RESEARCH REVIEW JOURNALS
Volume-04
Issue-06
June-2019

ISSN: 2455-3085 (Online)
RESEARCH REVIEW International Journal of Multidisciplinary
www.rrjournals.com[UGC Listed Journal]

Evaluation of Financial Awareness: A case study of Delhi Slums

Bhoomika Garg

Research Scholar,Department of Commerce, Maharishi Dayanand University, Rohtak (India)

ARTICLE DETAILS

Article History
Published Online: 10 June 2019

Keywords
Financial Awareness, Financial Inclusion, Flagship Programs, Exploratory Factor Analysis.

***Corresponding Author**
Email: goyal.bhoomika20@gmail.com

ABSTRACT

Do the marginalized people efficiently direct their earnings? Do they save? These are the questions that need to be addressed before the agencies of Government try to empower them. In the past, poor and marginalized people have always been addressed from the supply side, but we need to understand the demand side i.e. the financial awareness level of these people in context of financial inclusion. In an environment where the variety and intricacy of financial products & services are expanding the scale of whole market, it has become essential that individuals should have detailed knowledge of the world of finance so as to make improved choices that are most suitable to their financial needs and goals (Kumar & Anis, 2013).This study is an attempt to extract the factors of financial awareness and then study the level of financial awareness among the selected slum dwellers of Delhi.

1. Introduction

Financial Awareness of banking products and services serve as the basis of financial planning for every individual. Financial planning can be seen as the process of taking necessary steps to make sure that individuals are capable to achieve their financial goals which they have planned and is geared up to deal with the contingencies as well (Shobha & Shalini, 2015). As far as Financial Literacy is concerned OECD defines it as " A combination of awareness, knowledge, skills, attitude and behaviour necessary to make sound financial decisions and ultimately achieving individual's financial wellbeing". However, every individual does not possess the same ability to plan their financial resources. There are several factors that actually influence the financial awareness among the people that includes gender, income level, education level, marital status etc.

2. Review of Literature

R. Annu (2018) in her theses "An Empirical Analysis of Financial Inclusion in India-A Case Study of Tamilnadu" assessed the nature and extent of financial inclusion in India with special reference to Tamilnadu. The study also identified factors influencing the level of financial inclusion and the factors responsible for under banking in the sample area. It was concluded that out of the total respondents of 519 from the Tamilnadu, only 380 had bank Accounts. Further 177(34.1%) respondents borrowed from informal sources rather than from formal sources for meeting their health, consumption, marriage and funerals expenditures.

World Bank Report (2018) on Financial Inclusion talks about "Digital Financial Inclusion". As per the report global spread of mobile phones has facilitated expanding access to financial services to hard to reach populations and small businesses at low cost and risk. Increased use of mobile phones has enabled greater availability of customer data that allows providers of financial services to design financial products that may fit to the needs of the different customers.

VibhutiShivam Dubey & Dr. Pradeep Kumar Asthana (2017) in their research paper, "A Comparative Study on Financial Literacy of Uttar Pradesh with Central Zone States in India" have discussed about the financial literacy level in Uttar Pradesh in comparison to other Central Zone States and have also suggested measures to promote financial literacy. The above study was conducted using secondary data collected from the websites of NCFE, RBI and NISM. It was concluded that financial literacy level of Uttar Pradesh is just half of the financial literacy level in India. Secondly Uttar Pradesh stood third in financial literacy level out of four total Central Zone states namely Madhya Pradesh, Chhattisgarh, Uttarakhand and Uttar Pradesh. It was suggested that government should impart financial literacy training to different sections of the society including both urban and rural section as per their understanding level. Secondly financial education should be introduced at the school level syllabus so that individuals at primary level can understand the benefits of financial planning.

Bapat Dhananjay & Bhattacharyay Nath Biswa (2016), in the working paper titled Determinants of financial inclusion of Urban Poor in India" assessed the level of financial inclusion and its relation to major socio-economic variables such as savings, investments, expenses and other financial and demographic variables. They took the sample size of 202 respondents from the slums of Pune city using stratified sampling. The regression model was used to derive the relationship between the financial inclusion measured by Adult bank Ratio (= number of adult members holding Bank Account/ number of adult members in household) which was taken as dependent variable and characteristics of the households as Independent variables such as Age, Gender, Occupation, Income Classification, Expense Classification, Housing Type, Family Type and saving Classification. They suggested to build a low-cost personalized distribution network for enhancing financial inclusion among urban poor.

