

## A Study Of Trainings Of Selected Banks In India

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**ABSTRACT:** Training is described as the acquisition of skills, concepts or attitudes that result in improved performance within the job environment. There are various stages in training – Training Needs Analysis, Training Process, Training and Development, Training Evaluation, Training Effectiveness and Training Impact. In this paper the authors have made an attempt to look into the various individual related parameters and Bank's related parameters. Also the effectiveness and impact was seen from both individual and Bank's related parameters. The Literature Review has been conducted to find out what other research scholars have studied about impact of trainings on Banks. The authors tried to study the total response received mainly from the selected Public and Private Sector Banks. The results were almost similar Gender wise, Bank Type wise, Age-wise, Marital Status wise, Position wise, Experience wise, Educational Qualification wise and Annual Income wise similar in respect of both the Sector of Banks. The participation was more from the area's worked in Loans and Advances, Retail Banking and Others. Including HR other areas it was minimal. The training programmes attended by the participants particulars related to KYC, Retail Banking, Recovery and NPA Management, Credit Management and Others. The other programmes including HR were minimal. The data was analyzed with the help of pivotal table. The Likert Scale score of the various parameters set out in the questionnaire to the executives of the Banks related to individual and Bank's showed that out of 31 parameters, 22 were significant and were accepted. However, 9 parameters, were Not Significant and hence rejected. The author's arrive to the conclusion that training and development plays an important role in the performance not only of the individual, but also of the Bank irrespective whether they are form Public Sector, Private Sector, Foreign or Co-operative Sector. The Likert Scale score was derived from the various parameters set out in the questionnaire related to individual and Banks.

**KEYWORDS** - Academic Qualification, Age, Annual Income, Bank, Bank Type, Experience, Gender, Marital Status, Likert Scale, Pivotal Table, Position, Programmes, Training

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### I. INTRODUCTION

In an emerging integrated world economy, the banking sector is playing a crucial role for the free flow of money and capital in areas of opportunities. Development of the global economy is possible only when such free flow is ensured by organizations like banks. The banks have to be managerially efficient and effective. There are various issues that influence the managerial efficiency and effectiveness. The developments in the banking sector in the post reforms phase transformed the Indian Banking Sector beyond expectations. The inclusion of Foreign Banks and New Private Sector Banks and changing role of Co-operative Banks, with their changing structure, introduction of advanced technology and asset port-folio, adapting to competitive strategies, management capabilities, customer focus is transforming the banking sector in India. This is posing new challenge to human resources of the banks to meet the same and perform better in India. In this regard training from time to time, as human resources is said to be the best resource or human capital is the real asset of any organisation, is of paramount importance. [1]

### II. LITERATURE SURVEY

2.1 Athar Mahmood (2014) The author is of the view that training has been an integral part of day-to-day life since times immemorial. Every new employee regardless of his previous training and experience needs to be introduced to the work-environment of his new job and taught how to perform specific tasks. Most organizations expect trainings to result in learning that translates into performance at actual workplace. It has been found that when training is performance management oriented, it helps in contributing to contribute to company's goal. The objective of the paper was an attempt to explain the interplay between training, learning and performance on one side while defining the parameters of performance on the other specifically for the banking sector. As a part of Methodology a comprehensive review of literature provided meaningful insights into performance dimensions in banking sector. They were identified and put in the context of environmental factors. Analysis &

Findings& Conclusion - The paper was divided into three distinct parts. In the first part, the relationship between training, learning and performance had been studied using a theoretical model represented diagrammatically. Next, the factors impacting an individual's performance have been broadly listed. Finally, performance dimensions in banking sector had been identified. The findings was that there was a positive correlation between the three with training leading to learning and considered successful only when desired performance is the same as actual performance. Ten variables determine performance in banking sector which operate within four environmental conditions forming the context. Also important are organization's vision, mission & strategies and the immediate supervisor's attitude. [2]

2.2 Paschaloudis D, Anastasiadou K, Anastasiadou A and Pantelidis P (2013) Objective – was to examine the training process of International Bank Human Resources. Methodology –Case study of two Bank leading figures, National Bank of Greece and Hongkong and Shanghai Banking Corporation (HSBC). They adopted the inductive approach in which they collected data and developed theory as a result of data analysis, using interviews, structured, semi-structured, telephone interviews as well as personal contacts. Analysis, Findings and Conclusion –The two banks were totally different in size and number. One was greater Local Bank and the other was a greater International Bank. The two banks were different in size, structure, corporate culture, function, can adopt and apply the same training approaches. In short two different banks in size and range had quite similar training process. It is drawn from the survey done by the authors that organisations around the world no matter their size are or the countries in which they operate may apply the same general rules, however, they may modify the general wide accepted rules in order to fit their corporate culture.[3]

2.3 Dr. Hegde Raviraj K and Kumar Anil (2013) Objective - Their objective was to study the individual training needs, employee training initiatives in Banks – A future perspective and latest trends in training, future orientations of trainings in banks. Analysis, Findings and Conclusion – Training and development activities in banks are like oxygen to human being and there is an urgent need for reforms in training. The factors like training need, training resources, perceived training, training and development objectives, latest training trends are to be identified by the management in accordance with organizational goal and employee need. The required change in curriculum, faculty, methodology, training resources is the need of the hour. Bank management has to realize the importance of training to enhance knowledge and skills apart from information and should create a training budget as well as conduct training audit for the effectiveness of training. [4]

