



Effect of financial socialization on financial literacy of formal sector employees in Kenya

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Abstract

Debt literacy can be improved through Financial Socialization conducted by Socialization Agents consisting of family, peers, formal education, experts, lenders and the media. The purpose of this research is to find out which socialization agent has the biggest role in the process of financial literacy. This research is a quantitative research using primary data whose data is obtained by conducting a survey. This research found that school is the most influential agent of financial socialization on financial literacy to formal employees in Kenya. The government should revamp the educational system for a debt literate populace.

Keywords: Agents of Financial Socialization, Debt Literacy, Financial Socialization

1. Introduction

At independence in 1963, the Government of Kenya identified poverty and unemployment as major problems facing its people. Over fifty years later, and despite numerous policy efforts, poverty continues to afflict many Kenyans, and millions are unemployed, under-employed or are “working poor” (Mwangi & Kihui, 2012) ^[27]. Similar to other developing countries, Kenya has two sectors: formal and informal. According to the 2009 Kenya Population and Housing Census (2019) ^[20], there were 19,677,401 employees in both formal and informal sector. At the end of year 2021, the formal sector employed an estimated 2,907,300 people. These are broken down as 1,980,200 employees in the private sector and 923,100 employees in the public sector (KNBS, 2022).

73.5% of the employees in Kenya are on low wage of between Shs.10,000 and Shs.50,000 per month. Only 68,676 employees earn more than Shs.100,000 a month, representing 2.89% (KNBS, 2015a, 2015b) ^[17, 18]. Despite high level of education with those in formal employment, Kenyans generally, are not very financially literate (Gachango, 2014; Mwangi & Kihui, 2012) ^[12, 27]. Variation in debt literacy among employees in Kenya is expected since each has different financial capability and motivation for gaining financial knowledge. Also expected from them is the diversity in terms of age, education, income, occupation, professional orientation and locality (Gachango, 2014) ^[12]. However, Danish Trade Union (2014) contends that the labour force in Kenya is relatively mobile, well-educated and entrepreneurial.

2. Literature Review

The effect of financial socialization on financial literacy was previously investigated by Sohn, Joo, Grable, Lee and Kim (2012) ^[32] who found that the higher the level of financial socialization, the higher the level of financial literacy. The results of this study are supported by research conducted by Ameliawati and Setiyani (2018) ^[2] which found that financial socialization has a positive effect on financial literacy. Another study from Loebiantoro, Eaw and Annuar (2021) ^[22] found that financial socialization agents have a significant influence on financial literacy. The more financial socialization from parents, formal education, peers, and the media, the higher the level of financial literacy. On the other hand, the less financial socialization, the lower the level of financial literacy you have. Research conducted by Hira, Sabri and Loibl (2013) ^[15] found that the media has a higher role than the family and has a positive influence on financial literacy. The results of another study conducted by Hilgert, Hogarth and Beverly (2003) ^[16] also showed that the media had a higher positive influence than other socialization agents.

The implication is that well designed media content can be a major source of learning about money and personal finance. There are various kinds of media that can be used and the internet is the most important in providing financial information education.

2.2 Financial Socialization

Humans as social beings will always interact with each other in society. Socialization generally refers to the process by which individuals acquire the values, knowledge, and skills necessary to interact with others (Ward, 1974) [34]. Social learning theory has been used to explain the influence of financial socialization on financial behaviors and outcomes in adulthood, and posits that behavior is learned through a process of direct experience and observation (Bandura, 1971) [3].

According to Danes (1994) [7], financial socialization is the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to financial sustainability and individual well-being. There is interaction and socialization between consumers and institutional actors to acquire knowledge, skills, and values in social and cultural class adjustment (Hira, *et al.*, 2013) [15]. Previous research found that socialization actors are not only formal education, but also peers, family, and the media (Hilgert, *et al.*, 2003) [16]. According to research conducted by the Organization for Economic Co-operation and Development (OECD) in 2006 (OECD, 2014) stated that the main source of financial socialization for adolescents is the media. Therefore, policy makers such as the government must ensure that the media present accurate and quality content about financial information. Debt literacy can be improved through financial socialization agents consisting of family, peers, formal education, experts, lenders and the media.

