CHAPTER 2
Chapter 2

LITERATURE REVIEW

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2.1 Introduction

“Financial Literacy is the base and primary step for financial inclusion. It highlights knowledge on the merits and demerits of financial products and services, based on which an individual can choose the right product according to his/her needs. In the words of Shri Pranab Mukherjee, (2013), “Financial literacy and education plays a vital role in financial inclusion, inclusive growth and sustainable prosperity”. It ensures that financial services need to be reached to weaker or unreached sections of the society. Thus, all the initiatives should aim at achieving financial inclusion through financial literacy.”

![THE FINANCIAL TRIPOD](Image)

**Fig. 2.1 The Financial Tripod(Source: Self designed)**

“In developing economies like India with more than 60 per cent of the population residing in rural areas need to ensure adequate access to financial products and services.” By the end of March 2013, it was found that 59 percent of the adults were having bank accounts, where as in rural areas it was only 39 per cent. “For this, the Financial Stability and Development Council (FSDC), led by the Finance Ministries mandated to focus on financial inclusion and financial literacy. Financial Literacy Centers were established in June 2012 by the Reserve Bank of India. As per new guidelines of the RBI, all commercial banks have to conduct
awareness camp at least once in a month.” Accordingly, by the end of March 2013, 718 Financial Literacy Centers have been set up and 2.2 million people have been educated through awareness camps (Richa Aggarwal, 2014). In the same way various Government institutions, viz., the SEBI, the RBI and IRDA who are committed to the mission “to create a financially aware and empowered India” to improve financial literacy thus achieving financial inclusion in India.”

“The concept of financial literacy consists of a mix of several aspects viz. financial knowledge (ANZ, 2005; Hung et al., 2009; FINRA, 2010; Gallery, 2010; Huston, 2010; Remund, 2010; OECD, 2013); financial operations experience (Orton, 2007; FINRA, 2010; OECD, 2013); ability to communicate about different financial concepts (Remund, 2010); ability to use different financial concepts and instruments (Hung et al., 2009; Huston, 2010; Remund, 2010); ability to take adequate financial decisions (Remund, 2010; OECD 2013); attitude towards the use of financial instruments (Orton, 2007); people’s confidence in financial operations performed (Huston, 2010; Remund, 2010; OECD, 2013); real financial behavior (Orton, 2007; Huston, 2010); multiple measures (Baron-Donovan et al., 2005).”

Researches have shown that gender, race, background, behavior and attitudes have an impact on retirement planning. Furthermore, studies have shown that education plays an important part in all of the categories mentioned above. “Literacy is a reasonably good indicator of development in a society. World Bank studies have established the direct and functional relationship between literacy and productivity on one hand and literacy and the overall quality of human life on the other. Financial Literacy helps individuals to improve their level of understanding of financial matters which enables them to process financial information and make in-formed decisions about personal finance.”
National Centre for Financial Education (NCFE) conducted Financial Literacy & Inclusion Survey in Chhattisgarh in the year 2014. It conducted 2211 face-to-face personal interviews in the age-group of 18-80 Years in 4 districts of Chhattisgarh. The geographic distribution of sample size into urban and rural areas was 33:67 while the gender mix of the total sample size into male and female was 53:47. From the survey the financial literacy status of the state is summarized below:

- 27% of the respondents think about future before spending money. 26% respondents are used to save for future and 39% plan their earnings.
- Respondents in Chhattisgarh have a behavior of keeping close watch on financial affairs, paying bills on time and buying products within their affordability.
- While determining the Financial knowledge of the people it was found that more than 80% of the people were not aware of the calculation of time value of money and even compound interest.
- The Financial Inclusion status of the state as surveyed by NCFE shows that the awareness with respect of banking, insurance and pension products is comparatively higher than that of capital market and commodity derivative products. Among all the financial products, the respondents in Chhattisgarh have preference towards savings related Banking Products and Insurance, followed by Other Savings Related Products, Pension and Capital Market.
- The overall financial literacy and financial inclusion in Chhattisgarh is estimated to be 4% which is comparatively lesser than the central zone and national level rate.

The literature review presented in this chapter is an evidence for the fact that financial literacy levels possessed by the individuals among the various countries is low irrespective of the stage of development of the country. Amongst them, various studies have established a relationship
between financial literacy and demographics of an individual. While, the studies done by consumer economists have tried to establish the relationship of financial literacy with various financial behaviors, as an outcome of financial education, the studies documented in this chapter shows a low level of financial literacy and lack of financial information affecting the ability to perform necessary financial behavior. Financial literacy is comparatively lower in rural areas and minimum of financial literacy is needed for effective decision making. Financial literacy provides an aid in improving the quality of services and products. In the context of Indian Economy, the researcher has proceeded further with an exploratory research to find out whether the investors in state of Chhattisgarh, which is slowly developing as one of the most progressing states of India does possess the sufficient level of financial literacy and does it have any impact on their investment decision. Also, the BMFL model which has been developed at Banasthali Vidyapith in association with PRIME, aims at analyzing the level of Financial Literacy level for the people of Chhattisgarh residing in Raipur, Mahasamund, Bemetra, Baloda Bazaar, Gariyabandh, Dhamtari and Raigarh based on gender, location, income level, occupation, district and age and disseminate information through statistical analysis and case studies. Studies on financial literacy have been conducted more in western world and very less work has been done in Indian context and lesser comprehensive research at doctoral research has been carried in Chhattisgarh state. Furthermore, it has been believed that FL in India is low, but is it the real position? One can know only after exploring using the BMFL.

“Chen & Volpe (2002) in their study concluded that there are gender differences in personal financial literacy level among college students and females were less financially literate than their male counterparts even after controlling other factors. Both males and females, however found that major field of study had significant effect on financial literacy; that business majors were likely to know more about personal finance than
non-business majors. They also found that males ranked themselves more financial literate than females, and more males ranking personal finance as an important subject than females. The study showed positive relationship between age and most of the behavioural indicators for age group 25-34 while no such association was found for age group 18-24. Household income also showed a relatively strong positive association with financial control such as having savings and investments. Education was also found crucial in choosing financial products and staying informed”.

**ANZ (2003)** in their study found a major concern for the youth debt levels in Australia as it was in UK. The researcher also found that a low level of financial literacy was associated with low levels of employment, single and ages between 18-24.

**Mandell Lewis (2006)** in their study had emphasized the importance of financial literacy and measure the financial literacy of high school seniors. The researcher analyzed no connection between education and financial literacy. The researcher did two piece of analysis. Firstly on the Jumpstart Data been captured and then the observer says that just in time education is more effective. The researcher had also analyzed that the persons who plays stock market game are more interactive, enthusiastic and have level of financial literacy scores.

According to **IIMS Survey** conducted **(2007)** in their study collected the data from 5637 respondents and purposive sampling been done, the respondents were chosen from low income households. The data reveals that formal training programmes are more informative increase awareness in comparison to informal training programmes. Lower level of literacy was observed among respondents in Rajasthan as compared to other states.
Lusardi Annamaria, Mitchell S Olivia (2007) in their research studied that the ones who are financially illiterate are unable to make decisions in reference to savings for retirement and thus have less wealth. In the given research questions has focused on respondents to Health and Retirement Study over 50 yrs of age. The researcher used Rand American Life Panel an internet survey in order to access financial knowledge of workers during their earning years. The researchers used multivariate analysis. The researcher concluded that financial literacy is a key determinant for retirement planning. And the ones who are financially literate they are more likely to plan for retirement and decision.

Chidambaram (2007) said that—“Financial literacy should be imbibed in our life like an earner should be a saver, a saver should be investor and an investor should be financially literate. People in India save and it results into the savings of instruments which are low interest yielding which is because of the lack of financial planning and lack of awareness about the future goal and the amount of money needed for fulfilling that goal”.

Bist Singh Rajender has emphasized on role of ICT enabled services on development of a nation how does it helps in creating employment opportunities, reducing disparities, help farmers in creating value based information. The researcher has discussed about various initiatives in regard to financial inclusion technology alternatives which like ATM, kiosk, Mobile financial services. According to analysis 70% of respondents consisted of women, who belonged to poor unbanked and had limited access to financial services and are mainly from SC/ST category.

Rajput and Oberoi (2011) said that “the marginalized groups of population is financially excluded and the Top most states indulged in Financial inclusion are basically from Southern India and the least financial inclusion are in the states including Arunachal Pradesh, Nagaland, Chhattisgarh, Bihar and Manipur. The people are unaware of banking
services as well the banking officials are also not aware about the needs and capacity of the people”.

“Gale William and Levine Ruth (February 2011) studied the extent and effects of financial illiteracy on American households, reviewed previous efforts to promote financial literacy, and discussed new directions for such initiatives. None of the traditional approaches to financial literacy – employer-based, school-based, credit counselling, or community-based has generated strong evidence that financial literacy efforts have had positive and substantial impacts. Nevertheless, the apparent success of financial planning efforts and simplification initiatives suggests that there are private actions and public policy strategies that can influence saving behaviour. There is a key role for the private sector in enhancing financial literacy and the market is responding rapidly to try to fill the void. There also is an at-least equally important role for the public sector, via a campaign that revolves around a comprehensive website and through better coordination of existing policies toward saving. The authors conclude that improving financial literacy should be a first-order concern for policy-makers, and that gains could accrue not only to the affected individuals, but also to their family members and society at large.”

Mishra Loknath (2011) According to researcher financial education helps in enhancing financial capability. Financial capability has three main components: Financial knowledge, Financial skill and Financial Responsibility. The researcher conducted financial Planning Education Survey (2011), wherein a questionnaire was designed and sent to (educationists, education providers, corporate bodies, NGOs) 150 respondents from which only 30% responded i.e 47.

In the words of Nelson Mandela, “Education is the most powerful weapon which you can use to change the world”. Improvement in
financial knowledge is necessary and this is possible with right education to right persons at right time.