2.4 Nazmul Kader Abdul and Selim Md. (2015) Objective– The focus of the authors study was to measure the success of training and whether training has any impact on promotion and what types of training are provided to the newly recruited employees of Exim Bank Ltd. Methodology, Analysis, Findings and Conclusion – The methodology adopted was random sampling where 50 employees were selected for the study. It was a combination of EXIM Bank Ltd and the secondary data was collected through various sources like books, journals, annual reports etc. The major findings of the study indicated that 60% respondents were satisfied with the training facilities of EXIM Bank Ltd. The results also showed that training has a positive impact on promotion and EXIM Bank Ltd., provides the foundation or induction training to their employees' when they were newly recruited. The authors are of the view that the major contribution of the paper is that it will help to measure the success of training and also help to reduce the training and recruitment costs of EXIM Bank Ltd. The authors also suggested to implement the proposed conceptual framework to measure the success of their training, ensure adequate time for questions and discussion sessions', otherwise training will not be effective, ensure more training for employees who have completed adequate length of service, train more female employees to promote in top management, increase the number of female employees, hire qualified trainers for training delivery, attract doctorate degree holders in HRD/M to join the HR department of the organization and utilize them to develop and implement training programmes etc.[5]

2.5 Dr. Karthikeyan, R. Karthi, D. Shyamala Graf (2010) Objective – Studied the existing practices of the various aspects of training program and its effectiveness in selected public and private sector banks in Tiruchirappalli District, South India. This is mainly to assess the present status of the employee effectiveness in discharging the roles and responsibilities in tune with the objectives of the bank. The aim is to assess the effectiveness of the various facets of training i.e. employee's attitude towards training inputs; quality of training programmes; training inputs and application of training inputs to the actual job. Banks should take necessary steps in such away that employees should feel training is essential to enhance the productivity and customer satisfaction to meet the present business challenges in India. A well-structured questionnaire was used to collect the primary data. Secondary data for the study were collected from reputed journals, magazines, websites and bank records. Total sample size for this study is 512 respondents. It consists of 454 respondents of clerical cadre

and 58 respondents of managerial cadre in banks. Statistical Package for Social Sciences (SPSS) analysis was to calculate result and come to conclusion that training contributes for growth and result of the banks. [6]

2.6 Korde Abhay and Dr. Laghte Kavita (2015) Objective - The objective of the study was to Analyze growth of Branches, Employees, Profit Per Employees, Deposits, Advances and Net Non-Performing Assets of Bank of Baroda and Union Bank of India from 2008-2009 to 2012-2013, Analyze the said growth between Bank of Baroda and Union Bank of India from 2008-2009 to 2012-2013, Analyze the said growth of Bank of Baroda and Union Bank of India with PSBs and Analyze between the training expenses of Bank of Baroda and Union Bank of India related to HR and NPA related trainings. Methodology, Analysis, Findings and Conclusion - The study was an exploratory research. As the study of the research paper was mainly related to analyze the growth of selected parameters related to the performance of Bank of Baroda and Union Bank of India and their comparative growth and also their comparative growth with PSBs and to compare the training expenses of both the banks related to HR and NPA related training the findings were based on the secondary data and percentage of progress for the period 2008-09 to 2012-13 is calculated from the data available in the Annual Report of RBI for the year 201213, the findings are based on the secondary data. The authors arrive to the conclusion that the bank which has invested more in training is able to perform better than the bank which invests comparatively less in the area of training and especially in the area of HR and NPA related training. Thus Bank of Baroda has an upper hand in various parameters as compared to Union Bank of India.[7]

### III. OBJECTIVE OF THE STUDY

The objective of the research is to:

- i) Find out the attitude and priorities of the Executives of the Banks towards Training. Various Trainings attended by the Executives, Usefulness of the training to the Executives, Banks and its impact.
- ii) Check the Likart Scale Score of the parameters set out in the questionnaire to the Executives of the Bank.

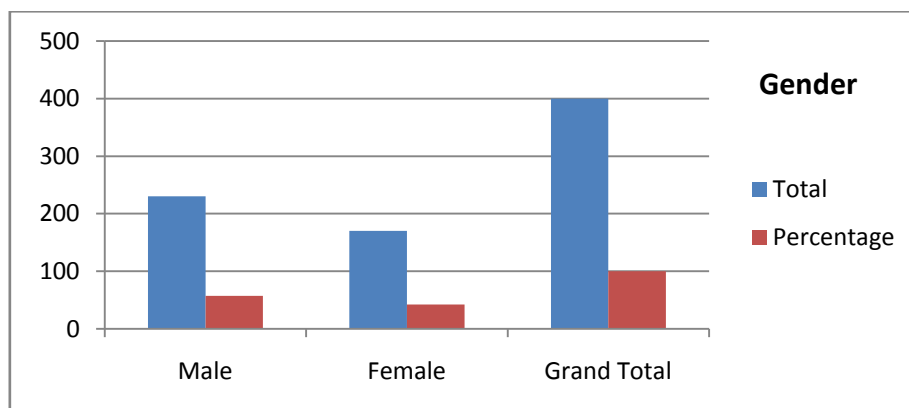
### IV. RESEARCH METHODOLOGY

It is an Analytical Research. The present study is based on Primary data. The required information has been obtained from the Executives of the Banks through questionnaire manually, e-mail, and social media.

