

# Financial Capability of Students: An Increasing Challenge in Indian Economy

Dr. Priyanka Malik



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Dedicated to:  
My Children Vardan & Parth  
(Future Generation of Our Country)

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**Dr. Priyanka Malik**

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CHAPTER - 1

# **INTRODUCTION**

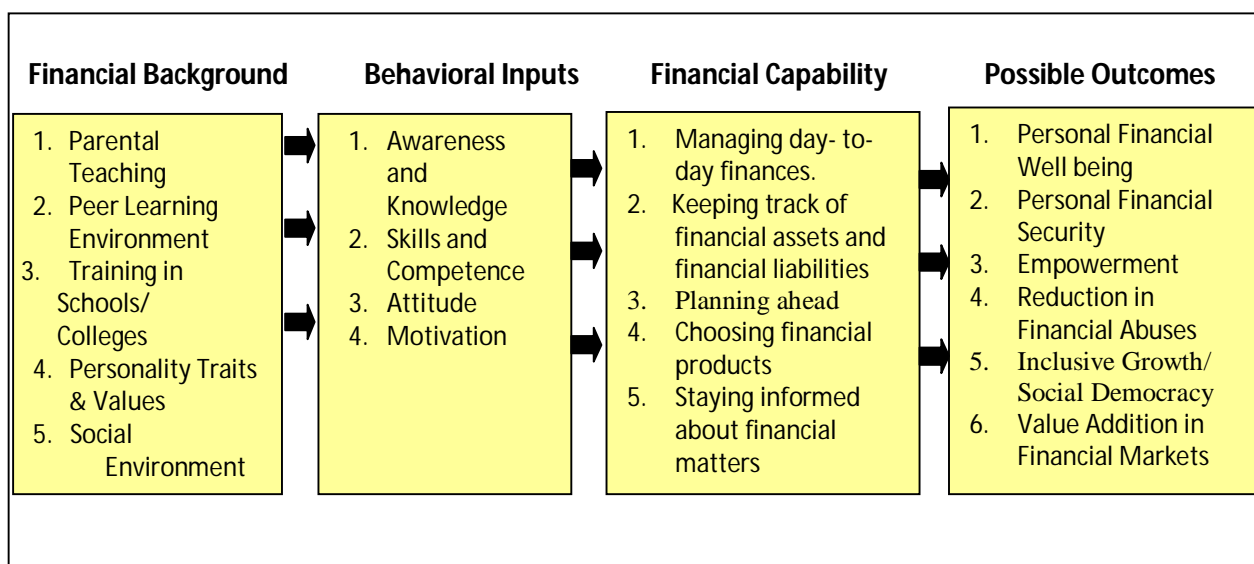
***“If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest.”***

-----Benjamin Franklin

## 1.1 Introduction

Financial capability provides people the knowledge, skill, confidence and motivation to make the financial choices that are right for them and help them improving their financial well being. Major countries around the world, like USA, UK, Australia, South Africa, China, Japan etc., are constantly trying to enhance the financial capability of their people, especially the vulnerable and critical groups in the society. Vulnerable groups are those who suffer because they have been alienated from the mainstream, while critical groups in the society are those whose contribution can be crucial for overall development of the society. In Indian society, vulnerable groups include, low income groups, landless laborers, marginal and small farmers, SC/STs, senior citizens, religious minorities etc., while critical groups include youth, women, educated middle class etc. India clearly enjoys a demographic advantage compared to many other developing and developed countries of the world. As per 2011 census, it has more than 50% of its population below the age of 25. This group of population clearly stands out as a critical group in the Indian society as this will constitute the future of modern India. (*Basu Kaushik, 2007-07-25, “India’s demographic dividend”*). **Dr. Lokanath Mishra** has been awarded first doctoral in financial literacy in India and he has found that level of awareness and financial planning among middle educated class in India is less than 10% and they need financial planning. The population which has been considered for this research work is college going students in the age group of 16 to 25 (born between 1987 and 1996) and is a part of sociological division “Generation Y”, which consists of persons who were born between 1981 and 1999. “Generation Y” persons are significantly different from “Baby Boomers” born between 1946 and 1960, and the time of birth of “Generation X” persons is between 1961 and 1980. “Generation Y” persons are characterized as more independent minded largely mobile, more technology savvy and have more liking for social networking. This research analyzes the financial capability of the respondents from targeted population of Generation “Y”. The study analyzes the level of financial capability of targeted population and suggests the ways and means to develop their financial capability.

## 1.2: Model for Financial Capability Development



(Figure 1.1: Model for Financial Capability Development)

The meaning of Financial Capability has been further explained by adding above model for “Financial Planning Development”.

The whole research study, research design etc have been built around this model. Financial Capability includes (i) General **awareness** of finance related matters, **knowledge** about financial products, markets, regulations etc. (ii) **Skills** and **competence** to deal with financial matters and (iii) **Motivation** to collect

financial information, compare financial products and take appropriate financial decisions. Financial capability is different from financial literacy. A person can be financially literate but not capable as he/ she may lack the required motivation to deal with financial matters.

Financial capability cannot be developed overnight; the efforts for development have to be continuous since childhood. The research design will take care of this requirement and will seek the views of parents, teachers, educationists as well as financial experts while analyzing the ways through which financial capability of college students could be developed.

<i>Life Stage</i>	<i>Age Group</i>	<i>Perceived Sphere of Influence</i>
Childhood	0-7	Parents, Family Members
School Going Children	8-15	Parents, Teachers, Family Members, Pears
College / University Students	16-25	Pears, Social Networks, Media, Parents, Teachers, Family Members

(Table 1.1: Influence of various people at different life stages)

### 1.3 Importance of Financial Capability

As an economy develops, the importance of finance grows. It reduces the risk of an individual and he/she can invest in his/her own wealth for enhancing welfare. Financial capability has a very important role in the development of communities. “Financial capabilities are the motivational forces to effectively manage finances and effect change in day to day management of finances. In other words, it can be said that financial capability is the ability to understand finance. More specifically, it refers to the set of skills and knowledge that allows an individual to make his/her decisions. More money, more spending choices, and more financial products did not necessarily mean that people have the financial knowledge or are well-equipped to operate their finances to their best advantage. There are many factors which make financial education increasingly important. Demographic profiles are changing, prices of all the goods are continuously increasing, financial sectors are growing more and more complex, personal savings are decreasing, rich people are becoming more rich, poor more poor and government have limited resources (*Organisation for Economic co-operation and Development- OECD, 2007*)”.

#### Demographics Are Changing

- New generation has fewer children than their parents; therefore, there will be fewer hands to support their parents who are retired.
- At the same time, expectation from the life has increased, so younger generations would like to increase their savings.
- New generation requires more savings to manage their health problems as lots of health issues are emerging due to bad eating habits of the young generation, life style changes, working culture and stressed environment in the organization.

#### Financial Markets Continue to Change

- “Technological change and market innovation have changed the nature of wholesale and retail banking, and it is likely that it will continue to change. At the retail level, technology has increased the amount of credit available (**Bernanke, 2006: 1**), and the Internet has increased both the amount of information about investment and credit and the availability of these products. Electronic banking makes it possible to at least have a bank account, under all conditions, yet a significant percentage of the population does not participate in the conventional financial system”.
- “The number, availability, and the complexity of financial products have increased. Information technology and telecommunications have made it possible to tailor products to specific markets. As the number of financial products increasing, consumers have more choices with respect to fees, interest rates, and maturities. The complexity and choice of products have made it difficult for consumers to assess them”.
- In India, there has been an increase in the number of financial service providers. Research shows that this has in a way added to the confusion in making choices at the market place.

### **Employment and Pension Systems Are Changing**

- i. "Employment trends are changing such that fewer people have long-term, continuous employment. Part-time, contract, and non-permanent employment requires a different set of financial management skills than those needed by full-time, permanent employees (**Vosko, Cranford, and Zukewich, 2003**). Related to this, a growing segment of the workforce is lacking traditional benefits, such as pension".
- ii. "At the same time a major trend in pension systems has been the change from defined benefit to defined contribution pension schemes. India is confronted with severe challenges like a growing population, increased ageing, and decline in organized public sector employment, the absence of formal social security for informal sector employees and high cost of existing defined benefit (DB) pension".
- iii. "According to the **National Sample Survey** 61st round (2004-2005), out of the total work force of 457.5 million, organized sector employed only 62.5 million i.e. 13.66%, leaving 395 million (86.34%) to be employed by the unorganized sector. It has been estimated that only 11% of workers are covered by formal pension system while 89% still remain uncovered. The changes in pension systems mean people need to become involved with the financial markets. So they should have a sound knowledge of the finance market".

### **Consumers Are More Involved in Financial Markets**

- i. "More people now have funds to invest, so there are more individual investors now. Personal income is increasing of baby boom generation and they are accumulating more assets for their future".
- ii. "More households are investing directly in stocks. When indirect investments through mutual funds and retirement accounts are included, the percentage of households investing in stocks is even higher".

### **The Consequences of Poor Financial Decisions Are Becoming More Serious**

- i. "The aging of the baby boom generation and the erosion of social safety nets are making individuals' financial decisions more important (**MacKay, 1998: 32**). Other sources of increasing financial insecurity, such as changes in employment, mean that there is greater risk and fewer resources to cushion individuals and households from the impact of poor decisions".
- ii. "The increasing numbers of consumers, the pace of change in types of services, the introduction of new technologies to deliver them, and the level of complexity have led to more aggressive marketing and fraud. Consumers may be convinced to invest in products that are not in their best interests. Sales agents may not always make clear the potential risks of some investments. Consumers are at risk from their own financial ignorance".
- iii. The growth in the number of alternative financial institutions such as muthoot finance and Annapurna gold loan is a special concern.
- iv. "Consumer debt is at an all-time high. Increases in income mean that more people are buying on credit, taking out loans, and buying homes. Even though deregulation may have resulted in more competitive credit rates, the increased competition for credit card holders has likely contributed to the number of young people with high debts at a time when they are starting families and buying homes".

### **1.4 Statement of the Problem**

- i. India is a developing country. Even today a sizeable portion of population is living below the poverty line. The per capita income, as per the latest available data, is quite low compared to that of developed nations. However, Indian economy is growing at a faster pace and likely to emerge as the third largest economy by 2050.
- ii. "A growing young population and the resultant changes in the savings and investment patterns would be advantageous for the country's economy going forward. This will impact not only economic growth prospects, but also savings and investment behaviour and potentially – if somewhat difficult to quantify – financial market growth prospects." **DB (Deutsche Bank) Research**, a part of the German financial powerhouse.

- iii. In this context, it is quite essential to ascertain the financial capability of Indian youth, especially college students pursuing professional courses, those who would form the so called educated middle class in future. Is it dependent on family's financial background, educational status of parents and the subject matter of the studies (management or engineering) they pursue? Here researcher wants to identify financial background is improving the financial capability of students or not? How education of the parents is helping their children in financial planning or taking best decision?
- iv. It is all the more required to study whether the financial capability has a gender bias? It has been well known that traditionally most of the financial decisions are taken by male members of the family. The concept of Karta in HUF (Hindu undivided family) has been built around this premise. However, the social structure is changing rapidly. Now people are living in nuclear family. In proposed research it has been tried to find out whether gender bias is still persisting even among young educated persons in India or not

### **1.5 Significance of Proposed Research Study**

- i. The proposed research study has been conducted, for the first time in India to test the level of financial capability of the management and engineering students. Attempts have also been made to analyze various ways and means to develop such capabilities.
- ii. The study has tried to explore whether this lack of awareness is the prime reason for the respondents not taking correct decision about financial products and services.
- iii. An attempt has also been made to ascertain what proportion of the respondents feel that they have suffered from financial distress / difficulties in life because they do not have proper knowledge of finance.
- iv. The proposed study has tried to throw light on what form of formal and informal education on finance can be and should be provided at college level in India.
- v. The study has examined how students can use their pocket money so that they can manage their money in efficient manner.

### **1.6 Research Objectives**

- i. To test the basic knowledge and understanding of financial knowledge of Management Students and Engineering Students in Noida and Greater Noida.
- ii. To analyze and test their skills and to find out whether the students of Management have better financial capability as compare to Engineering students.
- iii. To examine the role of parents in enhancing the financial capability of children.
- iv. To examine whether the financial background of parents play significant role in development of financial capability of the children or not.
- v. To find out whether there is a gender divide in understanding the concept of finance i.e. whether boys have better financial knowledge compared to girls. To ascertain the desired financial behaviour of the students and pressure of peer group.
- vi. To analyze the role of financial advisor for improving the financial capability.
- vii. Based on national/ international experience and the situation obtaining in India, to suggest ways and means to improve financial capability of the students.

### **1.7 Benefit to Common People and Society**

It is expected that the society would immensely benefit from this research work as this type of study was undertaken for the first time in India and it threw light on the extent of financial capability of college students in India. It also suggests ways and means to develop this capability. This study have also indicated the gender bias, if any, exists as regards to financial capability of college students in India and how far financial capability can be affected by socio-economic status and educational profile of parents. The research study has given the suggestion what programs can be run at school level/ college level to inculcate the saving

habits among the students. It is hoped that all the stake holders of the society, including Government, can take lessons from this study and help in designing appropriate policies and strategies to enhance the financial capability of college students in India.

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## CHAPTER - 2

# **REVIEW OF LITERATURE**

*“A good day is one where I can not just read a book, but write a review of it. Maybe today I’ll be able to do that. I get for some reason somewhat stronger when the sun starts to go down. Dust is a good time for me. I am crepuscular.”*

## 2.1 Introduction

The purpose of this review of literature is to provide a context for the study through identifying, evaluating and interpreting the existing work, which has been done on the financial capability and literacy of professional degree courses, identifying the gaps in literature and benefits of being financial literate student.

## 2.2 Research Surveys and their findings related to financial planning, education and Capability:

Financial crisis has highlighted the importance of financial planning, financial education and financial capability at national and international level. Many countries like Indonesia, Japan, Malaysia, Singapore, USA, UK, and Australia are doing various studies to improve the financial literacy, financial education and financial capability. Developed and developing nations are creating national strategies on the above issues. The main purpose of these strategies is to inculcate saving habits, protect future and best utilization of income of consumers. Countries may face few challenges while implementing these strategies. The main purposes of these strategies are not only enhancing financial awareness but to support the development of more responsible financial behaviour and habits.

## 2.3 Research Surveys of Financial Planning and their findings- A summarized view

**Robert J. Garner et. al. (1999)** have suggested in their book *“Ernst & Young's Financial Planning Essentials”* to take charge of your finances. This book introduced the importance of **financial planning**. It can help a person to set his/her goals for the future, understands different investment vehicles and concepts develop and implement a strategy, and monitor your investments. This book addressed important tax issues also, along with other traditional financial planning disciplines such as investments, insurance, and asset planning. The overview which *Ernst & Young's Financial Planning Essentials* provided the basic information a person needs to take action.

**Shirke A. et. al. (2007)** have summarized in the journal *Financial Planning for youth*, “the Indian youth has never had it so good. On the consumption side, the choice of goods and services available is unprecedented. And as far as income is concerned, given the booming economy and it’s over improving prospects, opportunities have never been better! So, the youth is earning a lot and spending a lot! It’s definitely a happy situation to be in!

In times like these, when everything seems to be going right for so many, there is a tendency to ignore that one great habit-saving money. The rational is simple- since the future looks great from here, why set aside money for future needs and contingencies. But, according to author’s view, this is an ideal time to save money as surplus monies are high. Rather than spending this money on a product or service you do not really need, you would do well to invest the same to provide for some future critical need.”

In this volume authors have discussed the investment avenues available to youth. And they also discussed the concept of spending wisely and very popular tool to fund purchases- credit cards.

**Certified Financial Planner Board of Standard Inc (2009) (www.cfp.net)** had conducted a National Consumer Survey on **Personal Finance** with 1742 consumers in USA and found that nearly two third (64%) did not have a written financial plan in place. “Only 17% indicated that they have a written plan in place and update the plan regularly. 51% of the respondents listed building a retirement fund as one of their most important financial concerns. Other top pressing issues for US consumers were generating current income, providing health insurance coverage and managing or reducing current debt”. The survey brought out the fact that even in US, there is a lack of understanding about the fact that everyone can benefit from a financial plan, regardless of one’s wealth or social status. Those who engaged the services of financial planners / advisors stressed on ethics and standards of practice of the advisors as critical factors for their credibility and acceptance.

**Mishra Lokanath (2011)**, has found in his research that among **financial planning** concepts, awareness is relatively higher for (i) family & personal budgeting (ii) time value of money (iii) concept of risk and return (iv) insurance planning and (v) tax planning , however, there is little or negligible awareness about liability

planning and estate planning. Retirement planning and investment planning concepts and practices have not yet attracted the attention of more than 60% of the educated middle class in India. Furthermore wide gap was observed between what the educated middle class in India wish to do as regards financial planning and what they are actually doing currently. This is obvious for a concept which is evolving slowly but steadily.

It was also observed that imparting real life financial skills to school students is critical to their holistic development. Establishing sound financial habits at a young age will prepare them for financial success in future. In this context, the “**Pocket Money**” program run by SEBI and NISM to increase financial literacy among school students is a success. But it is operating at present on a pilot scale. It has to be extended to the majority of schools in India. If children’s are not equipped with the right skills, they will have a miserable time, learning financial lessons the hard way and making some horrendous mistakes.

The research was conducted by taking samples primarily from two southern metropolis/ states, viz., Hyderabad (Andhra Pradesh) and Bangalore (Karnataka). The major findings and conclusions were, therefore, presented to 6 different experts; two each from North, East and West zones and their views were taken. These experts were chosen from financial planning practitioners, educationists and social workers. Barring minor differences, most of these experts agreed that the findings and conclusions are equally applicable to all parts of India and can be generalized. Most of the experts observed that a national level financial capability survey should be conducted in India as soon as possible. They further observed that the findings of this research study should be sent to the Central Government urging it to take appropriate measures to improve the financial capability of Indians in general and the socio-economically vulnerable groups in particular. They observed that this type of research should be encouraged and be adequately funded by the Government.

**Priyanka Choudhary, Lokanath Mishra et. al. (2013)** have argued that “**Financial Planning** is important for all men and women, irrespective of their age, educational background, income level, cultural affiliation and family status. However, financial planning is considered mandatory for women, while it is important for men. Women outlive men by 2 to 3 years in India. As per the 2011 census estimate, life expectancy at birth for women in India is 68 years against 66 years for men. On an average, women earn only 76% of the amount earned by their male counterparts in the same profession. While men earn money uninterruptedly throughout their working life, women often need to take break, especially when they have children. Motherhood often interrupts their career.

Many women leave their employment during early stage of their career for child birth / child care. Some of them return to work, while others do not. Those who come back to work often face the compulsion of starting their career all over again. As a result, their superannuation benefits (PF, Gratuity, Pension etc.) remain lower. Women tend to be more conservative investors than men, which often means their portfolios do not grow as quickly when they are young – a time when they should be investing aggressively.

Women are more intimidated about financial issues than men. Because of low level of interest in money matters and fear of going wrong, women often allow men (father / brother / husband) to take financial decision on their behalf, but it has been observed that in nine out of ten cases they require to take such decisions independently later in their life. Women comprise a horrifying 87% of the impoverished elderly. They, therefore, need to plan for their retirement carefully and need long term health care insurance. Taking control of one’s own personal finances can increase financial security.”

**Mandell (1998)** suggested that “one of the major changes for Western economies have been their increasing **consumer orientation**. While these economies are relatively affluent, providing opportunities for those with education and skills, much of the affluence results from increased market freedom for producers, consumers and economic resources. Market freedom is highly beneficial to those who are knowledgeable and capable, and disastrous to those who are not.”

**S. Donna Taylor and Gail Overbey (1999)** compared 68 students of the college (most aged 18-22) with 83 adults. More than 23 students revealed significant diffidence in the expected income of students and actual income of non-students. Significant difference has been reported in the amount of credit card debt also. Those who perceived themselves as saver and others who perceived spenders reported significantly higher levels of conflict.

**Andrew Braunstein, Michael McGrath and Donn Pescatrice (2000-01)** examined the effect of various **financial factors** have on student determination at the same institution during the comparable time period. “Surprisingly, it has been found that financial aid did not have a significant impact on freshmen determination. However, students from families with greater incomes tended to determine. Academic performance was the most significant factor, which was affecting a freshmen’s decision to continue into the sophomore year, as poor performing students inclined to drop out.”

### **2.3.1 Lessons Learned from Financial Planning**

It can be concluded from different studies that financial planning help a person to set his/her goals for the future. Even in the country like US people do not plan for retirement. In India, 60% of the educated people in middle class do not have retirement planning. Women in India, often take a break during their pregnancy. Motherhood often interrupts their career. So, they should plan very carefully for their retirement. Most of the students in different countries have credit card debt. Students do not plan their expenditure through credit card. They purchase the goods which they do not require immediately.

### **2.4 Research Surveys of Financial Education/Knowledge and their findings- A summarized view**

**Mullainathan and Thaler (2000)**, analyzed in a paper of behavioral economics that a “**consumer** may have too much trust in certain institutions and may therefore neglect to gather any information on his/her own. On the other hand, another consumer may be too sensitive to new information and may overreact in a situation to which this information applies. A third consumer may want to donate to charity without realizing that he/she is unable to afford it. A fourth type of consumer might be indifferent to financial issues and ignore them as far as possible. Consumers received and also actively collected information from various sources in their micro and macro environments. It has been found that well-informed and **financially educated consumers** were able to make good decisions for their families and thereby increased their economic security and well-being. Consumers also learned from their own experiences, listening to their friends and other household members, and received information from external sources such as the media (television, radio, newspapers, magazines and the internet) and through education.”

**Bernheim, Garrett and Maki (2001)** examined the long-term effects of school financial education on saving behaviour and asset accumulation. It could be possible because, different states have adopted compulsory consumer and financial education at different times and few not at all between 1957 and 1985. “A national survey of total 2,000 individuals has been collected. Individual’s details of personal characteristics including location of schooling, current income, wealth, and saving rates has been collected for the survey. Although the latter three magnitudes may be biased, this will not distort the results on the effectiveness of financial education unless the errors with which saving rates are reported themselves depend on financial education. The main finding of the research is that self reported saving rates were 1.5% higher of students in states, where financial education made compulsory for five years compared to states, where financial education never made a mandate.” The difference is statistically significant. It seems that mandates become more effective the longer they have been in force. This shows that it takes time to develop appropriate curriculum and the skills for changing the behaviour of an individual.

Mandate is building experience continuously. This is a long period for leaning, keeping in mind that some changes were made in anticipation of certain performance. The states, where mandatory education has introduced earlier than others states, saving rates were highest.

A Study by **Clancy, Grinstein-Weiss and Schreiner (2001)** is of particular interest because it focused on the effects of **financial education** on the poor. “The study looked at the take-up of a government saving program designed for poor people. Different program strands varied in the hours of financial education offered. There was a data on actual saving rates. So it was possible to estimate the effect of varying hours of education on savings. The effects appear large. Six extra hours of financial education were associated with a 25% increase in saving. In interpreting these results, note that, not only there were self-selection effects in the program, but program managers directed people into strands according to background and need. Standard self-selection estimation techniques have been applied but are unlikely to fully control for these non-random treatment effects. So the impact of education was likely to be exaggerated.”

**Roberts and Jones (2001)** found that young students were unprepared to handle the cost of basic needs and to manage financial difficulties. They recommend that **financial education** is the only solution to diminish financial problems.

According to **Hilgert and Hogarth (2003)**, “**financial knowledge** is associated with financial practices such as credit management, cash-flow management, investments and savings. Firstly, financial knowledge and understanding involve an awareness of the household’s amount of income: that is, how more money can be spent. Secondly, financial knowledge and understanding is required when the household decides how much money needs to be allocated to various forms of expenditure and what is the best way to conduct payments. This awareness should be seen in people’s behaviour. They should realize that they live in the real world, understand the restrictions set by their available income and, finally, be honest in their financial decision making.”

The survey has revealed that “89 percent of households had a bank account, 88 percent always paid their bills on time and 79 percent had some financial record-keeping system. Less than half (46%) of households, however, had some kind of budget or plan for spending. The survey also tested the consumers’ financial IQ, quizzing them about credit, saving, investment and mortgages. An average of 81 percent of households was knowledgeable about mortgages and 77 percent about saving. The study did not reveal the effect of scoring well on financial issues – did it mean that knowledgeable consumers had heard something or used those services themselves or were they otherwise familiar with the details of the services?”

**Bernheim and Garrett (2003)** used “cross-sectional data from a large telephone survey to provide evidence of the effects of workplace **financial education**. The finding of this survey was that, “when an employer offers financial education, self-reported saving rates rise from 5% to 6% for the median saver. For those who were already saving higher fractions of their income, perhaps not surprisingly, education did not appear to have any effect. The use of employer availability of education rather than take-up avoids the selection bias that those choosing to attend a courses are more disposed to save. However, it still allows for another potential selection bias. Firms do not randomly choose whether or not to offer financial education. Even if they did, employees with a “taste” for saving may find their way to employers who provide education. Indeed, employers in some sectors may find that savers are better employees and deliberately seek to attract them by providing financial education. One way to test for this is to find a proxy for saving proclivity. If self-selection imparts an upward bias to the estimate of the effect of education, the inclusion of this proxy should lower the effect of education on saving. Wealth can be argued to be a measure of taste for saving since it is increasing in past saving decisions. Including wealth in the regressions causes the estimated effect of educational availability on saving to rise. Perhaps this is because financial education is more often offered when employees have low financial competency. The implication of this interpretation is that financial education is remedial; the employees to whom it is offered have below average savings rates, controlling for many demographic and economic variables. If this is really what is happening, **Bernheim and Garret** underestimate the effects of education. It does though seem surprising that below average savers become above average after receiving education.”

**Peura-Kapanen (2005)** discovered that “**financial management** was thought of as a short-term activity. As far as their personal economy was concerned, consumers felt it most important to pay their bills on time and maintain a balance between their expenditure and available income, checking the balance of their bank account on a monthly basis. Economic planning in the form of budgeting and monitoring of expenditure was not typical of their financial management. The study participants engaged in mental accounting, however. Financial planning was linked to major, expensive purchases or was done by consumers with low or irregular income.”

**Valentine, G., & Khayum M. (2005)** analyzed through regression analysis that certain socialization factors, such as having a part-time job of 10–20 hours per week, having a savings account, and being from a family with a relatively higher level of family income, yielded improved quiz performance.

According to **Hogarth (2006)**, the consistent themes running through various definitions of **financial education** include “(a) being knowledgeable, educated, and informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes; (b) understanding the basic concepts underlying

the management of money and assets e.g., the time value of money in investments and the pooling of risks in insurance); and (c) using that knowledge and understanding to plan, implement, and evaluate financial decisions.”

According to **Kempson et. al. (2006)**, financial skills signify understanding of everyday financial matters and the right decisions. Financial management skills, knowledge and **financial management education** enable education policy makers to formulate suitable strategies to improve student’s financial management knowledge. Enhancement of Financial management skills, knowledge and financial management education will advantage to universities, parents, individual and the nation. The specific objective of this study was to assess financial management skills among the university level students of both, who came from urban and rural area enrolled in different universities and colleges in Peshawar city.

A research conducted by **Leskinen and Raijas (2006)** revealed that financial resources of university level students come from various sources such as from parents, loans, credit cards as well as from part time jobs. They have reported that financial competences and abilities are based on **financial management** understanding. And financial competences and abilities effect saving, attitudes and spending pattern of the students. Therefore, financial competences and abilities are required to supervise, arrange and organize properly. **Leskinen and Raijas** revealed that financial skills are based on various factors such as age, values, sex, education, attitude, family, society and economic and cultural environment which have direct and indirect affect on personal financial skills

A study by **Peng et. al. (2007)** was based on an online survey of alumni of a large mid-western university. They have investigated whether those students behave differently, who have taken **financial education** courses at school and university. “Investment knowledge was found to increase saving but the question was - only university courses increases investment knowledge? There was a control for current income, inheritance and so forth, but there was an obvious self-selection issue. People used to choose whether to enroll for finance course in a particular university because they have more interest in financial matters and these students may have a higher saving propensity.” It has been analyzed that there was a significant relationship between college-level financial education and investment knowledge.

**The Borden et. al. (2008)** study of a seminar-based **financial education** program (Credit Wise Cats) administered to college students showed that “the seminar effectively increased students’ financial knowledge, increased responsible attitudes toward credit, and decreased avoidant attitudes toward credit from pretest to posttest.” Post test, “students reported intending to be engaged in significantly more effective financial behaviors and fewer risky financial behaviors” (Borden et. al., p. 23). “This study was typical of current research in that it charted vague measures of improvement based on a pre- and posttest model of assessment. It also is typical in that it relies on self-reported and/or intended, rather than actual, behavioral change, and does not include any longitudinal follow-up to determine “stickiness” of perceived improvements in financial knowledge and/or behaviors.”

The capability approach was concerned with the ability to achieve a combination of functions that someone values, and not just a single capability (**Sen, 2009: 232**). He argues that “*the capability approach points to an informational focus in judging and comparing overall individual advantages ... and does not, on its own, propose any specific formula about how that information may be used*” (p. 232). Hence, it does not give any specific formula for policy decisions and national or local policies need to judge the importance of capabilities in conjunction with other factors.

**Martha Henn McCormick (2009)** analyzed that in the current financial crisis, “children and youth are uniquely impacted by household finance complexities. Moments of financial trouble are teachable opportunities for children and youth to learn about personal finance and to improve their own money management skills. However, comprehensive strategies for educating them about personal finance have not yet emerged. This review of the literature explores the state of youth **financial education** and policy, including definitions and measures of effectiveness. Delineating a range of approaches to the delivery and assessment of youth financial education, this paper reports on impact data and best practices and highlights some controversies. It concludes with a discussion of the gaps in knowledge and suggestions for further research.”

According to **Margaret SherrardSherraden and Lissa Jonson (2010)**, “a groundswell of interest in young people’s ability to understand and handle financial decisions has generated keen interest in financial knowledge and effectiveness of **financial education**. This study examined an innovative four-year school-based financial education and savings program, called “I Can Save” (ICS). Using a quasi-experimental design, the study examines quantitative and qualitative data to analyze program effects on financial knowledge. Elementary school children who participated in I Can Save, scored significantly higher on a financial literacy test taken in fourth grade than comparison group students in the same school, regardless of parent education and income. Results suggested that young children increase financial capability when they have access to financial education and it is accompanied by participation in meaningful financial services.”

According to **Lindsey Appleyard and Karen Rowlingson (2013)**, **financial education** is viewed by both policy makers and the public as an increasingly important tool for developing financially capable citizens in an era of increasing individual financial responsibility. “This paper considered the recent history of school involvement in teaching financial education. It then draws on research undertaken in summer 2010 at two Birmingham schools to explore children’s understandings of key financial issues. The paper concluded that it appears to be a groundswell of momentum behind making financial education a compulsory part of the National Curriculum, but, even if this happens, there will be challenges in delivering such education in practice. For example, the role of values in financial education makes it a contested subject and teachers will need training and support to deal with this. They will also need to be supported to deliver financial education in a way which recognizes diversity and sensitivity issues in the classroom.”

**In JA-YE “Europe Financial Capability Survey” (2010) (www.ja-ye.org)**, it was found that “97% of surveyed Europeans think that young people need to learn about **financial management** whilst they are still at school and 78% of respondents think that currently young peoples’ knowledge of their own personal finances is ‘little’, ‘next to none’ or ‘none at all’. Teachers and parents were most commonly identified in respondents’ top three ranks for who should be responsible for educating young people on these issues. Whilst teachers were ranked in the top three by 71% of respondents, compared with 68% for parents, the proportion of 1st place rankings for parents was notably higher (ranked first by 38% of respondents, compared with 25% for teachers).”

“Banks were ranked in the top three by 29% of respondents. Only 14% of respondents felt that Government should be most responsible for this. Respondents felt that banks should be responsible for making sure people borrow money sensibly more than the other roles or organizations included as options. 65% of respondents ranked banks in their top three. 62% of respondents who had taken part in a JA-YE Program agreed either slightly or strongly that the program had ‘taught them how to manage their money better.’”

**Khurshed Iqbal, Faizan Ali Khan et. al. (2010)** assessed that **financial management** skills among the university level students enrolled in different universities and colleges in Peshawar city by employing both t-tests and Analyses of Variances (ANOVA). Six universities (three public sectors and three private sectors) and five private sector business and management sciences colleges were selected randomly for this research study. By and large the results of the study based on the total mean score and it has been concluded that male students have more financial management skills than female students. There was a significant difference in the financial management skills both students of public and private universities and colleges. Students of public sector universities and colleges have higher financial management skills score (Mean 39.05) than students of private sector universities and colleges score (Mean 38.01).

In India, **Sarr et. al. (2012)** have summarized that **financial education** did not increase the saving account even months after the intervention whereas in the U.S a study which has been done by FDIC (2007) had revealed that participants wanted to open more deposit accounts, they wanted to save money and adhere to a budget.

It can be seen that different studies have different impacts on participants. At some places programs were successful but at other places it became useless exercise.

#### **2.4.1 Lessons Learned from Financial Education/Knowledge**

It can be summarized from the above surveys that well-informed and financially educated consumers were making good decision. States should impose mandatory financial education in the school. At personal level,



all the financial problems can be solved by financial education. It has been reported that 5-6% savings has been increased after getting financial education. Financially educated person deal with all the issues which are related to managing money, assets, banking and investments. Policy makers in the country should formulate suitable strategies to improve the level of financial education among the students of school and colleges/universities. Financial troubles in the family are learning opportunities for children and that's how they can improve their money management skills.

### **2.5 Research Surveys of Financial Literacy and their findings- A summarized view:**

**Danes & Hira (1987)** surveyed 323 college students from Iowa State University. "They have used a questionnaire of 51 items to measure college students' knowledge of credit cards, personal loans, insurance, record keeping and overall financial management. The findings of the study was that males knew better than females in most of the areas, married students knew better than unmarried students, and upper classman knew better than lower classman. Overall finding of the study was that college students have low financial knowledge".

**Volpe, Chen, & Pavlicko (1996)** have done the survey of 454 undergraduate business students from one university using an instrument of 23 items that focused primarily on investment knowledge. Their main findings were similar to the previous studies showing that students have low literacy score of 44%, with those who have taken business in major. They were comparatively more knowledgeable on investments than those students who did not have business in major.

**Markovich and DeVaney (1997)** have surveyed in Purdue University, where they have selected 236 undergraduate seniors to measure financial knowledge and behavior using an instrument with 34 items. "Their study included financial behavior, but they only measured the level of students' knowledge and behavior. They did not measure whether knowledge impacted or correlated with the behavior or not. They have identified that overall financial knowledge of seniors was low and there was little difference between the college seniors who have opted majors, although the business did have the highest knowledge scores. They also found that students believed college students should take a personal finance course and taking that course would help them financially."

**Chen and Volpe (1998)** have surveyed 924 graduate and undergraduate students at multiple universities. "They have covered complete range of financial issues and student characteristics, and took into consideration how this more comprehensive look influenced some college students to be more knowledgeable than others. Furthermore, they measured how this knowledge influenced the financial opinions and decisions of college students."

**Henry et. al. (2001)** have done the survey of 126 undergraduate, who were having education at the University of Louisiana at Lafayette. "They used a 13-item questionnaire on income, debt, and budgeting practices. Their main findings were that, majority of the students did not have or use a written budget ever. Women, married students, and older students were most likely to follow their budgets."

**Gianni Nicolini (2005)** presented the policy choices related to financial literacy as organized around two main approaches: the 'invasive approach' and the 'information approach'. "Focusing on the latter, the author argued in favor of the creation of a financial capability index. This tool would help to stimulate consumers' perceptions about their own financial situation."

**Mandell (2004)** has examined the level of **financial literacy** of those students in US, who have adopted financial literacy course in high school. It has been analyzed that course has been designed to improve the financial literacy, but they tend to do no better or little better than those who did not have such course. In most of the cases author did not find any connection between education and financial literacy within a year after taking such course. (Mandell, 2006, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=923557](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=923557))

**Catarina Frade and Claudia Lopes (2005)** have analyzed that financial literacy can be a miracle to reform indebtedness. Financial education should not be only for the young adults, it is equally important for children. The financial education should be formal and later on it should be combined with the financial training programs. Consumer's different characteristic determines and shape their attitudes towards consumption, credit and indebtedness. The study has been conducted in Portugal, which were having series

of interview. This research project has been conducted by Observatory of Consumer Indebtedness (OCI) of University of Coimbra with the purpose of identifying relationship between unemployment and over indebtedness.

Development of consumer credit system has been started late in Portugal as compare to other European member's state. A high rate of indebtedness had made the family situation worse. It became more worse when there was no effective system for dealing with over indebtedness. In 2004, a research project was conducted to analyze the failure to meet debt obligations and the negative impact on families' when they didn't have jobs. To meet these objectives, face to face interviews have been conducted on a very large scale.

### **First Empirical Study: Interviews of the unemployed**

Interviews have been taken of workers whose average age was forty and their education was low and they had very few professional skills. It has been resulted that the companies where these workers were working, were established since many years. Few workers were working for them since 30 years. Some had started their work at the age of 12 and since then they are working in the same factory. All the workers were getting the benefit of unemployment and it was coming to an end. They did not have new jobs.

Companies were established in the large towns or cities but the workers had rural or semi-rural lifestyle. Their wages were low but they had a strong tendency to save. They were not taking credits to complete their requirements and they did not have any plan to use credit card in future as well.

In addition, they have tried to increase their income either by taking small informal jobs or their spouse were helping them, the people tried to restrict their family expenditure as far as possible. Their main priorities were feeding their children and paying the loans. They were not spending to complete their personal things like clothes, hairdressers, holidays and sometimes even on medicines.

In spite of having all the problems, people used to maintain very strong ethical values in relations to their debts. They were making untold sacrifices to repay their debts. There was one more important aspect in the life of these people. They were having very strong bonding with friends and families. Sometimes friends and families were helping them to repay their debts.

It has been observed that, the person who was not having job, he was not financially insecure, but he was having psychological problems. Loneliness, no plans and projects, lack of skills for getting new job, very low self-esteem as either they have taken retirement too early or they are too old for getting new job.

### **Second empirical study: Interviews of the over-indebted**

Interviews have been conducted of those individuals who had taken the help from DECO to renegotiate deals with creditors in second study. Most of the interviewees were living around the capital city of LISBON. The ages were different of all the interviewees, but the age group of 25-40 was dominant. All the interviewees were not unemployed, but unemployment was the main reason for the loans defaulting, followed by health problems and unmanageable family budget. Most of the interviewees have or have had insecure jobs and those who have had the jobs; they had the less professional jobs or they were earning very less.

The life style of people was urban. They used to take credit for fulfilling their demands. Taking credit was not only limited to buy house; it was for the consumption of other products like car, house appliance, trips and holidays. Mostly people used to pay through credit card and their indebtedness were increasing continuously.

**Habschick, M. et. al. (2007)** while conducting a survey of **financial literacy** schemes in the European Union, 27 member states had observed that financial literacy is a growing priority, both for the EU institutions and the market players. The key findings indicated that:

- i. "The distribution of financial literacy schemes varies greatly throughout the EU. Most schemes were found in the UK, Germany and Austria. The Netherlands and France are advanced as well but underrepresented in this survey. The most active Member State in Eastern Europe is Poland. Bulgaria, Latvia, Luxembourg, Slovenia and Romania seem to be solely covered by transnational EU programs,
- ii. The current main target groups are children and young adults,

- iii. Two out of three schemes provide their service through intermediaries,
- iv. Every second uses multiple instruments and channels – the internet being a particularly important one,
- v. Every sixth scheme is operated by private financial service providers which target customers as well as non-customers and their content predominantly remains impartial.”

**Princeton Survey Research Associates International (2007)** had conducted a **Financial Literacy** Survey for the National Foundation for Credit Counseling, USA, and had found out that, “Only a minority of Americans keep close track of what they spend on typical monthly expenses. Nearly two-thirds said that they learned about financial issues such as managing money, balancing a check book and building their savings in their home. When they were growing up while less than half said they learned about managing money in school. Three in 10 said they are interested in learning more about financial issues or seeking professional advice in the next year. Roughly four in 10 credit card holders said that they do not or cannot pay the full amount due every month on the credit card, which they use most often.

Despite a lack of fiscal discipline in some areas, a large majority of the public—especially younger consumers—believed it was important to discuss the financial aspects of major purchases, such as a house or car, with a trusted professional, friend or relative before buying. In addition to talking to family and friends before making a major purchase, more than one-third of the public have sought advice from a professional financial advisor.”

**Bryce L. Jorgensen (2007)** has examined the students of Virginia (USA) titled “**Financial Literacy** of College Students: Parental and Peer Influences”, has revealed that- “A current national concern is the low financial literacy of college students in U.S.A. College students are not receiving the financial knowledge which is necessary to be successful in today’s fast paced economy. Due to an increasingly complex marketplace, college students need greater knowledge about their personal finances and the economy. The financial decisions made early in life create habits difficult to break and affect students’ ability to become financially secure adults. Most recent studies show average personal financial scores declining with average scores close to a failing grade.”

“The College Student Financial Literacy Survey (CSFLS) was created to collect data specifically for this study. The purpose of this descriptive, cross-sectional, on-line survey design study is three fold. First objective was to investigate the personal financial literacy (knowledge, attitudes and behavior) of a sample of undergraduate and graduate college students using the personal characteristics of gender, class rank, and socioeconomic status (SES). Second objective was to examine, parental and peer influences on the level of financial literacy of college students. Final objective was to examine, how college students’ financial knowledge and attitudes correlated with their financial behavior.”

“The study found that financial knowledge, attitude, and behavior scores were low but they significantly increased each year from freshman to masters. Further, students who were financially influenced by their parents had higher financial knowledge, attitude, and behavior scores. Finally, students with higher financial knowledge also had higher financial attitude and behavior scores.”

**Samy M., Tawfik H. et. al. (2008)** have used Neural Network as a sensitivity modeling tool for the determinants of **financial literacy**. “Financial literacy model has been used to measure the literacy\ of youth in Australian society with respect to their financial knowledge of Credit Cards, Loans and Superannuation (Pensions schemes in Australia that allows for choice for funds and investment decisions by the member). Based on the financial literacy related parameters, Neural Network results showed good promise and capability for efficient literacy determinants and represent a potentially robust and fault tolerant approach. The findings indicated that the determinants of credit card are significantly dependent on a student’s year of study, credit card status and daily routine, which has a strong relevance to respondents’ knowledge of credit cards. The intention of this study was not to explore the skills of youth in order to measures the level of financial literacy but the objective was to test the basic financial knowledge of key products that was common to youth in Australian Society. In doing so, the researchers were keen to identify the determinants of financial knowledge.”