“Agarwalla Sobhesh Kumar, Barua Samir, Jacob Joshy, Jayanth R. Varma et al. (2012) in their study tried to understand the Financial Literacy level of three demographic groups young working adults, retired and students. The survey involved 3000 respondents from the given age groups. The study involved questionnaire developed as per OECD standards. The findings suggest that financial knowledge was quite low. There was desirable attitude towards saving. Men were found to be financially knowledgeable than women. Financial knowledge was more widespread among the more educated and the relatively wealthy. The financial behaviour and attitude of women was marginally better compared to men. It was found that majority of respondents financially planed for their retirement and started systematic savings early in life. The overall awareness of financial products was reported to be generally low”

“Annamaria Lusardi (2012) conducted a study which comprise of sample population from USA and used questions which provide the base for cross country analysis of financial literacy. These questions are the base of financial decision making as they are based on concept of numeracy, diversification, and inflation. According to a researcher financial illiteracy is detected across U.S.A, Netherland, Sweden, Italy, Japan, New Zealand, and Germany. Percentage of respondents who correctly answered the questions is comparatively less regardless of economic development stage. According to researcher financial literacy being analyzed based on gender, age, demographic groups, employment status, education. According to researcher the persons who are financially literate are more likely to plan for their retirement irrespective of number of schemes available. According to a researcher Poor financial literacy has been found across the nation. A strong linkage has been found in between the financial literacy and retirement planning”.
Parmarth Kumar Hemantha (2012) in their study identified the gap that in reaching financial inclusion financial literacy seems to be a prior requirement supported by credit delivery methods – ICT and client protection. The researcher in their study focuses upon Assessment study of seven states (Rajasthan, UP, Bihar, Jharkhand, MP, Chhattisgarh, and Odhisa) and does Purposive Sampling.

“Bhushan Puneet (2013) examined the awareness level and investment behaviour of salaried individuals of Himachal Pradesh towards financial products. The author found that only 24.6% respondents had invested in pension funds, which means most of the people do not plan for retirement which is not a very healthy sign. Also 77.7% people had invested in life insurance which means that people are aware about the importance of life insurance. Only 39.1% respondents invest in public provident fund. The researcher concluded that respondents were quite aware about traditional and safe financial products whereas awareness level of new age financial products among the population was low. Majority of the respondents park their money in traditional and safe investment avenues so people must be made more aware about new investment opportunities available in the market”.

“Vasantbhai, Sakaria, Sima (2013) in their study focused to identify and evaluate the financial literacy among retired persons of Rajkot city. Further, the study aimed to measure the financial awareness and knowledge of the retired persons and also to make suggestions for better investment options to the perspectives investors. With F – Test and Sandler – ‘A’ at 5% level, the researcher concluded that 88% of respondents were knowledgeable about how to invest and where to invest and 12% of respondents were not aware about the same. The age group and savings were found to affect the issues related to financial literacy.
Research also found that market information and skills were necessary in investment decision”.

“Bhushan Puneet and Medury Yajulu (2013) in their study focuses upon that Most of the work has been done in developed nations like USA, UK, Australia very few studies has been carried out in developed nation like India. Target population in most of the cases is college students rather than young population. The researcher in their study focuses upon bridging the gap that there are very few studies which covered all areas of personal finance in order to study financial literacy”. The researcher conducted a survey among salaried individuals at Himachal Pradesh and uses multistage sampling, Total of 516 respondents constitute the sample. To check the level of financial literacy questions from areas personal finance, financial numeracy were asked and ANOVA Test been conducted. And the results show that the level of financial literacy level is 58.30% among salaried individuals. The ones who are above 60 yrs of age is having highest financial literacy level, it is highest in case of males than females.

Bashir Taqadus, Arshad Asba, Nazir Aleena, Afzal Naghmana (2013) in their literature analyzed the impact of Psychological Factors on Financial Literacy in Pakistan. The given research comprise of individuals who had financial dealings with National Saving Centre of Pakistan. The data was gathered through questionnaire which contained 11 items to test financial literacy which covers following areas- hopelessness, religiosity, financial satisfaction, risk preference, retirement plan intention. The researcher in their study analyzed that people of Pakistan are financially illiterate and only one third of respondents were able to correctly answer.

“Jariwala (2013) conducted her research in Gujarat state on financial literacy and its impact on investment decision making. According to researcher a person can better choose the available investment avenue
which will result into best product selection and sound financial well-being of an individual. The research depicts direct relation between financial education and financial investment decisions. Financial literacy helps the people to manage their financial goals under which they can opt for those investment options which will give good amount of return at the time of retirement. The research shows change in pattern of savers and change in pattern of investors with improving financial literacy.

“In the first all India financial literacy survey, NCFE in 2014 made an excellent effort that comprised 2280 face to face personal interview in the age group of 18-80 years with the distribution of sample size in the ratio of 97:03 as urban and rural areas. In this financial literacy is a combination of knowledge, attitude and behaviour. This concept comprises financial attitude of people towards financial literacy which involves attitude towards saving and investing the money. Behaviour is also having a significant on financial wellbeing. Respondent’s behaviour depicts careful analysis of each and every product prior to take a purchasing decision. Survey depicts lower level of financial knowledge. Respondents have preference towards banking, insurance and pension funds and very small fraction of people holds knowledge of derivatives and commodity derivative market. Overall financial literacy is estimated to be 32% as per report given which is comparatively higher than the north zone. Literacy among males is comparatively higher than females. And higher level of literacy is observed in case of government employees.”

“Paul Ali in their study focused to identify and evaluate young people are high users of basic accounts and having saving oriented behaviour. Researcher had conducted an interview of participants which gives him an insight that people are aware about the importance of money and its impact. That is why people are involved in searching for various options
which may give them independence and sense of satisfaction and financial independence”.

“The Mishra Loknath (2015) in his study focused on Role of financial planning in Women life. The researcher in their study conducted a survey of 590 respondents drawn from middle class to identify the level of financial literacy level. The researcher conducted a Core Consistency Analysis found > 90% of respondents observed financial planning is necessary and lead to financial planning. The researcher found that less than 15 % of respondents are actually going for financial planning. The researcher has identified that there are various options available for financial planning need is to get aware and make the decisions in accordance to it”.

“Educate a man, you will educate but one, educate a women, you will educate a nation.”

SEBI has undertaken an initiative to spread awareness in regard to financial education to various segments via school students, college students, working executive, income earners. SEBI has identified Resource persons and they are trained in order to prove training on various aspects of finance. Various workshops and seminars are been conducted by SEBI.

Initiatives taken by RBI and other Banks:
Abhay counseling centre (Bank of India)
Disha Trust (ICICI Bank ltd)
Samadhan (Allahabad Bank)

“The Mundra S.S (2015) in his study discussed about the trial concept of financial inclusion, literacy and consumer protection. The researcher had made categorization about five type of illiterates Wise illiterates, Greed Driven illiterates, Information driven illiterates, Illiterates illiterates,
kindergarten illiterates. The researcher than address their needs and discussed how and why financial literacy drive is essential. The researcher said that greed, financial illiteracy non availability of formal financial system are three major reasons because of which public fall into trap of illegal financial activities. The researcher had emphasized on effective coordination between state and local administrative machinery. And had also emphasized on state level bankers coordination committee for active coordination”.

“Dwivedi Monika, Purohit Harsh, Mehta Divya and Gurjar Sunita et al. (2015) in their article emphasized on impact of financial literacy and their impact on managing the finance. They focused on importance of financial literacy within an organization registered under society’s registration Act. They had emphasized on importance and role of PRADAN as an organization. This organization focus on an idea that brightest must work with the poor. This organization has taken an initiative to improve the living conditions of poor and eradicating poverty from the society. They worked for mobilizing the resources. This organization has taken an initiative for sustainable livelihood. Now the women don’t need to take money from lenders. The women just need to take credit at 12% interest”.

Sharma S (2015) has taken a different approach towards explaining Financial Literacy. Apart from Financial Knowledge, Attitude and Behaviour, he has included in his study aspects like Motivation following the ‘Basket of Needs’ rather than ‘Hierarchy of Needs’ prescribed by Maslow. According to him room for ethics emanate from ‘How to Earn’ (Shubh- Labh or Holy Profit), ‘Managing Expenses’, ‘How to Donate’ (regularly, even if amount is less) and Accumulation of Wealth (primarily for the society, but working as a custodian for accumulated wealth following the Dharm path and remembering that in general one should accumulate lesser wealth).
“Nejati F, Ahmadi M and Lali M et al. (2015) in their study emphasized on role of financial education and how it will empower an individual with an insight. Financial Education initiatives help to reduce dispersion of wealth. In the given research relationship was studied in between financial literacy, retirement planning and household wealth. 5 Point Likert Scale was used to rank the questions. Due to normality of research variables, the Pearson’s correlation test and multivariate regression were used to examine the hypotheses”.

In a special invitation talk at Banasthali University, Garg G.P. (2016), Registrar, NCFE emphasized on need for imparting financial literacy education in India, and expressed concern with lower level of financial literacy and discussed significance of efforts from all stakeholders to boost financial literacy.

According to the analyses made results shows that there is a direct and positive relationship between financial literacy and independent variables self-control, savings planning, retirement planning, and risk diversification.

The researcher was careful to choose the appropriate research design so demanded by the nature of the project. Exploratory research is used prior to starting a formal research to sharpen the concepts and elucidates the progress. This method saves the time, money and effort of the researcher as one can develop judgment as to what methodology to follow in the formal research process by consulting experts and analyzing the current situation. Additionally, this assures the practicality of the formal investigation is in the selected area. (Cooper & Schindler, 2008)

Exploratory research was carried out casually in the preliminary stage of the research. Moreover, the researcher after detailed introductory, general and expert opinions based on casual process, the researcher became assured to move the research further.
Then the instrument was tabulated for each question using mean, frequency, and percentage of the characteristics and other statistical analysis tools. Subsequently, interpretation was stated represented as findings (Schindler & Cooper, 2013).

2.2 Significance of Literature Review

Review of literature holds an essential position in providing an informative base to the researcher collecting information from an extensive assortment of secondary source of data such as books, journals, magazines, World Wide Web etc. The methodical and pertinent collections of prior work of a variety of researches done in past implant insights into the researcher paving the means for continuous advancement towards the exploration of the problem in sight. Therefore, the researcher gains the required information, details, understanding, and facts thus enabling the researcher create feel of the chronological works and finally amalgamate and reach the conclusion.

