

Financial Savviness among Women in IT Companies

Prof. (Dr.) B. H. Nanwani

Abstract—The paper attempts to assess Financial Literacy of Women employed specifically for IT specific operations in IT firms. The questionnaire developed by The Organisation for Economic Cooperation and Development (OECD) has been employed for this purpose. The findings clearly indicate that the stereotypical views about women having low financial scores do not hold true, at least not in the case of young, urban, well – educated women employed and engaged in sophisticated IT jobs and earning high salaries! Such women are tech and financially savvy.

Index Terms—Financial Literacy, financial knowledge, financial behavior, financial attitudes

INTRODUCTION

Financial inclusion is a much acclaimed goal of modern economies given that it can bring about equity and equality. But the impediment to financial inclusion is financial literacy. Financial literacy opens up the sluice gates for one's welfare and well-being; hence its importance. In modern times one needs to be financially savvy given that: Life expectancy has increased and therefore the need to plan for enhanced amounts of post-retirement funds, medical insurance coverage etc. In context of our country, to be financially savvy is even more pronounced given that:

1. There is an absence of social security
2. The break down in joint family structures, making individuals responsible for financial planning and outcomes
3. Sophistication of financial markets and availability of wide choice of financial products (with innovative risk-return combinations) has made adequate knowledge of such products and market trends a pre requisite for good financial outcomes and insulation against losses.
4. Technology has further changed functioning of financial markets and financial literacy is imperative for aligning to such changes.

Financial literacy helps or aids better planning of money and earnings, better handling of life events like education, job loss, retirement, and prudent financial decision making for wealth accumulation. Research has shown that financially literate individuals fare well on budgeting, saving, and controlled spending; mortgage /debt management etc.

Higher financial literacy enhances the demand for financial products, brings about competitiveness and transparency in the financial market and these outcomes coupled with wealth

accumulation of financially literate individuals paves way for a robust economy, stability, growth and development. In a nutshell financial literacy changes individual lives and strengthens economies.

FINANCIAL LITERACY

Canada's Task Force on Financial Literacy defines financial literacy as having the knowledge, skills and confidence to make responsible financial decisions.

The OECD defines financial literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being." This definition has been used to construct this paper.

Basic financial literacy includes understanding of terms like savings, credit, insurance and budgeting and is an amalgam of financial knowledge, attitudes and behavior.

Financial knowledge influences behavior and attitudes and is reflected in the way one manages money on a day to day basis. Financial behaviour is gauged from 'money management acts' such as timely payment of bills, budgeting, saving and investment habits, retirement funds etc. Financial attitudes shape financial behaviour and reflect an individual's opinion about financial planning, propensity to save and spend.

Given its importance and the fact that financial literacy in India is much below world standards various concerted efforts have been undertaken by RBI, SEBI, Insurance Regulatory and Development Authority [IRDA], The Pension Fund Regulatory and Development Authority [PFRDA], Stock Exchanges, Broking Houses and Mutual Funds, Insurance Companies, NGOs to provide financial literacy skills through workshops, seminars, websites, print and electronic media advertisements.

LITERATURE SURVEY

Financial illiteracy is a global phenomenon. In a Financial Literacy survey covering 143 countries by Standard & Poor (2015), only one out of three adults in the world were found to be financially literate. In USA for instance 57% are financially literate, 28% in China, 26% in Southern Europe and 24% in India. There are several studies that establish deficiencies in financial literacy in India. VISA (2012) study ranked India at the 23rd position among the 28 countries surveyed. Agarwala et al (2013) in their research covering 3000 individuals too established the fact of very low financial knowledge among Indians. In terms of financial behaviour and attitude employees and the 'retired' scores are positive while women are marginally better than men in terms of financial knowledge.

Financial literacy varies with certain socio economic parameters like gender, age, education level and income [Mark Taylor (2010) cited in Kumar S., Anees Md. (2013)]. However, the research work of Agarwal et al [2013], shows that education does not automatically transform into financial literacy and contextual variables such as joint family systems in India and other sociological and behavioral aspects have a bearing on financial literacy. Bhushan P, Medury Y (2014) also show the impact of place of work on financial literacy. Government employees were found to have low literacy levels as compared to private sector employees.