### V. DATA ANALYSIS

#### 5.1 GENDER – Table: 1

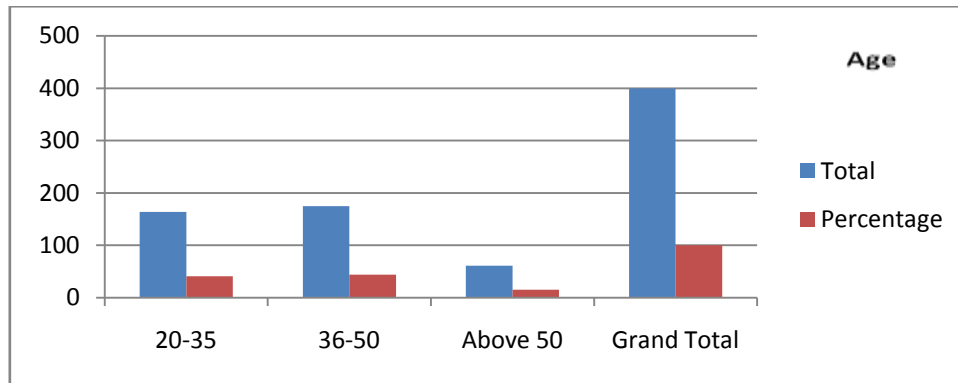
Gender	Total	Percentage
Male	230	57.50
Female	170	42.50
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 1** – It represents the Gender of those participated in the survey. It indicates that total 230 (57.50%) Males and 170 (42.50%) Females participated in the survey. The highest participation was by Males 57.50% as compared to 42.50% by Females.

#### 5.2 AGE – Table: 2

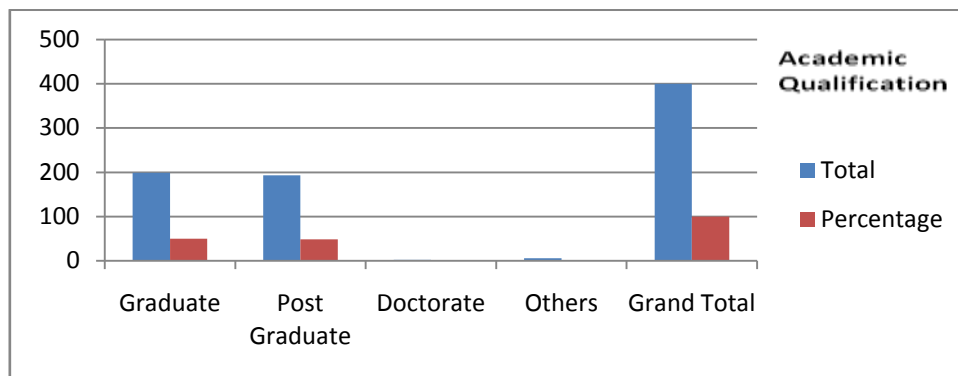
Age	Total	Percentage
20-35	164	41.00
36-50	175	43.75
Above 50	61	15.25
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 2** – Indicates the age-wise break up of the participants. Of the total 400 participants, 164 (41%) were in the age group of 20-35, 175 (43.75%) in 36-50 and 61 (15.25%) were in above 50 years age group. The highest participation was 43.75% by participants between the Age group of 36-50 years as compared to 41% by 20-35 years age group participants.

**5.3 ACADEMIC QUALIFICATION – Table: 3**

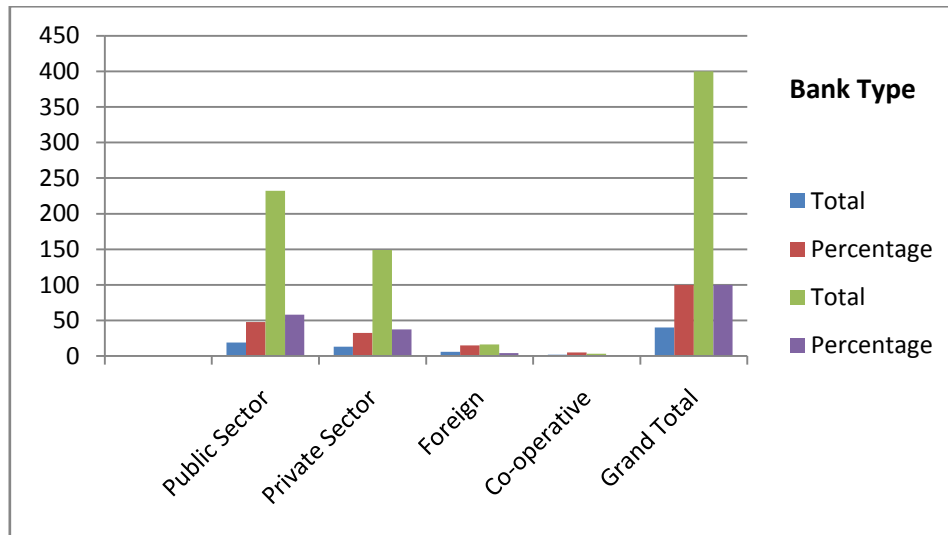
Academic Qualification	Total	Percentage
Graduate	199	49.75
Post Graduate	193	48.25
Doctorate	2	0.50
Others	6	1.50
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 3** – It represents Academic Qualification of the participants. It shows that 199 (49.75%) respondents were Graduates, 193 (48.25%) Post Graduates, 2 (0.50%) Doctorate and 6 (1.50%) with Other academic qualifications. The highest participation was 49.75% by Graduates as compared to 48.25% by Post-Graduates.