Financial literacy is must for a better life because the most important contribution of financial services businesses in the lives of their investors is not return, risk or funding of financial goals. It is customer empowerment that leads to better financial lives. Though Financial literacy initiatives remain grand in vision but are limited in efficacy, because personal finance is an applied science and art.

Financial literacy involves both concepts and application but bringing these two ends together is very tough in reality. If we want the investors to understand that buying equity shares is equivalent to taking a stake in a business, this idea may be lost on an investor who can buy and sell in a matter of seconds on an electronic screen.

A simple awareness drive about equity investing is easy to design. It falls through only because funding it serves no one's business interest, and
because its target audience is seeking immediate action points. Regulators and other policy makers try to centralize the investor education drives, by allocating central funds. But these resources end up funding initiatives that fall short in content, efficacy and quality. Thus, the researcher has referred to several studies and believes that following benefits are there from the Literature Review as under:

1. Financial Literacy constitutes an important part of Indian economy. It has been observed that financial knowledge in India is very low.

2. There is strict need for initiatives to be taken by government authorities so that in accordance to it action will be taken.

3. Government is in process of setting up Financial Stability and Development Council which will focus on two key aspects that is Financial Literacy and Financial Inclusion.

4. The proposed study is first of its kind in India aiming to measure the financial capability of educated persons in Chhattisgarh Region.

5. This study has discussed the new BMFL model to understand financial literacy enabling comparison of BMFL to other existing models.

6. The study is promoting an opportunity for further research by new researchers about BMFL model to identify financial literacy in Indian context.

7. The research work carried out by the researcher is thus enabling the policymakers and stakeholders to formulate plans according to the actual condition of financial literacy and personal finance management of people of Chhattisgarh.

2.3 Historical Background
The “definition of financial literacy began in the UK from National Foundation for Education Research and was initially adopted across the UK with a view to achieve international consistency (Noctor, Stoney and Strandling, 1992). Since then, financial literacy has become a prominent research topic in other developed countries, where this definition has been widely accepted and adopted by many studies. This part of the chapter is divided into three sections. The first section presents the international studies conducted for measuring the financial literacy of citizens of various countries such as, The United States, The United Kingdom, Australia, Singapore and other OECD member countries. This section also briefs the efforts made in India in the field of financial literacy. The second section of this chapter discusses on theoretical framework for financial behavior. As personal finance and/or financial behavior is based on the theories from several disciplines such as family studies, economics, psychology and sociology. In the third section, review of literature is presented on various studies those have attempted to establish the relationship between financial education, financial literacy and various financial behavior.”

2.4 Global Scenario: International Studies on Financial Literacy

“People face challenges in different stages of life to take certain financial decisions. Financial illiteracy is inability to make informed judgments and effective decisions regarding the use and management of money and wealth which affects their family and society at large. In order to improve the society and economy of the nation ,it is very important for a country to take steps for improving financial literacy. Financial literacy is the set of skills and knowledge that allows an individual to take appropriate financial decisions. The objective of the research was to understand financial literacy and its importance and to understand the current financial literacy initiatives being taken in India and other parts of the world.
literacy i.e. the ability to process financial information and make informed decisions about personal finance has received growing attention in the developed world, and recently, in the developing world, as a potentially important determinant of household well-being. Concept of Financial literacy is a worldwide concern because the life expectancy is increasing due to continuous developments in medical and technology field however it is very important for a person to sustain himself economically till he is alive. Financial literacy has become an immensely popular component of financial reforms across the world. Promotion of Financial literacy dates back as early as 1908 in United States of America, where Edward A. Filene established American credit union movement to promote financial literacy in form of newsletters. (ref:www.cuna.org)”

2.4.1 Studies in U.K

“Schagen and Lines (1996) conducted a financial literacy survey of the general population on behalf of the NatWest Group Charitable Trust, with a particular focus on four groups: young people in work or training (having age of 16 to 21 years), students in higher education living from home, single parents and families financial information and institutions, money management in families and their confidence in dealing with financial issues. The survey had also covered the questions that tested respondents’ understanding and knowledge of financial markets, financial instruments, financial decision making, financial problem solving and financial planning. The results had indicated that, most respondents were confident in their financial dealings. The notable exceptions were single parents, who were less committed to savings, and students, who were the least confident group while dealing with the financial matters, with very few keeping any financial records.”

“The Adult Financial Literacy Advisory Group (AdFLAG) (2000) had undertaken a study to determine —how to promote better access to
financial education to young people and adults by conducting the relevant research, investigating areas of good practice, consulting with a variety of organization across the public, private and voluntary sectors and visiting organizations active in providing financial education programs to socially excluded people. The study concluded that the need for financial literacy would continue to grow because individuals were expected to become more self-reliant, difficulties arising from changing work patterns, an ageing population, less government involvement and increasingly complex financial products. To this end, The Adult Financial Advisory Group recommended that short term financial literacy education should be built around the education, employment, housing, financial services and communication with particular focus on needy population sectors such as older people, young people, single parents, and people with disabilities and people living in social housing.”

2.4.2 Studies in U.S.A

“Chen and Volpe (1998) conducted a survey of 924 college students from thirteen colleges to examine their personal financial literacy; the relationship between financial literacy and students' characteristics and impact of financial literacy on students' opinions and decisions. The survey attempted to examine the personal financial literacy of the U.S. college students across four main areas: general knowledge, savings and borrowings, insurance and investments. Chen and Volpe (1998) used Analysis of Variance (ANOVA) technique to show the variations in the levels of financial literacy among subgroups of students. In addition, logistic regression models were used to examine the financial literacy levels of students across different demographic characteristics. The participants were classified into two subgroups using the median percentage of correct answers. Students with scores higher than the median were classified as having relatively more knowledge and students with scores equal to or below the median were classified as having
relatively less knowledge. This dichotomous variable was used as the dependent variable in the logistic model and the independent variable were represented by the demographic characteristic variables. This study found that personal finance skills and knowledge are inadequate; with the overall median percentage of correct scores was 55.56 percent. Results of the survey showed that the most poorly answered questions were those involving investments, while the best answered questions were those on general knowledge. The demographic variables that were used in the analysis of the study were academic discipline, class rank, gender, race, nationality, years of work experience, age and income. It was found that those students with a non-business majors, women, students in a lower class rank, under the age of 30 and had little work experience have lower levels of knowledge. It was also found that the participants with better financial knowledge identified more efficient options, while in their decision making concerning personal financial issues, they reacted more effectively. This study concluded that students with less knowledge were more likely to hold wrong opinions and make incorrect financial decisions and college students are not knowledgeable about personal finance. The low level of knowledge limits their ability to make informed decisions. The study also concluded that the level of an individual's financial knowledge tends to influence attitudes which in turn affects an individual's financial behavior.

“In extension of the previous study Volpe and Chen, (1998) surveyed 530 online investors to examine their investment literacy (financial literacy) and the relationship between the literacy and online investor characteristics (e.g. education, gender investing experience and other factors). In this study, their respondents were online investors as the advent of online investing has significantly impacted an investor's decision making process by providing instant access to a vast amount of financial information, lower transaction costs, and quick order execution. The survey included the questions based on investment concepts like: effect of distribution from a
mutual fund on its net asset value (NAV), blue chip stock terminology, compounding of interest, beta as a volatility measure, capital gain tax rate, portfolio diversification, stock splits, financial ratio analysis, appropriate asset allocation strategies, and the relationship between interest rates and bond prices. The survey was conducted online. The results of the study found that online investors answered about 50 percent of the questions correctly. Investors with 50 years of age or older were more knowledgeable than those who were younger and it was consistent with those found in previous research (Volpe and Chen, 1998). Women had lower level of investment knowledge than men. Investors with graduate degrees were more knowledgeable than those with some high school or college education and those who have traded online were more knowledgeable than those who have not. The overall study concluded that the online investors' knowledge of investments is insufficient and needs to be improved in future.”

“Moore (2003) mentioned that Washington State Department of Financial Institute (DFI) established and commissioned the Social and Economic Sciences Research Centre (SESRC) at the Washington State University to conduct a financial literacy study to investigate financial knowledge, behavior, attitudes and experiences. The study on consumers who had borrowed from a lender that recently settled in a large predatory lending case (labeled the victim pool); and the general population (labeled the general pool). A telephonic survey was conducted on 1,483 adults (891 from the victim pool and 592 from the general pool). In addition to the survey, 31 participants from the victim pool were randomly chosen to take part in four focus group sessions. These participants had actually filed complaints with DFI (or the office of Attorney General) regarding their recent mortgage transactions and these sessions were formed to allow a more in-depth understanding of these individuals’ mortgage experiences, as well as to support the survey findings. The results showed statistically significant differences between two population pools and, in general, the
results were less positive for respondents in the victim pool compared to those in the general pool. In particular, the victim pool had less understanding of specific financial terms that were thought to have a critical impact on decisions regarding loans. Respondents in the victim pool were less likely to invest in stocks, have long term savings and financial plans, spread their investments, or invest in retirement plans. These respondents also showed higher tendencies towards risky behavior.

This study also recognized financial illiteracy as a concern amongst Washington State residents and the main purpose of the study was to provide DFI with the information needed for them to develop an effective financial literacy program to educate, inform and assist consumers in making financial decisions. Although the results indicated that consumers would benefit from such a program, especially those in the victim pool, the major challenge identified was to motivate participation.”

“Hilgert, Hogarth and Beverly et al.(2003) used results from the University of Michigan’s monthly Survey of Consumers (conducted in November and December 2001) to explore the connection between financial knowledge and behaviors. A financial practice index was calculated for each of the four financial management activities: cash-flow management, credit management, saving and retirement. Each index comprised three categories: low, medium and high, and the survey respondents were placed into these categories based on their participation in each activity. In addition, a financial knowledge score was calculated across five sections: credit management, saving, investment, mortgage, and other. The average financial knowledge score was examined by the financial practice index and index level. Differences were revealed between financial practice index and financial knowledge scores, indicating that there is a relationship between behavior (as measured by the index) and knowledge (as measured by score). In general, medium to high index levels were associated with higher scores under most sections of knowledge. Research confirmed a correlation between financial
knowledge and behavior, although the direction of the causality is unclear. It is also concluded that those who score higher on financial literacy tests are more likely to follow recommended financial practices. Compared with those who have less financial knowledge, those with more financial knowledge are also more likely to follow recommended financial practices and engage in recommended financial behaviors."

