Global Journal of Business, Economics and Management: Current Issues

Volume 11, Issue 3,(2021) 206-219

www.wjbem.eu

Importance of personal finance literacy at the time of financial crisis. (Case of selected bank users in Dire Dawa City, Ethiopia)

Mesfin Yemer [a*], College of Economics and Business, Dire Dawa University, Dire Dawa, Ethiopia. mesfinyemer34@gmail.comn

Suggested Citation:
Yemer, M. (2021). Importance of personal finance literacy at the time of financial crisis. (Case of Selected Bank Users in Dire Dawa City, Ethiopia). *Global Journal of Business, Economics and Management: Current Issues. 11*(3), 206-219. https://doi.org/10.18844/gjbem.v11i3.5717

Received from July 28,2021; revised from September 12,2021; accepted from November 8,2021.
Selection and peer review under responsibility of Prof. Dr. Andreea Iluzia IACOB, Bucharest Academy of Economic Studies, Romania.

Abstract
This study examines importance of personal financial literacy during a financial crisis. In doing so, the study adopted a descriptive study design and purposive sampling method. Data were conveniently collected from 44 bank users in Dire Dawa, the study was used structured questions which include financial concept calculation, yes and no to test financial knowledge as a proxy for financial literacy of respondent The study shows that financial vulnerability is particularly severe among specific demographic groups whose income is not regular and those with low income. The study finds out that the ability to understand and use it is knowledge to make a sound financial decision is varies across individual's demographic character of respondents. Finally, the study made some important resource hubs suggestions are provided to deal with personal finance decisions in times of emergency.

Keywords: Personal finance, financial literacy, financial preparedness, COVID-19, financial crisis;

* ADDRESS OF CORRESPONCE: Mesfin Yemer, College of Economics and Business, Dire Dawa University, Dire Dawa, Ethiopia
Email Address: mesfinyemer34@gmail.comn

1. Introduction

Managing one's finances presents a complex set of challenges in today's financial marketplace. Financial products are numerous and complex, requiring consumers to make choices from an array of options. Making smart money selection is essentially a matter of understanding however the economy work, however cash flows through it and the way folks create money selections. A good financial decision also necessary in "great difficulty" of getting a little money requires making deliberate sudden decisions that allow you to stay on track, even when things take an unexpected turn or changes (loss of a job or change in the family) that put your non-discretionary needs temporarily beyond your means (Hilgert and Hogarth, 2002).

1.1 Statement of the problems

Being able to manage one's money life and build the money selections which will serve one's life goals need a mix of data, skills and action. Together, these abilities are known as financial literacy. Financial literacy implies the power of people to get, perceive and judge data needed to create choices to secure their money future as best as attainable (ASIC, 2011). Financial literacy is very important in each household for day-to-day decision-making, as it helps saving money, which later could be invested or saved for reaching goals that have been set such as: Where to buy fast-moving consumer goods, what type of investment risk pension fund to select, etc. For households to make day-to-day decisions correctly, they should understand and know the basic concepts of personal finance that would help to eliminate the most frequent incorrect decisions (Atkinson and Messy, 2012).

Different studies show that most households lack financial knowledge, concepts and do not know the methods needed to make decisions most beneficial to their economic well-being. Such a lack of financial literacy can affect an individual's everyday money management and ability to save aside for continuing household goals such as buying a home, seeking higher education, or financing retirement (Lusardi and Mitchell, 2007b; Alessie et al., 2008). Furthermore, ineffective cash management also can lead to behaviours that build shoppers liable to severe money crises. The current sudden crisis (COVID-19) is especially very stressful to millions of employees who are working from home, losing sleep and a considerable part of households saving and investment are way down and facing financial difficulties, as they have lost part of their income, due to lost jobs.

In this extremely challenging situation, it is very important to know how individual consumers or households cope with the financial crisis during the on-going pandemic. Therefore, this study conducted to understand financial concepts and knowledge of individual households to make good financial decisions that did not have a high impact not only on their current household economic well-being in a pandemic but also influence the future post-pandemic of COVID-19. Specifically, the paper focuses on assessing the importance of personal finance literacy to make sound financial decisions most advantageous to their economic well-being in this challenging financial crisis in the period of Covid-19. Hence, this paper tries to find out the following framed question

- What looks like the financial preparedness of individual to overcome on-going economic challenges in Dire Dawa?