2.3 Family

Parents have a major role in financial socialization agents to provide financial literacy that can affect financial knowledge, financial attitudes, and financial behavior (Hira, *et al.*, 2013; Lusardi, Mitchell & Curto, 2010) [15, 24]. The impact that parents make on their children's knowledge, behavior, attitudes, and financial abilities starts early (Drever, White, Kalish, Quest, Hoagland & Nelms, 2015) [9]. In a family, financial socialization can occur implicitly when children observe parents' financial behavior and routine interactions, such as earning, spending, saving, borrowing, and sharing (Danes & Dunrud, 1993; Danes, 1994; Gudmunson & Danes, 2011) [6, 7, 13]. The theory of financial socialization through the family states that the socialization carried out is in terms of spending and saving, when to spend or save, and whether spending takes precedence over saving (Shim, Barber, Card, Xiao & Serido, 2010) [31]. Several studies have found that the role of parents is very important in increasing financial knowledge, capability, and behavior among adolescents (Tang, 2017) [33]. In Ghana, a survey of 3,623 young respondents found that parents have a significant influence on the development of financial competence (Chowa & Despard, 2014) [5].

2.4 Peers

Peers are considered a source of financial socialization that has a significant influence. Information and skills acquired through peer groups vary, such as financial advice and

information on financial planning and investment decisions (Hira *et al.*, 2013) [15]. Financial information provided by financial socialization agents such as peers, parents, and schools is considered a passive form of information seeking, while an active form of socialization can be obtained through the media (Sohn *et al.*, 2012) [32]. High peer influence in the use of debt is synonymous with debt illiteracy. Theoretically, individual will prefer behaviour of their reference group to outsiders, a phenomenon called in-group bias. In-group bias is due to peer pressure. Peer influence emanated from unconscious external influence, which affects the quality of decisions made. Often, peer influence in personal finances affects spending decision due to social comparison (Finke, 2011) [11].

2.5 Schools

In schools, students get financial literacy information regardless of their personal or ethnic circumstances (Drever *et al.*, 2015) [9]. Research by Shim, Barber, Card, Xiao & Serido (2010) [31], even states that there is clear evidence that formal financial education during the secondary school years predicts students' financial knowledge. Research by Danes and Haberman (2007) [8] mentions that secondary school financial literacy courses have been shown to have a short-term effect on improving financial knowledge.

2.6. Media

Another financial socialization agent is the media which also plays an important role in influencing purchasing and investment decisions, including the choice of investment products. Consumers prefer to educate themselves independently through media sources, namely television, radio, magazines, internet, and newspapers. The reasonable explanation that the media is just in time (available on time), provides easy access, and directly provides information for decision making (Hira *et al.*, 2013) [15]. Increasing the use of social media is an important educational development because it can increase opportunities to access financial information that was previously inaccessible (Lachance, 2014) [21]. Advances in social media are found in the use of Facebook, Instagram, twitter, and LinkedIn (Barber, 2013) [4]. Mass media such as the internet and television have an important role in increasing consumer knowledge among teenagers (Ahluwalia & Sanan, 2016) [1].

2.7 Financial experts and lenders

Seeking debt advice and counsel from persons deemed to be debt literate-experts has been used to indicate debt literacy (Winchester, 2011) [35]. Lenders are also a great source of financial information. Beside the conflict of interest of the lender, there is information asymmetry between the borrower and the lender. Further, lenders will lend to anyone for profit (Russell, Maitre & Donnelly, 2011) [30]. In most cases, the lending agents will give biased advice which favours the lender; popularly called the framing bias. Theoretically, all the above agents of social learning impart implicit and explicit information (Bandura, 1971) [3].

