

LEVEL OF FINANCIAL LITERACY AMONG WOMEN WORKING IN DIFFERENT WORK SECTORS IN URBAN PUNJAB

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Abstract : Women in the present era, are getting employed in various work fields. They have to take financial decisions regarding saving, investing, budgeting and borrowing. Knowledge of financial concepts, fixed income and variable income investment options, basic numeracy is required for informed financial decisions. This paper aims at finding the level of financial literacy among women employed in different work sectors in urban Punjab. Present level of Financial literacy depends on knowledge of financial products and services and putting that knowledge in practice and action. For this purpose, action component of Financial literacy is classified into 'high', 'low' and 'no' financial literacy and financial competency has been found for basic financial numeric skills. Financial literacy for fixed income investment options has been found 69.8% and 34.6% women are found financially literate for Variable income investment modes. Association of overall financial numeric skills possessed by working women has been found with socio demographic profile of women. Association is calculated by using chi square test for independence. Significant results are found for association of financial numeric skills with education, work area, decision making and there is no significant association found between overall numeric skills and type of family, income, districts, age, marital status and work experience. Working women usually prefer safe investment modes. Even after the financial knowledge of investment modes very few invest in risky securities. Therefore a wide gap is found between financial knowledge and financial literacy. Various information sources imparting financial knowledge has also been discussed. Family members/ Friends / Relatives and newspaper are the most commonly used information source by 82.8% and 70.2% women respectively.

Keywords: Financial literacy, Socio - economic and demographic factors, Numeric skills, Fixed and variable investment options

1 Introduction:

Employed and self employed Women are earning money but they have a little financial knowledge. Therefore they lack financial decision making. However, many of them use information sources like newspaper, websites, radio and TV commercials. Some of them have to depend on financial agents, family members for investment of their surplus funds. For making right financial decisions, they must be financially literate. Financial literacy is the need of the hour because of the various frauds, scams, complex markets, new financial products and changing financial environment. Application of knowledge for taking financial decisions in daily life boosts up the confidence of an investor and benefits in terms of increased returns. High numeracy skills are required to take financial decisions for making selection of investment alternative. Understanding of interest rates, present values, yield, concept of inflation, diversification of stocks and marginal cost of lending rate is essential for putting their hard earned monies to any investment option like fixed deposit, Public provident fund, national saving certificates, debentures, government securities, mutual funds, insurance schemes, real estate, stock markets, investment in commodity markets and many more. Need for financial education and numeric skills increases with increased financial responsibilities. For informed decision making in present and future, one must be financially literate.

Inculcating any type of skills and getting knowledge are not necessarily a part of classroom teaching always. One can have numerous sources for learning and gaining information. The sources of information providing financial information enhances the level of financial knowledge and hence literacy too. Financial information sources create not only theoretical but develop numeric skills also. They use numeracy to solve and manage the real life problems. Numeracy is called mathematical skill also. Therefore, Knowledge and application of financial knowledge along with application of mathematical skills, for better understanding of financial information and ability, to analyze that information is termed as financial literacy. It means the basic skills for making the right analytical decisions. understanding of numbers, figures, finding relation between the numbers, doing calculations and interpretations, visualizing the results in advance, understanding of graphic data and analysis are basic skills.

1.1 Present level of Financial literacy : Various researchers measured financial literacy.(Huston 2010; Hung et al. 2009) reported the ways used for measuring it. Performance test and self assessment were used in previous studies to measure financial literacy. Numerous researchers used survey questions. They discovered savings aspect, investments and debt as different domains of financial literacy. Participants rate themselves for their level of financial literacy they have. Present level of Financial literacy depends on knowledge of financial products and services and putting that knowledge in practice and action. Application of knowledge in decision making boosts up the confidence of an investor and benefits them in terms of increased profits. High numeracy skills are also required along with knowledge of investment options. Overall financial numeracy is categorized in to three groups i.e "More skilled", "Less skilled" and "No skills" for measuring financial competency on the basis of knowledge of these skills and action component of Financial literacy is classified in to 'high', 'low and no financial literacy to find level of financial literacy. Association of overall financial numeric skills possessed by working women has been found with socio demographic profile of women. Association is calculated by using chi square test for independence. Level of financial literacy has been measured by adding the positive responses of individual respondent under action component.

