Financial Awareness among Women in Delhi NCR: A Comparative Study

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Abstract

Gender Equality in recognized as one of the economic objective of all the nations around the world. In spite of various measures taken to ensure financial inclusion globally, it has been found that women are still unable to access the formal financial system (World Bank, 2015). Financial inclusion aims at making easy access of financial services to all sections of the society including the underprivileged. For financial inclusion to take place the pre requirement is that people should have basic understanding of the financial concepts like budgeting, interest rates, time value of money, inflation, debit-credit, money management, investment, banking products, risk-return, etc. Low levels of basic financial understanding leads to ineffectiveness and inefficiencies in making economic decision. Demographic factor, socio-economic factors, education level, workplace activity, etc. are related to individual's level of financial awareness. Understanding the intensity of the impact of such factors on their basic financial understanding level among different categories of people is essential for effective policy making that aims at achieving financial well-being of all people including the underprivileged. Hence the current study aims at exploring basic financial literacy level among females in Delhi NCR. The online survey was carried out with questionnaire as the research instrument on a sample of people from Delhi NCR region using convenience sampling technique. The collected data was analyzed using Non-Parametric test of independent samples Kruskal-Wallis test and Mann-Whitney U test. The study identified that there is a significant difference in the basic financial awareness among different age groups and employment status among the women in Delhi NCR. But the difference in the basic financial awareness among different education level among the women was insignificant in Delhi NCR.

Keywords: Basic financial literacy, effective policy making, demographic factor, socio-economic factors, education level.

Introduction

Financial literacy includes financial decision making skills required to communicate matters concerning money, planning ahead, and take suitable routine decision related to money (Vitt. et al 2000). Financial literacy means the education and skills that enables a person to make sound economic decisions by way of their discernment of finance. A

financially knowledgeable person manages his/her income wisely by preferring a diversified investment portfolio and thus enjoys a standard of living better than rest. There is positive correlation between the levels of financial awareness and the quality of financial services in an economy and this positive relation have positive impact on the economic development of the nation (Bhushan, 2014). A financially knowledgeable person is better at handling financial emergency situation and displays positive financial behavior such as timely bill payment, executing safe online payment transactions, more saving, more diversified investments and using credit card judiciously (Hilgert et al., 2003).

Several studies in the past have demonstrated that people with high level of financial awareness makes better budgeting decisions, have more savings, and manage their household expenses wisely (Moore, 2003; Perry and Morris, 2005); handles their credits in better way (Campbell, 2006; Lusardi and Tufano, 2009); plan and invest for their old age and have emergency fund (Lusardi and Mitchell, 2008); and are financially wealthy (Stango and Zinman, 2009). Lately the significance of the study in the field of financial literacy and investment preferences has increased as a result of economic crisis experienced by the world population. Rapidly changing technology, diverse investment options, globalization and liberalization have made new financial instruments widely available leaving majority of the population less equipped to make sound financial decision as they fails to evaluate complex financial products because of low levels of financial literacy (Lusardi and Mitchell, 2007). Therefore, Government, organizations and the international community keep on developing measures towards improvement of financial literacy and building strong financial system.

Lusardi and Mitchell (2011) concluded that the level of financial literacy is generally found low across different nations, notwithstanding the level of its financial market development. As per S&P Global FinLit Survey, 2014, financial literacy levels are low around the world. The average scores across the G20 countries was just 12.7 out of a possible 21 (where 7 points were for knowledge, 9 for behavior and 5 for attitudes) and India scored 11.9 (OECD, 2017). India's share in the world's population is 17.5 percentage but nearly 76 percentage of its adult population are financially illiterate (S&P Global FinLit Survey, 2014). Previous studies have identified that the low level of financial knowledge among people is an important contributor of the economic crisis of 2008 (IRBD, OECD, DFID, CGAP, 2009). The level of financial literacy depends on various parameters including employment status, level of education and economic condition of people. Previous studies have shown that highly educated and qualified person with high income group may have problems in understanding financial matters that can be easily interpreted by not so well educated person having lower income level.

Past research studies shows that female scores lower than men on various parameters of financial knowledge because they lack confidence in handling financial matters. Contrary to this, women are found superior to men in certain financial areas like ad-hoc money management. For instance, women in Australia displayed better budgeting on daily basis and they focus on minimizing their household expenditure (AGFLF, 2008). Studies also points out that females are well aware of their low level of financial knowledge (Bucher-Koenen et al., 2012; Lusardi and Tufano, 2009). Women's financial empowerment is one of the key objectives of the G20's Global Partnership for Financial Inclusion of various subgroups (GPFI, 2016). Furthermore, it is estimated that advancing women's equality have a potential to increase global GDP by 12 trillion USD by 2025 (GBA & Mckinsey, 2014).