**5.4 BANK TYPE – Table: 4**

Bank Type	Total Banks	Percentage	Total Participants	Percentage
Public Sector	19	47.50	232	58.00
Private Sector	13	32.50	149	37.25
Foreign	6	15.00	16	4.00
Co-operative	2	5.00	3	0.75
<b>Grand Total</b>	<b>40</b>	<b>100.00</b>	<b>400</b>	<b>100.00</b>

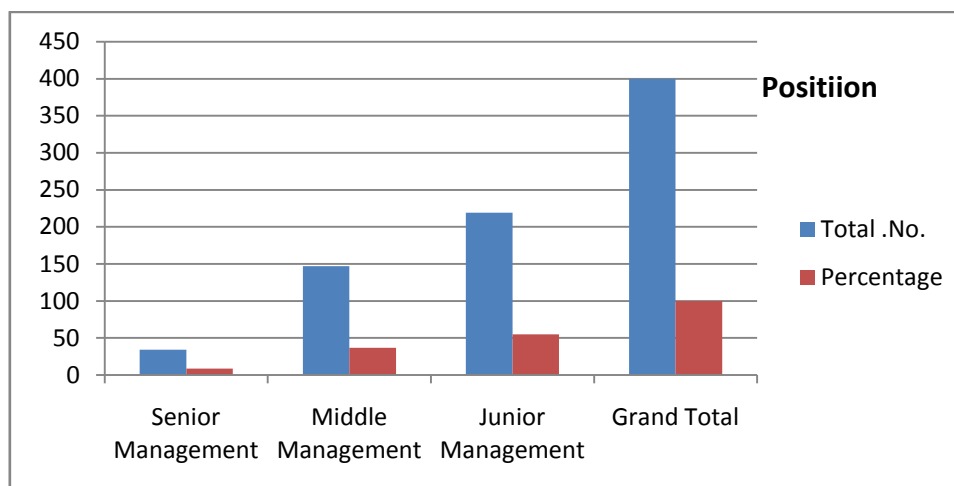


**Table 4** – It is representing the Types of Banks. It shows that out of total 40 Banks which participated in the survey, 19 (47.50%) Public Sector Banks, 13 (32.50%) were Private Sector, 6 (15%) Foreign and 2 (5%) Co-operative Banks participated in the Survey.

Out of 400 participants, 232 (58%) were from Public Sector Banks, 149 (37.25%) from Private Sector, 16 (4%) from Foreign Banks and 3 (0.75%) from Co-operative Banks. The highest participation was by 58% by Public Sector Bank participants.

**5.5 POSITION – Table: 5**

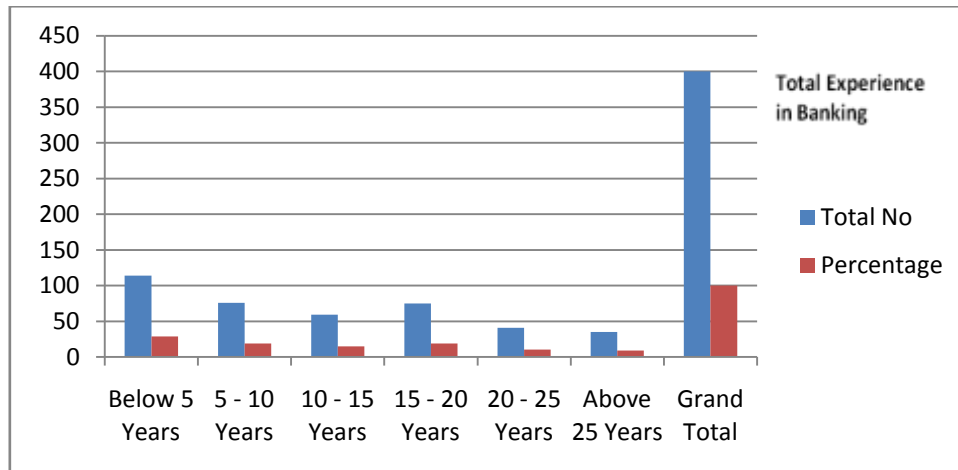
Position	Total .No.	Percentage
Senior Management	34	8.50
Middle Management	147	36.75
Junior Management	219	54.75
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 6** – It represents the various positions of the Management. Out of 400 respondents, 34 (8.50%) were from Senior Management, 147 (36.75%) from Middle Management and 219 (54.75%) from Junior Management. The highest participation was by 54.75% i.e. by Junior Management Participants.