Dr. Manohar.V. Serrao, Dr. A.H. Sequeira& Dr. K.V.M Varambally(2016) in their paper "Impact of Financial Inclusion on the Socio-Economic Status of Rural and Urban Households of vulnerable sections in Karnataka" suggested a three-stage

model to make the financial system of the country more inclusive. At **I** stage they suggested to improve the absorptive capacity of the households by improving primary education, basic health and by providing vocational training to the members of the households. They focussed on improving the financial literacy among household members using Government Sponsored campaigns and banking network. At stage **II** they emphasised on providing basic financial services to the BPL households to increase the confidence of the people in banking system and at the same time to increase the business opportunity of banking network. At the **last** stage they focussed on drawing innovative strategies to enhance the reach of banking facilities.

Lakshmi Kumar & Jyoti Prasad Mukhopadhyay (2013) in their working paper "Patterns of Financial Behavior among Urban Clients: Some Evidences from Tamil Nadu, India" examined the financial behavior of the respondents in terms of income flow, expenditure, savings and borrowings of both urban and poor rural microfinance client over a six month period of time using "Q-Squared Methodology". They concluded that financial needs of urban poor and rural people are not homogenous in nature. Their livelihood activities, access to basic services like health care, education and financial needs are different and thus, both the groups must be served with different financial product mix which is proportionate with their needs.

Dr. Anirban Ghatak (2013), in the Paper titled "Demand side factors affecting Financial Inclusion" identified the demand side factors of financial inclusion and suggested a model for financial inclusion using those factors. He opined that demand side factors which are very important were identified to be Accessibility, Literacy, Assets possessed by an individual, Culture and Income of the individual. He concluded that financial inclusion will help in pooling of the funds which remain idle in the hands of the financially excluded which ultimately will result into capital formation and lead to economic development of the country.

3. Objectives of the Study

The present study is an attempt to fulfill the following objectives:

1. To explore the variables or factors to study the level of financial awareness among the slum dwellers of Delhi
2. To examine the level of financial awareness with respect to all the factors that would be extracted in the first objective.

4. Methodology

Profile of the surveyed population

The present study has considered the JJ clusters that come under DUSIB. The total number of 675 JJ clusters has been divided into 11 districts namely central, south, west, south, north, north east, west, new Delhi, east, Shahdara, north west. Using non-random purposive sampling, four districts has been considered for the further analysis. The total number of 400 respondents has been taken as sample respondents for the present study out of the above four districts. The details of the number of respondents from each district is shown in table 1:

Table1: Number of respondents from each region

Region	No. of Respondents	Percentage
North	119	30.1
North East	83	21
North West	104	26.3
West	89	22.5
Total	400	100

Instrument of the study

The present study is based on the primary data and the data has been collected using the predesigned schedule specifically prepared for the slum dwellers of Delhi. The schedule has been primarily prepared in English language but was translated into the Hindi language while recording the responses from the respondents. There were two parts of the instrument: First part covers the demographic profile of the respondents and in the second part covered the statements to know their level of financial awareness.

5. Data Analysis

Exploratory Factor Analysis

Factor Analysis is a technique that reduces large amount of data into smaller sets of inter-correlated general variables making the output useful for further analysis (Field 2000; Rietveld & Van Hout 1993). The choice of factor analysis is based on the need to determine factors on the basis of variance explained and is more stringent and conservative approach in extracting relevant factors (Rietveld& Van Hout1993).

For this research, EFA is used to fulfill three main motives:

- To condense the hefty number of variables (or items referred to in the questionnaire) to lesser number.
- To study the relationship between the set of variables.
- To assess the status of financial awareness among the respondents.