In terms of financial literacy components, financial knowledge was found to be higher among the urban educated males in India with no impact due to income and marriage. Employed persons and educated persons displayed more responsible financial behavior in terms of payment of dues/ bills. Persons in lower age group showed better financial attitude as compared to higher age group. Gender does not seem to have had any effect on financial attitudes (Trivedi P, Trivedi S (2014).

Research reports by different authorities however have shown a gender gap in financial literacy. Women's financial knowledge is poorer than that of men (Hung et al 2012). Worldwide, 35% of men are financially literate, compared to 30% of women. This gender gap is found in both advanced economies and emerging economies in terms of basic as well as advanced measures of financial literacy. Women have weaker financial skills than men even considering variations in age, country, education, and income. [S& P Global Financial Literacy Survey 2015; Koenen et al (2016)].

Low level of financial literacy has greater impact on women than men. Women are also less likely to go out for financial education and are not confident about investing their money [Lusardi & Mitchell (2008). Women face a variety of financial

issues and challenges that either aren't experienced by men, or aren't experienced to the same degree. They are more intimidated about financial issues than men, earn lesser money, are less prepared for retirement, receive smaller retirement benefits, have a longer life expectancy than men and are more conservative than men. Women are thus at higher risk than men for financial stress [Anthes, W and Most, 2000]. Unfortunately though anxious about securing their future, women lack the wherewithal of securing their future.

In a recent survey, Financial knowledge scores were found to be low among urban, well-educated, working women in Rajasthan although their scores on financial attitudes and behaviour were positive [Akshita Arora, 2016]. Chijwani [2014] has also proved low financial scores among young women in Pune despite higher education and employment. These women had 'moderate risk taking appetite' and independence in taking financial decisions. Mathivathani and Dr. M. Velumani (2014) have attributed the cause of low financial literacy scores among rural women in Tamil Nadu to poverty, social, cultural, physical, educational and financial barriers.

The factors causing gender gaps in financial literacy have not been well documented or extensively researched. Lusardi, Michaud, and Mitchell (2016) cited in Koenen et al (2016) attribute this gap to differences in the benefits and costs of acquiring financial knowledge; while Hsu(2011) puts it down to decision-making patterns and practices of division of work in households. For example, a wife may take up household tasks while the husband may take up financial decisions and tasks and thus enhance his financial knowledge. Vis- a vis India, there is ample scope to assess financial literacy of women and their sub groups like working women, widows, singles etc. and the contextual factors or determinants of their literacy.

RESEARCH DESIGN

The paper adopts Descriptive research design. Survey method has been employed to collect data. Questionnaire created by OECD has been used to collect data about financial knowledge, behavior and attitudes among women employed in the IT sector in Pune. Along with this, is a set of questions that ask respondents to rate themselves on their financial knowledge and reasons why despite having knowledge women do not venture into financial planning and or making investments. These questions attempt to correlate such behavior to personality specific and social factors.

Data has also been collected from relevant secondary sources.

WOMEN IN IT INDUSTRY IN PUNE

Pune is an important IT hub in the country. There are several large and reputed companies like BMC, Zensar, Infosys, Wipro, Cybbage, Sagitech and the like. Pune is also known as Oxford of the East and has an impressive educated population. Given this, it was deemed appropriate to study financial literacy among women working in few IT Companies in Pune. For the purposes of this research women working in IT Companies and undertaking IT specific operations such as Software development, Quality Assurance, Technical writing etc. have been included while women working in IT companies as Secretaries, HR professionals, Marketing etc have not been considered for the survey.

Such women, it is presumed are highly qualified, independent and well paid. It would be interesting to assess their financial literacy given that it is generally assumed that education and income has a significant impact on financial literacy scores. Also generally the women employed could be representing millennials between ages of 25 and 35 who have been exposed to some kind of knowledge on finance. Also being related to the technical field they are well versed with ways of sourcing data to take financial decisions and become prudent or savvy. Given these enablers it was deemed fit to assess their financial literacy scores.