1.2 Definition:

1. Personal financial literacy as per PACFL (2008) is "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial wellbeing".
2. OECD/INFE (2012) defined financial literacy a "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being". It is the ability to know the role and functions of money in one's life. It is all about the learning for the ways of management, investment, lending and borrowing of money.

2 Literature review:

Bajtelmit and Van Derhei (1996) found women as more conservative than man and they were not interested for investment in risky modes of investment. They only prefer risky investment in case of high rate of return.

Beal and Delpachitra (2003) found lack of financial education in schools as main cause of low skills concerning basic financial concepts, instruments, financial planning and decision making among Students of the University of Southern Queensland (USQ) in Australia. Lizarragga et.al (2007) Decision making process is the most difficult task for everyone because Decision making power of humans is influenced by various factors. Researchers discussed the naturalistic theory, which focused on decisions and factors affecting decisions of people living in real world. Naturalistic theory emphasized personal competency and role of experience in decision making process. Lusardi, Annamaria .et.al (2010) found strong relation of financial literacy to socio-demographic factors. Level of financial literacy was reported low because the basic knowledge of interest rates, concept of inflation and diversification of risk has been possessed by less than one-third young adults. Meenakshi Chaturvedi and Shruti khare (2012) Authors found occupation, level of education and income as factors influencing the investors' awareness. Working women gave weightage to traditional modes of investment than mutual funds and corporate securities Financial Industry Regulatory Authority (2013)Significance of financial literacy was identified by the U.S Americans, in a National Financial Capability Survey conducted in 2012. 89% participants stated the need of teaching of finance in schools. Term Financial literacy was used for defining personal

financial management. Taft, Marzieh Kalantarie, et.al (2013) showed positive correlation of financial literacy with age and education. More financially literacy has been found among married men. Gupta (2014) explored low financial skills among the micro entrepreneurs in Kangra district. Lack of awareness about financial products, Inefficient practices for keeping record, improper cash management, poor saving habits, were the reasons for low financial skills. Vijay laxmi et.al (2019) found the women working in education sector in urban Punjab as more financially skilled. 98% women respondents have the ability to calculate simple Interest and 73% were able to calculate compound interest. Whereas for present values, yield, bank rate, diversification of stocks and impact of inflation less responses are received respectively.

3 Research Methodology: Research methodology is a blue print to solve the research problem. Kothari(1997)

3.1 Statement of the problem: To find the present level of financial literacy among the working women.

Sub objectives:

- To find the awareness about fixed income investment modes.
- To find the awareness about variable income investment modes.
- To know the information sources providing financial knowledge.
- To find the association of overall financial numeric skills with socio - demographic factors.

3.2 Type of research: Exploratory and descriptive.

3.3 Universe: Female Population of top five districts of Punjab i.e Jalandhar, Amritsar, Ludhiana, Patiala and Bathinda.

3.4 Sampling Unit: Working women

3.5 Sample size: 500.

3.6 Sampling procedure: 100 Women from each district.

3.7 Data Collection and Statistical tools: Used questionnaire instrument for collection of data from primary sources. Afterwards, entered data in excel and transformed to SPSS. Percentage, frequency count, Chi - square are used with the help of IBM SPSS 21.0.

4 .Analysis and interpretation: After transforming the collected data to excel then to SPSS, different tools has been applied. The results of analysis derived from SPSS 21.0, has been presented in the form of tables below and interpreted the results in the form of statements. Results has been interpreted for fixed income awareness modes of investment, variable income awareness modes of investments, sources of information used by working women to collect financial information, present level of financial literacy in Punjab among working women and association of overall financial numeric skills with socio demographic factors.