3. Debt Literacy

Financial literacy is the ability of people to process economic information that is used in making appropriate decisions about financial planning, wealth accumulation, debt, and retirement (Lusardi & Mitchell, 2014) [25]. The same thing was expressed by Sohn *et al.*, (2012) [32] who defined

financial literacy as the ability and knowledge to face challenges and make financial decisions in everyday life. Remund (2010) ^[29] categorizes financial literacy into five, namely: (a) understanding of financial concepts; (b) competence to discuss financial concepts; (c) ability to manage personal finances; (d) skilled in making sound financial decisions; and (e) assurance to develop effective plans for future financial needs. Research by Lusardi and Tufano, (2009) ^[23], also confirms that the reason for the need for financial literacy is the complexity of the capital market that offers a variety of products. This is confirmed by Mandell (2007) ^[26] which states that financial literacy is the competence to assess and evaluate new and complex financial instruments and make the right decisions in terms of

choosing instruments based on functions that are in their best long-term interests.

Debt literacy is one of the core competences of financial literacy. This implies debt literacy borrows heavily from, and applies, the dimensions of financial literacy. It refers to the competences in borrowing decisions such as making simple decisions regarding debt contracts and applying basic mathematical knowledge about interest compounding to everyday debt choices. A debt contract will feature interest rate, fees, penalties and repayment schedules among other terms and conditions. Low debt literacy provides a fertile ground for debt decision mistakes (Lusardi & Tufano, 2009) ^[23].

4. Research Framework

Independent Variables

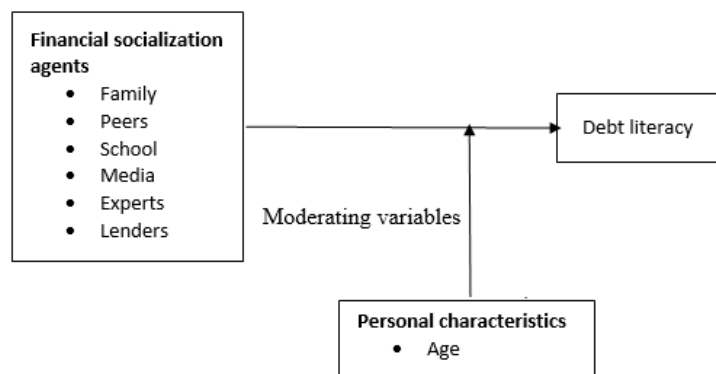


Fig 1: Conceptual Framework

4.1 Research Hypotheses

Based on the discussion of the theories and concepts above, the research hypotheses can be formulated as follows:

- H1:** Family has no significant effect on debt literacy of formal sector employees in Kenya.
- H2:** Peers has no significant effect on debt literacy of formal sector employees in Kenya.
- H3:** Schools have no significant effect on debt literacy of formal sector employees in Kenya.
- H4:** Media have no significant on effect debt literacy of formal sector employees in Kenya.
- H5:** Experts have no significant on effect debt literacy of formal sector employees in Kenya.
- H4:** Lenders have no significant on effect debt literacy of formal sector employees in Kenya.
- H5:** Age of formal sector employees has no moderating effect of on the relationship between financial socialization agents and debt literacy.

5. Research Methodology

This study examined the relationship between financial socialization and debt literacy of formal sector employees in Kenya. Positivism paradigm was used in this study. The study adopted a cross sectional and correlational descriptive research design. The study targeted a population of about 2.9 million employees in the formal sector. Two stage sampling was done, first, cluster sampling and then random sampling.

The study used primary data collected by use of self-administered questionnaires. A pilot test of the questionnaire was conducted on 40 respondents to check its validity and reliability. 384 questionnaires were circulated. Of the returned, 292 questionnaires were considered usable. Cronbach's alpha for likert type items was found reliable (over 0.7). Data analysis used IBM SPSS statistics version 21. Diagnostic tests produced favourable results. Descriptive and Pearson's correlation analysis were done. Further, OLS Multiple regression models were used to examine the relationships between the independent variables and the dependent variable. The questionnaire was divided into three parts, the first part contains the personal characteristics of the respondents, such as gender, age and occupation. The second part contained questions for each financial socialization agent, namely family, peers, formal education, media, experts and lenders whilst the third part was questions on debt literacy.

6. Analysis and Discussion

Several adjustments were made in the main-test as a follow-up to the results of the pre-test, including increasing the number of samples and increasing the number of indicators. There are 24 indicators used in the main-test, consisting of: Family with 4 indicators, Peers with 4 indicators, Formal Education with 5 indicators, Media with 5 indicators, and Financial Literacy with 6 indicators.

