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RESEARCH ARTICLE

FINANCIAL LITERACY : A COMPARISON BETWEEN THE YOUTH OF INDIA AND USA

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Abstract

Financial literacy is a critical aspect of our lives. When taught early, it provides life skills for young adults to make use of now as well as in the future. It can help individuals go from surviving to thriving. Financial education isn't taught in schools and colleges but is very essential to live in these times. A person not only learns how to survive in a capitalist world, but also how to grow and preserve their money. This project focused on what young adults currently know about money management and to provide recommendations to increase their financial acumen. The research also compares the responses of several questions from students in India (New Delhi) and students in the United States (Massachusetts). The goals of this project were three - fold: 1. Conducted research on the literacy models used to assess knowledge and skills regarding financial literacy in general; 2. Created a survey instrument based on the research and administered the survey to participants; 3. Created a set of recommendations and observations based on the survey results in the form of an infographic. To accomplish this goal a simple questionnaire, created from a composite of several internationally known literacy programs, was administered to individuals of ages 18-22. A series of 15 recommendations resulted from the analysis of the survey results and were disseminated through the use of an infographic. One of the results was that only 50% of the indian population knew in detail about the concept of interest and inflation rates.

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Introduction:-

Financial literacy is a major topic for youth in India as well as the rest of the world. Unfortunately, few understand its relevance and value nowadays. Financial literacy is the mix of one's knowledge, skill and attitude towards financial matters (Sekar M. & Gowri M. 2015). The OECD (The Organization for Economic Cooperation and Development) defines financial literacy as –“A combination of awareness, acquaintance, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being.”

Individuals today need to be more responsible for their finances than ever before. Financial literacy for the general population is often focused on better planning of retirement life, gradual wealth accumulation and better financial decision making (Van Rooij et al 2012). The questions that young adults have are not only related to their future retirements but also for everyday money matters for their immediate use every day. Young adults and teenagers are just starting their planning for their future careers and the ability to make financial commitments and decisions may have significant benefits in their lives. To be financially literate becomes important from the initial stages of one's

career however education and knowledge can be a hindrance to becoming financially illiterate. As a result, young adults are left with incomplete knowledge about financial dealings, and uninformed decisions etc.(Sekar M. & Gowri M. 2015).

Utilising Sekar.M & Gowri's research this project focused upon the level of financial literacy in Gen Y employees. Similarly, the paper by J.D Jayaraman & Saigeetha Jambunathan in 2018 contained research on financial literacy in high school students. They both measured the financial literacy of people only in India between the ages of 15-18 and 21-35. As a result, the following research project was developed as an extension of those initial observations reported by the research team of both Sekar and Jayaraman and specifically focuses on college age students.

The goal of this research was to compare the level of financial knowledge the people of India and the United States through the use of a standardised survey The project objectives included :

1. Research what is known about the the level of financial knowledge in Indian students ages
2. 18-22.
3. Create a survey to be distributed to at least 20 students in India to
4. assess and compare their financial literacy.
5. Distribute the results of the survey and it's conclusions and recommendation through the
6. development of an infographic.

Chapter 2:-

Background

The following chapter represents a literature review to gather information on the financial literacy of college age students in India.

Defining Financial Literacy

The definition of financial literacy as defined by OECD in 2005 was- "The process by which financial consumers/investors improve their understanding of financial products and concepts, and through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being".

Many have used this definition in their own work (Lusardi and Mitchell 2008; AREN and DİNÇ AYDEMİR 2014 etc).

According to Huston (2010), financial literacy such as health or general literacy might be conceptualised with two main dimension: understanding personal finance knowledge and using it. Hence, it could be described as "measuring how well an individual can understand and use personal finance-related information". Although several definitions of financial literacy exist, all of them generally imply the ability of people to obtain, understand and evaluate information required to make decisions for their financial matters in the future.

According to RBI (Reserve Bank of India), Financial literacy can broadly be defined as- "providing familiarity with and understanding of financial market products, especially rewards and risks, in order. making informed choices".

Importance Of Financial Literacy

People are not aware of basic concepts of finance such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification. Knowledge of more complex concepts, such as the difference between bonds and stocks, the working of mutual funds, and basic asset pricing is even scarcer (Lusardi 2008).

Financial literacy is mainly important because people with low financial literacy are less likely likely to plan for retirement (Lusardi and Mitchell 2006,2007a,2009), less likely to buy any stocks (Van Rooij, lusardi and Alessie 2007), less likely to choose mutual funds with lower fees(Hastings and tejeda- ashton 2008), and more likely to have problems with debt(Lusardi and Tufano 2009).

Need For Measuring Financial Literacy

The U.S. Senate Committee on Banking, Housing and Urban Affairs reported in 2002that the fastest-growing group of bankruptcy filers was those age 25 and younger. These high levels of debt may also prevent young workers from

taking advantage of employer-provided pensions, tax-favored assets, or building up a buffer to insure against shocks: 55% of young adults report they are not saving in either an individual retirement account (IRA) or a 401(k) account, and 40% do not have a savings account that they contribute to regularly (USA Today/NEFE 2006).

These debt loads are of particular concern given recent evidence that young people may lack sufficient knowledge to successfully navigate their financial decisions: for instance, a National Council on Economic Education study of high school students and working-age adults showed widespread lack of knowledge among respondents regarding fundamental economic concepts (NCEE 2005), confirming evidence provided by the Jumpstart Coalition for Personal Financial Literacy (Mandell 2004). Policymakers have become so concerned about young people's finances that the Credit Card Accountability, Responsibility, and Disclosure (CARD) Act of 2009 included several provisions specifically targeted at protecting younger credit card consumers. For instance, credit cards will no longer be issued to young people under the age of 21 unless they have an adult co-signer or can show proof that they have the means to repay the debt; college students will be required to receive permission from parents or guardians in order to increase credit limits on joint accounts; and those under 21 will be protected from pre-screened credit card offers unless they specifically opt in for the offers.

Understanding financial literacy among young people is thus of critical importance for policymakers in several arenas: it can aid those who wish to devise effective financial education programs targeted at young people, and it can also aid those who wish to devise legislation to protect younger consumers (Lusardi, Mitchell and Curto 2009). It is crucial to know where the youth is facing problems in the matters of finance so that steps can be taken to amend them. These steps are included in the results section as the recommendation to the countries.

Measuring Financial Literacy

1. Financial literacy is conceptually measured in 4 distinct ways as first reported in 2014 (AREN and DİNÇ AYDEMİR 2014) :
3. The first measure exploits objective financial literacy scales in measuring at which level people's financial knowledge are. This has been used by many previous researchers including Chen & Volpe 1998, Hogarth and Beverly 2003, Lusardi, Mitchell & Curto 2010 et al. It needs a common and universal measurement scale in order to operationalise the financial literacy of individuals.
5. The second attempts to measure the perceptions of people (Van Rooij, Koll and Prast, 2007). In this, participants are asked to evaluate their financial knowledge themselves according to a scale ranging between particular values (Van Rooij, Koll and Prast, 2007).
6. The third identifies financial literacy level of participants with both objective or test based and also subjective or self-assessed measures (Guiso and Jappelli, 2008).
7. The fourth employs proxies for measuring financial literacy on the ground that a lot of studies have concluded that these factors chosen as proxies strongly correlate with financial literacy (Dhar and Zhu, 2006).

Input By Financial Institutions To Improve Financial Literacy Of People

For decades, government and non-profit organizations have been trying to address what they see as a serious gap in the curricula of our K-12 school systems. Nationally representative organizations such as the Council for Economic Education (previously known as the National Council on Economic Education), Junior Achievement, the Jump\$tart Coalition, and the National Endowment for Financial Education are among a growing group of supporters that have recognized the problem and are taking action to address it. Financial institutions have also joined the effort and, in some cases, devoted significant resources to the field. They often provide financial support to existing nonprofit financial education programs, and some develop proprietary financial education programs and materials. But a few financial institutions have adopted financial education as a functional unit in their retail banking services.