**5.6 Total Experience in Banking – Table: 6**

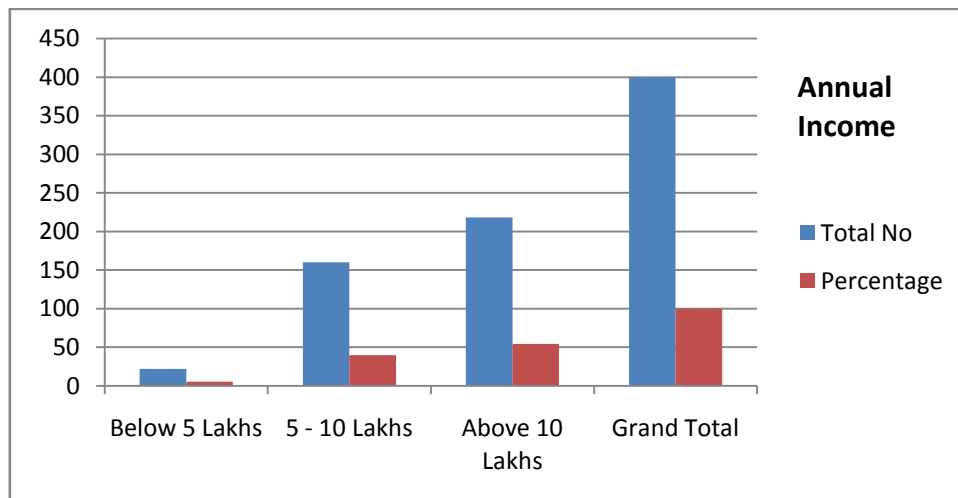
Total Experience in Banking	Total No	Percentage
Below 5 Years	114	28.50
5 - 10 Years	76	19.00
10 - 15 Years	59	14.75
15 - 20 Years	75	18.75
20 - 25 Years	41	10.25
Above 25 Years	35	8.75
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 6** – It shows total experience in banking of the participants. Below 5 years is represented by 114 (28.50%), 5-10 years by 76 (19%), 10-15 years by 59 (14.75%), 15-20 years by 75 (18.75%), the 20-25 years is represented by 41 (10.25%) and the last above 25 years is represented by 35 (8.75%) executives. The highest representation was 28.50% of below 5 years experience participants.

**5.7 ANNUAL INCOME – Table: 7**

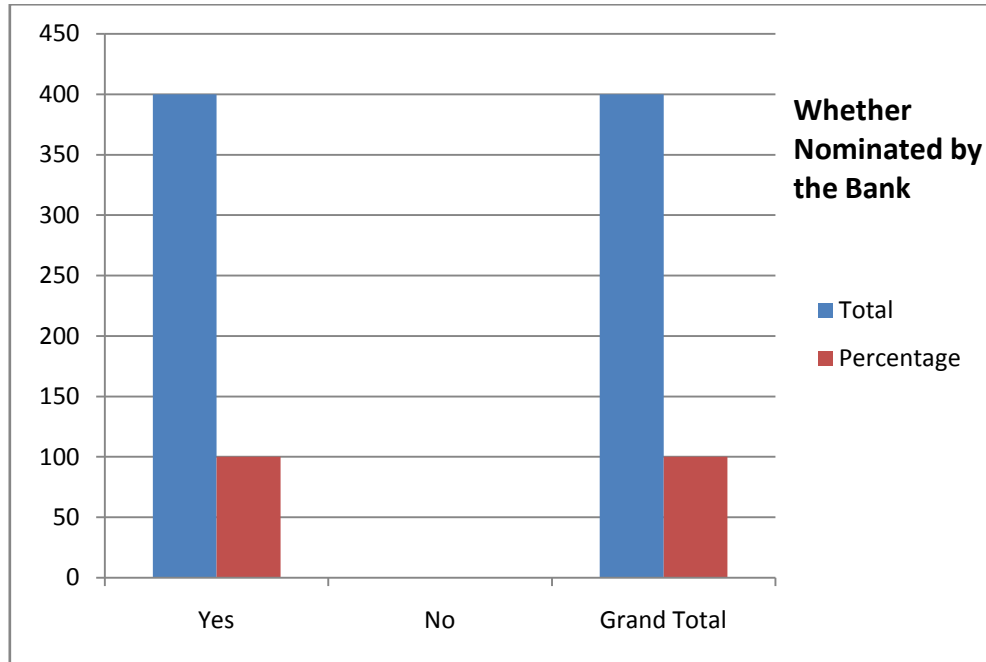
Annual Income	Total No	Percentage
Below 5 Lakhs	22	5.50
5 - 10 Lakhs	160	40.00
Above 10 Lakhs	218	54.50
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 7** – It represents the annual income wise break up of the respondents. Out of the 400 respondents, 22 (5.50%) were below 5 lakhs, 160 (40%) between 5-10 lakh and remaining 218 (54.50%) were in the annual income bracket above 10 lakhs.