“Chen and Volpe (2005) conducted a survey of 212 company human resource and benefits administrators to find out the financial literacy of the U.S. workers. The survey instrument was consisted of 68 questions focusing on importance of various personal financial topics, the level of knowledge possessed by employees, whether inadequate personal finance knowledge leads to a decline in productivity, the use of a financial literacy test to screen new hires and the most effective approach to improve employee's financial literacy in the workplace. The results of the survey showed that participants ranked all of the surveyed personal finance topics as important and that they believed that employees do not have adequate knowledge about these topics. Retirement planning was ranked as being the most important topic, followed by personal finance basics, insurance, company benefit plans, taxes, investments and estate planning. Respondents identified that the least knowledgeable areas among employees are financial planning basics and retirement planning. More than 55 % of respondents who answered a question about whether inadequate personal finance knowledge leads to a decline in productivity believed that this is the case, although a few respondents recommended using a financial literacy test to screen new hires. Results of the survey also showed that respondents believed that outsourcing outside financial planners is the most effective approach to educating employees on personal finance."

running a biennial survey, the first survey was conducted in 1998 (NCEE, 2005) and the second survey in 2004. Results of the later survey revealed that only 34 states had standards for personal finance and 20 of these required that these standards be implemented. In addition, only six states required that students complete a course that covers personal finance before graduating from high school and only eight states actually tested students’ personal financial knowledge. From the results of this survey, it was concluded that the vast majority of young people in the U.S. were not being taught about personal finance in school.”

“Lusardi and Mitchell (2006) developed a module on retirement planning and financial literacy as part of Health and Retirement Study conducted in 2004 in The United States. The module aimed to explore the hypothesis that poor planning may be a primary result of financial illiteracy. In order to do this, the module measured how workers make their saving decisions, how they collect information for making these decisions, and whether they possess required amount of financial literacy needed to make these decisions. A total of 1,269 adults aged over 50 years responded to the module and results showed that there is a strong relationship between financial knowledge and planning; in that those with financial knowledge were more likely to plan and to succeed in their planning. They also found that overall, financial literacy is poor among older Americans and certain groups are particularly at risk. In addition to this, they also found that the least literate are also the least likely to plan and save for retirement.”

“Lusardi and Mitchell (2009) Based upon the findings of previous research, the least literate are also likely to plan and save for retirement (Lusardi and Mitchell, 2006; 2007a; 2008), Lusardi and Mitchell developed a study to report on several self-assessed and objective measures of financial literacy newly added to the American Life Panel (ALP), and identify the links between financial literacy and retirement planning by exploiting information about respondents' financial knowledge acquired in
school – before entering the labor market and certainly before starting to plan for retirement. The Rand American Life Panel (ALP) was an internet based survey of respondents age 18+ recruited by the University of Michigan's Survey Research Center. They used two sets of questions to test economic knowledge of population. The first set followed HRS approach which captured people’s capacity to handle basic financial literacy concepts, which intended to measure simple concepts crucial for everyday financial transactions and decision making. This set included the questions based on numeracy, compound interest, inflation, time value of money and inflation/ money illusion. From 989 observations taken from ALP, it was found that 87.1% respondents can do simple calculations regarding interest rates and they also understand the effects of inflation. Yet almost three quarters of respondents (69.0%) cannot give correct answer about compound interest. Similarly, a sizable fraction of respondents (78.4%) suffer from money illusion. Moreover, fewer than half (47%) of the respondents can correctly answer all the five questions. Moving towards socioeconomic characteristics, respondents aged 50+ were more consistently better informed, although the age differences were not often statistically significant. Those who had not attended the college were more likely to respond incorrectly. It was also found that women exhibited much lower levels of financial literacy than men, where sex differences were statistically significant for all except money illusion question. These findings were similar to those in the older sample of Health and Retirement Survey (HRS). The second set was used to capture sophisticated financial literacy, and measured responses to more advanced application based financial knowledge questions. Both the sets also included self assessment questions, which are intended to reflect people’s confidence about understanding of economics. With the same number of observations, it was found that most respondents responded to most of the questions correctly. The respondents were found to be knowledgeable about the functioning of stock markets and diversification. They were also found to be more knowledgeable about the fluctuations in
assets than about patterns of asset returns. But the questions linked to bond prices and interest rates proved very difficult. Only 16% respondents could answer the questions correctly confirming that sophisticated financial literacy was not widespread. Under the socio economic characteristics, it was found that younger respondents were less well informed. In addition, it was found that better educated respondents were more knowledgeable than less educated counterparts. Sex differences were also marked in that women knew substantially less than men with regards to the stock market, risk, and bond returns versus stocks, risk diversification, and basic asset pricing. They used multivariate analysis to link retirement planning with financial literacy, holding other socioeconomic factors constant. Under the ordinary linear multivariate regression it was found that financial knowledge is influential in retirement planning. But sophisticated financial knowledge is the most important factor, while basic literacy is not that statistically significant. The overall findings of this study suggested that the impact of financial literacy index in the retirement planning is positive, statistically significant and it strongly influences retirement planning.”

2.4.3 Studies in Australia

“Beal and Delpachittra (2003) conducted the first Australian financial literacy survey in 2002 on a sample of students from the University of Southern Queensland. The survey was targeted a first year students across five disciplines: Arts, Business, Education Engineering and Surveying and Sciences. In addition, students studying psychology as a major and some post-graduate psychology students were targeted. It was found that many psychological problems in the community are connected with financial difficulties and so practicing psychologists should have an understanding of personal financial issues, hence the interest in gaining an understanding of the levels of financial literacy among psychology students. Complete primary data was collected from 789 students, through which the following five main skills were tested by asking technical multiple
choice questions: basic concept, markets and instruments of financial markets, planning, analysis and decision making and insurance. The methodology used to analyze the survey responses was very similar to that of Chen and Volpe (1998). Results for the first main area of skill, basic concepts', showed that questions best answered was about how saving is achieved, where students correctly answered 97.1 percent of cases. The question that was worst answered in this area queried about the balance in the bank account where an initial $ 100 had been deposited for one year at 12 percent simple interest versus 1 percent per month compound interest, in which only 52.9 percent of respondents answered correctly. Another poorly answered question in this area was reason for diversifying an investment portfolio, in which only 58.5 percent of students answered correctly. These results indicated that simple concepts in finance, such as the effect of compounding interest and the relationship between risk and return, are not well understood by university students. Results for the second main area of skill, markets and instruments of the financial markets', showed that the question best answered was one which queried about the nature of the liability undertaken when guaranteeing a friend's loan. This question was correctly answered by 87.5% of respondents. Majority of the remaining questions for this main area of skill were poorly answered. Only 44.1 percent of students understood the role of the cash rate in the economy and only 36.7 percent of students were able to correctly identify which Australian asset class has given the best returns over the last two decades. These results strongly confirmed that many students are not aware of common financial information. Results for the third main area of skill, financial planning', showed that the best answered questions queried about the advantages of keeping a daily track of expenditure and about the awareness of bank statements allowing them to keep watch on interest rates and bank charges. The worst answered question, to which only 27.9 percent of students answered correctly, required respondents to indicate the correct method of subtracting outstanding cheques from the apparent balance on a bank statement to
achieve the actual balance. These results indicate that the majority of participating students have a poor understanding about the method of effecting bank reconciliation. Results for the fourth main area of skill examined, analysis and decision making’ showed that solving financial problems together with the knowledge of insurance matters were the areas which students generally answered least well. The best answered question where 64.5 percent of respondents answered correctly, involved mortgage-buster or saving offset accounts. The best method to rectify a persistent credit card debt was able to be identified correctly by 58 percent of respondents and only 43.1 percent of respondents were able to correctly solve a simple present value problem. The worst two answered questions involved an asset-rich, cash-poor person getting funds quickly for an urgent medical procedure (36.3 percent correctly answered) and a calculation of the best deal on a motor vehicle in which only 33 percent of respondents answered correctly. The final main skill areas that were examined paying attention on insurance and results showed that 77 percent of respondents were correctly able to identify the determinants of vehicle insurance premiums. Approximately 57 percent understood the nature of 73 insurance excesses, but only 42 percent were able to identify the risks covered by compulsory third party vehicle insurance. The worst answered questions involved flood not normally being covered by householders’ policies (31.6 percent answered correctly) and the nature of term life insurance, in which only 21.5 percent of respondents were able to answer correctly. These results indicated that while students appear to have a reasonable knowledge about vehicle insurance, many are lacking knowledge about other types of insurance, such as household and life insurance. Analysis of the full model showed that five independent variables, major, sex, occupation, experience and risk preference impact significantly on the dependent variable. The significant demographic variables are sex, work experience, income and risk preference. Students with higher financial literacy scores were more likely to be male, have greater work experience, have a higher income and have a lower
aggregate risk preference. An analysis of the first of the five separate models showed that students with higher general financial knowledge and skills were more likely to be studying business, be male, working in more highly skilled occupation and have more work experience. Overall, it was concluded that university students in Australia were not skilled nor knowledgeable in financial matters and that this will tend to impact negatively on their future lives through incompetent financial management."

“ANZ Bank Study (2003) on behalf of the ANZ bank (RMR, 2003), Roy Morgan Research conducted Australia’s first national survey on financial literacy. There were two components of the study: a telephonic survey of 3,548 adults and an in-depth survey of 202 people which included a self component and an in-depth interview of around one to one and a half hours each. The telephone survey consisted of 145 finance and 25 demographic questions. The finance questions were split into four categories: mathematical and standard literacy, financial understanding, financial competence and financial responsibility. The objective of this study was to test the knowledge of respondents against an individual’s needs and circumstances and hence not all the respondents were asked all the questions. As a result, a bias in the results has been generated that respondents were asked only questions about the financial products and services that they currently use, then it could be expected that their knowledge of such products and/or services would be higher than the respondents who does not use that particular product or service. Use of self-rating questions in the survey also introduced a bias in the findings of study. Despite these limitations, the ANZ survey attempted to measure knowledge and understanding, behavior, attitude, perceptions and awareness as they related to the four categories mentioned above, rather than simply measuring skills. In addition to this, the chosen sample was highly representative of Australian population, with confidence interval of less than + 2 at the 95 % confidence level. In the analysis, ten levels of
financial literacy were used which were combined to form financial literacy quintiles, where quintile one was the lowest level of financial literacy and quintile five was the highest. Correlations, averages and percentages were also used to summarize results. The survey findings showed that Australians overall are a financially literate society, but that certain groups have particular challenges that need to be addressed. Those groups were identified as those having lower level of education, those not working or in unskilled work, those with lower incomes (household income under $20,000), those with lower saving levels (under $5,000), single people and people at both extremes of the age profile (18-24 years old and those above 70 years). In contrast, respondents in the highest financial quintile were males, people with tertiary degrees, professionals and business owners, couples with no children and people aged between 45 and 59 years. Thus, despite respondents only being tested on the issues relevant to their current circumstances, a strong correlation was found between financial literacy levels and socio economic status.