6.1 Descriptive Statistics on personal characteristics

Table 1: Distribution of respondents by Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	female	90	30.8	30.8	30.8
	male	202	69.2	69.2	100.0
	Total	292	100.0	100.0	

Finding in Table 1 indicates that male respondents are more than female. All respondents disclosed their gender.

Table 2: Distribution of respondents by age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	young	147	50.3	50.3	50.3
	middle	105	36.0	36.0	86.3
	elderly	40	13.7	13.7	100.0
	Total	292	100.0	100.0	

Finding in Table 2 indicates that majority of the respondents were young (below 35 years) while the elderly respondents were few (above 45 years).

Table 3: Distribution of respondents by Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	low	94	32.2	32.3	32.3
	high	197	67.5	67.7	100.0
	Total	291	99.7	100.0	
Missing	99	1	.3		
Total		292	100.0		

Finding in Table 3 show 67.5% of the respondents had high educational level (degree holders). Only three respondents did not disclose their levels of education.

Table 4: Distribution of respondents by marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	65	22.3	22.3	22.3
	Married	214	73.3	73.5	95.9
	Separated/divorced	4	1.4	1.4	97.3
	Widow	8	2.7	2.7	100.0
	Total	291	99.7	100.0	
Missing	99	1	.3		
Total		292	100.0		

Finding in Table 4 indicates that majority of the respondents were married. Only three respondents did not disclose their marital status.

Results in Table 6 show distribution of respondents by lenders. 57.4% of the respondents sought assistance from lender at below moderate extent (M=3.07, SD=1.56).

Table 5: Distribution of responses by financial experts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	145	49.7	50.3	50.3
	2	29	9.9	10.1	60.4
	3	36	12.3	12.5	72.9
	4	21	7.2	7.3	80.2
	5	57	19.5	19.8	100.0
	Total	288	98.6	100.0	
	Missing	99	4	1.4	
Total		292	100.0		

Results in Table 5 show distribution of respondents by financial experts. Majority of the respondents sought assistance from financial experts at low extent (M=2.36, SD=1.606).

Table 7: Distribution of responses by Peers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	3.4	3.4	3.4
	2	16	5.5	5.5	8.9
	3	31	10.6	10.6	19.5
	4	49	16.8	16.8	36.3
	5	186	63.7	63.7	100.0
	Total	292	100.0	100.0	

Results in Table 7 show distribution of respondents by peers. 63.7% of the respondents sought assistance from peers at very high extent (M=4.32, SD=1.083).

Table 6: Distribution of responses by Lenders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	76	26.0	26.8	26.8
	2	28	9.6	9.9	36.6
	3	59	20.2	20.8	57.4
	4	42	14.4	14.8	72.2
	5	79	27.1	27.8	100.0
	Total	284	97.3	100.0	
Missing	99	8	2.7		
Total		292	100.0		

Table 8: Distribution of responses by school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	82	28.1	28.1	28.1
	2	32	11.0	11.0	39.0
	3	61	20.9	20.9	59.9
	4	42	14.4	14.4	74.3
	5	75	25.7	25.7	100.0
	Total	292	100.0	100.0	

Results in Table 8 show distribution of respondents by the extent they used their education and training. 59.9% of the respondents used their education and training at moderate extent (M=2.99, SD=1.553).

Table 9: Distribution of responses by Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	44	15.1	15.1	15.1
	2	50	17.1	17.1	32.2
	3	80	27.4	27.4	59.6
	4	57	19.5	19.5	79.1
	5	61	20.9	20.9	100.0
	Total	292	100.0	100.0	

Results in Table 9 show distribution of respondents by the extent they used their media to make debt decisions. 59.6%

of the respondents used media at moderate extent (M=3.14, SD=1.338).

Table 10: Distribution of responses by family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	98	33.6	34.6	34.6
	2	22	7.5	7.8	42.4
	3	48	16.4	17.0	59.4
	4	40	13.7	14.1	73.5
	5	75	25.7	26.5	100.0
	Total	283	96.9	100.0	
Missing	99	9	3.1		
Total		292	100.0		

Results in Table 10 show distribution of respondents by the extent they consult the family when making debt decisions.