**Sandra J. Huston (2010)** analyzed that **financial literacy** (or financial knowledge) is typically an input to model the need for financial education and explain variation in financial outcomes. “Defining and appropriately measuring financial literacy is essential to understand educational impact as well as barriers to effective financial choice. This article summarizes the broad range of financial literacy measures used in research over the last decade. An overview of the meaning and measurement of financial literacy is presented to highlight current limitations and assist researchers in establishing standardized, commonly accepted financial literacy instruments.”

“Increasing consumer financial literacy is a public policy. The objective was to improve welfare through better decision making (**U.S. House of Representatives, Financial Services Committee 2009**). The recent mortgage crisis, consumer over indebtedness and household bankruptcy rates provide evidence to support this goal. To assess current levels of financial literacy and explore means to improve it, a construct was needed to measure consumers' ability to make effective financial decisions. Despite its importance, the academic literature has given little attention to how financial literacy is measured?”

“Typically, financial literacy and/or financial knowledge indicators were used as inputs to model the need for financial education and explain variation in financial outcomes such as savings, investing and debt behavior.”

“The purpose of this article was to examine previous literature to identify obstacles, and propose an approach, to develop a more standardized measure of financial literacy. Previous literature that attempted to measure human capital specific to personal finance is reviewed to identify how financial literacy is currently conceptualized and measured. A commonly accepted, standard construct is particularly important in future studies to provide the consistency needed for comparison studies and/or meta-analyses.”

**Atkinson Adele, Mckey Stephen et. al. (2010)** have presented a new way of looking at and measuring **financial literacy**. Main focus of financial education is on managing money, whereas this survey has described that this is the area where financial capability are highest. It has been analyzed through this survey that half of the population in UK needs to understand that it is very dangerous to live for a day and make no provisions for the unexpected problems, unexpected expenditure and retirement. In addition to that, low levels of financial capability have been identified and wrong financial products are purchased by these people. Author concluded that government needs to priorities the policies.

**Lausardi Annamaria and Olivia S. Mitchell (2011)** have examined **financial literacy** in the US using the new National Financial Capability Study, wherein they demonstrated that “financial literacy is particularly low among the young, women, and the less-educated. Moreover, Hispanics and African-Americans scored the least well on financial literacy concepts. Interestingly, all groups rated themselves as rather well-informed about financial matters, notwithstanding their actual performance on the key literacy questions. Finally, they have shown that people who score higher on the financial literacy questions are much more likely to plan for their retirement, which is likely to leave them better positioned for old age. Their results have informed those seeking to target financial literacy program to those in most need.”

**Lausardi Annamaria and Olivia S. Mitchell (2011)** have examined that “in an increasingly risky and globalized marketplace, people must be able to make well-informed financial decisions. New international research demonstrates that **financial illiteracy** is widespread in both well-developed and rapidly changing markets. Women are less financially literate than men, the young and the old are less financially literate than the middle-aged, and more educated people are more financially knowledgeable. Most importantly, the financially literate are more likely to plan for retirement. Instrumental variables estimates show that the effects of financial literacy on retirement planning tend to be underestimated. In sum, around the world, financial literacy is critical to retirement security.”

According to **Elsa Fornero and Chiara Monticone (2011)**, Recent pension reforms in Italy require individuals to decide whether to participate in pension funds, how much to contribute, and how to invest their wealth, raising concerns about their ability to deal with financial matters. Using the Bank of Italy's Survey on Household Income and Wealth (SHIW), researcher's empirical analysis shows that most individuals lack knowledge of basic concepts such as interest rates and inflation. Men, the more educated,

and residents in the Centre–North possess higher **financial literacy**. Researcher also found that financial literacy has a positive and significant impact on the probability of pension plan participation.

**Diana Crossan, David Feslier and Roger Hurnard (2011)** have compared “levels of **financial literacy** between the general adult population of New Zealand, people of Māori ethnicity, and people of Ngāi Tahu, a Māori tribe that is providing financial education to its members. While the level of financial knowledge of Māori people is generally lower than for non-Māori (controlling for demographic and economic factors), there is little difference between the financial knowledge of the people of Ngāi Tahu and other New Zealanders. Moreover, they have found that financial literacy is not significantly associated with planning for retirement. This could reflect the dominant role of New Zealand's universal public pension system in providing retirement income security.”

**Shizuka Sekita (2011)** has analyzed that “the level of **financial literacy** is not high in Japan. Although a majority of respondents were able to correctly answer a simple question about interest rates, more than half were not able to correctly answer a question about risk diversification. Many respondents stated they did not know the answer to the financial literacy questions, which might indicate that Japanese are very cautious and only answer when confident in their response. Women, the young, and those with lower incomes and lower educational attainment have the lowest levels of financial literacy, and financial literacy increases the probability of having a retirement savings plan.”

**Tabea Bucher-Koenen and Annamaria Lusardi (2011)**, have examined **financial literacy** in Germany using data from the SAVE survey. They have resulted that “knowledge of basic financial concepts is lacking among women, the less educated, and those living in East Germany. In particular, those with low education and low income in East Germany have low financial literacy compared to their West German counterparts. Interestingly, there is no gender disparity in financial knowledge in the East. In order to investigate the nexus of causality between financial literacy and retirement planning, they have developed an instrumental variables strategy by making use of regional variation in the financial knowledge of peers. They found a positive impact of financial knowledge on financial planning.”

**Lauren Willis** has argued that: “policymakers [in the United States] have embraced **financial literacy** and **education** as a necessary corollary to the disclosure model of regulation. This education is widely believed to turn consumers into ‘responsible’ and ‘empowered’ market players, motivated and competent to make financial decisions that increase their own welfare. The vision is of educated consumers handling their own credit, insurance, and retirement planning matters by confidently navigating the bountiful unrestricted marketplace.

Although the vision is seductive, promising both a free market and increased consumer welfare, the predicate belief in the effectiveness of financial literacy education lacks empirical support. Moreover, the belief is implausible, given the velocity of change in the financial marketplace, the gulf between current consumer skills and those needed to understand today’s complex non-standardized financial products, the persistence of biases in financial decision making, and the disparity between educators and financial services firms in resources with which to reach consumers.

Harboring this belief may be innocent, but it is not harmless; the pursuit of financial literacy poses costs that almost certainly swamp any benefits. For some consumers, financial education appears to increase confidence without improving ability, leading to worse decisions.

When consumers find themselves in dire financials traits, the regulation through education model blames them for their plight, shaming them and deflecting calls for effective market regulation. Consumers generally do not serve as their own doctors and lawyers and for reasons of efficient division of labor alone, generally should not serve as their own financial experts. The search for effective financial literacy education should be replaced by a search for policies more conducive to good consumer financial outcomes.”

**Gianni Nicolini, Brenda J.Cude and Swarn Chatterjee (2013)** have analyzed the differences in financial literacy of Canada, Italy, the USA and the UK. The main objective of this study was to understand whether factors of financial literacy in one country can be generalized for another country or whether unique national characteristics of individual country make it necessary to evaluate financial literacy in each country

separately. A financial literacy index has been created which was based on multiple choice questions. The index has been used to test the financial literacy of individual country. Results suggested significant differences among countries. It has been observed that national and cultural differences are existing in what households know and need to know about their personal finances. While developing the financial literacy assessment tools policy maker should consider these differences for a particular country.

**Dr. Harsh Purohit et. al. (2015)** tried to “understand the level of awareness about various government welfare schemes among rural women of Tonk district of Rajasthan (India). In the first stage, the level of **financial literacy/awareness** among women was judged using simple inquiry method wherein the respondents were asked basic questions related to various investment options, need for investments, savings, inflation etc. so that the women are at ease to answer, the questions were asked when the male members were at work and that too in their regional language. The results from the first stage provided evidence that rural women lacked basic knowledge of financial products. Further, they were completely dependent on male members.

The results highlight low level of awareness about **(a) The Consequences of Inflation (b) Benefits and Avenues for Savings (c) Various Government Schemes among Rural Women**. Further, it was also observed that most women respondents did not had bank account or were not actively using their bank accounts. The bank accounts opened in their names were used by male members like husband, brother etc. Further, many times women were cheated when their hard earned money was not deposited in their account as they relied on someone else in operating their bank account.

After assessing the level of financial literacy, various initiatives were taken to improve the level of awareness among the rural women. The rural women were made aware of Government schemes like JANDHAN YOJNA, ATAL PENSION YOJNA, SUKANYA SMRIDHI YOJNA, BHAMASHAH YOJNA (RAJASTHAN GOVT. SCHEME). Along with that canopy was setup outside various bank branches to facilitate them in opening a bank account, how to fill the form (KYC), how to operate ATM and give information about the **Documents, Pin Number, Passbook, Bank Slips, Signature & Thumb Rule**.

The results have important implications for the government agencies and banks which have been assigned the work of promoting awareness about the recently launched financial and welfare schemes such as '**Pradhan Mantri Jan Dhan Yojana**' (opening of bank accounts to provide basic financial services to poor) and '**Sukanya Samriddhi Yojana**' (empowering girl child by requiring parents to make periodic deposits carrying higher interest rate) so that rural women can take advantage of these schemes.”

**Santo Dal Andreas, Martelli Duccio (2015)** have analyzed that developing personal finance literacy is becoming very important issue in many countries. Main focus of this paper was to focus on the financial literacy of students and to analyze potential benefits of their participation in investments in terms of improved skills and knowledge. “It analyzes an innovative online portfolio management competition for graduate students, the Fund Management Challenge, which is promoted by the CFA Society Italy. The results demonstrated how this Challenge, and investment simulations in general, set with specific rules to mitigate opportunistic behaviors, can help to improve participants' financial literacy levels. In addition to this, the use of quality indicators encourages students to learn and helps mentors and educators to better allocate resources to those in need of assistance. The study represents an original analysis of the Challenge. If further analysis supports this preliminary evidence, the Challenge could become a reference point for future investment simulations targeting university students.” (**Santo D.A., Martelli D., 2015**).

### **2.5.1 Lessons Learned from Financial Literacy**

It is considered that male have more financial literacy than female. It has been proved from many studies that students have low literacy score in finance. The students, who are taking subjects like personal finance, their literacy score is high and they are taking better decision in the family. A study which has been conducted on Australian youth concluded that usages of credit card are significantly dependent on studies of the students. They can learn how much can be spent with credit card and when to repay the amount without giving extra interest. It has been analyzed in one of the study which has been conducted in UK. Result shows that, it is very dangerous to live even for a single day without planning for unexpected provisions. After having the financial literacy, more people like to plan for their retirement. Studies have shown that women are less

financially literate than men. Very few people know about finance basic concepts such as interest rate, inflation etc. From above studies it can be concluded by the researcher that financial literacy can secure the future of citizens of the country.

## **2.6 Research Surveys of Financial Capability and their findings- A summarized view**

**Didier Noel (2005)** presented a comparison of credit application assessment methodologies, as seen through legal frameworks in Switzerland, France, Belgium and at the EU level. The papers gave an overview of the recent research in the **financial capabilities** of consumers and possible ways to evaluate their ability to deal with financial matters.

Financial capability is defined here as “the capacity, when in possession of a given set of information, to implement a decision-making process, based on which decisions are to be taken and/or modes of conduct followed, with respect to certain economic/financial situations. Improving financial capability therefore means improving the results of such a decision-making process. This will entail increasing consumers’ know-how and expertise and should be done through programs designed to improve knowledge, skills and confidence. Besides traditional training courses, making the inputs of the decision process simpler and easier to use should be considered as a complementary measure.”

This paper focuses on the second approach, which aims at improving the information level of consumers without compromising their decision-making independence. The author started his research with an analysis of the current regulatory framework in order to determine areas for intervention regarding financial capability.

**Johana Leskinen and Anu Raijas (2005)** explored the concept of “**Consumer financial capability- a life cycle approach**”. Building on microeconomics theory and empirical findings, they have developed the framework in which consumer financial capability depends on age, education, cultural environment and income among other factors. “They conclude that financial education programs should take those characteristics into account and provide tailored tools adapted to the background of consumers as well as to the stage in the life cycle that they have reached.

After summarizing the dynamics of household economic activities, the authors explain the rationale of using the life-cycle approach for their framework. This approach takes into account the evolution of consumer needs, resources and responsibilities through the different phases of their lives. It also encompasses the role of expectations in decision-making processes and the general preference of individuals for stability in the level of consumption. Combined with a typical income development profile, where income reaches its peak around the middle of the life, this inclination to stability supports the hypothesis that individual financing needs significantly change over time. When applied to the analysis of consumer financial capability, the life-cycle approach supports the concept of different financial capabilities corresponding to different stages in life, from childhood to old age.”

**Atkinson et. al. (2007)** used *Financial Capability Survey*, analyzed that “the least financially capable were younger, with children who were struggling on low incomes and were disorganized. The next least capable groups were: low-income, younger, single people, using few products, plus the early middle-aged, who used few products and did some planning.”

**Elizabeth Johnson and Margaret S. Sherraden (2007)** have analyzed that youth in the United States are facing increasingly complex and perilous financial world. “Economically disadvantaged youth, in particular, lack financial knowledge and access to mainstream financial institutions. Despite growing interest in youth financial literacy, researcher did not see comparable efforts to improve access to financial policies and services, especially among economically disadvantaged youth. Instead of aiming for financial literacy, an approach widely promoted in the United States, author suggested aiming for financial capability, a concept grounded in the writing of Amartya Sen and Martha Nussbaum. Building on research in the U.K., the paper proposes that financial capability results when individuals develop financial knowledge and skills, but also gain access to financial policies, instruments, and services. The paper addressed theoretical and pedagogical approaches to increasing **financial capability**.”



**Sen (2009: 295-8)** suggested that other factors need to be considered in addition to equality in **capabilities**. Specifically, “he argued that we should not seek equality of capability as capabilities are characteristics of individual advantages and do not adequately focus on fairness or equity of processes (for example, concerning the capability of long life, women live longer than men but it would be unfair to give women less medical attention for the same health condition); there are other demands on judgments about the distribution of resources etc.; if capabilities between people are ranked, this does not give a complete ranking in terms of equality; and improving the capabilities of all needs to be considered as well as reducing inequalities of capabilities.”

**Mark Taylor (2010)** has analyzed people’s ability to manage and take control of their finances, is receiving increasing interest among policy makers as more people find themselves in difficult financial situation during the current economic downturn. Author has pointed the issues- how to measure the financial capability with a specific focus on making ends meet and money management. Data has been collected from household (the British Household Panel Survey) and identified key determinants. Lowest financial capability has been found among the young unemployed single adults living in households with other unrelated non-working adults. In contrast, older men and women in full time with an employed spouse have better financial capability.

**Lausardi Annamaria (2011)** has examined about Americans’ **financial capability**. “Financial capability is measured in terms of how well people make ends meet, plan ahead, choose and manage financial products, and possess the skills and knowledge to make financial decisions. The findings reported in this work paint a troubling picture of the state of financial capability in the United States. The majority of Americans do not plan for predictable events such as retirement or children’s college education. Most importantly, people do not make provisions for unexpected events and emergencies, leaving themselves and the economy exposed to shocks. To understand financial capability, it is important to look not only at assets but also at debt and debt management, as an increasingly large portion of the population carry debt. In managing debt, Americans engage in behaviors that can generate large expenses, such as sizable interest payments and fees. Moreover, more than one in five Americans has used alternative (and often costly) borrowing methods (payday loans, advances on tax refunds, pawn shops, etc.) in the past five years. The most worrisome finding is that many people do not seem well informed and knowledgeable about their terms of borrowing; a sizeable group does not know the terms of their mortgages or the interest rates they pay on their loans. Finally, the majority of Americans lack basic numeracy and knowledge of fundamental economic principles such as the workings of inflation, risk diversification, and the relationship between asset prices and interest rates.”

In the US, **Cole et. al. (2013)** evaluated the impact of a course i.e. personal finance which was taught in high school. They find no effect on financial outcomes of this course, while training in mathematics is shown greater benefits to the students though levels of financial market participants, more investment income and better management of debt.

There is another study, which has been done by Hathaway and Khatiwada in 2008. They have stated that “Unfortunately, we do not find conclusive evidence that, in general, financial education programs do lead to greater financial knowledge, and ultimately, to better financial behavior. However, this is not the same as saying that they do not or could not – it is just that current study, while at times illustrating some success, leave us with an unclear feeling about whether we can grant a blanket application of these results specifically, to financial education programs more generally.”

There can be many other ways through which **financial capability** of students can be improved.

- i. Students should have Personal finance as a compulsory subject in their course. They should be given real world problems to solve so that they can understand the best usage of money before entering into the real world or before having any kind of responsibility.
- ii. Finance projects can be given in groups so that students can have the brainstorming session before reaching to any conclusion of a particular problem. Group activities give better results.
- iii. Financial institution can have mass market programs to aware the students about financial products. These institutions can approach different colleges on timely basis and take the feedback from the

students about previous learning or experts can help the students in purchasing the financial products from their pocket money.

**Priyanka Choudhary, Lokanath Mishra et. al. (2013)** have analyzed that India has fourth rank in terms of preparedness for conventional warfare and has largest contingents of defence forces in the world. Indian defence forces consist of Army, Navy, Air force and Coast Guard. India had an active military forces of 13,25,00 people and active reserve forces of 17,47,000 people in 2011. In order to maintain youthful profile of defence persons; approximately 60,000 people take early retirement or released every year from the services at a young age. Majority of these defence personnel retire at a time where they have many unfinished family and social responsibilities. Because of these responsibilities they need to take up a second occupation. Department focuses on their skills so that they can easily get other occupation but unfortunately, there is no significant effort is made to provide them with basic life management skills including day to day management of their finances which is very important. Due to low level of **financial capability** many of them faces complex financial problem post retirement. Several steps have been taken by United States (US) to increase the financial capability of its defence personnel.

India as a developing country, should take clue from United States. At least now, India should take necessary steps to increase the financial capability of defence personnel.

**Rajiv Prabhakar (2014)** has identified that **Financial Capability** is a controversial area of public policy. Critics claimed that that it is part of a 'financialisation' agenda to turn people from citizens into subjects while supporters said that **financial capability** is very important to lead an independent life.

This study has been conducted in London to identify the attitudes towards financial capability. The study was conducted on focus groups. The results has shown that most of the people support financial capability and do not think they are turned into **financial** subjects. However, some of their views overlap with a weaker version of financialisation, particularly on home ownership. Participants also suggest that the priority now is to target institutions rather than individuals.

**Laura Luukkanen and Outi Uusitalo (2014)** have studied that how today's changing market environments demands **financial capability** even from young consumers. The main focus of this article was on the perception of young people on the roles and responsibilities of school, public, private and non-profit sectors in promoting financial capability among the youth.

Data has been collected via focus group discussions among young people aged between 15-16 and education institutes of Finland. It has been analyzed that educational institutions play an important role in the life of young people but tend to focus on macro finance issues in financial education. Banks have been seen as professional actors which are promoting financial capability among the youth, but their activities are profit driven. Young people are less familiar about the public sector and non-profit organization which are providing financial information, but these organizations are considered impartial and reliable. It is very difficult for the young people to differentiate between the activities of various parties offering financial advice. They want to have all information from different perspectives. Financial education and financial matters are more interesting to young people when they are current. So, in order to promote financial capability among youth, different organizations should be more proactive and cooperative with each other.

**Margaret Miller et. al. (2014)**, have studied in "Can you help someone become Financially Capable- A Meta Analysis of the Literature". For the analysis of this study 188 papers and articles have been identified. It has been identified that financial education can change financial behaviour including improvement in savings and record keeping. Personal financial management and financial behaviour can control other outcomes like loan default. Meta-analysis could not provide the insights on impact due to sample and not to have direct comparability. There was no alternative method to achieve desired results. All the studies have neglected the analysis of cost and financial literacy intervention benefits.

### **2.6.1 Lessons Learned from Financial Capability:**

Financial Capability has been defined as the capacity of making a best decision under certain financial situation. A concept of consumer financial capability- a life cycle approach has been developed and it has been analyzed that financial capability depends on age, education and income. Life cycle approach supported

different stages in life from childhood to old age. When individual develop the skills and financial knowledge then financial capability improves. American youth are also lacking in financial capability. One of the study, which has been conducted in India and it has been find out that low level of financial capability create complex financial problem post retirement among the defence personnel. In order to promote financial capability among youth, different organizations like banks should be more proactive and cooperative with each other.

## **2.7 Research Gap**

It is evident from the literature review that most of the studies on financial knowledge/financial awareness/financial literacy/ financial capability has been conducted in the context of western culture. Among the western countries also, mostly studies have been conducted in US, UK, Australia. Other countries have very few studies on the above said issues. But now, studies on financial literacy have got the momentum. It has been observed that these issues are not addressed in Indian context. Very few studies have been done on this particular aspect. Dr. Lokanath Mishra has made a report on the financial planning of middle educated class. Banasthali Vidyapith University is extensively working on financial literacy, but financial literacy/capability of professional students' has not been studied by any financial agency or university. Professional students are studying the subject of finance but few questions arise here: do they use their pocket money or credit card effectively? Do they start their investment from their pocket money? Do they actually use the financial concepts in their real life? Do they know risk involvement which is associated with investments? Do they participate in the financial decisions of the family? Do they actually using their financial knowledge in the development of their financial well-being model?

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- <http://aia.aspiriant.com> – Aspirant is a leading independent wealth management firm of the world.
- <http://insights.socialware.com/> An information service for advisors relating to social networking research, best practices and policies
- <http://militaryfinance.umuc.edu/> HSBC / University of Maryland University College (UMUC) - Military Education Centre – Provides a full range of financial planning education
- <http://rossdawsonblog.com/> It is a blog run by Raw Dawson
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- <http://www.cegworldwide.com/> Provides Vital Advisor Resources, giving advisors the tools that lead to success
- <http://www.fi360.com/> Fi360 promotes a culture of fiduciary responsibility and improves the decision making processes of investment fiduciaries and other financial service providers.
- <http://www.fiduciarynetwork.net/> -Fiduciary Network provides long-term, passive capital to fee-only wealth management firms and helps current owners transition their business to the next generation.
- <http://www.financial-planning.com/EliteAdvisorForum/> Presents elite advisor bestpractices77
- <http://www.finra.org/> Financial Industry Regulatory Authority of USA. It is the largest independent regulator for all securities firms doing business in the United States
- <http://www.ftkmc.com/knowledge-for-markets.html> Financial Technology Knowledge Management Company
- <http://www.investorfirst.in/index.php> CEBI/ NISM Financial Education initiatives
- <http://www.jumpstart.org/> Jump Start Coalition for Personal Finance Literacy is a forum for improving the financial literacy of pre-kindergarten through college-age youth by providing advocacy, research, standards and educational resources
- <http://www.moneymadeclear.org.uk/> Money Made Clear – UK Government site for Financial Literacy and Financial Education. (Moneymadeclear™ from the UK's Consumer Financial Education Body, established by the Financial Services Authority)
- <http://www.napfa.org/about/index.asp> National Association of Personal Financial Advisors (NAPFA) is a leading association of fee-only financial advisors
- [http://www.nseindia.com/content/ncfm/ncfm\\_finliteracy.htm](http://www.nseindia.com/content/ncfm/ncfm_finliteracy.htm) NSE / NCFM financial literacy initiative
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- **www.sec.gov** The Securities and Exchange Commission, USA
- **www.yougov.com** It is a research and consulting organization, pioneering the use of the Internet to collect high quality in-depth data for market research (What the world thinks?)
- **www.cfp.net** Certified Financial Planner Board of Standards, Inc.
- **www.ja-ye.org** Junior Achievement Young Enterprise (JA-YE) Europe is an organization to inspire young people to succeed in a global economy- provides economic education to young people (6-25 years of age)
- **www.aijsh.org** Asian Journal of Research

CHAPTER - 3

**RESEARCH DESIGN  
&  
FRAMING OF HYPOTHESES**

*“Attempt the end and never stand to doubt; nothing’s so hard, but research will find it out.”*

*-Robert Herrick*

### 3.1 Research Design

Research design can be defined as a detailed blueprint to meet its objective (Aake D.A. et. al., 2000). The main purpose of research design is to plan about methods which will be adopted for collecting the data, techniques for analysis, keeping view the objectives of research and availability of time and money. Researcher has used exploratory and analytical technique to carry out this research. Exploratory research can be conducted through expert survey, focus group, questionnaire and secondary research. In the proposed research study researcher have tried to explore the effect of professional course on financial literacy/capability of students through questionnaire and taken the feedback from focus groups. Researcher tried to analyze the study through questionnaire. This research has been designed into four stages: Pre-Design Stage in which **Experience Survey** has been conducted. **Financial Capability Survey** has been conducted in stage two. Third stage is of **analyzing ways and means for improving Financial Capability**. In fourth stage, the result has been given to **Focus group**. The main purpose of sending results to Focus group was to compare the results in respective regions with the work of researcher.

- **Stage I: Pre-Design Research**

The proposed research study has been conducted in **four stages**. **First Stage** has included “Experience Surveys”, “Literature review” and Pilot Studies”. “**Experience survey**” is an exploratory research technique under which the people who are knowledgeable about the particular research topic were surveyed, i.e. their views and expert opinion are taken before undertaking the actual research study. This is proposed as the research topic is new and in India very little research has been done on the proposed subject of study. Survey of existing literature or “**literature review**” is highly essential to understand the type of research studies conducted on the specific topic/ similar topics anywhere in the world and the nature of findings / conclusions drawn from such studies. Published data and literatures are considered as a valuable resource for a research study, it is often recognized that only a fraction of the existing knowledge in any field is put into writing and hence an experience survey along with a comprehensive literature review is considered important in order to take a more complete view of the research problem (Cooper and Schindler, 2009). It is important that all surveys are tested before the actual surveys are conducted. The “**pilot studies**” are done to ensure that the questionnaires are clear to the respondents and can be completed in the desired manner. Thus it has been piloted on the sample to be used.

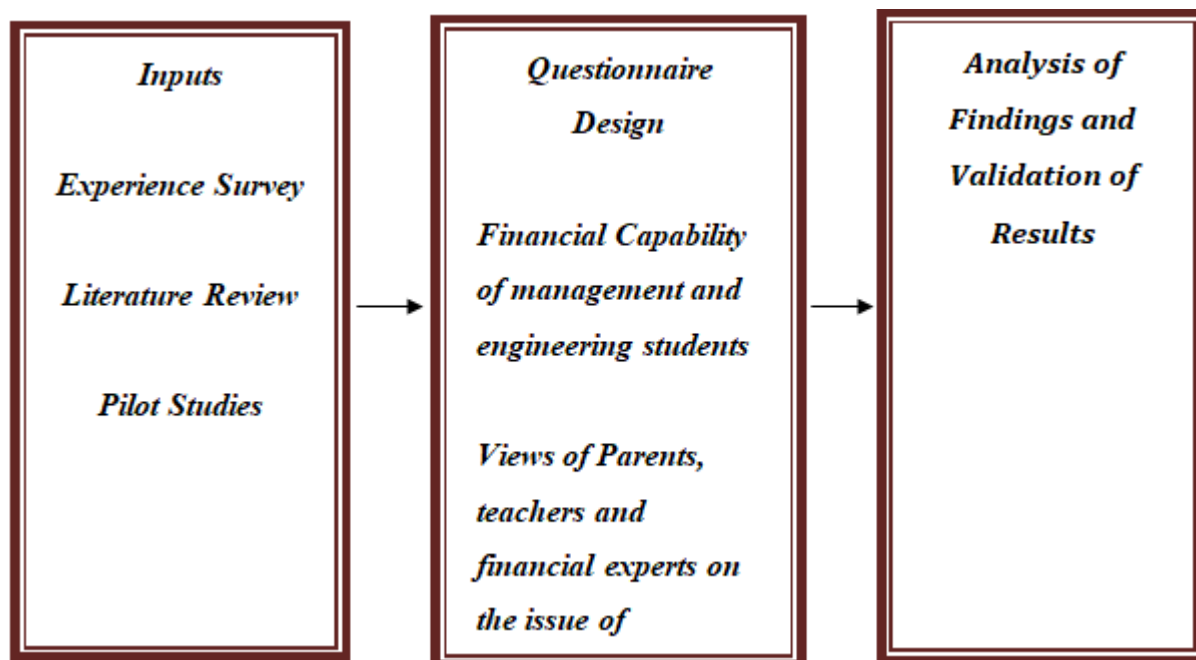
- **Stage II (Financial Capability Survey)**

In the **second stage**, an appropriate questionnaire has been designed to conduct a survey of financial capability of college students pursuing professional courses in India. For designing this questionnaire, the survey instruments used in India and abroad for similar type of research work have been consulted. Further, the questionnaire has been designed around a list of desirable financial behaviors identified for Indian college students. The sample size of this questionnaire is 1018 students including around 509 management students and 509 engineering students. This survey helped in designing a “**Financial Capability Scoring Model**” for college students and has enabled the researcher to conduct comparison of scores based on gender, family background etc.

- (c) **Stage III (Surveys for analyzing ways and means for improving Financial Capability)**

In the **third stage**, a different questionnaire has been used to conduct another survey. The target respondents for this survey are parents, teachers and financial professionals. Sample size for this survey is 50. It is important to evaluate the considered views of all these three groups before arriving at a conclusion. Parents and teachers play very important role in the development of personality of their children/students. Through this survey researcher tried to find out what is the contribution of parents, teachers and other targeted respondents in develop in the financial capability of their children/students. Is profession is playing role in the development of interest in savings or investment?

### Questionnaire Designing and Validation of Results



(Figure 3.1: Questionnaire Designing & Validation of Results)

#### (d) Stage IV (Analysis of Findings / Interpretation and Validation of results):

In the **fourth stage** the summary of findings of the research study has been discussed with a “**Focus group**” of experts for necessary validation and taking a generalized confirmatory view of the research conclusions. Focus Group interviews have been found particularly useful for validating findings of social research. It is considered a good practice to get a group of 6 to 8 persons together and discuss the findings and inferences with them. This process helped researcher to evaluate whether correct interpretation of the findings has been done or not. The focus group interviews have been conducted with a group of knowledgeable experts in this field.

### 3.2 Research Questions

Developing appropriate questions are very important for completing an investigation. **Haynes** suggested in his study that it is important to know “where the boundary between current knowledge and ignorance lies.” Population of interest should be defined through research questions and they should be relevant with the field. The challenge was to develop appropriate questions by the researcher. The following questions have been developed for the research work.

- i. What is the level of Financial Capability of Indian students pursuing professional courses like Management and Engineering?
- ii. Is there a gender bias for financial capability among students?
- iii. Whether family background, parental educational status, nature of education etc influence financial capability?
- iv. How financial capability of Indian students pursuing professional courses can be developed?
- v. What role of parents, teachers, educationists, finance professionals, society and Government can play in developing financial capability of college students in India?

### 3.3 Framing the Hypotheses

Researcher has taken the help of previous studies on financial literacy/knowledge/capability to formulate the hypotheses. Apart from that, opinions of experts also have been considered for making the hypotheses. Financial professionals have suggested important points to formulate the hypotheses.

**Null Hypothesis-** Basic personal financial knowledge of Management and Engineering students is not significantly different. ( $H_{01}$ )

**Alternative Hypothesis-** Basic personal financial knowledge of Management and Engineering Students is significantly different. ( $H_{a1}$ )

**Null Hypothesis-** Gender barrier does not exist in understanding the basic concept of financial knowledge. ( $H_{02}$ )

**Alternative Hypothesis-** Gender barrier does exist in understanding the basic concept of financial knowledge. ( $H_{a2}$ )

**Null Hypothesis-** Professional education does not play a significant role in improving the financial capability. ( $H_{03}$ )

**Alternative Hypothesis-** Professional education plays a significant role in improving the financial capability. ( $H_{a3}$ )

**Null Hypothesis-** Teachers and non-teachers do not play any important role in developing the financial capability of college students. ( $H_{04}$ )

**Alternative Hypothesis-** Teachers and non-teachers plays very important role in developing the financial capability of college students. ( $H_{a4}$ )

**Null Hypothesis-** Gender of Management and Engineering students does not affect interest in managing money and financial matter in the family. ( $H_{05}$ )

**Alternative Hypothesis-** Gender of Management and Engineering students affect interest in managing money and financial matter in the family. ( $H_{a5}$ )

**Null Hypothesis-** Management and Engineering courses do not affect interest in managing money and financial matter in the family. ( $H_{06}$ )

**Alternative Hypothesis-** Management and Engineering courses affect interest in managing money and financial matter in the family. ( $H_{a6}$ )

**Null Hypothesis-** Gender of Management and Engineering student does not affect in participating in financial decision in the family. ( $H_{07}$ )

**Alternative Hypothesis-** Gender of Management and Engineering student affects in participating in financial decision in the family. ( $H_{a7}$ )

**Null Hypothesis-** Management and Engineering courses do not affect interest in participating in financial decisions in the family. ( $H_{08}$ )

**Alternative Hypothesis-** Management and Engineering courses affect interest in participating in financial decisions in the family. ( $H_{a8}$ )

**Null Hypothesis-** Gender of Management and Engineering students does not affect their interests in having saving accounts for accessing and monitoring. ( $H_{09}$ )

**Alternative Hypothesis-** Gender of Management and Engineering students does not affect their interest in having saving accounts for accessing and monitoring. ( $H_{a9}$ )

**Null Hypothesis-** There is no difference of opinion between teachers and non-teachers in desirability of teaching financial matters to children. ( $H_{010}$ )

**Alternative Hypothesis-** There is difference of opinion between teachers and non-teachers in desirability of teaching financial matters to children. ( $H_{a11}$ )

**Null Hypothesis-** There is no difference of opinion between teachers and non-teachers in offering knowledge about basic financial products and lessons on personal finance should be made compulsory in schools and colleges / universities/ technical institutions. ( $H_{012}$ )

**Alternative Hypothesis-** There is difference of opinion between teachers and non-teachers in offering knowledge about basic financial products and lessons on personal finance should be made compulsory in schools and colleges / universities/ technical institutions. ( $H_{a12}$ )

### 3.4 Sampling

A stratified random sampling has been used for this study. For knowing the financial capability of students a survey has been conducted. The sample size of this survey was 1018 (individual respondents) students who were pursuing Management course and Engineering course. 509 students have responded who were doing management course. 509 students were from engineering course. Very few respondents were doing job after completing the management course. The sample of those students has been considered in management course. Respondents from other courses have not been considered for this study. The students from various business school and engineering school in Noida and Greater Noida have been considered for the response. Researcher has ensured that the sample size is representative.

For another survey (*Views of Parents, teachers and financial experts on the issue of Financial Capability of College Students*), the sample size was 50 respondents. In the questionnaire design multiple choice and likert scales have been used. For data analysis and testing of hypotheses, quantitative and statistical techniques have been used. Sample for this survey has been taken from various business schools, corporate and financial professionals located in Noida and Greater Noida.

#### 3.4.1 Classification of sample

- i. State of Domicile: UP, Delhi, Haryana, Rajasthan , MP, Bihar, Other States (Specify)
- ii. Family Income Level: Up to Rs. 3 Lakhs, More than Rs.3 lakhs up to Rs.6 lakhs , 6 lakhs & above per annum
- iii. Education Level of Parents (Father): Elementary School Level, High School Level, Under Graduate, Graduate, Post Graduate and above
- iv. Family Structure: Joint Family, Nuclear Family, Others
- v. Occupation of Parents (Father): Service Holder, Businessman, Agriculturist, Industrialist, Others
- vi. Family Size: Up to 3, 4 to 7, 8 and above
- vii. Educational Background of Respondent: Under Graduate, Graduate (Science, Arts, Commerce, Engineering, others), Post Graduate

### 3.5 Profile of Respondents:

#### 3.5.1 Demographic profile of Students:

##### Age Profile of Respondents

Age Range	In Percentage Terms	Total
18 years or less	13%	134
19-24 years	79%	801
25-34 years	8%	78
35 years and above	0%	5
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.1: Age Profile of Respondents)

This shows that 79% of respondents were belongs to the age group of 19-24 years and 13% from the age group of 18 or less than that. These are the two groups of the students for whom financial capability is very important and they can learn how to use or save their money so that they can develop the saving habits since their early stage of the life.

**Gender of Respondents**

<b>Gender</b>	<b>In Percentage Terms</b>	<b>Total</b>
Male	71%	727
Female	29%	291
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.2: Gender of Respondents)

The above table and diagrams shows that 71% of the respondents were Male and 29% of the respondents were Female in the professional courses. Above table shows that still female ratio is very less in professional courses and it does not show the equal participation of the respondents in taking the decision.

**Course of Respondents**

<b>Course</b>	<b>In Percentage Terms</b>	<b>Total</b>
Engineering	50%	509
Management	50%	509
Pharmacy	0%	0
Other	0%	0
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.3: Course of Respondents)

Question has been given to the students of management and engineering course. When they have been asked the course, 50% of the respondents have reported that they are from Management course and 50% respondents were belongs to Engineering course. In the current survey researcher did not concentrate respondent from any other course. The study has focused only two professional courses i.e. Management and Engineering.

**Educational Level of Respondents**

<b>Education</b>	<b>In Percentage Terms</b>	<b>Total</b>
Post Graduate	29%	293
Under Graduate	48%	490
Certificate /diploma	4%	37
12th or equivalent	19%	194
10th or below	0%	2
Can't say	0%	2
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.4: Educational Level of Respondents)

From the above table it can be seen that 48% of the respondents who are pursuing their undergraduate and 29% of the respondents who are pursuing their post-graduation. Only 4% respondents are there, who are doing certificate/diploma program.

**Yearly Income of Respondent's Family**

<b>Income</b>	<b>In Percentage Terms</b>	<b>Total</b>
UptoRs. 4,00,000	38%	387
Rs. 4,00,001-6,00,000	15%	150
Rs. 6,00,001-8,00,000	10%	103
Rs. 8,00,001-10,00,000	6%	57
Rs. 10,00,001 and above	8%	79
Don't want to reveal	23%	242
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.5: Yearly Income of Respondent's Family)

Yearly Income of the family plays very important role in deciding the savings of a particular family. Every family saves for the future according to their income. 37% of the respondents have reported that their family's yearly income is Rs. upto 4,00,000 where as 24% of the respondents did not want to reveal their family income.

#### **Respondents' Profile Based on Domicile**

State	In Terms of Percentage	Total
Haryana	4%	41
Rajasthan	4%	37
Uttar Pradesh	59%	596
Punjab	2%	24
Madhya Pradesh	1%	18
Other	30%	302
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-3.6: Respondents' Profile Based on Domicile)

Above table shows more than 50% of the respondents belong to Uttar Pradesh as researcher targeted the colleges of Uttar Pradesh. Around 40% of the respondents were from other states. Very few respondents belongs Haryana, Rajasthan, Punjab and Madhya Pradesh.

#### **3.5.2 Demographic profile of Educational Administrator/Teachers/ Social Reformer etc:**

One more survey has been conducted for Educational Administrator /teachers/social reformers to know their contribution in improving the financial capability of their children.

Q1. How would you like to describe yourself?

(a) a Teacher (b) an Educational Administrator (c) a Social Reformer (d) a Policy Maker (e) None of the above

#### **Profession of Respondents**

Profession of Respondents	In Terms of percentage	Total
Teacher	40%	20
An Educational Administrator	16%	8
A Social Reformer	10%	5
A Policy Maker	10%	5
None of the Above	24%	12
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.7: Profession of Respondents)

40% of the respondents were teacher amongst the respondents. 16% were educational administrator, 10% social reformer and policy maker and 24% respondents were belongs to different group.

#### **Age Profile of Respondents**

Age Category	In Terms of percentage	Total
Upto 30	4%	2
Between 31 and 40	40%	20
Between 41 and 50	44%	22
Between 51 and 60	6%	3
Above 60	6%	3
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.8: Age Profile of Respondents)



The youngest of these 50 respondents was found to be between 20 and 30 while oldest was found to be of more than 60 years. Mostly respondents (44%) were belong to the age group of between 41 and 50 whereas 40% of the respondents were belongs to the age group of between 31 and 40. Only 6% of the respondents were more than 60.

#### **Number of Children of Respondents**

<b>No. of Children</b>	<b>In Terms of Percentage</b>	<b>Total</b>
None	2%	1
One	42%	21
Two	46%	23
Three	10%	5
Four and above	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.9: Number of Children of Respondents)

When respondents have been asked about their children, 42% of the respondents have reported that they have only one child and 46% of the respondents have two children. Only 10% of the respondents have three children. It can be seen that number of children are decreasing in India due to change working culture and nuclear family system. Earlier women were not working in India but now they are going outside and working in the various organizations.

#### **State of the Respondents**

<b>State</b>	<b>In Terms of Percentage</b>	<b>Total</b>
Delhi	24%	12
UP	42%	21
Rajasthan	2%	1
Haryana	12%	6
Punjab	0%	0
Other	20%	10
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.10: State of the Respondents)

When respondents have been asked about their state? 42% of the respondents belong to Uttar Pradesh, 24% and 12% from Delhi and Haryana respectively. 20% of the respondents were from other state. It can be seen that mostly state has been covered in the sample.

#### **Monthly Income of the Respondents**

<b>Monthly Income</b>	<b>In Terms of Percentage</b>	<b>Total</b>
Less than equal to Rs. 20,000	0%	0
Rs. 20,001 to Rs. 50,000	12%	6
Rs. 50,001 to Rs. 1 Lakh	40%	20
Above Rs. 1 Lakh	48%	24
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.11: Monthly Income of the Respondents)

It has been observed that 40% respondents have income between Rs. 50,001 to 1 Lakh and 48% of the respondents have their income above Rs. 1 Lakh. Only 12% of the respondents have their income between Rs. 20,001 to 50,000. Monthly income of the respondents plays very important in improving the financial situation of their family.

**Education Level of the Respondents**

Level of Education	In Terms of Percentage	Total
School level or lower	6%	3
Undergraduate	2%	1
Graduate	16%	8
Post Graduate and above	76%	38
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table-3.12: Education Level of the Respondents)

Education level of the respondents gives them the understanding of any financial problem. Education can help respondents to understand the positive and negative aspect of an investment and best product can be chosen by them as per their requirement. Majority (76%) of the respondents have completed their post-graduation. 16% of the respondents have reported that they have completed their graduation course.

**Gender of the Respondents**

Gender	In Terms of Percentage	Total
Male	66%	33
Female	34%	17
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 3.13: Gender of the Respondents)

66% of the respondents belong to male category and 34% of the respondents were female in the sample.

**3.6 Type of Data Used:** Primary and secondary data has been collected but mostly primary data was the source of collection.

**3.6.1 'Experience Survey'** is a technique of Exploratory Research. Exploratory research can be defined as the initial research where researcher wants to have an idea about a particular aspect or try to understand the observed aspect. It can be summarized that exploratory research does the initial ground work for further research.

Regarding the selection of respondents for an Experience Survey, choosing appropriate respondents is very important step in the process, because it is directly related with the quality of results expected. While selecting the students it has been kept in mind by the researcher that respondent must have knowledge about the discipline and concept. They should have experience of target issue so that their inputs are able to achieve desired results.