The following four step process has been used for the EFA:

Step 1 : Checking Existing Issues

It is suggested by researchers that before applying EFA , it is always advisable to check for some initial issues like appropriateness of sample size (Bryman & Cramer,2011 ; Furr, 2011 ; Field, 2009) , sampling adequacy (Field,2009) and the suitability of applying factor analysis to the data set (Hair et al. , 2006).

These prerequisites are examined as follows:

1. Appropriateness of Sample Size: There is no thumb rule regarding the suitability of sample size. Different parameters are defined by various researchers regarding the sample size to be considered for conducting EFA. For Example, two rules have been defined by Hairet al., (2006) to check the sample size suitability first, the number of observations in a sample must be more than the number of variables and second rule is that Observations in a sample must not be less than 50. This study fulfills both the criterion as

the sample size taken is more than 50 (n=395) and the number of observations are more than the number of variables (n=24).

2. Adequacy of sample Size: To check the adequacy of sample size, two tests were conducted: Kaiser - Meyer- Olkin (KMO) test and Bartlett test of sphericity.

KMO Test: The KMO test is conducted on the above-mentioned sample size to check its adequacy. The KMO statistic value varies between 0 to 1 where value close to 1 indicate that factor analysis would provide discrete and consistent factors. In this study this value came out to be 0.935, thus making the sample size adequate and reliable. As the value of more than 0.70 is considered good for the further outcomes.

Bartlett Test of Sphericity: This test evaluates the complete correlation matrix to make sure that the correlation matrix has significant correlation among at least some of the variables. For this study, the test provided a significant $\chi 2$ (chi - square) value of 4.998 ($p< 0.005$, df=171) shown in table 2.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.935
Bartlett's Test of Sphericity	Approx. Chi-Square	4.998E3
	Df	171
	Sig.	.000

3. Suitability of applying factor analysis to the data set: Proceeding further, anti-image correlation matrix and measure of sampling adequacy were analyzed to make certain that the application of factor analysis technique to the data set is suitable.

Anti Image Correlation Matrix: The diagonal values in anti image correlation matrix shows the measure of sampling adequacy and the values for each item should be more than 0.6 whereas the off-diagonal values show the negatives of partial correlation which should be very small and not to be more than 0.70. (Hairet al., 2006). Based on this criterion, the output was examined, and it was concluded that all the diagonal values were more than 0.8 which is meritorious, and all the off-diagonal values were less than 0.60.

To summarize the anti-image correlation matrix and measure of sample adequacy test provided the desired results thereby confirming the suitability of factor analysis to the sample.

Step 2 : Executing Exploratory Factor analysis

Under this step EFA has been conducted to identify the underlined structure of relationships between the variables. The three important decisions that has been taken are as follows:

1. Selecting Factor Extraction Method: The two most commonly used factor extraction methods are - Principal Component Analysis and Principal Axis Factoring. In this study PCA has been used as this method provide the factors that are mutually independent having r=0. In this sample there were 26 items (statements). All the communalities were examined, and it was observed that most of them were above 0.50 (except one item having the communality value of 0.438) which is considered to be good for the further analysis. Table 3 shows communalities value for each of the item.

Table 3 : Communalities

	Initial	Extraction
AWARENESS ON PRADHAN MANTRI SURAKSHA BIMA YOJNA	1.000	.723
AWARENESS ON ATAL PENSION YOJNA	1.000	.607
AWARENESS ON GENERAL CREDIT CARD SCHEME	1.000	.659
AIWARENESS ON PRADHAN MANTRI JEEVAN JYOTI BIMA YOJNA	1.000	.729
AWARENESS ON MUDRA YOJNA	1.000	.667
AWARENESS OF HOUSING LOAN	1.000	.693
AWARENESS OF EDUCATION LOAN	1.000	.715
AWARENESS OF AUTO LOAN	1.000	.742
AWARENESS OF PERSONAL LOAN	1.000	.654
AWARENESS ON DEPOSIT ACCEPTANCE BY THE BANK	1.000	.657
AWARENESS ON INSURANCE SERVICES BY THE BANK	1.000	.639
AWARENESS ON DRAFT SERVICE	1.000	.663
AWARENESS ON ATM SERVICE	1.000	.709
AWARENESS IN TAX COLLECTION SERVICE	1.000	.748
AWARENESS ON PENSION PAYMENT	1.000	.637
AWARENESS ON ONLINE SERVICE	1.000	.684
AWARENESS ON LOCKER SERVICE	1.000	.438
AWARENESS ON MUTUAL FUND SERVICE	1.000	.551
AWARENESS ON DEBIT CARD SERVICE	1.000	.562

Extraction Method: Principal Component Analysis.