“Commonwealth Bank Study (2004) The CBF’s survey on financial literacy was the first study that investigated the strength of association between financial literacy and outcomes for both individuals and the Australian economy. This was achieved in three phases. The first phase was a national telephonic survey of 5,000 Australians aged between 16 to 65 years; the second phase investigated the microeconomic effects of improving financial literacy, and the third phase investigated the macroeconomic effects of improving financial literacy. The national telephonic survey consisted of 20 multiple choice questions. The survey was designed to test each respondent’s ability to make financial decisions, rather than testing knowledge of financial information. The survey also collected demographic information such as personal finances, whether the individual had ever owned a business, personal and health history, and sources of financial knowledge. The results of the survey showed that those who were unemployed had poorer financial literacy skills. Also
among this group were younger people (aged 16-20 years), males, students, people with lower levels of education, people with lower personal income (under $ 10,000), people with lower annual household income (under $ 50,000) and people who had never worked in paid employment. Participants with these demographic characteristics made up 10 percent of the respondents with the lowest financial literacy scores. Results of the survey also showed that people in older age groups displayed lower financial literacy, suggesting that financial literacy was not merely a function of age or life experience. Results also indicated that the higher an individual’s financial literacy, the lower the probability that they were unemployed. In addition, lower financial literacy was found to have an impact on an individual’s health. The survey also revealed that 85 percent of respondents primarily learn about managing their finances through experience or trial and error, and a significant proportion of respondents (36 %) specified financial institutions as a source of their financial knowledge."

“The second phase of the study revealed that improvements in financial literacy can result in lifestyle gains for individuals of all ages, across the whole community. For those respondents who had the lowest levels of financial literacy, the expected probability of unemployment was 14.3 percent, compared to 1.7 percent for those who had the highest levels of financial literacy. Further, there was evidence that a modest improvement for the financial literacy of the 10 percent of respondents who had the lowest financial literacy scores, would have resulted in these people having an average increase in annual income of $3,204.”

“The third phase of the study revealed that an improvement in financial literacy has the potential to create more than 16,000 new jobs boosting Australia’s economy by $ 6 billion per annum (CBF, 2004, p. 3). Other anticipated macroeconomic effects of improving financial literacy includes the strengthening of national savings, a boost to both public and private consumption, and the creation of more successful small businesses.”
2.4.4 Study in Singapore

“Money SENSE (2005) The Money SENSE Financial Education Steering Committee (FESC) (2005) commissioned a national survey of 2,023 Singapore citizens and Permanent Residents. The basic objective of the study was to measure the current levels of financial literacy among different segments of the Singapore population with reference to their financial knowledge and understanding of common financial products and services and the actions taken by Singaporeans in dealing with financial matters. The questionnaire was divided into three tiers namely, basic money management, financial planning and investment know-how. The findings of the study showed that the mean financial literacy score including knowledge and action for tier I was 74 and for tier II it was 62 from a total of 2023 respondents. Mean financial literacy score for tier III was 67 out of 662 who had invested.”

2.4.5 The OECD Study (2005)

“With an objective to identify financial literacy skills and knowledge possessed by the consumers and to establish the baseline measurement of financial literacy for policy makers and financial institutions OECD has conducted financial literacy surveys in selected five countries (Australia, Japan, Korea, The United States, and the United Kingdom). These surveys exhibited two different approaches for measuring financial literacy. One approach was to give respondents an objective test that measures their knowledge and understanding of financial terms and their ability to apply financial concepts to particular situations. Surveys of this type were undertaken in the United States and Korea and were targeted at high school students. The other approach was to ask respondents for a self assessment, or for their self perceptions, about their financial understanding and knowledge, as well as for their attitudes towards financial instruments, decisions, information and its receipt. This was the
approach used by the surveys undertaken in the United Kingdom, Japan, and Australia, although the Australian survey has also included some of the objective measurement of financial literacy. Although, the surveys differed in target audience, approach for measuring financial literacy and survey methodology, there are a number of similarities in the results. “Among which,

1. All the surveys found low level of financial understanding among respondents.

2. The surveys that included the questions about respondents’ social characteristics found that financial understanding is correlated with education and income level.

3. The surveys found that respondents often feel they know more about financial matters than is actually the case.

4. The surveys found that respondents often feel financial information is difficult to find and understand.

2.4 Domestic Scenario: Financial Literacy in Indian Context

2.4.1 Indian Scenario

As per Financial Service giant Visa, 65% Indians lack financial literacy, declaring India as one of the least financial literate countries among 28 countries. “This survey was conducted between February and April 2012 where 25,500 respondents were interviewed in 28 countries including global superpowers like USA, Canada and Australia. Out of a possible score of 100, Brazil topped the charts with a 50.4 followed by Mexico with 47.8, Australia with 46.3, USA with 44 and Canada with 43.8 in top 5
India ranked 23rd as the report termed only 35% of Indian respondents as financially literate.”

![Bar chart showing overall country ranking](chart.png)

Fig. 2.2 Financial Literacy Level for Various Countries (Source: Visa, 2012)

2.4.2 India Protection Survey – Earning, Spending and Saving Pattern in India (2007)

“National Council for Applied Economic Research and Max New York Life Insurance Company Limited did a study titled —India Protection Survey - How India earns, spends and saves‖ and developed a data on attitudes and practices that have a bearing on the financial security of Indian households. The survey collected the data from sample size of over 63,000 households spread across the length and breadth of the country. The survey found that out of 86 percent of Indian household that save, 36 percent keep their saving at home as cash. The results also say that India saves primarily for emergencies (83 percent), wedding and social events...
(63 percent), children’s education (81 percent) and inheritance, old age (47 percent). The results also show that less than 3 percent buy bonds and other financial instruments. The survey also found little correlation between saving and long term gain. The survey concluded that the lack of long term financial planning and poor levels of financial literacy comprise of the core of India’s financial insecurity. In India, the Reserve Bank of India launched its first initiative in 2007 to establish Financial Literacy and Credit counselling centres throughout the country which would offer free financial education and counselling to urban and rural population. The broad objective of the FLCCCs is to make the people in urban and rural areas educated and aware about various financial products and services available from the formal financial sector and providing them free financial literacy/education and credit counseling."

2.5.3 Initiatives for Financial Literacy in India

In India Financial Literacy initiatives have been taken by various agencies to enhance financial capability of Indian population. These initiatives include:

1. RBI’s initiative on Financial Literacy

“Reserve Bank of India has undertaken a project titled “Project Financial Literacy” with an objective to propagate information regarding the general banking concepts to various target groups, including school and college students, women, rural and urban poor, defense personnel and senior citizens. “

2. SEBI’s initiative on Financial Literacy

“Securities Exchange Board of India has started financial education on a nationwide spree to undertake financial education to various target
segments viz. school students, college students, working executives, middle income group, home makers, retired personnel, self help groups etc., SEBI has empanelled Financial Educator Resource Persons throughout India for this purpose. The Resource Persons are given training on various aspects of finance and equipped with knowledge about the financial markets. These SEBI Certified Resource Persons organize workshops to these target segments on various aspects viz. savings, investment, financial planning, banking, insurance, retirement planning etc. More than 3500 workshops have been already conducted in various states covering around two lakh and sixty thousand participants. Investor education programs are conducted by SEBI through investor associations all over the country. Regional seminars are conducted by SEBI through various stakeholders viz. Stock Exchanges, Depositories, Mutual Funds Association, Association of Merchant Bankers etc. SEBI has a dedicated website for investor education wherein study materials are available for dissemination. SEBI also publishes study materials in English and vernacular languages. Under ‘Visit SEBI’ programme, School and college students are encouraged to visit SEBI and understand its functioning. SEBI has recently set up SEBI Helpline in 14 languages wherein through a toll free number, investors across the country can access and seek information for redressal of their grievances and guidance on various issues.(ref.www.rbi.org) 

3. IRDA’S Initiatives on Financial Education

“Insurance Regulatory and Development Authority has taken various initiatives in the area of financial literacy. Awareness programmes have been conducted on television and radio and simple messages about the rights and duties of policyholders, channels available for dispute redressal etc have been propagated through television and radio as well as the print media in English, Hindi and 11 other Indian languages. IRDA conducts an annual seminar on policy holder protection and welfare and also partially
sponsors seminars on insurance by consumer bodies. IRDA has done a pan India survey on awareness levels about insurance. IRDA has also brought out publications of ‘Policyholder Handbooks’ as well as a comic book series on insurance. A dedicated website for consumer education in insurance has been launched.”

4. PFRDA Initiatives on Financial Education

“The Pension Fund Regulatory and Development Authority, India’s youngest regulator has been engaged in spreading social security messages to the public. PFRDA has developed FAQ on pension related topics on its web, and has been associated with various non government organizations in India in taking the pension services to the disadvantaged community. PFRDA’s initiatives have become more broad-based with direct mass publicity on NPS – both as individual model through POPs and group models through Aggregators. PFRDA has issued advertisements in print media and electronic media through radio and television. PFRDA appointed intermediaries are called Aggregators who are directly responsible for pension awareness mostly in vernacular languages and in line with socio-economic sensibilities.”