- What looks like the personal finance literacy level across demographic characters in Dire Dawa?

- What kind of available recommendable resource hubs for people to manage a personal finance in a time of crisis?

2. Literature Review

2.1. Concept of personal finance

Analysing the concept of personal finance it is easy to encounter various approaches toward this subject, as there are lots of definitions by various authors, but we could simply call personal finance as all financial decisions and activities that a person could make. Such as budgeting income, expenditure, saving, investment and all other decisions that require money.

In fact, different individuals have varied responsibilities, values, needs wants and resources. It is important for everyone to determine their own plan as they are the only ones who well understand the way they live, work, their preferences, their obligations and dreams or aspirations for the short-term and long-term goal. For instance, individual expected to understand their financial position which involves examining one's net worth and cash flows to transfer unforeseen risks such as illness, accidents, loss or damage to personal property or loss of income, which could lead to financial loss (Lusardi and Tufano, 2009). A household's cash flows include totalling up all their expected income during a particular year considering their anticipated expenditure within the same year. This analysis assists to identify which financial goals will be achieved and at what time and it is help to understand the amount of money need to come up with a plan to distribute assets to meet any income shortfall (Hilgert and Hogarth, 2002)

2.2. Concept of financial literacy

Financial literacy means different things to different people and also different meaning used over different countries. For instance, according to New Zealand financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of money (ASIC, 2011). According to Worthington (2006) financial literacy is management of money which includes: budgeting, saving, investing and insuring. Financial literacy could be defined as measuring how well an individual can understand and use personal finance-related information to make financial decisions (Huston, 2009).

2.3. Significance of financial literacy

Financial literacy is very important in each household for day-to-day decision making, as it helps saving money, which later could be invested or saved for reaching goals that have been set. According to Wachira & Kahiu (2012), financial literacy helps in empowering and educating consumers so that they are knowledgeable about finance and enables them to use this knowledge to evaluate products/services and make informed decisions about payment of bills promptly, prudent debt management which improve the credit status of potential borrowers to support livelihoods, economic growth, sound financial systems and poverty reduction. It conjointly provides larger management of one's money future, simpler use of economic product and service and reduced vulnerability to rabid retailer or dishonest schemes.

Financial literacy prepares consumers to overcome for recent tough and difficult financial times, through strategies that mitigate risk such as household budgets, accumulating savings, diversifying assets and purchasing insurance Greenspan (2002).

Financially-literate individuals do better at budgeting, saving money and controlling spending (Moore, 2003; Perry and Morris, 2005); planning for retirement (Lusardi and Mitchell, 2007a; Lusardi and Mitchell, 2008); and ultimately, successfully accumulating wealth (Stango and Zinman, 2009).

2.4. Costs of financial ignorance

As stated in the earlier, financial literate households are better informed on on-going situation that have a high impacts key outcome, not only during the work life, but afterwards, in retirement, as well. Even, also better informed about pension system rules, pay lower investment fees in their retirement accounts and diversify their pension assets better (Arenas de Mesa et al., 2008; Chan and Stevens 2008; Hastings et al., 2011).

To the contrary, least financially literate households are unlikely to be sensitive to fees; they are most likely to bear such costs. Constitute only small percent of the cardholder population, but they often practicality bear a disproportionate share of the costs associated with fee-inducing behaviours and lack knowledge about interest charges to paying bills late, going over the credit limit, using cash advances and paying only the minimum amount due (Lusardi and Tufano, 2009a). Another way that the financially illiterate spend dearly for financial services is through high-cost forms of borrowing, including payday loans. While also these borrowers also frequently fail to take advantage of other, cheaper opportunities to borrow (Ernst et al., 2004). Similarly, less financially literate households are known for unable to correctly calculate interest rates, under estimate the power of interest compounding, failed to refinance their mortgages during a period of falling interest rates and experience difficulties repaying debt (Campbell, 2006; Stango and Zinman, 2007)

2.5. Measuring: Personal finance literacy

Analysis of this part of the research helps to understand where specific financial literacy knowledge can be used and how it helps to manage personal finance. In this regard, most of the researchers have developed scales of their own to measure the level of financial literacy among the respondents. For instance, Lusardi and Mitchell (2008, 2011a and 2014) was used the concepts of numeracy, inflation, risk diversification and debt. Besides, Lusardi (2011) included the concept of assets pricing, mortgage payments and more recently knowledge of interest compounding in survey.