Banks are uniquely positioned to provide financial education, as they can bridge theoretical economic concepts, such as scarcity and opportunity costs, with practical "money-in-the-pocket" services, and supplement them with the necessary financial products. Access to low-cost financial products is particularly valuable for "unbanked" and "underbanked" clients (those that do not have bank accounts, or who have accounts but underutilize them); connecting financial education with financial products allows all individuals to become fully integrated in the traditional financial system, setting them on the path to wealth accumulation.

Financial education helps consumers by offering them the knowledge they need to make sound financial decisions and secure their economic futures. But banks can also benefit from financial education in a number of ways. At a time when competition in retail banking is fierce, targeted financial education programs can open new roads into

untapped populations, such as the immigrant and underbanked markets. In addition, financial education programs can also create goodwill at the community level and strengthen relationships with local customers and community partners. In some cases, banks can also receive Community Reinvestment Act credit for providing financial education to low- and moderate-income individuals.

What Teens Value In Financial Literacy

According to the National Financial Educators Council, the top 3 most sought after financial education topics that young adults want to know more about are Moving out on your own, Paying for college, and How to purchase a car. The top 5 influencers of the youth's future financial situation are present financial situation, financial behaviours, financial sentiment, financial education, and financial systems.

The annual back-to-school survey conducted by Capital One (2007) asked teens what they would most like to learn about money. Teens expressed interest in learning about how financing works for large purchases such as a car or home (74%), investing money (72%), identity theft and how to protect themselves (68%), saving money (62%), budgeting (58%), checking accounts (55%), and credit cards (55%). Only 14% of this group had taken a class on money management and 52% were eager to learn about money management.

Likewise, Schwab (2007) found that teens want to learn about money matters when they questioned 1,000 teens between the ages of 13 and 18 using an online survey. Teens said they were motivated to learn about budgeting, saving and investing so they can pay their bills (88%), stay out of debt (88%), not have to rely on others for money (85%), be able to take care of their family (77%), and buy the things they like (77%). Sixty-three percent of these teens said they were knowledgeable about money management; yet when probed about specific areas of knowledge, only 41% indicated they knew how to budget their money, 34% indicated they knew how to pay bills, and only 22% knew how to invest money to make it grow.

Chapter 3 :

Methodology:-

The following methodology section explains how the methods to achieve each of the project goals was accomplished. A step-by-step arrangement of the way in which the experiment was carried out are given below:

Research Methods:-

Information on how to assess the financial literacy of people was ascertained by reading and studying search papers online. I searched for the keywords-"papers on analysis of financial literacy". I learnt more about the official institutions that take up these kinds of activities under them (for example OECD). I learnt about their methods and the sample space they used for their experiments. I used the search engine "Safari" for my research purposes. Information on how to assess the financial literacy of people through surveys was accessed by reading and studying research papers online. A search for keywords such as-"papers on analysis of financial literacy" and "scholarly articles on financial literacy" allowed for easy access of information.

Participant Survey

A participant survey based upon the research from section 3.1 was created. The surveys consist of 30 questions derived from information accumulated through a review of various other professional surveys and research papers. The survey was sent to 30 people and results were recorded anonymously through the survey tool. The well-documented and widely used "Lusardi-Mitchell questions" on inflation, compound interest, mortgages, bond pricing, and diversification were included to guarantee the comparability with previous studies.

An example of 7 of the survey questions are shown below with the full survey found in Appendix A.

Do you maintain financial records?

What do you do with your pocket money?

How often do you ask for extra money from your parents?

How often do you borrow money from friends and family?

Do you intimate your parents about the expenditures at college in advance?

The survey was answered online starting on June 18, 2020 and open for participants until XX. After reviewing several survey platforms, I decided to use the survey platform "Surveygizmo.com" because it provided me a smooth user-friendly interface with built-in analytics generators.

Prior to the survey question, the following an introductory statement listed below was read by each survey participants:

" I invite you to participate in my research project. This survey aims to find out and compare the level of financial literacy among 30 individuals ages 18-22 in India and the United States. This survey is anonymous, you will not be asked to give your name or any information that tells how you answered the survey questions. Your decision to participate in this research is voluntary. Thank you very much. "

Beyond the survey for literacy knowledge in India a smaller number of individuals from the United States of America were also presented with the survey as well. This secondary aim was to compare the level of financial literacy of a developing economy like India and a developed economy like the United States.

Third, the results from this survey were analysed using surveygizmo.com and conclusions were developed to form a set of recommendations. The results would hopefully provide each country with an idea of where they lack.

Dissemination Of Results Method

1. The methods for dissemination of the results beyond this research paper was chosen to be the use of infographics because they were both aesthetically pleasing and could contain the important information and results. After reviewing several infographic generating platforms, graphicmama.com was chosen because of its attractive and at the same time clear result giving graphs. In constructing the infographic, the following guidelines were observed:
2. The goals was to build a visually appealing infographic that clearly and
3. concisely communicates complex information to diverse audiences.
4. Graphical elements to include (e.g., charts, maps, icons, pictures, tables) were included in the template.
5. The color of background and font can be easily changed.
6. Use of diverse literature tools, credible articles and peer- reviewed journal articles, and other quality professional sources could be integrated.
7. Information was reliable and had a transparent purpose.
8. Use at least 3 quality professional sources in material.
9. Cite your sources such as APA or MLA on the graphic, usually at the bottom) as well as be sure all information is current.
10. Use evidence and practice-based data, compelling statistics, easy-to-read fonts, complimentary colour schemes, simple charts, bold graphs, and other graphics to disseminate information in quick and easily digestible format.

From these guidelines an infographic was created and is shown in the results section.

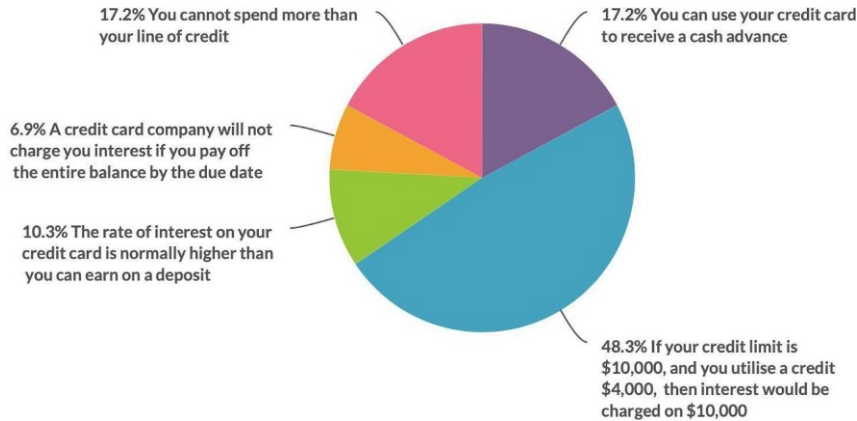
Chapter 4 :

Results:-

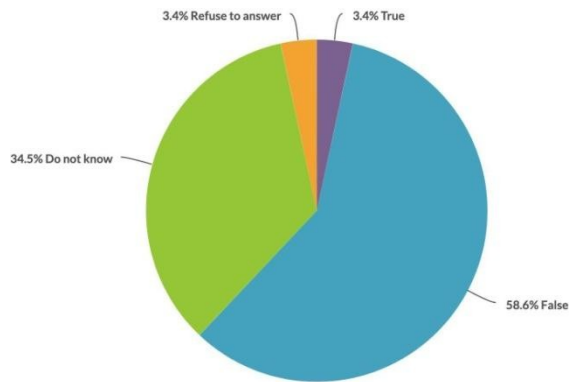
The following are the results based on the survey finding testing financial literacy of youth from 30 people in New Delhi, India and from a smaller cohort of 8 people from Massachusetts in the USA as a comparison. Dissemination of several of the results lead to the development of an infographic that could be displayed in educational settings.⁷

