

**EFFECT OF FINANCIAL LITERACY ON PERSONAL FINANCIAL  
MANAGEMENT PRACTICES:  
A CASE STUDY OF EMPLOYEES OF FINANCE AND BANKING INSTITUTIONS**

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**ABSTRACT**

This paper examines the personal financial management practices that encompasses Savings practices, Expenditure practices, Debt management, Investment, Money management, retirement and unexpected practices of both employees who are financially educated versus those who are not. In this study, those who are financially literate are those perceived to have undergone some level of financial training such as bankers, accountants and auditors etc. The survey data was obtained from 192 employees using a structured questionnaire. This study focused on the effect of financial education on personal financial management practices. The results have shown that those who are financially educated do practice to an extent the standard financial behaviors. A likert's mean score of 5 would have indicated that the financially educated perfectly understand the impact of poor money management habits caused by lack of financial education.

It further observes that one can still practice financial management behaviors whether or not they are financially literate. This is as a result of other available avenues of acquiring financial knowledge. Finally, there is significant difference between those who are perceived to be financially educated compared to those who are perceived otherwise. We tested the overall data to determine whether the means of responses on all the aspects of personal financial management were significantly different for the finance and the non-finance respondents. Those who were financially literate recorded a mean score of 3.753103 while those who were not had a mean of 3.364828 out of the maximum 5.0 points.

The student t-test of equal means gave a p-value of 0.029086 at a 5% significance level. These results show that there is a significant difference between the personal financial management practices of the finance and the non-finance literate respondents. The financially literate had a better appreciation and application of the financial management practices.

It can be concluded that financial literacy influences personal financial management practices. It is recommended that individuals should try to acquire some basic knowledge of financial management to allow them to better manage their personal finances. However, these recommendations should be applied bearing in mind the limitations of the possible lack of representativeness of the sample used in this study.

## **1.0 INTRODUCTION**

The financial systems of the 21<sup>st</sup> Century have been growing with speed, sophistication and becoming more complex (Hilgert and Hogarth, 2002) world over. The economic and social environment in which people take financial decisions has changed – and this change is set to continue with the dynamic and ever changing technology. Financial products and services have multiplied along with technological and other means of marketing them (Greenspan, 2005).

People have increasing to take individual responsibility for their financial affairs unlike in the past when the governments provided basic necessities like education, provision of health care and even subsidized food prices. This calls for skills that can be obtained through financial education. The cost of education, in Kenya for example, even though the government introduced free primary and secondary education, the reality is that the parents still bear the burden of most requirements. The cost of healthcare is equally being borne by individuals rather than the government or other organizations (Vitt et al, 2005). This was a descriptive quantitative study aimed at determining the effect of financial education on personal financial management practices.

Financial problems resulting from poor personal financial management is known to affect individual productivity at the workplace. Garman et al (1996) found that employees in the United States were stressed about their poor financial behaviours that impacted negatively on their job productivity. Brown et al (1993) found that many employees were suffering from stress as a result of money problems. They observed that money problem behaviors included: over-indebtedness, overspending, unwise use of credit, bad spending decisions, poor money management and inadequate money to make ends meet. As a result of these employee problems, many companies in the United States adopting financial education at work places aimed at equipping their employees with personal financial management skills (Brown et al, 1993).

Financial Literacy is the ability to make informed judgments and to take effective actions regarding the current and future use and management of money (Basu, 2005:2). Financial literacy includes the ability to understand financial choices. For example, the ability to compare offers before applying for a credit card, having a current and savings accounts, having a book keeping system, planning for the future like saving or investing for long term goals like education, home, vacation etc. Financial literacy also calls for wise spending. This means preparing budgets, tracking expenditures, paying bills on time, and ensuring that credit card balances are paid in full each month. Financial literacy affects financial decision making. Ignorance about basic financial concepts can be linked to lack

of retirement planning, lack of participation in the stock market, and poor borrowing behavior (Lusardi, 2008).