59.6% of the respondents used media at moderate extent (M=2.90, SD=1.632).

6.2 Correlation Analysis Results of the Study variables

Table 11: Correlation Matrix

		1	2	3	4	5	6	DL
Experts	Pearson Correlation	1						
	Sig. (2-tailed)							
Lenders	Pearson Correlation	.434**	1					
	Sig. (2-tailed)	.000						
Family	Pearson Correlation	.210**	.188**	1				
	Sig. (2-tailed)	.000	.002					
Peers	Pearson Correlation	-.156**	-.139*	-.065	1			
	Sig. (2-tailed)	.008	.019	.277				
Schools	Pearson Correlation	-.007	-.042	-.084	-.112	1		
	Sig. (2-tailed)	.909	.483	.160	.056			
Media	Pearson Correlation	.004	-.043	-.048	-.100	.528**	1	
	Sig. (2-tailed)	.946	.473	.422	.089	.000		
DL	Pearson Correlation	.335**	.178**	.283**	-.059	.392**	.366**	1
	Sig. (2-tailed)	.000	.003	.000	.317	.000	.000	
	N	288	284	283	292	292	292	292

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

The results in Table 11 imply that all financial socialisation agents are positively and significantly related to debt literacy except peers which was negative and insignificant. (r=-.059, p>.05). All the financial socialisation agent had a weak correlation with debt literacy. Since none of the correlation coefficients greater than 0.8, it was concluded that the problem of multi-collinearity did not exist.

6.3 Regression Analysis Results for the Study Variable

The general model used to test the relationship between the agents and debt literacy;

$$y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + \epsilon_i \dots \text{Equation 1}$$

Where: y_i = Debt literacy

x_1 = experts

x_2 = lenders

x_3 = family

x_4 = Peers

x_5 = schools

x_6 = Media

b_i =Coefficients of the agents

Table 12: Relationship between financial socialisation agents and Debt Literacy

	β	SE	$\hat{\beta}$	T	Sig.	VIP
Constant	2.263	0.120		18.897	.000	
Experts	0.064	0.013	0.260	4.722	.000	1.268
Lenders	0.012	0.014	0.047	0.852	.395	1.259
Family	0.060	0.012	0.251	4.995	.000	1.061
Peers	0.016	0.019	0.042	0.833	.405	1.057
School	0.076	0.015	0.305	5.101	.000	1.494
Media	0.061	0.018	0.208	3.471	.001	1.506
R	.595					
R squared	.354					
Adjusted R squared	.339					
Std error of the estimates	0.31600					
ANOVA	F(6,277)=24.711, p=.000					

Findings in Table 12 show that there is a moderate correlation (R=.595) between the agent and debt literacy. The same Table also indicated that agents explain 35.4% of the variation in debt literacy. It follows that other factors outside the agents explain 64.6% of variation in debt literacy. Table 12 show that the adjusted R² is .339 which is close to the R², hence the model is well generalized. This means that if the model were derived from the population instead of the sample; it would account only for 1.5% variation, which is fairly low. The VIF values were within the acceptable range hence the indicators were uncorrelated and there is no multi-collinearity. VIF nearest to 1 suggest no multi-collinearity; that is there is no linear relationship between independent variables. While VIF substantial greater than one mean there is multi-collinearity. VIF more than 10 indicates serious multi-collinearity problem (Field, 2013) [10].

Results in Table 12 imply the model is valid [F(6,277) = 24.711, p=.000]. The value of F-ratio was significant (p=.000). This shows that the regression model has no chance of giving wrong predictions. The model in Table 12 show coefficients for the consulting experts (b₁=0.260, p=.000), lenders (b₂=0.047, p=.395), family (b₃=0.251, p=.000), peers (b₄=0.042, p=.405), School (b₅=0.305, p=.000) and media (b₆=0.208, p=.001). Table 12 show that four coefficients of the agents were significant (p<.05) and therefore affected

debt literacy whilst lenders and peers had insignificant effect to debt literacy and were dropped in the ensuing model. However, all the coefficients of the agents were positive. The beta values explain the relationship between predictors and dependent variable. Table 12 also show that marginal effects for experts and school were highest. Details in Table 12 were used to fit a linear equation. Substituting the standardized beta coefficients in Table 12 in the OLS multiple regression model ($y_i = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + \epsilon_i$), the following DL equation was obtained;