There are various studies done on the determinants of financial literacy at different points of time. In some cases a few factors dominate while in other cases those factors are found not to be significant. Moreover, financial instruments have become increasingly complex and access to credit is easier than ever before. Study on the factors affecting financial knowledge has helped policy makers in framing policies to address the problem of low levels of financial awareness. Sophisticated financial instruments, low level of financial awareness makes the need of financial literacy even more important. Therefore, present study aims at comparing basic financial literacy level among people in Delhi NCR region with respect to demographic factors, economic factors and level of education.

These days, financial literacy is driving the attentiveness of a broad range of major financial institutions, government and semi-government bodies, individual customer and community interest groups, policymakers, etc. in India and across the world. A financial literate person demand financial products that suits his short run and long run financial needs, financial product provider compete to offer products that have features to address those demand of potential investors. Even when there exists no proven gender gap in financial knowledge, studying the gender-specific causes of financial literacy area wise is essential for effective policy design. Therefore, assessing the financial literacy level of the various section of society especially women is a key requirement for implementing

national strategy for financial education in a successful manner. This helps policy makers in identifying the existing gaps and taking appropriate steps. Hence, present study aims at studying the relationship between demographic and economic factors on the level of basic financial literacy among women residing in Delhi NCR.

Review of Literature

There are several studies for instance, Rasoaisi and Kalebe (2015); Abdeldayem (2016); Ansong and Gyensare (2012); Luksander, et. al., (2014); Potrich, et. al. (2015); Atkinson and Messy (2012); Lusardi and Mitchell (2011); ANZ (2008); Gallery et al. (2011); Nga et al., 2010; Baluja, G., 2016; Bhabha, J. I., et. al., 2014 etc. that have noted that the level of financial literacy is lower in females compared to males because the lack confidence in financial decisions. On the contrary there exist certain studies that have revealed that women scores better than men in financial knowledge such as Mbarire and Ali (2014) and Bashir et al., 2013. Miotto and Parente (2015) showed that women with more self-control and a greater inclination to plan are more capable of managing their finances; if they are indebted, this is mainly explained by a financial imbalance or by critical events such as job loss or divorce.

Financial knowledge accumulate with one's age based on one's practical life experiences (Agarwal, S., et. al., 2009 and Luksander, et. al., 2014). The study done by Abdeldayem (2016) observed that respondents aged (41-50) years were more financial knowledgeable than all other age groups. Luksander, et. al., (2014) noted that Older people showed low levels of financial knowledge than young adults. Rooij et al. (2007) identified lower literacy level of young people as compared to middle-age respondents and declining slightly with advancing age of sixty one years and above. Similar results were observed among people belonging to age group (18-24) and (70 and above) in Australia as they displayed low level of financial knowledge (ANZ, 2008). Almenberg and Widmark (2011) found that the level of financial literacy among young people, women as compared to men and among those who lack higher education is low.

There are various factors that affect financial literacy including age, gender, education, profession, income, place of residence and race/ethnicity, employment status and place of work (Bhushan and Medury, 2013; Das, 2016 and Mbarire & Ali, 2014). Gunther and Ghosh (2018); Abdeldayem (2016); Sucuahi (2013); Almenberg and Säve-Söderbergh (2011) showed positive correlation between education and the level of financial literacy. Gunther and Ghosh (2018) in their study observed that financial literacy level of individual is affected by

employment status. While Mbarire and Ali (2014) found that financial knowledge of people is not affected by occupation status & type. Bhushan and Medury (2013) observed that financial literacy level was not affected by age and geographic area. Luksander, et. al., (2014) found that teaching of financial-economic topics in secondary school level does not have any significant influence on the financial knowledge level of young people. Conversely, Ansong and Gyensare (2012) and Beal & Delpachitra (2003) observed that respondent with business as its major subject did fairly well than others due to their higher level of interest in financial matters.

