



# Impact of Financial Literacy, Financial Socialization Agents, and Parental Norms on Money Management

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## **Abstract**

This study investigates the impact of financial literacy, socialization agents and parental norms on money management. Data collected via questionnaire from postgraduate students in both private and public institution of higher learning (proxy for young adults) are used in this study. Structural Equation Modeling (SEM) analysis is applied to establish the causal relations between the constructs of the proposed model. The results from this study indicate that financial literacy, financial socialization agents, and parental norms play a significant role on money management of young adults.

**Keywords:** Financial literacy, financial socialization agents, parental norms, and money management.

## **1. Introduction**

Financial literacy, financial socialization agents and parental guidance play an important role on the money management of young adults. Such exposures if well employed may contribute extensively to the financial freedom of individuals and prosperity of the society at large. It is imperative that these young adults are financially savvy from the onset of their career as it will assist in proper money management and thus minimize occurrence of young adults from being drowned in debts and eventual bankruptcy.

As widely documented, financial literacy has great impacts on money management (Lusardi, 2008a, NBER Working Paper 14084). Money management is a combination of individuals' aptitude to realize, analyse, handle, and communicate personal finances towards financial wellbeing (Vitt and Anderson, 2001; Atkinson and Messy, 2012 and OECD Working Paper 15). Money management is pivotal in the current era because young adults, especially those

from the medium to low income family are expected to make crucial decision on finance related matters at every stage of their life cycle. Their expenses are enormous due to high cost of living, huge study loans and other social expenses to keep up with the Joneses. It is imperative that these young adults are equipped with appropriate tools to manage their current and future financial obligations. Otherwise, with all the peer pressure, they may resort to unhealthy financial practices such as borrowing and extensive usage of credit cards, which is a major contributor towards escalating level of bankruptcy among young adults.

To this end, we undertook a study amongst the young adults to determine the impact of financial literacy, socialization agents and parental norms have on money management. These young adults are represented by part-time postgraduate students (who are working adults) at different private and public universities in the Klang Valley. Convenience sampling procedure is adopted and data is collected via university campus intercept procedure; face to face survey method. This research applies Structural Equation Modeling (SEM) analysis to establish the causal relations between financial literacy, socialization agents and parental guidance on the money management. The results from this study indicate that financial literacy, parental guidance and socialization agents play a significant role on the money management of young adults. This is an indication that young adults need to be exposed to proper financial and money management knowledge, thus assisting them in making the right financial decisions and attain financial freedom at an early stage of their life. At a macro level, social problems arising from poverty and criminal activities could be reduced, if not eliminated (Boon et al., 2011). In that context, it is strongly commended that execution of knowledge and awareness among young adults on financial planning and its impact on money management be taken as an ultimate task by parents, educational institution, employers and the government. As rightly stated by Sundarasan et al., “Financial literacy, money management and wealth optimization is a ‘cradle to grave’ process, whereby individuals need to be educated and guided at every stage of their life-cycle, so as to ensure minimization of financial mistakes and to ensure financial freedom at the earliest possible stage of their life”.

The remainder of this paper is organized as follows. Section 2 presents an overview of previous works in this field. In Section 3, Research Design and Methodology are developed and a framework is proposed to determine the effects of each factor on money management. Implication and limitation is discussed in section 4. Finally, the paper concludes in Section 5 with a brief summary and further research.

## **2. Literature Review**

This section focuses on reviewing literatures directly related to our research; money management, financial literacy, socialization agents, and parental norms.

### **Money Management**

Money management has gained significant importance as being a vital part of financial stability and development (OECD, 2012), as unsatisfactory money management may cause “ill-informed” financial decisions. A report by the OECD (2009) shows that this has been brought about by the shifts in demographic profiles, continues challenging economic and financial conditions, contraction in private and public support systems and the continues developments within the financial markets. Money management among young adults has become an important issue globally and continues to be a major concern for financial well-being. This is particularly