The study will help identify areas where women's financial skills needs to be bolstered and help construct creative and customized ways of making them financially savvy. This kind of human capital given their technical skills and general intelligence and good salaries can become intelligent savers and investors and thus do yeoman services in the capital formation and as such economic growth of the country.

SAMPLE

More than 150 questionnaires were distributed to women working at Sagitech and BMC. 50 women working in the field of Software development and other IT related operations returned the filled in questionnaires. The respondents were selected as per convenience and availability and willingness to answer the questions. Similarly, the IT companies have been selected as per convenience.

Data was collected by administering the questionnaire in person or through email.

OBJECTIVES

1. To assess financial literacy among women employed in the IT companies in Pune
2. To explore underlying reasons for low finance behavior and attitudes, if any
3. To suggest ways to customize financial literacy programmes for niche segments such as highly educated, working women/ Gender specific approach to financial education

HYPOTHESIS 1:

Women employed for IT related work in the IT Companies have high financial literacy scores

HYPOTHESIS 2:

Certain personality specific attributes and social factors prevent women from undertaking financial planning despite having financial knowledge.

FINDINGS

Profile of Women covered in this survey

The filled questionnaires were received from 50 women employed in BMC Software and Sagitech.

1. 23 of the 50 women, i.e. 46% were aged between 22 years and 31 years while 32% were in the age group of 32 to 41 years. 2 women were above the age of 40 and 7 respondents refused to disclose their age.
2. Of the 50 respondents 26 [52%] women were married while 48% were single. 19 [38%] women hold post graduate degrees, while the rest hold a Bachelor's degree primarily in the fields of Engineering or Computer Science.
3. 24 women [48%] have a monthly family income between Rs. 50,000 to 1 lakh, while 8 [16%] have income above Rs. 100,000; 3 respondents had monthly family incomes of Rs. 50,000 and 6 respondents [12%] have monthly incomes of less than Rs. 50,000. 9 respondents did not divulge their incomes.

It can be broadly said that the women covered in this survey are primarily young, married, well- educated and earn good salaries. They are connected with IT specific work and hold positions such as Software Engineers, Lead writers, Technical writers, Quality Assurance, Product Developers, and Application Developers etc.

A. Financial Knowledge as component of Financial Literacy

Seven core questions covering a range of financial topics were used to test the financial knowledge of the respondents.

Table 1: Financial Knowledge Scores

No. of Respondents	In % age	Score	Remarks
9	18	9	High
18	36	8	High
15	30	7	High
3	6	6	High
2	4	5	Average
2	4	4	Average
1	2	3	Low
		2	Low
		1	Low
		0	
Total:50	100		

A financial knowledge score was created by summing correct answers and reporting them as a score out of 7. 70% of respondents had high scores i.e. between 5 to 7 scores whereas 9 respondents i.e 22% of the sample had low scores including 3 having zero scores.

76 % of respondents could calculate interest on savings account while 58% showed comprehension of the concept of compounding interest. In most other studies, people have generally not been able to apply their knowledge to calculation of interest and more so in case of compounding interest.

While the women respondents showed that they could do math calculations in terms of interest calculations, the response in terms of understanding of higher financial concepts was not promising.

Table 2: Responses about Understanding Financial Concepts

Financial concept	TRUE [Responses]	FALSE [Responses]	Don't Know [Responses]	Not Ans.	Total
Co-relating Risk and returns	24	9	15	2	50
Inflation and Cost of Living	40	6	4		50
Low Risk with Diversification	20	10	18	2	50

Over 50% respondents showed lack of awareness about the correlation between risk and returns in investments with some giving incorrect answers and 30% expressing 'don't know' [30%] as responses. Similarly 60% of respondents do not know about benefits of diversification in investments. Majority of the respondents [80%] however could correctly link inflation with rising costs of living.

B. Financial Behaviour as component of Financial Literacy

Financial behavior impacts financial wellbeing. These behaviours were deciphered through questions such as thinking before making a purchase, paying bills on time and budgeting, saving and borrowing to make ends meet.

The financial behaviour score takes into account positive behaviours exhibited and is a measured against a total maximum score of 9 points. Those exhibiting 2/3 of the total positive behaviours are considered to have a relatively high score.