5. Market players Initiatives on Financial Education

“Commercial banks are realizing that they are missing out on large segment of financially illiterate and excluded segment of prospective customers. Major financial institutions are spreading awareness through Financial Literacy and Counseling Centers and Rural Self Employment Training Institutes on financial literacy. The objective of these centers is to advise people on gaining access to the financial system including banks, creating awareness among the public about financial management, counseling people who are struggling to meet their repayment obligations
and help them resolve their problems of indebtedness, helping in rehabilitation of borrowers in distress etc. Some of these credit counseling centers even train farmers/women groups to enable them to start their own income generating activities to earn a reasonable livelihood. Similarly, many Stock Exchanges, Broking Houses and Mutual Funds have initiatives in the field of financial education through conducting of seminars, issuance of do’s and don’ts, and newspaper campaigns. Insurance companies too, carry out campaigns and other educational activities for generic education in insurance.”

6. Other Measures

“Other than the Reserve bank and other regulators, various NGO’s in the country are also spreading financial literacy in the country. Sanchayan is an NGO dedicated exclusively to spreading financial literacy and awareness among the youth and adults from low-income background. Sanchayan conducts free workshops for the underprivileged youth on topics ranging from the basics of banking, credit cards and PAN cards to the investing in shares and mutual funds, so that these youth can become financially aware and also a part of the mainstream banking and financial services industry. Indian School of Microfinance for Women through its Citi Center for Financial Literacy (CCFL) has formed a network of partner organizations named National Alliance for Financial Literacy (NAFil) to take financial literacy as a movement across the country. Also Mann deshi Udyogini Business School for Rural Women: HSBC has collaborated with Mann Vikas Samajik Sanstha in Satara to provide financial literacy and management skills to girls and women with no formal education.”

7. Government Measures
a. “Prime Minister Narendra Modi has announced a new digital payments app called **BHIM** based on the Unified Payments Interface (UPI). BHIM is also supposed to support Aadhaar-based payments, where transactions will be possible with just a fingerprint impression. BHIM is a digital payments solution app based on Unified Payments Interface (UPI) from the National Payments Corporation of India (NPCI). BHIM app will help you to send and receive money to other non-UPI accounts or addresses. One can also send money via IFSC and MMID code to users, who don’t have a UPI-based bank account. Additionally, there’s the option of scanning a QR code and making a direct payment. Users can create their own QR code for a certain fixed amount of money, and then the merchant can scan it and the deduction will be made. A maximum of Rs 10,000 can be shared Banks that are supporting BHIM app for UPI-based payments include Allahabad Bank, Andhra Bank, Axis Bank, Bank of Baroda, Bank of Maharashtra, Canara Bank, Catholic Syrian Bank, Central Bank of India, DCB Bank, Dena Bank, Federal Bank, HDFC Bank, ICICI Bank, IDBI Bank, IDFC Bank, Indian Bank, Indian Overseas Bank, IndusInd Bank, Karnataka Bank, Karur Vysya Bank, Kotak Mahindra Bank, Oriental Bank of Commerce, Punjab National Bank, RBL Bank, South Indian Bank, Standard Chartered Bank, State Bank of India, Syndicate Bank, Union Bank of India, United Bank of India, and Vijaya Bank. (Source: The Indian Express, January 2017)”

b. “**Vittiya Saksharta Abhiyan (Visaka)** is a scheme launched by the Union HRD ministry under which heads of educations institutions have been advised to give students credits for taking forward the Centre’s financial literacy campaign for a cashless economy. HRD Ministry’s website says, The purpose of the ’Vittiya Saksharta Abhiyan’ is to actively engage the youth/students of Higher Education institutions to encourage and motivate all payers and payees to use a digitally enabled cashless
c. NITI Aayog has launched the schemes Lucky Grahak Yojana (for consumers) and the Digi-धन  Vyapar Yojana (for merchants) to give cash awards to consumers and merchants who utilize digital payment instruments for personal consumption expenditures. The scheme specially focuses on bringing the poor, lower middle class and small businesses into the digital payment fold. The primary aim of these schemes is to incentivize digital transactions so that electronic payments are adopted by all sections of the society, especially the poor and the middle class. It has been designed keeping in mind all sections of the society and their usage patterns. The scheme became operational with the first draw on 25<sup>th</sup> December, 2016 (as a Christmas gift to the nation) leading up to a Mega Draw on Babasaheb Ambedkar Jayanti on 14<sup>th</sup> April 2017. To promote digital mode of payment and transactions in locals of Chhattisgarh state, first, Digi-Dhan Mela was organized in the capital city of Raipur on 2<sup>nd</sup> January, 2017. The second Digi-dhan fair of Chhattisgarh was organized in Bilai on January 9 and third in Bilaspur on January 13. The state government also organized slogan, poster and jingle competitions to promote digital payment in Chhattisgarh. First prize for each category of competitions of Rs. 15,000 each and second prize of Rs. 10,000 each were distributed in the Digi-Dhan Mela. (Source: Business Standard, January 2017)

d. RBI has come up with a scheme called DEAF i.e Depositor Education and Awareness Fund Scheme, 2014. All Banks need to deposit the amount with RBI in this scheme. Any type of balance under the following types of accounts:

- Savings bank deposit account
fixed or term deposits
- cumulative/recurring deposit accounts
- current deposit accounts
- other form of deposit account in any form and with any name
- cash credit accounts
- loan accounts after due appropriation with banks
- margin money against issue of letter of Credit/Guarantee etc. or any security deposit
- outstanding telegraphic transfer
- DDs, pay orders, bankers cheques, sundry deposit account
- unadjusted NEFT credit balances or other such transactions
- unreconciled credit balances on account of ATM transactions
- undrawn balance in any prepaid card

If remain idle for ten or more years with bank will be transferred to this scheme. Such collected amount will be invested by RBI and used for spreading the depositor education and awareness about dealing with such issues.

e. Under Chief Minister Vasundhara Raje's flagship Bhamashah financial inclusion-cum-service delivery scheme is based on the biometric authentication like Aadhaar and has the family, instead of the individual, as the central beneficiary. The card is linked to a bank account and is opened in the name of a female member of the family, thereby, recognizing her as the head of the household, unlike the traditional male-headed PDS/ration card systems. Using the Bhamashah card, the state government intends to deliver financial as well as non-financial services, including cashless health cover for over 4.5 crore Rajasthanis.

2.5.4 Theoretical Framework for Financial Behaviour

“For the last three decades Consumer Economists have been in the continuous process of studying financial behavior. Fitzsimmons, Hira,
Bauer and Hafstrom (1993) did a study on financial behavior from 1970s to early 1990s. Over the years this trend has been continuing with more studies on financial behavior (Hilgert, Hogarth & Beverly, 2003; Hogarth, Hilgert, and Schuchardt, 2002; O’Neill & Xiao, 2003; Xiao, 2006). Xiao (2008) stated that—financial behavior can be defined as any human behavior that is relevant to money management. The common financial behavior includes cash, credit, saving and investment behaviors. As studied by economic psychologists, certain human psychological behavior patterns are present which have an impact on individuals’ financial behaviors. They have identified the contextual factors that influence decision making. Personal finance is an interdisciplinary subject and derives its context from subjects such as family studies, economics, psychology, and sociology. Theory is a general framework of ideas. A pattern emerges, after collection of specific types of data, and a theory is developed to provide explanation for this pattern. This topic describes theoretical frameworks to explain individual financial behavior."

2.6 Various Studies on Financial Literacy and Financial Behavior

The researcher in this section has discussed findings of past studies; those who have tried to find out the relationship between financial literacy of individuals and the financial behaviors displayed by them. Empirical research studies show that both economic and psychological factors are associated with various financial behaviors of individuals, such as, cash flow management, saving, investment and credit behaviors. Researchers from different fields have contributed towards the literature on consumer financial behavior. Amongst them, consumer economists have conducted the research studies to identify association of financial literacy with financial behaviors of individuals. The in-depth discussion of various studies is presented below.
DeVaney, Gorham, Bechman and Haldeman et al. (1996) “conducted an experimental study to examine cash flow and credit use three months after participants completed a series of women's financial information workshops. The results showed that 24% of the participants started to set up bill payment system as a practice after attending the workshop. This study found that age was positively related to the probability of using bill paying system (p. 75). For creating and maintaining an emergency fund, 44% of the respondents started the practice after getting financial knowledge. Regarding obtaining credit, 22% of respondents reported making a change in obtaining credit on their own name. The only variable that was significantly related to adoption of this financial behavior was marital status. Those not married were less likely to adopt this behavior. One third of the participants indicated that they limited the number or use of credit cards after completion of workshop. While four out of ten participants began to save regularly or increased regular savings (p. 76).”

“Berhiem, Garrett & Maki et al.(1997) examined the effects of mandated financial curriculum in schools. They attempted to determine whether mandated financial education across the states and over the time in high school had any long term behavior effect on adult decisions regarding savings. The data were collected in the month of November 1995, from the nationally representative sample of respondents between the ages of 30 and 49. By using regression analysis on variables related to consume education in high school and adult financial behavior, their results have shown mandates significantly increase the exposure to financial education, and has positively raised the rates of saving (a flow variable), and hence accumulate more wealth (a stock variable) during the adult lives. The results indicated that while the effects of this mandate have been significant, but the effect is gradual rather than immediate. They also found that the self reported rates of saving rise significantly with education and earnings. The results also show that individuals who received personal finance instructions had a saving rate 1.5 percent greater than individuals
who received no instructions, and wealth is increased by an amount equal to earnings for one year within 15 to 20 years after graduation from high school. They also concluded that financial education can be used to stimulate personal savings."