significant amongst young adults in higher learning institutions (Knight & Knight, 2000), with the repercussions being seen in the high financial debts among students (Lea, Webley, & Walker, 1995; Lunt & Livingstone, 1992; Ranyard & Craig, 1995a; Walker, 1996). In that context, effectiveness of educational awareness has been documented as a pivotal component of financial improvement (Carsky, Lytton, & McLaughlin, 1984; Knight & Knight, 2000). Developing operational and suitable approaches will influence budgeting behavior among these young adults. This is an alternative educational effort so that individuals will outwit the undesirable effects of financial debt due to improper or non-existence of appropriate money management (Kidwell, Brinberg, & Turrisi, 2003). Budgeting could be improved by laying out a proper financial plan which will help to improve and/or minimize the likelihood of financial debt (Lunt & Livingstone, 1992; Ranyard & Craig, 1995b). A well designed and detailed financial plan is needed to ensure a proper money management execution platform amongst young adults.

### **Financial Literacy**

Financial literacy refers to, ‘understanding finance and the capability to utilize it to make sound personal financial decision’, (Hogarth and Hilgert, 2002). Financial education facilitates literacy, i.e., mastery of finance related knowledge and expertise, which are essential in undertaking daily transactions and wealth accumulation investments. It empowers people to manage their own finances and give long lasting financial security for themselves and their families. These information and abilities are essential to handle financial encounters and judgments in daily life, such as managing the allowances, maintaining a bank account, investing and saving (Kotlikoff and Bernheim, 2001; Johnson and Sherraden, 2007). Formal financial education is believed to play a vital role in financial literacy (Bernheim et al., 2001; Varcoe et al., 2005) and it is important to equip oneself with this knowledge of financial literacy at an early stage of one’s life as it affects the financial behaviour (Beverly and Burkhalter, 2005; Martin and Oliva, 2001).

Financial literacy has been linked to savings and portfolio decision. For example, people with low monetary education are more inclined to face issues with financial obligation (Lusardi and Tufano, 2009, NBER Working Paper 14808), less likely to take an interest in value ventures (Van Rooij et al., 2007; Christelis et al., 2010), less plausible to pick performing trust funds with lower expenses (Hastings and Tejada-Ashton, 2008, and NBER Working Paper 14538), less inclined to aggregate and oversee riches successfully (Stango and Zinman, 2007; Working Paper, Mimeo, Dartmouth College; Hilgert et al., 2003), and less inclined to antedate retirement (Lusardi and Mitchell, 2006; NBER Working Paper 17075, 2007 and 2009 and NBER Working Paper 15350). It cannot be denied that financial literacy is an imperative part of sound financial decision making, and many youngsters wish they had more money related information (Lusardi et al., 2009, NBER Working Paper 15352). It is thus widely documented that a positive relationship exists between financial literacy and financial decision-making.

The ultimate goal of financial education is to educate consumers so that they can make appropriate decisions and be responsible for them, assess their current financial situation and manage their finances in such a way as not to be a burden to their families or society. A financially knowledgeable and cultured citizen is highly competent in handling money and is adept to managing his own/family budget, including managing financial assets and obligations pertaining to a shift in life-long attainments. Furthermore, understanding the extent of financial literacy level of the young is particularly imperative when observed from the viewpoint that financial knowledge and expertise developed early in life as it generates an underpinning for impending financial conduct and happiness (Beverly and Burkhalter, 2005; Martin and Oliva, 2001).

Linking financial literacy and personal financial behavior have shown positive correlation in most researches (Bernheim et al, 1997, NBER Working Paper 6085; Hogarth and Hilgert, 2002; Hilgert et al., 2003; Courchane and Zorn, 2005; Lusardi and Mitchell, 2007; Lusardi, 2008b, OECD Working Paper 18, Boon, Yee, & Ting (2011)). Based on the preceding discussion, the following hypothesis is tested:

*H<sub>1</sub>: Financial literacy has a positive impact on money management*

## **Financial Socialization**

In addition to formal financial education and its commitments towards financial literacy, interaction of an individual with socialization proxies, for example, parents, friends, educators and media is important amongst young adults towards money and wealth optimization. A process by which individuals obtain necessary skills, information and attitude to maximize their ability in the financial marketplace is called financial socialization (Ward, 1974). Previous research has demonstrated that individuals acquire monetary information from formal instructive systems as well as from associations with socialization proxies (Hilgert et al., 2003). Theoretical and empirical results recommend that people look into money related instruments through social cooperation by means of informal correspondence or from recognizable learning (Brown et al., 2008; Hong et al., 2004; Osili and Paulson, 2008). Researchers have additionally noted that the impact of peers is imperative in forming an individual's money related conduct (Kretschmer and Pike, 2010; Masche, 2010; Moore and Bowman, 2006). Thus, peers verifiably assume a vital part in deciding an individual's monetary behavior (Delfabbro and Thrupp, 2003; Moore and Bowman, 2006; Kretschmer and Pike, 2010; Masche, 2010).

Media is an alternate essential socialization machinist for youngsters and teenagers. In a study by Lyons et al.(2006), approximately 33% of secondary schools stated that they had utilized mass media and the internet as bases to secure financial information. Research has also demonstrated the extent to which television has an impact on teenagers' buy appeals, brand distinguish, materialistic demeanor, and monetary practices (Buijzen and Valkenburg, 2003; Churchill Jr and Moschis, 1979; Loibl and Hira, 2005; Schor 2004). Loibl and Hira (2005) found that individuals who utilized media (e.g., pamphlet, distributions, programming, and Internet) as a data hotspot for money related engagements seem to have better monetary practices and financial fulfillment. They contended that media sources assist as a significant basis towards one's self learning for monetary matters. Lusardi et al. (2010) also demonstrated that financial literacy is intensely associated to socio-demographic features and domestic financial complexity. Thus, the following hypothesis will be tested based on the extant literature.

*H<sub>2</sub>: Socialization agents have a positive impact on money management.*

## **Parental Norms**

Apart from media and peers as money related socialization agents, parents are recognized as one of the prime socialization proxies for adolescent and adults (Clarke et al., 2005; Rettig 1985) and monetary related facts accumulations (Lyons et al., 2006). Current research has recommended that parents are additionally persuasive in imparting money related education to their children (Ivan and Dickson, 2008; Clarke et al., 2005; Dennis and Migliaccio, 1997; Neul and Drabman,

2001; Shim et al. 2010; Shim et al. 2009; Xiao et al. 2007). A comprehensive study by Shim et al. (2009) concurs that adults who are confident with their transactions with financial choices tend to have sufficient guidance from their parents since childhood, in addition to formal financial literacy education from different sources. Similarly, Lyons et al. (2006) who undertook a study on high school and college students conjectured that almost 77% of the students turned towards and relied on their parents to endow them with the information on financial knowledge and proficiency.

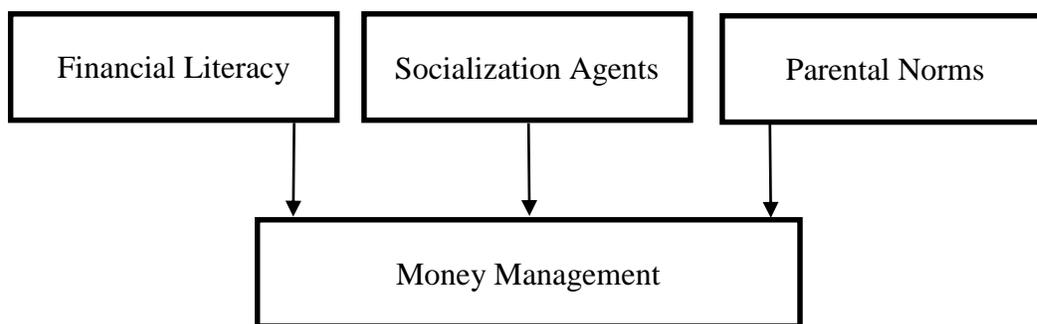
Recent evidence suggests that an individual’s mother’s education had a way with financial literacy, particularly if a respondent’s mother has university education. Respondents whose mothers were not deprived of university education had superior outlooks than those whose mothers advanced only from high school. This difference is statistically significant especially in terms of inflation, interest rates and risk diversification (Lusardi et al., 2009). Dewi, Prihatsanti, Setyawan, & Siswati, (2015) document that children usually learn the habitual patterns from their parents. Parents who had pushed valuable monetary conduct and were involved in unswerving inculcation amongst youth were strongly considered by their youngsters as financial replicas. The adults eventually undertake financial activities conforming towards appropriate money management. Thus, a large part of monetary learning that individuals adapt is through parent’s exhibition of financial knowledge (Clarke et al., 2005; Neul and Drabman, 2001; Shim et al., 2009).