Such measurement method is help to identify and measures the knowledge and understanding of individuals which enable sound financial decision-making and effective management of personal finances. Therefore, with some modification, researcher was used a multiple-choice question constructed by Lusardi and Mitchell, 2008; Lusardi and Mitchell, 2011a; Lusardi, 2014). Besides, other multiple choice questions were included to analysis individual financial decision during a financial crisis (Lusardi et al., 2017 and 2020). Besides, the study was used structured questions which include financial concept calculation, yes and no to test financial knowledge as a proxy for financial literacy of respondent. Analysis of this part of the research helps to understand where specific financial literacy knowledge can be used and how it helps to manage personal finance.

3. Methods and Materials

The research methodology is indicative of a technique/procedure/researcher's desire to execute every research work. Accordingly, the study is tried to present or include the necessary research methods for the completion of the research.

3.1. Research design

A research design specifies the methods and procedures for acquiring the information needed to structure and solve the research problems and stipulates types information needed to be collected, methods of sources and by what procedures (Crosswell, 2007). Hence, descriptive researches are those studies which are concerned with describing the characteristics of a particular individual, or group and it includes surveys and fact-findings enquiry of different kinds (Kothari, 2004). More to the point, descriptive survey design is help to explore and describe observed phenomena surveys and suitable when the phenomenon under investigation can be observed directly by the researcher, (Kathuri and Pals, 1993; Borg and Gall, 1983). Hence, this study adopts descriptive survey design to obtain information relating to people's thoughts about financial decisions.

3.2. Source of data and data collection method

Primary data are data directly derived from sources such as oral historians, or their transcribed statements, or written questionnaires. These tend to be the original artefacts, documents and items related to some direct event, or outcome of an event, or some experience of an individual (Croswell 2003). Hence, the study was highly depending on collected information from the volunteer purposively picked up respondents in Dire Dawa. As a result of this, the study used a primary data was used to achieve the objective of the study.

As mentioned earlier in the above paragraph, the study is highly depending on collected information from the volunteer respondents during the data collection. This primary data were called through multiple choice questionnaires. The layouts of the questionnaire was kept very easy, simple and prepared in three different versions (English and Amharic) which help to encourage meaningful participation by the respondents.

3.3. Sampling design

The study targeted users of financial institutions in Dire Dawa as a target population. According to Salant (1994), non-probability sampling method is preferred to use when it is difficult to determine the reliability of the sample results in terms of probability and also probabilities cannot be assigned to the units objectively. Most non-probability sampling methods help researcher to achieve specific

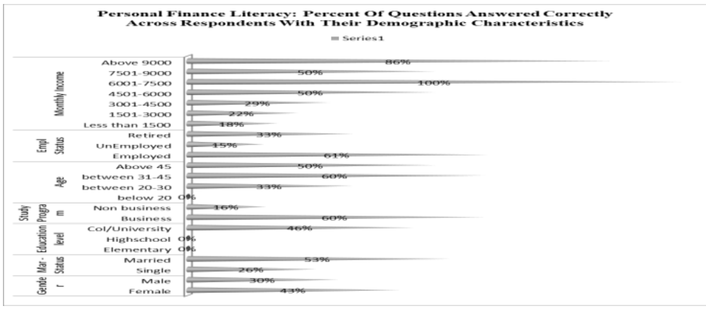
Yemer, M. (2021). Importance of personal finance literacy at the time of financial crisis. (Case of Selected Bank Users in Dire Dawa City, Ethiopia). *Global Journal of Business, Economics and Management: Current Issues.* *11*(3), 206-219.
https://doi.org/10.18844/gjbem.v11i3.5717

purpose or plan in mind. Similarly, purposive sampling can be very useful for situations where researcher need to reach and get the opinions of your target population quickly. As a result of this, this study is used a purposive to understand of the situation and to identify and differentiate the financial activities of individuals study participants and included around 44 responded in the study.