Bhushan et. al. (2013) found a positive correlation between education level, income level and financial literacy level amongst salaried individuals of Himachal Pradesh. According to him, people with higher education level have higher level of financial literacy. Financial literacy level was found more among people having higher income level. Also, it was found that employees in government sector displayed higher financial literacy scores than those working in private sector. Age has a significant correlation with financial literacy. Agarwal, et. al., (2009) concluded that young generation and senior people usually borrow at higher interest rates than middle-aged people. People in the age bracket of 50-60 years borrow at low rate of interest. It was also noticed that cohort and selection effects have more effects on the reported outcomes for older borrowers. Also a strong relationship between age and financial sophistication was also noticed in the analysis.

Beal and Delpachitra (2003) found that financial literacy increases with work experience and income level. It suggests that people gradually learn to apply financial skills through trial and error. It was also seen that less risk averse people probably have more financial exposure. Students studying business studies scored better on financial knowledge test due to their higher level of interest in financial matters. Mbarire and Ali (2014) in their study on determinants of financial literacy level in Kenya revealed that the young people and the old people have low level of financial literacy while it was seen highest among respondents belonging to 31-40 years and it was moderate among the respondents belonging to 41-50 years. The study showed that people in Kenya have low level of basic financial literacy.

One could say that a variety of studies have emphasized on investigating determinants of financial literacy and it has been found that age, gender, education level, occupation, area of residence, race, wealth, ethnical background, etc. are significantly affect the level of financial literacy. It has been observed that some of these factors dominate in some situation while they have negligible impact in other

situation. Since the impact of these factors on financial literacy differ in different location and at different point in time therefore, continues research in different areas is required to provide policy maker the correct information. Present study focuses on examining the impact of demographic factor, employment and education level on the basic financial literacy level among women residing in Delhi NCR region.

Research Methodology

The study

Present study is descriptive in nature and examines the influence of individual women's profile on the basic financial literacy level. The study utilizes primary data which is collected by administrating online questionnaire. The target group of the research was represented by female living and working in Delhi NCR region.

The Sample

Non-probability convenience sampling method was employed to select the sample. The questionnaire was filled by 165 female respondents living in Delhi NCR region.

Tools for Data Collection

Close-ended questionnaire was used as this research is based on quantitative data. The research instrument used to collect data in the present research was adapted from the Scale of Financial Literacy developed by Leena B. Dam and Malti Hotwani (2018). The questionnaire consisted of 17 close-ended questions related to basic financial literacy with each question to be marked on a five-point Likert scale. The secondary data was collected through various research magazines, websites, journals and newspapers.

Tools for Data Analysis

Results of one sample Kolmogorov-Smirnov test sample reveal that does not follow normal distribution. Hence, non-parametric test were used to analyze data. Independent Samples Kruskal-Wallis test and Mann-Whitney U test were used to test the research hypothesis. The collected data was processed using SPSS version 26.

Objectives

To compare basic financial literacy among women in Delhi NCR with respect to age.

To compare basic financial literacy among women in Delhi NCR with respect to employment status.

To compare basic financial literacy among women in Delhi NCR with respect to level of education.

Research Hypotheses

Following hypotheses were formulated:

H01: The distribution of basic financial literacy is normal.

H02: There is no significant difference in the level of basic financial literacy across different age groups.

H03: There is no significant difference in the level of basic financial literacy across different employment level.

H04: There is no significant difference in the level of basic financial literacy across different education level.

Reliability of the Measures

In order to assess the reliability of the data Cronbach's alpha test was applied on all the 17 items. Cronbach's alpha tests the internal consistency of the collected values that is do all the items within the instrument measure the same thing. Usually, a coefficient value greater than or equal to 0.7 is considered acceptable and is considered as a good indicator of construct reliability (Nunnally, 1978). The calculated value of the coefficient of Cronbach's alpha is 0.757 as shown in Table no-1. Therefore, the collected data satisfies the reliability test and thus it can be used for further analysis.

Table 1 Reliability Statistics	
Cronbach's Alpha	N of Items
.657	17

Source: SPSS output.