Studies done in the United States of America by various researchers have shown that relatively few households implement recommended financial management practices. These practices may be used to define personal financial management. These include budgeting and cash flow management, account ownership, use of credit, savings behavior, and asset accumulation (Davis and Carr, 1992).

## **2.0 METHODOLOGY**

The population of the study comprised all employees perceived to have training in finance from financial institutions listed on the Nairobi Stock Exchange. There are fifteen (15) financial and investment companies listed on Financial and Investment Sector Market (FISM) of the Nairobi Stock Exchange.

This study used a survey to determine the population of respondents. The target of interest was personal finance management practices in the areas of savings, borrowing, insurance, expenditures, and investments. One sample basically targeted employees (respondents) with finance background.

A second independent sample was drawn from other non finance and investment employees (respondents) so as to compare whether there exists a difference between the two groups when it comes to personal financial management practices. A simple random sampling technique was used to select respondents from each institution in each of the two groups of respondents. A total of 192 respondents (half in each sample) were used for this study.

A self administered questionnaire was used to gather data from the respondents. However, considering other office commitments, the respondents were allowed 2-3 days to complete the questionnaire in some instances hence the use of drop and pick later data collection approach.

The financial management practices of participants were examined using a Likert scale comprising twenty four 5-point questions scored from (1) *never* to (5) *always*. Higher scores were an indicator a higher level of use of personal financial management practices and vice versa.

The areas to be scored on were divided into; Saving Practices, Expenditure Practices, Investment Practices, Money Management Practices, Retirement Practice and Unexpected Expenditure Practices. The responses from each participant were used to calculate the mean percentage of scores for each question.

The statistical package for social sciences (SPSS version 12) was used for analysis. The Student t-test was used to test for the significance of differences between the means of

the finance and non-finance respondents with the aim of determining whether there is a financial literacy influences personal financial management practices.

### 3.0 DATA ANALYSIS AND DISCUSSIONS

Poor financial behaviors are personal and family practices that have consequential, detrimental and negative impact on one’s life at home and work (Thomas, 1996). Thomas provides examples of poor financial behaviors that negatively impact one’s family life for example regularly running out of money, unable to pay due bills on time (utilities, rent, credit cards etc) typically not contributing to a pension plan; regularly feeling emotionally stressed about money and many others. Although this study was not looking at the effect of poor financial behaviors, the responses obtained can help the researchers to make some of the inferences.

#### 3.1 Savings Practice

Saving is defined as what is left out of personal disposable income. Alternatively, personal disposable income is defined as income after taxes are paid (Urban Institute, 2008). Saving may also be seen as the difference between income and consumption. This implies that savings automatically decline as consumption increases (Lusardi, 2003). The following table represents a summary of the responses on saving:

**Table 1:** Saving Practices of Respondents by Category

Practice	Financially Educated	Not Financially Educated
I save/ invest out of each payment I receive?	3.70	3.60
I save at least 10 percent of my gross monthly income	3.61	3.51
I set aside money for future needs/wants	3.72	3.60
I increase my savings when I receive a salary increase	3.61	3.29
I am the kind of person who always looks to save money	3.80	3.46

*Source: Research data, 2010*

Our findings show that most respondents embrace a savings culture displayed as by their setting aside of some money out of each payment they receive. There is a significant difference between the means of the financial literate and the non-finance respondents. Those who were financially literate recorded a mean of 3.688 while those who are not had a mean of 3.492 out of the maximum 5.0 points.

Most financially educated respondents were always looking for other opportunities to save money, setting aside money for future needs, and saving out of each payment they received unlike their counterparts.

The student t-test of equal means gives a p-value of 0.01989 at a 5% significance level; clearly indicating that there is a significant difference between the saving practices of the finance and the non-finance respondents. The results could be attributed to the fact that

the financially literate respondents have an appreciation of causes and consequences of business bankruptcies and are able to apply the logic to their own situations.