Survey Results from India students ages 18 to 22:

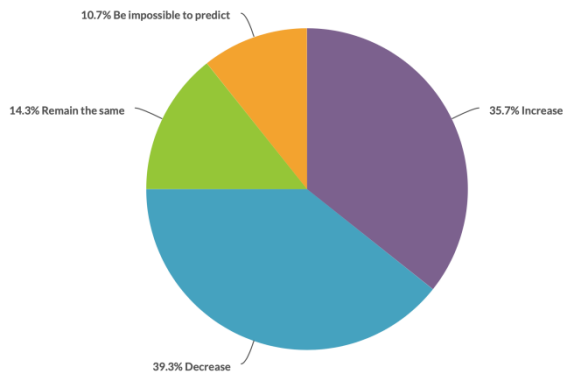
When individual students were asked "Which is FALSE concerning credit cards?" only 48.3% of the people were able to answer correctly. A summary of the correct responses are listed on chart A. The responses were - 17.2 % believed they could use their credit card for an advance credit; 17.2 % said they could use the card for more than their line of credit, whereas the participants believe that if your credit limit is \$10,000, and you utilise a credit \$4,000, then interest would be charged on \$10,000; The rate of interest on your credit card is normally higher than you can earn on a deposit; A credit card company will not charge you interest if you pay off the entire balance by the due date; You cannot spend more than your line of credit

**Chart A : Credit Card Knowledge**

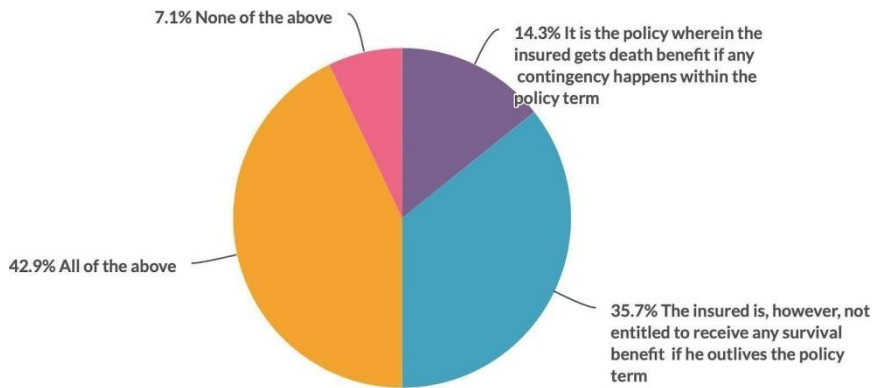
“Please tell me whether this statement is true or false. “Buying a single company’s stock usually provides a safer return than a stock mutual fund.” with 34.5% of the people refusing to answer as shown in chart B. The responses offered were - true; false; do not know; refuse to answer. The large “don’t know” response rate was particularly troubling, as previous research has found that “don’t know” answers identified respondents with very low levels of financial knowledge (Lusardi and Mitchell 2006, 2007a; Lusardi and Tufano 2009; van Rooij, Lusardi, and Alessie 2007).

**Chart B : Stock Knowledge**

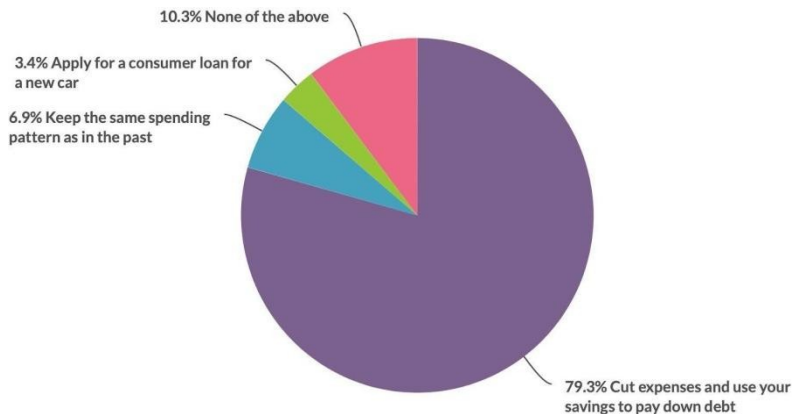
In a question about interest rates “ If interest rates rise, the price of a Government bond will...” and prices of government bonds, only 39.3% answered correctly as shown in chart C. The responses were - increase; decrease; remain the same; be impossible to predict.

**Chart C : Government Bond Knowledge**

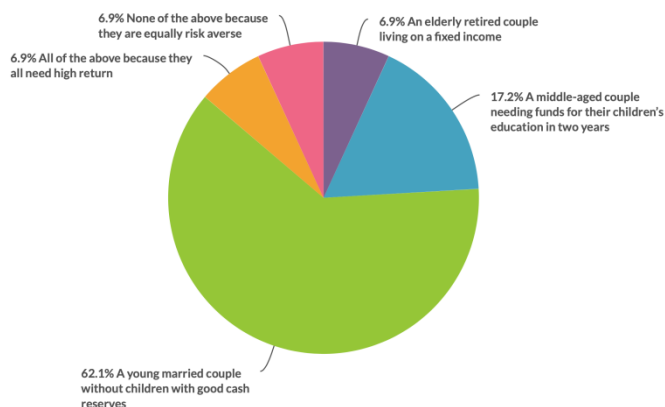
When asked “Term Insurance Means...”, 42.9% answered correctly as shown in chart D. The responses were - It is the policy wherein the insured gets death benefit if any contingency happens within the policy term; The insured is, however, not entitled to receive any survival benefit if he outlives the policy term; These plans are relatively cheaper than endowment policies and money back policies; All of the above; None of the above.

**Chart D : Insurance Knowledge**

On the other hand, when asked “You have just graduated from college and found a job earning \$40,000 per year. You will pay \$600 per month for five years for education loans. What should you do to improve your financial health?” 79.3% people answered correctly as shown in chart E. The responses were - Cut expenses and use your savings to pay down debt; Keep the same spending pattern as in the past; Apply for a consumer loan for a new car; Use your credit card to pay for a vacation in Switzerland; None of the above.

**Chart E : Earning**

In a question “A high-risk and high-return investment strategy would be most suitable for” 62.1 % answered correctly as shown in chart F. The responses were - An elderly retired couple living on a fixed income; A middle-aged couple needing funds for their children; A young married couple without children with good cash; All of the above because they all need high return; None of the above because they are equally risk averse.

**Chart F : Return on Investment**

72.4% of people answered “The main reason to purchase medical insurance is to...” correctly as shown in chart G. The responses were - After buying medical insurance , you are normally covered for; You have a better chance to choose doctors; Compensate for the future medical expenses; A policy purchased by the individual is cheaper than one purchased through a group; None of the above.

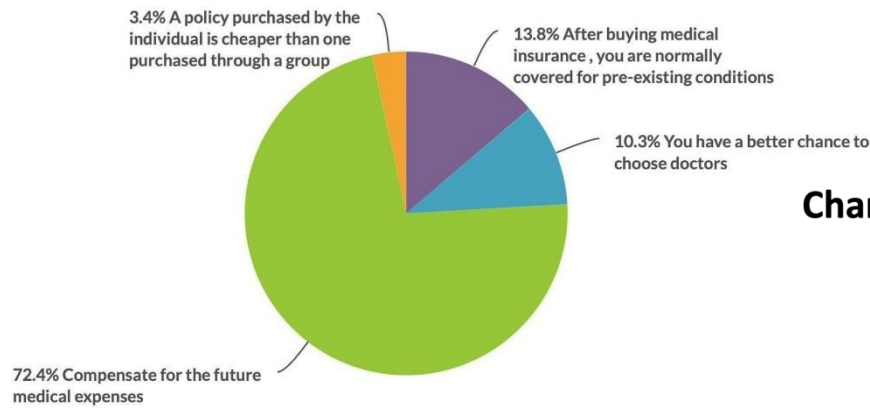


Chart G : Insurance and Compensation

Also, 75.9% of people answered “You can improve your creditworthiness by...” correctly as shown in chart H. The responses were - Showing no record of defaults; Paying cash for all goods and services; Borrowing large amounts of money from your friends; Donating money to charity; Visiting your local commercial bank(0 responses).

