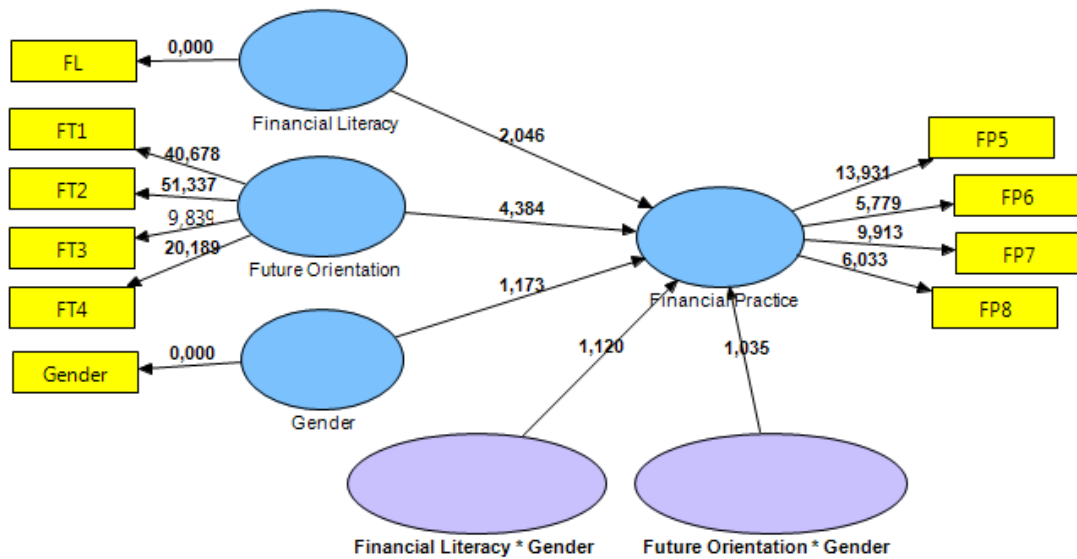
*Note: **p<0.01, *p<0.05*

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Fig. 1. Path Coefficients of Financial Literacy, Future Orientation, Gender and Financial Practices



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Fig. 2. Bootstrapping of Path Coefficients of Coefficients of Financial Literacy, Future Orientation, Gender and Financial Practices

4. DISCUSSION

This paper found that H1 was accepted, which proves that there is positive relationships between financial literacy and personal financial management practices among generation Y

296 in Malaysia. The finding of this study is consistent with a previous study indicating that the
297 key to personal financial management practices is the ownership of financial literacy [14].
298 Hence, one can assume that individuals with better financial literacy are deemed to perform
299 better in regards to personal financial management practices, when compared to those with
300 lower financial literacy.

301
302 Furthermore, this paper also found that future orientation (H2) has a positive relationship
303 with personal financial management practices among generation Y in Malaysia. This
304 particular finding is consistent with previous studies in which an individual with future
305 orientation presumed to plan for future-oriented financial behavior and events such as
306 retirement planning and saving [21,44]. In other words, individuals that think about the future
307 would plan their finances more carefully as they want to have effective personal financial
308 management practices.

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310 Last but not least, it was found that gender does not play a moderating role in the
311 relationships between financial literacy (H3) and future orientation (H4) towards personal
312 financial management practices among generation Y in Malaysia. The result of this finding is
313 in contrast with previous studies where both male and female were found to have different
314 practices on financial-related matters [4,24,25,26,27]. This paper found that different
315 practices on personal financial management practices among male and female among
316 generation Y in Malaysia do not exist.

317

318 **4. CONCLUSION**

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320 The study outcomes project that financial literacy and future orientation would have
321 significantly positive effects on personal financial management practices. Meanwhile, gender
322 does not play any moderating role between financial literacy and future orientation on
323 personal financial management practices among Generation Y in Malaysia. As such, the
324 Malaysian Government should focus more on the exposure of financial education for
325 children and youth. This would help to teach these youths to learn about financial matters
326 which can assist them to make better decisions in the future. Hence, the outputs retrieved
327 from this study can serve as guidelines by the Malaysian government agencies and
328 policymakers to implement new subject in the academic field as means to teach about
329 financial matters, efficient counselling as well as replacing the existing policies which are
330 more focused on Generation X. The findings also contribute towards the body of knowledge
331 to offer a better idea in regards to personal financial management practices, apart from
332 being an alternative in the attempt of seeking a solution to curb the escalating bankruptcy
333 issue faced by Generation Y in Malaysia. Therefore, future researchers should consider
334 expanding into other factors, such as money attitude and financial socialization agent, which
335 may unravel other relevant influential factors in the light of personal financial management
336 practices among Generation Y.

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339 **COMPETING INTERESTS**

340

341 Authors have declared that no competing interests exist.

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