For the current Experience Survey, 20 respondents were carefully selected based on their knowledge and experience. Researcher has selected 10 students from management course and 10 from engineering course. They have been asked about the utilization of their pocket money and saving habits from their pocket money. Most of respondents have accepted that they do not save or invest their pocket money anywhere. They spend their pocket money in travelling, food or entertainment. It has been observed that day by day students require more pocket money to meet their expenditure. Only few have responded that they save their money. When it has been asked about the investment from their saving, they responded that they do not invest their money in any of the financial product. They never thought in this direction while studying.

After framing the initial questionnaire researcher approached 30 respondents to conduct the pilot study. Pilot study is strategy which is used to test the questionnaire using a small sample size on the basis of convenience. 15 students from each course (Management and Engineering) identified by the researcher. For the management course 10 students from MBA and 5 students from BBA have been selected. 15 students from engineering course have been selected. Respondents were clear in most of the questions. Students from engineering course were not clear about the diversified portfolios. It has been observed by the researcher that students were not clear about the risk part of investment. For that the concept has been clarified by the researcher. Cronbach alpha for the questionnaire items was found to be 0.84 which appears satisfactory.

### 3.6.2 Questionnaire

For the purpose of analysis questionnaire has been divided into five factors. On the basis of these factors only statistical tools have been used. “Financial Awareness” has been converted into FACT 1, “Adopting Financial Knowledge Practices” has been converted into FACT 2, “Knowledge of Banking Saving & Investments” has been made FACT 3, “Financial Capability” has been converted into FACT 4 and “Interest in Financial Literacy” has made FACT 5. Different questions were part of FACT 1, FACT 2, FACT 3, FACT 4 and FACT 5. For the analysis of data t test, ANOVA-one way, chi square and correlation have been used. SPSS and Excel have been used to analyze the data.

#### Grouping of Questions for the Analysis of Survey for Students

Subject	Question Numbers	Questions
FACT1 Financial Awareness	Q20 and Q23	Q20. All the relevant information on personal finance and financial planning for college/universities students should be available at once source, preferably in local language besides Hindi and English.  Q23. Which of the following financial products/ processes you are familiar with? * you can select more than one choice
FACT 2 Adopting Financial Knowledge Practices	Q11, Q12, Q15, Q16, and Q17	Q11. Whether you take interest in managing money and financial matter of your family?  Q12. One should have sufficient financial knowledge to manage his/her money and financial matters.  Q15. How often you participate in major financial decisions in the family?  Q16. Does your family is in the habit of making monthly budget to manage your family expenditures?  Q17. Every family must maintain an emergency fund to meet it's unforeseen expenditure.
FACT 3 Knowledge of Banking Saving & Investments	Q18, Q21, Q22 and Q24	Q18. One should first take care of payment of installments on borrowings and committed investments requirements for future before going for any form of major expenditure for the month.  Q21. One should have a bank savings account, which can be easily accessed and monitored.  Q22. It is advisable to know the calculation of interest on your borrowings and on savings account.  Q24. One should know his/her risk taking ability before investing.
FACT 4 Financial Capability	Q25, Q26, Q27, and Q29	Q25. One should evaluate risks and rewards of each investment carefully.  Q26. One should start investing early to get the benefits of compounding.  Q27. One should have a diversified investment portfolio in order to reduce risks.  Q29. One should use his/her pocket money/ credit card responsibly

FACT 5 Interest in Financial Literacy	Q30, Q31 and Q32	Q30. "Personal finance" should be taught in schools/ colleges/universities as a compulsory subject.  Q31. Parents should teach basics of personal finance to children and involve them in major financial decisions making in the family.  Q32. Colleges/Universities should set up counseling centers to advise students on how to handle difficult financial situations.
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(Table-3.14: Grouping of questions for analysis of student survey)

### 3.6.3 Tools of Data Analysis

The major tools used for the data analysis are Correlation, t test, F test, z test and chi square test using SPSS and MS-EXCEL software.

### 3.7 Locale of the study

For conducting the study researcher has chosen two locations in NCR i.e. Noida and Greater Noida. Noida and Greater Noida have emerged as two major educational hubs in National Capital Region. A large number of state-run and private universities have been located in this region along with a host of private technical institutions. Students from all over the country as well as from abroad are taking opportunity to pursue professional courses in these universities/ institutions giving these institutions a truly national character. Management and Engineering degrees have been most popular among students in India for the past several years primarily because of the employment opportunities these courses offer. It has therefore been considered to take samples from Management and Engineering institutions from Noida and Greater Noida for the proposed research study. However, the researcher has placed the findings of this research work before a focused group of experts carefully chosen from other parts of India before taking a generalized conclusive view on the study.

### 3.8 Limitations of Research

- i. Since these types of studies have not been undertaken so far in India, secondary data sources and related literatures pertaining to India were found to be highly limited. Formal research design at stage-1 is therefore primarily based on the available research findings abroad.
- ii. In the absence of past research data / observations in the matter with respect to India, it was not possible to compare the progress achieved in course of time.
- iii. Due to cost and time limitations only Cross-sectional studies has been carried out. Longitudinal studies could not be undertaken.
- iv. For the financial capability survey, the sample, only numbering 1018 from out of the students, faculty and administrative staff only located at two different locations has been taken.
- v. For the second survey (parents/ teachers etc.) also the sample size has been kept limited to 50 only.

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## CHAPTER - 4

# **RESEARCH SURVEYS IN DIFFERENT COUNTRIES - A DETAILED REVIEW**

*“The land of literature is a fairy land to those who view it at a distance, but, like all other landscapes, the charm fades on a nearer approach, and the thorns and briars become visible”*

- Washington Irvin

#### 4.1 Introduction

The terms financial capability and financial literacy are often used interchangeably. Financial capability is the term which commonly used in the U.K and in Canada. Financial literacy is the term which commonly used in Australia and in the United States. **Financial capability** is understood as being a set of financial knowledge, skills, and behavior among individuals, with each part defined as follows (PRI, 2005: 4):

(a) **Financial knowledge and understanding:** It is the ability to make sense of and manipulate money in its different forms, uses, and functions, including the ability to deal with everyday financial matters and make the right choices for one's own needs.

(b) **Financial skills and competence:** It is the ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations and also including the ability to manage and resolve any financial problems or opportunities.

(c) **Financial responsibility:** It is the ability to appreciate the wider impact of financial decisions on personal circumstances, the family, and the broader community, and to understand the rights, responsibilities, and sources of advice or guidance.

**Financial literacy**, on the other hand, is a narrower concept and is defined (PRI, 2004, 5) as: “The ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to differentiate financial choices, discuss money and financial issues without discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy”.

The term **financial education** is commonly used. The OECD's definition of financial education includes elements of information, instruction, and advice and is very broad so as to be as inclusive and comprehensive as possible (OECD, 2005: 13, 26).

“**Financial education** is the process by which a 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”.

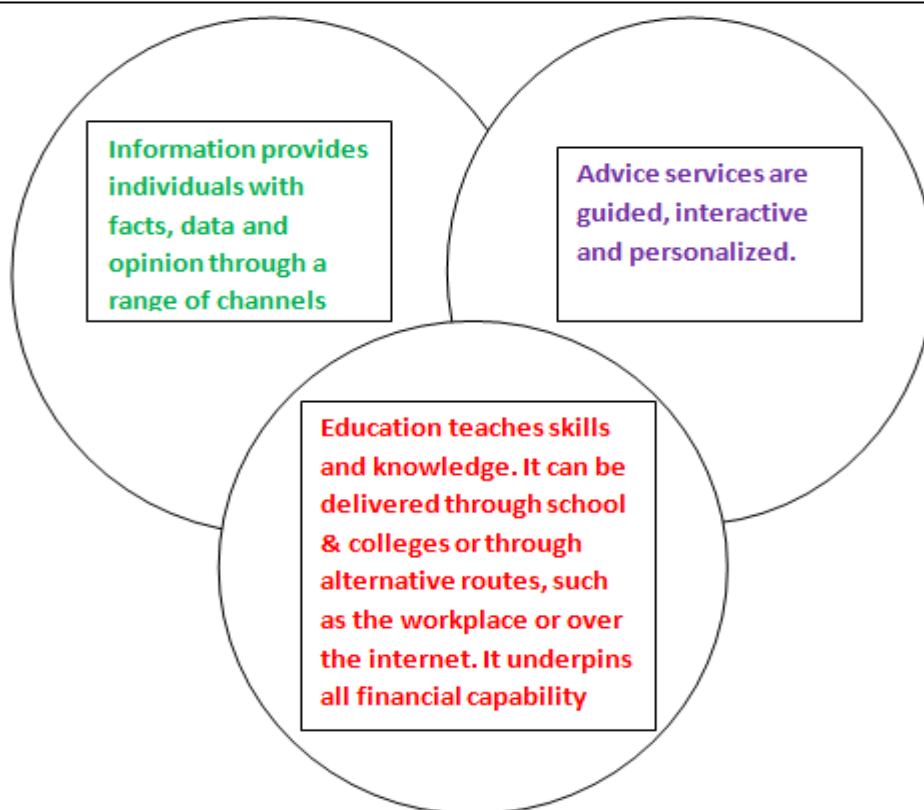
**Financial Planning**, however, is defined as the process of meeting one's life goals through the proper management of finances. Life goals can include buying a home, saving for child's education or planning for retirement. (FPSB, 2011, [www.fpsb.org](http://www.fpsb.org) )

Improving people's ability to make financial decisions is in everybody's interests. It saves people money, time and a lot of tension. And, later on in years to come, they will be benefited from their decisions which they have made now and it gives them the freedom.

Improving the financial capability of people in developed and underdeveloped countries are a big challenge, but the prize is enormous. Numerous studies have shown that many people find personal finance difficult. The understanding can be complex and people can find thinking about their long term financial security or even distressing. But most people can become more confident if enough effort is made at the right time to help them help themselves.

Personal finance education, taught in a compelling and practical way, can make all the difference later in life. A person who is well-versed in personal finance will be one that is more capable, competent and self-reliant. People who understand their financial circumstances are more likely to make sensible choices and adequate provision for their future. They will use a different range of financial services that can make their lives easier.

A successful financial capability initiative will use a range of different ways of helping people acquire skills and knowledge. This will include the use of **education, information and advice**.



(Figure-4.1: Three different ways of acquiring Financial Capability)

## 4.2 Research Surveys and Evaluations: International Experience

Many studies are being conducted in various countries. Researcher tried to analyze the current situation of a country and the different measures adopted by the government. It was not possible to cover all the countries due to lack of resources. Different studies of Australia, United Kingdom (UK), United States of America (USA) and India has been covered in this study. Other countries are focusing continuously on the issue of financial literacy, financial education and financial capability, but very few studies have been done in India. It's an emerging challenge for the researcher in India.

## 4.3 AUSTRALIA

### 4.3.1 Financial Literacy – Women Understanding Money (2008)

Australian Government has recognized the importance of creating opportunities for all Australians to learn more about money. Now a day's women have more choices to manage their money. Generally women are making day to day spending decisions.

The scope of the task for governments and other financial literacy service providers is broader and more challenging than simply providing comprehensive and education resources. There are enough resources available to consumers with an active interest in building their money skills. The challenge was to motivate those who either did not get the opportunities to learn or not used existing information and resources or were not seeking to build their money skills.

### Findings

**1. Budgeting-** Women were highly confident in their ability to budget, but around 50% said that they do not budget regularly. Women reported better budgeting habits than men.

- 91% of women said that they have a better ability to budget as compared to men (90%)
- 80% of women said that they can reduce their spending as compare to men (78%)
- 44% said that they do not budget regularly for day to day spending where as 52% men budget regularly.
- 77% said that they can get some time in case of a financial emergency as compared to men (82%)



2. **Saving-** Women were highly confident about their ability to save and the majority of women said that they have good savings habits but a few said that they do not save. Both men and women shown similar attitudes and behaviour in saving habits but most of the women said they save before spending.
  - 88% of women said that they have the ability to save as compared to 88% men
  - 22% said that they don't save as compared to 21% men
  - 62% said that they save regularly as compared to 63% men
  - 52% said that they save before spending as compared to 48% men
  - 42% said that they spend before saving as compared to 44% men
3. **Investment-** As compared to budgeting and saving, very few women were confident in their ability to invest, but the majority of them were interested in learning more about investing. Women were less confident as compare to men when it comes to investing, and did not want to take factors into consideration such as risk and return, when making an investment decision.
  - 63% of women said that they have the ability to invest money as compared to 75% men
  - 64% said that they own or are currently paying off for their home they live in as compared to 60% men
  - 16% said that they have an investment property and 43% said that they have other investments as compared to 20% and 49% men respectively
  - 30% of women said that they will consider both risk and return while choosing an investment as compared to 38% men
  - 68% women were interested in learning more about investing money as compared to 71% men
4. **Credit and debt-** Women were highly confident in their ability to deal with credit cards and manage their debt. Most of the women said that they can manage debt; few said that they only make minimum repayments on credit card debt and loans and few said that they got into debt by buying things which they could not afford. Few women have credit cards and loans, but more have other source of debt. Women are not very comfortable with their debt.
  - 83% of women were confident with their credit cards and 88% of women said that they can manage debt as compared to 84% and 90% men respectively
  - 74% women said that they regularly pay the total balance owing on their credit card when it is due as compared to 79% men
  - Only 18% women usually make the minimum repayment on loans and 14% do the same with credit cards as compare to 16% and 13% men respectively
  - 21% said that they use debt to buy things which can not be afforded by them as compared to 22% men
  - 71% said that they have a credit card, 55% said that they have loans and 23% had other debt as compared to 73%, 57% and 21% men respectively
  - 18% of women said that they were uncomfortable with their debt as compared to 15% men
5. **Planning and retirement-** Women were not confident in their ability to plan for their long-term financial future as compared to their skills in budgeting, saving, dealing with credit cards and managing debt. They were not confident in saving enough money for retirement, but they wanted to learn more about planning for their financial future, including retirement planning.
  - 77% of women said that they have a better ability to plan for their long-term future as compared to 84% men
  - 60% said that they have the ability to ensure enough money for retirement as compared to 65% men

- 78% said that they have superannuation fund as compared to 84% men
  - 12% said that employer funded superannuation will meet their retirement needs as compared to 16% men
  - 74% said that they have thought about their long-term financial plans for the future and retirement needs as compared to 78% men
  - 78% women wanted to learn more about planning for their long-term financial future and 72% wanted to learn more about ensuring enough money for retirement as compared to 77% and 70% men respectively
6. **Protecting money-** Women were highly confident in their ability to protect their money. They were confident enough in choosing appropriate insurance and recognizing a scam. However, very few women were confident in their ability to invest and the findings indicated that the majority could not take key points into consideration when they made an investment decision, so they might be more vulnerable to scams than they think. Both women and men reported similar kind of attitudes and behaviour when it comes to protecting money.
- 81% of women said that they have the ability to choose an appropriate insurance as per their requirements as compared to 82% men
  - 85% said that they understand their rights and responsibilities when it comes to dealing with money as compared to 86% men
  - 87% said that they can recognize a fraud or an investment scheme which seems too good to be true as compared to 89% men
  - 63% of women said that they have the ability to invest as compared to 75% men
  - 70% of women did not consider both risk and return when it comes to choosing an investment as compared to 62% men
7. **Information and advice-** Women were highly confident in their ability to get information about money, but the majority wanted financial information or advice from an accountant/tax agent or a bank, and from a financial adviser. Very few were confident enough in their ability to understand financial language, ability to invest and saving enough money for their retirement, and most of them were interested in learning about all these. As compare to men, women were more interested in getting information and advice from financial advisors, banks, community services and government sources.
- 84% of women said that they can get information about money from different sources as compared to 85% men
  - 81% said that they have the ability to deal with financial service providers as compared to 82% men
  - 66% said that they have taken the help of an account/tax agent, and 60% said that they have taken help from a bank for financial advice as compare to 69% and 53% men respectively
  - 60% said that they understand financial language and 70% were interested in learning more as compare to 68% and 66% men respectively
  - 79% said that they understand all/most of the information in the financial statements as compared to 80% men
  - 84% said that they needed help from a financial advisor for financial information, 65% needed help from a bank, 48% from a community service and 33% from Centre link as compared to 80%, 55%, 36% and 25% men respectively

#### **What women think about money?**

Women were highly confident in their ability to understand money, especially when it comes to day to day issues which are related to money like saving, budgeting, dealing with credit card, but they were not very confident in complex issues of money like investing, understanding financial language and saving enough money for retirement.

Women understood the importance of learning. They wanted to learn about complex issues. Significant numbers of women had the belief that they could find the ways for managing their money in a better manner. No matter, if it is boring and stressful. Women felt money handling more stressful, uncomfortable and boring as compared to men.

- 52% said that dealing with money is very stressful as compared to 43% men
- 42% said that thinking too much about their long-term financial future makes them uncomfortable as compared to 37% men
- 34% said that, dealing with money is boring as compared to 29% men
- 29% said that financially, they like to live for today as compared to 34% men
- 52% of women believed that money is just a means to buy things as compared to 59% men

**4.3.2 ANZ survey of Adult Financial Literacy in Australia (2011)** has conducted a survey in a series published since 2003. The outcome of the survey is:

The survey identified groups, where lower levels of financial literacy are more likely to be encountered. These groups were much the same in 2011 as in previous surveys included:

To capture the concept of financial literacy they focused on the behaviour that can be considered indicators of a person's financial literacy. Five behavioural indicators were ***keeping track of finances, planning ahead, choosing financial products, staying informed and financial control.***

- i. "People who were relatively young (under 25 years);
- ii. People who were not having formal post-secondary education;
- iii. People with relatively low levels of income and assets (e.g. those whose main source of income was a Government benefit or allowance; those with annual household incomes below \$25,000; those with less than \$2,000 in savings and investments);
- iv. Those who was working in lower blue collar occupations; and
- v. Females".

***Overall level of financial knowledge in Australia:***

Different methods were used to measure the financial knowledge. Different groups have been studied in a complex economic environment and complexities which are faced by an individual. It is very difficult to draw the conclusions what Australian know and don't know.

However, overall, the research findings are:

- i. Most of the people have reasonable knowledge of financial issues and people are confident about their knowledge of financial matters. People have good understanding about simple day-to-day money management concepts like budgeting, credit, saving and debt but struggling with more complex concepts like saving for retirements and investments.
- ii. Generally people are interested in learning more financial issues.
- iii. Most of the people rely on a wide range of information and take advice from various sources while taking the financial decisions. Sources can be informal (eg. Family, friends, newspapers) and formal (eg. Financial advisers, accountants and product providers).
- iv. People don't know what they do not know.

**Some implications of the findings**

"The 2011 survey provides a guide to the various groups who may benefit from efforts to lift their levels of financial literacy. The 2011 survey also shows that financial literacy is complex. Individuals and groups may perform well on some components of financial literacy but not others and financial attitudes of persons affect their level of financial literacy quite strongly".

“This provides some guidance for designing financial literacy programs. For eg. focus of programs on raising financial knowledge and numeracy may be effective in improving components of financial literacy such as *choosing financial products, keeping track of finances* and *staying informed*; however, their effect on *planning ahead* is likely to be more limited”.

Programs that take into account and find financial attitudes of people are positively influenced than those who did not attend. Financial self-efficacy, which was a measure of confidence in dealing with money and of willingness to engage with money management, was positively associated with all components of financial literacy. The research analyzed that 36% of people find dealing with money is stressful, even when things are going well. Together these findings suggest that effective program design needs to:

- Find a way to engage people
- To help overcome the stress, some people associate with dealing with money and build confidence in managing money.

This in turn highlights the need for support in the form of advice, ‘coaching’ and tools amongst some groups in the community.

### **Changes over time**

This is the fourth ANZ Survey of Adult Financial Literacy since the first in 2003. When the 2011 results are compared with those from the previous surveys, some changes are apparent. One group of changes relates to the GFC and its effects and the other to ongoing efforts to increase awareness of consumers’ rights.

#### **1. Changes in financial attitudes and behavior**

Several measures from the 2011 survey support the view that Australians have become more cautious in their financial attitudes and behaviour since GFC (Global financial crisis). Houses’s financial toughness has generally increased, but this has not been the case for all households.

- i. “In 2011, 77% people have said that they tried to save on a regular basis, which is the highest level seen in any of the four surveys; the next highest figure was 72% in 2008. This is in line with Australian Bureau of Statistics data showing a marked increase in the savings ratio of Australian households since GFC”.
- ii. “Fewer people had a personal loan (down 5 points since 2008 to 12%), a line of credit or overdraft (down 2 points to 12%) or a lease/hire purchase agreement (down 2 points to 7%)”.
- iii. As compared to 2008, more people reported that they were in control of their financial situation every time or most of the time (up 4 points to 81% in 2011) and fewer people feel they would be unable to manage for a period of time if they experienced a major loss of income (down by 2 points to 22% in 2011).
- iv. However, “financial resilience has not increased for all households. For example, those with household incomes of \$65,000 or less who are supporting their children and/or \$300,000 plus mortgages are less likely to feel their financial situation is under control; nor has there been any decrease since 2008 in the proportion who feel this way”.

#### **2. Changes in investing**

Since the GFC financial markets have been characterized by a higher level of instability and lower investment returns, particularly in shares, which have resulted in some changes.

- i. “There was greater awareness of investment instability with more people agreeing that short term fluctuations in market value can be expected even with good investments (up 7 points to 74%)”.
- ii. “Very few people held shares (down by 3 points since 2008 and by 9 points since 2002 to 35%) or managed investments (down by 4 points since 2008 and by 13 points since 2002 to 16%)”.
- iii. “There was greater uncertainty about how to assess the performance of a superannuation fund or management of investment (19% unsure compared with 13% in 2008 and 8% in 2005)”. While not a change as the question was asked for the first time in 2011, four in 10 people disagreed with the proposition “*I would trust financial professionals and accept what they recommend*”.

- iv. The proportion of people saying they read their superannuation statements is down 6 points since 2008 to 69%, which may indicate avoidance of news of somewhat disappointing returns over the past few years. Around one third of people continued to report they found their superannuation statement is difficult to understand.

### 3. Changes in awareness of consumer rights and responsibilities

Changes related to awareness of the rights and responsibilities of users of financial services were evident in the areas of complaints and insurance.

- i. “People were more confident about making an effective complaint against a bank or other financial institution. In 2011, 68% were confident or very confident about doing this; up from 58% in 2005 and 63% in 2008. There was also greater awareness of the industry adjudicator (up 10 points from 2008 to 46%) as a potential source of help in resolving difficulties with the provider of a financial product or service”.
- ii. In 2011 awareness was more, amongst the people for cooling off period that applies when taking out a new insurance policy (up 6 points since 2008 to 74%).
- iii. Very few people were aware that a claim could be refused if the policyholder did not meet their duty of accurate disclosure (down 7 points since 2008 to 47%).

#### Some issues require ongoing attention

Issues which are not new, that may require ongoing attention include: underinsurance and understanding risk in the investment. Recent media coverage of the inadequate/inappropriate flood insurance held by many people appears to have done little to raise awareness of the need to ensure the level/appropriateness of existing insurance cover.

- i. From the survey 2011, it has been find out that people were not interested in renewing the existing insurance policy (27% have shown interest in doing so; it was down by 3 points since 2008) and hence ready to leave at risk of under-insuring.
- ii. It has been also found that one in five people who were having their own house or those who were purchasing their home did not have building insurance. One in four, who were having their own house, were purchasing or renting their home, did not have content insurance. These figures were same, as it was in 2008 survey and suggested that under-insurance continued to be a significant risk for the Australians.
- iii. At 53%, the proportion of people who said they would not invest in “*an investment advertised as having a return well above market rates and no risk*” was not significantly different from 2008. While the marked improvement on earlier results (46% in 2002) has been maintained, there remains scope for further improvement.

In the 2008 Survey Summary Report of Australian government have noted that future surveys could usefully focus on behaviour and the extent to which money management skills and knowledge translate into behaviour.

The 2011 Survey it has been done by identifying behaviours that are indicators of financial literacy and the groups within the population that perform well against these and the groups that do not. The characteristics of those groups such as age, education, household circumstances, financial knowledge, numeracy and financial attitudes were examined to help explain differences and build a picture particularly of low financial literacy groups. This is a step forward in our understanding of a complex subject.

#### 4.4 UNITED KINGDOM (U.K.)

**4.4.1 Building Financial Capability in UK (2003):** Financial Services Authority has started work on seven projects for making the national strategy for financial capability. Seven projects were as follows: Schools: laying the foundations, Young Adults: new responsibilities, Work: reaching people through the workplace, Families: being a parent, Borrowing: making informed decisions, Retirement: planning ahead, Advice: the role of ‘generic’ advice. Each project has been led by a special working group. There were specific reasons to choose above said projects.

1. The aim of the 1<sup>st</sup> project was to give future generations a good grounding in personal finance education before leaving the school.
2. As an adult a person has to take his/her responsibility. This project could help (will) young adults face personal finance issues and try to find out the solutions of that.
3. Recruitment, promotion, relocation, parental leaves, flexible working and retirement all have an impact on our finances and ought to be the trigger for a review of one's financial arrangements. The workplace therefore can be a natural channel for reaching people with specific financial capability needs.
4. Project "parent" have helped to decide the issues and opportunities of personal finance. After having children in the families, parents have to decide which fund to choose and how to use it for their children.
5. Borrowing project has focused on personal loans and any other mortgages which are very easily available in the market. While taking the loan people think that it can be managed, but sometimes it can be unmanageable. Getting borrowing right is critical for everyone and the economy at large. This means understanding not just what a person is borrowing today but what the implications are for tomorrow.
6. Retirement project has focused on the planning of retirement which can be postponed very easily. This project has covered a wide range of personal financial issues enabling everyone to make sensible plans for their retirement.
7. Advice project has provided personal or interactive services which helped consumers to plan their finances and identify the priorities for action.

#### **Outcomes of these Projects**

- i. People were looking for help which was appropriate according to their needs.
- ii. Most of the people have greater knowledge and understanding of financial issues, can better identify their needs and products that might help meet those needs, and know when and where to seek further advice.
- iii. People are more aware of the need to take control of their personal finances.
- iv. People have greater confidence in their ability to take an active role in managing their financial needs.
- v. People are motivated to take action for controlling their financial issues.
- vi. Now more people review their financial situation regularly.
- vii. Financial services industry design products that more closely meet people's needs.
- viii. Financial products are promoted and sold in a fashion that is more suited to people's needs.

**4.4.2 Financial Capability in UK: Establishing a baseline (2006)** has surveyed 5,300 adults to create a comprehensive picture of financial capability in UK and few results have been drawn from this report.

- i. "81% of the pre-retired think that a state pension will not provide them with the standard of living they hope for in retirement. Nevertheless, 37% of these people have not made any additional pension provision.
- ii. 70% of people have made no personal provision to cover an unexpected drop in income.
- iii. 1.5 million people have fallen behind with bills or credit commitments, one third said that they have financial problems. Almost three million or more (or two million households) said it is a constant struggle to keep up with commitments.
- iv. 33% of people, who hold no more complex products than general insurance, bought their policy without comparing it to even one other product.
- v. 40% of people who owned equity ISA were not aware that its value fluctuates with stock market performance, and 15% of people who owned cash ISA think its value does".

The main purpose of financial capability was to establish a baseline measure of financial capability in terms of how well people fulfill end meets, keep track of their finances, planning for the future, choose financial products and stay informed about financial matters. The results were based on the analysis of complex data, from which four themes stand out:

- i. Large numbers of people, from all the sections of society, were not taking basic steps to plan for the future, such as sufficient savings for their retirement or putting money for their future.
- ii. The problem of over-indebtedness is not that it affects a large proportion of the population, but that when it strikes it is often severe, and that many more people may find themselves in trouble in an economic downturn.
- iii. Many people are taking financial risks without realizing it, because they struggle to choose products that truly meet their needs.
- iv. The under-40s were much finally capable as compare to their elders. Most of the people from this age group had lower levels of income and very less experience in dealing with financial institutions.

In short, conclusion has been drawn from the survey that some steps should be taken to improve the financial capability in UK.

#### ***4.4.3 Evaluation of the Impact of Young People and Money Training for Youth Practitioners (2009)***

prepared for the Financial Services Authority by ECOTEC Research and Consulting Ltd. The consultancy has undertaken an evaluation of Young People and Money (YP&M). It was a training program for providing financial capability to young people, who were either not in education, employment or training (NEET) or at risk of becoming NEET.

##### **Objective of evaluation**

- i. “identify how YP&M has been incorporated into the professional practice of youth work practitioners and how the knowledge and skills gained are being used in interactions with NEET young people”;
- ii. “explore if YP&M is enhancing the financial capability of NEET young people and if the attitudes and behaviour of NEET young people are changing as a result of training youth work practitioners”;
- iii. “identify whether services have become more sensitive to the needs of young people regarding money matters”.

##### **Findings**

YP&M contributes to a number of policies focused on increasing the financial capability and reducing the number of NEET young people in the UK.

As a result it is an important program in tracking these particulars policy challenges. Results from the surveys demonstrate a positive impact for practitioners participating in YP&M, particularly within their professional practice

- i. 82% practitioners surveyed that no money management training has been undertaken to support their work with young people. Initial impact was very positive with management information, collected on the day of YP&M training. Most of the practitioners considered advising on financial capability are to be part of their role. Very few practitioners considered any negative impact consequences of providing money matters support to NEET young people.

Practitioners have integrated ‘**making ends meet**’ and ‘**keeping track of finances**’ dimensions of financial capability into their professional practice. Less emphasis was given to supporting young people with ‘**choices regarding financial products**’ and ‘**staying informed**’ about financial matters. Positive feedback was received from young people when practitioners used their resources. Practitioners have changed their practices in relation to monitoring. Young people have monitored more by the practitioners.

- ii. Practitioners identified the need of continuous training programs in relation to providing support to young people. Some practitioners did not integrate the training program because of some barriers i.e. funding, curriculum and staffing issues.

- iii. The main purpose of the training was to increase the confidence and awareness of practitioners so that they can better understand the financial capability of young people.

#### **NEET Young People**

- i. Training brought the positive change amongst the young people. As their understanding of money matters has been improved, they have rated their understanding and knowledge. At the final stage results were less positive comparatively. Apart from that, new practices have embedded in organizations and young people no longer identified an increased emphasis on financial capability within the organization, and were not subsequently as focused on the financial capability support they received from practitioners.
- ii. The training has had a positive impact on the attitudes and behavior of young people in relation to money. The results of pre-training survey shown that young people were interested in improving their saving behaviour, although two thirds from the whole had no savings and could not afford to save. Saving behaviour improved a lot over the period of study.
- iii. It was difficult to identify a direct link between better knowledge and skills with regard to money and improved situation in terms of employment. However, there was a small increase in the proportion of young people gaining more employment at each stage of the survey.

#### **Recommendations**

The report recommended following points. There are few points which have evaluated the impact of YP&M on practitioners and NEET young people.

- i. Support should be provided between three and six months after training. This support should help practitioners to continue to implement young people and money and deals with any issues/ concerns. Mostly web-based support and telephone support will be given to the people.
- ii. Additional emphasis should be given on helping practitioners to support young people in relation to more complex problems of financial capability. It should be ensured that the potential impact of improving saving rates among NEET young people is fully realized.
- iii. The barriers with the practitioners were money, while supporting young people. For eg. Arranging Staff and funds were very difficult for practitioners. Developing networks of practitioners and these barriers could be addressed which may provide support and increase the impact of YP&M. Expert practitioners could be identified to work with local practitioners.
- iv. YP&M has had more success in accessing practitioners from some sectors like housing rather than criminal justice. Attention should be paid to how best these sectors can be targeted.

**4.4.4 Financial Capability and Wellbeing: Evidence from BHPS (2009):** Main focus of this project was analyzing relationships between people's ability to manage and take control of their finances and their psychological wellbeing. Financial Service Authority's (FSA's) main goal was to make national strategy for financial capability, which could bring together industry, government and third sector to deliver financial capability programs. Parents, employees, young people and other groups were targeted by these programs to improve financial skills. This project explored how levels of financial capability related and affected psychological wellbeing.

Data from British Household panel survey (BHPS) has been used to analyze the financial capability based on some hypotheses. How financial capability varies according to individual and household characteristics have been described. The relationship between financial capability and psychological well-being has been examined using multivariate models.

The project has used a period of data from 1991-2006. For assessing the financial capability, financial variable in 16 waves of BHPs has been taken. These variables were: respondent's current financial situation in the last year, expected change in financial situation in coming year, respondents saves or not, savings per month, whether the household has problems keeping up with housing payments, whether these problem have required borrowings, whether these problems have required cutbacks, whether the household has been more than two months in housing arrears in the last 12 months, number of consumer durables which household has



accessed. The measure of psychological wellbeing that has been focused on, were General Health Questionnaire (GHQ) score, life satisfaction report and health problem associated with anxiety or depression.

### **BHPS variables relevant to financial capability**

Some of the variables could not measure easily (like ability to keep up with housing payments) while few were based on individual perception (like current financial situation). In all cases, only respondent could give the information. All variable have been divided in to mainly four groups: measures of financial well-being, saving behaviour, housing payment problems and material well-being. Almost two third of BHPs respondents reported that they are living comfortably and this proportion has been increased from 54.2% (1991) to 71.4% (2006), while fraction reported that financial difficulties has fallen significantly from 13.5% (1991) to 6.6% (2006). The proportion of respondents reported that their financial situation is worse and they are less optimistic about the future as well. Few have reported that their average savings have been increased over a period of time and they have more consumer durable items. Very few respondents are living in household with housing payment problems over time.

### **Relationships between financial capability and other characteristics:**

It has been found that “people with higher financial capability tend to be young (35 or less), divorced or separated, having one or two dependent children, single, alone parents, poor health, lived in rented accommodation and unemployed but need a job. In contrast, people with the lowest levels of financial capability are aged (55 or more), married or widowed with no dependent, home owner, having permanent job, having good health. Data revealed that getting married, improvements in health, becoming a home owner and entering work are associated with an increase in financial capability, whereas the death of a spouse, marital dissolution, an additional child, problems in health and unemployment are associated with a decrease in financial capability. These findings are consistent with the Financial Services Authority’s Baseline Survey”.

### **Relationships between financial capability and psychological well-being:**

Average psychological well-being has been falling from 1991 to 2006. Average GHQ increased by 5% which indicate higher mental stress, anxiety and depression also increased, average life satisfaction fell by 1% over time. It has been found that there is a strong association between financial capability and psychological wellbeing. “Greater financial incapability is associated with greater mental stress. People’s financial capability is a strong predictor of their psychological well-being”.

Unemployment or divorces are psychologically harmful effects of financial incapability whereas good health or retirement reduces the psychologically damaging impacts of financial incapability.

**4.4.5 Financial Capability: Why is it important and how can it be improved (2011) by Shaun Mundy:** This study has been conducted by CfBT Education Trust. Financial Capability does not mean that a person can calculate APR or he/she knows the meaning of APR. “It is instead about being able to compare the different product offerings with different characteristics and to reach a reasonable decision on whether they are good offers or not. And find out which of these will be most suitable, given one’s personal situation, budget and preferences”.

Behaviour of financial capable person can vary according to an individual’s personal circumstances. For example a person should know about his/her financial situation accurately at any given point of time, because the consequences can be severe if they will run out of money. However, a person without spare money or little money may not need to know about investments. A wealthy person, on the other hand, must know the benefits of the products so that he/she knows how to invest their money wisely. The main purpose of financial capability is to help people healthy lives and can also help others to recognize when they need advice.

Many people lack the knowledge, skills and confidence to manage their money well in both the developed and developing countries. That’s why there is an increasing recognition, among both international and national levels for tackling this kind of situation.

### **Why it is important for people to be financially capable**

Financially capable people can make sound financial decisions for themselves and their families. They can differentiate between financial products and services in a better manner; can plan ahead financially; can build

up some savings; can avoid becoming over indebted; can protect themselves against financial risks. It is becoming very important that people should have the ability to manage their personal finances.

- i. In recent years, individuals have to take more responsibility for their long term financial planning, rather than dependent on the state or their employer for their future in developed countries.
- ii. Many people are failing to cope with unexpected financial challenges like illness, unemployment or predictable future event such as retirement.
- iii. Credit cards and personal loans are easily available in recent years. Many people have benefited from this but there are increasing numbers of borrowers who have taken unmanageable credits in many countries.
- iv. Recently, consumers have a wide range of financial products and services from which they can choose best product/service as per the terms and condition. This creates more opportunities for consumers but financial decisions are more complex and demanding rather than past.
- v. Mostly, people who lacks in financial understanding and skills, do not take participation in financial products and services.
- vi. People in financial difficulty can suffer stress and worry which can turn into health issues, personal relationship problems, poor performance or absence from the work.

### **Financial Capability programs**

There is a vast range of financial capability programs which are currently being undertaken or which used to be done in the past.

- i. "Financial education in schools
- ii. Adult financial education
- iii. Use of television, radio and other mass media
- iv. Use of new technologies like media and mobile phones
- v. Gender based programs"

### **Conclusion and recommendations**

It has been recognized by the governments, central banks and international organizations about the importance of taking steps to improve the financial capability of peoples. A number of countries have launched national strategies to improve the financial capability of people and other countries are likely to launch new programs.

Some programs have been launched with a main purpose of learning more. Many recommendations have been given for developing national financial capability strategies.

- i. Keep things simple and straightforward: the aim of financial capability should not be turning people into financial experts. It must give people basic information, skills, understanding and confidence to help them to manage their finances well.
- ii. Use relevant and engaging language as per the audience.
- iii. Repeat messages again and again so that people may remember important messages.
- iv. Use different methods and channels so that they can learn from different ways.
- v. Monitor and evaluate financial capability programs continuously.

## **4.5 United States of America (USA)**

### **4.5.1 American Financial Capability-NBER Working Paper Series by Annamaria Lusardi (2011):**

National Financial Capability study consists of three linked surveys: (a) National Survey of 1,488 American adults have been surveyed through telephonic interview; (b) State-by-State Survey- A state-by-state online survey of approximately 25,000 American adults; (c) Military Survey- An online survey of 800 military service and spouses. The findings of the National Survey were between May and July 2009. The primary

sample of 1200 respondents was the general adults of U.S. To ensure sufficient number of respondents for the analysis, African-Americans, Hispanics, Asian-Americans and adults with less than a high school education were oversampled. The total number of sample was 1488.

The objectives of the U.S. financial capability survey were to benchmark key indicators of financial capability and evaluate how these indicators can be varied with various characteristics like demographic, attitudinal, behavioral and financial literacy. Financial capability of persons cannot be judged by looking at one indicator. It covers various aspects of behavior.

This report has focused mainly on four areas to assess financial capability of Americans. Areas are:

1. “Making end meets
2. Planning Ahead
3. Choosing and managing financial products
4. Financial Literacy and self-assessed skills”

The findings of the report are as follows:

**1. Making end meets:** Making end meets is a key building block of financial capability, which can be measured by examining how people deal with their daily financial matters and how people balance their monthly income and expenses to avoid overspending. The results have shown that because of the economic crisis during that period, people were not able to meet their end meets. One third of the respondents have stated that they had unexpected and large drop in their income. Workers were earning less than \$25000 in a year. Across all demographic groups, those who had large drop in their income were not able to cover their expenses.

**2. Planning Ahead:** Planning for future is very important for an individual. Everybody wants to plan for their retirement, children education and unexpected situations.

Only 49% of the respondents have set aside emergency funds or rainy funds in case of sickness, jobless, economic downturn or other emergency. Thus, many families face financial problem in case of any emergency. 33% respondents have reported that they have experienced large decrease in their income and 40% respondents do not have any emergency funds. 12% of individuals have reported that their expenses are greater than income and 36% of individual's expenses are equal to their income. However, 81% of respondents have reported that they have health insurance. Even people were not ready for predictable events. Majority of Americans have not done any retirement planning. Only 42% of respondents have reported that they have made plan for their retirement. Other than that, mostly respondents have reported that tuition fees at colleges and universities have increased over past decade. Only 33% respondents have set aside money for their college education.

**3. Choosing and managing financial products:** Choosing and managing financial products is very important for an individual. Report shows that 31% of respondents with low income are unbanked and 36% respondents without school degree are unbanked. 28% of African Americans and 30% of Hispanics are unbanked.

Another traditional way of borrowing is the use of credit cards. 68% of Americans have reported that they use credit cards. In addition to that, 27% have stated that they have at least four credit cards. 33% people are engaged in two or three activities and 17% are engaged in more than three activities. The activities was paying the minimum payment, paying late fees, paying over the limit fees or using the card for cash advances. Borrowing habits of 41% of credit card holders resulted in either substantial interest payment, fees or both.

One significant source of borrowing people engage in is taking out a mortgage to buy a house. 61% of individuals owned a home and all had a mortgage and 21% had home equity loan. Mostly respondents had lack of full understanding of mortgage contracts and it could have bad consequences on servicing the mortgage and meeting the mortgage payments.

Another important asset is retirement savings for Americans. Many Americans were not familiar with all the technical terms which used to describe various retirement plans. 51% respondents have reported that they have pension plan through current or previous employer and 28% respondents had retirement plans through other retirement accounts.

One more factor which affects, how individual make decision while it comes to take risk. 26% of respondents were unwilling to take any risk and 45% had low risk tolerance.

**4. Financial Literacy and self-perceived skills:** When respondents have been asked about their financial knowledge, mostly respondents have given themselves high scores. To evaluate financial knowledge, respondents have been asked many questions related to fundamental concepts of economics and finance expressed in everyday life. Such as calculating interest rate and inflation, the risk diversification, relationship between bond prices and interest rate and the relationship between interest payment and maturity in mortgages. Financial literacy is strongly correlated with the behaviour of respondents. Respondents with higher literacy are more likely to plan for retirement, they are more likely to have emergency funds and pay credit cards payments on time. Financial literacy is also correlated with attitude towards risk. Respondents who are unwilling to take risk, they do not know the answer to the question about risk diversification. Those who are willing to take risk their preferences and knowledge is better.

It has been find out through survey that respondents who are paying high interest rate of more fees are more prevalent among those who are earning low income and having low education. Lack of financial capability is not a problem for individual, but it's a problem for the society as well.

**4.5.2 American financial Capability: Women, financial literacy and credit card behaviour by Gary R. Mottola (2012):** The main purpose of this study was to identify the relationship between gender and credit card behaviour and what is the role of financial literacy in this relationship? Many authors have revealed that women are consistently scoring lower than men on measures of financial literacy and financial well-being of women can be negatively impacted by gender-based gap. Financial literacy can be the linked with several outcomes like retirement planning, uses alternative financial services, loans, participation in stock market and loans.

Credit card behaviour among women is important because over three-quarters of the population have at least one credit card and on average users have 3.7 card and unpaid balance of over \$5,600 (**foster, Meijer, Schuh and Zabeek, 2011**) and (**U.S. Census Bureau, 2012**). Nonpayment, late payments and exceeding credit limits can lead to higher fees, higher interest rates and lower credit scores. Similarly, failing to choose wrong credit card can increase the costs.