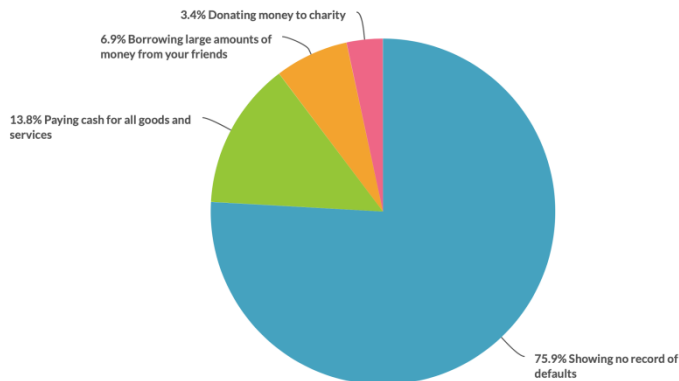


Chart H : Credit Knowledge

While an equal number of people(36.7% each) maintain very detailed or no financial records, 26.6% people maintain minimal records as shown in chart I.

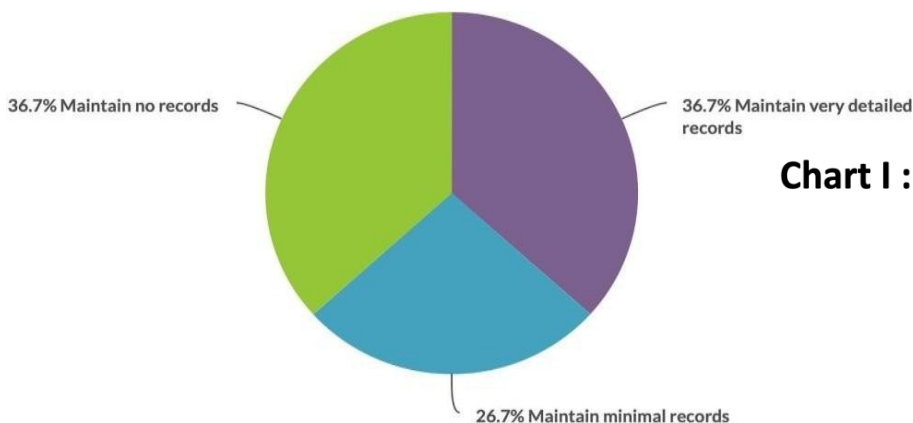


Chart I : Maintenance of Financial Records

Also, 53.3% people save a portion of their pocket money in the bank, 40% save it at home, and 6.7% spend it fully as shown in chart J.

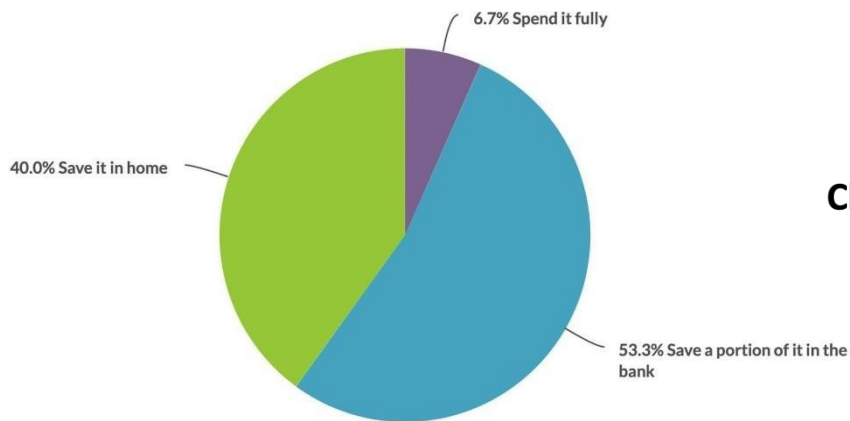


Chart J : Saving/Spending of Pocket Money

Finally, 76.7% people never borrow money, 16.7% borrow once a month, and 6.7% borrow 2-3 times a month as shown in chart K.

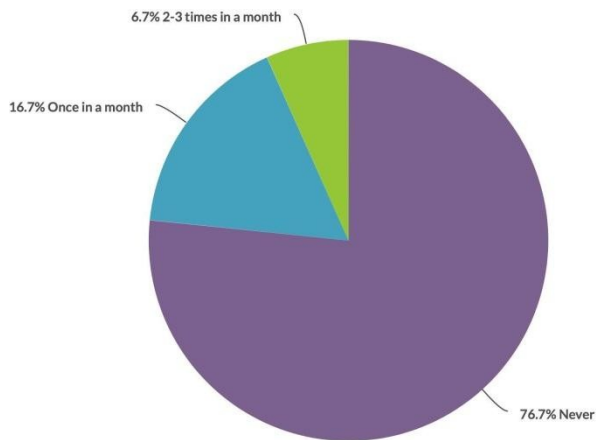


Chart K : Borrowing of Money

Survey Results Comparison with a Small Cohort from USA :

Results for 7 questions were given with the exact wording to 8 students in the United States.

When asked, “Imagine that the interest rate on your savings account was 4% per year and inflation was 6% per year. After one year, how much would you be able to buy with the money in your account?”, 75% answered correctly as shown in chart L. The responses were - More than today; Less than today; Exactly the same; Do not know.

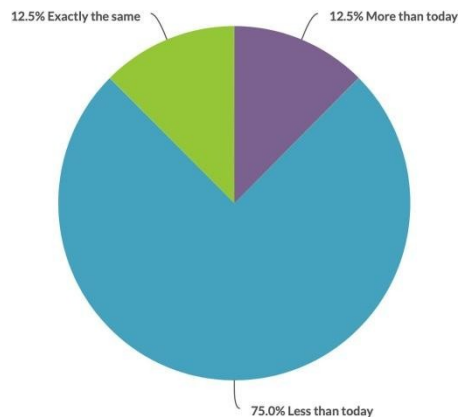


Chart L : Interest Rates Knowledge

In a question “Which of the following is FALSE?”, only 25% answered correctly as shown in chart M. The

responses were - As shareholders of a firm, you have a right to tell fund managers what securities to buy; A mutual fund is a diversified collection of securities used as an investment vehicle; A mutual fund is an investment corporation that raises funds from investors and purchases securities; Your ownership in a mutual fund is proportional to the number of shares you own in the fund; None of the above.

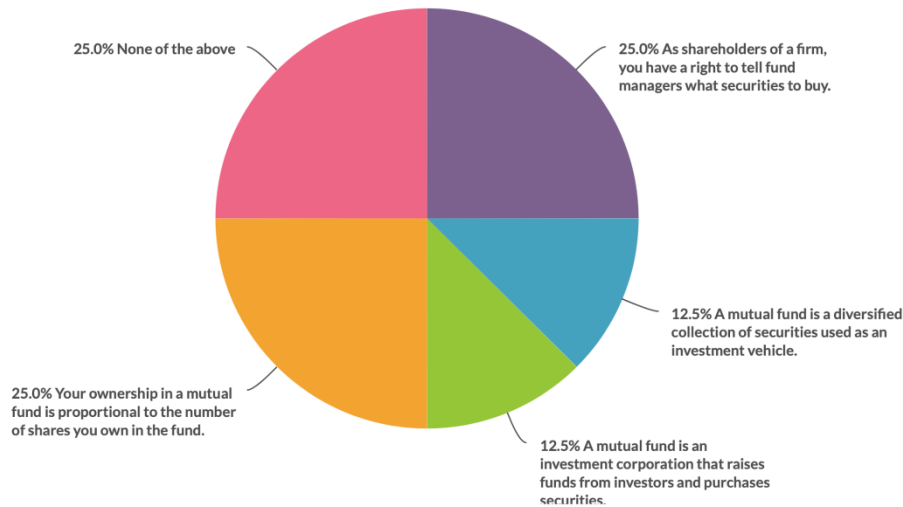


Chart M : Mutual Funds Knowledge

While 75% of the people maintain minimal records, an equal number of people maintain detailed or no records(12.5% each) as shown in chart N.