**5.8 WHETHER NOMINATED BY THE BANK – Table: 8**

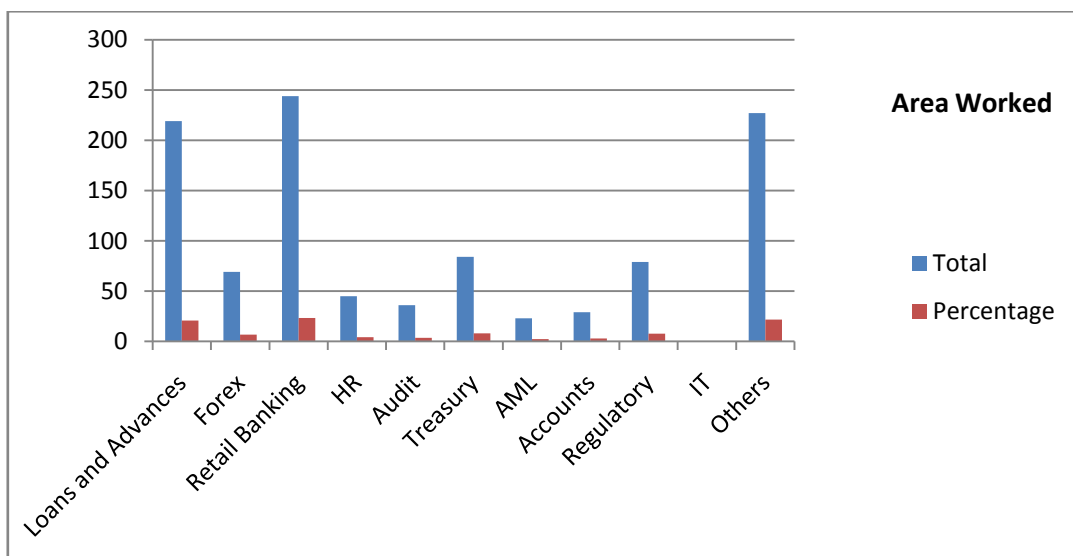
Whether Nominated by the Bank	Total	Percentage
Yes	400	100.00
No	0	0.00
<b>Grand Total</b>	<b>400</b>	<b>100.00</b>



**Table 8** – It indicates whether nominations of the participants was done by their organization or by the individual participant. However, all the 400 (100%) participants responded that they were nominated by the Bank.

**5.9 . AREAS WORKED IN – Table: 9**

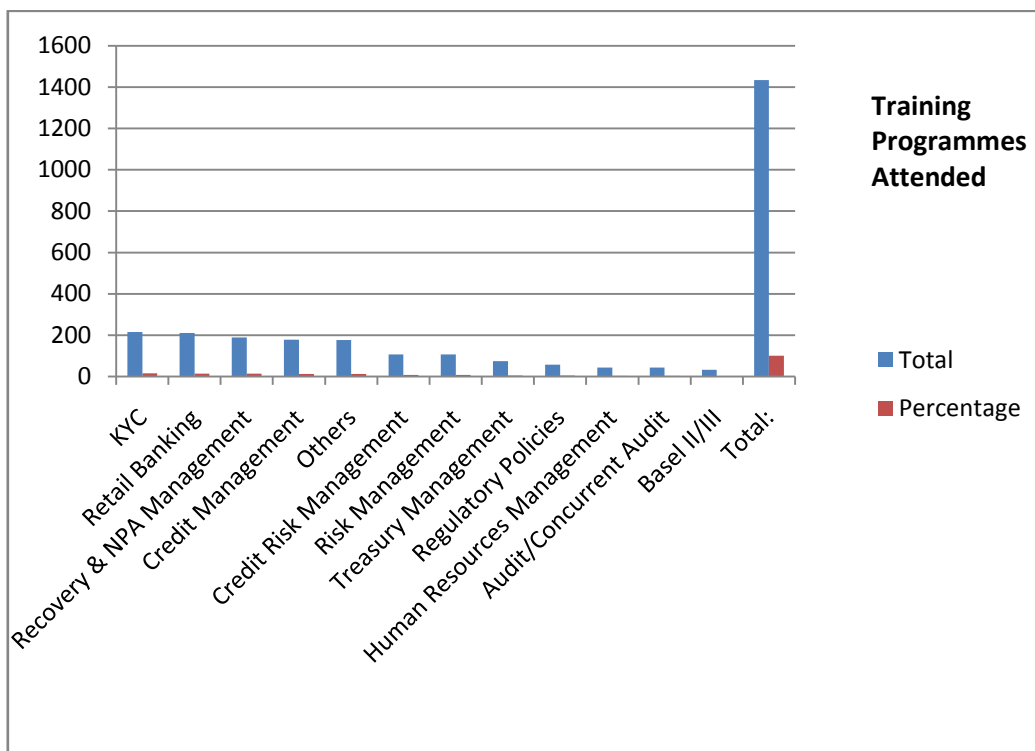
Sl.No.	Area Worked	Total	Percentage
1.	Loans and Advances	219	20.76
2.	Forex	69	6.54
3.	Retail Banking	244	23.13
4.	HR	45	4.27
5.	Audit	36	3.40
6.	Treasury	84	7.96
7.	AML	23	2.18
8.	Accounts	29	2.75
9.	Regulatory	79	7.49
10.	IT	0	0.00
11.	Others	227	21.52
	<b>Total:</b>	<b>1055</b>	<b>100.00</b>



**Table 9** – It can be observed that programmes area worked by the participants was Loans and Advances (219) (20.76%), Retail Banking (244) (23.13%) and Others (227) (21.52%). The Regulatory related programmes were worked by about 79 (7.49%) participants and HR by 45 (4.27%) participants.