4. Data Analysis and Presentation

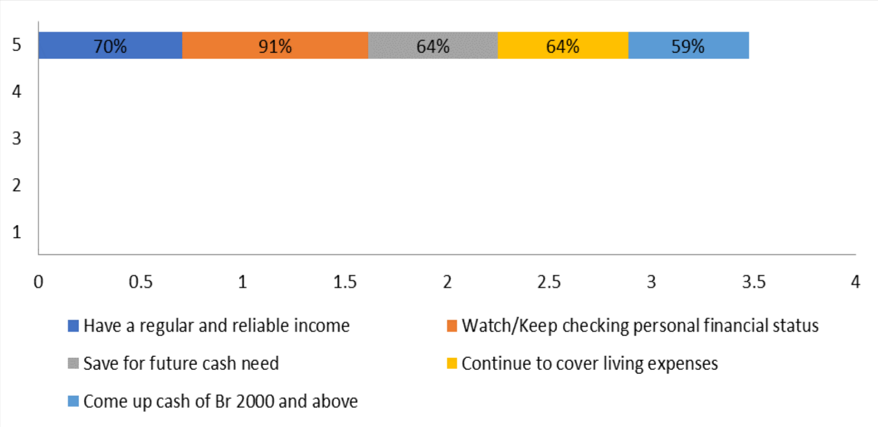
This section presents the findings of the paper and should tell readers “What do paper results indicate?” In essence, the study was used a descriptive method of analysis to described collected data and the response was presented using simple table, percentage, figures and graph.

Figure 1. Percentage of questions answered correctly



According to the above figures, Personal finance knowledge is varying among different demographic character of respondents. For instance, higher percentage of questions is answered correctly by those married, employed respondents and respondents between 31-45 and above 45 ages more likely to have a relatively high level of knowledge and understanding (i.e., answering 60% and 50%, respectively). Beside, who have and enrolled college or university level and get opportunity to access a business education more likely to have a relatively high level of knowledge and understanding (i.e., answering 60% and 46%, respectively).

Figure 2. Financial Literacy: Financial Resilience of Individual/Preparedness-Vulnerability/



Obviously individual need to take responsibility of their financial decision and associated outcome. In this regard, individual could make both simple and/or complex personal finance decisions in the normal day to day course of life. For example, in case of future cash need, individuals must decide how to generate a sufficient cash and how much to spend or to save. How well individuals navigate life's financial decisions is dependent, at least in part, on their knowledge and understanding of personal finances, often referred to as financial literacy. Having saying this, the above figure tried to tell us about the respondent's financial conditions which help to figure out financial decision of respondent. To do so, the study tried to raise different issues to the respondents, such as: ask whether respondents monthly income is regular and reliable; whether keep a close watch on spending is based on budget, how long continue to cover living expenses and whether come up with money of Br 2000 in time of need. Accordingly, the above chart of personal financial situation of respondents summarised as follows:

- Monthly income of majorities respondents are regular and reliable, that is,
- Obviously, a majority of respondent check available resource before any spending
- Respondents are more confident in their ability to raise Br. 2000 in the near term to meet an unexpected need. In addition, majorities of respondents save income for future retirement or other unforeseen situation. Such saving practice is creating resource which helps them to cover living expenses for one or two or three months in the case of undesirable problems or some other emergency
- Financial vulnerability is high among those respondents with non-regular and not reliable income.

4.1. Financial literacy level across demographic characters: Cross tabulation

Based on answers to the financial literacy test, a personal financial literacy score, which ranges from 1 to 5 and corresponds to different literacy levels, was constructed as shown in the following.