### **3.2 Expenditure Practices**

A report by the National Foundation for Credit Counseling (2007) suggests that many financial experts agree that having a household budget is a characteristic of good financial management practice. Table 2 summarizes expenditure practices by respondents.

**Table 2:** Expenditure Practices of Respondents by Category

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
I track some or all my expenses	3.67	2.00
I compare prices for major expenses	4.13	4.02
I use a spending plan or budget	3.44	1.34
I often spend more than I can afford	1.94	1.93
I closely watch the amount I spend	3.87	2.06

Source: Research Data, 2010

The research findings showed that more respondents who are financially literate track all or some of their expenses with a mean of 3.67 compared to their counterparts who registered a mean of 2.00. Both categories however display similar trends when it comes to comparing prices for all major expenses with means of 4.13 and 4.02 respectively.

The best way to really know where the money is going is by tracking spending each day. Only then can spending change. Those financially literate recorded a mean of 3.67 compared to 2.00 for those who are not. A very small percentage in both categories spends more than they can afford; recording a mean of 1.94 and 1.93 respectively. Spending more than one makes can lead to unnecessary debt burdens for the individuals. Debts and especially consumption debt can negatively change the course of one's life (Monyoncho, 2007). About three in ten of those interviewed did not have a spending plan.

Our findings show that most respondents embrace good expenditure practices especially in the area of comparing prices for major expenses. Statistically, there is a significant difference between the means of the financially literate and the non-finance respondents. Those who were financially literate recorded a mean of 3.34 while those who were not had a mean of 2.27 out of the maximum 5.0 points. The student t-test of equal means gave a p-value of 0.046124 at a 5% significance level indicating that there is a significant difference between the expenditure practices of the finance and the non-finance respondents.

### **3.3 Debt Management Practices**

Two questions asked were meant to understand the respondents' debt management practices. Debts can be accumulated either by borrowing interest linked funds and not paying on time hence attracting penalties; or borrowing money and using it mainly for consumption. This can either be through delaying paying bills or even credit card purchases that are not cleared at the end of the credit period. Monyoncho (2007) suggests that one should avoid buying consumables on credit and rather pay cash wherever possible. Table 3 summarizes debt management practices respondents.

**Table 3: Debt Management Practices of Respondents by Category**

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
I pay my bills on time	4.46	4.70
I repay the money I owe on time	4.52	4.67

Source: Research data, 2010.

The respondents from both groups recorded very high means of above 4.4 for both categories of debt management. This indicates a high level of discipline in regard to paying bills and creditors on time. Of the two groups, those who are not financially educated are more sensitive sorting out their bills on time with a mean of 4.685 compared to those who are financially educated with a mean of 4.49.

The findings show that overall; the non finance respondents pay their bills and borrowings in time. Statistically, there is a significant difference between the means of the financial literate and the non-finance respondents. Those who were financially literate recorded a mean of 4.49 while those who were not had a mean of 4.685 out of the maximum 5.0 points. The student t-test of equal means gave a p-value of 0.014167 at a 5% significance level indicating that there is a significant difference between the debt management practices of the finance and the non-finance respondents. These findings may be as a result of the finance respondents applying the working capital management theory where one is expected to pay his debts as late as possible but at the same time collect his receivables as soon as possible.