**5.10 . WHICH EFFECTIVE PERFORMANCE RELATED TRIANING ATTENDED MOST RECENTLY - Table: 10**

Sl.	Training Programmes Attended	Total	Percentage
1	KYC	215	14.98
2	Retail Banking	210	14.63
3	Recovery & NPA Management	189	13.17
4	Credit Management	178	12.40
5	Others	177	12.33
6	Credit Risk Management	107	7.46
7	Risk Management	107	7.46
8	Treasury Management	75	5.23
9	Regulatory Policies	58	4.04
10	Human Resources Management	44	3.07
11	Audit/Concurrent Audit	43	3.00
12	Basel II/III	32	2.23
	<b>Total:</b>	<b>1435</b>	<b>100.00</b>



**Table 10 -** It shows that the programmes related to Loans and Advances/NPA were given top much priority. Whereas HR related training programme had less participation.

**5.11 LIKERT SCALE SCORE**

Likert Scale score of Strongly Agree/Agree/Disagree/Strongly Disagree from the questionnaire

Sl.No	Item	Factor	A	D	Significant/Not Significant
	<b>Before Attending The Training:</b>				
1	Before Training I was Enthusiastic	4.3075	6	1	Not Significant/Reject
2	I Possessed same communication skills	3.887218	3	4	Significant/Accept
3	I had same Attitude towards work	3.914573	4	3	Significant/Accept
4	I possessed Leadership Skills	3.56	2	5	Significant/Accept
5	I was able to work in Teams:	3.554156	1	6	Significant/Accept
6	I possessed IT Skills:	3.962312	5	2	Significant/Accept
	<b>Was the Training you attended:</b>				
7	Training was Useful for your work:	4.39	4	1	Not Significant/Reject
8	Training was Very Informative:	4.3775	3	2	Not Significant/Reject
9	Trainer had good knowledge and ability to deliver and communicate effectively:	4.305	2	3	Not Significant/Reject
10	Quality of the training facilities and aids e.g. audio visual, ambiance etc., were as desired:	3.78	1	4	Significant/Accept
	<b>Training you attended Helped To:</b>				



11	Training helped to acquire the required knowledge for Job	4.335	3	1	Not Significant/Reject
12	Training helped to acquire Critical Competencies	4.335	3	1	Not Significant/Reject
13	Training helped to acquire Additional Competencies	3.64411	1	4	Significant/Accept
14	Training Changed Attitude for Banks Performance	4.0075	2	3	Not Significant/Reject
<b>ENHANCED EMPLOYEE PARAMETERS:</b>					
<b>Individual Related Parameters:</b>					
15	After the training I was able to Apply skills/knowledge on the Job Effectively:	4.0175	11	1	Not Significant/Reject
16	After the training I was able to Improve relations with Superiors/Colleagues:	3.9599	9	3	Significant/Accept
17	After the training I was able to Improve relations with Customers:	3.94	7	5	Significant/Accept
18	After the training I was able to Change Attitude/Initiative:	3.915	6	6	Significant/Accept
19	After the training I was able to Improve Quality/Quantity of Work:	3.895	5	7	Significant/Accept
20	After the training I was able to Improve Team Building:	4.0125	10	2	Not Significant/Reject
21	After the training I was able to Improve Punctuality/Attendance:	3.3875	1	11	Significant/Accept
22	After the training I was able to Improve Dependability:	3.438596	2	10	Significant/Accept

Sl.No	Item	Factor	A	D	Significant/Not Significant
23	After the training I was able to Improve Enthusiasm/Initiative:	3.9425	8	4	Significant/Accept
24	After the training I was able to Improve Communication Skills:	3.829574	3	9	Significant/Accept
25	After the training I was able to Improve Work Consistency:	3.861809	4	8	Significant/Accept
<b>Banks Related Parameters:</b>					
<b>After attending the training Programme, result was:</b>					
26	Training results in reduction in NPA	3.9525	6	1	Significant/Accept
27	Training results in Increase in Profit	3.58396	3	4	Significant/Accept
28	Training results in reduction of credit risk	3.6525	4	2	Significant/Accept
29	Training results in improvement in credit management:	3.6525	4	2	Significant/Accept
30	Training results in improvement in Deposits	3.385965	1	6	Significant/Accept
31	Training results in reduction in industrial relation issues	3.441103	2	5	Significant/Accept

A = Ascending  
D= Decending

## VI. CONCLUSION

The training related data was collected from selected Public, Private, Foreign and Co-operative Banks. About 40 Banks participated in the survey. Of which 19 (47.50%) were from Public Sector, 13 (32.50%) from Private Sector, 6 (15%) from Foreign and 2 (5%) from the Co-operative Sector. There were 400 respondents/participants of which 232 (58%) from Public Sector, 149 (37.25%) from Private Sector, 16 (4%) and 3 (0.75%) from Foreign and Co-operative Sector.