$$DL = 0.260E + 0.251F + 0.305S + 0.208M \dots \dots \dots \text{equation 2}$$

Equation 2 imply that for one point increase in consulting experts (E), family (F), school (S) and media (M), the score of debt literacy (DL) would increase by 0.260, 0.251, 0.305 and 0.208 respectively, by keeping other three variables constant each at a time. However, the T-value for school was the highest thus it has the largest effect on debt literacy. Thus, the study rejected the null hypotheses H₀₁; H₀₃; H₀₄; and H₀₅ (b_i=0, p<.05) that the agent have no significant effect on debt literacy. But the data failed to rejected the null hypotheses H₀₂ and H₀₆ (b_i=0, p<.05) that the agent have no significant effect on debt literacy.

6.4 Revised Conceptual Framework

Independent Variables

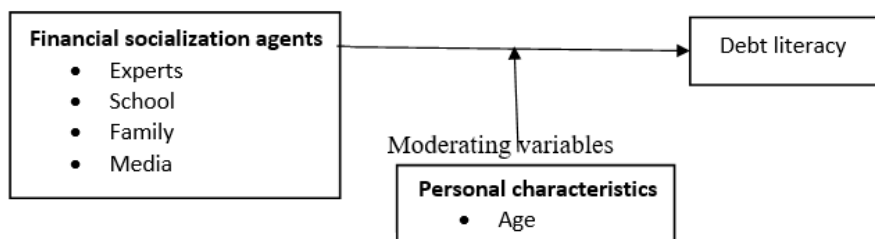


Fig 2: Conceptual Framework

Beta values, p-values and T-values in Tables 12 were used to rank the agents in descending order based on their

significance while those that were insignificant were dropped

Table 13: Relationship between revised financial socialisation agents and Debt Literacy

	β	SE	$\hat{\beta}$	T	Sig.	VIP
Constant	2.352	0.065		36.136	.000	
Experts	0.069	0.012	0.283	5.738	.000	1.046
Family	0.062	0.012	0.258	5.228	.000	1.053
School	0.072	0.015	0.287	4.946	.000	1.453
Media	0.064	0.017	0.228	3.756	.001	1.447
R	.598					
R squared	.358					
Adjusted R squared	.349					
Std error of the estimates	0.31522					
ANOVA	F(4,277)=38.605, p=.000					

Findings in Table 13 show that there is a moderate correlation (R=.598) between the revised agents and debt literacy. The same Table also indicated that revised agents explain 35.8% % of the variation in debt literacy. It follows that other factors outside the agents explain 64.2% of variation in debt literacy. Table 13 show that the adjusted R² is .349 which is close to the R², hence the model is well generalized. This means that if the model were derived from the population instead of the sample; it would account only for 0.9% variation, which is fairly low. The VIF values were within the acceptable range hence the indicators were uncorrelated and there is no multi-collinearity.

Results in Table 13 imply the model is valid [F(4,277) =38.605, p=.000]. The value of F-ratio was significant (p=.000). This shows that the regression model has no chance of giving wrong predictions. The model in Table 13 show coefficients for the consulting experts (b₁=0.283, p=.000), family (b₃=0.258, p=.000), School (b₅=0.287, p=.000) and media (b₆=0.218, p=.000. Table 13 show that four coefficients of the agents were significant (p<.05). Table 13 also show that marginal effects for experts and school were highest. A study by Loebiantoro, Eaw, and Annuar (2021) [22] found media was the most influential agent of financial socialization on financial literacy in the millennial generation.