### **3.4 Investment Practices**

Although many respondents were aware of existing investment instruments a much lower numbers had made investment commensurate to the knowledge. This observation is for both those financially educated and those who are not. To make saving and investment decisions individuals require knowledge beyond fundamental financial concepts including relationship between risk and return; how bonds, stocks, and mutual funds work (Lusardi, 2008). This study, however did not delve into looking at these

relationships. Those who were financially literate had a higher mean (3.63) in investments practices compared to the mean of those who were not (3.51). The following table represents a summary of the responses on investment practices:

**Table 4: Investment Practices of Respondents by Category**

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
I know about investments (stock, bonds, mutual funds)	4.16	3.96
I have invested in stocks, bonds or mutual funds	3.19	3.16
I spread my money across more than one type of investment	3.53	3.41

*Source: Research Data, 2010*

The findings show that overall; there is no significant difference between the finance and the non-finance respondents as far as investment practices are concerned. Those who were financially literate recorded a mean of 3.63 while those who were not had a mean of 3.51 out of the maximum 5.0 points. The student t-test of equal means gave a p-value of 0.38403 at a 5% significance level indicating that the two means are not significantly different. These findings may be an indication that saving does not necessarily lead to investment.

### **3.5 Money Management Practices**

The survey information provides description of how respondents learned about managing money and how they use the information. There were five sources of information on how to manage their money. The most preferred source is from reading books followed by college/university. Looking after one’s spending habits can help “find” money to put in their financial goals. The best way to know where to spend is to track spending practices. Every shilling must be written down daily to find out where money is going. The following table represents a summary of the responses on money management:

**Table 5: Money Management Practices**

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
Have you ever felt that your financial situation was out of control	2.42	2.60
I worry about money matters	3.08	3.11
I write Goals for managing my money	3.22	2.73
I generally achieve my money management goals	3.23	3.11

*Source: Research Data, 2010*

Slightly more than 50 percent (or mean of 2.60) of those respondents who are not financially educated have at one time or the other felt that their finances were out of control. They are more likely to worry about money and less likely to write out their

money goals. The financially literate group had a higher possibility of achieving their money management goals likely because they set goals for managing the money unlike their counterparts.

The findings show that overall; there is no significant difference between the finance and the non-finance respondents as far as far as money management practices are concerned. Those who were financially literate recorded a mean of 2.9875 while those who were not had a mean of 2.8875 out of the maximum 5.0 points. The student t-test of equal means gave a p-value of 0.341214 at a 5% significance level indicating that the two means are not significantly different. These findings may be an indication that saving does not necessarily mean good money management.

### 3.6 Retirement Practices

Retirement programs represent a way to encourage long term planning as it relates to employment (Muske and Winter, 2004). Such plans can be viewed as wise financial management. A study by the *Principal Global Financial Well Being* (2004) indicated that majority of the surveyed participants are extremely concerned about their financial future and specifically their standard of living. According to Lusardi (2000) financial literacy affects financial decision making. Ignorance about basic financial concepts can be linked to lack of retirement planning, lack of participation in the stock market, poor borrowing, among others. The following table represents a summary of the responses on retirement management practices:

**Table 6:** Retirement Management by Category

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
I contribute to a registered retirement benefits scheme	4.38	4.00
I save for retirement	4.00	3.00
I have a retirement plan	4.50	2.27

Source: Research Data, 2010

The first question on retirement intended to determine whether the respondents contribute to a pension scheme on a regular basis. The findings show that those perceived to be financially educated place a premium on retirement, recording a mean of 4.38 compared to those not financially educated at 4.00. The high mean could be attributable to the fact that retirement contributions are statutory and are deducted at source especially for those who are formally employed and the fact that they save more and therefore able to put some into retirement.

Overall, the findings show that; there is a significant difference between the finance and the non-finance respondents as far as far as retirement management practices are



concerned. Those who were financially literate recorded a mean of 4.293 while those who were not had a mean of 3.09 out of the maximum 5.0 points. The student t-test of equal means gave a p-value of 0.04155 at a 5% significance level indicating that the two means are significantly different. These findings indicate that financial literacy leads to better retirement management. This could be explained by the fact that they can forecast the future more accurately than their counterparts.

Retirement planning is a predictor of wealth accumulation (Lusardi, 2003, Lusardi & Beeler, 2007, and; Lusardi & Mitchel, 2007a). Those who plan, more than double the wealth of those who have not. Lusardi (2008) suggests that those who are more financially knowledgeable are more likely to have planned for retirement. The findings of this study are consistent with those of Lusardi (2008).