Table 4.1: Awareness about modes of investment having fixed income

| | Aware (Knowledge) | | Aware and Used (Action) | | Not Aware | |
|-----------------------------------|-------------------|---------|-------------------------|---------|-----------|---------|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| Saving account | 500 | 100 | 500 | 100 | 0 | 0.0 |
| Bank Fixed Deposit | 497 | 99.4 | 459 | 91.8 | 3 | 0.6 |
| Public Provident Fund(PPF) | 452 | 91.4 | 279 | 55.8 | 48 | 9.6 |
| National Saving Certificate(NSCs) | 387 | 77.4 | 144 | 28.8 | 113 | 22.6 |
| Post Office Savings(POSs) | 421 | 84.2 | 180 | 36.0 | 79 | 15.8 |
| Government Securities | 358 | 71.6 | 100 | 20 | 142 | 28.4 |
| Debenture / Bonds | 332 | 66.4 | 73 | 14.6 | 168 | 33.6 |

Source: SPSS output

From above table, it can be seen that large number of working women possesses financial knowledge but all of them do not make use of financial knowledge. 100% women followed by 99.4%, 91.4%, 84.2%,

77.4%,71.6 and 66.4% have the knowledge for savings account, Fixed deposits, PPF, POSs, NSCs , government securities and debentures respectively have the knowledge .Women taking action for investing their funds in FDs are 91.8%, PPF are 55.8%, POSs are 36% NSCs are 28.8%,and government securities 20%. Usually they prefer safe investment modes. Therefore a wide gap is found between financial knowledge and action. On the basis of action components , financial literacy is divided in to three groups: 1) More financially literate 2) Less financially literate 3) Not financially literate.

Table 4.2: Awareness about modes of investment having variable income

| | Aware (Knowledge) | | (Aware and Used) Action | | Not Aware | |
|--|-------------------|---------|-------------------------|---------|-----------|---------|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| Equity Share Market | 297 | 59.4 | 92 | 18.4 | 203 | 40.6 |
| Commodity Market | 223 | 44.6 | 37 | 7.4 | 277 | 55.4 |
| Mutual Funds/ systematic investment plan | 382 | 76.4 | 217 | 43.4 | 118 | 23.6 |
| Real Estate / Property | 402 | 80.4 | 177 | 35.4 | 98 | 19.6 |
| Gold/ Silver (bullion) | 334 | 66.8 | 142 | 28.4 | 166 | 33.2 |
| Life Insurance | 472 | 94.4 | 354 | 70.8 | 28 | 5.6 |

Source: SPSS output

It can be seen from the above table that majority of respondents are aware about all variable income investment options except commodity market investments. But number of aware female includes 18.4% respondents investing in equity market and 7.4% in commodity market. Majority of women 70.8% and 43.4 % are doing investments in insurance schemes and mutual funds respectively. 80.4% are aware about Real estate/ property while 35.4% has invested in real estate . Women mostly prefer to take moderate risk.

Table No.4. 3 Present Financial Literacy Level among Working Women in Punjab

| | More Financially Literate | Less Financially Literate | Not Financially Literate | Total |
|---|---------------------------|---------------------------|--------------------------|-------|
| Fixed income investment financial literacy | 349(69.8) | 151(30.2) | | 500 |
| Variable income investment financial literacy | 173(34.6) | 238(47.6) | 89(17.8) | 500 |
| Overall Financial Literacy | 378(75.6) | 122(24.4) | | 500 |

Source: SPSS output

Present level of financial literacy has been calculated on the basis of results of action component of financial literacy has been used for determining the present level. 69.8% working women are found as more financially literate regarding fixed income investment options as compared to 34.6% about variable income modes of investment . Less financially literate women are more in case of variable income securities than 30.2% in fixed income investments. Overall high financial literacy rate 75.6% as compared to overall low financially literate i.e 24.4% .

Table 4. 4: Sources from where you get information about Investment options

| S.No | Sources of financial Information | Frequency | Percent |
|------|--------------------------------------|-----------|---------|
| 1 | Newspapers | 351 | 70.2 |
| 2 | TV Advertisements/ Business Channels | 321 | 64.2 |
| 3 | Radio Commercials | 89 | 17.8 |
| 4 | Promotional Pamphlets | 192 | 38.4 |
| 5 | Financial Education Websites | 182 | 36.4 |
| 6 | Campaigns/ Seminars/ Workshops | 172 | 34.4 |
| 7 | Internet/ E-mail messages | 290 | 58 |
| 8 | Stock Brokers and Agents | 169 | 33.8 |
| 9 | Family members/ Friends / Relatives | 414 | 82.8 |

Source: SPSS output

Major sources of information for financial knowledge are Family members/ Friends / Relatives 82.8% followed by newspapers(70.2%) and TV advertisements (64.2%). For meeting the information needs about investments radio commercials are least used source. 38.4% uses pamphlets and 36.4 % financial education websites like www.money control.com, www.rbi.org.in .