Of the 400 participants, the percentage of male participants was 57.50% and females was 42.50%, The main age group of the participants was 20-35 (41%) and 36-50 (43.75%). Academic Qualification wise also it was interesting to note that Graduates (49.75%) and Post-Graduates (48.25%) were part of the survey. The Bank type participation was Public Sector (58%), Private Sector (37.25%). The participation of Middle Management was 36.75% and Junior Management was 54.75%. As regards experience in banking it was observed that about 28.50% had below 5 years experience, about 19% and 18.75% in the group between 5-10 years and 15-20 years respectively. The other groups were somewhat near to each other from 8.75% to 14.75%. About 40% of the participants were in the annual income group between 5-10 lakhs and 54.50% were above 10 lakhs. All the employees were sponsored for the training by their respective Banks. The area's worked in by the participation was 20.76% in Loans and Advances, Retail Banking 23.13%, in other area's 21.52% and including HR it was minimal in other area's. The response of the participants for attending to the various

trainings related to KYC, Retail Banking, Recovery & NPA Management, Credit Management and Other was between 12.33% to 14.98%. For other trainings related to Basel II/III, Audit, Concurrent Audit, HRM, Regulatory Policies, Treasury, Risk, Credit Risk Management related training programmes was between 2.23% to 7.46%. The data was analyzed with the help of pivot table.

It can be observed from the Likert Scale score of the various parameters set out in the questionnaire to the executives of the Banks related to individual and Bank's that out of 31 parameters, 22 were significant and were accepted. However, 9 parameters, were Not Significant and hence rejected. It can thus be concluded that training and development plays an important role in the performance of the Banks irrespective whether they are from Public Sector, Private Sector, Foreign or Co-operative Sector. The Likert Scale score was derived from the various parameters set out in the questionnaire related to individual and Banks.

## **VII. LIMITATIONS & SCOPE FOR FUTURE STUDY**

### **7.1 Limitations –**

The Limitations of the Study is that it is based only on primary data and is a part of the thesis to be submitted by the principal author to the university.

### **7.2 Scope for Future Study -**

The principal author has combined the primary data and secondary data of the Banks in the thesis to find out impact of training not only on Individual's but also on the Performance of the Banks.

## **REFERENCES**

### **Journal Papers**

- [1]. Athar Mahmood, Jaipuria Institute of Management, India – “What constitutes performance in banking sector: A conceptual framework of the three dimensional relation between training, learning & performance in banking sector” – (<http://www.jaipuria.ac.in/faculty-research/research-publications/research-papers/>).
- [2]. Paschaloudis D, Anastasiadou K, Anastasiadou A and Pantelidis P (2013) [https://www.researchgate.net/profile/Kyriaki\\_Anastasiadou3/publication/265982744\\_The\\_Training\\_Process\\_in\\_Bank\\_Organisation\\_s\\_within\\_a\\_Global\\_Context/links/58c9317aaca2721e6679cafb/The-Training-Process-in-Bank-Organisations-within-a-Global-Context.pdf](https://www.researchgate.net/profile/Kyriaki_Anastasiadou3/publication/265982744_The_Training_Process_in_Bank_Organisation_s_within_a_Global_Context/links/58c9317aaca2721e6679cafb/The-Training-Process-in-Bank-Organisations-within-a-Global-Context.pdf)
- [3]. Dr. Hegde Raviraj K and Kumar Anil (2013), Bangalore – “Training in Indian Banking with special reference to Public Sector” – Asia Pacific Journal of Research, June 2013, Volume No:2, Issue:4 (ISSN 2320 – 5504)
- [4]. Nazmul Kader Abdul and Selim Md. (2015) proceedings of the International Conference on Contemporary Management Practices (CAASR-ICMP 2015) – Research Gate.
- [5]. Dr. Karthikeyan, R. Karthi, D. Shyamala Graf (2010), International Journal of Business and Management Vol. 5 No. 7, 2010, “Impact of Training in Indian Banking Sector – An Empirical Investigation”
- [6]. Korde Abhay and Dr. Laghte Kavita (2015), Research Scholar, JBIMS, Mumbai and Professor, JBIMS, Mumbai – “Is there any Impact of Training on the Performance of Selected Public Sector Banks”, Annual Research Journal of SCMS, Pune Vol. 3, April 2015, pp. 135-154.

### **Website**

- [7]. [http://aric.adb.org/pdf/external/financial\\_market/India/india\\_bnk.pdf](http://aric.adb.org/pdf/external/financial_market/India/india_bnk.pdf) (downloaded on 21.1.2014) (The Indian Banking Sector on the Road to Progress - G. H. Deolalkar, former Managing Director of State Bank of India.

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