### ***3.7 Unexpected Expenses Management Practice***

It is a good practice to recognize that unexpected occurrences are inevitable and that the way one reacts to them depends on how well they plan for contingencies. Table 7 summarizes responses to unexpected Expenses management practices.

**Table 7:** Unexpected expense Management by Category

<b>Practice</b>	<b>Financially Educated</b>	<b>Not Financially Educated</b>
I have insurance to cover "big" unexpected expenditures	3.54	3.56
I have enough money to pay for an emergency	3.47	3.14

Source: Research Data, 2010

Both groups of respondents seem to agree that having an insurance cover is important, especially when it comes to meeting unexpected expenditures. The means are 3.54 for those who are financially educated and 3.56 for those who are not. There is a difference between the two groups when it comes to having enough money for an unexpected emergency. Those who are financially literate are more prepared for unexpected situations compared to those who are not.

Overall, the findings show that; there is no significant difference between the finance and the non-finance respondents as far as unexpected expense management practices are concerned. Those who were financially literate recorded a mean of 3.505 while those who were not had a mean of 3.35 out of the maximum 5.0 points.

The student t-test of equal means gave a p-value of 0.271141 at a 5% significance level indicating that the two means are not significantly different. These findings indicate that financial literacy does not necessarily lead to better emergency management. This could be explained by the fact that emergency expectation is a behavioral aspect that leads to different levels of risk tolerance by human beings regardless of the level of financial literacy.

### 3.8 Basic Personal Management Practices

From a personal financial management perspective, there are five basic items expected in personal financial management. These include being able to; repay the money you owe on time, pay the bills on time, compare prices for major expenses, contribute to a retirement scheme, and know about investments. Table 8 summarizes responses to the basic management practices.

**Table: 8:** Top 5 Basic Personal Financial Management Practices

<i>Financially Educated</i>	Mean	<i>Not Financially Educated</i>	Mean
I repay the money I owe on time	4.52	I repay the money I owe on time	4.67
I pay my bills on time?	4.46	I pay my bills on time?	4.70
I compare prices for major expenses	4.38	I compare prices for major expenses	4.02
I contribute to a registered retirement benefits scheme	4.16	I contribute to a registered retirement benefits scheme	4.00
I know about investments (stock, bonds, mutual funds)	4.13	I know about investments (stock, bonds, mutual funds)	3.96

Source: Research Data, 2010

The findings show that overall; there is no significant difference between the finance and the non-finance respondents as far as far as the five aspects above are concerned. Those who were financially literate recorded a mean of 4.33 while those who were not had a mean of 4.27 out of the maximum 5.0 points.

The student t-test of equal means gave a p-value of 0.378389 at a 5% significance level indicating that the two means are not significantly different. These findings may be an indication that one's reaction to the five aspects is more of a behavioral psychology tendency rather than a finance fundamental.

#### Overall Test Results

We tested the overall data to determine whether the means of responses on all the aspects of personal financial management were significantly different for the finance and the non-finance respondents. Those who were financially literate recorded a mean of

3.753103 while those who were not had a mean of 3.364828 out of the maximum 5.0 points.

The student t-test of equal means gave a p-value of 0.029086 at a 5% significance level. These results show that there is a significant difference between the personal financial management practices of the finance and the non-finance literate respondents. The financially literate had a better appreciation and application of the financial management practices.

#### **4.0 CONCLUSIONS**

Financial, knowledge, *experience* and behaviors are linked in a relational way (Washington State Department, 2003). The report further observed that those financial experiences and behaviors together contribute to financial knowledge levels and gains in competency. The extent to which an individual demonstrates financial knowledge, more financial experience and more positive protective type financial behaviors, predicts the extent to which they are financially literate and more effective in their financial management.