“Boyce and Danes (1998) have introduced the curriculum on Personal Financial Planning Program for school children in the NEFE High School Financial Planning Program (HSFPP). The curriculum is a collaborative effort between the National Endowment for Financial Education (NEFE), the USDA (United States Department of Agriculture), and the Cooperative State Research, Education, and Extension Service (CSREES)—the federal partner of the Cooperative Extension System. It includes an extensive instructor's manual, student workbook, and student personal financial portfolio which are provided free by NEFE. The curriculum acquainted the students with basic financial planning concepts and illustrated how these concepts apply to everyday life. The goal of the curriculum was to increase the financial planning literacy of teens. The curriculum was divided into seven units: (1) providing an introduction to the financial planning process, (2) explaining the relationship between career/work factors and earning potential, (3) developing a personal spending/savings plan, (4) using and managing credit effectively, (5) describing risk management techniques and explaining the importance of protecting their assets, (6) explaining the importance of saving and investing and the benefits of utilizing the time value of money into their savings plans, (7) completing the personal financial plan. 434 schools were covered under this study. After three months, the results of the program evaluation found that teaching financial literacy through the NEFE curriculum has a positive impact on students’ financial management knowledge, behavior and self-efficacy. For all questions, there was a statistically significant increase in financial behavior, knowledge, and self-efficacy questions immediately after participating in the program. The area where the most students increased in knowledge was in understanding the
cost of credit. When investigating the total gains in financial knowledge, behaviors, and self-efficacy across the 13 questions, 86% of the students showed an increase in financial knowledge or behaviors. Greater percentages of students reported that they — almost always — compare prices when shopping (44.5%), set money aside for future needs or wants (40.5%), and repay the money they owe on time (60%). In the follow-up, students reported — almost always — knowing the cost of buying on credit approximately 43 percent of the time. Finally, about 76% of the students reported that they — almost always — felt as though the way they managed their money would affect their future. 58% said they had changed spending habits and 56% said they had changed saving habits. More than one-third of students (39%) reported that they had started saving money 3 months after completing the HSFPP. 13.8% (1.0% of 418) reported that they have now started saving. For determining the saving corpus, a large proportion of students (38%) reported that they decide on a specific percent or amount of earnings to save while many students (28%) reported to save only when they had a specific purchase to make. Nearly one third of students (31%) reported that the most important financial planning activity they had taken on since participating in the HSFPP was establishing a savings account."

“German and Kim (1999) conducted a study to investigate the effectiveness of workplace financial education at one of plants owned by a Southeastern chemical production company. Differences and similarities between participants and nonparticipants in the financial workshops were explored. The objectives of the workshop were to assess the workers’ perception of financial wellness and personal financial behaviors to measure changes in workers’ personal financial behavior who participated in the workshops and to obtain self-reported measures of health and job performance ratings. Workshop participants reported a positive change number of personal financial behavior as a result of the education received. Three-quarters (75%) of the workshop participants reported that
they have made better financial decisions since attending the workshops. Seventy-five percent of the participants related that they were more confident in making investment decisions. Seventy percent reported they changed their investment strategy by appropriately diversifying or being more aggressive in their investment choices. Fifty-six percent of participants agreed that —their financial situation had improved because of the financial education. Almost half (45%) of the workshop participants increased the amount of contribution to the employer’s 401(k) plan. Thirty-four percent workers agreed that they started for contributing towards the 401(k) plan as a result of the financial education workshops (p. 85). It was also found that those who participated in the workshops tended to have credit under control, a budget and a financial plan and had improved their financial situation. The overall findings suggest that the most workshop participants took positive actions to improve their financial well being after they receive financial education.”

“Clark et al. (2003) found that financial education seminars have an effect on individuals' retirement goals and saving behavior. They studied the responses to questionnaires distributed and collected from 60 TIAA- CERF financial education seminars held at educational institutions and non-profit organizations between March 2001 to May 2002. In these seminars, participants completed a survey on retirement goals and after being asked to attain a one-hour financial education seminar, they filled up a second questionnaire and checked whether their retirement goals have changed? Analysis of the results showed that 34 percent of the participants changed either their retirement income goal or their retirement age goal in response to the seminar. 90 percent of respondents reported that they anticipated making changes to their retirement saving plans. The researcher concluded that the provision of financial information has an important effect on saving for retirement.”
“Hilgert, Hogarth and Beverly et al. (2003) studies conducted by them is published in Federal Reserve Bulletin, utilized the discipline of behavior economics as a framework for exploring the differences in consumer knowledge and consumer behavior, and also explained how these two are connected (p. 320). They focused on four primary activities of financial management: cash flow management, credit management, saving and investment. The data was collected from University of Michigan’s Monthly Surveys of Consumers and the Survey of Consumer Finances conducted in November and December 2001 in order to assess 1) financial literacy of adults and 2) effect of this financial literacy on their financial behaviors. Eighteen financial management behaviors were reported on by consumers, like basic skills while managing money i.e. cash-flow management, saving to and more sophisticated skills such as investment and credit behaviors. Information about their use of 13 different financial products was also provided. When using an index, where behaviors were divided into classifications of low, medium, and high, they found that financial behaviors are hierarchical. This means that individuals with limited amounts of cash should engage in practices that manage their cash flows, but not in saving or investing. They found there is a direct correlation between financial knowledge and behavior, although the direction of the causality is unclear. Those who score higher on financial literacy tests were more likely to follow recommended financial practices as well as more likely to engage in recommended financial behavior. They concluded that increased index scores for investment, saving, and credit management practices are partially contributable to understanding and being knowledgeable about investment, savings, and credit respectively. According to this data, improvements in individuals’ financial management practices are directly related to the amount of knowledge and experience possessed .”

Grable and Joo (2004) conducted an exploratory study on understanding the determinants of financial satisfaction. They have reviewed the various
determinants of the financial satisfaction and developed a framework of financial satisfaction. They found numerous direct, indirect and total effects in their study. They determined that education, financial knowledge, financial risk tolerance, financial solvency, financial behaviors and financial stress levels had a direct effect on the financial satisfaction.

**Grable and Joo (2004)** analyzed effect of environmental and biopsychosocial factors on financial risk tolerance of an individual. The objective of the research was to test the effects of demographic, socioeconomic and psychological variables on financial risk tolerance among the college faculty and staff members, using environmental (age, gender, racial background, birth order, self-esteem, Type-A personality, and financial satisfaction) and biopsychosocial (income, net worth, financial knowledge, home ownership, education, marital status) factor classifications. The intent of test was to determine whether environmental and biopsychosocial factors play a role in determining the person's tolerance for financial risk, and if it confirmed, when and which factor appeared to be the most important. The study was premised on Irvin’s (1993) risk taking behavioral model. Financial risk tolerance is defined as the willingness to engage in behaviors in which the outcomes remain uncertain with the possibility of an identifiable negative outcome (Irvin, 1993, p. 11). Findings derived after analyzing data collected from the sample (N= 406) of faculty and staff from two universities, indicated that education, marital status, net worth, financial knowledge, household income, and self-esteem were significantly related to financial risk tolerance. Among all of these significant factors, except self-esteem, were environmental factors, while self-esteem represented only one significant biopsychosocial factor. The study concluded that respondents who have a higher net worth, a high level of education, high household income and more financial knowledge tend to exhibit a greater level of preference for financial risk. While, in terms of biopsychosocial factors, self esteem is related positively to financial risk.
tolerance. Study also confirmed that environmental factors influence risk tolerance more directly than biopsychosocial factors.

**Mandell (2005)** used the data collected by The Jumpstart Coalition and conducted a survey with an objective to find out financial literacy of high school students. The survey contained 31 questions and distributed to a sample of approximately 4,000 high school students every two years. The results of the survey have proven that students are fairly financially illiterate, which has continued in a downward trend since then. Mandell evaluated the survey results to determine the correlation between financial literacy and propensity to save. This study found that financial education does contribute, although only slightly, to measures of financial literacy and financial education does positively affect the savings. Saving also appears to have some impact, however small, on the propensity to save. Although the study produced unusual results, the overall conclusion of the study was that financial education affects propensity to save without necessarily improving financial literacy. In other words, students who take courses dealing with personal finance may emerge with little improvement in financial literacy, but they may end up more savings oriented than students who have not had a course. Mandell also concludes that even if financial literacy does matter, educators must first determine which areas are of the most important to teach and the appropriate time tables for educating students.

**Kim (2007)** examined the impact of a Cooperative Extension workplace financial education program on a selected group of university employees. A pre- and post- survey design was used. The University of Maryland Cooperative Extension offered four two hour workshops for 97 University employees from the summer and fall of 2002 to the spring and fall of 2003. The workshop curriculum was consisted of eight modules, such as financial decision making/goal setting, financial record organization, cash management, credit management, risk management, investment,
retirement planning, and estate planning. The study examined the influences of the program on university employees’ self-assessed financial knowledge, financial behaviors, and perceived financial well-being. The data collected during pre- and post-assessment found that participants made significant improvements in financial knowledge, financial behaviors, and perceived financial well-being. The present study used the Human Behavior model of Ajzen and Fishbein (1980) where knowledge and attitudes are related to individual’s beliefs and changes in beliefs are reflected in behaviors. Based on Ajzen and Fishbein’s model, Kim (2000) developed a framework conceptualizing that workplace financial education could positively change financial knowledge and financial behaviors, which in turn could improve financial well-being. Further, workplace financial education could impact employees’ absenteeism and job satisfaction by improving their financial wellbeing. Overall, participants perceived that their financial well-being improved as a result of the workshops, which was similar to Hira and Loibl’s (2005) study. Although the mean scores for saving for retirement in the financial behavior scale did not change, people felt more secure about their personal finances for retirement after the workshops. Further, although satisfaction with their current financial situations did not change significantly, their financial stress had decreased and their feelings of retirement security and general perceived financial well-being improved. The results suggest that workplace financial education not only impacts retirement planning, but also perceived financial well-being. Studies have found that employees’ subjective financial well-being influences their absenteeism, job satisfaction, and organizational commitment.

Maarten van Rooji et al. (2007) For better understanding of financial literacy and its relation to financial decision making, Maarten van Rooji, Annamaria Lusardi and Rob Alessie (2007) designed two modules: 1) Basic financial literacy and 2) Advanced financial literacy, covering the questions to measure numeracy and basic knowledge related to the
working of inflation and interest rates, as well as questions to measure more advanced financial knowledge related to financial market instruments (stocks, bonds, and mutual funds) before entering into the stock market. They used the data from the 2005 DNB (De Nederlandsche Bank) Household Survey (DHS). This data set was representative of the Dutch population, and was contained over 2,000 households. This study found that lack of financial literacy correlates with investors’ decisions to participate in the stock market and also financial literacy matters for stock market ownership, even after controlling a large set of demographic variables, income and wealth. The estimates are also sizable: A one standard deviation increase in advanced literacy raises stock market participation by more than eight percentage points (p. 16). Thus, overall study concluded that stock ownership increases sharply with the financial literacy.