Table 3: Financial Behaviour Scores

No. of Respondents	In % age	Score	Remarks
9	18	9	High
18	36	8	High
15	30	7	High
3	6	6	High
2	4	5	Average
2	4	4	Average
1	2	3	Low
		2	Low
		1	Low
		0	
Total:50	100		

90 % of women covered in this survey achieved high scores ranging from 6 to 9 marks.

RESPONSIBLE FINANCIAL BEHAVIOURS

a. Day to day Money decisions and Household Budgets
 Women covered in the sample have exhibited positive financial behavior by taking on responsibility either individually or jointly for day to day financial decisions and having a household budget. 4 respondents or 8% of the respondents are singularly or primarily responsible for day to day household decisions about money; while 76% women take such decisions with their partners or other family members. Besides 74% have a household budget. Day to day financial decisions are thus not an anathema for women covered in the sample.

b. Managing Expenses and Borrowings
 60% of the sample [30 respondents] has never been in a situation of their income falling short of expenses during the last 12 months. Of the 20 respondents who have faced an adverse situation of expenses overshooting incomes, 6 respondents have managed the situation by falling upon their savings, working overtime etc. but not resorting to borrowings. Only 14 respondents or 28% of the sample had resorted to borrowing in the form of drawing on their credit cards, borrowing from employers, delaying payments etc. Borrowing is not considered as a positive financial behavior.

c. Active Saving
 80% of respondents are active savers choosing to save via bank savings accounts, fixed deposits or even buying stocks and shares [very few respondents], or giving money to family to save on their behalf etc. Saving money is a positive financial

behavior and women respondents seem to have scored very well on this front.

d. Sources of Information for buying financial products
 Only 3 respondents i.e. 6% do not currently hold any financial product personally or jointly. The remaining 47 respondents are individually or jointly holding several financial products ranging from Provident Funds to Insurance Policies, stocks and Shares, Saving Accounts, credit cards etc. It is also heartening although not very surprising to note that over 90% of the women have invested in financial products on the basis of independent and expert sources of advice such as accessing product specific information on the internet or best buy guidance on internet and independent brokers and agents. Their investment decisions are thus well informed and on the basis of independent sources making them eligible for high scores owing to positive financial behaviours.

e. Other Behaviours

- 94% of the respondents buy products only after considering whether they can afford it
- 90% pay their bills on time
- 76% keep a close watch on their financial affairs. This is only expected given that 74% have budgets.
- 68% set and also strive to achieve their long term financial goals

C. Financial Attitudes as component of Financial Literacy

Attitudes and preferences are considered to be an important element of financial literacy. Attitudes impact behavior. A negative attitude towards savings for instance will generally make a person avoid the behavior of saving or a casual attitude towards long term financial plans will make a person prioritise short term wants.

The OCED Questionnaire includes three statements to gauge respondents’ attitudes or disposition towards money and planning for the future. Respondents were asked to agree or disagree with the following three statements:

1. I tend to live for today and let tomorrow take care of itself
2. I find it more satisfying to spend money than to save it for the long term
3. Money is there to be spent

About 56% of respondents strongly or completely disagreed with the perception of tending to live for the day; 80 % disagreed that it is more satisfying to spend rather than save for the long term and 38% completely or strongly disagree with the perspective that money is there to be spent.

The average response to the three attitude statements provides an overall indicator of attitude. Respondents with an average attitude indicator above 3 (a 'high' score), have attitudes that tend towards the longer term. Analysis shows that 90% of the sample or 45 respondents out of 50 have scores ranging from 3 to 5. This has been captured in Table 4 below:

Table 4: Financial attitude Scores

No. of Respondents	In %age	Score	Remarks
5	10	5	High
27	54	4	High
13	26	3	High
1	2	2	Average
2	4	1	Low
2	4	0	
Total:50	100		

It may be worth correlating here that 90% of respondents have high scores on financial attitudes and financial behavior.