2. Number of factors to extract: The next decision that is to be taken is regarding the number of factors to be extracted. Kaiser's criterion and percentage of variance explained criterion was used to extract the factors. Kaiser's criterion is the most commonly used method when the number of observations lie between 20 to 50 (Hair et al., 2006). Thus, using this measure three factors were retained in the study which were having the eigenvalue of more than 1 as shown in table 4. Percentage of variance method was also used to make sure the practical significance of these three factors. The three factors explained 65.665% variance which can be considered satisfactory in social sciences (Hairet al., 2006). The total variance explained by these three factors has been shown in table 4:

Table 4: Total Variance Explained

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.278	48.832	48.832	4.518	23.781	23.781
2	2.083	10.961	59.792	4.141	21.792	45.573
3	1.116	5.873	65.665	3.817	20.092	65.665
4	.774	4.073	69.738			
5	.756	3.980	73.718			
6	.675	3.552	77.270			
7	.511	2.689	79.959			
8	.493	2.594	82.553			
9	.456	2.399	84.952			
10	.425	2.237	87.189			
11	.402	2.116	89.305			
12	.327	1.720	91.026			
13	.322	1.692	92.718			
14	.287	1.510	94.228			
15	.269	1.416	95.644			
16	.236	1.243	96.887			
17	.204	1.074	97.961			
18	.200	1.053	99.015			
19	.187	.985	100.000			

Extraction Method: Principal Component Analysis.

3. Factor Rotation Method: After completing the factor extraction process, the further step is to rotate the factor to improve the explicability. There are two major classes of rotation: Orthogonal (that produces uncorrelated factors i.e. varimax method) and oblique (that produces correlated factors i.e. Promax method). For the purpose of this study orthogonal rotation has been used as it provides factors that are completely independent and thus provides clear interpretation of results.

Step 3 : Interpreting the results of EFA

1. Examining Communalities: The table 3 shows the communalities for all the items. Researchers suggest that communality of each observation should be more than 0.5. In this study there were 5 items that were having the communality value of less than 0.5 and thus out of 5, 4 items were not taken for further study, but the item 17 has been retained because it was going well with the factor 2 while examining the factor loading.
2. Examining Factor loadings: Factor Loadings explain the association between each variable and each factor. Researchers suggest that for a sample of approx 250, factor loadings of 0.5 and above can be considered significant. The table5 shows that all the factor loadings of this study were above 0.5, lowest being 0.536. There were no items with cross loadings i.e. no item is appearing in not more than one factor. The analysis thus shows that EFA provided a final solution in the form of three factor structure containing 19 items.

Table 5: Rotated Component Matrix[a]

	Component		
	1	2	3
AWARENESS ON ATM SERVICE	.826		
AWARENESS ON DEPOSIT ACCEPTANCE BY THE BANK	.803		
AWARENESS OF HOUSING LOAN	.772		
AWARENESS OF AUTO LOAN	.747		
AWARENESS OF EDUCATION LOAN	.724		
AWARENESS ON DEBIT CARD SERVICE	.642		
AWARENESS IN TAX COLLECTION SERVICE		.788	
AWARENESS ON DRAFT SERVICE		.712	
AWARENESS ON PENSION PAYMENT		.683	
AWARENESS ON ONLINE SERVICE		.674	
AWARENESS ON MUTUAL FUND SERVICE		.596	
AWARENESS ON INSURANCE SERVICES BY THE BANK		.573	
AWARENESS ON LOCKER SERVICE		.571	
AWARENESS OF PERSONAL LOAN		.536	
AIWARENESS ON PRADHAN MANTRI JEEVAN JYOTI BIMA YOJNA			.800
AWARENESS ON MUDRA YOJNA			.784
AWARENESS ON GENERAL CREDIT CARD SCHEME			.770
AWARENESS ON PRADHAN MANTRI SURAKSHA BIMA YOJNA			.718
AWARENESS ON ATAL PENSION YOJNA			.651

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

3. Labeling the Factors: In order to attach meaning to each factor, a labeling of factors must be done on the core subject matter shared by them (Field, 2009). But before labeling the factors, suggestion was taken from the academicians and researchers from the field of finance and suggestions of PhD supervisors were also considered.