Details in Table 13 were used to fit a revised linear equation. Substituting the standardized beta coefficients in Table 13 in the OLS multiple regression model

($y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + \epsilon_i$), the following DL equation was obtained;

$$DL = 0.283E+0.258F+0.287S+0.218M.....equation 3$$

6.5 Moderating Effect of Age on the Relationship Between the revised agents and debt Literacy

The MMR model used to test the moderating effect age of employees in the relationship between revised agents and debt literacy was;

$$y = b_0 + b_1x_1 + b_2z_1 + b_3x_1z_1 + \epsilonequation 4$$

Where: **y** = Debt literacy

x₁ = Aggregate revised agents score

z₁ = Age of the employees (1=less than 35 years; 0 =otherwise)

b_i =coefficients

Table 14: MMR model summary of revised agents against debt literacy

Model	R ²	Adj. R ²	SE	Change Statistics					
				ΔR^2	ΔF	df1	df2	$\Delta Sig.F$	
1	.600	.360	.355	.31363	.360	78.412	2	279	.000
2	.602	.363	.356	.31353	.003	1.172	1	278	.280

From Table 14, Model 1 indicate that R=.600, R²=.360 and [F(2,279)=78.412, p=.000] implying the model can predict debt literacy significantly. The value of R² indicates that 36% of the variance in the debt literacy can be accounted for by the revised agents and age of the employees. Model 2 in Table 14, shows the results after the interaction term (**x₁.z₁**) was added into the model. Table 14 also indicates that the inclusion of the interaction term resulted into an R² change of .003 and [F(1,278)=1.172, p=.280], showing insignificant moderating effect. Thus, the study failed to reject the null hypothesis [H_{05b}:b₃=0, p<.05] that age of employees has no moderating effect of on the relationship between revised agents and debt literacy.

Table 15: MMR model results of revised agents against debt literacy

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	15.426	2	7.713	78.412	.000
1 Residual	27.443	279	.098		
Total	42.869	281			
2 Regression	15.541	3	5.180	52.698	.000
2 Residual	27.328	278	.098		
Total	42.869	281			

The MMR Models 1 and 2 shown in Table 15 were found to be valid [F(2,279)=78.412 p=.000] and [F(3,278)=52.698, p=.000] respectively. The models in Table 15 show the value of F-ratio were significant (p=.000). These results show that the both models significantly predict debt literacy but model 1 was better.

Table 16: MMR model coefficients of revised agents against debt literacy

	Model	Beta	SE	Beta	T	Sig.	Tolerance	VIF
1	b_0	2.337	0.064		36.298	.000		
	x_1	0.066	0.005	0.590	12.186	.000	.979	1.022
	z_1	0.041	0.038	0.053	1.086	.278	.979	1.022
2	b_0	2.396	0.085		28.328	.000		
	x_1	0.061	0.007	0.541	8.169	.000	.523	1.913
	z_1	-.093	0.129	-.119	-.718	.473	.083	11.995
	$x_1.z_1$	0.012	0.011	0.192	1.083	.280	.073	13.772

Based on MMR model 2 beta values shown in Table 16, revised agents (x_1) had positive but significant ($p=.000$) effect on debt literacy while age of the employees (z_1) had negative and significant ($p=.473$) effect on debt literacy. Since the coefficient of the interaction term ($x_1.z_1$) was insignificant ($p=.280$), the study failed to reject the null hypothesis that [$H_{07}:b_3=0, p<.05$] that age of employees has no moderating effect of on the relationship between revised agents and debt literacy. Finally, substituting the standardized beta coefficients in the best OLS MMR model

($y_1 = b_0 + b_1x_1 + b_2z_1 + \varepsilon$), the following DSR equation was obtained;

$DL = 0.541RA \dots \dots \dots \text{Equation 5}$

Equation 3 implies that for one point improvement in the revised agent (RA) would increase debt literacy (DL) by 0.541 points keeping the effect of age of the employees constant. Whereas age of employees had no significant contribution to debt literacy.

7. Conclusion of the Study

Based on the results of this study, it can be concluded that the financial socialization agents, such as the family, school, media and financial experts can improve the debt literacy of formal sector employees. The greatest influence is given by the school, meaning that the more information on debt is gained by formal education. The other better influence were financial expert who give both debt counsel and advice. Media was the least influential despite the ease of access of financial information anytime and anywhere.

8 Recommendation of the Study

Considering the availability of media formal sector employees are encouraged to embrace these financial socialization agent to obtain current financial information. Financial information available on the internet and social media can be easily accessed by all formal sector employees regardless of age so as to increase their debt literacy. In fact well designed media contents can be a major source of learning about money and personal finance.

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