FINANCIAL LITERACY

In the current paper, the overall financial literacy has been calculated by summing the raw scores of financial knowledge, financial behaviour and financial attitudes; i.e on a total score of 21 points [Financial Knowledge: 7 points, Financial Behaviour: 9 points and Financial Attitudes: 5 points]

Table 5: Financial Literacy Scores

No. of Respondents	In %age	Score
0	0	21
2	4	20
1	2	19
12	24	18
11	21	17
4	8	16
4	8	15
4	8	14
1	2	13
4	8	12
2	4	11
1	2	10
1	2	9
2	4	8
0	0	7
1	2	6
0	0	5
Total:50	100	

75% of respondents have high Financial Literacy scores ranging from 14 to 20 points.

The average of this combined score among all 50 women respondents is 15.12. In general terms, it may be said that respondents have scored high scores on financial behavior and attitudes over knowledge.

In all the respondents surveyed there are some women who did not achieve any high scores on any of the components of financial literacy. Typically, people tend to have 1 or 2 strengths; however in the current survey it was found that 11 respondents [22%] had high scores on all three components of financial literacy.

SELF-REPORTED RATINGS

While Financial Knowledge, Financial Behaviour and Attitude scores have been calculated on basis of responses, respondents were also asked to assign themselves marks on their perceptions of the level of financial knowledge they possessed. They were asked to rate their financial knowledge on a scale of 1 to 7 where 1 means very low level of knowledge and 7 means very high level of knowledge.

19 respondents or 36% rated themselves at 5 while 15 respondents gave themselves 4 marks. Thus 68% of the sample considered themselves to be possessing high or good amount of financial knowledge. 5 respondents each assigned themselves 3 and 2 marks while 6 refused to rate themselves.

It is interesting to note that 15 of the 19 respondents [self-rating:5] actually scored high financial literacy scores between 15 to 20 out of 21 points; Of the 15 respondents who assigned themselves 4 marks, 10 again reported high literacy scores of 15 to 19 marks. This indicates that they have valid confidence in their knowledge.

Despite scoring well 7 of the high scoring respondents [38 in all] expressed interest in attending educational and/or training programmes to enhance their financial knowledge and further increase their confidence in this field.

It is interesting to note that 7 respondents who actually secured high scores from 15 to 20 out of 21 total points gave themselves only 2 to 3 marks on the self-rating scale. Despite having knowledge they do not undertake financial planning and/or investment decisions for various reasons.

Personality Specific and Social Factors and their Impact on Financial Behaviours

Of 50 respondents, 20 [i.e.40%] expressed that despite having financial knowledge they do not undertake financial planning and or investment decisions. This was attributed to certain personality specific and other social factors mentioned in order of priority as:

1. Not possessing enough knowledge to take decisions independently
2. Not interested in this aspect of life
3. Lacking self-confidence
4. A feeling that men are best suited for these tasks or growing up seeing men folk undertake these tasks.

INTERVENTIONS FOR ENHANCING FINANCIAL LITERACY

The Respondents were asked if they would be interested in interventions such as training in the field of finance. To this, 26 out of 50 women [52%] covered in this survey answered in the positive. This clearly indicates that women have a desire to improve their financial knowledge and also lack self confidence in their abilities. 22% of the respondents were not interested in such interventions while the remaining 13 respondents [26%] chose not to answer this question. Majority of

these respondents had high literacy scores almost justifying their responses.

Proving of -

HYPOTHESIS 1:

Based on the above it can be safely said that Hypothesis 1 that Women employed for IT related work in the IT Companies have high financial literacy scores is proved. 75% of the sample has Financial Literacy scores between 14 to 20. The average financial Literacy score for all 50 respondents is 15.12.

HYPOTHESIS 2:

Certain personality specific attributes and social factors prevent women from undertaking financial planning despite having financial knowledge. Hypothesis 2 is also correct given that over 50% of respondents do not undertake financial tasks owing to certain personality related or social constraints.

LIMITATIONS

The study is based on a small sample drawn from only two IT companies in Pune and may not truly represent a larger section of women employees.

CONCLUSION AND SUGGESTIONS

Education and high level employment can significantly impact financial literacy and prove gender gap in financial literacy to be a myth. However, despite having knowledge women may owing to self-limiting perceptions hesitate to venture into financial planning and investments. What is therefore needed is not just financial education but also training them to build their confidence.