Using data from 2009 FINRA Investor Education Foundation National Financial Capability Study (NFCS) have explored the relationships among gender, financial literacy and credit card management in detail. More than 28,000 respondents have been surveyed in all the state. The key findings of this survey was-

- i. Female respondents revealed more costly credit card behaviour than male respondents. Data has shown that more female respondents (6%) pay late fees than the male respondents. Similarly, very few women revealed positive credit card behaviour than men; Women were less likely to take cash in advance on their credit card than men.
- ii. It has been revealed that the relationship between gender and credit card behaviour is affected by financial literacy. For eg. among men and women with low levels of financial literacy, women are having more costly behaviour than men. Statistics shows that 29% of men with low financial literacy are having problematic credit card behaviour where as it has been increased up to 32% among the women who are having low financial literacy. However, among men and women with high levels of financial literacy there is no significant difference in their credit card behaviour. 24% men and women have problematic credit card behaviour with high financial literacy. In other words, high financial literacy not only improves the credit card behaviour but it eliminates the gender based differences in credit card behavior also.
- iii. There is another interesting fact which has come up in this study. Only half a percentage points (15.0%) more interest rate is paid by the female than men (14.5%). But both men and women pay more interest

rates on credit card, whereas high levels of financial literacy eliminate credit card behaviour but not differences in credit card interest rates

#### **4.6 India**

To evaluate the financial capability of Indians, very few studies have been done in India. NISM and IIM Ahmadabad is one of the institutions which has tried to find out the financial literacy of students, employees and retired in India.

**4.6.1 Delivering Financial Literacy: challenges, strategies and instruments- RBI-OECD Workshop (2010):** Financial Literacy is very important for transparent, robust, sustainable economy and fairer society. Financial Literacy is matter of concern in India. Reserve Bank of India has identified this issue and their commitment is to improve the financial literacy of Indian population. The main purpose of having this workshop was (i) to identify the importance of financial education (ii) financial education as a means to financial inclusion (iii) to verify the efficiency of financial education initiatives.

RBI and other financial institutions of India have reinforced financial capability and literacy of Indian citizens. RBI has made multi targeted strategy to improve the financial literacy. As per the need of individual and capability different, innovative and wide ranging financial literacy programs have been designed. Financial programs for the rural areas, small and medium sized enterprise is also a focused area for RBI and they are trying to fight with the financial exclusion in global market.

**4.6.2 A Survey of Financial Literacy among Students, Young Employees and Retired in India by Prof Sobhesh Kumar Agarwalla et. al. (2012):** Government jobs are reducing day by day so it's the responsibility of an individual to manage their finances. Researches from different countries have shown certain degree of association between financial literacy and their outcomes, which affects the wellbeing of household adversely. Lack of financial literacy is associated with high interest rate borrowings, poor retirement planning and less participation in financial market. The situation is spreading in all the countries and many countries have started many programs to improve the financial capability of their citizens. Their main aim is to improve the understanding about principles and conventions of savings and money and to enable individuals to take optimal financial decisions consistent with their goals. Several studies have been done to examine the level of financial literacy in India. Most of them have reported that, financial literacy is very poor in the country.

This report has tried to give the picture of nation. The study attempts to map the financial literacy level of three important aspects i.e demographic groups, young working adults, retired and students. 1001 students, 983 employees and 983 retired have been taken as a sample for this study. Sample has been taken from all over the country. Sample is more or less represented the above average income group in the country and mostly respondents are from urban area. The respondents in the sample by and large are educated. **(IIM Ahmadabad, June 2002)**. Sizable proportion of the students was from rural regions of India. All the groups have been dominated by the males in the samples.

#### **Financial Knowledge**

Financial knowledge of the students was assessed by examining their understanding of the basic principles underlying savings and debt such as simple and compound interest, time value of money, impact of inflation on investment returns. The proportion of the employed and retired Indians, who have scored 6 or above are 22% and 23% respectively. This is very low as compare to the survey which has been conducted by OECD in 13 countries. On an average more than half of the respondents scored very high financial knowledge. The results have suggested real lack of understanding of the basic principles related to money in everyday life. Only 17% of the young have understood the impact of inflation on the rate of return. The education level appeared a significant factor in explaining the financial knowledge of the young employed. Highly educated people, graduates and post graduates had greater level of financial knowledge.

Respondents in the higher income groups had greater financial knowledge whereas respondents from low income group had poor on financial knowledge. This particular observation is correct in the developed countries as well.

Financial knowledge of students is very poor. Only one in 20 students was able to give correct answer for all the questions. 7% of the student could not give any answer. Large section of the students did not have sufficient understanding about the principles of personal finance. 22% of the students have high financial knowledge but more than 50% have very low financial knowledge and it's a dangerous situation for the country.

The understanding about inflation is also not very high. Only 39% students could understand how inflation would impact the rate of return on investment and only 43% students knew how inflation affects price levels.

Compound interest, value of money and inflation plays very important role while taking the personal and house hold financial decision. It is a great matter of concern when majority of the students in India, have poor understanding about these concepts.

Gender of the students did not play significant difference in scoring the certain level of financial knowledge. Students who have their origin in village, they performed marginally better as compared to the urban students. Students who came from families with higher income group and the students from families which plan their expenditure and savings, they have high financial knowledge. Students who were having the exposure of course like economics and accounting, did not outperformed compared to other courses. It has been observed in this study that financial knowledge of the students is not strongly related with the level of parent's education.

Students from west region have scored high on financial knowledge among all the regions in India. However, students from North have scored very low on financial knowledge among the different regions. Income level of family, occupation of parents and family financial discipline influence the financial knowledge of children. Basic principles of personal finance are not known to most of the students.

Academic learning is also very poor of those students who had the exposure of finance related subjects. Learning outcomes should be reinforced of the students from these courses.

**4.6.3 Financial Literacy and Inclusion in India by NISM (2014):** This report has tried to estimate the financial literacy and Inclusion of Indians. The main purpose of this survey was to (i) "estimate the present level of financial literacy and financial inclusion in terms of key socio-economic demographic groups and other explanatory variables (ii) identify the needs and gaps of the Country and different sections of the society (iii) Intra-Country and Inter-Country comparison of Levels of Financial Literacy and Financial Inclusion (iv) Provide baseline figures which can be measured, evaluated, compared and benchmarked for strategies, policies and future change." The survey has been conducted in 28 states, 7 Union Territories focusing on rural and urban segment. Overall country has been divided into 5 zones- east zone, central zone, north zone, south zone and west zone.

Three components of financial literacy have been used to find out the results of the survey i.e. Financial Attitude, Financial Behavior and Financial Knowledge. When the results has been observed it has been find out that:

- i. "25% urban and 15% rural respondents are found financially literate.
- ii. 18% male respondents are financially literate which is 1.5 times of female literate respondents.
- iii. The 25-49 age group is the most financial literate in the age category.
- iv. The general class category leads in the financially literacy among all classes.
- v. Higher the education and income higher is the financial literacy.
- vi. Government employees are leading in financial literacy followed by private employees, self-employed (non-agri.), retired persons and students."

In case of **Geographical Mix and Financial Literacy**, it has been observed that rural respondents are scoring more in terms of financial attitude whereas financial behavior and knowledge is more of urban respondents.

In case of **Gender Mix and Financial Literacy**, it has been observed that “2/3<sup>rd</sup> respondents either male or female have similar financial attitude. However in case of financial behaviour and knowledge higher number of male respondents have achieved minimum required score than female respondents.”

In case of **Age Group and Financial Literacy**, it has been observed that 67% respondents have scored more than 3 points in case of financial attitude. As compare to other age group, 25-49 age group have scored more in case of financial literacy.

In case of **Social Category and Financial Literacy**, it has been observed that in case of financial literacy general category is leading as compare to other categories like SC/ST or OBC. **Education and financial literacy** have shown the direct relationship. It has been observed that **financial literacy increases with increase in income**.

In case of **Occupation and Financial Literacy**, it has been observed that in each category (self-employed, salaried or retired), more than 25% respondents are financially literate. Casual labour, housewife and agricultural labour have score very low in terms of financial literacy.

#### **4.7 Lessons learned from Various Programs in Different countries**

It has been observed by the researcher that women have better understanding about the day to day activities like budget, savings, credit card, but when it comes to make complex decision, they do not perform well. The people who are earning less and have low education, they are paying high interest on the due payments. Indian students do not have knowledge of basic concepts like compound interest rate, inflation. Students with finance course do not have learning about the concepts. It is matter of concern for the countries. Recently, countries are focusing more on various programs through which financial literacy can be improved. Information about the running financial programs will be given by the researcher in chapter 8.

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CHAPTER - 5

**FINANCIAL CAPABILITY OF STUDENTS-  
SURVEY, FINDINGS & INTERPRETATION**

***“Research can only present data about the past. No one seriously believes that people’s answers to hypothetical questions about the future accurately represent their future behavior; they merely represent a current attitude, which may or may not be translated into future behavior”.***

**– Stephen King, former JWT executive**

### **5.1 Introduction**

There is no accepted definition of the term **‘financial capability’**. Financial capability is commonly referred to as an individual’s capacity to make financial decisions and judgments that contribute to his or her immediate and long-term financial security.

**Shaun Mundy**, a consultant to OECD, the World Bank, **CGAP (Consultative Group to Assist the Poor)** and the UK’s Financial Services Authority, specializing in financial capability and financial services regulation, defines it as “having the knowledge, understanding, skills, motivation and confidence to make financial decisions which are appropriate to one’s personal circumstances”. The concept of financial capabilities focuses on changing behaviours, in addition to increasing knowledge or literacy. A person’s financial capability is best demonstrated by his/ her behaviour. Someone can be financially literate without being financially capable. For example, a person who understands the need and importance of shopping around before buying a financial product or service, cannot be regarded as financially capable unless in actual practice he /she shops around before buying a financial product or service. Capabilities are latent and are the simple ability to ‘do something’. Competence is nothing but control over money. It is the utilization of capability to achieve a desired goal and forms a link between capability and wellbeing. The measurement of the success of a development intervention, therefore, requires a clear distinction between capability, competence and well-being.

Financial well-being refers to subjective perceptions and objective indicators of individuals’ personal financial status. Objective indicators of financial circumstances include measures such as income, debt, savings and aspects of financial capability such as knowledge of financial products and services, planning ahead and staying on budget. Subjective perceptions include individuals’ satisfaction with their current and future financial situation.

Both developed and developing countries are making continuous efforts to enhance the financial capability of their citizens. It is widely believed that strengthening of financial capability would play an important role in increasing levels of financial inclusion, improving the efficiency and stability of financial markets, and hence enhancing welfare outcomes for consumers. USA., U.K., Canada, Australia, New Zealand, Brazil, Fiji, Eastern Caribbean Currency Union, Ghana, Hungary, Ireland, Malaysia Singapore, South Africa, Tanzania, Trinidad & Tobago and Kenya have already initiated steps to conduct national level studies on financial capability to identify the capability deficits of various segments of their population and vulnerability of selected groups within the population in order to develop comprehensive national strategies for improvement of financial capability of their citizens. Governments (e.g. US Treasury, Australia Financial Literacy Foundation and New Zealand Retirement Commission), Central Banks (e.g. Central Bank of Trinidad and Tobago, Eastern Caribbean Central Bank and Bank Negara Malaysia) and Financial Services Regulators (e.g. UK Financial Services Authority and South Africa Financial Services Board) have taken the lead to organize the process.

### **5.2 The current Survey and the Respondents**

A specially designed **“Financial Capability of Students”** was used for the current survey. The questionnaire was initially put to pilot testing with experience survey. Experience survey has been conducted with few students who were having knowledge about this area and their considered views were taken redesigning the questionnaire, before being sent to respondents finally. The respondents were students of management and engineering course.

#### ***Suitability of Using Experience Based vs. Perception / Opinion Based Questions in the Survey:***

Scaling is the generation of broadly defined continuum on which measured objects are located (**Peterson, 1997**). It is very important for researcher to use appropriate scaling methods to aid an improving accuracy of subjective estimation. During the design and pilot testing of the **financial capability of student’s** questionnaire for the current survey, some of the students, who were involved with the Pilot Study, suggested

that questions should be asked directly from the respondents. Financial Capability of the students is expected to be very low, even among the students of professional courses, it would be more appropriate for the survey to elicit 'direct experience based response' on an ordinate scale instead of trying to get opinion based responses using a likert scale. They observed that it is better to ask straight "Do you participate in major financial decision in the family? –Expecting either of the 5 responses, "always", "very often", "sometimes", "Rarely" or "I never participate", rather than asking a question "A student should participate in financial decision in family " with opinionated responses like, "strongly agree", "agree" "neither agree nor disagree", "disagree" and "strongly disagree". The other example they gave was "Does your family is in the habit of making monthly budget to manage family expenditure? with, "always", "very often", "sometimes", "Rarely" or "never" is much superior to "All families should make monthly budget to manage family expenditure" with "strongly agree", "agree", "neither agree nor disagree", "disagree" and "strongly disagree" responses. In the second case, one only gets an opinion, while in the first case the respondent indicates whether he actually does something or not. They further advised that the questionnaire need not ask the respondents to reveal their identity as some of the questions being used are personal or confidential in nature and the respondents may be hesitant to reply such questions if they are compelled to reveal their identity. The researcher found these observations quite relevant for the current research study. Other issues which they pointed out, while advising for not using likert scale for the current survey were (i) respondents may not behave honestly while responding- which may be intentional or unintentional (ii) respondents answers may base on feeling towards surveyor or the subject or (iii) may answer according to what they feel is expected of them as respondents / participants. Overall they felt that for a survey of this kind, which is being administered for the first time in India, it would be appropriate to use likert scale.

In the first attempt, 1018 respondents from different colleges (Management and Engineering College) of Noida and Greater Noida have responded for the questionnaire. 509 students have responded from Business School, 509 students have responded from Engineering College. The results are given below:

For the purpose of analysis, questionnaire has been divided into five factors. On the basis of these factors only statistical tools have been used. "Financial Awareness" has been converted into FACT 1, "Adopting Financial Knowledge Practices" has been converted into FACT 2, "Knowledge of Banking Saving & Investments" has been made FACT 3, "Financial Capability" has been converted into FACT 4 and "Interest in Financial Literacy" has made FACT 5. Different questions were part of FACT 1, FACT 2, FACT 3, FACT 4 and FACT 5.

### 5.3 Analysis and Interpretation of results – Financial Capability of Students:

Researcher tried to explain the role of each factor irrespective of the age of the respondents. These grouping have given clearer picture of each factor and shown the difference of every factor if it exists.

**Comparison of FACT 1 to FACT 5 among the categories of Age of students- A1 = <= 18 years, A2=19-24 years, A3= 25 years or more**

Factors	A1( N=134)		A2( N=801)		A3( N=83)		F Value
	Mean	SD	Mean	SD	Mean	SD	
Financial Awareness	2.7463	.54409	2.7241	.58312	2.5145	.71280	1.476NS
Adopting Financial knowledge Practice	2.3856	.36240	2.4205	.34095	2.4799	.37934	1.895NS
Knowledge of banking savings & investments	2.8545	.27642	2.8617	.29047	2.8163	.42606	.858NS
Financial Capability	2.7780	.33112	2.7725	.34318	2.7108	.50528	1.175NS
Interest in financial literacy	2.7886	.33344	2.8169	.35046	2.7871	.44043	.561NS

(Table-5.1: Comparison of different age groups with FACT 1 to FACT 5)

There is no significant difference between the three categories of age. Table shows that the value of F is not statistically significant. From the table it can be concluded that the awareness of finance in all the groups are same. It means financial awareness is not different in different age groups. Likewise different age groups are not adopting financial practices and they have same knowledge of banking savings and investments. Financial Capability and taking interest in finances are not varying in the different age groups.

**Comparison of financial awareness between Male and Female Student**

Course	N	Mean	S.D	t value
Male	727	2.7139	0.60130	0.357NS
Female	291	2.7285	0.56187	

*Not Significantly at .05 level.*

(Table-5.2: Financial Awareness between male and female student)

Table shows that the value of t is 0.357 which is less than 1.96. Null hypothesis will be accepted. It is not statistically significant. It means Basic financial awareness of Male and Female are not significantly different. Financial awareness of male and female are same. Gender doesn't make any difference in having the knowledge of finances.

**Comparison of adopting financial knowledge practices between Male and Female student**

Course	N	Mean	S.D	t value
Male	727	2.4248	0.35220	0.587NS
Female	291	2.4107	0.33539	

*Not Significantly at .05 level.*

(Table-5.3: Adopting Financial Knowledge Practices between male and female student)

Table shows that the value of t is 0.587 which is less than 1.96. Null hypothesis will be accepted in this situation. It means there is no significant difference between the Male and Female in adopting financial knowledge practice. They adopt same financial practices.

**Comparison of knowledge of Banking Savings and Investments between Male and Female student**

Course	N	Mean	S.D	t value
Male	727	2.8418	0.32420	<b>2.555*</b>
Female	291	2.8952	0.23344	

*\*\* Significantly at .05 level.*

(Table 5.4: Knowledge of Banking Savings and Investments between male and female student)

Table shows that the value of t is 2.555 which is more than 1.96. Alternative hypothesis will be accepted in this situation. It means there is significant difference between knowledge of banking savings and investments between male and female. India is a male dominating society, they are handling money matters in the family and table shows that Male and female have different knowledge of banking savings and investments. They both understand the financial risk differently and calculate the risk differently before investing.

**Comparison of Financial Capability between Male and Female student**

Course	N	Mean	S.D	t value
Male	727	2.7586	0.36859	1.351NS
Female	291	2.7921	0.32786	

*Not Significantly at .05 level.*

(Table 5.5: Financial Capability between male and female student)

Table shows that the value of t is 1.351 which is less than 1.96. Null hypothesis will be accepted in this situation. It means there is no significant difference between the financial capability of male and female. Both the gender thinks that they should have diversified investment portfolios and pocket money should be used responsively.

**Comparison of Interest in Financial Literacy between Male and Female student**

Course	N	Mean	S.D	t value
Male	727	2.8074	0.34933	0.469NS
Female	291	2.8190	0.37356	

*Not Significantly at .05 level.*

(Table 5.6: Interest in Financial Literacy between male and female student)

Table shows that the value of  $t$  is 0.469 which is less than 1.96. Null hypothesis will be accepted in this situation. It means there is no significant difference between Male and Female while they take interest in financial literacy. Both the gender thinks that they should have been taught personal finance in schools/ college/ university.

From the above table it can be concluded that in most of the factors there are no significant difference between male and female. Whether we talk about financial capability or interest in financial literacy or adopting financial knowledge; all are showing that gender does not make any difference in above said factors. The results are different from the studies which is been done previously. The reason behind this may be the study has been conducted in NCR region of India, where most of the women are independent and they take their financial decision by themselves. It clearly shows that the situation of women in country like India is improving a lot. Researcher also has observed that women are independently purchasing their houses, car and choosing different investment options from their income.

**Comparison of Financial Awareness between Engineering and Management Student Respondent**

Course	N	Mean	S.D	t value
Engineering	509	2.7092	0.59685	0.478NS
Management	509	2.7269	0.58364	

*Not Significantly at .05 level.*

(Table 5.7: Financial Awareness between engineering and management student)

Table shows that the value of  $t$  is 0.478 which is less than 1.96. Null hypothesis will be accepted in this situation. It means financial awareness of Management and Engineering students are not significantly different. It shows that, the students who are doing management and engineering course, their awareness may be equal.

**Comparison of Adopting Financial Knowledge Practices between Engineering and Management Student Respondent**

Course	N	Mean	S.D	t value
Engineering	509	2.4185	0.34630	0.210NS
Management	509	2.4231	0.34877	

*Not Significantly at .05 level.*

(Table 5.8: Adopting Financial Knowledge Practices between engineering and management student)

Table shows that the value of  $t$  is 0.234 which is less than 1.96. So, null hypothesis will be accepted. It shows that the difference is not statistically significant. It means Management and Engineering students are not adopting financial knowledge practices in their real life.

**Comparison of Knowledge of Banking Savings and Investments between Engineering and Management Student Respondent**

Course	N	Mean	S.D	t value
Engineering	509	2.8556	0.30136	0.156NS
Management	509	2.8585	0.30276	

*Not Significantly at .05 level.*

(Table 5.9: Knowledge of Banking Savings and Investments between engineering and management student)

Table shows that the value of  $t$  is 0.156 which is less than 1.96. It is not statistically significant. So, null hypothesis will be accepted. It means knowledge of banking savings and investments of Management and Engineering students are same.

**Comparison of Financial Capability between Engineering and Management Student Respondent**

Course	N	Mean	S.D	t value
Engineering	509	2.7613	0.36282	0.613NS
Management	509	2.7750	0.35249	

*Not Significantly at .05 level.*

(Table 5.10: Financial Capability between engineering and management student)

Table shows that the value of t is 0.613 which is less than 1.96. It is not statistically significant. So, null hypothesis will be accepted. It means financial capability of Management and Engineering students are not different. Their capability of handling the difficult financial situations are not dependent on the course.

**Comparison of Interest in Financial Literacy between Engineering and Management Student Respondent**

Course	N	Mean	S.D	t value
Engineering	509	2.8081	0.34631	0.234NS
Management	509	2.8134	0.36629	

*Not Significantly at .05 level.*

(Table 5.11: Interest in Financial Literacy between engineering and management student)

Table shows that the value of t is 0.234 which is less than 1.96. It is not statistically significant. So, null hypothesis will be accepted. It means students of Management and Engineering students take same interest in financial literacy. They want to understand the concept of personal finance and college can play very important role in setting up the counseling session.

**Correlations between all the five Factors (N=1018)****Relationship (Correlation coefficients)**

	Financial Awareness	Adopting Financial Knowledge Practices	Knowledge of Banking Saving & Investments	Financial Capability	Interest in Financial Literacy
Financial Awareness	1	.125**	.288**	.256**	.215**
Adopting Financial Knowledge Practices	.125**	1	.161**	.188**	.171**
Knowledge of Banking Saving & Investments	.288**	.161**	1	.539**	.365**
Financial Capability	.256**	.188**	.539**	1	.439**
Interest in Financial Literacy	.215**	.171**	.365**	.439**	1

*\*\* Correlation is significant at the 0.01 level*

(Table 5.12: Correlation between FACT1 to FACT 5)

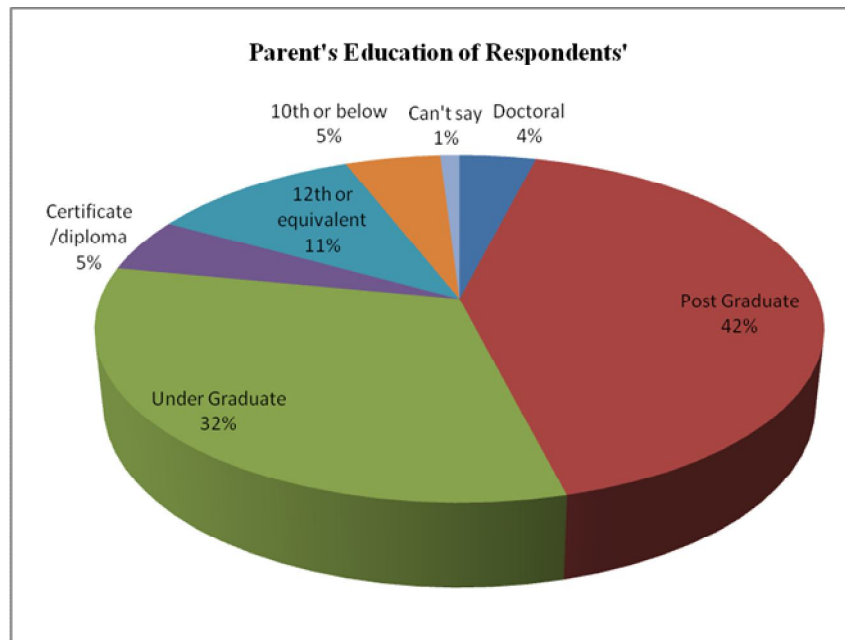
Questionnaire has been divided into five factors. Five factors for the analysis are: financial knowledge awareness, adopting financial practices, knowledge of bank saving and investments, financial capability and interest of respondents in financial literacy. Table shows that all the factors are correlated. The students who are financially aware they adopt financial knowledge practices, they have better knowledge of savings and investments, their financial capability is better and they take more interest in financial literacy. It shows that, if awareness of finances is improving among the students, financial capability of students will also improve and they will take better decision for their future. All the factors are strongly correlated with each other.

**Education of Respondents' Parents**

Parent's Education	In Percentage Terms	Total
Doctoral	4%	42
Post Graduate	42%	425

Under Graduate	32%	327
Certificate /diploma	5%	52
12th or equivalent	11%	114
10th or below	5%	50
Can't say	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.13: Education of Respondents' Parents)



(Figure 5.1: Education of Respondents' Parents)

Above table shows the parents educational level of the respondents. 32% of the parents have completed their under graduation and 42% have completed their post-graduation. Very few (only 4%) have completed their doctorate. Parent's education plays very important role in building the financial capability.

**Comparison of FACT 1 to FACT 5 among the Parent's education- P1 = Doctoral, P2=Post Graduate, P3= Certificate/Diploma, P4= 12<sup>th</sup> or equivalent**

Factors	P1( N=467)		P2( N=327)		P3( N=111)		P4( N=113)		F Value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Financial Awareness	2.7409	.57421	2.6911	.62613	2.6577	.61045	2.7611	.52226	1.048NS
Adopting Financial knowledge Practice	2.4318	.34154	2.4159	.34560	2.4294	.38175	2.3805	.34249	.707NS
Knowledge of banking savings & investments	2.8678	.30429	2.8494	.28656	2.8716	.29936	2.8208	.33652	.896NS
Financial Capability	2.8041	.33307	2.7607	.36250	2.7342	.34752	2.6748	.42768	<b>4.567*</b>
Interest in financial literacy	2.8187	.35342	2.8186	.34396	2.8081	.35213	2.7640	.40503	.801NS

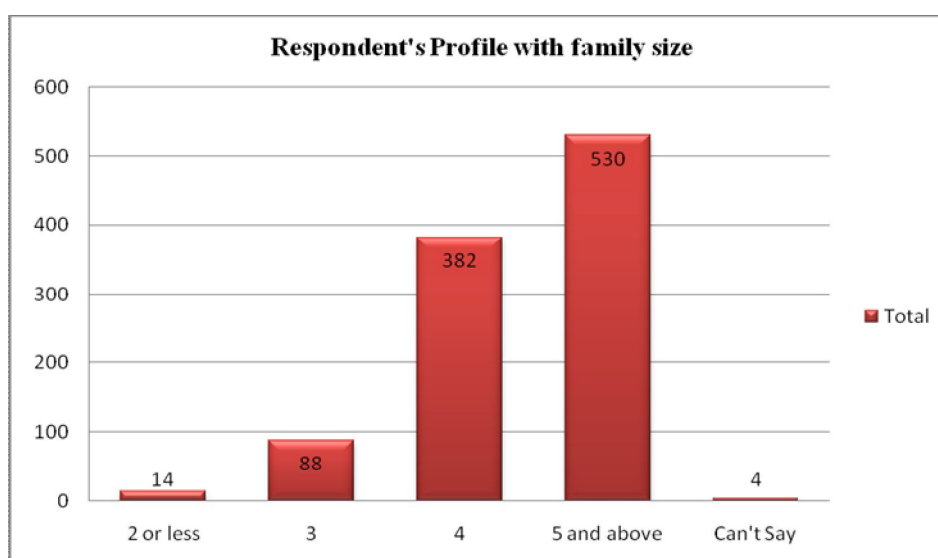
(Table 5.14: Comparison of FACT 1 to FACT 5 among Parent's education)

There is no significant difference between the four categories of parent's education. Table shows that the value of F is not statistically significant. From the table it can be concluded that the awareness of finance in all the groups are same. It means financial awareness is not affected by the education of parents. Likewise different groups of parent's education are not affecting financial practices of the students. They have same knowledge of banking savings and investments. Parent's education are not giving the guarantee of increasing the knowledge of banking savings and investments. But parents' education is making the difference in financial capability. It means parent's education improving the financial capability of the student. Result shows that the education is statistically significant. Interest in financial literacy is not affected by parent's education.

#### Family Size of Respondents

Family Size	In Percentage Terms	Total
2 or less	1%	14
3	9%	88
4	38%	382
5 and above	52%	530
Can't Say	0%	4
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table-5.15: Family Size of Respondents)



(Figure 5.2: Family Size of Respondents)

The above table shows that family size of 5 and above for the respondents, followed by family size of 4. Very few respondents have their family size of 3.

#### Comparison of FACT 1 to FACT 5 among the categories of Family members- M1 = 3, M2=4, M3= 5 and above

Factors	M1( N=88)		M2( N=400)		M3( N=530)		F Value
	Mean	SD	Mean	SD	Mean	SD	
Financial Awareness	2.6705	.63827	2.7525	.55409	2.7000	.60761	1.217NS
Adopting Financial knowledge Practice	2.4167	.34091	2.4129	.35319	2.4274	.34451	.203NS
Knowledge of banking savings & investments	2.8636	.25683	2.8625	.30271	2.8519	.30858	.163NS
Financial Capability	2.7642	.37015	2.7688	.36441	2.7684	.35089	.006NS
Interest in financial literacy	2.7803	.36052	2.8000	.38634	2.8239	.33114	.864NS

(Table 5.16: Comparison of FACT 1 to FACT 5 among the categories of family members)



There is no significant difference between the three categories of family members. Table shows that the value of F is not statistically significant. From the table it can be concluded that the awareness of finance in all the groups are same. Family members are more or less, it is not increasing the awareness about the finances. It means financial awareness is not different in groups of family members. Likewise different groups of family members are not bringing the difference financial practices and they have same knowledge of banking savings and investments. Financial Capability and taking interest in finances are not varying in the different groups of family members. So, it can be concluded that family members are not affecting the knowledge and capability of the students. It means size of the family is not improving the knowledge/ interest in finances or capability of the student.

**Comparison of FACT 1 to FACT 5 among the Family Income- F1 = 4,00,000, F2=4,00,001-6,00,000, F3= >=6,00,001, P4= Don't want to reveal**

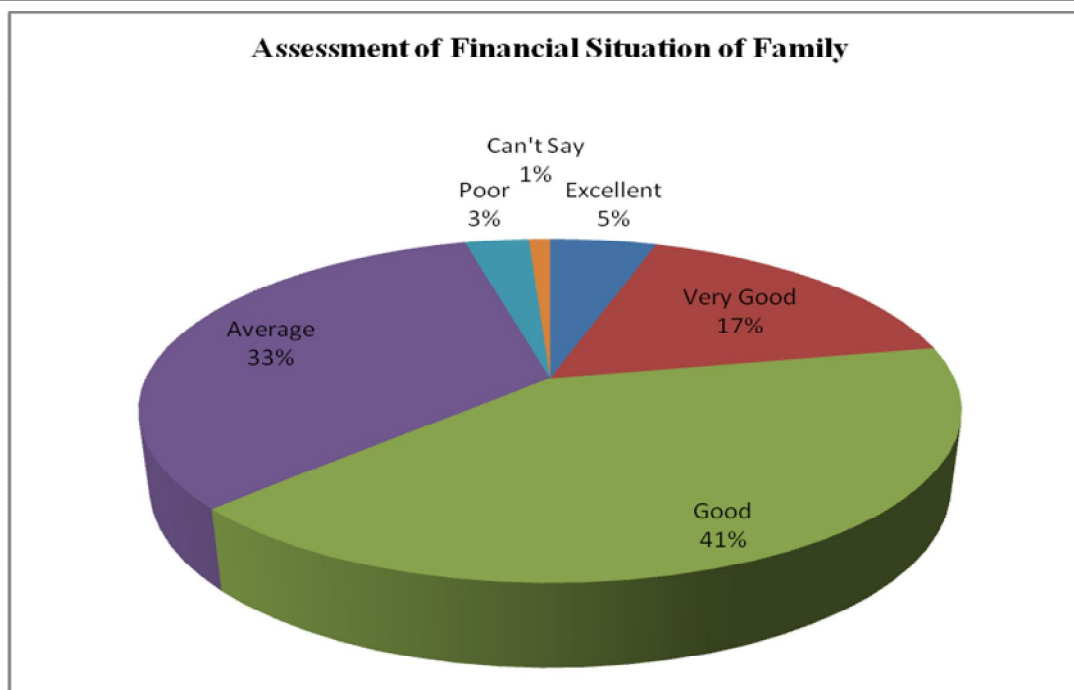
Factors	P1( N=387)		P2( N=150)		P3( N=239)		P4( N=242)		F Value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Financial Awareness	2.7726	.53864	2.7467	.54572	2.7280	.56999	2.6033	.69353	<b>4.336*</b>
Adopting Financial knowledge Practice	2.4755	.33383	2.4356	.33931	2.4156	.33399	2.3292	.36877	<b>9.124**</b>
Knowledge of banking savings & investments	2.8527	.28273	2.8800	.24529	2.8682	.31820	2.8388	.34443	.717NS
Financial Capability	2.7526	.37272	2.8000	.28379	2.7897	.34830	2.7521	.38176	1.095NS
Interest in financial literacy	2.8053	.38615	2.7933	.31769	2.8354	.32892	2.8058	.35597	.546NS

(Table 5.17: Comparison of FACT 1 to FACT 5 among the family income)

Table shows that the value of F is statistically significant. So, it can be concluded that family income is impacting the financial awareness of the student. Likewise different family income groups are adopting different financial practices for their future. Lower income groups will adopt different financial practices due to different knowledge and higher income groups will adopt different financial practice due to different knowledge. But results show that knowledge of banking savings and investments does not differ in different groups of the family income. Financial Capability and interest in financial literacy are also not statistically significant. It means they are not varying in different income groups of the family. So, it can be concluded from the above results that financial background of the parents do not resulted into improvement of financial capability of children. It depends on the children how much interest he/she takes in understanding the concepts and how much they use those concepts in solving the real life problems.

Assessment of Respondents' Financial Situation of Family		
Financial Situation of the family	In Percentage Terms	Total
Excellent	5%	54
Very Good	17%	178
Good	41%	413
Average	33%	340
Poor	3%	25
Can't Say	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.18: Financial Situation of Respondent's Family)



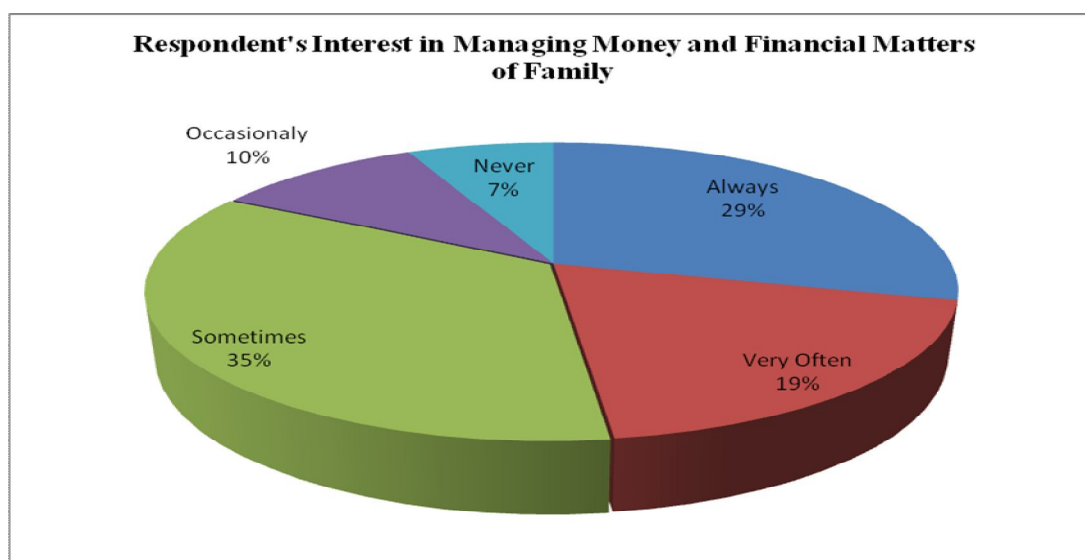
(Figure 5.3: Financial Situation of Respondent's Family)

Above table shows that 42% of respondents have reported their financial situation of family is good and 33% of the respondents have reported that their financial situation of family is average. Only 17% have reported that their financial situation is very good.

#### Respondent's Interest in Managing Money and Financial Matter of Family

Respondent's Response	In Percentage Terms	Total
Always	29%	299
Very Often	19%	189
Sometimes	35%	354
Occasionally	10%	103
Never	7%	73
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.19: Respondent's Interest in Managing Money & Financial Matter)



(Figure 5.4: Respondent's Interest in Managing Money & Financial Matter)

Above table shows that only 29% of the respondents always takes interest in managing money and financial matters of family always. 19% of the respondents revealed that they take interest very oftenly and 35% respondents take sometimes. It shows that very few respondents are involved in the decision making in the house. Involvement of the students should be increased as it inculcates the habits of savings and taking correct decision for their future.

### ***Test of Hypotheses***

**Null Hypothesis-** Gender of Management and Engineering students does not affect interest in managing money and financial matter in the family.

**Alternative Hypothesis-** Gender of Management and Engineering students affect interest in managing money and financial matter in the family.

Total number of male  $n_1 = 727$ , total number of female  $n_2 = 291$

Total no. of male who (always+ very often) take interest in managing money = 361

Total no. of female who (always+ very often) take interest in managing money = 127

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{n_1 + n_2}$$

$$(n_1 + n_2), \quad p = 0.48$$

$$q = (1 - p), \quad q = 0.52$$

$$pq = 0.25$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$z = 1.7380$$

Since, computed value of  $z = 1.738$  is less than the critical value of  $z$  (1.96 at 5% level), therefore, we accept the null hypothesis. So, gender of engineering and management students does not affect interest in managing money and financial matter in the family.

### ***Researcher tried to analyze the same perspective from the course point of view-***

**Null Hypothesis-** Management and Engineering course does not affect interest in managing money and financial matter in the family.

**Alternative Hypothesis-** Management and Engineering course affect interest in managing money and financial matter in the family.

Total number of management student  $n_1 = 509$

Total number of engineering student  $n_2 = 509$

Total number of management students who (always+ very often) take interest in managing money = 246

Total number of engineering students who (always+ very often) take interest in managing money = 242

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{n_1 + n_2}$$

$$(n_1 + n_2), \quad p = 0.48$$

$$q = (1 - p), \quad q = 0.52$$

$$pq = 0.25$$

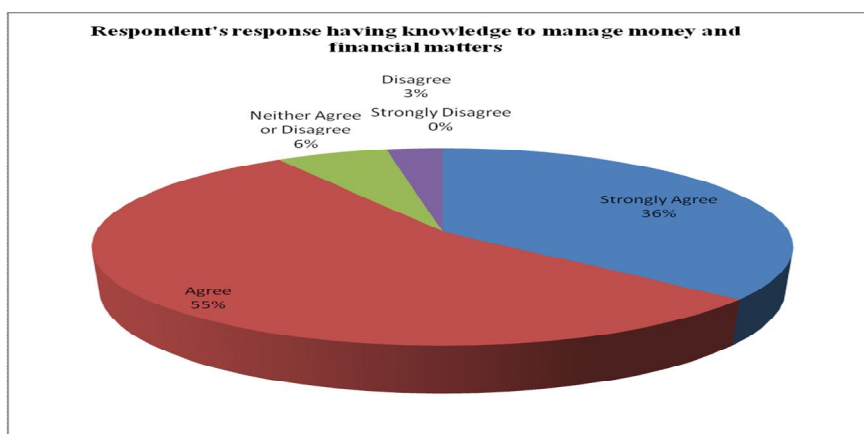
$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$z = 0.2485$$

Since, computed value of  $z = 0.25$  is less than the critical value of  $z$  (1.96 at 5% level), therefore, we accept the null hypothesis and it can be concluded that course of management and engineering interest does not affect interest in managing money and financial decision in the family.

Respondent's Response having Knowledge to Manage Money and Financial Matters		
Respondent's Response	In Percentage Terms	Total
Strongly Agree	36%	365
Agree	55%	561
Neither Agree or Disagree	6%	60
Disagree	3%	27
Strongly Disagree	0%	5
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.20: Respondent's Response having Knowledge to Manage Money & Financial Matters)



(Figure 5.5: Respondent's Response having Knowledge to Manage Money and Financial Matters)

Whether you take interest in managing money and financial matter of your family? When this particular question has been asked from the respondents, 55% of the respondents have shown interest in managing their money and financial matters whereas 36% of the respondents were strongly agree in favour of towards taking interest in managing their money and financial matters.

#### Test of Hypothesis

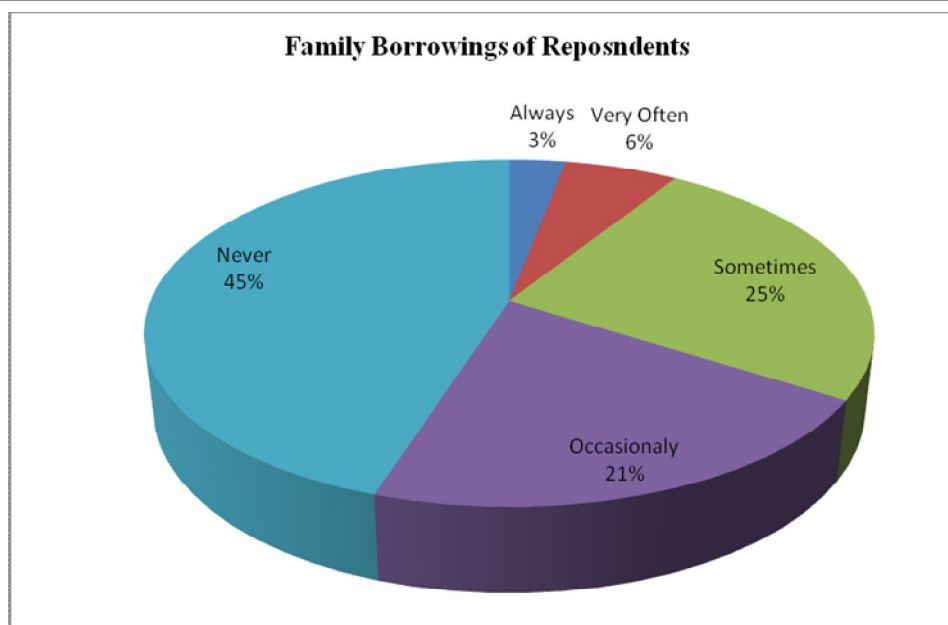
**Null Hypothesis:** Professional education does not play significant role in improving the financial capability.

**Alternative Hypothesis:** Professional education play significant role in improving the financial capability.

Using Chi Square analysis, Degree of freedom =  $(2-1) * (3-1) = 2$ , chi Square value for degrees of freedom = 2 at 5% level is 5.99. The calculated value of  $\chi^2$  is = 3.05 which is less than the table value. So the null hypothesis is accepted and it is concluded that professional education does not play significant role in improving the financial capability. This observation can be interpreted by the fact that most of the students, who are enrolled in professional courses, are not using the lessons of personal finance in their real life.