This communication of parental guidance at early stages of one’s life coupled with the existence of financial education at school acts as a perfect blend and gives a solid establishment that could prompt better monetary decision-making by young adults. Parental impact, through primary exposures or deliberate education of cash management appears to be a critical variable in creating individuals’ money related propensities and practices. To further test on the impact of parental norm and wealth optimization among young adults, the following hypothesis is tested:

*H<sub>3</sub>: Parental norms have a positive impact on money management.*

This paper will focus on the relevance of financial literacy, financial socialization agents and parental norms towards money management and address the impact of the factors on money management.

Figure 1: Proposed framework for the impact of parental norms, financial socialization agents, and financial literacy attitude towards money management



### 3. Research Design and Methodology

The sample is represented by part-time postgraduate students (who are working adults) at different private and public universities. Convenience sampling procedure is adopted and data is collected via university campus intercept procedure; face to face survey method. Three hundred students were randomly selected to respond to the survey instruments, out of which only two hundred instruments were used for further data analysis due to incompleteness. Out of the total selected survey instruments, 60% of the respondents were female, whilst 40% of the respondents were male. This research applies 5 point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The instrument used to measure financial literacy is based on the works of (Boon et al., 2011) with five-item scale, whilst socialisation proxies uses the scale by Korean Financial Literacy Test (Sohn et al. 2012). Parental norms is represented by the five-item scale of Shim et al., (2010) and finally money management uses the five-item scale of Boon et al., (2011).

This research applies Structural Equation Modelling (SEM) analysis to establish the causal relations between the constructs on the proposed model. Confirmatory factor analysis (CFA) was performed to examine the constructs' dimensionality (see Table 2) using AMOS 20 software. Maximum likelihood estimation is applied to account for the nonappearance of multivariate normality. Chi-square test, goodness-of-fit index (GFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) is used to test the model fits (Hair, Tatham, et al. 2006).

Table I reports the properties of each scale for the five items of financial literacy, four items of socialisation proxies, five items of parental norms, and five dimensions under money management. The significant factor loadings under each construct's items demonstrate the convergent validity. This research also calculates the average variance extracted (AVE) (Fornell and Larcker 1981) to determine the discriminant validity of the constructs (see Table 2). The proposed hypotheses are tested using the structural equation modelling (SEM) as this technique provides statistical inferences by assessing the relationships in the path diagram comprehensively (Hair, Tatham, et al. 2006). Comparable model fit indices are tested using GFI, CFI, and RMSEA (Hair, Tatham, et al. 2006).

#### 4. Data Analysis

Table 1 displays the characteristics of the sample. The age of respondents range from 20 to 40 years old; 70% of the respondents are between 21 and 30 years, 20% between 31 and 40 years and 10% of the respondents were above 40 years. Out of the total respondents, 60% of the respondents represent private higher learning institution and the remaining 40% of the respondents were from the public higher learning institutions. In addition, most of the respondents (80%) were concerned about financial planning and money management. However, the remaining 20% of the respondents are not aware of financial planning and money management. Majority of the respondents (48%) agreed that media plays an important role in creating the awareness on financial planning slogan amongst the young generation. Most of them (27%) agreed that family can play an important role in promoting the important aspects of financial planning among the young generation. The characteristics of the samples are reported in Table 1.