The first factor explained the maximum variance. This factor contains all the statements related to the core services that are provided by the banks. Thus, for the simplicity purpose and for adding more meaning to a factor, this factor is re-labeled as financial awareness on core banking products and services. The second factor items related to the secondary or ancillary services that are catered by the banking institutions and thus, this factor is re-labeled as financial awareness on ancillary banking services. The third factor incorporated statements regarding the various schemes that are provided to the unprivileged sector of the society through the banking institutions. Thus, this factor is re-labeled as the awareness on flagship programs.

Now, the final scale is developed using EFA, it is necessary to evaluate its reliability.

Step 4: Evaluating Scale's Reliability

The reliability of the scale has been measured using Cronbach's alpha for each sub scale.

Following Churchill (1979), the Cronbach alpha was calculated for each sub scale (Factor 1 to 3). The tables 6,7 and 8 shows that Cronbach alpha (α) is above 0.70 for all sub scales, thus, indicating high reliability.

Table 6 :Scale Reliability Analysis for factor 1 " Awareness on Core Banking Products and services"

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AWARENESS OF HOUSING LOAN	14.4000	32.164	.763	.878
AWARENESS OF AUTO LOAN	14.8911	31.077	.801	.872
AWARENESS OF EDUCATION LOAN	14.9266	31.982	.772	.876
AWARENESS ON ATM SERVICE	13.8253	32.099	.713	.886
AWARENESS ON DEPOSIT ACCEPTANCE BY THE BANK	13.5823	34.051	.677	.891
AWARENESS ON DEBIT CARD SERVICE	14.9190	34.085	.651	.894

Table 6(a) : Cronbach Alpha value for factor 1

Reliability Statistics

Cronbach's Alpha	N of Items
.901	6

Table 7 : Scale Reliability Analysis for Factor 2" Awareness on Ancillary Banking Services"

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AWARENESS IN TAX COLLECTION SERVICE	11.5595	36.283	.786	.876
AWARENESS ON DRAFT SERVICE	11.4405	35.623	.707	.882
AWARENESS ON PENSION PAYMENT	11.3949	37.174	.676	.885
AWARENESS ON ONLINE SERVICE	11.4785	34.875	.757	.877
AWARENESS ON MUTUAL FUND SERVICE	11.7595	39.843	.564	.895
AWARENESS ON INSURANCE SERVICES BY THE BANK	11.0810	33.973	.714	.882
AWARENESS ON LOCKER SERVICE	11.4304	37.276	.557	.896
AWARENESS OF PERSONAL LOAN	11.3873	34.872	.719	.881

Table 7(a): Cronbach Alpha value for factor 2

Reliability Statistics

Cronbach's Alpha	N of Items
.897	8

Table 8 : Scale Reliability Analysis for Factor 3" Awareness on Flagship Programs"

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
AIWARENESS ON PRADHAN MANTRI JEEVAN JYOTI BIMA YOJNA	5.3519	7.279	.736	.825
AWARENESS ON MUDRA YOJNA	5.3848	7.628	.655	.843
AWARENESS ON GENERAL CREDIT CARD SCHEME	5.3519	7.284	.702	.831
AWARENESS ON PRADHAN MANTRI SURAKSHA BIMA YOJNA	5.1620	6.040	.763	.812
AWARENESS ON ATAL PENSION YOJNA	5.0177	6.023	.654	.854

Table 8(a): Cronbach Alpha value for factor 3

Reliability Statistics

Cronbach's Alpha	N of Items
.862	5

Interpretation

It is clear from the above table that Cronbach alpha value of each sub scale is more than 0.70 and thus indicates high reliability of each sub scale. In all the three factors that are extracted using EFA there is no need to delete any of the items in any of the factor as the reliability of each statement if item deleted is also more than 0.70 thus, indicating high consistency between the items.