Family Borrowings of Respondent's		
Family Borrowings	In Percentage Terms	Total
Always	3%	26
Very Often	6%	65
Sometimes	25%	268
Occasionally	21%	211
Never	45%	448
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.21: Family Borrowings of Respondent's)

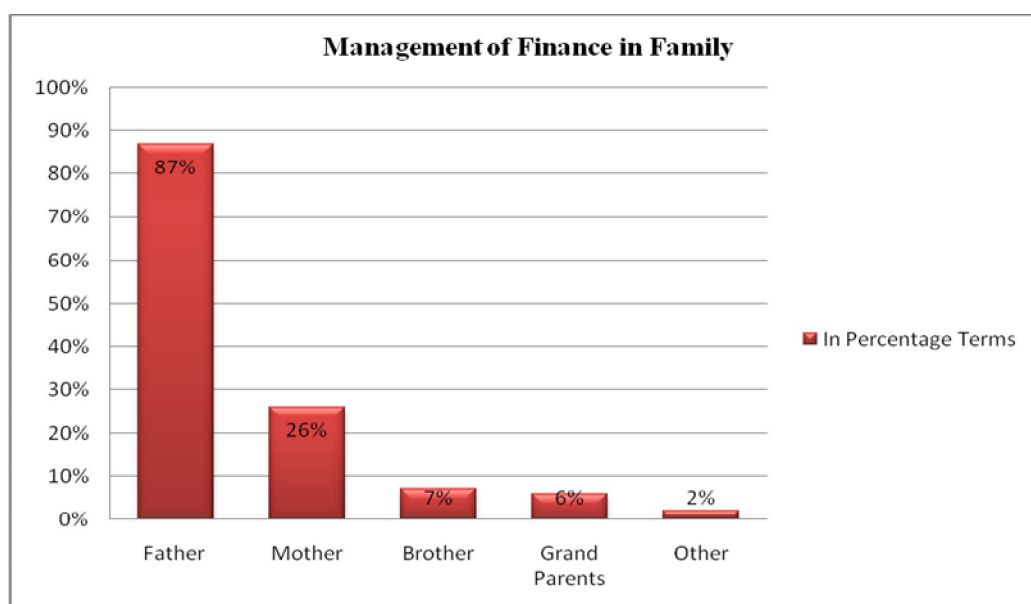


(Figure 5.6: Family Borrowings of Respondent's)

Respondents have been asked about the family borrowings, 45% respondents have reported that their family never had large borrowings. 21% and 25% respondents have reported that their family has borrowed occasionally and sometimes.

Management of Finances in Family		
Management of Finance	In Percentage Terms	Total
Father	87%	877
Mother	26%	267
Brother	7%	69
Grand Parents	6%	59
Other	2%	24

(Table- 5.22: Management of Finances in Family)



(Figure 5.7: Management of Finances in Family)

When Respondents have been asked about the management of finances in the family, 87% of the respondents have reported their father is managing the finances in family. Only 26% respondents have reported that their mother takes the financial decision in the family.

**Financial Decision in the family**

Q14.1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	121	11.9	11.9	11.9
	1	897	88.1	88.1	100.0
	Total	1018	100.0	100.0	

(Table 5.23: Decision Making by Father)

Above table shows that, there are 88% family where father is taking financial decision in the family. Only 12% families are there, where fathers are not taking financial decision.

Q14.2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	762	74.9	74.9	74.9
	1	256	25.1	25.1	100.0
	Total	1018	100.0	100.0	

(Table 5.24: Decision Making by Mother)

Above table shows that, there are 25% family where mother is taking financial decision in the family and 75% families are there, where mothers are not taking financial decision.

Q14.3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	952	93.5	93.5	93.5
	1	66	6.5	6.5	100.0
	Total	1018	100.0	100.0	

(Table 5.25: Decision Making by Brother)

Above table shows that, there are 94% family where brother is not taking financial decision in the family and only 6% families are there, where brothers are taking financial decision.

Q14.4					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	959	94.2	94.2	94.2
	1	59	5.8	5.8	100.0
	Total	1018	100.0	100.0	

(Table 5.26: Decision Making by Grandparents)

Above table shows that, there are 94% family where grandparents are not taking financial decision in the family and only 6% families are there, where grandparents are taking financial decision.

**Relationship (Correlation coefficient) of FACT 1 to FACT 5 with Management of Financial Matter by Family Members**

Management of money matters in family	FACT 1 (Financial awareness)	FACT 2 (Adopting fin knowledge practices)	FACT 3 (Knowledge of banking savings & investments)	FACT 4 (Financial Capability)	FACT 5 (Interest in fin literacy)
@ 14.1 Father	-.057	-.055	<b>.078*</b>	.057	.058
@ 14.2 Mother	.024	.030	<b>.064*</b>	.035	-.035
@ 14.3 Brother	.018	.028	.007	-.002	-.024
@ 14.4 Grand Parents	.054	-.002	.037	.014	-.018

Table 5.27: Relationship of FACT 1 to FACT 5 with Management of Financial Matter by Family Members

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

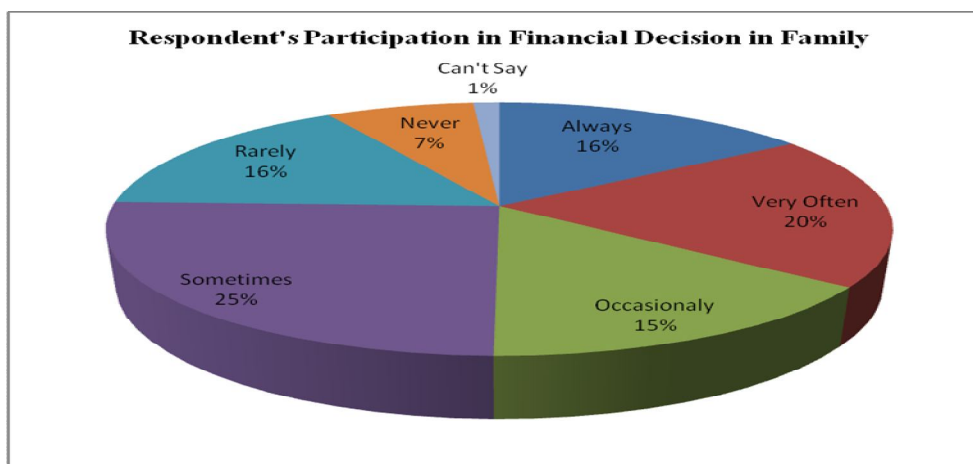
**\*.** Correlation is significant at the 0.05 level (2-tailed).

**Note:** @ These are dummy variables. 1 means members are managing family money matters and 0 means members are not managing family money matters.

From the above table it can be concluded that, if father and mothers are handling money matters in the family, awareness of those children are low and they are not adopting financial knowledge as they are not statistically significant. But it shows that, if a father and mother are taking decision in the family then children are adopting banking savings and investment whereas financial capability and financial literacy is poor their children. If grandparents are taking financial decisions in the family then children are not aware about finances and they do not have knowledge of banking savings and investments.

<b>Respondent's participation in Financial Decision in Family</b>		
<b>Respondent's Participation in financial decision</b>	<b>In Percentage Terms</b>	<b>Total</b>
Always	16%	159
Very Often	20%	198
Occasionally	15%	154
Sometimes	25%	258
Rarely	16%	162
Never	7%	74
Can't Say	1%	13
Total	100%	1018

(Table 5.28: Respondent's participation in Financial Decision in Family)



(Figure 5.8: Respondent's participation in Financial Decision in Family)

When respondents have been asked about the participation in financial decision in family? Only 19% respondents have reported that they participate in the financial decision very often, 15% have reported that they participate occasionally and 26% participate sometimes in the financial decision of the family.

**Test of Hypotheses**

**Null Hypothesis-** Gender of Management and Engineering student does not affect in participating in financial decision in the family.

**Alternative Hypothesis-** Gender of Management and Engineering student affects in participating in financial decision in the family.

Total number of male  $n_1 = 727$ ,

Total number of female  $n_2 = 291$

Total no. of male who (always+ very often) take participation in financial decision = 269

Total no. of female who (always+ very often) take participation in financial decision = 82

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{(n_1 + n_2)}$$

$$(n_1 + n_2), \quad p = 0.34$$

$$q = (1 - p), \quad q = 0.66$$

$$pq = 0.23$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$$

$$z = 2.6723$$

Since, computed value of  $z = 2.6723$  is greater than the critical value of  $z$  (1.96 at 5% level), therefore, we reject the null hypothesis. So, gender of management and engineering students affect interest in participating in financial decisions in the family. It means, participation of male students is more in financial decisions in the family.

**Researcher tried to look from course perspective also-**

**Null Hypothesis-** Management and Engineering course does not affect in participating in financial decision in the family.

**Alternative Hypothesis-** Management and Engineering course affects in participating in financial decision in the family.

Total number of male  $n_1 = 509$ ,

Total number of female  $n_2 = 509$

Total number of management students who (always+ very often) take participating in financial decision in the family = 200

Total number of engineering students who (always+ very often) take participating in financial decision in the family = 155

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{(n_1 + n_2)}$$

$$(n_1 + n_2), \quad p = 0.35$$

$$q = (1 - p), \quad q = 0.65$$

$$pq = 0.23$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$



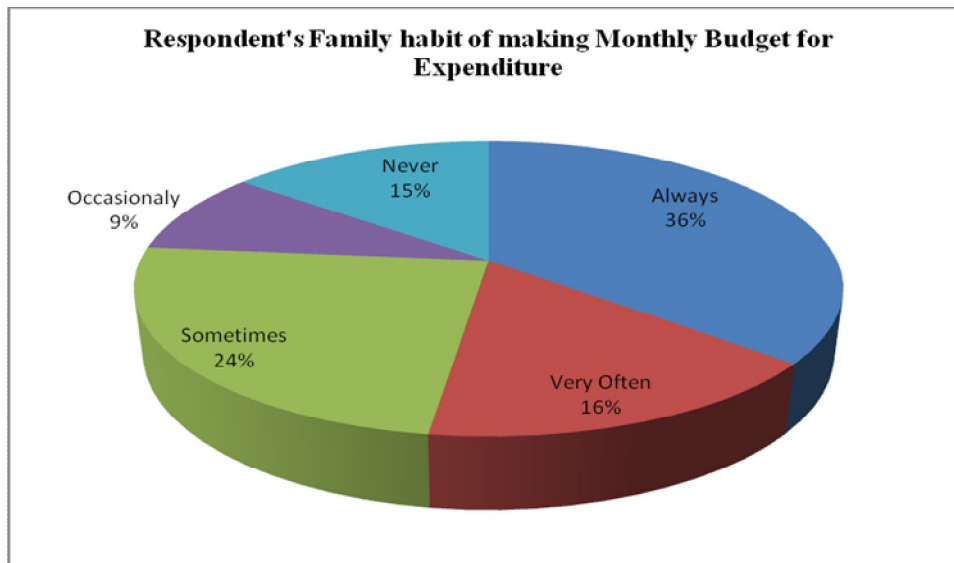
$$\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}$$

$$z = 2.9635$$

Since, computed value of  $z = 2.97$  is greater than the critical value of  $z$  (1.96 at 5% level), therefore, we reject the null hypothesis and it can be concluded that course of management and engineering student affects in participation in financial decision in the family. It means management students participate actively in the financial decision of the family. As management students are studying subjects of finance, which may be the reason for taking more interest in financial decisions. That's how a student can improve their skills for taking better decision.

<b>Respondent's Family habit of Making Monthly Budget for Expenditure</b>		
<b>Making monthly Budget</b>	<b>In Percentage Terms</b>	<b>Total</b>
Always	36%	366
Very Often	16%	166
Sometimes	24%	247
Occasionally	9%	92
Never	15%	147
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.29: Respondent's Family habit of Making Monthly Budget for Expenditure)



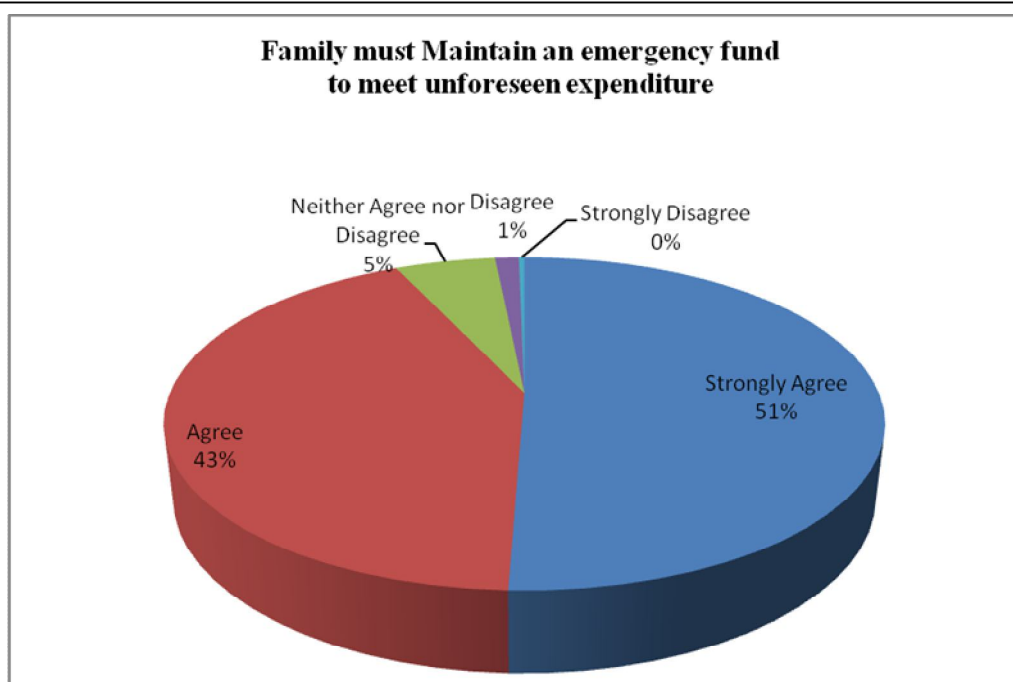
(Figure 5.9: Respondent's Family habit of making Monthly Budget for Expenditure)

When it has been asked from the respondents that, is your family in the habit of making monthly budget to manage your family? 36% respondents have reported that their families always make the monthly budget for managing their expenditure. 16% have reported very oftenly and 24% sometimes make their monthly budget to manage their expenditure. 15% respondents have reported that they never make any monthly budget.

#### **Family must Maintain an Emergency fund to Meet Unforeseen Expenditure**

<b>Emergency Fund to meet unforeseen expenditure</b>	<b>In Percentage Terms</b>	<b>Total</b>
Strongly Agree	51%	515
Agree	43%	432
Neither Agree nor Disagree	5%	55
Disagree	1%	13
Strongly Disagree	0%	3
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.30: Family must maintain an Emergency fund to Meet Unforeseen Expenditure)



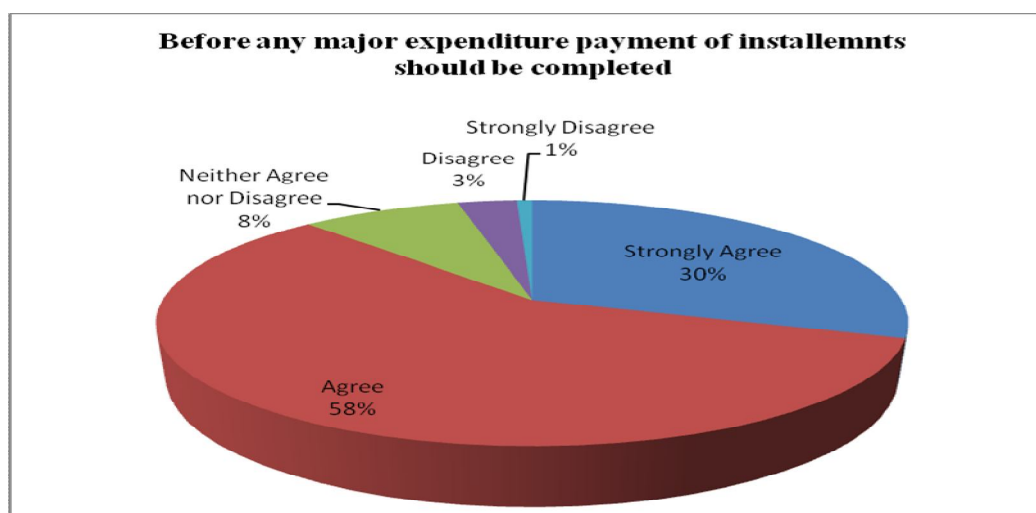
(Figure 5.10: Family must maintain an Emergency fund to Meet Unforeseen Expenditure)

When respondents has been asked whether family should main an emergency funds to meet unforeseen expenditure, 52% have reported that they are strongly agree and 42% were agree that they should have an emergency funds to meet unforeseen expenditure. Only 5% were disagree for having emergency funds to meet unforeseen expenditure.

**Before Any major expenditure installments should be completed**

Before any major expenditure payment of installment must be completed	In Percentage Terms	Total
Strongly Agree	30%	305
Agree	58%	590
Neither Agree nor Disagree	8%	84
Disagree	3%	31
Strongly Disagree	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table- 5.31: Before Any major expenditure installments should be completed)



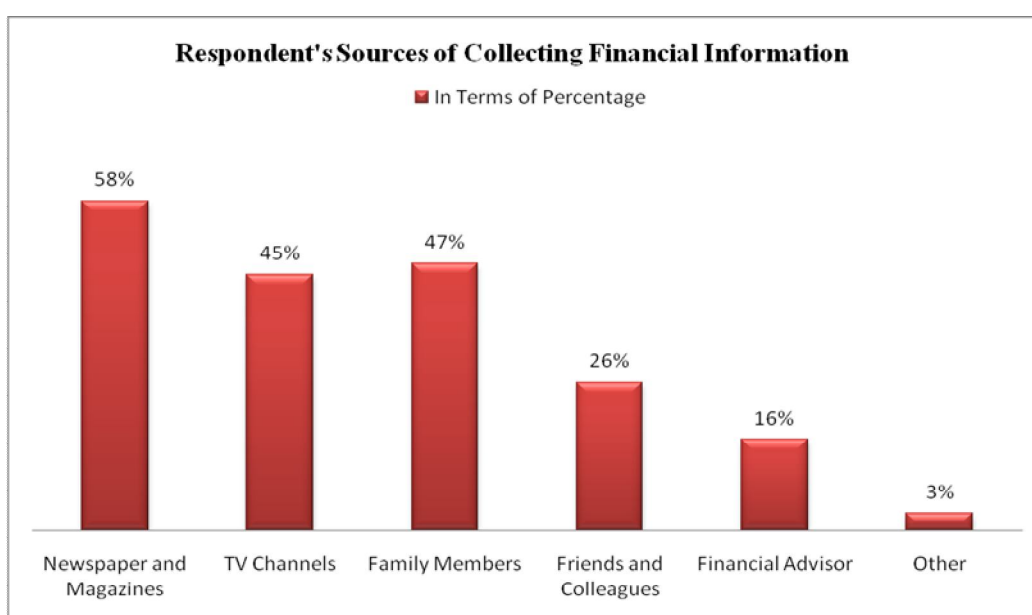
(Figure 5.11: Before Any major expenditure installments should be completed)

When respondents have been asked that, one should first take care of payment of installments on borrowings and committed investments requirements for future before going for any form of major expenditure for the month. 30% of the respondents were strongly agreed and 58% of the respondents were agree to the above said statement. Only 3% were disagreeing to this.

#### Respondent's Sources of Collecting Financial Information

Respondent's Sources	In Terms of Percentage	Total
Newspaper and Magazines	58%	584
TV Channels	45%	450
Family Members	47%	472
Friends and Colleagues	26%	264
Financial Advisor	16%	158
Other	3%	34

(Table- 5.32: Respondent's Sources of Collecting Financial Information)



(Figure 5.12: Respondent's Sources of Collecting Financial Information)

When respondents have been asked the sources of collecting financial information, 58% respondents have told that they collect the information from newspaper and magazines. 45%, 47% collect the information from TV channels and family members respectively. 26% and 16% respondents have reported that they take the help of their friends and colleagues and financial advisor respectively. In the above questions respondents could select multiple options for collecting the financial information.

#### Sources for collecting the Financial Information

Q19.1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	439	43.1	43.1	43.1
	1	579	56.9	56.9	100.0
	Total	1018	100.0	100.0	

(Table 5.33: Financial information collection from Newspaper)

43% of the respondents are not collecting the financial information from newspaper and 57% of the respondents are collecting the information from newspaper. Most of the respondents are reading newspaper and they can read all information related to financial products.

Q19.2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	572	56.2	56.2	56.2
	1	446	43.8	43.8	100.0
	Total	1018	100.0	100.0	

(Table 5.34: Financial information collection from TV)

56% of the respondents are not collecting the information from TV channels and 44% of the respondents are collecting the information from TV Channels. Very few channels are there who gives the information about the financial products.

Q19.3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	550	54.0	54.0	54.0
	1	468	46.0	46.0	100.0
	Total	1018	100.0	100.0	

(Table 5.35: Financial information collection from Family members)

46% of the respondents are collecting the financial information from family members. Family members can give the best suggestion.

Q19.4					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	757	74.4	74.4	74.4
	1	261	25.6	25.6	100.0
	Total	1018	100.0	100.0	

(Table 5.36: Financial information collection from Friends &amp; Colleagues)

As per the given table, friends are colleagues are not playing very important role in collecting the information for financial products. Only 26% are respondents, who are being affected by friends and colleagues.

19.5					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	864	84.9	84.9	84.9
	1	154	15.1	15.1	100.0
	Total	1018	100.0	100.0	

(Table 5.37: Financial information collection from Financial Advisor)

There are very few respondents who are consulting from financial advisors for collecting the financial information. 85% of the respondents are not taking any advice from financial advisors.

#### Relationship (Correlation coefficient) of FACT 1 to FACT 5 with Sources of Collecting Financial Information

Sources of Collecting Financial Information	FACT 1 (Financial awareness)	FACT 2 (Adopting fin knowledge practices)	FACT 3 (Knowledge of banking savings & investments)	FACT 4 (Financial Capability)	FACT 5 (Interest in fin literacy)
@19.1 Newspaper and Magazines	.058	.0111**	.158**	.166**	.074*

@ 19.2 TV Channels	.002	.017	<b>.077*</b>	<b>.074*</b>	.008
@ 19.3 Family Members	.030	.000	<b>.091**</b>	<b>.091**</b>	.035
@ 19.4 Friends and Colleagues	.002	-.011	<b>.103**</b>	<b>.107**</b>	.015
@ 19.5 Financial Advisors	-.017	-.025	.014	-.025	.014

Table 5.38: Relationship of FACT 1 to FACT 5 with Sources of Collecting Financial Information

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

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

**Note:** @ These are dummy variables. 1 means a person is collecting financial information from a particular source and 0 means a person is not collecting financial information from a particular source.

Above table shows that **news paper** is the biggest source for collecting the financial information and students are adopting financial knowledge from newspaper. Students in India highly believe in newspaper for financial information. They are collecting the knowledge of banking savings and investments from newspaper. The students, who are taking the information from newspaper, their financial capability is also very high and they are taking interest in financial literacy as well. It shows that all the factors are highly correlated with the source newspaper.

**TV** is another source for collecting the information but it is not very effective. Banking savings and investments are correlated with the TV. It means students are collecting the information from TV about banking savings and investments. Their financial capability is also statistically significant. It shows that TV is not very reliable source for collecting the financial information as compare newspaper.

Table shows that financial awareness of the students is not correlated with the **family members**. It means, if members of the family are having good knowledge about the financial products, it is not giving the guarantee of having the financial awareness of the students. Whereas knowledge of banking savings and investments are good of those students, who are collecting the information from family members and their financial capability is also high.

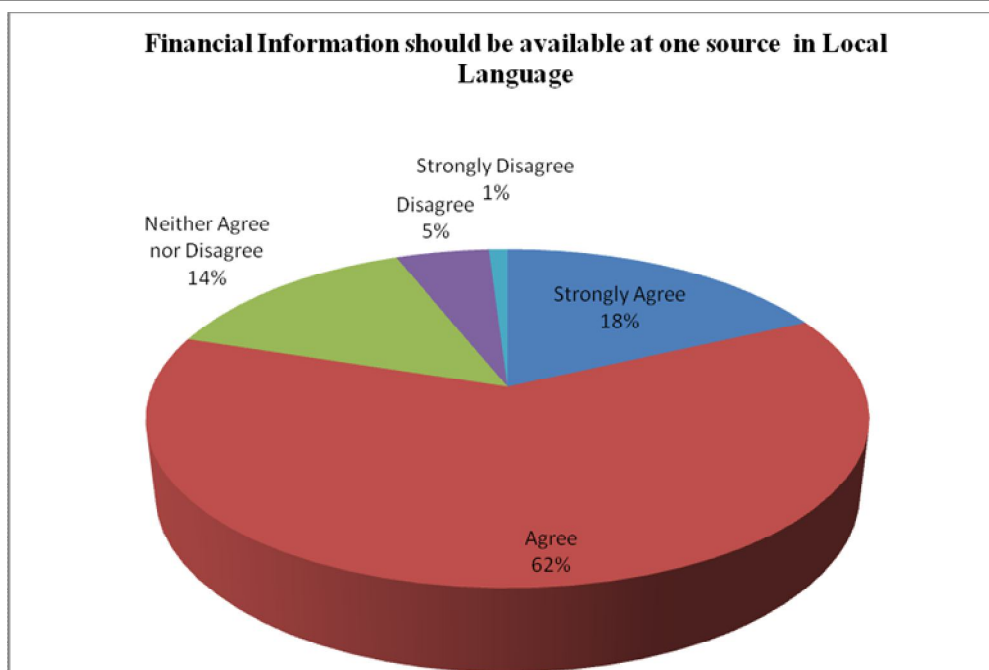
**Friends and colleagues** play very important role in India. Indian students have emotional bonding with their friends and colleagues. Students in India collect the information about banking savings and investments and their financial capability is also very high. It means friends and colleagues are impacting their financial capability whereas financial awareness is not correlated with friends and colleagues.

**Financial advisors** are those professionals who give the advice to the people, who want to invest their money in the market. Result shows that students are not collecting the information from financial advisors. They never consult with the financial advisors for their savings and investments. No factor is correlated with the collection of information. Financial advisors are not playing major role in India for advising about the financial products.

**Relevant information on Personal finance and financial planning for college/ universities students should be available at one source, preferably in local language**

Financial Information should be available in college	In Percentage Terms	Total
Strongly Agree	18%	187
Agree	62%	636
Neither Agree nor Disagree	14%	139
Disagree	5%	48
Strongly Disagree	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.39: Financial information should be available at one source in local language)



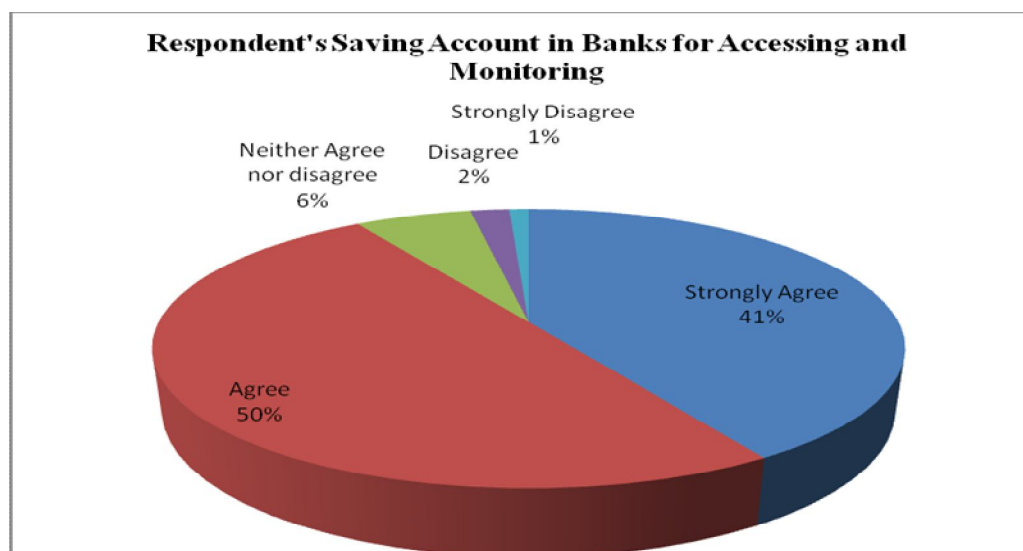
(Figure 5.13: Financial information should be available at one source in local language)

When respondents have been asked, whether relevant information on personal finance and financial planning for college/universities students should be available in local language as we know that there are many languages in India. 18% respondents are strongly agree and 62% are agree for having information in college/universities, so that they can learn about financial planning.

#### Respondent's saving account in Banks for accessing and monitoring

Saving account in bank	In Percentage Terms	Total
Strongly Agree	41%	426
Agree	50%	501
Neither Agree nor disagree	6%	59
Disagree	2%	23
Strongly Disagree	1%	9
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.40: Respondent's saving account in Banks for accessing & monitoring)



(Figure 5.14: Respondent's saving account in Banks for accessing & monitoring)

When respondents have been asked should they have saving account in bank's for accessing and monitoring? 41% are strongly agree and 50% are agree that they should have account whereas 6% are neutral for accessing and monitoring the account. Only 2% are disagree to this statement.

**Test of Hypotheses**

**Null Hypothesis-** Gender of Management and Engineering student does not affect in having saving accounts for accessing and monitoring.

**Alternative Hypothesis-** Gender of Management and Engineering student does not affect in having saving accounts for accessing and monitoring.

Total number of male  $n_1 = 727$ ,

Total number of female  $n_2 = 291$

Total no. of male who (agree+ strongly agree) who are having saving accounts = 657

Total no. of female who (agree+ strongly agree) who are having saving accounts = 265

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{(n_1 + n_2)}$$

$$p = 0.91$$

$$q = (1 - p), \quad q = 0.09$$

$$pq = 0.09$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$z = -0.3558$$

Since, computed value of  $z = -0.356$  is less than the critical value of  $z$  (1.96 at 5% level), therefore, we accept the null hypothesis. So, it can be concluded that gender of management and engineering student does not affect in having saving accounts for easy access and monitoring.

**Researcher tried to look from course perspective also-**

**Null Hypothesis-** Management and Engineering course does not affect in participating in financial decision in the family.

**Alternative Hypothesis-** Management and Engineering course affects in participating in financial decision in the family.

Total number of management students  $n_1 = 509$ ,

Total number of engineering students  $n_2 = 509$

Total number of management students who (agree+ strongly agree) who are having saving accounts = 460

Total number of engineering students who (agree+ strongly agree) who are having saving accounts = 462

$$p = \frac{(n_1 \cdot p_1) + (n_2 \cdot p_2)}{(n_1 + n_2)}$$

$$p = 0.91$$

$$q = (1 - p), \quad q = 0.09$$

$$pq = 0.09$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

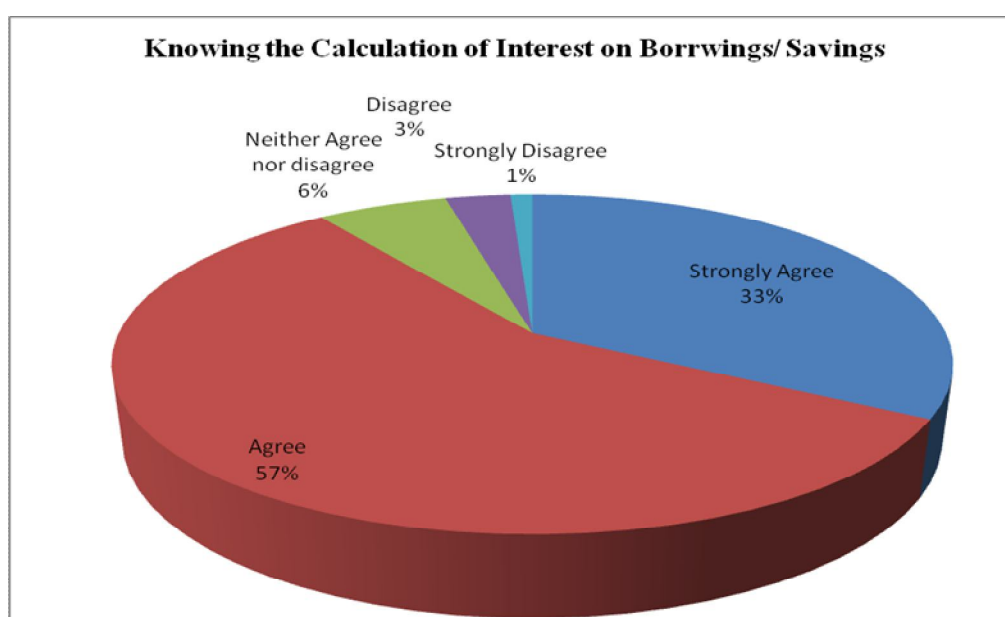
$$z = -0.2131$$

Since, computed value of  $z = -0.21$  is less than the critical value of  $z$  (1.96 at 5% level), therefore, we accept the null hypothesis and it can be concluded that course of management and engineering student does not affect in having saving accounts for easy access and monitoring.

#### Knowing the calculation of Interest on Borrowings and Savings

Knowing the calculations on borrowings and savings	In Percentage Terms	Total
Strongly Agree	33%	340
Agree	57%	580
Neither Agree nor disagree	6%	60
Disagree	3%	30
Strongly Disagree	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.41: Knowing the calculation of Interest on Borrowings & Savings)



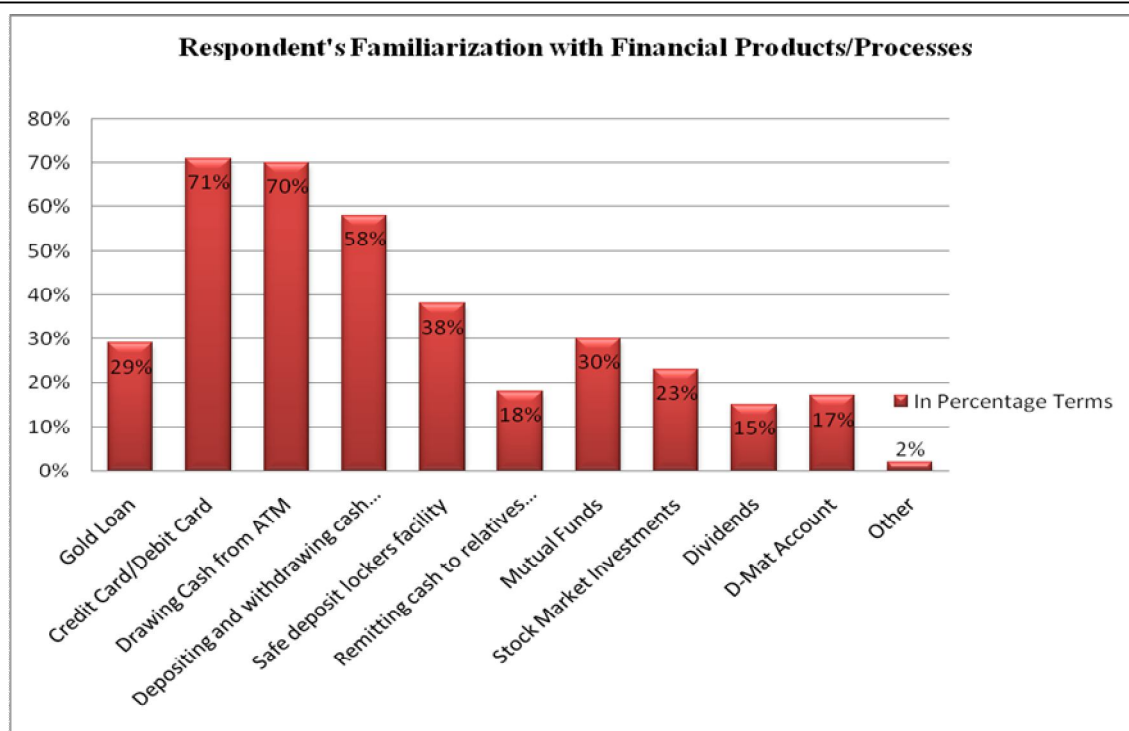
(Figure 5.15: Knowing the calculation of Interest on Borrowings and Savings)

It is very important to know the calculation procedure of interest on borrowings or savings for the respondents. When it has been asked from the respondents, 33% respondents were strongly agree and 57% were agree. Only 3% were disagreed to the above statement.

Respondent's Familiarization with Financial Products/Processes		
Respondent's Familiarize with	In Percentage Terms	Total
Gold Loan	29%	296
Credit Card/Debit Card	71%	720
Drawing Cash from ATM	70%	711
Depositing and withdrawing cash from bank's savings account	58%	591
Safe deposit lockers facility	38%	389
Remitting cash to relatives through bank	18%	188
Mutual Funds	30%	308
Stock Market Investments	23%	234
Dividends	15%	148
D-Mat Account	17%	169
Other	2%	23

(Table 5.42: Respondent's Familiarization with Financial Products/Processes)





(Figure 5.16: Respondent's Familiarization with Financial Products/Processes)

Which of the following financial products/ processes you are familiar with? When it has been asked from the respondents mostly people 71% and 70% knew about debit/credit card and ATM machine respectively as a financial product. 58% respondents knew depositing and withdrawing the amount. Only 15% and 17% respondents knew about dividends and D-Mat Account respectively.

#### Familiarity of a person with financial products

Q23.1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	720	70.7	70.7	70.7
	1	298	29.3	29.3	100.0
	Total	1018	100.0	100.0	

(Table 5.43: Familiarity with Gold Loan)

29% of the people are familiar with Gold loan whereas 71% of the people are not familiar with gold loan. The concept of gold loan is new in India. Women of India do not believe in taking the loan from gold.

Q23.2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	289	28.4	28.4	28.4
	1	729	71.6	71.6	100.0
	Total	1018	100.0	100.0	

(Table 5.44: Familiarity with Debit/Credit card)

72% of the people know about debit/credit card. The trend of using debit/ credit card is increasing day by day. People in small town are also using debit/credit card as it is decreasing the theft of money as well. Only 29% of the people are not aware about debit/ credit cards.

**Q23.3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	304	29.9	29.9	29.9
	1	714	70.1	70.1	100.0
	Total	1018	100.0	100.0	

(Table 5.45: Familiarity with cash withdrawn from ATM)

70% of the people knows about the financial product which is cash withdrawn from ATM. Cash is withdrawn from ATM as the trend of using debit/credit card is increasing, so people are aware about the ATM. Only 30% of the people are not aware about ATM.

**Q23.4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	480	47.2	47.2	47.2
	1	538	52.8	52.8	100.0
	Total	1018	100.0	100.0	

(Table 5.46: Familiarity with deposit and withdraw cash from Bank's Savings Account)

53% of the people know about the deposit and withdraw cash from bank's savings account. Most of the students have saving accounts in bank but 47% of the people do not have knowledge about the saving accounts.

**Q23.5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	635	62.4	62.4	62.4
	1	383	37.6	37.6	100.0
	Total	1018	100.0	100.0	

(Table 5.47: Familiarity with safe deposit lockers)

62% of the people do not have knowledge about safe deposit lockers. Only 38% of the students have knowledge about the deposit lockers.

**Q23.6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	832	81.7	81.7	81.7
	1	186	18.3	18.3	100.0
	Total	1018	100.0	100.0	

(Table 5.48: Familiarity with remitting cash to relatives through bank)

82% of the students do have knowledge about remitting cash to relatives through bank. This term is new to the students. Only 18% of the students know about this particular financial product.

**Q23.7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	716	70.3	70.3	70.3
	1	302	29.7	29.7	100.0
	Total	1018	100.0	100.0	

(Table 5.49: Familiarity with Mutual Funds)

Mutual Funds is very common for the investments but very few (30%) students this whereas 70% do not about this financial product.

Q23.8					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	787	77.3	77.3	77.3
	1	231	22.7	22.7	100.0
	Total	1018	100.0	100.0	

(Table 5.50: Familiarity with Stock Market Investments)

77% of the students do not have knowledge about Stock Market Investments. Stock is depending on the market situation. Accordingly a person will get the return from market. Only 23% of the students have knowledge about stock market investments.

Q23.9					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	872	85.7	85.7	85.7
	1	146	14.3	14.3	100.0
	Total	1018	100.0	100.0	

(Table 5.51: Familiarity with Dividends)

Dividends are known by 14% of the students. 86% of the students do not have any knowledge about the dividends.

Q23.10					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	850	83.5	83.5	83.5
	1	168	16.5	16.5	100.0
	Total	1018	100.0	100.0	

(Table 5.52: Familiarity with D-Mat Account)

D Mat Account is known by 16.5% of the students whereas 83.5% do not know about the D-Mat account. D-Mat account is generally created by those people who invest in stock/shares of the companies or mutual funds. That can be the reason, students not having knowledge about D-Mat account.

#### Relationship (Correlation coefficient) of FACT 1 to FACT 5 with Familiarity with the Financial Product by the Respondent

Familiarity with the Financial Product	FACT 1 (Financial awareness)	FACT 2 (Adopting fin knowledge practices)	FACT 3 (Knowledge of banking savings & investments)	FACT 4 (Financial Capability)	FACT 5 (Interest in fin literacy)
@23.1 Gold Loan	.011	-.050	<b>.094**</b>	<b>.103**</b>	.061
@23.2 Credit card/ Debit Card	<b>.098**</b>	-.037	<b>.166**</b>	<b>.189**</b>	<b>.069*</b>
@23.3 Drawing Cash from ATM	-.010	.002	<b>.214**</b>	<b>.161**</b>	<b>.095**</b>

@23.4 Depositing and withdrawing cash from bank's savings account	.009	-.030	<b>.174**</b>	<b>.157**</b>	<b>.062*</b>
@23.5 Safe deposit lockers facility	.048	-.014	<b>.176**</b>	<b>.193**</b>	<b>.128**</b>
@23.6 Remitting cash to relatives through bank	.045	.012	<b>.0127**</b>	<b>.138**</b>	<b>.075*</b>
@23.7 Mutual Funds	.008	-.018	<b>.094**</b>	<b>.087**</b>	<b>.043</b>
@23.8 Stock Market Investments	.036	-.019	<b>.111**</b>	<b>.097**</b>	<b>.075*</b>
@23.9 Dividends	.053	-.57	<b>.115**</b>	<b>.124**</b>	.050
@23.10 D-Mat Account	.042	-.043	<b>.099**</b>	<b>.133**</b>	<b>.070*</b>

Table 5.53: Relationship of FACT 1 to FACT 5 with Familiarity with the Financial Product by the Respondent

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

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

**Note:** @ These are dummy variables. 1 means a person is having knowledge about a particular financial product. 0 means he do not have knowledge about that financial product.