The study clearly indicates that the women covered in this sample have shown high scores in financial behavior over financial knowledge. What is required is therefore to build short term courses that will help them understand financial concepts and their application in real life situations - education in terms of risk and returns, diversification of portfolios and calculations of compound interest et al. This conceptual framework will perhaps increase their confidence and knowledge and empower them to be independent financial decision makers.

Besides they can also be trained and educated in complex financial products such as shares and bonds as also investing for long term goals.

BIBLIOGRAPHY

- [1] Agarwala, S.K., Barua, S., Jacob, J. and Verma, J. R. (2013). Financial literacy among working young in urban India. Working Paper, IIM-Ahmedabad
- [2] Anthes, W., & Most, B. (2000). Frozen in the Headlights: The Dynamics of Women and Money. *Journal of Financial Planning*, 13, 130-142
- [3] Arora A. (2016). Assessment of Financial Literacy among Working Indian Women. Research Gate. Retrieved from https://www.researchgate.net/publication/298790053_Assessment_of_Financial_Literacy_among_working_Indian_Women
- [4] Bhushan P (2014). Relationship between Financial Literacy and Investment Behavior of Salaried Individuals. *Journal of Business Management & Social Sciences Research (JBM&SSR)* Volume 3 (5). Retrieved from www.borjournals.com
- [5] Chijwani M. (2014). A Study of Financial Literacy among Working Women in Pune. *International Journal for Scientific Research & Development* Vol. 1 (11) | ISSN (online): 2321-0613
- [6] Global financial Literacy (2015) S & P Global. Retrieved from <https://www.spglobal.com/corporate-responsibility/global-financial-literacy-survey>
- [7] Hung, A., Yoong J., Brown E. (2012). Empowering Women Through Financial Awareness and Education. *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 14, OECD Publishing. <http://dx.doi.org/10.1787/5k9d5v6kh56g-e>
- [8] Hsu, J.,(2011). Aging and Strategic Learning: The Impact of Spousal Incentives on Financial Literacy, Ann Arbor: University of Michigan 2011.
- [9] Kumar S., Anees Md. (2013). Financial Literacy & Education: Present Scenario in India. *International Journal of Engineering and Management Research*. Volume-3 (6), pp. 83-87. Retrieved from www.ijemr.net
- [10] Lusardi, A., Mitchell, O. (2008). Planning and Financial Literacy: How Do Women Fare? *American Economic Review*, 98(2), 413-417.
- [11] Mathivathanl V., Velumani M. (2014). A Study on Financial Literacy Among Rural Women in Tamilnadu. *Indian journal of applied Research*. Volume : 4 (12) ISSN - 2249-555X
- [12] OECD INFE (2011) Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for conducting Internationally Comparable Survey of Financial literacy. Paris: OECD. Retrieved from <http://www.oecd.org/finance/financial-education/49319977.pdf>
- [13] Report of Recommendations on Financial Literacy - Canadians and Their Money Building a brighter Financial Future. Task force on financial literacy(2010) Retrieved from <http://www.edugains.ca/resourcesFL/Background/CanadiansAndTheirMoney-2011.pdf>
- [14] Tabea Bucher-Koenen T. B, Lusardi A, Alessie R. J. M, and Rooij M. C. J. (2016) How Financially Literate are Women? An Overview and New Insights. *Global Financial literacy Working Paper*
- [15] Trivedi P, SaumyaTrivedi S. (2014). Financial Literacy an Essential Prerequisite for Financial Inclusion. *Global Journal For Research Analysis*. Volume 3(3)
- [16] Visa World Financial Literacy Survey 2012. Retrieved from <http://indiamicrofinance.com/visa-world-financial-literacy-survey-2012.html>
- [17] Women and Financial Literacy (2013). OECD/INFE Evidence, Survey and Policy Responses. Retrieved from *Women and Financial Literacy, OECD/INFE Evidence, Survey and Policy Responses*

Prof. (Dr.) B. H. Nanwani
Director, Sadhu Vaswani Institute of Management Studies
6, Koregaon Road, Pune, India
E-mail: directorsvims2010@gmail.com