Financial Literacy Score

Value	Literacy Level	Number of correct answer
5	Excellent	7
4	Very Good	6
3	Good	5
2	Fair	4
1	Poor	0-3

Literacy Level Indicator Score

I. Gender of respondents

Financial literacy level * Gender Cross tabulation

Count

		Gender		Total
		female	male	
Financial literacy level	Poor	6	11	17
	Fair	0	1	1
	Good	2	1	3
	Very Good	3	1	4
	Excellent	10	9	19
Total		21	23	44

As shown in the above table, about ten female respondent's performances on a financial literacy test fell in the excellent category while only nine male respondents attained the same performance category. This implies that a total of 19 respondents in both categories were able to answer seven questions correctly. Furthermore, around 11 males performed poorly in the test as compared to 6 female that attained the same performance were only able to answer 0-3 questions correctly. Based on this, there is a little difference between males and females in their examination of financial knowledge. This finding is similar with (Avard et al., 2005; Morgan and Trinh, 2017) stated that male and female seemed to have less difference of understanding of financial knowledge.

4.2. Marital status of respondents

Financial literacy level * Mar-status cross tabulation

Count

		Mar-Status		Total
		Single	Married	
Financial literacy level	Poor	15	2	17
	Fair	0	1	1
	Good	2	1	3
	Very Good	3	1	4
	Excellent	7	12	19
Total		27	17	44

As shown in the above table, about 12 married respondent's performances on a financial literacy test fell in the excellent category while only seven unmarried respondents attained the same performance category. Furthermore, around 15 unmarried respondents performed poorly in the test as compared to two married respondents that attained the same performance. Based on this, married respondents are better than unmarried to have ability to understand an on financial knowledge and understanding. This finding is similar with Skog (2006) and Morgan and Trinh (2013) find that married (either male or female) are more likely to be financially literate.

II. Attained level of education of respondents

Financial literacy level * Education level Cross tabulation

Count

		Education level			Total
		College/university	Elementary	High school	
Financial literacy level	Poor	10	2	5	17
	Fair	0	0	1	1
	Good	3	0	0	3
	Very Good	3	1	0	4
	Excellent	19	0	0	19
Total		35	3	6	44

As shown in the above table, performance of 19 respondents who attend college or university on a financial literacy test fell in the excellent category while none of other respondents attained the same performance category. This finding is consistent with the findings of Morgan and Trinh (2017) that respondents who attend higher educational level are generally more financially literate than those attend lower level education. The work of Tomáš et al. (2011) also support the case that peoples who attend higher education are understand financial concept and more likely to be financially literate.

III. Major study program of respondents

Financial literacy level * Program study Cross tabulation

Count

		Program study		Total
		Business	Non- Business	
Financial literacy level	Poor	4	13	17
	Fair	0	1	1
	Good	2	1	3
	Very Good	3	1	4
	Excellent	16	3	19
Total		25	19	44

As the above table showed that, respondents study business program outstripped their non-business major counterparts in the financial test. This is shown that 16 percent of business major and 3% of non-business major students, respectively, managed to answer all seven questions correctly. In the similar vein, four business major students attained the lowest grade, which is poor. However, 13 of the non-business major, respondents are performed poorly. These results are similar with the findings of

Murphy (2005) which confirm that respondent's study business program is generally more financially literate than non-business majors. The works of Lusardi and Mitchell (2007); Alessie et al. (2008) and Almenberg & Save-Soderberg (2011) also support this conclusion those people who study business are more likely to have financially knowledge

4.3 *Age of respondents*

Financial literacy level * age cross tabulation

Count

		age				Total
		20-30	31-45	ABOVE 45	LESS THAN 20	
Financial literacy level	Poor	9	3	2	3	17
	Fair	0	1	0	0	1
	Good	2	1	0	0	3
	Very Good	1	1	2	0	4
	Excellent	6	9	4	0	19
Total		18	15	8	3	44

As shown in the above table that 6% of those aged between 20-30 and 9 of those aged between 31 and 45, while also 4 of those aged above 45 years managed to answer all questions correctly. Moreover, nine of those aged between 20-30, while also three respondents of those aged between 31 and 45, two respondents of those aged above 45 years performed poorly on opposite the first above paragraph which implies that respondents are able to manage to answer less or equal to three questions correctly. These results are suggests that respondents middle ages are not identified as peoples face problem of financial decision makers and they are more likely to have financially knowledge compared to the age group of 20-30 years. This finding is similar with Bhushan and Medury (2013) which suggest that level of financial literacy is higher with higher age group.