Table 1: Characteristics of the Sample

Characteristics	Frequency (N=200)	Percentage (100%)
<b>Gender</b>		

Male	80	40
Female	120	60
<b>Age</b>		
21-30 Years	140	70
31-40 Years	40	20
Above 41 Years	20	10
<b>Marital status</b>		
Single	152	76
Married	48	24
<b>Respondent academic Qualification</b>		
Undergraduate	90	45
Postgraduate	110	55
<b>Parent's academic Qualification</b>		
Non-Graduate	82	41
Graduate	118	59
<b>Race</b>		
Malay	56	28
Chinese	122	61
Indian	18	9
Others	4	2
<b>Parents</b>		
Self-employed	112	56
Employed	88	44
<b>Monthly household income</b>		
Under RM1000	84	42
RM1001-RM2999	48	24
RM3000-RM4999	32	16
RM5000 and Above	36	18
<b>Main source of financial knowledge</b>		
Family	54	27
Media	96	48
Peers	32	16
School	18	9

Table 2 reports that the construct properties for each scale of Parental Norms, Socialisation proxies, Financial Literacy, and Money Management. The initial CFA model for all the constructs are adequate in achieving the acceptable model fit for further data analysis. The significant factor

loadings demonstrate adequate convergent validity of the constructs. In addition, the results of the construct reliability (CR) also demonstrate adequate internal consistency of the measured variables. It is concluded that the construct reliability of the constructs are supported since all composite reliabilities are more than 0.7 (Hair et al., 2010). Also, Table 2 shows that this model fits the sample data set and also meets the goodness-of-fit indices.

Table 2: The CFA results of the measures and their construct properties

Item	Constructs	Loading	CR	AVE
<b>Factor 1: Parental Norms</b>			0.89	0.63
$\chi^2=8.49$ with 5 degrees of freedom $p=0.00$ ; GFI=0.95; CFI=0.94; RMSEA=0.05				
PN1		0.75		
PN2		0.82		
PN3		0.83		
PN4		0.78		
PN5		0.80		
<b>Factor 2: Socialisation Proxies</b>			0.91	0.68
$\chi^2=8.39$ with 5 degrees of freedom $p=0.00$ ; GFI=0.94; CFI=0.96; RMSEA=0.06				
SA1		0.79		
SA2		0.87		
SA3		0.78		
SA4		0.85		
<b>Factor 3: Financial Literacy</b>			0.93	0.72
$\chi^2=12.49$ with 6 degrees of freedom $p=0.00$ ; GFI=0.92; CFI=0.93; RMSEA=0.05				
FL1		0.87		
FL2		0.86		
FL3		0.89		
FL4		0.85		
FL5		0.79		
<b>Factor 4: Money Management</b>				
$\chi^2=8.49$ with 5 degrees of freedom $p=0.00$ ; GFI=0.93; CFI=0.94; RMSEA=0.06				
MM1		0.78		
MM2		0.79		
MM3		0.86		
MM4		0.71		
MM5		0.74		

Notes:  $\chi^2$ : chi square function; d.f.: degree of freedom; GFI: goodness of fit index; CFI: comparative fit index; RMSEA: root mean square error of approximation.

Standardized path coefficient ( $\beta$ ) is applied to check the effects of the proposed model (less than 0.10 = small effect; around 0.30= Medium effect; value more than 0.50 = large effects) (Cohen 1988). The final model of the associations is shown in Table 3. We established the association of

parental norms, socialisation proxies, and financial literacy on money management. The standardized path coefficients ( $\beta$ ) support the positive relationship between all variables and money management at a significant level (see Table 3). Thus, H<sub>1</sub>, H<sub>2</sub>, and H<sub>3</sub> are accepted.

Table 3: Overall model fit statistics, path estimate and influence effects between the variables

Overall Model Fit Statistic	Statistic Value	Path	Path Estimate	Significance
P-value of test Statistic	0.335	Parental norm to money management	0.782	***
GFI	0.963	Socialisation agent to money management	0.625	***
AGFI	0.946	Financial literacy to money management	0.827	***
RMSEA	0.056			
	0.952			

Parental norms ( $\beta= 0.782$ ,  $p=0.000$ ) indicate a significant and positive relationship on money management; implying that parental norms have positive influence on money management of young adults. This is similar to the findings of Clark et al.(2005), Danes and Haberman (2007), Neul and Drabman (2001), and Shim et al. (2009). Their study documents that the larger part of monetary learning that individuals hold is adapted through parent’s exhibition of financial knowledge. Though financial literacy is to a large extent associated with the financial experience as it unveils greater financial knowledge, parental involvement and influence could be even more decisive because financial occurrences that ensues within a family setting is expected to be more impactful. Role of parents from an infancy stage of an individual is imperative, so as to ensure that they are taught at every stage of their life on the importance of wealth optimization. This will mold individuals to be financially savvy and attain financial freedom in the later part of their lives.