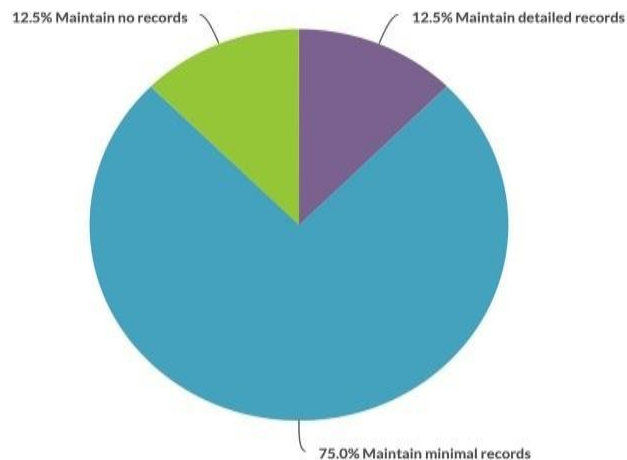


Chart N : Maintenance of Financial Records

Also, 75% save a portion of their pocket money in the bank and 25% spend it fully as shown in chart O.

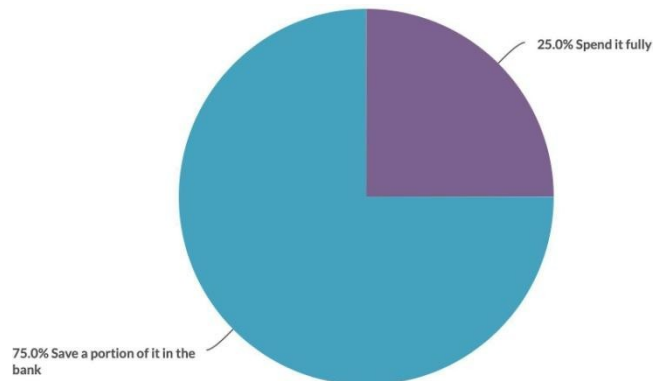


Chart O : Saving/Spending of Pocket Money

Finally, 75% of the people never borrow money, 12.5% borrow once a month, and 12.5% borrow 2-3 times a month as shown in chart P.

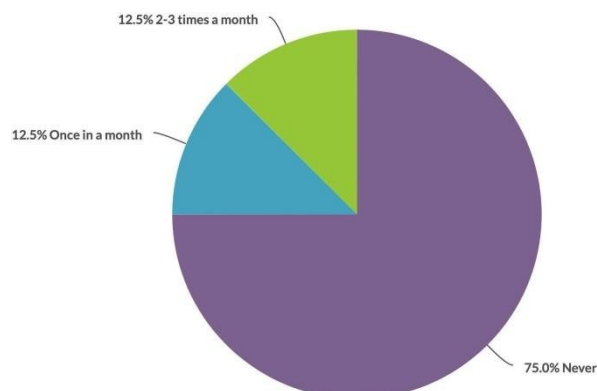
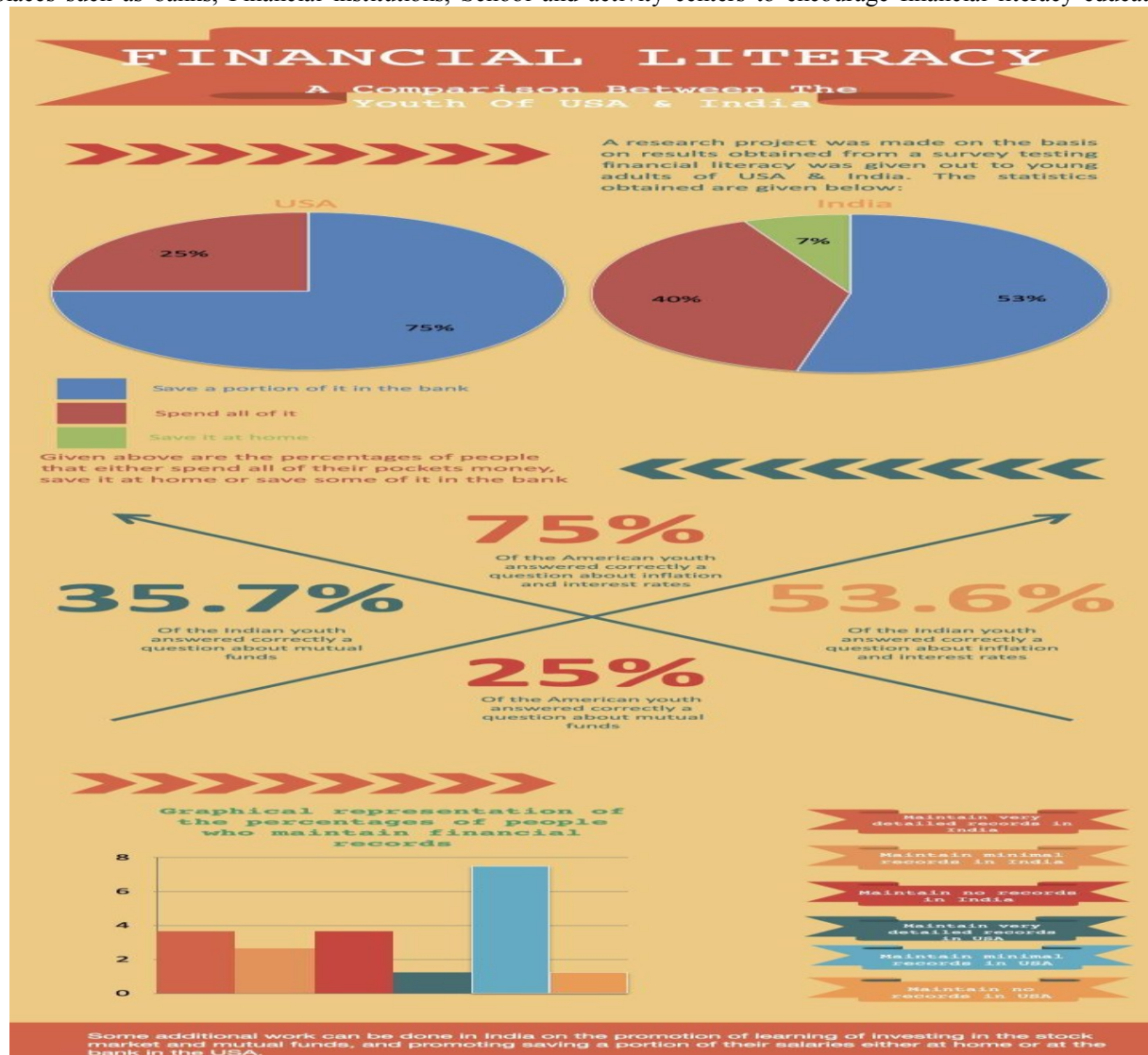


Chart P : Borrowing of Money

Creation of a Infographic

A review of the survey results along with the lower than optimal number of students who responded correctly to the survey the following information dissemination infographic was developed. The infographic could be displayed in places such as banks, Financial institutions, School and activity centers to encourage financial literacy education.



Chapter 5 :-**Analysis & Recommendations:-**

The following represents the analyses and final recommendation of the results obtained in the survey that was available from 18 June 2020 to 7 July 2020.

Analysis of data

The following represents the gender backgrounds of the survey participants:

Charts Q & R (respectively).