Luigi and Japelli (2008) Luigi Guiso and Tullio Japelli (2008) attempted to find out a correlation between financial literacy and portfolio diversification by using the data of Unicredit Clients’ Survey conducted between June and September 2007. They have developed a sample of Italian clients possessing at least 10,000 euro of financial wealth of the Unicredit Group. The survey collected data from the respondents of 1686 individuals having a checking account in one of the banks of Unicredit Group. The objectives of the study were to analyze the different levels of financial literacy, with reference to the information required to choose among different sets of assets and understand the meaning of diversification. After analyzing the impact of financial literacy and investors’ characteristics on portfolio diversification, they found that measures of financial literacy are strongly correlated with the degree of portfolio diversification, and infer that the evidence is consistent with explanation of under diversification based on investors’ limited financial literacy. They have given four types of explanations for the lack of diversification. One, the limited diversification reflects some frictions in otherwise traditional
portfolio models: high transaction cost, search cost, small portfolio size and constraints to buy in round lots. This approach stresses that underdiversification is a rational choice, where individuals trade-off the benefits of diversification against the costs of achieving it. The exact mechanisms through which these frictions operate vary: they can restrict the ability of investors to hold a large number of assets (Perraudin and Sorensen, 2000), limit their information processing capacity (Van Nieuwerburgh and Veldkamp, 2007), or affect the way they value outside job options (p. 4). Second, they argued that diversification may reflect behavioral biases (p. 4). And third, investors may develop preferences or attractions towards certain types of stocks (p. 5). And lastly, the poor financial literacy is a fourth important factor associated with lack of diversification. The individuals with poor financial sophistication may undervalue the benefits of diversification or ignore them altogether (p. 6).

Hussain et al. (2009) studied the level of financial literacy of UAE individual investors who invest in local financial markets and examined the relationship between financial literacy and the influence of the factors that affect the investment decision. The data were collected from 290 national investors. The study found that financial literacy of UAE investors is far from the needed level. The financial literacy level was found to be affected by income level, education level and workplace activity. High-income respondents hold high educational degrees, and those who work in the field of finance/banking or investment had as expected a higher financial literacy level than others, whereas, financial illiteracy exists regardless of the age of the respondents. A significant difference in the level of financial literacy was found as well between the respondents according to their gender. Specifically, women possess a lower level of financial literacy than men. The study also concluded that there is a relationship between financial literacy and investment decisions.
“Seth et al. (2010) assessed the level of financial literacy among the investors of Delhi and National Capital Region. The study attempted to analyze the relationship between financial literacy and other factors like age, income, and education. The study indicated that the financial literacy of investors in Delhi and NCR was different for different financial instruments. Around 96% of them have savings account in the banks, but the mere acquaintance with banks is not adequate, as only around 30% had knowledge about National Savings Certificate & Public Provident Fund. While 98% of the investors knew about Life Insurance, only about 45% preferred Life Insurance as the most effective financial instrument, which would be helpful at the time of contingencies. Although, around 92% of the investors had knowledge about Mutual Funds but only 24% preferred them. Financial literacy is found to be dependent upon age, income and educational level of the individuals. Thus, the High-income respondents had high financial literacy than persons with lower income. The study also revealed that people consider Life Insurance as the most effective financial instrument followed by Fixed Deposits in banks. It was also found that most of the people relied on telecast in the T.V channels or advertisements put out in the newspapers and magazines to learn about financial products followed by advice from friends. But, while investing in share market, around 21% people relied on brokers.”

2.7 Key Observations and Research Gap

Many studies have been conducted by academicians and researchers on different innovations. In the course of review of literature, there were many studies which were found to be instrumental in this research work. Major studies have been reported from USA, Britain and Canada with authors such as, Zebrin, Shaw, Coloum, and Clarke being more active. Large number of studies has been conducted during 2009, 2011 and 2014. In Indian context Tiwari and Joshi have conducted good number of studies though they are still lesser as compared to international studies.
Table 2.1 No. of studies at International and National Level on Financial Literacy

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Studies At National Level</th>
<th>No. of Studies At International Level</th>
</tr>
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<tbody>
<tr>
<td>2009</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>5</td>
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<tr>
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<td>2014</td>
<td>4</td>
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<tr>
<td>2015</td>
<td>5</td>
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Fig. 2.3 Comparison of Various Studies Done at International & National Level

Following are the key observations identified related to the review of literature on this study:

a) Many studies have emphasized on the positive role played by banking sector reforms in the development and improvement
of Indian banking industry. Reddy(2009), Seth(2009), Karim (2010) and Roland have given credit to liberalization in banking operations and introduction of new financial instruments for improved performance of public and private sector banks in past decades.

b) Shah and Clarke(2009) have mentioned that most of the banks and big organizations now are anxious to use internet banking because of its relatively lower and bearable delivery cost, higher sales capacity and potential for offering greater convenience for customers.


d) A study on e-banking reveals that the young generation is more known to computer and internet banking. So they are more interested in using the E-banking system. (Paul, 2008)

e) Tiwari (2014) in his study mentions that mobile phone technology is a growing technology in banking, finance and commerce sector by which we can save our time and can access our account and information of our account from anywhere and anytime and it also keeps alert us with our account transaction and with other necessary information.

f) A key challenge posed before mobile banking is use of different regional languages across the nation is discussed by Rao(2013). India has 18 official languages which are spoken across the country. Additionally, two-thirds of the population in India is illiterate, creating difficulties in deployment of mobile banking solutions.
g) Some of the threats related to the ATM are Eavesdropping spoofing, Skimming Attack, Card Trapping, PIN Cracking, Phishing Attack ATM Malware, ATM hacking, etc. This point is raised by Lavanya and Raju. (2013)

h) A study taken up in Coimbatore city by Umamaheswari and Bhuvaneswari reveals that most of the customers are satisfied with the ATM services provided by the banks. But still many customers have faced many problems such as unavailability of ATM centres, non-functioning of ATM machines, wrong deductions of amount etc. (2013)

i) The electronic funds have appeared as a necessity in the nowadays financial industry. The most important reasons for the use of electronic fund transfer systems are the transaction processing low cost, low time processing, low risk in the financial messages transmission (private, personal communication networks). (Poenar, 2008)

j) The issuing bank should take necessary step to improve their cardholder's awareness and satisfaction. This point is raised by Dwarkadas (2011).

k) A research shows the usage of Debit cards in rural areas is also influenced by some of the factors like age, income, occupation, educational level, and years of association with the bank. These factors are said to be influential in the usage of debit cards among the rural consumers. The results allow banks' decision makers to develop strategies that can increase the usage of Debit Cards by Rural customers. Debit cards are widely used everywhere; fortunately our rural India has started the eve of adopting the new technology of ATMs and debit cards. The major customers of rural areas consists of students, business people, vendors and farmers,
this amply indicates the growth of the nation and raise in the standards of people. **Literacy was one of the factor affecting the adoption and long term usage of ATMs and debit cards, but now a days the trends are even changing in the rural areas.** (Ravikumar and Maran, 2013)

**l)** Due to the growth of **IT sector**, banks are being able to reach their customers anywhere at any time. (Paul, 2013)

**m)** Most of the studies indicate that introduction of new and updated technology has changed the face of Indian banking sector.

**n)** SMS banking is the future of banking technology and **SMS banking would play an important role in the creation of a cashless economy.** This is mentioned by Rotimi, Awodele and Bamidele (2007).

**o)** According to Vimala, the ‘**plastic money efficient services’ and ‘credit card development’** contributes significantly to the banking development of the country.

Thus, the literature review presented in this chapter is an evidence for the fact that financial literacy levels possessed by the individuals among the various countries is low irrespective of the stage of development of the country. Amongst them, various studies have established a relationship between financial literacy and demographics of an individual. While, the studies done by consumer economists have tried to establish the relationship of financial literacy with various financial behaviors, as an outcome of financial education, the studies documented in this chapter shows a low level of financial literacy and lack of financial information affecting the ability to perform necessary financial behavior. Financial literacy is comparatively lower in rural areas and minimum of financial literacy is needed for effective decision making. Financial literacy provides
an aid in improving the quality of services and products. In the context of Indian Economy, the researcher has proceeded further with an exploratory research to find out whether the investors in state of Chhattisgarh, which is slowly developing as one of the most progressing states of India does possess the sufficient level of financial literacy and does it have any impact on their investment decision. Also, the BMFL model which has been developed at Banasthali Vidyapith in association with PRIME, aims at analyzing the level of Financial Literacy level for the people of Chhattisgarh residing in Raipur, Mahasamund, Bemetra, Baloda Bazaar, Gariyabandh, Dhamtari and Raigarh based on gender, location, income level, occupation, district and age and disseminate information through statistical analysis and case studies. Studies on financial literacy have been conducted more in western world and very less work has been done in Indian context and lesser comprehensive research at doctoral research has been carried in Chhattisgarh state. Furthermore, it has been believed that FL in India is low, but is it the real position? One can know only after exploring using the BMFL.

Research Gaps have been also identified. Studies on financial literacy have been conducted more in western world and very less work has been done in Indian context and lesser comprehensive research at doctoral research level has been carried in Chhattisgarh state though many developments have taken place in banking sector in this region as well. Attitude of bank employees towards various innovative products and services is also very relevant as they deal with the customers and know the exact reality of banking operations which has been taken up in this study which till now has not been covered by a descent number of researchers. Studies related to customers and bank employees’ attitude towards NEFT and RTGS are also now been observed especially in India. Factors like ease of handling ATMs, simplicity in operations, impact of knowledge about computers and mobiles, cost, accessibility in regions, ease of understanding and availability have not been studied much in
composite manner. Various promotional activities like advertising, public awareness programmes; bank assurance, coins dispenser machines, etc. have also been studied in this research which have not been studied much. Furthermore, it has been believed that FL in India is low, but is it the real position? One can know only after exploring using the BMFL. Few attempts have been made for studying financial literacy level among the investors in Raipur, Mahasamund, Bemetra, Baloda Bazaar, Gariyabandh, Dhamtari and Raigarh. Determining the relationship of socio-economic factors on the level of financial literacy among the investors and the impact of financial literacy on personal finance has also witnessed little research. Stakeholders have taken initiatives to promote FL, but are they really helping in boosting FL in Indian context? This is another unexplored area. The next chapter discusses the research methodology adopted for this study.
References


Ibid. p. 25