As for the socialization agent, the empirical results indicate a significant and positive ( $\beta= 0.625$ ,  $p=0.000$ ) relationship on money management. Financial socialization impacts monetary practices of individuals (Buijzen and Valkenburg, 2003; Churchill Jr and Moschis, 1979; Loibl and Hira, 2005; Schor 2004). Loibl and Hira (2005) found that the extent to which individuals refer to media (e.g., pamphlet, distributions, programming, and Internet) on money related activities affect the monetary practices and financial fulfillment. The results surmise that individuals use information obtained from socialization agents, such as friends, peers etc. to assist in better financial planning and practices.

Similarly, financial literacy also has a significant and positive ( $\beta= 0.827$ ,  $p=0.000$ ) impact on money management. This concurs with the study by (Stango and Zinman, 2007, Working Paper, Mimeo, Dartmouth College; Hilgert et al., 2003; Lusardi et al., 2009, NBER Working Paper 15352), who have clearly documented that financial literacy plays a pivotal role in money management. Young adults with low levels of financial literacy are less probable to accumulate and manage wealth effectively. Table 4 shows that the three hypotheses are fully supported.

Table 4: Summary of results of hypotheses

No	Hypotheses	Accepted/Rejected
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H1	Parental norms play a significant role on money management	Accepted
H2	Socialisation proxies play a significant role on money management	Accepted
H3	Financial literacy plays a significant role on money management	Accepted

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## 5. Implication and Limitations

Financial literacy, money management and wealth optimisation is a ‘cradle to grave’ process, whereby individuals need to be educated and guided at every stage of their life-cycle, so as to ensure minimisation of financial mistakes and to ensure financial freedom at the earliest possible stage of their life (Sundarasan et al., 2014). It is a relatively new concept in developing countries due to the absence and ignorance on the awareness of the antecedents to proper wealth management programme among young adults. Ignorance on finance related matters have dominated all aspects of human lives in diverse ways, so it is palpable that all relevant parties, i.e., government, regulatory bodies, institution of higher education, parents and employers understand the antecedents contributing towards strategic wealth management among young adults. These stakeholders should assume the responsibility in ensuring that individuals are equipped with the obligatory techniques of financial planning that would enable them to make appropriate decision. The factors explored in this paper have strong impacts on financial decision-making and money management; thus it is envisioned that it would support young adults’ endeavour in long-term life-changing financial decisions. Limitation of this study may include the relatively small sample size from a developing country. However, the results from this study are very similar to other studies that have been undertaken globally.

## 6. Conclusion and Further Research

This paper empirically investigates the roles of parental norms, socialisation agents and financial literacy on money management of young adults. Close-ended questionnaires were used to conduct a survey among young adults who are represented by the postgraduate students currently studying at both private and public universities.

With the theoretical and empirical support, the results from this study indicate that parental norms, socialisation proxies, and financial literacy play a significant role on money management. In conclusion, it is certain that if appropriate financial planning and money management becomes widespread in a society, economic growth will be motivated (Case and Fair, 1999) and consequently, social problems arising from poverty and criminal activities would be reduced, if not eliminated (Boon et al., 2011). Thus, it is strongly commended that execution of knowledge and awareness among young adults on financial planning and its impact on money management be taken as an ultimate and major task by government.

Future research could investigate and measure an extensive diversity of other questions in more detail which is presented in the Financial Literacy and Education Commission Research and Evaluation Working Group (2011). This research measures financial literacy at two cognitive levels; it is recommended that three different cognitive levels, i.e., Knowledge,

Comprehension, and Application (Cameron et al., 2014) be considered in future work as it may give a more comprehensive dimension to the study. Also, the variation in the relationship due to culture, gender and economic status should be further explored.

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