**Financial Awareness of Gold loan** is very poor of the students as it is not statistically significant whereas very few students are adopting this knowledge into this practice. It means very few students know about the Gold loan. Result shows that students have strong knowledge about gold loan for the purpose of savings and investments in banks. Those who are familiar with gold loan, their financial capability are also strong. Result shows that it is statistically significant. But students do not have interest in financial literacy.

Financial Awareness of **credit card/ debit card** is very high. It means, most of the students know about the financial product i.e. credit card/debit card. Students are not able to adopt this product as financial practice. But students know saving and investment options of credit/debit card. The students who are familiar with credit card/ debit card their financial capability is also strong.

**Drawing cash from ATM-** financial awareness of this product is also very poor among the students. Most of the students are adopting this product for saving and investment purpose and their financial capability is also very high of those students, who have knowledge about cash withdrawn from ATM. They have interest in financial literacy.

Financial awareness of those students is not statistically significant, who are familiar with **depositing and withdrawing cash from bank's savings account**. It means students are not aware financially and their financial knowledge is not very good. But they know the banking saving and investment options and their financial capability is also very strong. Table shows that students who are familiar with this financial product, they have interest in financial literacy.

**Safe deposit lockers-** Very few students are familiar this financial product. Financial knowledge is very poor of those students who are familiar with this financial product. Students who are familiar with this product, they know the savings and investment options related to this product. Their financial capability and their interest in financial literacy are also very high.

**Remitting cash to relatives through bank-** Very few students are familiar this financial product. Financial awareness and financial knowledge of those students is very poor, who are familiar with this financial product. Students who are familiar with this product, they know the savings and investment options related to this product. Their financial capability and their interest in financial literacy are also very high.

Financial awareness and financial knowledge of those students are very poor who are familiar with the financial product- **Mutual Funds**. Results shows that students have knowledge about the savings and investment options of mutual funds and their financial capability are also strong. But they do not have interest in financial literacy.

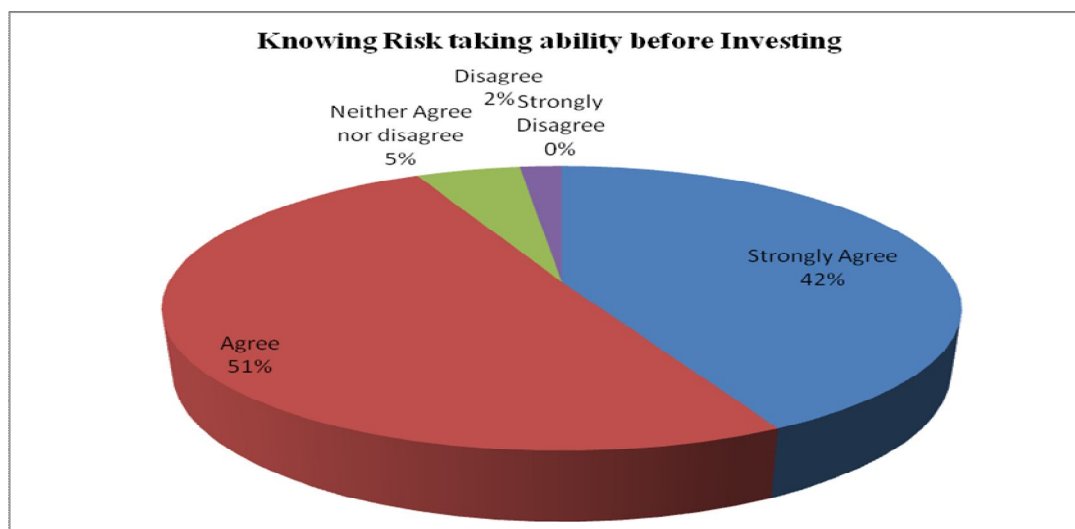
**Stock Market Investments**- financial awareness and financial knowledge of those students are weak, those who are familiar with this financial product. It can be interpreted from the above table students have knowledge about the savings and investment options of stock market. Their financial capability is also strong and they have interest in financial literacy.

**Dividends and D-MAT Account**- students do not have financial awareness and financial knowledge, those who are familiar with Dividends and D-MAT account. Table shows that students are having knowledge about banking savings and investment options and their financial capability are also very high. Students who are aware with the D-MAT Account, they have interest in financial literacy as well.

**Before Investing one should know his/her Risk taking Ability**

Risk Taking Ability	In Percentage Terms	Total
Strongly Agree	42%	426
Agree	50%	514
Neither Agree nor disagree	6%	55
Disagree	2%	21
Strongly Disagree	0%	2
Total	100%	1018

(Table 5.54: Before Investing one should know his/her Risk taking Ability)



(Figure 5.17: Before Investing one should know his/her Risk taking Ability)

One should know is/her risk taking ability before investing, so 42% of the respondents were strongly agree and 50% were agree to the statement. Only 2% are respondents were disagreeing to the statement.

**One should know Risks and Rewards of each Investment Carefully.**

Investment should start early	In Percentage Terms	Total
Strongly Agree	37%	378
Agree	54%	550
Neither Agree nor disagree	6%	57
Disagree	2%	21
Strongly Disagree	1%	12
Total	100%	1018

(Table 5.55: One should know Risks and Rewards of each Investment Carefully)

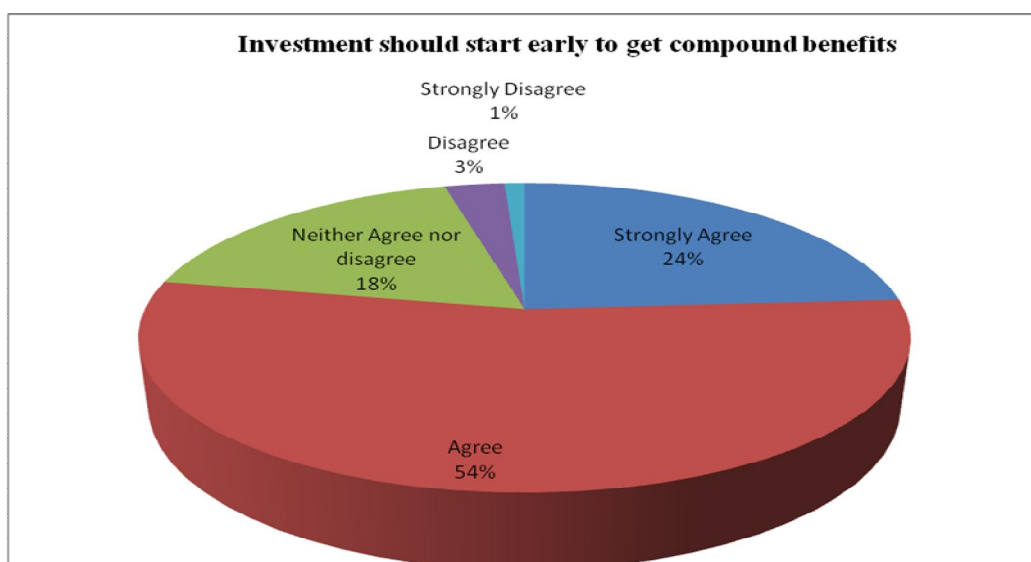


(Figure 5.18: One should know Risks and Rewards of each Investment Carefully)

**Investment should start early to get compound benefits**

Investment should start early	In Percentage Terms	Total
Strongly Agree	24%	240
Agree	54%	557
Neither Agree nor disagree	18%	180
Disagree	3%	33
Strongly Disagree	1%	8
Total	100%	1018

(Table 5.56: Investment should start early to get compound benefits)



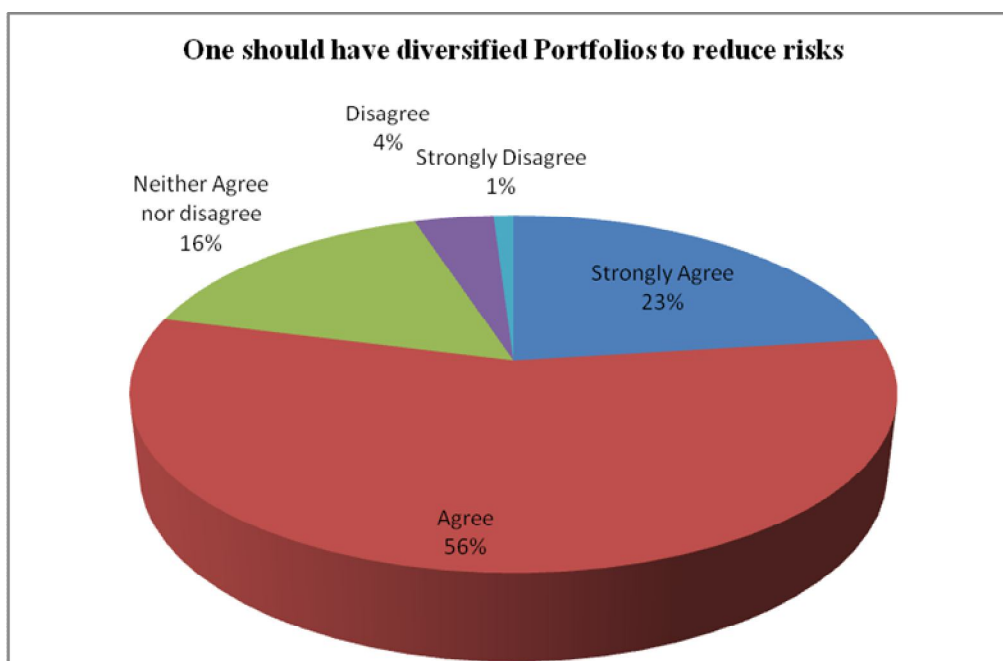
(Figure 5.19: Investment should start early to get compound benefits)

One should start investing early to get the benefits of compounding, when this question has been asked from the respondents 24% respondents are strongly agree and 54% respondents were agree to the statement. Respondents were agreed to that they should start their investment since their early age. Only 3% respondents were disagreeing to start their investment in their early stage of the life.

**A Person should have Diversified Portfolio to Reduce Risks**

<b>Diversified Portfolio</b>	<b>In Percentage Terms</b>	<b>Total</b>
Strongly Agree	23%	234
Agree	56%	568
Neither Agree nor disagree	16%	167
Disagree	4%	42
Strongly Disagree	1%	7
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.57: A Person should have Diversified Portfolio to Reduce Risks)

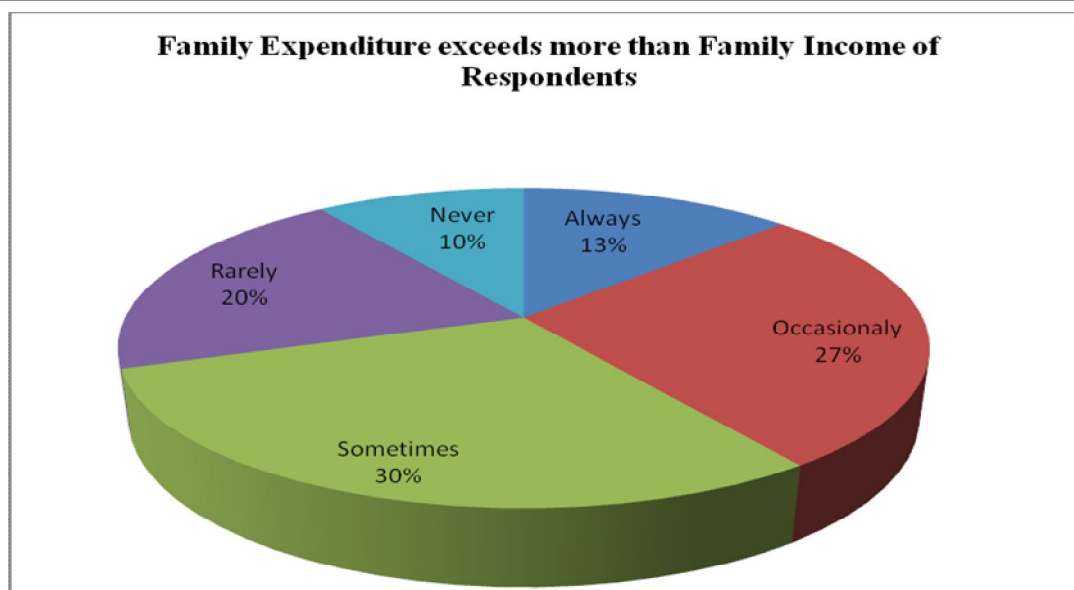


(Figure 5.20: A Person should have Diversified Portfolio to Reduce Risks)

One should have a diversified investment portfolio in order to reduce risks, when this question has been asked from the respondents. In response to that, 23% respondents were strongly agreed and 56% respondents were agreed. People should invest in different portfolios to minimize the risk so that they can have minimum losses. It can be possible that one should is not getting benefit from one portfolio but he/she can get the benefit from other portfolio. Only 4% were disagreeing that they should not invest in diverse portfolio.

<b>Family Expenditure exceeds more than Family Income of Respondent's</b>		
<b>Expenditure exceeds than Income</b>	<b>In Percentage Terms</b>	<b>Total</b>
Always	13%	133
Occasionally	27%	275
Sometimes	30%	304
Rarely	20%	208
Never	10%	98
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.58: Family Expenditure exceeds more than Family Income of Respondents')

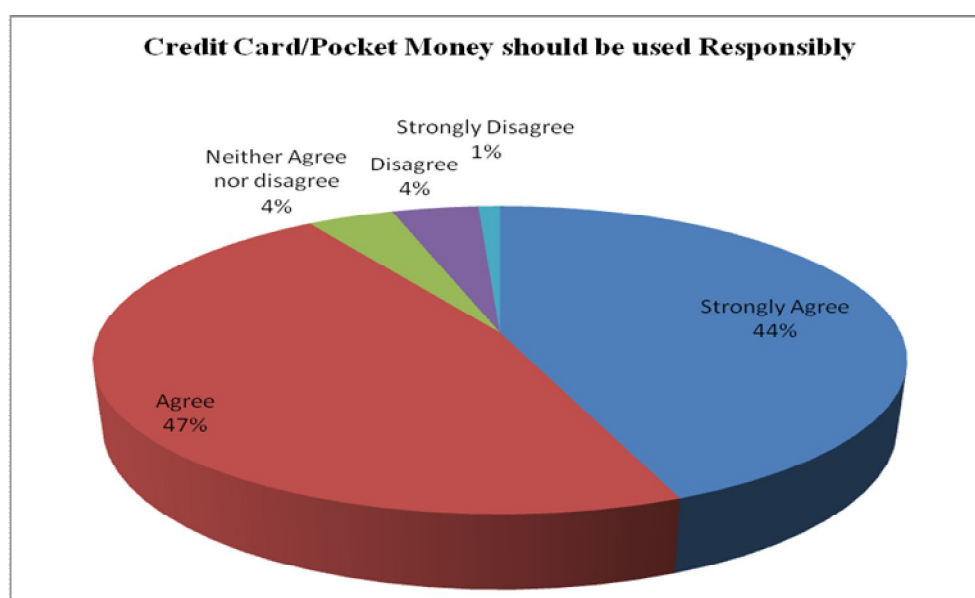


(Figure 5.21: Family Expenditure exceeds more than Family Income)

When respondents has been asked does your family exceeds the expenditure more than family income of respondents, only 13% of the respondents have reported that their family expenditure always exceeds more than family income. 27% and 30% have reported occasionally and sometimes respectively. Only 10% of the respondents were sure that their family expenditure does not increase more than family income. The situation is very dangerous in our country. It shows that people are not saving enough to complete their expenditures.

Credit Card/Pocket Money should be used Responsibly		
Responsible usage of Credit Card/Pocket Money	In Terms of Percentage	Total
Strongly Agree	44%	448
Agree	47%	477
Neither Agree nor disagree	4%	44
Disagree	4%	42
Strongly Disagree	1%	7
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.59: Credit Card/Pocket Money should be used responsibly)



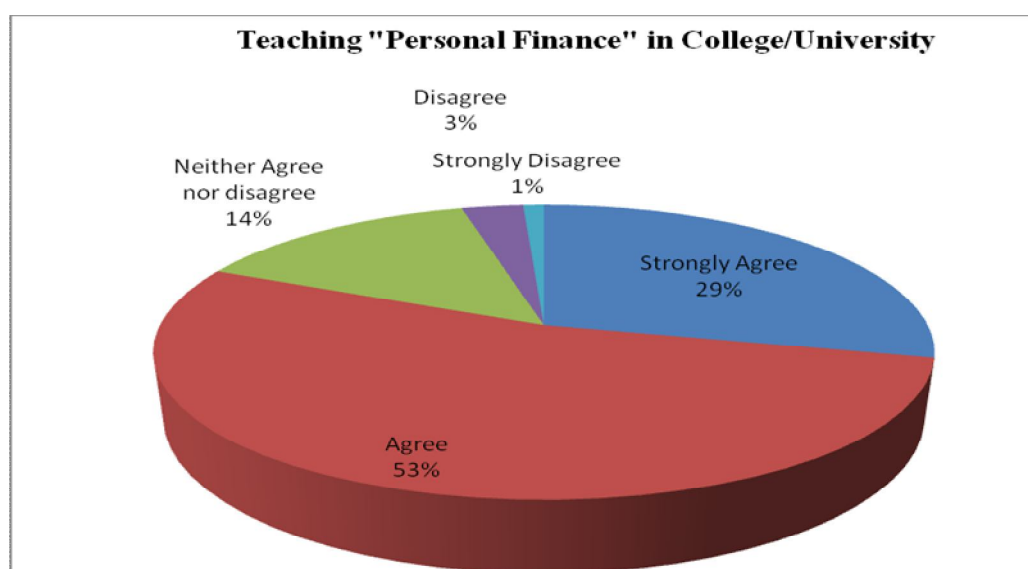
(Figure 5.22: Credit Card/Pocket Money should be used responsibly)



Respondents have been asked do u agree, one should use their credit card/pocket money should be responsibly? 44% and 47% of the respondents were strongly agreed and agreed to the statement. Means more than 80% of the respondents were agreed that one should use credit card/ pocket money responsibly. While purchasing from the credit card one do not realize that how much he/she has spent. When it comes to the repayment, that time it is being realized by the person. Mostly student use their pocket money for the basic needs. They do not think about investment or saving which can be started from the early stage and their saving habits will be improved. If a person knows how to use their credit card/ pocket money, he/she can take better financial decisions in his/her life.

<b>"Personal Finance" should be taught in College/Universities</b>		
<b>Teaching Personal Finance in College/University</b>	<b>In Percentage Terms</b>	<b>Total</b>
Strongly Agree	29%	295
Agree	53%	539
Neither Agree nor disagree	14%	141
Disagree	3%	35
Strongly Disagree	1%	8
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.60: "Personal Finance" should be taught in College/Universities)

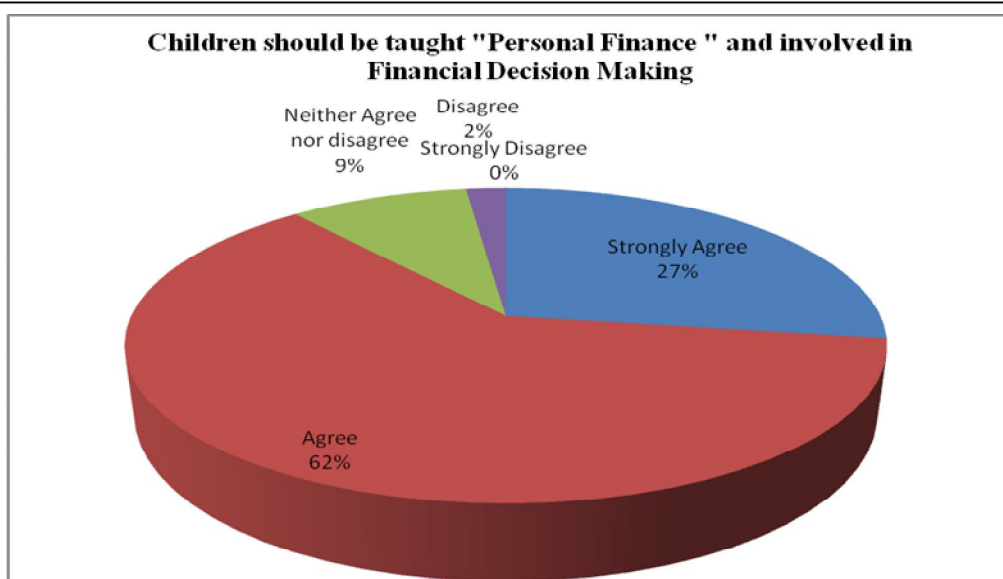


(Figure 5.23: "Personal Finance" should be taught in College/Universities)

When respondents have been asked, personal finance should be taught in college/university or not? More than 80% of the respondents were agreed to teach the subject in college/ universities. Only 4% of the respondents were not in the favor to teach the personal finance in college/ university.

<b>Teaching Personal Finance to the children by parents and involve them in Financial Decision Making</b>		
<b>Teaching Personal finance and involve them in Financial Decision Making</b>	<b>In Percentage Terms</b>	<b>Total</b>
Strongly Agree	27%	274
Agree	62%	632
Neither Agree nor disagree	9%	93
Disagree	2%	16
Strongly Disagree	0%	3
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.61: Teaching Personal Finance to the children by Parents & involve them in Financial Decision Making)

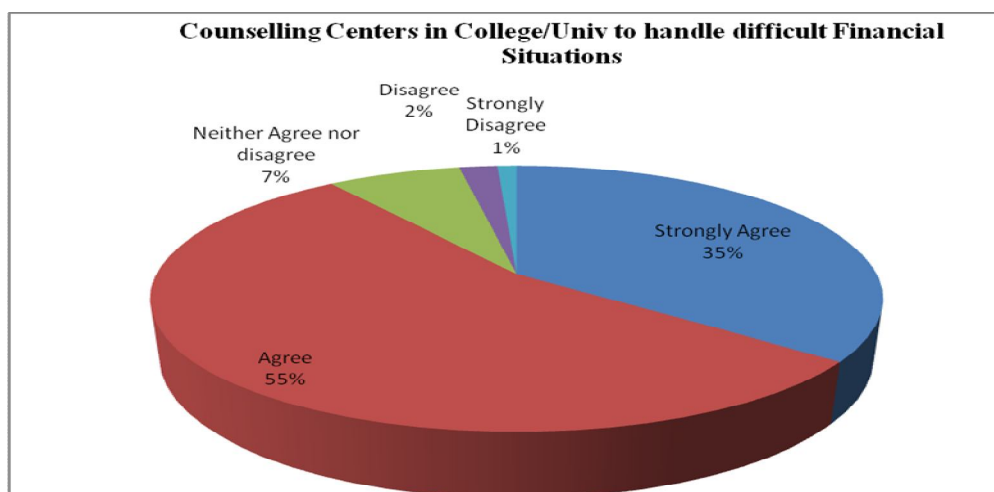


(Figure 5.24: Teaching Personal Finance to the children by Parents & Involve them in Financial Decision Making)

When respondents have been asked “Parents should teach basics of personal finance to children and involve them in major financial decisions making in the family”? Around 80% of the respondents were agreed to the statement yes, children should be taught by the parents and they should be involved in the financial decision making. If children will help their parents in taking the financial decision, gradually they will also understand how and what decision should be taken in a particular situation. It will be practical exposure to the children which will help them later on in their life and they will be able to take better decision for their family. 2% of the respondents were disagreed to the above statement. It is a good sign of the improvement in the society.

<b>Counseling centers' should be set up in College/Universities to handle Financial Situations</b>		
<b>Counseling centers In College/University</b>	<b>In Percentage Terms</b>	<b>Total</b>
Strongly Agree	35%	352
Agree	55%	560
Neither Agree nor disagree	7%	76
Disagree	2%	21
Strongly Disagree	1%	9
<b>Total</b>	<b>100%</b>	<b>1018</b>

(Table 5.62: Counseling centers' should be set up in College/Universities to handle Financial Situations)



(Figure 5.25: Counseling centers' should be set up in College/Universities to handle Financial Situations )

College/ Universities play very important role in student's life as they can develop the basic understanding of subject. 90% of the respondents were agreed to have counseling centers in college/ universities. Counseling centers can help the students to solve their financial problem if they have any. They can help them to know where to invest, how to invest and what can be the best option for them to save their pocket money. Only 3% of the students were not agreed to the above statement.

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CHAPTER - 6

**A SURVEY OF PARENTS FOR  
IMPROVING FINANCIAL CAPABILITY –  
SURVEY, ANALYSIS & INTERPRETAION**

***“Sometimes if you have financial restraints, it’s a benefit. It forces you to come up with a more creative way”***

***-Robert De Niro***

## 6.1 Introduction

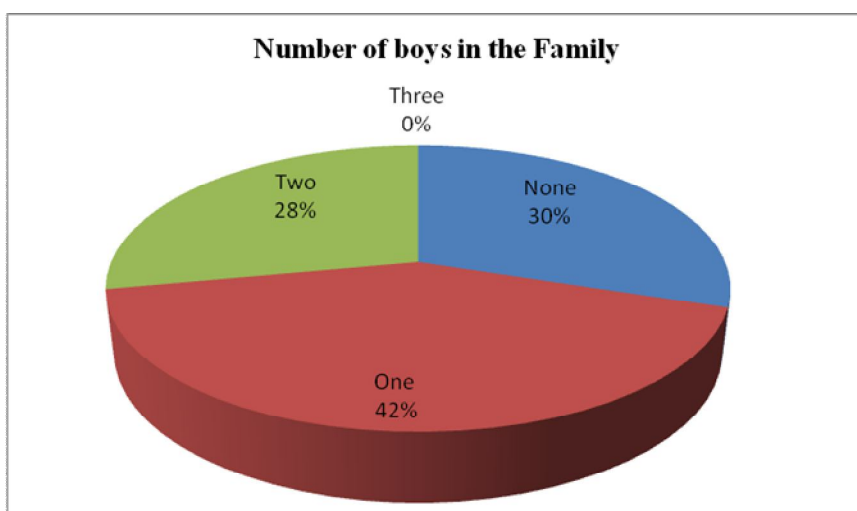
One more questionnaire has been formulated for Parents/ Teachers/ Educational Administrator/ Social Reformers/ Policy Makers. A simple random survey has been conducted and the questionnaire has been given to 60 respondents through email. 50 respondents have responded to the questionnaire. Questionnaire has been divided into three subcategories. First category is the respondents personal information of the respondents, second category is the perception based questions of the respondents and last category of the respondent is situation based questions.

## 6.2 Findings of Survey and its Interpretations

**Number of Boys in the Family**

No. of Boys	In Terms of Percentage	Total
None	30%	15
One	42%	21
Two	28%	14
Three	0%	0
Four and above	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.1: Number of Boys in the Family)



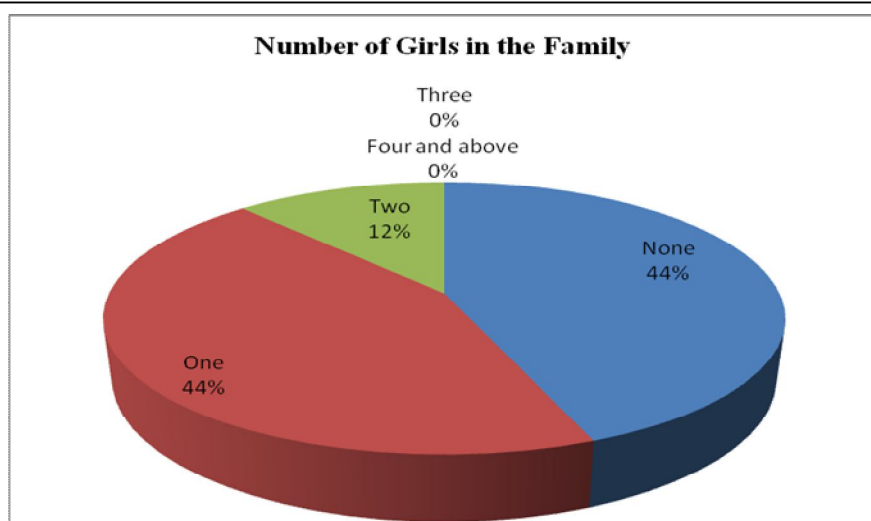
(Figure 6.1: Number of Boys in the Family)

When respondent have been asked how many boys are there in the family? 42% of the respondents have reported that they have one boy and 28% have reported that they have two boys are there in the family. 30% of the respondents have reported that do not have any boy child in the family.

**Number of Girls in the Family**

No. of Girls	In Terms of Percentage	Total
None	44%	22
One	44%	22
Two	12%	6
Three	0%	0
Four and above	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.2: Number of Girls in the Family)



(Figure 6.2: Number of Girls in the Family)

When respondents have been asked how many girls are there in the family? 44% of the respondents have one girl child and 12% of the respondents have two girls. 44% of the respondents have no girl child in the family. It has been observed that number of girls is very less as compare to boys in India and the situation can be seen in professional courses where very few number of girls are studying.

### 6.3 Analysis and Interpretation of Perception Based Questions:

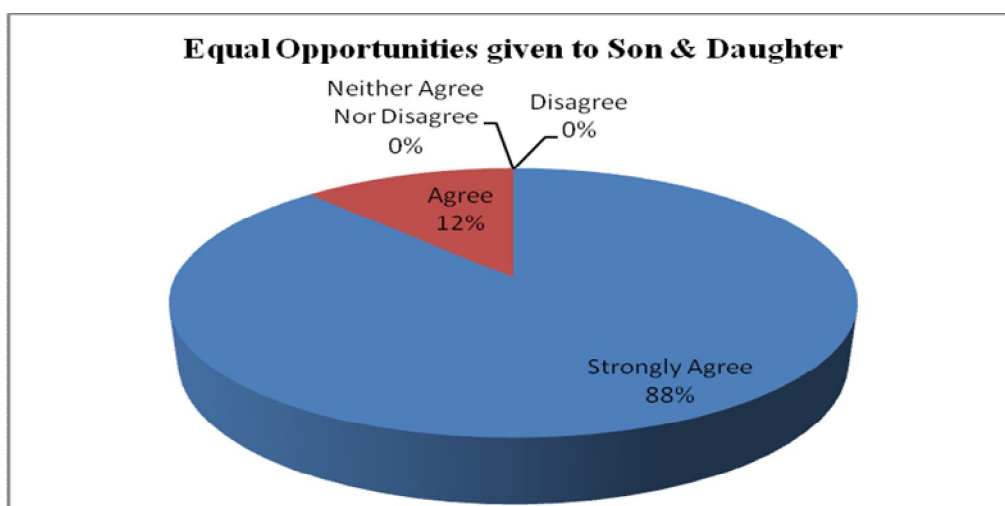
Few questions have been asked from the respondents which was perception based. In these questions they had to respond what they feel about a particular situation.

Q1. In a family both sons and daughters should be treated equally, enjoy similar privileges and be provided equal opportunities.

#### Equal opportunities given to both Son and Daughter

Equal opportunities given to Son & Daughter	In terms of Percentage	Total
Strongly Agree	88%	44
Agree	12%	6
Neither Agree Nor Disagree	0%	0
Disagree	0%	0
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.3: Equal opportunities given to both Son and Daughter)



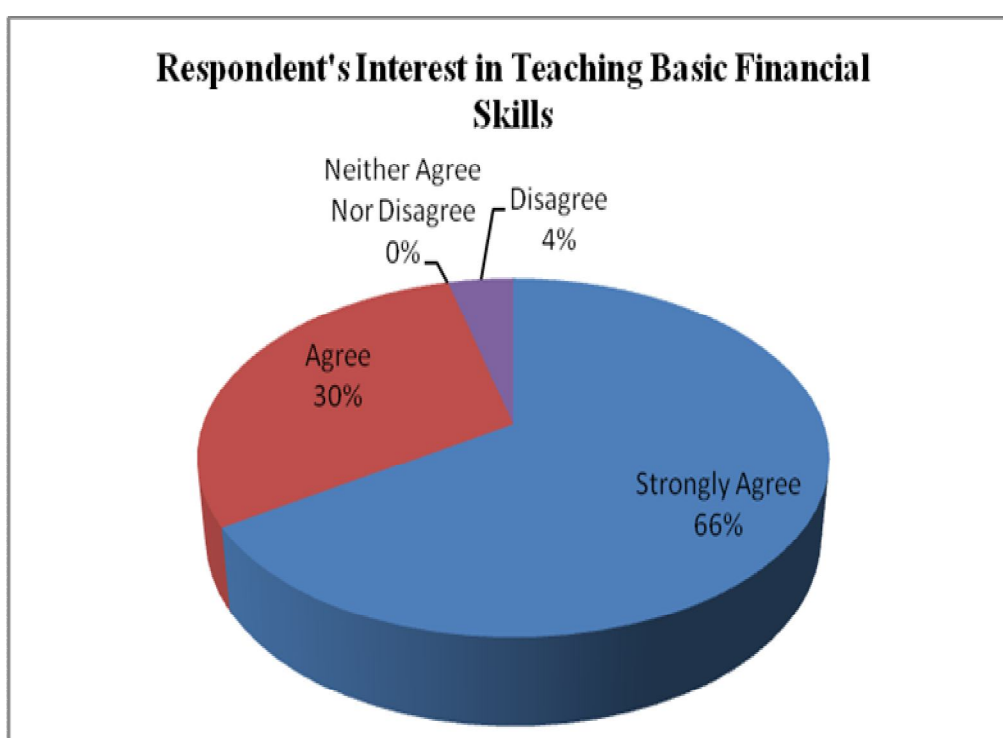
(Figure 6.3: Equal opportunities given to both Son and Daughter)

When respondents have been asked what they think about giving the equal opportunities to both sons and daughters, should they be treated equally and enjoy similar privileges? 88% of the respondents have reported that they were strongly agreed to the above statement and 12% were agreed to that. No respondent disagreed to the above statement.

#### Respondents take Interest in Teaching Basic Financials Skills

Interest in teaching Financial Skills	In Terms of Percentage	Total
Strongly Agree	66%	33
Agree	30%	15
Neither Agree Nor Disagree	0%	0
Disagree	4%	2
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.4: Respondents take Interest in Teaching Basic Financials Skills)



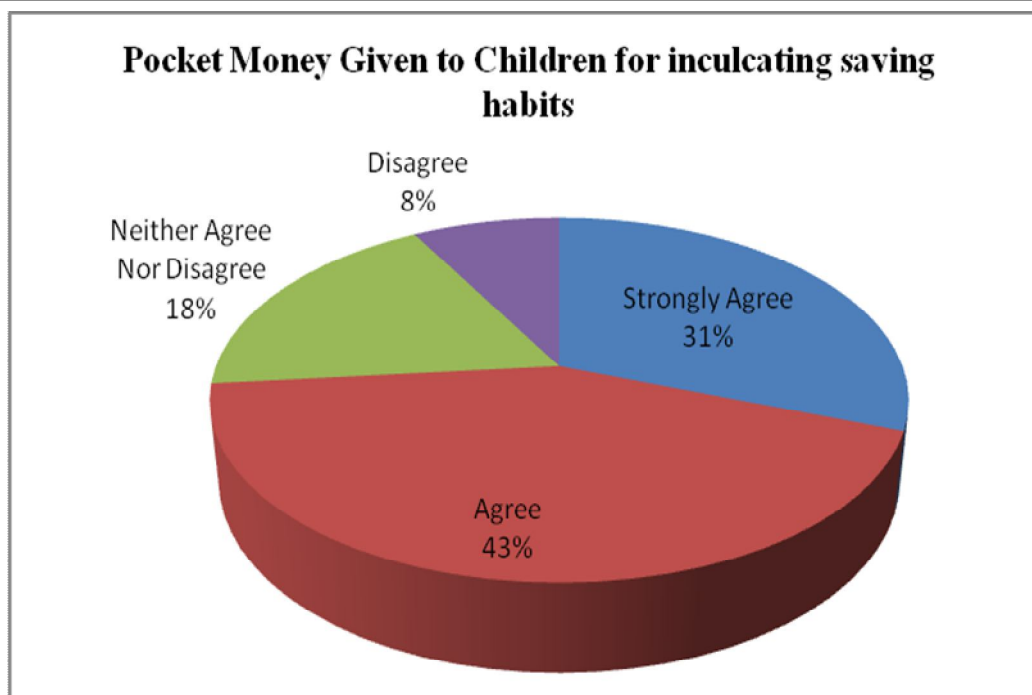
(Figure 6.4: Respondents take Interest in Teaching Basic Financials Skills)

Should parents take enough care and interest to teach basic financial dealings to their sons and daughters during their formative years? 66% of the respondents have reported that they strongly agree to the above statement and 30% of the respondents agreed to the above statement. Only 4% of the respondents were disagreed to the above statement.

#### Pocket Money given to School going Children to inculcate the saving habits

Pocket money for inculcating saving habits	In Terms of Percentage	Total
Strongly Agree	30%	15
Agree	42%	21
Neither Agree Nor Disagree	18%	9
Disagree	8%	4
Strongly Disagree	2%	1
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.5: Pocket Money given to School going Children to inculcate the saving habits)



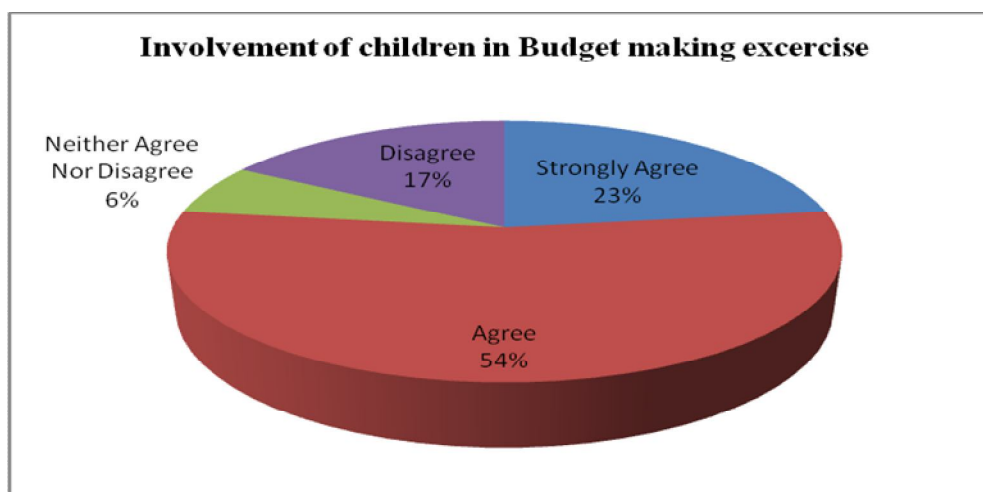
(Figure 6.5: Pocket Money given to School going Children to inculcate the saving Habits)

Should parents consider giving a token amount of pocket money to school going children in order to inculcate in them good saving and spending habits? 30% of the respondents strongly agreed and 42% of the respondents agreed to the above statement. 18% of the respondents were neither agree nor disagree, means they are neutral to the above statement. Only 8% of the respondents were disagreed, it means these respondents did not want to give pocket money to inculcate saving habits among the children.

#### Involvement of Children in Monthly Budget Exercise

Involvement of children in budget making exercise	In Terms of Percentage	Total
Strongly Agree	22%	11
Agree	52%	26
Neither Agree Nor Disagree	6%	3
Disagree	16%	8
Strongly Disagree	4%	2
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.6: Involvement of Children in Monthly Budget Exercise)



(Figure 6.6: Involvement of Children in Monthly Budget Exercise)

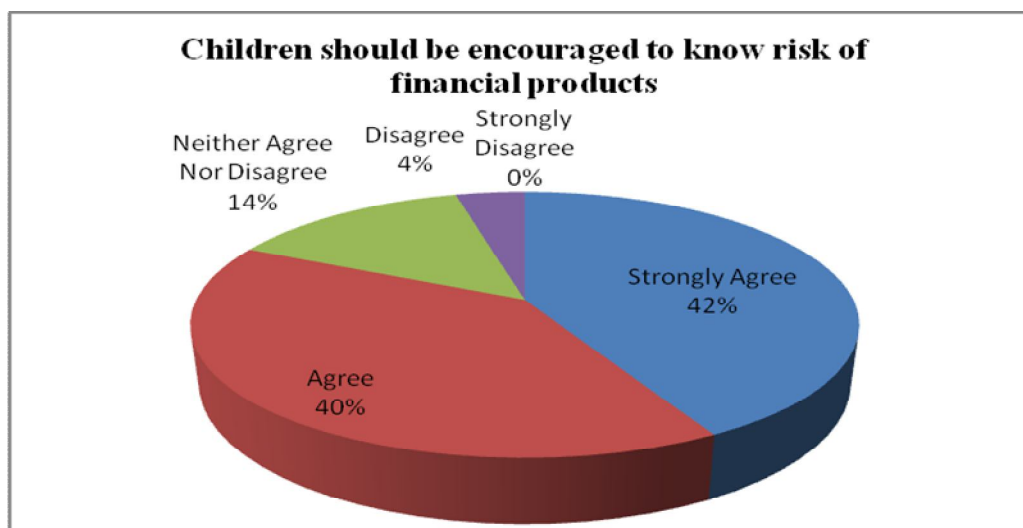


When respondents have been asked whether parents should involve children, both sons and daughters in monthly family budgeting exercises? 22% of the respondents strongly agreed and 52% of the respondents were agreed to the statement. Respondents have accepted that children should be involved in monthly budgeting exercise, so that they can learn how limited amount of money can be utilized to complete all the expenses of his/her family.

#### Children should be encouraged to know the Risk of Financial Products

Risk of financial products should be known	In Terms of Percentage	Total
Strongly Agree	42%	21
Agree	40%	20
Neither Agree Nor Disagree	14%	7
Disagree	4%	2
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.7: Children should be encouraged to know the Risk of Financial Products)



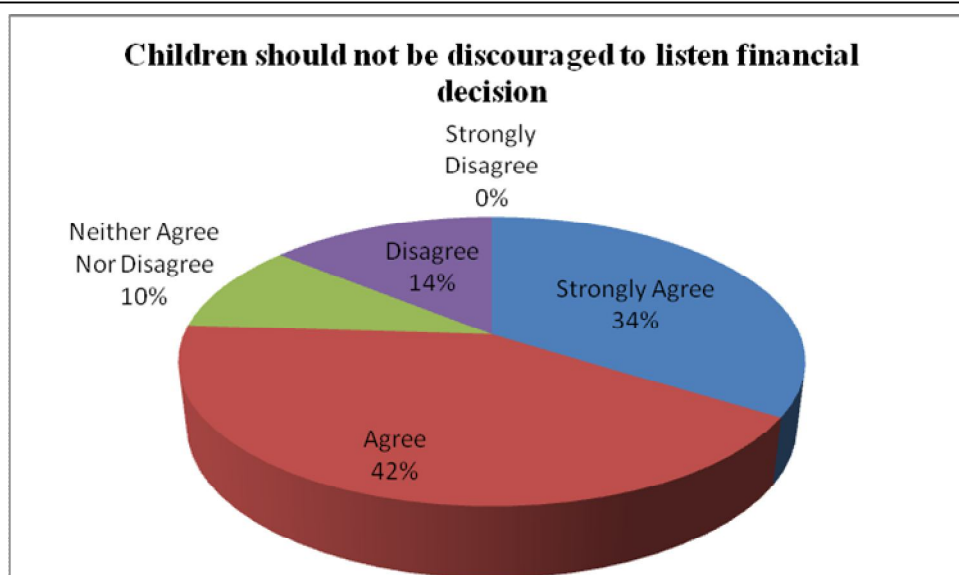
(Figure 6.7: Children should be encouraged to know the Risk of Financial Products)

Should parents encourage their children to learn about various financial products, their advantages, utilities and risks involved in their dealings? When this question has been asked from the respondents, 42% of the respondents strongly agreed and 40% of the respondents were agree to the above statement. More than 80% of the respondents were agree that their children should learn about financial products, their advantage and risks. If children will know about the financial products since their early stage, they will be able to choose better financial products later on in their life. Only 4% of the respondents were disagreed, it means they didn't want their children to learn about the financial products, their advantages and risk involved in their dealings. Many experts have concluded that it is becoming very important for children to understand how to make financial decision in this competitive environment (Lucey and Cooter 2008; Lunt 1996; Lunt and Furnham 1996; Suiter and Meszaros 2005).