The results of the survey indicate that about 50% of the people in India knew in detail about credit cards while almost 60% of the people knew about the different risks associated with the stock market. While only about 40% answered correctly about interest rates and government bonds, almost 80% knew what strategy to follow to pay back one's education loans. Surprisingly, in a country in which only 44% of the people are covered by health insurance (According to a report titled 'Indian Life and Health Insurance Sectors' from a firm called Milliman), more than 72% of the people knew the answer to a question about health insurance. In addition, only 2% of the population is involved in the stock market directly or indirectly, more than 60% of the people knew about the stock market and the risks involved with investing in it. Surprisingly, with only 28% of the population having term insurance in the country, more than 42% of the people knew in detail about it.

The following tables represent the comparison of several survey questions from participants in India and the United States.

Table 1:- Results regarding the understanding of the concept of interest and inflation rates in people.

"Imagine that the interest rate on your savings account was 4% per year and inflation was 6% per year. After one year, how much would you be able to buy with the money in your account?"

Responses	Percentage of people that chose this option in India	Percentage Of People that chose this option in USA
More than today	17.9	12.5

Less than today (correct)	53.6	75
Exactly the same	14.3	12.5
Do not know	14.2	NIL

This table showed that a greater number of people in the USA knew the correct answer than in India by a margin of more than 20%.

Table 2:- Results regarding the understanding of the concept of mutual funds in people.
“Which of the following is FALSE?”

Responses	Percentage of people that chose this option in India	Percentage of people that chose this option in USA
As shareholders of a firm, you have a right to tell fund managers what securities to buy (correct)	35.7	25
A mutual fund is a diversified collection of securities used as an investment vehicle	14.3	12.5
A mutual fund is an investment corporation that raises funds from investors and purchases securities	14.3	12.5
Your ownership in a mutual fund is proportional to the number of shares you own in the fund	14.3	25
None of the above	21.4	25

This table showed that a greater number of people in India knew the correct answer than in the USA by a margin of more than 10%.

Table 3:- Results regarding the maintenance of financial records.

Responses	Percentage of people that chose this option in India	Percentage of people that chose this option in USA
Maintain detailed records	36.7	12.5

Maintain minimal records	26.6	75
Maintain no records	36.7	12.5

This table shows that the habit of maintaining financial records is more widespread in Indians than in Americans.

Table 4: - Results regarding current knowledge of saving (Saving of Pocket Money).

Responses	Percentage of people that chose this option in India	Percentage of people that chose this option in USA
Save it at home	40	NIL
Save it at bank	53.3	75
Spend it fully	6.7	25

This table shows that Indian people prefer to save pocket money at their homes and banks while Americans either spend it fully or save it at the bank.

Table 5: - Results regarding the practices of Borrowing of money from friends and family.

Responses	Percentage of people that chose this option in India	Percentage of people that chose this option in USA
Never borrow	76.7	75
Borrow once a month	16.7	12.5
Borrow 2-3 times a month	6.6	12.5

This table shows that most people in both the countries prefer not to borrow money from their friends and family with less than 25% in both the countries borrowing some money.

Recommendations:-

Based on the analysis of the survey results, the following recommendations have been developed :

1. The government, to achieve financial literacy, should follow the process of : overview of national strategies for financial education, developing a diagnosis to inform the national strategy, establishing institutional and governing arrangements: the role of stakeholders in the national strategy, setting and achieving objectives, evaluating and funding the national strategy, ensuring effective and innovative provision of financial education

2. The financial services industry could make financial literacy a more forceful platform and put more energy into an industry-wide effort to increase attention, shape policy, fund new research, experiment with new learning techniques like gamification, and encourage their customers, whether they be businesses or individuals, to take a more active role in boosting financial literacy among kids in their communities.
3. Banks could provide financial education to people as it is beneficial to them too in the long run. Building a successful bank-based financial education program requires several important ingredients. First, the program priorities have to be clearly defined. The bank must decide what it hopes to accomplish through the program and focus on achieving that outcome. Second, a standardized, high-quality curriculum should be employed. Third, delivery mechanisms must be appropriately designed, for example, consider whether the program will be instructor-led, delivered directly by bank employees, or dependent on an indirect delivery channel such as a third party community partner.
4. Mechanisms like money games, simulation games and soap operas should be designed and adopted globally, which would yield positive results on financial behaviour of the youth (Tufano et al 2010).
5. According to the survey, the youth of India lacks knowledge in basic topics such as credit cards, interest rates and government bonds, term insurance, etc. and these should be reinforced to the public through advertisements generated for public interest, online free courses with multiple regional languages to cope with India's multitude of languages spoken in every corner.
6. In the USA, the youth especially lacked knowledge in the topic of mutual funds. Topics like these should be included in the high school education of students, with extra credits for classes covering topics like hedge funding, bonds and interest rates etc.
7. Curricula for elementary school children should also serve as an age-appropriate introduction to core concepts about money (e.g., the use of bills and coins, the purpose of money) and markets (e.g., how goods and services are exchanged), and how institutions facilitate the interaction between individuals and the exchange of goods and services because familiarity with core concepts influences the ability to attain specific knowledge and skills and, ultimately, to successfully make sound financial decisions.
8. Financial education that includes opportunities for student participation, discovery, and exploration—in other words, “Participatory Learning”—can have a strong, positive impact on financial literacy. Participatory learning can have a powerful impact on the development of financial literacy in two ways. The first is by providing an important context for knowledge and skills. Second, participatory learning provides opportunities to engage in financial decision-making, allowing students to learn through trial and error in controlled settings.
9. Books such as “Rich Dad Poor Dad” should be there as supplementary books in the school curriculum to promote financial learning.
10. Parental involvement is one of the key factors that affects the learning of finance in a child. Parents play an important role in how children develop financial norms, attitudes, knowledge, and behaviours, perhaps even more so than other factors such as youth work experience or financial education itself. Children frequently identify their parents as both their primary and most preferred source of financial information, and parents both implicitly and explicitly teach their kids about finances, often providing them with their first experiences and interactions with money. By participating in adult financial behaviours—like accompanying a parent to the bank to deposit a check—children receive early context and familiarity with money and financial institutions that can inform their financial literacy later on.
11. Another promising way to promote parental involvement in the long-term financial literacy of their children is through the use of child development accounts (CDAs), savings accounts established at birth or the beginning of grade school that can be used toward college or retirement. CDAs have traditionally encouraged saving by providing an initial seed deposit, matching parental/participant contributions, and requiring no minimum balance. Evidence suggests that CDAs promote accumulation of assets and improve individual saving rates, and that the incentive structure is a key driver of these positive financial behaviours.
12. Some additional work can be done in India on the knowledge of investing in the stock market and mutual funds, and saving a portion of their salaries either at home or the bank in the USA.

In conclusion:-

Financial literacy is a form of education that should be given to the youth starting at a very young age, such as primary or middle school. Nearly all of the countries lack something in their financial education and this can be overcome by giving basic financial values to children at early ages, with complex topics being introduced at later stages.

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Appendix

APPENDIX A : -

Survey given to students in India:

I invite you to participate in my research project. This survey aims to find out and compare the level of financial literacy among 30 individuals ages 18-22 in India and the United States. This survey is anonymous, you will not be asked to give your name or any information that tells how you answered the survey questions. Your decision to participate in this research is voluntary. Thank you very much.