4.4 Employment status of respondents

Financial literacy level * employment status Cross tabulation

Count

		employment status			Total
		EMPL	Retired	UNE	
Financial literacy level	Poor	7	1	9	17
	Fair	0	0	1	1
	Good	2	0	1	3
	Very Good	3	1	0	4
	Excellent	16	1	2	19
Total		28	3	13	44

As shown in the above table, about 16 employed respondent's performances on a financial literacy test fell in the excellent category while only a total of three unemployed and retired respondents attained the same performance category. This implies that a total of 19 respondents in both categories were able to answer seven questions correctly. Furthermore, a total of 17 respondents, greater number is from unemployed respondents' group, were performed poorly in the test and they are only able to manage answer 0-3 questions correctly. Based on this, married respondents are better than unmarried on financial knowledge and understanding. This finding is similar with. This result indicates that employed respondents are more likely to have higher financial knowledge compared to those of unemployed and retired. This finding is consistent with survey conducted by Morgan and Trinh (2013) in Cambodia conclude that the employed, either of self or salaried worker, have higher financial knowledge than the group of (unemployed and retired people).

4.5. Collection of resource hubs helps to manage personal finance in times of a crisis

Despite of the above findings, there are different references or reading material which could offer some help to manage our finance at time of hardship. Among those materials the study will only try to include a few resources that could be important for managing personal finance during crisis. In this regard, for instance, GFLEC has built a resource that help individual to manage our personal finances and buffer ourselves against the financial emergency. It is available here: - https://gflec.org/education/financialresilience/. The GFLEC resources included the following important tips that can help users to make financial decisions.

- Learn What the National and Local Government Is Providing In Crisis Time
- **Learn Possible Hardship Adjustment in Financial and Other Contracts**
- Revisits And Create a Budget to Manage the New Condition Imposed By Crisis
- Rebuild Over Time A Buffer Stock of Saving
- Take Advantage of Lower Interest Rates
- Take Advantage of Online Technology to Manage Your Money As Well As To Compare Terms And Search For The Best Offer Available
- Manage Debt
- Protect Your Credit Score
- Watch Out for Your Fraud and Keep Your Family Health.

In addition to the above, Amy (2021) provide an important suggestion help individual to manage our personal finances and means to deal with economic crisis and buffer ourselves against the financial emergency. It is available here: https://www.investopedia.com/articles/pf/11/prepare-for-a-financial-crisis.asp**. Resource** included the following important tips that can help users to make financial decisions.

- Maximize Your Liquid Savings

- Make A Budget
- Prepare To Minimize Your Monthly Bills
- Closely Manage Your Bills
- Take Stock Of Your Non-Cash Assets And Maximize Their Value
- *Pay Down Your Credit Card Debt*
- *Get A Better Credit Card Deal*
- Look For Ways to Earn Extra Cash
- Check Your Insurance Coverage
- Keep Up **w**ith Routine Maintenance.

5. Conclusion

This study is contributing to the literature on personal financial literacy by exploring financial literacy and household financial preparedness to stay financially viable during the unexpected financial crisis of COVID-19 era. In addition, the study is identified and suggests an important hubs resource for peoples to manage a personal finance in a time of crisis. Accordingly, the study find out that ability to understand and use it is knowledge to make sound financial decision is varies across individual's demographic character of respondents. In other word, married, employed, middle and older Age groups and individuals who have and enrolled college or university level and get opportunity to access a business education more likely to have a relatively high level of knowledge and understanding. Furthermore, the study find out that majority's respondents are confident in their ability to raise additional income in the near term to meet an unexpected need. Hence, individuals with higher financial literacy are significantly more likely to report having greater availability of unspent income and ability to cover living expenses for one or two or three months in the case of undesirable problems or some other emergency. Although greater percentages of study participants are more likely to have available of unspent income and ability to cover living expenses in the case of undesirable problems or some other emergency, still there are different groups which looks for financial assistance from the voluntary donors or government. Hence, financial assistance should be there and clearly part of the solution to financial crisis happened during such national and global crisis.