The findings of this research show that the practices of those perceived to be financially literate seem to agree with the current literature. However it is also observed that even those who are perceived not to be financially literate exhibit some strong characteristics personal financial management implying that probably, formal college education and employment environment may not be the only source of financial education. The respondents were able to access and utilize financial knowledge to their benefit even though they were not financially literate.

The findings of this research established that there are more people interested in saving out of each payment they receive. Those financially literate tended to look out for more sources of money to save compared those who are not. Both categories were prudent with their spending habits as they rarely spend more than they can afford. More of those who are financially educated closely watched what they spend compared to their counterparts.

Savings is a major issue for the respondents; those financially literate tended to save more than their counterparts. This could be explained by the fact their knowledge of finance helps them to know the consequences of having no money and the symptoms that could indicate that they are heading there. The financially literate seemed to manage expenditure better than their counterparts probably because they understand the importance of planning, tracking of expenditure, and watching the amounts they spend unlike their counterparts. Many people feel uncomfortable when they owe monies hence debt is largely avoided by ensuring that debts and bills are paid on time. These findings however the financially literate respondents tended employ very few of the debt management practices unlike those who did not have the financial knowledge. This could be explained by the fact that the financially literate could have been applying the working

capital management theory where one is expected to pay his debts as late as possible but at the same time collect his receivables as soon as possible.

Knowledge of investment options has not been fully translated to investments as there is no significant difference those with financial literacy and those without. This can be concluded that; the fact that one saves does not necessarily mean that they will invest. Money management is not influenced by financial literacy implying that good savings and expenditure practices do not automatically lead to good money management. That although there was a significant difference between the means of the financially literate and their counterparts as regards savings and expenditure, there was no difference when it came to money management. There was a significant difference between the two groups regarding retirement with the financially literate managing it better. The findings indicate that financial literacy leads to better retirement management. This could be explained by the fact that they can forecast the future more accurately than their counterparts probably using the net present value concept as used in finance theory .

Financial literacy does not however play a major role when it comes to management of unexpected expenses and the basic five financial management practices as there was no significant difference between the two groups. This could be explained by the fact that emergency expectation is a behavioral aspect that leads to different levels of risk tolerance by human beings regardless of the level of financial literacy. That every individual uses and understands the importance of money and hence they may not need financial education to embrace the five basic concepts of personal financial management.

Overall however, the financially literate had a better appreciation and application of the financial management practices and we can therefore conclude that financial literacy leads to better personal financial management practices.

## REFERENCES

- Amato, P. R., & Rogers, S. J. (1997). A longitudinal study of marital problems and subsequent divorce. *Journal of Marriage and the Family*, 59, 612-624.
- Anthes, W.L. (2004). Financial illiteracy in America: a perfect storm, a perfect opportunity. *Journal of Financial Service Professionals*, 58(6):49-56.
- Basu, S. (2005). White Paper: Financial literacy and the life cycle. White House Conference on Aging. [Online] Available from: [http://216.87.66.5/member/govt\\_relation](http://216.87.66.5/member/govt_relation).
- Brown, B. B., Mounts, N., Lamborn, S. D., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. *Child Development*, 64, 467-482.
- Central Bank of Kenya. (2009). Financial Access National Survey; Dynamics of Kenya's Changing Financial Landscape
- Cutler, N.E. (1997). "The False Alarms and Blaring Sirens of Financial Literacy: Middle-Agers' Knowledge of Retirement Income, Health Finance and Long-Term Care." *Generations*, 21, 27-33.
- Cutler, N.E. & S.J. Devlin. (1996). "Financial Literacy 2000," *Journal of the American Society of CLU & ChFC*.
- Davis P.E and Carr, R.A. (1992) Budgeting Practices Over the Life Cycle," *Journal of Consumer Education*, Vol. 10. pp. 27-31\
- Garman, E.T., Kim J., C.Y.Kratzer, Bunson B.H, & Joo S.H. (1999): Workplace Financial Education: Improved financial wellness; *Association of Financial COunselling and Planning Education* (79-88)
- Grable, J. E., & Joo, S. (1998). Does financial education affect knowledge, attitudes, and behavior? An empirical analysis. *Personal Finances and Worker Productivity*, 2(2), 213-220.
- Garman, E. T. (1998). "Removing Obstacles to Retirement Savings Via Comprehensive Workplace Financial Education," *Personal Finances and Worker Productivity*, 2:2:85-86.
- Garman, E. T., & Fogue, R. E. (2000). *Personal finance* (6th ed.). Boston: Houghton Mifflin.
- Garman, E.T., Leech, I.E. & Grable, J.E. 1996. The negative impact of employee poor personal financial behaviours on employers. *Financial Counseling and Planning*, 7:157-168.