KOLMOGOROV- SMIRNOV TEST

With the view to test the normality of the collected data Kolmogorov- Smirnov test is performed. It is important to test that the data follows normal distribution or not as it helps in deciding which type of statistical test can be applied to compare the averages of respondents. The result of the test show that values in Basic Financial Literacy among respondents does not follow normal distribution therefore H01 is rejected as shown in Table no-2 and Figure no-1. It means the values do not follow normal distribution therefore, Non Parametric tests can be used for comparing means.

|	Null Hypothesis	Test	Sig.	Decision
Table-2 Hypothesis Test Summary				
1	The distribution of FL is normal with mean 3.51 and standard deviation .44197.	One-Sample Kolmogorov-Smirnov Test	.003[a]	Reject the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.				
a. Lilliefors Corrected				

One-Sample Kolmogorov-Smirnov Normal Test Summary		
Total N		167
Most Extreme Differences	Absolute	.088
	Positive	.088
	Negative	-.042
Test Statistic		.088
Asymptotic Sig.(2-sided test)		.003[a]

a. Lilliefors Corrected

Source: Author's calculation

Figure-1 One-Sample Kolmogorov-Smirnov Normal Test
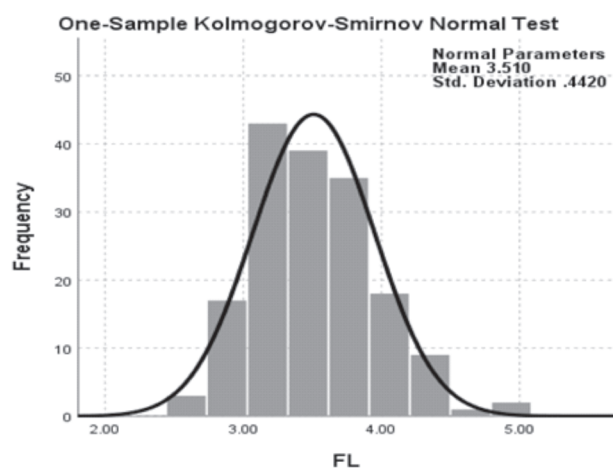
Source: Author's calculation

Results And Discussion

With the view to test the second hypothesis, that there is no significant difference in basic financial literacy among age group 18-24, 25-36 and 36 and above, independent samples Kruskal-Wallis Test was applied. The results revealed that basic financial literacy of women respondents among different age groups significantly differ in their mean values with p value .042 (Table no-3), and hence null hypothesis H02 was rejected at 5 percent level of significance. Women in age group 26-35 years are having highest mean values of 93.83 which shows that women in the age group 26-35 years have highest level of basic financial literacy, while mean values of women belonging to age group 18-25 years and 36 years and above are 71.25 and 87.83 respectively (as shown in Figure no-2) which represents the level of basic financial literacy in young female adults belonging to age group 18-25 years is lowest. Several studies indicate that age is one of the important factors determining financial literacy. The finding is not fully consistent with the findings of Almenberg and Save-Soderberg (2008) who observed that women in age bracket of 35-50 years and those older than 65 years displayed low financial literacy level. A study on financial literacy by Van Rooij et al. (2007) found that financial Literacy level were found to be low among the young, highest among middle-age respondents, and declines slightly at old age of 61 or over.

Table no-3 Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FL is the same across categories of age.	Independent-Samples Kruskal-Wallis Test	.042	Reject the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.				

Source: Author's calculation.

Figure no-2 Pairwise Comparisons of Age

Pairwise Comparisons of age

93.83

71.25

87.83

Each node shows the sample average rank of age.
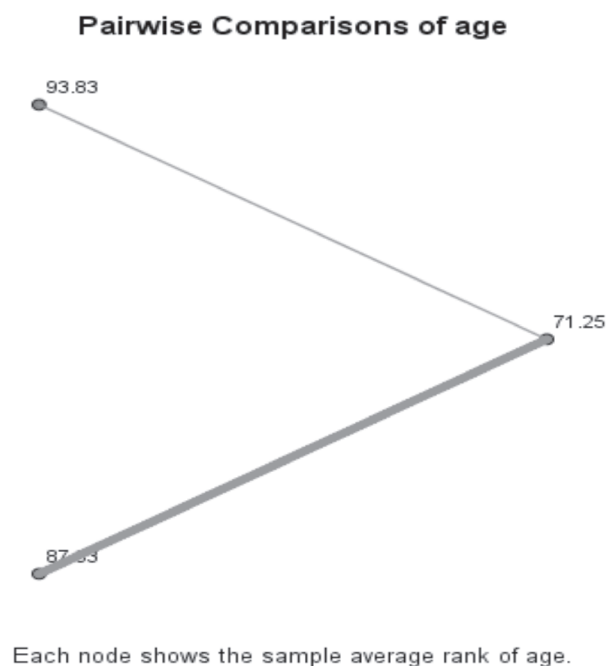
Source: Author's calculation