These three factors can be taken for further analysis as factors are independent and there is no problem of multicollinearity between them.

Level of Financial awareness among respondents

To know the level of financial awareness among the respondents, mean score of all the three factors has been taken to know their status. The best mean score of 2.8848(Likert Scale 1-5, 5 being the highest rank) has been given to factor 1 i.e. awareness regarding core banking products and services. The second rank has been given to Factor 2 i.e. Awareness regarding Ancillary banking products and services with a mean score of 1.6345. It is concluded that least awareness is found with respect to Awareness of Flagship Programs of GOI that are initiated through the banking system as it has the least mean score of 1.3134. The table 9 shows the mean score of all the three factors:

Table 9: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
MEAN SCORE OF FACTOR 1	395	1.00	5.00	2.8848	1.13034
MEAN SCORE OF FACTOR 2	395	1.00	4.75	1.6345	.85375
MEAN SCORE OF FACTOR 3	395	1.00	4.60	1.3134	.64336
Valid N (listwise)	395				

6. Conclusion

The study has escorted some of the very important findings on the issue of financial awareness with respect to banking products and services of the people who are outside the ambit of banking system. The present study has explored the three factors of financial awareness using Exploratory Factor Analysis implementing Principal Component Analysis approach. These three factors include awareness on core banking products & services, awareness on ancillary banking products & services and awareness on flagship programs that are reached to people through banking system. The study also concluded that level of financial awareness among the respondents from slum dwellers of Delhi is moderate with respect to core banking products and services having mean score of 2.8848 and is low with respect to other two factors having mean value of 1.6345 and 1.3134 respectively.. Various GOI and RBI schemes for the marginalized people of India are channelized through the banking system because it has maximum outreach but these schemes are not completely used by the people due to the lack of financial awareness among them. Thus, the agencies must think in this direction also to enhance the level of financial awareness and literacy among individuals so that the goal of complete financial inclusion can be achieved.

References

1. RBI (2018), “Annual Report”.
2. Bhole.L.M and Mahakud Jitendra, Financial Institution and Markets (Structure, Growth and Innovation), 2009, 5th Edition, Published by Tata McGraw Hill Education Pvt. Ltd, New Delhi.
3. Annu.R (2018), “An Empirical Analysis of Financial Inclusion in India a Case Study of Tamilnadu” (Doctoral Dissertation), http://shodhganga.inflibnet.ac.in/handle/10603/203374
4. World Bank Report (2018), http://www.worldbank.org/en/topic/financialinclusion/overview
5. Dube ShivamVibhuti& Dr. Asthana Kumar Pradeep (2017), “A Comparative Study on Financial Literacy of Uttar Pradesh with Central Zone States in India”, IOSR Journal of Business & Management, Vol 19, Issue 10, 22-27
6. Bapat Dhananjay & Bhattacharyay Nath Biswa (2016), “Determinants of financial inclusion of Urban Poor In India”, CESifo Working Paper No. 6096
7. Serrao V. Manohar, Sequeira. H. A & Varambally.M.V.K (2016), “Impact of Financial Inclusion on the Socio Economic Status of Rural and Urban Households of vulnerable sections in Karnataka” , https://www.researchgate.net/publication/289220260
8. Kumar Lakshmi & Mukhopadhyay Prasad Jyoti (2013), “Patterns of Financial Behavior among Urban Clients: Some Evidences from Tamil Nadu, India”, IMTFI Working Paper 2013-9
9. Ghatak, Anirban (2013), “Demand Side Factors Affecting Financial Inclusion”, The International Journal of Social Sciences and Management, Vol. 3 (No. 1)
10. Rangarajan Committee Report on Financial Inclusion (2008), https://www.sidbi.in/files/Rangarajan-Commitee-report-on-Financial-Inclusion.pdf