Table 4.5: Overall financial numeric skills

| | | Frequency | Percent |
|----|--|-----------|---------|
| 1. | Calculation of simple interest | 469 | 93.8 |
| 2. | Calculation of compound interest | 362 | 72.4 |
| 3. | Calculation of present values | 198 | 39.6 |
| 4. | Calculation of yield | 160 | 32 |
| 5. | Bank rate/Marginal cost of lending rate | 130 | 26 |
| 6. | Effect of Diversification of stocks on risk & return | 81 | 16.2 |
| 7. | Calculation of quantitative effect of Inflation | 80 | 16 |

Source: SPSS output

Knowledge of mathematical calculations helps in taking better financial decisions. Hence , financial numeric skills enhances the financial literacy level. Jayaraman, J.Det al (2018) discussed gender, education stream, financial education level, family income, , parental education, involvement and plans for future education and numeracy and financial literacy are found positively related. Respondents are asked about knowledge and calculation of Seven type of numeric skills. Majority of women respondents (93%) have knowledge of finding simple interest followed by (72.4%) compound interest . Low rate of response is found for present values , yield and bank lending rate. Least number of respondents i.e nearly 16% are able to understand effect of diversification and inflation. Table No. 4.5 explains only percentage respondents possessing numeric skills. But ,to find the association of financial numeric skill with socio demographic profile has been found with chi square test of independence. Divided the overall financial numeric skills in to three groups i.e "More skilled", "less skilled" and "no skills".

Table 4.6 Association between Overall financial skills and Type of family of working women

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|----------------|---------|--------------------------|----------------------|-------------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| Type of Family | Nuclear | 140(44.2) | 158(49.8) | 19(6) | 2.14 | 2 | 0.34 |
| | Joint | 88(48.1) | 89(48.6) | 6(3.3) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 %levels and *significant at 5% levels

On the basis of type of family , 49.8% women in nuclear family are more skilled than 48.6% women with joint family. p value 0.34 is found > .05 therefore found insignificant results .

Table 4.7 Association between Overall financial skills and Financial decision making by working women

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|---------------------------|-------------|--------------------------|----------------------|-------------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| Financial decision making | Self | 87(41.8) | 116(55.8) | 5(2.4) | 8.84 | 2 | 0.01** |
| | Anyone else | 141(48.3) | 131(44.9) | 20(6.8) | | | |

| | | | | | | | |
|--|-------|-----------|-----------|-------|--|--|--|
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |
|--|-------|-----------|-----------|-------|--|--|--|

Source: SPSS output

** Significant at 1 %levels and *significant at 5% levels

Overall financial numeric skills has significant relation with financial decision making , education and work area . observed chi value is 8.84 for financial decision making and overall numeric skills. p value is $0.01 < 0.05$. it is found significant at 1% significance level and hence association is found between overall numeric skills and financial decisions making by women. Hence, Women taking financial decisions at their own are more skilled

Table 4.8 Association between Overall financial skills and income of working women

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|--------|----------------|--------------------------|-------------------|----------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| INCOME | UptoRs. 20,000 | 56(57.1) | 37(37.8) | 5(5.1) | 12.5 | 8 | 0.13 |
| | 20001-40,000 | 66(44.9) | 76(51.7) | 5(3.4) | | | |
| | 40,001-60,000 | 58(43.6) | 65(48.9) | 10(7.5) | | | |
| | 60,001-80,000 | 34(40.5) | 48(57.1) | 2(2.4) | | | |
| | Above 80,000 | 14(36.8) | 21(55.3) | 3(7.9) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 %levels and *significant at 5% levels

Chi value shows the non significant results for income as p value is .13 which is $> .05$ and there is no significant association between income and financial numeric skills.