In order to find out significant difference between three age group i.e. 18-25 years, 26-35 years and 36 years and above; pairwise comparison of age using Kruskal-Wallis test was applied as indicated in Table 4. The p value in age groups 18-25 years and 26-35 is 0.061 which is above 5 percent level of significance, therefore there is no significant difference in the level of basic financial literacy among age group 26-35 and 18-25 years; p value in age groups 18-25 years and 36 and above years is 0.019 which is below 5 percent significance, therefore there is significant difference in the level of basic financial literacy among age group 18-25 years and 36 and above years; and p value in age groups 36 years and above and 26-35 years is 0.498 which is above 5 percent significance, therefore there is no

significant difference in the level of basic financial literacy among age group 26-35 years and 36 years and above. Hence, it can be inferred that there is significant difference in the level of basic financial literacy among age group 18-25 years and 36 and above years. Financial capability differs significantly with differences in age in a nonlinear way between genders and it develops with rising age (Taylor M. 2011).

Table no-4 Pairwise Comparisons of age					
Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
1.00-2.00	-16.087	8.572	-1.877	.061	.182
1.00-3.00	-22.583	9.638	-2.343	.019	.057
2.00-3.00	-6.496	9.576	-.678	.498	1.000
Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05.					
a. Significance values have been adjusted by the Bonferroni correction for multiple tests.					

Source: Author's calculation

In order to test the third hypothesis, that there is no significant difference in the level of basic Financial Literacy across different employment level, Independent Samples Mann-Whitney U Test was applied. The results revealed that basic Financial Literacy of respondents across different employment level differ significantly in their mean values with p value .006 (Table 5) and hence we reject the null hypothesis H04 at 5% level of significance. It means that there is significant difference in the level of basic Financial Literacy across different employment level of respondents in Delhi NCR region. The mean values of Salaried people is higher at 93.30 as compared to the mean value of non-salaried people which is 72.82 as shown in Figure no- 3. This findings are inconsistent with Mbarire

and Ali (2014) who found that financial literacy level are not influenced by employment type and level of income. There are studies that supports our findings that employment level affects the financial literacy of individual. For instance, Worthington (2006) found that in context of Australia people doing white collar jobs showed higher score in financial literacy test than those who were unemployed or working in blue collar jobs.

	Null Hypothesis	Test	Sig.	Decision
Table no -5 Hypothesis Test Summary				
1	The distribution of FL is the same across categories of employment.	Independent-Samples Mann-Whitney U Test	.006	Reject the null hypothesis.
Asymptotic significances are displayed. The significance level is .050.				

Independent-Samples Mann-Whitney U Test Summary	
Total N	
Mann-Whitney U	
Wilcoxon W	
Test Statistic	
Standard Error	
Standardized Test Statistic	
Asymptotic Sig.(2-sided test)	

Source: Author's calculation

Figure no-3 Independent-Samples Mann-Whitney U Test
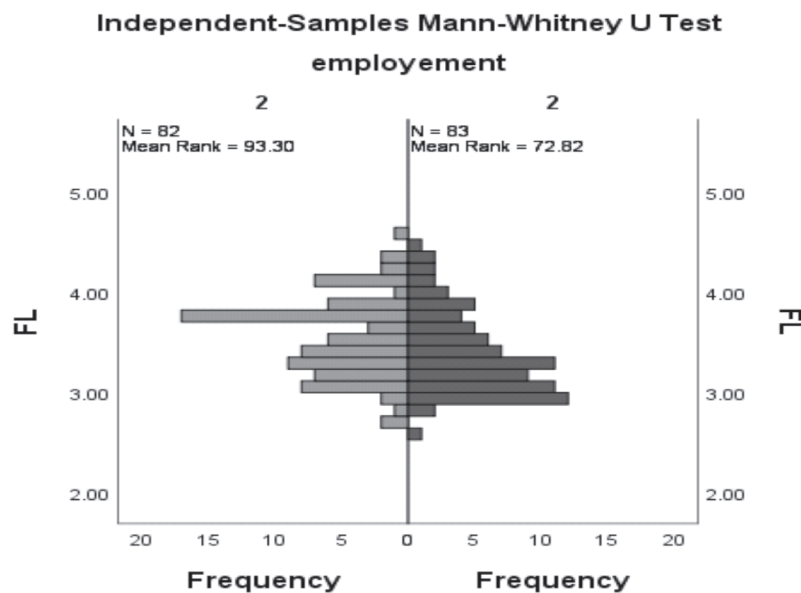
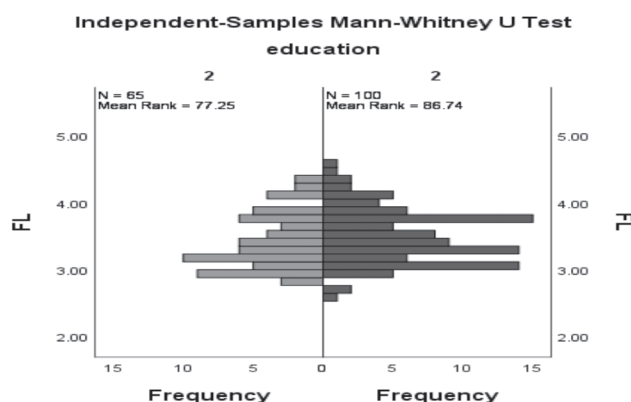*Source: Author's calculation*