- Greenspan, A. (2005). The Importance of Financial Education Today. *Social Education*, 69(2) 64-65.
- Greenspan, A. (2001). The Importance of Financial Education and Literacy: Remarks made before the National Council on Economic Education, Chicago.
- Hilgert, A. M. Hogarth, J. M. (2002). Household Financial Management: The Connection Between Knowledge and Behaviour.
- Karlsson, N., Dellgran, P., Klingander, B. & Gärling, T. (2004). Household consumption: influences of aspiration level, social comparison, and money management. *Journal of Economic Psychology*, 25(6):753–769.
- Kidwell, B. & Turrisi, R. (2004). An examination of college student money management tendencies. *Journal of Economic Psychology*, 25(5):601–616.
- Lusardi, A. (2008). Financial Literacy: An Essential Tool for Informed Consumer Choice? Joint Center for Housing Studies , Harvard University
- Lusardi, A, & Oliver S.M(2009). Financial Literacy among the young: Evidence and Implications for Consumer Policy WP 15352
- Lusardi A. & Oliver, M., (2006): Financial Literacy and Planning; Implications for retirement wellbeing, *Pension Research Council Working Paper 1*, The Wharton School.
- Lusardi A. & Oliver M, (2007b): Financial Literacy and Retirement Preparedness; Evidence and implications for Business Education, *Business Economics*, 35-44
- Monyoncho, K. (2007). How to save money for Investment: Practical Principles towards your financial success; Word Alive Publishers
- Muske, G. & Winter, M. (1999). Cash-Flow Management: A Framework of Daily Family Activities,” *Financial Counseling and Planning*, Vol. 10. No.1. pp. 353-72.
- Muske, G. & Winter, M. (2001). An In-Depth Look at Family Cash-Flow Management Practices,” *Journal of Family and Economic Issues*, Vol. 22. pp. 353-72.
- Muske, G. & Winter, M. (2004). Personal Financial Management Education; An Alternative Paradigm: *Association of Financial Counseling and Planning Education* pp 79-88.
- Mazrui, S.(2003). Marketing Approaches Used by Managers to Address Customer Service Challenges in Banking in Kenya, (Unpublished MBA thesis, University of Nairobi,2003).

National Foundation for Credit Counseling (2007). Financial Literacy Survey, Research Associates International

Storms, Rick. (1999). "Financial Education: Employer Trends, Benefits and Considerations," *Personal Finances and Worker Productivity*, 3:3:99.

Streeter, W.W. (2003). How's your financial literacy? *ABA Banking Journal*, 95(10):4.

Urban Institute(2008). Retirement Policy Programme; Brief series No. 21

Vitt, L. A., Reichbach, G. M., Kent, J. L., & Siegenthaler, J. K. (2005). Goodbye to Complacency: Financial Literacy Education in the U.S. 2000-2005. Washington, DC: AARP.

Washington State University (2003). Financial Literacy in Washington State: Technical Paper#03-39; Social & Economic Sciences Research Centre.