#### Children should not be discouraged to Listen Financial Decisions

Children should listen financial decision	In Terms of Percentage	Total
Strongly Agree	34%	17
Agree	42%	21
Neither Agree Nor Disagree	10%	5
Disagree	14%	7
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.8: Children should not be discouraged to listen Financial Decisions)



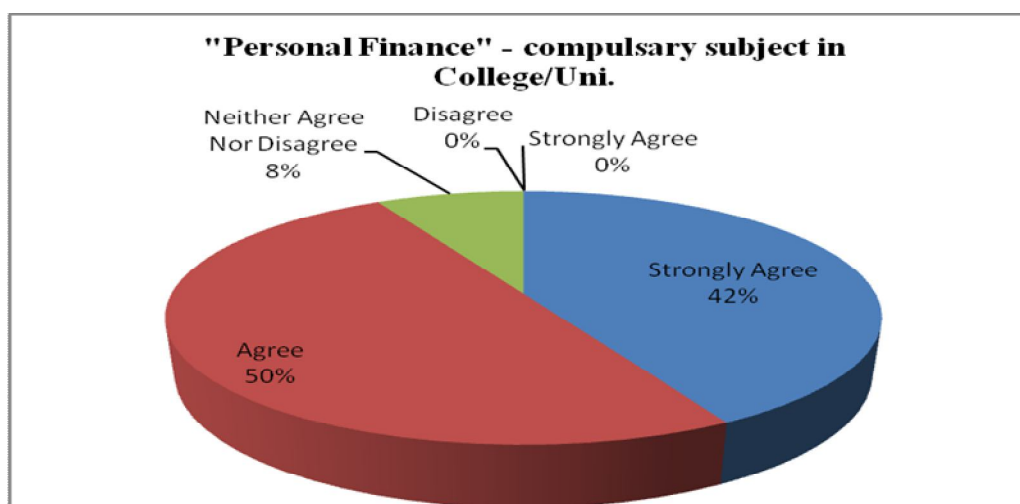
(Figure 6.8: Children should not be discouraged to listen Financial Decisions)

Parents should not discourage children to listen to major financial decisions taken in the family? When this question has been asked from the respondents, more than 75% of the respondents were agree, that they should not discourage their children to listen to major financial decision taken in the family. If a child will know about the financial decisions which are taken in the family, they can understand the problem which is faced by his/her parents and the solution of that problem which has been taken by his/her parents. That's how children can learn in a better manner and they will also take better decision in their life. 14% of the respondents were disagreed to the above statement; it means few parents do not want their children to listen financial decisions which are taken in the family.

**Personal finance should be compulsory at School/College/University**

Personal finance, a compulsory subject	In Terms of Percentage	Total
Strongly Agree	42%	21
Agree	50%	25
Neither Agree Nor Disagree	8%	4
Disagree	0%	0
Strongly Agree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.9: Personal finance should be compulsory at School/College/University)



(Figure 6.9: Personal finance should be compulsory at School/College/University)

Offering knowledge about basic financial products and lessons on personal finance should be made compulsory in schools and colleges / universities/ technical institutions. In response to this question, mostly respondents (92%) were in favour of providing knowledge about the financial products and lessons on personal finance in school/ college/ technical institutions. 8% of the respondents were not clear what should be done to improve the financial skills. It can be seen that mostly students study financial education at high school or college students, although most of the experts advice that financial education should begin as early as pre or primary school (Cohen and Xiao 1992; Godsted and McCormick 2006; Holden et. al.. 2009; Suiter and Meszaros 2005).

### Test of Hypothesis

For the purpose of proving hypothesis respondents have been divided into two categories i.e. teachers and non-teachers. The sample has been divided into two categories because very few respondents are belongs to other categories which are- an educational administrator, a policy maker, a social reformer and other.

**Null Hypothesis-** There is no difference between teachers and non-teachers in offering knowledge about basic financial products and lessons on personal finance should be made compulsory in schools and colleges / universities/ technical institutions.

**Alternative Hypothesis-** There is difference between teachers and non-teachers in offering knowledge about basic financial products and lessons on personal finance should be made compulsory in schools and colleges / universities/ technical institutions.

Total number of teacher n1= 20,

Total number of non-teacher n2= 30

Total number of teachers who (always+ sometimes) offering knowledge about basic financial products and lessons on personal finance =17

Total number of non-teachers who (always+ sometimes) offering knowledge about basic financial products and lessons on personal finance =27

$$p = \frac{[(n1 * p1) + (n2 * p2)]}{(n1 + n2)},$$

$$p = 0.88$$

$$q = (1 - p), \quad q = 0.12$$

$$pq = 0.11$$

$$z = \frac{(p1 - p2)}{\sqrt{pq \left( \frac{1}{n1} + \frac{1}{n2} \right)}}$$

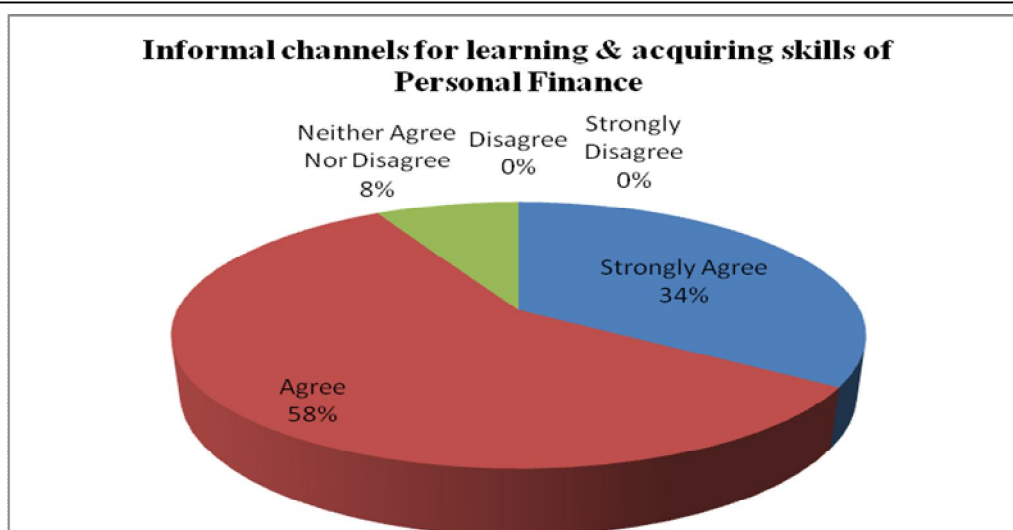
$$z = -0.5330$$

Since, computed value of z = -0.53 is less than the critical value of z (1.96 at 5% level), therefore, we accept the null hypothesis. So, it can be concluded that there is no difference between teachers and non-teachers in offering knowledge about basic financial products and lessons on personal finance. Both of teachers and non-teachers think that personal finance should be made compulsory in school and college/ universities/ technical institutions.

### Society should provide Informal Channels of Learning and Acquiring skills of Personal Finance

Informal channels for learning & acquiring skills of Personal finance	In Terms of Percentage	Total
Strongly Agree	34%	17
Agree	58%	29
Neither Agree Nor Disagree	8%	4
Disagree	0%	0
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.10: Society should provide Informal Channels of Learning and acquiring skills of Personal Finance)



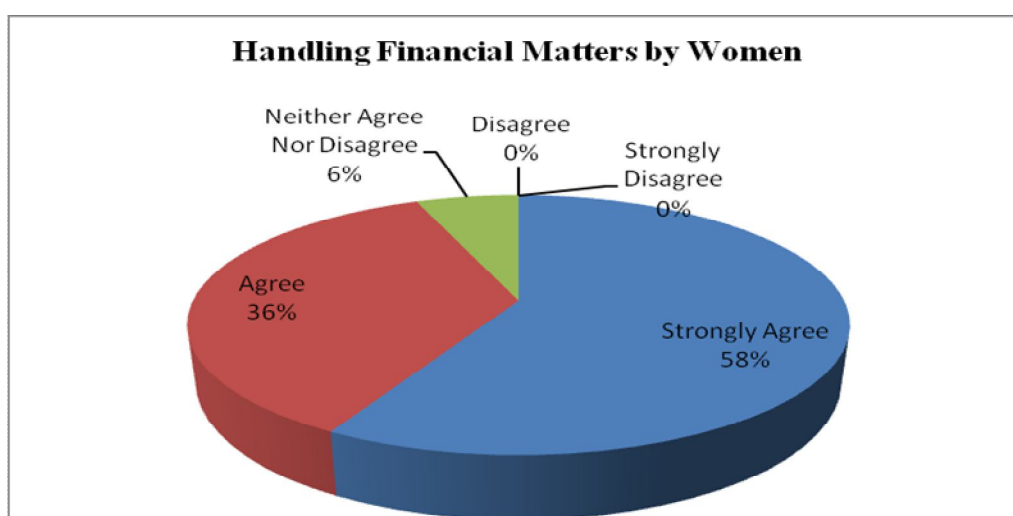
(Figure 6.10: Society should provide Informal Channels of Learning and acquiring skills of Personal Finance)

A decade ago very few researcher was interested in the topic of personal finances but now a days it has become very important topic for all the national regulators, international organizations, researchers and private institutions. Global financial crisis has increased the importance of financial knowledge and skills for consumers. **Lausardi and Mitchell (2012)** have suggested that individuals even in developed countries have difficult time understanding basic personal financial concepts. 34% of the respondents strongly agreed and 58% of the respondents were agreed that society should provide informal channels for learning and acquiring skills on personal finance. 8% of the respondents were neutral but no respondent was disagreed to the statement.

#### Women should be encouraged to handle Financial Matters in the Family

Handling financial matters by Women	In Terms of Percentage	Total
Strongly Agree	58%	29
Agree	36%	18
Neither Agree Nor Disagree	6%	3
Disagree	0%	0
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.11: Women should be encouraged to handle Financial Matters in the Family)



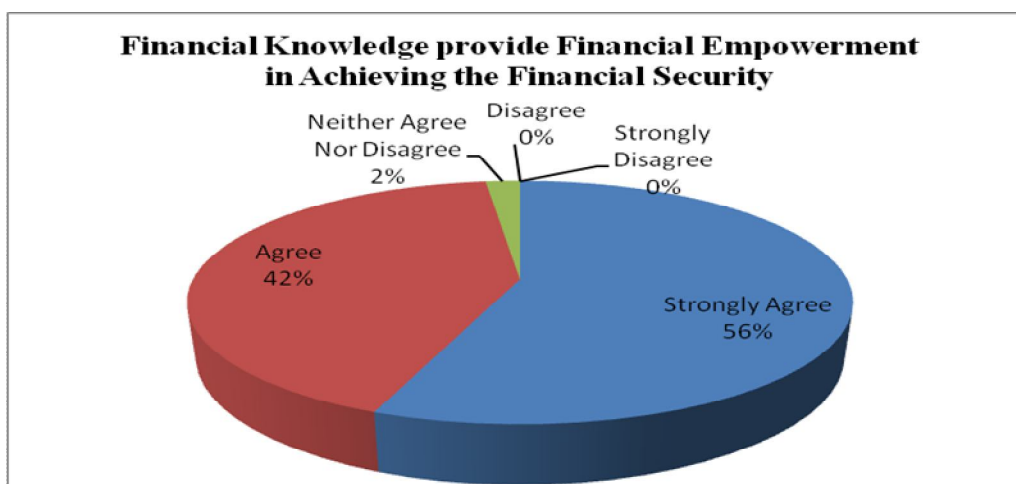
(Figure 6.11: Women should be encouraged to handle Financial Matters in the Family)

Should women in the family be encouraged to handle financial matters on their own and be involved in major financial decisions taken in the family? When this question has been asked from the respondents, 58% of the respondents were strongly agree and 38% of the respondents were agree that women should be encouraged handling financial matters in the family. 6% of the respondents were not clear. Experts have revealed that with high financial literacy, they did not find any difference in behaviour of between men and women. Financial literacy can improve credit card management and eliminate gender based difference in credit card behaviour (Garry R. Mottola, 2012).

#### Financial Knowledge provide Financial Empowerment in Achieving the Financial Security

Financial knowledge helps in achieving financial security	In Terms of Percentage	Total
Strongly Agree	56%	28
Agree	42%	21
Neither Agree Nor Disagree	2%	1
Disagree	0%	0
Strongly Disagree	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.12: Financial Knowledge provide Financial Empowerment in Achieving the Financial Security)



(Figure 6.12: Financial Knowledge provide Financial Empowerment in Achieving the Financial Security)

Knowledge and skills in dealing with financial matters provide financial empowerment and help in achieving financial security in life. When this question has been asked, most of the respondents were agreed. 56% of the respondents were strongly agreed and 42% of the respondents were agreed to the statement. Only 2% of the respondents were neutral. Mostly experts have revealed educational workshops, seminars and print media have very strong positive impact on the improvement of financial knowledge and skills. (Bayer et. al., 2009; Borden et. al., 2008; Fox et. al., 2005; Lusardi and Mitchell., 2007; Peng et. al., 2007). Financial knowledge and skills are helping the students to manage their financial according to their resources. Financial knowledge helps to understand better utilization of money. They can take better financial plan for their future.

#### 6.4 Analysis and Interpretation of Situation Based Questions:

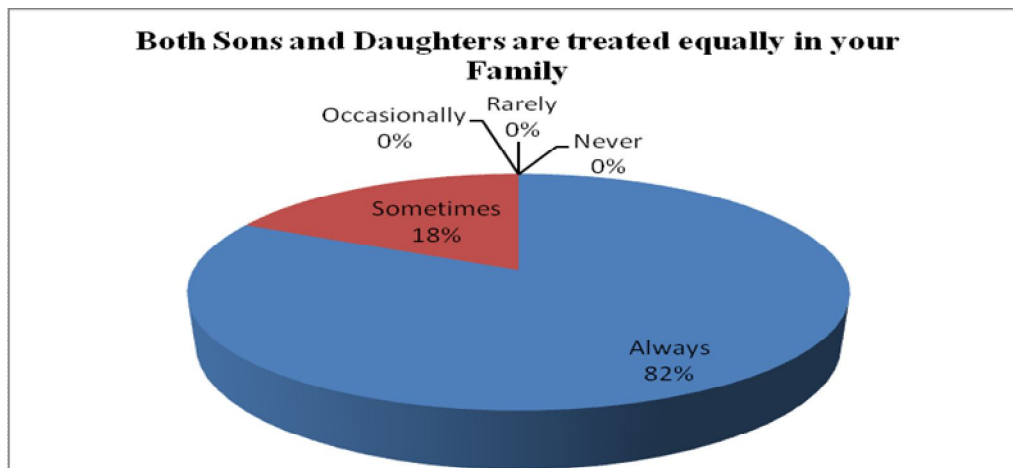
Third phase of the questionnaire is situational based. Here respondents have to tell what is the situation at present? Five options have been given to the respondents in this section- always, sometimes, occasionally, rarely and never.

#### Both Son and Daughter are treated equally in Family

Equal treatment of Son & Daughter	In Terms of Percentage	Total
Always	82%	41
Sometimes	18%	9
Occasionally	0%	0

Rarely	0%	0
Never	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.13: Both Son and Daughter are treated equally in Family)



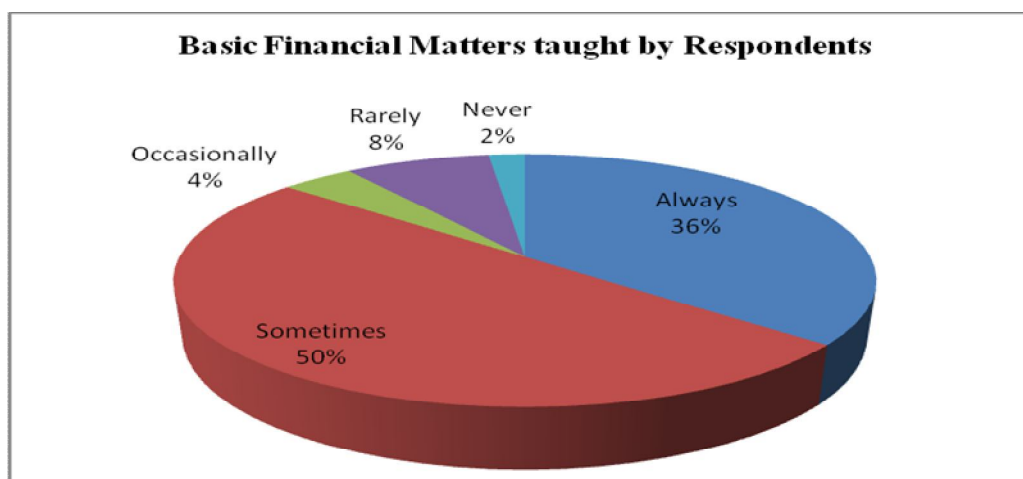
(Figure 6.13: Both Son and Daughter are treated equally in Family)

In your family do you treat your sons and daughters equally and provide them equal opportunities and privileges? When this question has been asked from respondents most of the respondents (82%) have responded that, yes they treat their son and daughter equally and provide them equal opportunities and privileges. Earlier boys used to get better opportunities in Indian society but now the mindset of people are changing. It has been proved from various studies that girls have strong education aspiration and they outperform then boys. (OECD Week, 2012). Recently in India, especially government is also encouraging the parents to send their girl child in school.

#### Basic Financial Matters taught by Respondents

Basic Financial Matters taught	In Terms of Percentage	Total
Always	36%	18
Sometimes	50%	25
Occasionally	4%	2
Rarely	8%	4
Never	2%	1
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.14: Basic Financial Matters taught by Respondents)



(Figure 6.14: Basic Financial Matters taught by Respondents)

National Council on Economic Education's Report (**NCEE 2005**) have shown widespread lack of basic economic and financial concepts among high school students, same has been confirmed by the JumpStart Coalition for Personal Financial Literacy (**Mandell, 2008**).

Do you take interest to teach basic financial matters to your children? When this question has been asked from the respondents 36% of the respondents have responded that they always teach basic financial matters to their children 50% of the respondents used to teach sometimes and 8% teaches rarely. Only 2% of the respondents never taught their children about the basic financial matters.

### Test of Hypothesis

**Null Hypothesis-** There is no difference between teachers and non-teachers in desirability of teaching financial matters to children.

**Alternative Hypothesis-** There is difference between teachers and non-teachers in desirability of teaching financial matters to children.

Total number of teacher  $n_1 = 20$ ,

Total number of non-teacher  $n_2 = 30$

Total number of teachers who (always+ sometimes) desirability of teaching financial matters to children = 15

Total number of non-teachers who (always+ sometimes) desirability in teaching financial matters to children = 27

$$p = [(n_1 * p_1) + (n_2 * p_2)]$$

$$(n_1 + n_2), \quad p = 0.84$$

$$q = (1 - p), \quad q = 0.16$$

$$pq = 0.13$$

$$z = \frac{(p_1 - p_2)}{\sqrt{pq \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$z = -1.4174$$

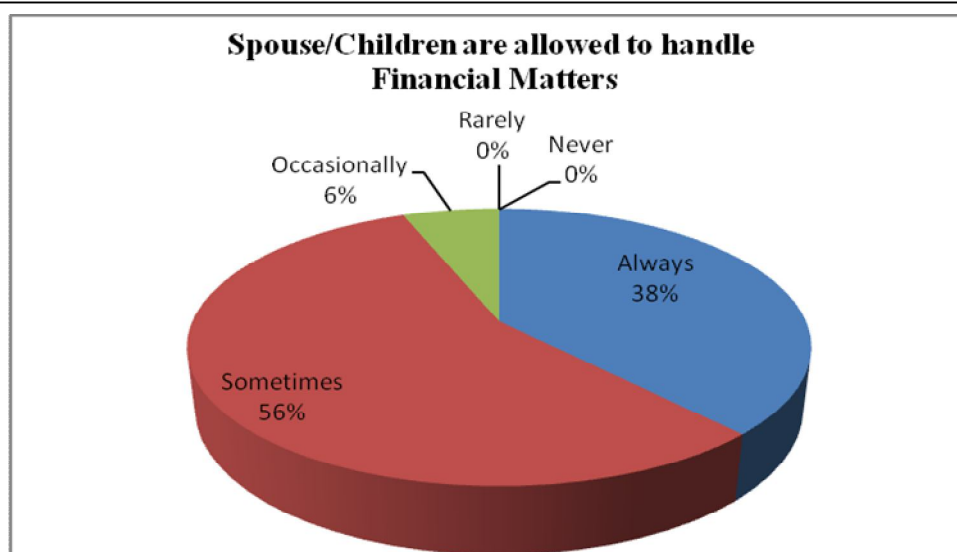
Since, computed value of  $z = -1.42$  is less than the critical value of  $z$  (1.96 at 5% level), therefore, we accept the null hypothesis. So, it can be concluded that there is no difference between teachers and non-teachers in desirability of teaching financial matters to children. It means, all parents want to teach about financial matters to their children equally.

### Spouse/Children are allowed to handle Financial Matters

Financial Matters should be handled by Spouse/Children	In Terms of Percentage	Total
Always	38%	19
Sometimes	56%	28
Occasionally	6%	3
Rarely	0%	0
Never	0%	0
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.15: Spouse/Children are allowed to handle Financial Matters)





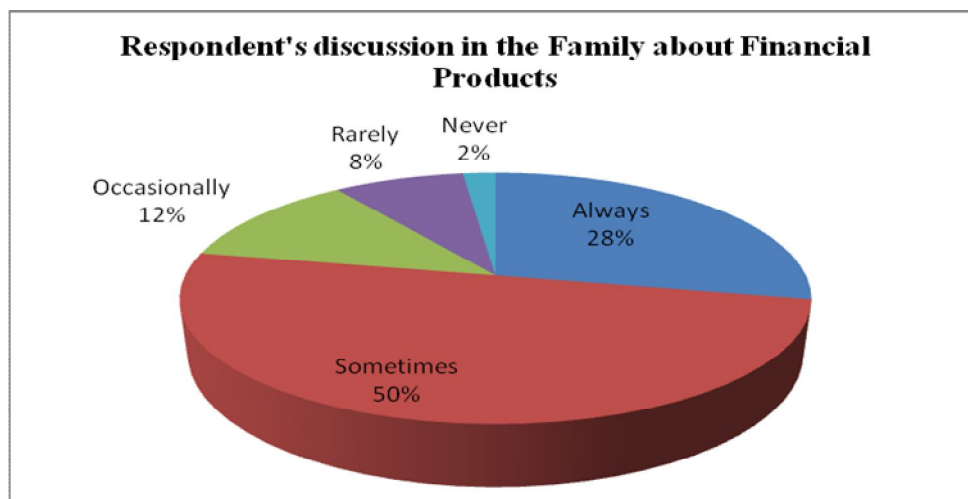
(Figure 6.15: Spouse/Children are allowed to handle Financial Matters)

Indian Society is a male dominating society. Here most of the financial decisions are taken by the male member of the family as they considered the head of the family. From the above statement, it has been tried to find out is still the situation same in amongst the educated people. The question has been asked from the respondents, do you allow your spouse and / or children to handle financial matters in the family. 38% of the respondents have responded they always allow their spouse/ children to handle financial matters of the family. 56% have responded they allow sometimes and 6% have responded they allow occasionally. Nobody has responded that they never consult with their spouse/children before investing somewhere. It shows that, the situation is changing in the society. Male members are giving the importance to their spouse taking the decision after discussion with them.

#### Respondent's discussion in the Family about Financial Products

Respondents discussion in family	In Terms of Percentage	Total
Always	28%	14
Sometimes	50%	25
Occasionally	12%	6
Rarely	8%	4
Never	2%	1
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.16: Respondent's discussion in the Family about Financial Products)



(Figure 6.16: Respondent's discussion in the



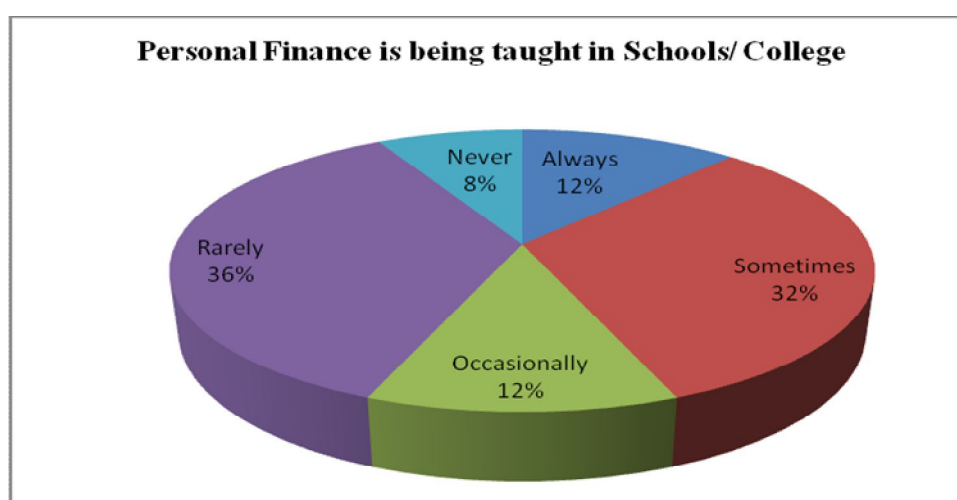
### Family about Financial Products)

How often you discuss about the financial products, their risk and return attributes in family discussions? When this question has been asked from the respondents, similar kind of responses have been received as we got in previous question. 28% of the respondents have responded that they always discuss the financial matters, their risk in their family whereas 50% were discussing sometimes, 13% occasionally. Only 2% of the respondents never discuss about their financial products and their risk.

### Personal Finance is being taught in Schools/ College

Personal finance in School/College	In Terms of Percentage	Total
Always	12%	6
Sometimes	32%	16
Occasionally	12%	6
Rarely	36%	18
Never	8%	4
<b>Total</b>	<b>100%</b>	<b>50</b>

(Table 6.17: Personal Finance is being taught in Schools/ College)



(Figure 6.17: Personal Finance is being taught in Schools/ College)

How often you notice personal finance is being taught in schools and colleges? When this question has been asked from the respondents, mix kind of responses has been received. Only 8% have responded that they notice that personal finance is being taught in school/college. 33% have reported sometimes, 38% have reported rarely and 8% have reported that they never notice that personal finance is being taught in school/college. As we know that management of personal finance is very important for every individual.

Recent changes in the market has made personal finance very important where the usage of credit card has been increased and it has been resulted that people are spending more as compare to savings. Borrowing habits of Indian people are also increasing day by day to have luxurious life.

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CHAPTER - 7

# **FINANCIAL CAPABILITY SCORING MODEL**

***“Greed is not a financial issue. It's a heart issue.”***

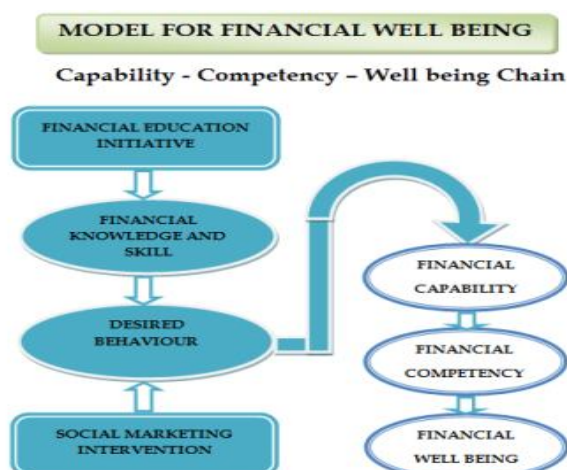
***-Andy Stanley***

## 7.1 Introduction

There is no generally accepted definition of the term ‘financial capability’. Financial capability is commonly referred to as an individual’s capacity to make financial decisions and judgments that contribute to his or her immediate and long-term financial security. **Shaun Mundy**, a consultant to OECD, the World Bank, CGAP (Consultative Group to Assist the Poor) and the UK’s Financial Services Authority, specializing in financial capability and financial services regulation, defines it as “having the knowledge, understanding, skills, motivation and confidence to make financial decisions which are appropriate to one’s personal circumstances”. The concept of financial capabilities focuses on changing behaviours, in addition to increasing knowledge or literacy. A person’s financial capability is best demonstrated by his/ her behaviour. Someone can be financially literate without being financially capable. For example, a person who understands the need and importance of shopping around before buying a financial product or service, cannot be regarded as financially capable unless in actual practice he /she shops around before buying a financial product or service. Capabilities are latent and are the simple ability to ‘do something’. Competence is nothing but control over money. It is the utilization of capability to achieve a desired goal and forms a link between capability and wellbeing. The measurement of the success of a development intervention, therefore, requires a clear distinction between capability, competence and wellbeing.

Financial well-being refers to subjective perceptions and objective indicators of individuals’ personal financial status. Objective indicators of financial circumstances include measures such as income, debt, savings and aspects of financial capability such as knowledge of financial products and services, planning ahead and staying on budget. Subjective perceptions include individuals’ satisfaction with their current and future financial situation.

Both developed and developing countries are making continuous efforts to enhance the financial capability of their citizens. It is widely believed that strengthening of financial capability would play an important role in increasing levels of financial inclusion, improving the efficiency and stability of financial markets, and enhancing welfare outcomes for consumers. U.S., U.K., Canada, Australia, New Zealand, Brazil, Fiji, Eastern Caribbean Currency Union, Ghana, Hungary, Ireland, Malaysia Singapore, South Africa, Tanzania, Trinidad & Tobago and Kenya have already initiated steps to conduct national level studies on financial capability to identify the capability deficits of various segments of their population and vulnerability of selected groups within the population in order to develop comprehensive national strategies for improvement of financial capability of their citizens. Governments (e.g. US Treasury, Australia Financial Literacy Foundation and New Zealand Retirement Commission), Central Banks (e.g. Central Bank of Trinidad and Tobago, Eastern Caribbean Central Bank and Bank Negara Malaysia) and Financial Services Regulators (e.g. UK Financial Services Authority and South Africa Financial Services Board) have taken the lead to organize the process.



(Figure 7.1: Financial Model for Wellbeing)

However, it has been rightly observed that no single entity can do this herculean task of improving financial capability of citizens of a country on a standalone basis. There is a clear need to work in partnership with other agencies. Potential partners include all those who are likely to benefit from improved financial capability, viz., Government, Financial Regulators, Financial Services Firms, Employers and Trade Unions, Consumer Organizations, Educational Bodies, Developmental Agencies, NGOs and Self-Help Groups etc. Stakeholders and partners get more actively involved in the process of development and implementation of strategy/programs if they are made co-owners of the forum. Partners normally share their knowledge and experience and learn from each other. Improved financial capability of citizens, usually provide a win-win situation for all the stakeholders. Through improvement of financial capability, Government can ensure higher level of financial inclusion, poverty eradication; increasing level of savings and investment; financial regulator can ensure responsive financial behaviour and greater regulatory compliance; financial services firms can hope for healthy competition in the financial market, employers can look for higher workplace productivity and NGOs for a secured and cohesive society.

Uneducated persons, low income families, senior citizens, retired military personnel, women who have been divorced/ widowed at middle age, persons addicted to alcohol or drugs have been identified as vulnerable groups in the society, who have very low level of financial capability. There are many others, who have high level of financial literacy but low level of financial capability as they suffer from behavioural problems and refuse to use their financial knowledge and skills for their financial well-being. Social marketing is often used to tackle these kinds of problems.

### 7.2 Current Survey and the Respondents (Students):

It is possible to construct a “Financial Capability Scoring Model” with the data (responses obtained from the questionnaire). The 32 questions in the questionnaire can be classified and grouped as follows:

### 7.3 Grouping of Questions for Financial Capability Scoring Model

Subject	Question Numbers	Questions
Personal Data	Q1, Q2, Q6, Q7, Q8 and Q9	Q1. What age group are in? Q2. What is your gender? Q6. How many members are living in your family? Q7. Your family's yearly income is? Q8. What is the profession of your father? Q9. Your state of domicile?
Educational Data	Q3, Q4 and Q5	Q3. Which course you are studying in? Q4. Highest level of education completed Q5. What is your parent's highest level of education?
Financial Knowledge Awareness	Q19, Q20 and Q23	Q19. Which are the sources you use for collecting the financial information? Q20. All the relevant information on personal finance and financial planning for college/universities students should be available at once source, preferably in local language besides Hindi and English. Q23. Which of the following financial products/ processes you are familiar with?
Adopting Financial Knowledge Practices	Q11, Q12, Q14, Q15, Q16, Q17 and Q28	Q11. Whether you take interest in managing money and financial matter of your family? Q12. One should have sufficient financial knowledge to manage his/her money and financial matters. Q14. Who manages your money matters/finances in family?

		<p>Q15. How often you participate in major financial decisions in the family?</p> <p>Q16. Does your family is in the habit of making monthly budget to manage your family expenditures?</p> <p>Q17. Every family must maintain an emergency fund to meet it's unforeseen expenditure.</p> <p>Q28. How often your family expenditure exceeds family income?</p>
Perceptions on Financial Knowledge Concepts, Practices and Usefulness	Q18, Q21, Q22, Q24, Q25, Q26, Q27, Q29, Q30, Q31 and Q32	<p>Q18. One should first take care of payment of installments on borrowings and committed investments requirements for future before going for any form of major expenditure for the month.</p> <p>Q21. One should have a bank savings account, which can be easily accessed and monitored.</p> <p>Q22. It is advisable to know the calculation of interest on your borrowings and on savings account.</p> <p>Q24. One should know his/her risk taking ability before investing.</p> <p>Q25. One should evaluate risks and rewards of each investment carefully.</p> <p>Q26. One should start investing early to get the benefits of compounding.</p> <p>Q27. One should have a diversified investment portfolio in order to reduce risks.</p> <p>Q29. One should use his/her pocket money/ credit card responsibly.</p> <p>Q30. "Personal finance" should be taught in schools/ colleges/universities as a compulsory subject.</p> <p>Q31. Parents should teach basics of personal finance to children and involve them in major financial decisions making in the family.</p> <p>Q32. Colleges/Universities should set up counselling centers to advise students on how to handle difficult financial situations.</p>
Assessment of Financial Position	Q10 and Q13	<p>Q10. What is the financial situation of your family?</p> <p>Q13. Does your family has large borrowings?</p>

(Table 7.1: Grouping of questions for Scoring Model)

#### 7.4 Financial Capability Scoring Table

Score	Frequency	Percentage (%)	Cumulative Percentage
1	353	34.68	34.68
2	95	9.33	44.01
3	130	12.77	56.78
4	108	10.61	67.39
5	82	8.06	75.44
6	54	5.30	80.75
7	48	4.72	85.46

8	56	5.50	90.96
9	35	3.44	94.40
10	56	5.50	99.90
11	1	0.10	100.00
<b>Total</b>	<b>1018</b>	<b>100.00</b>	

(Table 7.2: Financial Capability Scoring Model)

It can be observed from the above table that most of the students have knowledge only one product. After that, the percentage is continuously in decreasing trend. Knowledge of more than four financial products is very less. It can be very serious condition, as the risks are increasing continuously in one's life. They are not planning for their future. Schools are not teaching "Personal Finance" in the school to the children. In college also, nobody teach "Personal Finance" to the students. Very few colleges have this paper in their curriculum. Apart from that, parents do not involve their children in financial decision making. So, they do not get any exposure to handle financial problems. Students should have knowledge about different financial products, so that they can utilize their pocket money for their future. It becomes very important for the school, college and parents to teach basic financial skills.

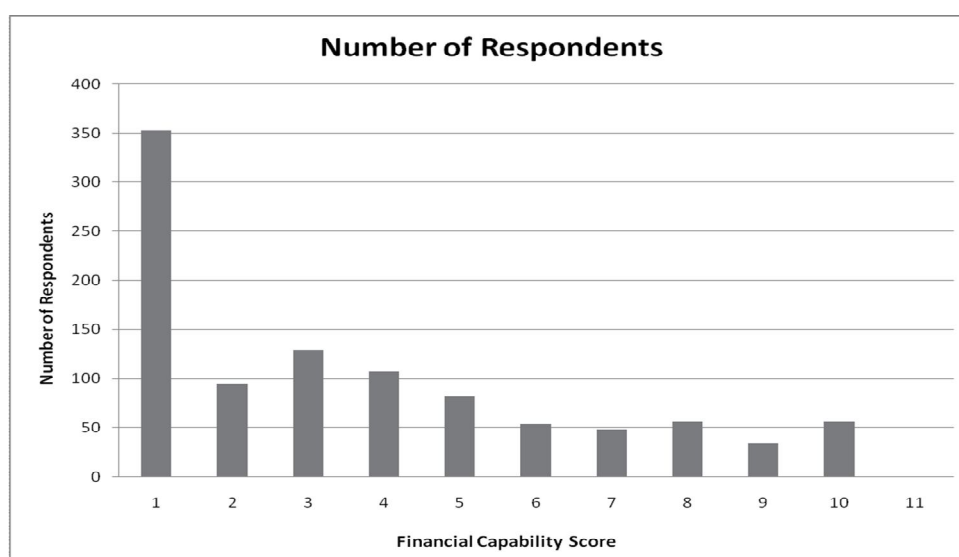
#### Pattern of Distribution of Financial Capability Scores

Financial Capability Score	Number of Respondents	Percentage of Respondents	Cumulative Percentage
UP to 4	686	67.39	67.39
5 to 8	240	23.58	90.97
9 and above	92	9.03	100
<b>Total</b>	<b>1018</b>	<b>100.00</b>	

(Table 7.3: Pattern of Distribution of Financial Capability Score)

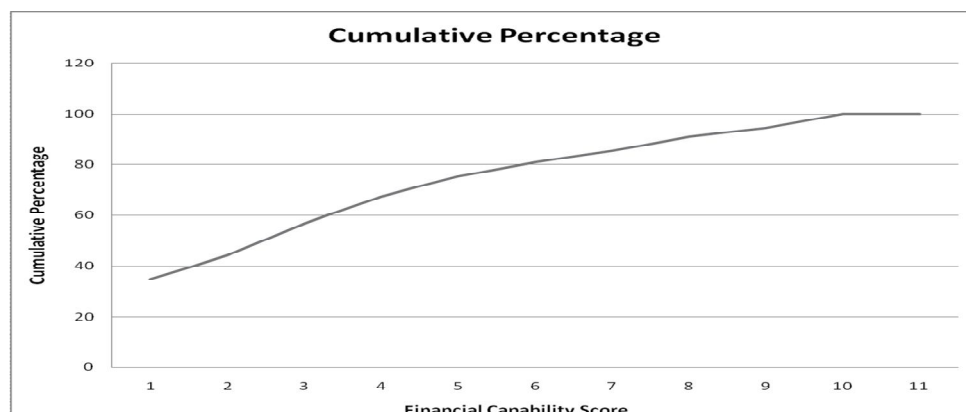
The above two table have shown that more than 50% of the respondents know only four financial products. It shows that financial capabilities of the students are very poor. It can be seen when it comes to the knowledge of more financial products, percentage of respondents have become lesser. Only 9% of the respondents knew all the financial products. It means that students do not have much saving habits and they do not use their pocket money responsively. As per the result it can be concluded that students do not have much knowledge about the financial products and it is very serious matter for the future of country.

#### Frequency Distribution of Capability Scores



(Figure 7.2: Frequency distribution of Capability Score)

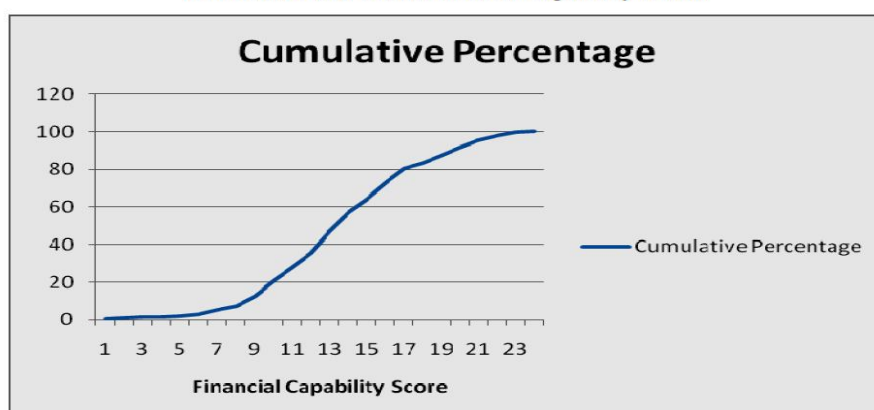
## 7.5 Cumulative (%) Distribution of Capability Score



(Table 7.3: Cumulative (%) Distribution of Capability Score of Students)

Above two figures clearly shows that responses are not forming a normal distribution curve. It is skewed curve. As the score is increasing percentage is decreasing. It can be concluded that even after studying in the professional course, students have very poor financial capability. They did not show their interest in knowing the products. Students have shown their casual behaviour for improving their financial capability.

Cumulative (%) Distribution of Capability Scores



(Figure 7.4: Financial Capability Score of Middle Educated Class)

A similar kind of study has been done by Dr. Lokanath Mishra (2011). This study was done on educated middle class people. Mr. Mishra has developed a financial capability score for educated middle class people. If we see above figure, it clearly shows that responses more or less form a normal distribution curve whereas in case of student's financial capability survey curve is not normal. It is skewed. It can be concluded through these curve that educated middle class people are more mature than the students. They have the responsibilities of their family whereas students do not have such responsibilities in India. Middle educated class people try to save their future and their children's future whereas students do not think about their future. They prefer to spend their pocket money in travelling, shopping etc. Middle educated people learn by the experience also. They may face financial problems in their life, so they compel to learn about financial products and savings whereas students do not face such problems in India. Financial problems of students are handled by the parents in India.