In order to test the fourth hypothesis, that there is no significant difference in the level of basic financial literacy across different level of education, Independent Samples Mann-Whitney U Test was applied. The results revealed that the basic Financial Literacy of respondents across different education level does not differ significantly in their mean values with p value .212 (Table 6). Hence we fail to reject the null hypothesis H04 at 5% level of significance. It means that there is no significant difference in the level of basic Financial Literacy across different level of education. The mean values of graduates and Post graduate does not differ significantly and are 77.25 and 86.74 respectively as shown in Figure no- 4. All the respondent selected in the present study were those who have passed their senior secondary education level. Although, the study by Almenberg and Säve-Söderbergh (2011) demonstrated that individuals who had lower levels of education (elementary stage- primary level) showed low financial literacy levels than degree holders and graduates, emphasis is however placed on the type of subjects and courses learned.

Table no-6 Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of FL is the same across categories of education.	Independent-Samples Mann-Whitney U Test	.212	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .050.

Independent-Samples Mann-Whitney U Test Summary

Total N	165
Mann-Whitney U	3624.000
Wilcoxon W	8674.000
Test Statistic	3624.000
Standard Error	299.530
Standardized Test Statistic	1.249
Asymptotic Sig.(2-sided test)	.212

Source: Author's calculation

Figure no-4 Independent-Samples Mann-Whitney U Test

Source: Author's calculation

Conclusion

Role of financial literacy has become more significant in financial reforms around the world. It is the effect of various financial crisis, technological advancements, sophisticated financial instruments, complex budgeting choices, taxation and handling household financial crisis. According to the literature there are various determinants of financial literacy which differ in their intensity with difference in geographical location. Present study focused on the impact of age, education level and occupation on the basic financial literacy among women in Delhi NCR region of India. Findings suggest that age and employment status plays an important role in determining the basic financial literacy among women in Delhi NCR while education level was found to be insignificant in determining basic financial literacy level. People belonging to age group 26-35 years showed highest level of basic financial literacy while the young adults belonging to the age group 18-25 years was found to be vulnerable. Therefore, we recommend government of Delhi, educational institution and financial institutions in Delhi NCR to give more emphasis on providing financial knowledge especially to young females in Delhi NCR region. Therefore, emphasis should be made on providing financial education at graduation level. The minimum level of education of the selected respondents were above high school level. Although some potential determinants of financial literary such as parents' level of education, income level, whether a woman is single, married, divorced, or widowed, etc. were left out in the study. This is in a context where socio-cultural factors, legal environment and customary law determine the social norms of behavior and needs for women, which may all play a role in influencing their participation in the financial system. Moreover, they can contribute insights on how a woman's financial inclusion is influenced by other variables, such as. Therefore, the study is not exhaustive in nature and hence further study can be done taking more factors into consideration.

Limitation and Scope of the Study

Present study focused on the impact of age, education level and occupation on the basic financial literacy among women in Delhi NCR region of India. Based on findings we recommend government of Delhi, educational institution and financial institutions in Delhi NCR to give more emphasis on providing financial knowledge especially to young females in Delhi NCR region. Therefore, emphasis should be made on providing financial education at graduation level. Although some potential determinants of financial literary such as parents' level of education, income level, whether a woman is single, married, divorced, or widowed, legal environment and customary

law that may potentially determine the social norms of behavior and needs for women, which may all play a role in influencing their participation in the financial system were left out in the study. Therefore, the study is not exhaustive in nature and hence further study can be done taking more factors into consideration.

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