Table 4.9 Association between Overall financial skills and age of working women

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|-----|----------|--------------------------|-------------------|----------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| AGE | 18-24yrs | 23(38.3) | 33(55) | 4(6.7) | 4.55 | 8 | 0.8 |
| | 25-34yrs | 104(47.1) | 109(49.3) | 8(3.6) | | | |
| | 35-44yrs | 57(46.7) | 59(48.4) | 6(4.9) | | | |
| | 45-54yrs | 31(43.1) | 35(48.6) | 6(8.3) | | | |
| | 55-64yrs | 13(52) | 11(44) | 1(4) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 %levels and *significant at 5% levels

Women in age category of 18-24 years are 55% and found more skilled than women in 25-34 years . women in eldest age group 55-64 years are 44% in more skilled which is least than other categories. . But still , p value $0.8 > 0.05$ is found non significant at 5% significance level.therefore accepted null hypothesis for no association between age and overall financial skills.

Table 4.10 Association between Overall financial skills and marital status of working women

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|----------------|----------------|--------------------------|----------------------|-------------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| Marital status | Married | 165(45.8) | 176(48.9) | 19(5.3) | 0.932 | 4 | 0.92 |
| | Unmarried | 56(44.8) | 63(50.4) | 6(4.8) | | | |
| | Widow/Divorcee | 7(46.7) | 8(53.3) | 0(0) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 % level and *significant at 5% level

53.3% Widowed and divorcee are found more skilled than followed by 50.4% unmarried and 48.9% married. Chi value is .932 and found non significant results at 5% significance level as p value 0.92 > 0.05.

Table 4.11 Association between Overall financial skills and education level of working women

| | | Overall financial skills | | | Chi-square Value | Df | p-value |
|-----------|----------------|--------------------------|----------------------|-------------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| EDUCATION | Under Graduate | 16(76.2) | 2(9.5) | 3(14.3) | 29.9 | 6 | 0.00** |
| | Graduate | 83(55.7) | 57(38.3) | 9(6) | | | |
| | Post Graduate | 120(39.5) | 172(56.6) | 12(3.9) | | | |
| | Other | 9(34.6) | 16(61.5) | 1(3.8) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 % levels and *significant at 5% levels

61.5% Women having higher **qualifications** in others category are more skilled than 56.6% post graduates. Graduates are more skilled than under graduates. Chi value found 29.9 and p-value 0.00 is found significant at .01 level of significance..As significant association is found. Highly educated women possesses more financial skills.

Table 4.12 Association between Overall financial skills and area of occupation

| | | Overall financial skills | | | Chi-square Value | df | p-value |
|--------------------|--------------------------|--------------------------|----------------------|-------------------|------------------|----|---------|
| | | Less skilled N(%) | More skilled N(%) | No skills N(%) | | | |
| Area of Occupation | Banking | 39(39) | 61(61) | 0(0) | 42.9 | 8 | 0.00** |
| | Education | 39(39) | 58(58) | 3(3) | | | |
| | Independent Professional | 43(43) | 45(45) | 12(12) | | | |
| | Insurance | 40(40) | 55(55) | 5(5) | | | |
| | Manufacture | 67(67) | 28(28) | 5(5) | | | |
| | Total | 228(45.6) | 247(49.4) | 25(5) | | | |

Source: SPSS output

** Significant at 1 % levels and *significant at 5% levels

For occupational sectors Chi value of 42.9 represent significant association between financial numeric skills and the area of work for women respondents. p-value = 0.00 shows significant association at 0.01 significance level between overall financial skills and area/ type of occupation. Increased financial skills are found in women working in financial as well as service sector i.e banking, education and insurance as compared to manufacturing and independent professionals. Manufacturing sector has high.

Overall nearly 49.4% working women are "more skilled". They make use of overall financial numeric skills for financial decisions.

Conclusion:

Significant association has been found for financial decision making, education and type of occupation with overall financial skills. Whereas, type of family, income, age and marital status has no significant association with overall financial numeric skills. Overall financial numeric skills are not a substitute of financial literacy but leads to better financial decisions and improves the financial literacy level. 75.6% working women has high financial literacy and 24.6% are found as low financially literate. sources of information provide financial knowledge and help them in selection of best alternative and better financial decisions.

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