1. What is your sex? *

1. Male
2. Female
3. Other
4. Do not want to disclose

2. What is your country?

1. USA
2. India

3. What is the highest education level of your parents? *

1. High-School Graduate

2. Graduate
 3. Post-Graduate
 4. Ph.D
4. Personal finance literacy can help you
1. Avoid being victimised by financial scams
 2. Buy the right kind of insurance to protect you from catastrophic risk
 3. Learn the right approach to invest for your future needs
 4. Lead a financially secure life through forming healthy spending habits
 5. Do all of the above
5. Bank account reconciliation involves
1. Balancing bank statement with your checkbook records to determine if there are errors
 2. Reconciling current bank statement with the previous month's statement to determine if there are errors
 3. Subtracting outstanding checks to your checkbook balance to determine if your checks have been properly processed
 4. Adding outstanding checks to your checkbook balance to improve your credit standing
 5. None of the above
6. An overdraft
1. A. Occurs when you write a \$50 cheque when you have \$25 in your account
 2. B. Is a stop-payment order written by the payee
 3. C. Will result in fines
 4. D. All of the above
 5. E. Both A and C
7. Your net worth is the difference between your
1. Expenditures and income
 2. Liabilities and assets
 3. Cash inflow and outflow
 4. Bank borrowings and savings
 5. None of the above
8. If you invest \$1,000 today at 8% for a year, your balance in a year will be
1. Higher if the interest is compounded daily rather than monthly
 2. Higher if the interest is compounded quarterly rather than weekly
 3. Higher if the interest is compounded yearly rather than quarterly

4. \$1,040 no matter how the interest is computed
5. \$ 1,000 no matter how the interest is computed
9. The main reason to purchase insurance is to
 1. Protect you from a loss recently incurred
 2. Provide you with excellent investment returns
 3. Protect you from sustaining a future loss
 4. Decrease the chances of accidents
 5. Improve your standard of living by filing fraudulent claims
10. Which is FALSE concerning credit cards?
 1. You can use your credit card to receive a cash advance
 2. If your credit limit is \$10,000, and you utilise a credit \$4,000, then interest would be charged on \$10,000
 3. The rate of interest on your credit card is normally higher than you can earn on a deposit
 4. A credit card company will not charge you interest if you pay off the entire balance by the due date
 5. You cannot spend more than your line of credit
11. Agriculture related Insurances are
 1. Crop Insurance
 2. Livestock Insurance
 3. Both A and B
 4. None of the above
12. Auto insurance companies determine your premium based on
 1. Age of insured
 2. Record of accidents
 3. Type and age of vehicle
 4. Completion of a driver education course
 5. All of the above
13. Please tell me whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a stock mutual fund."
 1. True
 2. False
 3. Do not know
 4. Refuse to answer
14. You have just graduated from college and found a job earning \$40,000 per year. You will pay \$600 per month for five years for education loans. What should you do to improve your financial health?

1. Cut expenses and use your savings to pay down debt
 2. Keep the same spending pattern as in the past
 3. Apply for a consumer loan for a new car
 4. Use your credit card to pay for a vacation in the Switzerland
 5. None of the above
15. Micro insurance is meant for
1. Poor People
 2. Rural Area
 3. Urban Area
 4. Involves Small amount
 5. Both A and D
16. If interest rates rise, the price of a Government bond will
1. Increase
 2. Decrease
 3. Remain the same
 4. Be impossible to predict
17. A high-risk and high-return investment strategy would be most suitable for
1. An elderly retired couple living on a fixed income
 2. A middle-aged couple needing funds for their children's education in two years
 3. A young married couple without children with good cash reserves
 4. All of the above because they all need high return
 5. None of the above because they are equally risk averse
18. _____ would not ordinarily be covered under a homeowners policy.
1. War
 2. Earthquake
 3. Flood
 4. Your being sued by someone for slander
 5. All of the above
19. Personal financial planning involves
1. A. Establishing an adequate financial record keeping
 2. B. Minimising expenses
 3. C. Preparing plans for future financial needs and goals

4. D. Both A and C
5. E. All of these
20. The main reason to purchase medical insurance is to
 1. After buying medical insurance , you are normally covered for pre-existing conditions
 2. You have a better chance to choose doctors
 3. Compensate for the future medical expenses
 4. A policy purchased by the individual is cheaper than one purchased through a group
 5. None of the above
21. You will improve your creditworthiness by
 1. Visiting your local commercial bank
 2. Showing no record of defaults
 3. Paying cash for all goods and services
 4. Borrowing large amounts of money from your friends
 5. Donating money to charity
22. Term Insurance Means
 1. It is the policy wherein the insured gets death benefit if any contingency happens within the policy term
 2. The insured is, however, not entitled to receive any survival benefit if he outlives the policy term
 3. These plans are relatively cheaper than endowment policies and money back policies
 4. All of the above
 5. None of the above
23. If you co-sign a loan for a friend, then
 1. A. You become responsible for the loan payments if your friend defaults
 2. B. It means that your friend cannot receive the loan by himself
 3. C. You are entitled to receive part of the loan
 4. D. Both A and B
 5. E. Both A and C
24. _____ is not a cost of taking an apartment on lease
 1. Security deposit
 2. Monthly rental payment
 3. Expenses incurred for non-compliance of lease terms
 4. Medical expenses of your friend who fell and broke his arm in the apartment
 5. Security deposit retained by the landlord for damages to property beyond normal wear and tear

25. Imagine that the interest rate on your savings account was 4% per year and inflation was 6% per year. After 1 year, how much would you be able to buy with the money in this account?

1. More than today
2. Exactly the same
3. Less than today
4. Do not know
5. Refuse to answer

26. Which of the following is false about “Systematic Investment Plan”?

1. It works on the principle of regular investments
2. It is an investment strategy wherein an investor needs to invest the same amount of money in a particular mutual fund at every stipulated time period
3. It enables an investor to buy more units when the price falls and fewer units when the price rises
4. It is riskier than one time investment in equity market
5. None of the above

27. Which of the following is FALSE?

1. As shareholders of a mutual fund, you have a right to tell fund managers what securities to buy
2. A mutual fund is a diversified collection of securities used as an investment vehicle
3. A mutual fund is an investment corporation that raises funds from investors and purchases securities
4. Your ownership in a mutual fund is proportional to the number of shares you own in the fund
5. None of the above

28. Do you maintain financial records? *

1. Maintain very detailed records
2. Maintain minimal records
3. Maintain no records

29. What do you do with your pocket money? *

1. Spend it fully
2. Save a portion of it in the bank
3. Save it in home

30. How often do you ask for extra money from your parents? *

1. Once in a month
2. 2-3 times in a month
3. Never

31. How often do you borrow money from friends and family? *

1. Never

2. Once in a month
3. 2-3 times in a month
32. Do you intimate your parents about the expenditures at college in advance? *
1. Yes
2. No
3. Sometimes

Survey given to students in USA:

I invite you to participate in my research project. This survey aims to find out and compare the level of financial literacy among 30 individuals ages 18-22 in India and the United States. This survey is anonymous, you will not be asked to give your name or any information that tells how you answered the survey questions. Your decision to participate in this research is voluntary. Thank you very much.

1. What is your sex? *
1. Male
2. Female
3. Other
4. Do not wish to disclose
2. What is the highest education level of your parents? *
1. High-School Graduate
2. Graduate
3. Post-Graduate
4. Ph.D
3. imagine that the interest rate on your savings account was 4% per year and inflation was 6% per year. After one year, how much would you be able to buy with the money in your account?
1. More than today
2. Less than today
3. Exactly the same
4. Do not know
4. Which of the following is FALSE?
1. As shareholders of a firm, you have a right to tell fund managers what securities to buy.
2. A mutual fund is a diversified collection of securities used as an investment vehicle.
3. A mutual fund is an investment corporation that raises funds from investors and purchases securities.
4. Your ownership in a mutual fund is proportional to the number of shares you own in the fund.
5. None of the above
5. Do you maintain financial records?