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CHAPTER - 8

**IMPROVING FINANCIAL CAPABILITY  
OF STUDENTS/YOUTH AND  
CHILDREN**

***“The only way to permanently change the temperature in the room is to reset the thermostat. In the same way, the only way to change your level of financial success 'permanently' is to reset your financial thermostat. But it is your choice whether you choose to change.”***

***-T .Harv Eker***

### **8.1 Introduction**

Both developed and developing nations are conscious of their youth power and constantly trying to develop the financial capability of their youth. USA has all along remained on the forefront in this effort, UK is following closely and all other countries are struggling to catch up. India is boasting of its demographic advantage and youth power but is yet to develop a strategy for development of financial capability of its youth.

The US strategy for improvement of Financial Capability of its citizens has been spelt out in the Revised Final Report of the President’s Advisory Council on Financial Capability (2013) as follows:-

“(a) Financial education is a lifelong pursuit that needs to begin in the home with parents educating their children, continue in a child’s pre-school years, continue throughout high school in preparation for postsecondary education and training, and then persist beyond. (b) Financial capability can best be advanced in the community through the coordinated efforts of local governments, schools, post-secondary institutions, financial service providers, local business leaders and non-profits working together (c) Financial capability can be viewed as a function of education, enlightened regulation and choice architecture”.

The above strategy has three components, viz., (i) for developing financial capability of citizens, comprehensive financial education must be provided throughout life, continuously (ii) financial capability can be best developed through a coordinated approach of all the stakeholders, including government, financial institutions, Schools, NGOs etc. (iii) besides financial education, for development of financial capability an enabling environment comprising of a developed market for financial products & services as well as a suitable regulatory structure is required.

Financial Capability Strategy for the UK (2015) has identified 3 factors for improvement of individual’s financial capability, viz., (i) Ability (Knowledge + Skill), (ii) Mindset (Attitude + Motivation) and (iii) Connection (Ease + Accessibility). Knowledge and skill have been envisaged to be developed by providing financial education and training (ii) positive attitude and motivation to manage money successfully can be ensured through experience based learning and (iii) connection to be provided through greater and more equitable access to financial product & services, advice & support.

The Youth Sub-committee of **President’s Advisory Council on Financial Capability (2013)** has developed an educational package called **“Money as You Grow”** consisting of 20 things (activity based learning modules) for kids as follows:-

#### **3 to 5 years**

1. You need money to buy things (activities)
2. You earn money by working (activities)
3. You may have to wait before you can buy something you want (activities)
4. There is a difference between things you want and things you need (activities)

#### **6 to 10 years**

5. You need to make choices about how to spend your money (activities)
6. It is good to shop around and compare prices before you buy (activities)
7. It can be costly and dangerous to share information online (activities)
8. Putting your money in a savings account will protect it and pay you interest (activities)

#### **11 to 13 years**

9. You should save at least a dime for every dollar you receive (activities)

10. Entering personal information, like a bank or credit card number, online is risky because some one could still it (activities)

11. The sooner you save, the faster your money can grow from compound interest (activities)

12. Using a credit card is like taking out a loan; if you don't pay your bill in full every month, you will be charged interest and more than you originally spent (activities)

#### **14 to 18 years**

13. When comparing colleges, be sure to consider how much each would cost you (activities)

14. You should avoid using credit cards to buy things you can't afford to pay for with cash.

15. Your first pay check may seem smaller than expected since money is taken out for taxes (activities)

16. A great place to save and invest money you earn in a Roth IRA (activities)

#### **Above 18 Years**

17. You should use a credit card only if you can pay off the money owed in full each month (activities)

18. You need health insurance (activities)

19. It is important to save at least three months' worth of living expenses in case of an emergency (activities)

20. When investing, consider the risks and the annual expenses (activities)

For learning to be real and effective, teaching should not be isolated from real life experience. Experimental learning allows students to test their understanding through interaction with the environment. It uses a cycle of action, reflection, conceptualization and new experience. Educational institutions use a variety of experimental learning methods like (a) Practice Based Learning (b) Role-play (c) Simulation (d) Imagination and inner exploration (e) Group work etc.

In the context of developing Financial Capability of its youth, three types of experimental learning methods have been put to use in USA.

(i) **Financial Education plus Savings Accounts:** One type of experiential education-based financial education program "**Bank at School**", which involves opening of a savings bank account at a bank branch located in school premises. The school is having partnership with financial institutions to make this program successful. (Cruce 2002; Johnson & Sherraden 2007).

(ii) **Save for America:** Save for America is a federally sponsored school banking program, co-sponsored by the US Departments of Treasury and Education, and operated in partnership with local financial institutions and schools or youth organizations. The financial education curriculum is designed for use by teachers and parents, and is available for grades kindergarten through sixth grade. Deposits are made at school, typically on a weekly basis, and transferred by parents and other volunteers to the financial institution.

(iii) **I Can Save (ICS)** provides financial education and matched savings. Children receive financial education instruction in an after-school. I Can Save Club once a week during the school year, including games and monthly visits to the bank to deposit savings. Students learn about money, college, entrepreneurship through exercise and games Teachers also include some financial education into classroom activities. Parents receive periodic financial education on topics including money management, spending, credit, investing etc.

Two US based Institutions namely; **National Empowerment for Financial Education (NEFE)** and **National Financial Education Council (NFEC)** together also play a prominent role in development of financial capability of students and youth. Since 1984 the NEFE is providing 100% funding for the **High School Financial Planning Program (HSFPP)**. HSFPP is a free turnkey financial literacy program especially focused on basic personal finance skills that are relevant to the lives of teens. The components for this program include (a) six student guide booklets (b) Teacher lesson plans (c) Activities handouts and (d) Online student practice quizzes. NEFE's crash course is a free online financial education resource designed specifically for college and university students with information that helps them make informed financial

decisions. On the other hand the NFEC offers comprehensive financial literacy solutions for schools (K-12), colleges and universities that can have a lasting impact on students' lives. The NFEC provides resources varying from simple classroom materials to comprehensive financial education campaigns. These campaigns include (i) Financial Educator Training and Certification, (ii) Middle School, High School & College Programs, (iii) Kids Financial Literacy Program (iv) Do-it-yourself Turnkey Education Program and (v) College Money Management Campaigns etc.

It should further be ensured that the financial education campaigns and youth's involvement should not stop when the students pass out from the colleges and universities but continue beyond that during induction training and on the job situation also. Partnerships with the private sector employers, nonprofit organizations, government agencies, financial institutions, and youth bodies are necessary for successful program implementation at this stage. In this situation financial education should be tailored to the needs of youth, employers, and financial education providers. Government, market administrators and regulators may help in designing financial products which could cater to the specific needs of the youth. Access to the financial markets should be easy and equitable and the risk return profile of each of the financial products and services should be clearly defined. "Choice" structure should be carefully built into the market in such a way that there are several products and multiple players who are freely competing among themselves. Risks in operation are identified and risk management systems are available for use.

## **8.2 Various other efforts worth noting are given below:**

1. For increasing the youth financial capability **Bank On program** has been launched in San Francisco in 2006. Bank on programs work with banks and credit unions in local communities to reduce barriers to banking and increase access to financial mainstream. Bank On programs are managed by local government or state public officials or public-private partnerships between local or state government, financial institution and community based organizations. They provide low-income, unbanked people with free or low cost startups or "Second chance" for bank accounts and access to financial education. Bank On programs is a unique example to develop innovative strategies which meet specific requirements in communities of all sizes. Regardless of community size, the fundamental strategy of this program is to improve access to banking and transactional account services in rural or urban communities.
2. The **United States Conference of Mayors (USCM)** has launched **DollarWise** initiatives in 2004. Main objective of this program was to incorporate financial education into summer youth employment programs in cities across the nation. USCM has aligned this initiative with Financial Literacy and Education Commission (FLECs). Mayors and city staff has been invited to launch financial literacy initiatives in partnership with financial institutions, nonprofit organizations, local business and faith based groups. Participating cities have been provided innovation grant, technical assistance and access to five online financial literacy modules by USCM. USCM has encouraged youth to complete the modules through video contest and award. USCM is hoping to incorporate financial education programs into every summer youth jobs programs in nation by 2015.
3. The **Economic Awareness Council (EAC)** in Chicago prepares family and students for economic and financial decisions. The EAC has partnership with local schools and youth services sites. They provide financial education to the students and family. EAC and Young America Saves made partnership to launch **Young Illinois Saves**. The objective of this campaign was to develop saving habits among young people. They have been encouraged to save as little as \$5 in a month and consistent saver were getting special saver benefits reward. Through Young Illinois initiatives, EAC is working with ten youth employment sites to provide financial education. Young workers have been encouraged to set goals for savings and can enroll themselves for direct deposit. Outcomes of this program have been analyzed in 2013. 308 youth (74% participants) has opened new bank accounts and deposited amount directly. 255 youth (62% participants) have taken pledge to save average \$54 per month. Those who have taken pledge, out of them 78% youth wanted to save for education, 8% for vehicle and 5% wanted to put money aside for emergencies. It has been reported that between \$94 and \$442 have been saved by youth in summers.
4. There is another program which has been initiated by **Philadelphia Youth Network (PYN)** in Philadelphia. The objective of PYN is to prepare young people for educational and economic success.

PYN provided a payroll card which is linked with saving account and financial education has been provided to youth in WorkReady Philadelphia. PYN offered 6-8 week paid work experience to improve economic outcomes. PYN is offering more than 50 programs for providing job experience and job training. By 2013, WorkReady programs served 9,813 youth throughout the year, which includes 7,667 youth in summer. 4,807 youth received a payroll debit card from PYN from July to September 2013. Out of 4,807 youth 506 have opted to save a portion of their earnings automatically deposited into saving account. Websites which contains information about budgeting and financial literacy had recorded 11,212 hits during this period of time.

5. **D.C. Department of Employment Services (DC DOES) and Bank on DC** became partner to offer financial education and access to checking and savings account to participants in **Summer Youth Employment Programs (SYEP)** in Washington, D.C. SYEP is a six week program employment program which is run by DC DOES in Washington. By 2013, 1500 youth ages 14 to 21 have enrolled in SYEP. Out of these 500 employers has been provided jobs in 2013. 49% of youth (more than 5,200) has opened the account through SYEP. This program has provided web based and instructor led financial education; more than 3600 have participated in these programs. Participants, who completed pre and post tests, their score increased by 19%.
6. **MyPath** saving program has been initiated in San Francisco. Main objective of this program is to provide peer to peer financial education, a saving account which is linked to an ATM card, incentives for those youth, who set and met their personal financial goals. It has been found that 197 participants saved \$1210 in their account. 39% of the participants have reported that they have saved most of their income every month, 39% saved half of their income and 21% have reported that they saved little of their income.
7. **Child Social and Financial Education (CSFE)** have provided the guidelines for child friendly schools (every child gets an environment where a child is physically safe, emotionally secure and psychological enable- [www.unisef.org](http://www.unisef.org)). CSFE prepared a relevant curriculum for learning social responsibility and financial competency. A child can explore his roles and responsibilities in classes or club sessions. He can take part in saving activities and apply entrepreneurial skills which are important to them. CSFE encourages child to participate in the various activities and give them a sense to control their own lives. They strengthen their self-confidence and encourage them to participate in those matters which can make them financially empowered citizens. OECD advised that “Financial education should start at school. People should be educated about financial matters as early as possible in their lives.”

**CSFE has provided simple schemes for savings**

- Children were using saving boxes to save money and other resources which was valuable to them.
  - Children in jail have been recorded with good deeds as “social savings”.
  - Group savings in classes and bank account has been encouraged.
8. **Meljol’s Model in India** is an initiative of Mumbai based organization which works for the rights of children. Children have been given the classes of making ledgers and promoted saving schemes. Savings of the children is been kept in the locker of head teacher, at the school. Two keys are used to open the locker. Teacher recorded very positive response from the students. Meljol have analyzed the results of their initiative after 10 years in 2007. At the time of interview, 78% of the students have reported that they are saving, 65% have stated that they have used their savings for school supplies and 12% have used their savings to pay fees for secondary school.
  9. **Social Saving of Sahil Program** is a child right NGO in Pakistan. This organization works on issues like child abuse and exploitation within country. The children in jail don’t have access to money; Sahil initiated a program “**good deeds**” for inculcating saving habits. Children have been introduced with social saving program where they can develop positive image for themselves, they help others and respect others. A simple card has been given to the children for saving system. Card had child name, village name or clubs name. Financial institutions were engaged with saving program.

10. **BRAC: Livestock rearing with young children in Bangladesh** is a program for children in Bangladesh. BRAC is a development agency which is responsible for alleviating poverty through empowerment of the poor. **BRAC** promote children to use their personal savings for purchasing and raising animals. The purchases are related to existed work pattern of the family. They do not create additional work for the organization's staff. BRAC has taken the advantage of existing social norms while reinforcing the lessons taught in social and financial education.
11. **Learning Assistance Program for Islamic Schools: Seed fund for financial enterprise** was an initiative to improve the quality of education in Islam. Children developed their products and donated the money to school after selling them. LAPIS experimented with different enterprises and got mixed results. For example few enterprises wanted too much resources and labour, which lead to discontinuation.

Few enterprises required little involvement of resources, such as children from junior school has made brooms and plates with local material and coconuts. A team of 20-30 students has produced brooms and plates and it has been sold to parents and neighbours. Students have collected the raw material from environment and they had skills to make the product. On an average, children were making 10-15 brooms per week and earning 3000-5000 rupiahs each.

There was another project which has been implemented by LAPIS in East Java. Junior high school students have been taught making of batik and to sell their products to people. This project was resource intensive as it required full coordination and support of organization and investment in raw material. The results were very positive, but due to intensive labour and resources the project could not expanded.

12. **Private Education Development Network (PEDN, 2004)** promoted youth entrepreneurial and business skills. PEDN has started this program in primary, secondary and territory institutions in **Uganda**. PEDN has adopted this methodology for children and youth, who can manage their own enterprises through purchasing chick or tree. PEDN has trained children to ask from their parents to keep aside chick or plant a new fruit tree. The child was responsible for rearing the chick or the produce and earned money will be saved. Result has shown that two-third of the children had their small enterprise. 57% of the girls and 47% of the boys have created their enterprise. The main objective of this program is to earn and save money by the children.
13. **The Central bank of Malaysia** along with **Bank Negara Malaysia** launched a saving campaign for school children in 1997. The long term objective of this initiative is to ensure that future Malaysians become financial savvy. Financial institutions want to inculcate the saving habits and create awareness among school children so that they can understand the importance of financial management and planning. The School Adoption Program, Pocket Money Book & website and the Student Financial Club are several initiatives which are taken by Malaysian Financial Institutions.

Overall goal of “**Pocket Money Book**” is to promote financial education. The objective of this program is to inculcate the habit of smart personal money management among students from young age. The program is assisting the children to manage their pocket money and personal finances through exercises and games related to money and finance.

14. **Kick4Life** in Lesotho has collaborated with UNICEF to provide basic financial literacy to those children and youth who are out from school. An initiative Aflatoun has been taken to provide social and financial education to children between the age group of 6-18 years. Aflatoun (Child Savings International) has developed a full set of contextualized material for children and teachers. This material is covering interactive lessons of 40 hours. Aflatoun has developed different materials for childhood programs (ages 3-5 years), primary schools (ages 6-14 years) and older children (ages 15 and above).
15. **National Strategy for Financial Education** program has been initiated in **Brazil**. Student Book and Teacher's Book was the foundation of Brazilian financial education program. The Student Book was having the various learning concepts of financial literacy and understands how financial system is present in daily lives of the people. The book has provided data and necessary conditions to students for transforming their knowledge into healthy financial behaviour.

16. **BintiPamoja**, a local NGO in Kenya have focused on teenager girls. The organization has developed financial literacy manual and it has been divided into four sections: budgeting, savings, banking services and earning money. Girls have been given 30 minutes to 2 hour sessions to improve the financial literacy.
  17. **Jarvis and Tosey (2002)** has suggested about different experimental teaching methods like practice based learning, simulation, role play, inner exploration, imagination and group work. Their main focus was on practical based learning through internships, because they occur “in the real world, under slightly conditions” (**Jarvis, 2002; p123**).
  18. Peru, Bolivia and Philippines have started one program “**text message reminder**” to increase the savings of participants. Few savers have received the message about their financial goal, other received messages about incentives of saving and few have received both type of messages. The results of the study have shown that savings of participants have increased by 6% and those who have received both type of messages, their savings have been increased considerably more (**Karlan, McConnell, Mullainathan & Zinman, 2011**).
  19. Canada has initiated a Program “**Learn Save**”, but results have shown very little effect of financial education on savings. The group which has received 15 hours of training in financial management and case management services, they did not save more. Qualitative finding of this program was that the educational content of this program was inadequate (**Leckie et. al, 2010**).
  20. **Borrowing, Spending and Saving Program** has been initiated in Gujarat, India. It has been found that controlling over own saving is associated with positive social behaviour. Young women who were controlling their own savings, they were having specific saving goals, could make their own decision as compare to those women who did not have control over their savings (**Kalyanwala & Sebstad, 2006**).
  21. XacBank in Mongolia provide financial education program to children and youth. They provide them bank tours and linked youth with saving accounts. In the same manner, Hatton National Bank in Sri Lanka is providing financial education in-school and out-of-school (saving accounts) to youth since 1990s (**Dias and Siisel, 2011**).
  22. **Financial Capability, Financial Competence, and Wellbeing in Rural Fijian Households (Fiji Fin Cap)**: The Reserve Bank of Fiji along with the Pacific Financial Inclusion Program and the Fiji Bureau of Statistics has implemented an experimental survey in 2007/08. The purpose of this survey was identify the various ways how villagers managed their money and accessed formal financial system and to analyze the relationship between villager’s levels of financial competence and wellbeing of their households. To meet the above objectives two different programs have been designed:
    - A **rural financial literacy program** which was implemented by the UNDP Pacific Center in partnership with NCSMED.
    - A concurrent **mobile vehicular banking service** or **Rural Banking Service program** implemented by ANZ Bank.
- The main objective of these training programs was to acquire the knowledge and skills needed to undertake basic money management. After attending these training programs, positive relationship has been found out that villager’s level of financial literacy and their financial skills and behaviour. It has been observed that those who have participated in the training programs they are more financial competent as compare to those who did not participate.
23. One more Program “**Money Savvy Kids™**” has been initiated, where 300 third grade children has been taught about finances. Each child has been given a piggy bank with four slots (for saving, spending, investing and donating) and eight financial lessons. Pre and post analysis of this program has shown significant improvement in knowledge and attitudes of children (**Schug and Hagedorn, 2005**).



24. **Financial Fitness for Life (FFFL)** curriculum has been designed for elementary, middle and high school children in Eastern Kentucky. After a year when result has been analyzed, it has been find out that financial knowledge has been increased of all the students (**Harter and Harter, 2007**).
25. **“Economic for Success”** program has been launched for middle school students in five states. Pre-Post test show, significant improvement in knowledge, attitude and confidents among 300 students about personal finance (**Diem et. al.**).
26. **Harold Alfond College in Maine** has deposited \$500 as college savings plan for every newborn since 2009. College sent financial education material as per their age, but the effects of this program have not been studied (**Clancy &Lassar, 2010**).
27. **Children Development Accounts (CDAs)** program is also called **Child Saving Accounts (CSAs)** or **Individual Development Accounts (IDAs)**. This program gives an opportunity to accumulate savings in an account which has been opened for the long term benefit of a child. These savings can help the child for accessing educational and entrepreneurship opportunities. Two studies have been done under CDAs program.
  - a) A program **“The Opportunity Passport<sup>TM</sup>(OP)** has been initiated by **Jim Casey Youth Opportunities Initiative (JCYOI)**. The initiative is working with local private or public agency partner to implement reforms and recruit former and current foster youth to participate. Participants receive training in financial literacy and after completion the training, every participants is been provided two accounts- a checking account and an Individual Development Account (IDA) with the balance of \$100. In this initiative, up to \$1000 deposited into IDA. OP includes educational expenses along with micro enterprise, vehicle, health care and housing cost. Participants have the facility to attend financial literacy programs. The youth, who are from foster, they have very few financial resources and they face problem in achieving financial independence (**Courtney, 2009; Courtney, Dworsky, Brown et. al., 2011**).
  - b) The **“SEED for Oklahoma Kids (SEED OK)** is a longitudinal study, where randomly new born babies have been selected in Oklahoma in 2007. SEED OK research has tested the concept of providing 529 college savings plan to all the participants. Oklahoma College Saving Plan had two types of account: a state-owned account (SEED OK 529) and a participant-owned 529 account (OK 529). State opened a SEED OK 529 account automatically for each participant child and deposited \$1000. Infants have been selected randomly for the account SEED OK 529 in Oklahoma during 2007. 2704 mothers of newborn have participated in the survey of SEED OK.
28. **The PACFC (2012)** in US have analyzed that few people like local leaders in states, tribes, local government and communities play major role in improving their financial capability. Because local leader have better understanding of the economic, financial and educational obstacles that impact negatively in their communities. They can make very strong policies and their initiative can make a real difference to solve the problems in their communities.

The states of Delaware and Wisconsin; the cities of San Francisco, Miami, New York, Georgia and American Indian Tribes such as Citizen Potawatomi Nation in Oklahoma etc. are few places where local government and tribes are made significant change.

Successful states, tribes and local government have utilized the partnership across public, private and nonprofit sectors to improve the financial well being of the citizens. They had clear objectives, well defined programs and marketing strategies and their outcome driven metrics.

The PACFC has identified three broad areas for financial capability initiatives:

- Financial education and capability programs for youth.
- Financial capability and access for low to moderate income family and underserved.
- Financial capability in the workplace

There are other initiatives which can be taken by the local communities:

- Financial Education Networks can be created where local nonprofits, educator, practitioners, librarians, government leaders and others will get to know each other as per their expertise and programming. People will find the opportunities to share best practices and maximize local resource.
- Further, conference, round tables, conferences and sessions can be conducted to share ideas, collaborate and explore new ways to enhance the financial capability of local people.
- Public awareness campaign can be run to build the interest of local public.
- “Financial Literacy Corps” can be made who will provide the information on financial literacy and opportunities which are available across the state/ tribe/city.

29. The concept of ‘**responsible lending**’ has been introduced for credit assessment in Switzerland, France, Belgium and Europe. Many studies have been done on the credit worthiness and repayment capability of borrowers but the concept of ‘**responsible lending**’ in Europe has been introduced recently. Main objective of this concept was that consumer could take the credit up to a limit, which can be easily repaid by him. It is the duty of creditors to assess the worthiness of borrower. It could be checked with the help of central database where states can have all the information about the consumer i.e. his income, his liability, his loan from any other financial institution etc. If borrower’s capacity will not be assessed by lender then lender loses the right to claim expenses and payment of interest. It means borrower can repay the amount as per the agreed EMI. (**Didier Noel, 2006**).

This means gross negligence relating to information and verification could be considered as a fault by the lender. In Belgium, following conditions for the lender’s responsibility were considered:

1. Proof of mistake by the lender (fault of lender)
2. Loss suffered by the borrower
3. Causal link between the above conditions

In France, (i) consumer cannot be granted loan till the time lender will not ascertain his financial capacity of repaying. (ii) if the consumer is not understanding the lender’s warning, he may refuse the loan. It means lender is obliged to give advice so that situation could be controlled.

In both the states, it has been observed that borrower do not provide the information which can be useful for lender or are encourage to hide by the credit intermediaries. In these cases collection becomes very difficult. At this point of time, compulsory consultation makes a great deal.

Lender can be very careful while giving the loan to borrower. He/ She should take care of few things:

1. Lender must ensure that whatever information has been communicated, it is supported by the appropriate documents.
2. The lender must check and analyze the information which is given by borrower.
3. If lender found any of the information is ambiguous, incomplete or contradictory, they can clarify from the borrower.

Assessing the consumer capacity for the loan is the responsibility of all the parties i.e. lender, intermediaries, borrower and guarantors.

30. **Federal Deposit Insurance Corporation (FDIC)** has started a program **Money Smart-A Financial Education Program**. The objective of this program was to increase financial understanding in young people. This program has been divided into four categories according to age.

- **Grades Pre K-2:** A child will understand the concept of currency, usage of money, counting of coins, difference between need and want, goal setting and relation with financial decision, how money can save and spend and creation of piggy bank in this module.

- **Grades 3-5:** Between the age of 3 to 5 years a child will prioritize the choices when he will make purchase, setting up short term and long term goal, the concept of budget and the concept of banks and their interest, different payment options and investment including risk and returns.
- **Grades 6-8:** Within this grade a child will come to know about various jobs and opportunities in financial field, importance of federal income tax and its impact on personal income, best values of goods and services, investing tips, consequences of debt, and creation of personal budget.
- **Grades 9-12:** In this module a child will learn about the sources of income, financial plan, learning about personal income and expenses, keeping financial records, benefits of compound interest, credit cards and their offers, cost of college, loan management, concept of inflation, investment and its impact on economy, retirement planning, business startup practices etc.

### **8.3 FEDERAL INTEREST IN FINANCIAL CAPABILITY FOR YOUNG AMERICANS**

Recently, many federal entities have focused on building financial capability, including increasing access to financial education and services for young workers and consumers.

- a. The **Financial Literacy and Education Commission (FLEC)**, established by the Fair and Accurate Credit Transactions Act of 2003, is charged with coordinating federal financial education efforts and a national strategy on financial education. FLEC has launched “**Starting Early for Financial Success**” initiative. The objective of this initiative is to enhance the financial capability of young Americans. The strategy is to develop an understanding of financial basics of young Americans before starting their careers. Parents and teachers can prepare young people for financial success; with this aim also this initiative has been taken.
- b. Dodd-Frank Act of 2010 has created **Consumer Financial Protection Bureau (CFPB)**. CFPB is providing information, technical assistance and guidance regarding the financial products or services to underserved consumers, including those who did not have banking facilities. Under the guidance of CFPB, millions of underserved young Americans have learnt the financial skills.
- c. The vision of **Administration for Children and Families (ACF)** was to provide youth employment and the development of youth financial capability. ACF has started Temporary Assistance for Needy Families (TANF) and State Community Services Block Grant (CSBG) programs to provide youth employment. ACF is coordinating with other federal agencies and non federal partner for improving the financial capability for youth.

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- <http://www.usmayors.org> Official website of U.S. Conference of Mayors
- <http://www.joinbank.org> Information about Bank On program
- <http://www.bedollarwise.org> Information about DollarWise program
- <http://www.illinoisassetbuilding.org/content/economic-awareness-council> Information about Economic Awareness Council
- <http://www.financialeducatorsCouncil.org> Information about Financial Literacy for Kids
- <http://www.bankondc.org/> Bank On DC is a collaborative effort between district government, financial institutions and nonprofits to provide access to financial services and products to unbanked and underbanked households in the DC Metro Area
- <http://www.frbsf.org/community-development/files/wp2013-03.pdf> Information about MyPath Saving Program
- [http://www.unicef.org/lifeskills/index\\_7260.html](http://www.unicef.org/lifeskills/index_7260.html) Website of United Nations Children's Fund
- <https://www.fdic.gov/consumers/consumer/moneysmart/young.html> Official website of Federal Deposit Insurance Corporation

CHAPTER - 9

**CONCLUSIONS  
&  
RECOMMENDATIONS**

***“An Investment in knowledge pays the best Interest”***

***-Benjamin Franklin***

### **9.1 Introduction**

The research study had a number of distinct stages. Since “financial capability” as subject of study is new and very little research has been done in this subject in India, Initially a pilot study has been conducted of the students. It has given the guidance for the subsequent stages of research. In the next stage, two different surveys were conducted (i) to find out the level of “financial capability of the students”, who are pursuing professional course. The study has mainly focused on management and engineering students. (ii) for conducting another survey, the target respondents have been selected parents, teachers and financial professionals. It was very important to know the views of parents before reaching the conclusion. For conducting the survey of financial capability of students, 1018 respondents have been selected from different colleges of Noida and Greater Noida. Majorly, management and engineering students have been taped for conducting the survey. For the opinion of parents, teachers and financial professionals, 50 respondents have been surveyed. They have been given the questionnaire before concluding. At the next stage the findings were analyzed and conclusions were drawn.

### **9.2 Major Conclusions**

Major findings and conclusions have been placed under two different heads, viz., (a) conclusion of financial capability; (b) financial literacy programs to improve financial capability

<b>S. No</b>	<b>Objectives</b>	<b>Result Obtained</b>
1.	1. To test the basic knowledge and understanding of financial knowledge of Management Students and Engineering Students in Noida and Greater Noida.	When it came to the financial awareness/ financial knowledge of management and engineering students. It has been revealed from the study that course is not affecting the financial awareness of the students. Students from both the courses may adopt same financial knowledge practices and their financial capabilities are also not dependent on course.
2.	Examine the role of parents in enhancing the financial capability of children	When parent’s education has been evaluated, it has been observed that (i) parent’s education is not affecting financial awareness and knowledge of the students. (ii) Study has revealed that parent’s education help in improving the financial capability of students. (iii) Education of parents does not result into their children taking interest in financial literacy.  Number of family members does not make any difference in financial awareness, financial knowledge and financial capability of the students. From the survey it can be concluded that size of the family is not improving the financial capability of the students.
3.	Examine whether the financial background of parents play significant role in development of financial capability of the children or not.	Results have shown that family income is playing the major role when it comes to financial awareness and adoption of different financial practices for their future. The children of lower income groups of parents will adopt different financial practices as compare to those whose parents are in higher income group. But different income groups of parents do not take the guarantee to have better knowledge and investment understanding. Financial capability of students is also not affected by the income of their parents.
4.	To find out whether there is a gender divide in understanding the	When awareness of finances has been evaluated in different gender i.e. male and female, it has been observed

	concept of finance i.e. whether boys have better financial knowledge compared to girls.	that gender is not affecting the awareness of finances. Male and female may have same awareness about the financial products. They can adopt same financial practices. Female ratio is comparatively less in the study due to less admission in the professional course, so equal participation could not be possible. It may lead to change the result while increasing the participation of female respondents in survey.  Results have shown that gender does not affect interest in management of money and financial matters in the family. Both the men and women have savings accounts for easy access and monitoring. It shows that situation is changing in the country like India where male used to get more advantages in the family. In the same fashion, engineering and management course does not affect interest in management of money and financial decision in the family and it does not affect in having the savings account.
5.	analyze the role of financial advisor for improving the financial capability	When role of financial advisor has been evaluated, it has been resulted that only 16% students take the help of financial advisor to collect the financial information. The role of financial advisors should be increased while students and families of respondents are taking the financial decisions for investment. It may be possible that families and friends of respondents have limited knowledge about the various financial products which are available in the market. They do not have knowledge about the best product which can be suitable for a particular respondent whereas financial advisors can give the best suggestion as per the requirement of respondents. They are well qualified and their job is to invest the money of shareholders for getting the best returns.
6.	Based on national/ international experience and the situation obtaining in India, to suggest ways and means to improve financial capability of the students.	Different programs have been studied by the researcher which is running successfully in different countries including India. On the bases of that, below few suggestion have been given by the researcher

(Table 9.1: Conclusion)

**Apart from these results there are few very important conclusions, which should be highlighted.**

1. The level of awareness about financial literacy, financial capability among the students is very low in India. It has been observed that students are not aware about many financial products. According to the results financial scoring model has been developed by the researcher and the scoring model is skewed in shape. It can be concluded that even after enrolling in professional course, financial capability of students are not improving and it has been proved through the model.
2. Majority however, are aware that, everyone irrespective of age, educational background, family income and gender, should be financially capable. The study has revealed the fact that financial literacy and financial knowledge is not affected by the age of students. It means all the age groups may have same financial literacy and knowledge depending on their interest.
3. When it comes to adopt financial practices, most of the respondents have shown their ignorance. A sizable portion of the students are not using their knowledge into financial practice irrespective of their age.



4. Apart from that, students have shown their ignorance in learning about the financial products. Their spending habits are increasing day by day but they don't have shown their interest in management of finance.
5. Financial awareness, adopting financial knowledge practices, banking savings and investment and financial capability factors have strong correlation with each other. Results show that if student will be more aware about financial products, he/she will be having more financially capability.
6. Number of family members does not make any difference in financial awareness, financial knowledge and financial capability of the students. From the survey it can be concluded that size of the family is not improving the financial capability of the students.
7. When student's familiarity of financial products has been evaluated, it has been observed that students are not familiar with many financial products and their financial scoring is very less. 71% and 70% of the students are familiar with debit/credit card and withdrawal cash from ATM respectively. Very few students have knowledge of other financial products. Results have shown that more knowledge of financial products will lead to improve the financial capability of students.
8. Financial Capability as a concept is new to majority of the students. It has not yet adequately influenced their mind or built into the practices, but interestingly, a majority of them have (i) family should maintain emergency funds for unforeseen situation to handle the difficult time (ii) installments of payment should be completed before going for major investments (iii) they should have sufficient knowledge to manage their pocket money in the best manner.
9. However, when evaluated for financial education practices being actually followed by professional students, it has been observed that (i) only 50% have confirmed that they take interest in managing money and financial matters in the family (ii) nearly 9% have confirmed that their family have large borrowings which would be difficult to repay (iii) only 19% of the respondents have confirmed that they participate in the financial decision of the family (iv) only 42% have stated that their family make the monthly budget.
10. It is a striking feature for families in India that they involve women and children in financial decision making in the family. India is considered a man dominating country. When it has been evaluated how many women participate in the financial decision making in the family? Only 26% have confirmed that women in their family participate in the financial decision of the family.
11. A wide gap was observed what students in India wish to do as regards financial education and what they are actually doing currently. This concept is not evolving at all. Students are not interested in financial literacy and they don't want to save their pocket money.
12. When encountered with the question of from where they collect financial information. Around 50% of the respondents have reported that best source of collecting the financial information is newspaper, family and friends. Nobody has expressed that they would take the help of appropriately qualified and experienced financial advisors.
13. How to develop awareness is a moot question which needs to be addressed. Developing financial literacy, disseminating financial knowledge and skill are obvious answers that come to mind. But in this context, it has been widely observed that **"developing financial capabilities"** is more appropriate and relevant than developing financial literacy. Financial capability is defined as "having knowledge, understanding, skills, motivation and confidence to make financial decisions which are appropriate to one's personal circumstances". The concept of financial capability focuses on changing behaviours, in addition to increasing knowledge or literacy. A person's financial capability is best demonstrated by his/her behaviour. Someone can be financially literate without being financially capable. Both developed and developing countries are making continuous efforts to enhance the financial capability of their citizens. It is widely believed that strengthening of financial capability would play an important role in increasing levels of financial inclusion, improving the efficiency and stability of financial markets, and enhancing welfare outcomes for consumers.

14. Financial education initiatives would provide financial knowledge and skills. This when mingled with social marketing interventions would ensure desired behavioural changes. Together, these will lead to financial capability improvement. Financial capability improvement will lead to financial competency and ultimately to financial well-being. The effectiveness of Financial “Capability-Competency- Well Being” chain has been well documented.
15. Teacher can understand the importance of teaching financial matters to children. Surprisingly, when it has been evaluated, result shown that there is no difference between teachers and non-teachers in offering knowledge about basic financial products and they wants to teach about the financial matters to their children.
16. Improvement of financial literacy among students in India would not automatically ensure that all financially literate persons would go for financial planning, unless they try and get convinced.

### **9.3 Financial Literacy Programs to improve financial capability:**

1. Imparting real life financial skills to school students is critical to their holistic development. Establishing sound financial habits at a young age will prepare them for financial success in future. In this context, the “Pocket Money” programme run by SEBI and NISM to increase financial literacy among school students is a success. The programme should be run at National Level in majority of schools in India. If children are not equipped with the right skills, they will have a miserable time, learning financial lessons the hard way and making some horrendous mistakes.
2. It is worthwhile to provide relevant financial education to school students free of cost through school, print media and electronic media, conduct a certification test at national level and provide appropriate incentives for clearing the test.
3. Personal finance should be compulsorily taught to college / university students. Those who are majoring in finance must study personal finance before they study corporate finance. Colleges / Universities may consider running regular financial counselling clinics with the help of reputed financial advisors to advise students on financial matters, especially on borrowings, spending on credit cards, saving and investing opportunities. The National Endowment on Financial Education (NEFE), USA provides financial resources for colleges, in the form of a “Cash Course” on line, free of cost, which aims at building money management skills, surviving in a tough economy and preparing for success. India may consider to offer similar opportunities to college / university students.
4. Women face tremendous challenges as they move through life’s transitions, from childhood to adult, from college to career, from single to married, to widowhood or divorce, and into the retirement years. And women are concerned about the financial well-being of their families as well as themselves, making sure that those they love are sheltered within their own financial success. So women should be financially empowered for their success in life. Women Institute of Financial Education (WIFE) website provides valuable financial educational resources for women. Similar websites may be promoted in India especially for women. Regional TV channels, magazines in English (Femina, Women’s Era, and Society), Hindi (Grihashobha) and other regional languages, specially meant for Indian women should devote a portion of their coverage to financial education of women in India. Women play multiple roles as mother, wife, sister, daughter, daughter-in-law etc, during their life time in the family. It would be prudent to involve women in the financial decision making process in the family. Once they understand finance and get used to taking financial decisions, they can easily teach, if not anyone else, their own children.
5. Teachers should endeavour to improve financial capability among young students by using financial tools, resources and activities to make the classroom fun and engaging. Providing appropriate training to teachers engaged in delivering financial education to students may help achieving this goal.
6. A child starts learning invaluable lessons, from the time he takes birth, from his parents. Parents, therefore, must learn the basics of saving, investing, and financial planning for themselves and their loved ones’ future. Parents should discuss finance and their finance related decisions with their children so as to make them financially savvy.

7. Regulatory Bodies like RBI, SEBI, IRDA, PFRDA etc should make greater efforts to provide relevant financial education to common public and enlighten them regarding the existing norms of financial regulations in the country.
8. Prominent educational Institutions in India should provide financial education at affordable cost to improve financial literacy of students and open students counseling centers to advise them regarding proper use of pocket money, credit card and other borrowings.
9. Corporate and Universities should join hands together to launch new programs to improve financial literacy. Banasthali Vidyapith has launched a program with CFPTRW (Center for financial planning & training research for women) to improve the financial literacy of Women in Rajasthan. Banasthali Vidyapith has developed a new model of financial literacy in Indian Context.
10. Correspondence courses on financial education and importance of financial planning may be provided to common public at affordable cost. Teachers may be provided with tool kits on financial planning education to teach students and prepare them for a national level testing and certification facility. Employers may provide incentives to all employees who have this certification at the time of joining. Considering the growing use of internets by students, web based courses on financial Planning may become popular in near future. A proper mix of class room teaching, correspondence education, media-based learning and web-based courses on financial planning should be provided in India to improve financial literacy and induce more and more students to go for financial planning.
11. NGOs may form Self-Help-Groups for common public to facilitate improvement of financial literacy by providing encouragement to members to actively participate in elementary financial education programs organized at local level, knowledge and experience sharing among group members and opening counseling centers for providing guidance to manage financial crisis.
12. Print and Visual Media (Newspapers and TV / Business Channels) must dedicate a sizable portion of their coverage per week to discussions on personal finance matters to educate students, parents, house wives, retired persons and senior citizens using convenient slots on different days of a week.
13. Financial counseling centers, at Government's initiative, may be opened for providing counseling to students in schools, colleges/universities to teach the situation of financial crisis in the family. Government and its agencies along with regulatory bodies should open a dedicated website for financial literacy education, which should work as a repository of personal finance/ financial planning resources and provide free access as well as free downloading facility to all.
14. Exposure to financial education is a necessary, but not a sufficient condition, for children who are going in the school or universities.
15. Students should be provided financial education classes and online training. Incentive programs should be run by the financial institutions or employers.
16. Young workers cover wide range of age groups with different priorities. Student should be provided financial education in high school and graduation to avoid complex situation in their life.
17. **"Meeting youth where they are"** can be a wonderful initiative. Social media, mobile apps can be developed to provide financial education. The modules can be given to the students/youth, so that they can learn on their own terms and at their own pace.

#### **9.4 Validation of Findings and Generalisation**

The above research was conducted by taking samples primarily from two northern metropolitan cities of Uttar Pradesh, viz. Noida and Greater Noida, thus for the purpose of generalization, there was a need for validation of the major findings by experts drawn from other parts of India. The major findings and conclusions were, therefore, presented to 6 different experts; two each from South, East and West zones and their views were taken. These experts were chosen from financial planning practitioners, educationists and social workers. Barring minor differences, most of these experts agreed that the findings and conclusions are equally applicable to all parts of India and can be generalised. Most of the experts have observed that a national level financial capability survey should be conducted in India as soon as possible. They further

observed that the findings of this research study should be sent to the Central Government urging it to take appropriate measures to improve the financial capability of Indians in general and the socio-economically vulnerable groups in particular. They observed that this type of research should be encouraged and be adequately funded by the Government.

### **9.5 Scope for Further Research**

(i) A national level financial capability survey could be conducted taking samples from various vulnerable groups in the society like senior citizens, scheduled caste and scheduled tribes, religious minority, physically challenged, women, agriculturists, retired military personnel etc and design a **“National Financial Capability Development Strategy”** to address the requirements of each of these vulnerable groups.

(ii) The current research study can be repeated with a larger sample size, taking into account the observations of engineering and management students from all walks of life and spread across every major state and union territory of the country, as the level of literacy and the extent of socio economic progress of students varies from place to place.

(iii) The current study can be expanded to all professional courses with a larger sample size, spread across all states and union territory of the country, as the level of understanding financial matters varies from profession to profession.

(v) A longitudinal analysis can be attempted to test the behavioural modification, if any, of respondents after policy intervention and the respondents receive relevant personal finance education.

(vi) An experience survey can be conducted to know whether the persons who formulate and implement their own financial planning, succeed to avoid financial distress, midlife financial crisis and lead a peaceful retired life or not.

(vi) A study can be conducted to ascertain the conditions under which an individual would prefer to confide with a financial planner to advise him / her.

(vii) A study can be conducted of behavioural changes of teachers/parents/ social workers/ educationist taking samples from various groups in the society, who started their children involvements in the financial matters in the family.

(viii) A study can be conducted to ascertain whether financial education really leads to financial well being.

(ix) A study can be conducted at the level of schools in major cities to identify the saving habits amongst the students and guidelines can be developed to inculcate the saving habits at national level.

(x) A study can be conducted at the school level to see the pre and post impact of financial programs and various means can be suggested for the financial institutions to develop the curriculum for different needs.

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## ABOUT THE BOOK

Every person has to deal with financial matters on day to day basis. Ineffective money management on the daily basis can result into financial crisis. In the same context, it is quite essential to ascertain the financial capability of Indian youth, especially college students pursuing professional courses, those who would form the so called educated middle class in future. Is it dependent on family's financial background, educational status of parents and the subject matter of the studies (management or engineering) they pursue? Here researcher wants to identify financial background is improving the financial capability of students or not? How education of the parents is helping their children in financial planning or taking best decision?

Financial Capability is required for financial well-being of the individual and his/her family. India has been a male dominating society. In this book it has been tried to find out whether gender bias is still persisting even among young educated persons in India?

Indian economy will be adversely impacted if the youth will not have proper financial capability of handling financial crisis and then it will lead to economic crisis of the country.



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