6. Recommendation

In addition to the above findings, the study identified and suggests resource which could offer some help to manage our finance at time of hardship. The resources included can help users, for instance, to create a budget, learn how to rebuild savings, monitor their credit, manage debt, use online technology to make financial decisions, look for ways to earn extra cash, check any means of insuring and life cost. Hopefully such resources will provide helpful information for people who are overwhelmed by the economic fallout and do not know where to turn for assistance.

References

Alessie, R., Lusardi, A., & van Rooij, M. (2008). *Financial Literacy, Retirement Planning, and Household Wealth. Nber Working Paper, No. 15350*.

Almenberg, J., & Save-Soderberg, J. (2011). *Financial Literacy and Retirement Planning In Sweden. Cerp Working Paper No. 112, Turin (Italy)*.

Amy, F. (2021). *Ways to Prepare for a Personal Financial Crisis*. Retrieved from http://www.investopedia.com/articles/pf/11/prepare for a financial crisis.asp

Atkinson and Messy (2012), *"Measuring Financial Literacy", OECD Working Paper No. 15, Measuring-Financial Literacy*. Retrieved from http://www.oecd-ilibrary.org/finance-and-investment.

Australia Securities and Investment Commission. (2011). *National Financial Literacy Strategy:-Report No. 229*. New South Wales: Australia Securities and Investment Commission.

Bhushan, P., & Medury, Y. (2013). Financial literacy and its determinants. *International Journal of Engineering Business and Enterprise Applications*, *13-145*, 155.

Campbell, J. (2006). Household finance. *Journal of Finance, 61*, 1553-1604.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approach*. (2nd ed.). California: Sage Publications.

Kothari, C. R. (2004). *Research Methodology Methods and Techniques*. (2nd ed.). New Delhi: New Age International Publishers.

Greenspan, A. (2002). Financial literacy: A tool for economic progress. *The Futurist*, *36*(4), 37-45.

Hastings, J., Madrian, B., & Skimmyhorn, W. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics*, *2013*(5), 347-373.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, *2003*, 309-322.

Huston, S. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, *44*, 271-275.

Lusardi, A., & Mitchell, O. S. (2007a). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, *54*(1), 205-224.

Lusardi, A., & Mitchell, O.A. (2007b). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business Economics*, 42(1), 35-44.

Lusardi, A., & Mitchell, O.A. (2008). Planning and financial literacy: How do women fare? *American Economic Review*, 98(2), 413-417.

Lusardi, A., & Mitchell, O. A. (2009) *How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness. National Bureau of Economic Research Working Paper No. 15350*.

Lusardi, A., & Mitchell, O. A. (2011a). *Financial Literacy and Planning: Implications for Retirement Well-Being*. In Financial Literacy: Implications for Retirement Security and the Financial Market Place. Oxford: OUP Oxford.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.

Lusardi, A., Oggero, N., & Yakoboski, P. (2017). *The Tiaa Institute-Gflec Personal Finance Index: A New Measure of Financial Literacy Technical Report*.

Lusardi, A., & Tufano, P. (2009). *Debt Literacy, Financial Experience and Over Indebtedness. NBER Working Paper No. W14808, National Bureau of Economic Research*. Retrieved January 15, 2013, from https://www.mrrc.isr.umich.edu

Lusardi, A., Hasler, A., & Yakoboski, P.J. (2020). *Building Up Financial Literacy and Financial Resilience*. Germany: Springer.

Moore, D. (2003). *Survey of Financial Literacy in Washington State: Knowledge, Behavior, Attitudes, and Experiences*. In Washington State University Social and Economic Sciences Research Center Technical Report No. 03-39.

Murphy, A. J. (2005). An exploratory study on the financial knowledge of black college students. *College Student Journal*, 39(3), 478-488.

Morgan, P. J., & Trinh, L. Q. (2017). *Determinants and Impacts of Financial Literacy in Cambodia and Viet Nam, Asian Development Bank Institute*.

Stango, V., & Jonathan Z. (2009). Exponential growth bias and household finance. *Journal of Finance*, *64*(6), 2807-2849.

Tomáš, C., Šimkova, M., & Nemcova, Z. (2011). Application for education of financial literacy. *Social and Behavioural Sciences*, *28*, 370-373.

According to Worthington. (2006). Predicting financial literacy in Australia. *Financial Services Review*, 15(1), 59-79.