1. Maintain detailed records
2. Maintain minimal records
3. Maintain no records
6. What do you do with your pocket money?
 1. Spend it fully
 2. Save a portion of it in the bank
 3. Save in at home
7. How often do you borrow money from your friends and family?
 1. Never
 2. Once in a month
 3. 2-3 times a month

APPENDIX B :
Raw Results from India :

Options	Percent	Responses
Male	30.0%	9
Female	70.0%	21

Options	Percent	Responses
India	100.0%	14

Options	Percent	Responses
High-School Graduate	13.3%	4
Graduate	30.0%	9
Post-Graduate	56.7%	17

Options	Percent	Responses
Avoid being victimised by financial scams	3.3%	1
Buy the right kind of insurance to protect you from catastrophic risk	3.3%	1
Learn the right approach to invest for your future needs	3.3%	1
Lead a financially secure life through forming healthy	16.7%	5

spending habits		
Do all of the above	73.3%	22

Options	Percent	Responses
Balancing bank statement with your check book records to determine if there are errors	69.0%	20
Reconciling current bank statement with the previous month's statement to determine if there are errors	17.2%	5
Subtracting outstanding checks to your check book balance to determine if your checks have been properly processed	6.9%	2
None of the above	6.9%	2

Options	Percent	Responses
A. Occurs when you write a \$50 cheque when you have \$25 in your account	50.0%	14
B. Is a stop-payment order written by the payee	7.1%	2
D. All of the above	7.1%	2
E. Both A and C	35.7%	10

Options	Percent	Responses
Expenditures and income	6.9%	2
Liabilities and assets	75.9%	22
Cash inflow and outflow	10.3%	3
None of the above	6.9%	2

Options	Percent	Responses
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Higher if the interest is compounded daily rather than monthly	74.1%	20
Higher if the interest is compounded quarterly rather than weekly	14.8%	4
Higher if the interest is compounded yearly rather than quarterly	3.7%	1
\$1,040 no matter how the interest is computed	7.4%	2

Options	Percent	Responses
Protect you from a loss recently incurred	13.8%	4
Protect you from sustaining a future loss	86.2%	25

Options	Percent	Responses
You can use your credit card to receive a cash advance	17.2%	5
If your credit limit is \$10,000, and you utilise a credit \$4,000, then interest would be charged on \$10,000	48.3%	14
The rate of interest on your credit card is normally higher than you can earn on a deposit	10.3%	3
A credit card company will not charge you interest if you pay off the entire balance by the due date	6.9%	2
You cannot spend more than your line of credit	17.2%	5

Options	Percent	Responses
Crop Insurance	10.3%	3
Both A and B	82.8%	24
None of the above	6.9%	2

Options	Percent	Responses
Age of insured	6.9%	2
Record of accidents	3.4%	1
Type and age of vehicle	48.3%	14

Completion of a driver education course	3.4%	1
All of the above	37.9%	11

Options	Percent	Responses
True	3.4%	1
False	58.6%	17
Do not know	34.5%	10
Refuse to answer	3.4%	1

Options	Percent	Responses
Cut expenses and use your savings to pay down debt	79.3%	23
Keep the same spending pattern as in the past	6.9%	2
Apply for a consumer loan for a new car	3.4%	1
None of the above	10.3%	3

Options	Percent	Responses
Poor People	7.1%	2
Rural Area	3.6%	1
Urban Area	3.6%	1
Involves Small amount	39.3%	11
Both A and D	46.4%	13

Options	Percent	Responses
Increase	35.7%	10
Decrease	39.3%	11
Remain the same	14.3%	4
Be impossible to predict	10.7%	3

Options	Percent	Responses
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An elderly retired couple living on a fixed income	6.9%	2
A middle-aged couple needing funds for their children's education in two years	17.2%	5
A young married couple without children with good cash reserves	62.1%	18
All of the above because they all need high return	6.9%	2
None of the above because they are equally risk averse	6.9%	2

Options	Percent	Responses
War	10.3%	3
Earthquake	13.8%	4
Flood	6.9%	2
Your being sued by someone for slander	41.4%	12
All of the above	27.6%	8

Options	Percent	Responses
A. Establishing an adequate financial record keeping	3.4%	1
B. Minimising expenses	10.3%	3
C. Preparing plans for future financial needs and goals	20.7%	6
D. Both A and C	24.1%	7
E. All of these	41.4%	12

Options	Percent	Responses
After buying medical insurance , you are normally covered for pre-existing conditions	13.8%	4
You have a better chance to choose doctors	10.3%	3
Compensate for the future medical expenses	72.4%	21
A policy purchased by the individual is cheaper than one purchased through a group	3.4%	1

Options	Percent	Responses
Showing no record of defaults	75.9%	22
Paying cash for all goods and services	13.8%	4

Borrowing large amounts of money from your friends	6.9%	2
Donating money to charity	3.4%	1

Options	Percent	Responses
It is the policy wherein the insured gets death benefit if any contingency happens within the policy term	14.3%	4
The insured is, however, not entitled to receive any survival benefit if he outlives the policy term	35.7%	10
All of the above	42.9%	12
None of the above	7.1%	2

Options	Percent	Responses
A. You become responsible for the loan payments if your friend defaults	21.4%	6
B. It means that your friend cannot receive the loan by himself	10.7%	3
C. You are entitled to receive part of the loan	7.1%	2
D. Both A and B	32.1%	9
E. Both A and C	28.6%	8

Options	Percent	Responses
Monthly rental payment	7.1%	2
Expenses incurred for non-compliance of lease terms	7.1%	2
Medical expenses of your friend who fell and broke his arm in the apartment	75.0%	21
Security deposit retained by the landlord for damages to property beyond normal wear and tear	10.7%	3

Options	Percent	Responses
More than today	17.9%	5

Exactly the same	14.3%	4
Less than today	53.6%	15
Do not know	14.3%	4

Options	Percent	Responses
It works on the principle of regular investments	25.0%	7
It is an investment strategy wherein an investor needs to invest the same amount of money in a particular mutual fund at every stipulated time period	25.0%	7
It enables an investor to buy more units when the price falls and fewer units when the price rises	28.6%	8
It is riskier than one time investment in equity market	17.9%	5
None of the above	3.6%	1

Options	Percent	Responses
As shareholders of a mutual fund, you have a right to tell fund managers what securities to buy	35.7%	10
A mutual fund is a diversified collection of securities used as an investment vehicle	14.3%	4
A mutual fund is an investment corporation that raises funds from investors and purchases securities	14.3%	4
Your ownership in a mutual fund is proportional to the number of shares you own in the fund	14.3%	4
None of the above	21.4%	6

Options	Percent	Responses
Maintain very detailed records	36.7%	11
Maintain minimal records	26.7%	8
Maintain no records	36.7%	11

Options	Percent	Responses
Spend it fully	6.7%	2
Save a portion of it in the bank	53.3%	16
Save it in home	40.0%	12

Options	Percent	Responses
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Once in a month	33.3%	10
2-3 times in a month	30.0%	9
Never	36.7%	11

Options	Percent	Responses
Never	76.7%	23
Once in a month	16.7%	5
2-3 times in a month	6.7%	2

Options	Percent	Responses
Yes	63.3%	19
No	13.3%	4
Sometimes	23.3%	7

Raw Results from USA :

Options	Percent	Responses
Male	37.5%	3
Female	50.0%	4
Do not wish to disclose	12.5%	1

Options	Percent	Responses
High-School Graduate	25.0%	2
Graduate	50.0%	4
Post-Graduate	12.5%	1
Ph.D	12.5%	1

Options	Percent	Responses
More than today	12.5%	1
Less than today	75.0%	6
Exactly the same	12.5%	1

Options	Percent	Responses
As shareholders of a firm, you have a right to tell fund managers what securities to buy.	25.0%	2
A mutual fund is a diversified collection of securities used as an investment vehicle.	12.5%	1
A mutual fund is an investment corporation that raises funds from investors and purchases securities.	12.5%	1
Your ownership in a mutual fund is proportional to the number of shares you own in the fund.	25.0%	2
None of the above	25.0%	2

Options	Percent	Responses
Maintain detailed records	12.5%	1
Maintain minimal records	75.0%	6
Maintain no records	12.5%	1

Options	Percent	Responses
Spend it fully	25.0%	2
Save a portion of it in the bank	75.0%	6

Options	Percent	Responses
Never	75.0%	6
Once in a month	12.5%	1
2-3 times a month	12.5%	1