Measuring the Variance between Personal Demographic Factors on Banking Tangible, Reliability and Empathy Factors of Service Quality

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Abstract: Purpose: In the present marketing environment customers are in the highly competitive and vibrant banking industry in India to look forward to most satisfying quality of service from their respective banks right from their entry into their premises till the fulfillment of purpose of their visit. This research paper has measure the effect of five personal demographic variables on banking service quality items. Methodology: The sample size consists of 300 respondents which were customer of public sector banks at Urban area in Tiruchirapplli District. The questionnaire method was adopted to collect the responses from customer. The questionnaire consist of five questions which are related to personal and demographic details of banks customer. This questions were nominal and Ratio scale questions. There are five questions which ware measure the customer satisfaction over the banking Tangible, Reliability and Empathy factors by using five point Likert's Scale. Statistical Tools: The respondents are segregated on the basis of different variables such as income, age, occupation gender, Education were consider as independent variables and three core variables related to banking service quality were consider as response items. The descriptive test and analysis of variances used to verity the research hypothesis of this study. Results: Age, Gender and Income has statistically significant effect on public sector customer Satisfaction on Tangibility. Education has statistically significant effect on public sector customer Satisfaction on Empathy factor.

Key Words: Service Quality – ANOVA – Tangible - Reliability - Empathy

I. INTRODUCTION

Banks have their own significant role to play in the economic system of any country. Various types of banks perform various functions according to their prescribed roles defined by their memorandums and articles of association. Central bank is the bank of the government and is required to monitor and supervise the banking activities in a politically defined and specified geographical region. Agricultural and industrial banks cater for the needs of farmers and industrialists.

Commercial banks generally have a wider network of their branches and look after the financial requirements of the general public. Commercial banks have maximum interaction with the general public and that is why, central banks are always keen to improve their service quality and productivity.

II. BANKING SERVICE QUALITY

Today's customers in the highly competitive and vibrant banking industry in India to look forward to most satisfying quality of service from their respective banks right from their entry into their premises till the fulfillment of purpose of their visit - it may be withdrawing money, getting a loan, making deposits and the like or just making some enquiries. It is but reasonable on the part of the customer to expect excellent service from his bank, failing which they cannot be blamed to switch themselves over to another bank which keeps promising through advertisements of various type carefully fulfill the meansioned services to the fullest satisfaction of its customers. Moreover, it is not difficult for the knowledgeable customer to make a choice of potential best provider of service, for the reason that they can get access to all the information they wants to, at the click of a mouse thanks to internet revolution. The banks need therefore to keep watching out every move of their rivals in the industry and always be on the alert to make customers' perception of their service quality does not fall short of their expectation.

III. OBJECTIVES OF THE STUDY:

This research paper has measure the variance between five personal and demographic factors along with banking service quality factors such as, Tangible, Reliability and Empathy factors. Based on the above objective the following hypothesis was framed.

IV. HYPOTHESIS

H1: Gender has significant influence on banking Tangible, Reliability and Empathy factors.

H2: Age has significant influence on banking Tangible, Reliability and Empathy factors.

H3: Education has significant influence on banking Tangible, Reliability and Empathy factors.

H4: Income has significant influence on banking Tangible, Reliability and Empathy factors.

H5: Occupation has significant influence on banking Tangible, Reliability and Empathy factors.

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V. METHODOLOGY

The sample size consists of 300 respondents. The respondents are segregated on the basis of different variables such as income, age, occupation, gender and education were consider as independent variables and three core questions related to banking service quality were consider as response items. The basic design of survey instrument consists of structured questionnaires. It is so designed to collect all required information from customers of any public sector banks. The data and information collected will be classified, tabulated and processed and its findings presented in a systematic manner. Statistical tools as descriptive and one way analysis of variances has applied.

A. Outlook of sample respondent:

Out of 300 sample respondent, 46.5 percent of Male respondent and 53.5 of female respondent participated in the study. Majority of Female respondent participated in the study. Age of respondent were classified into five groups, 33.5 percent of respondent age come under 20 – 30 years of age and 30 percent of respondent come under 30 40 years of age. The four level of classification of respondent education, 40.2 percent respondents are Post graduate and 30.2 percent are Graduate. Among the five level classification of respondent income, 36 percentage of respondent income come under Rs.10,000 – 20,000 and 28.5 percentage of respondent income come under Rs.20,000 – 30,000. Regarding the respondent occupation, 40.3 percent of respondent are salaried class people and 20.5 percent respondents are Self-employed.

B. Statistical Tools used:

This procedure performs a multifactor analysis of variance for Customer Satisfaction on Tangibility item of banking service quality. It constructs tests and graphs to determine which personal and demographic factors (Gender, Age, Education, Income, and Occupation) have a statistically significant influence on customer Satisfaction on Tangibility, Reliability and empathy factor of banking service quality. The F-test in the ANOVA table shows that the significant and insignificant personal and demographic factor of respondent

VI. VARIANCE BETWEEN PERSONAL DEMOGRAPHIC FACTORS ON BANKING TANGIBLE SERVICE QUALITY
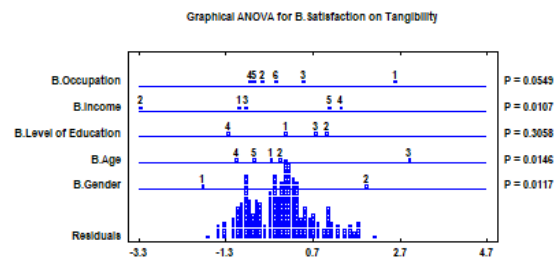
Table No.1 - Analysis of Variance for Customer Satisfaction on Tangibility

MAIN EFFECTS	Sum of Squares	Df	Mean Square	F-
Gender	**3.62606**	**1**	**3.62606**	**6.4**
Age	**7.11366**	**4**	**1.77841**	**3.1**
Level of Education	2.04731	3	0.682436	1.2
Income	**7.54146**	**4**	**1.88537**	**3.3**
Occupation	6.18319	5	1.23664	2.2
RESIDUAL	158.848	282	0.563292	
TOTAL (CORRECTED)	184.597	299		

All F-ratios are based on the residual mean square error.

The ANOVA table decomposes the variability of public sector bank customer Satisfaction on Tangibility into contributions due to various personal and demographic factors. Since Type III sums of squares have been chosen, the contribution of each factor is measured having removed the effects of all other factors. The P-values test the statistical significance of each of the factors. Since, Age, Gender and Income has a P-values are less than 0.05, these factors have a statistically significant effect on public sector customer Satisfaction on Tangibility at the 95.0% confidence level.

Diagram No.1 Graphical ANOVA for customer satisfaction over the Tangibility item of banking service quality
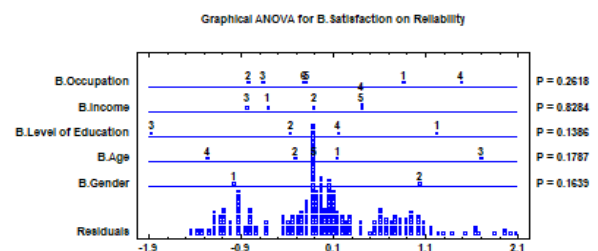

VII. VARIANCE BETWEEN PERSONAL DEMOGRAPHIC FACTORS ON BANKING RELIABILITY SERVICE QUALITY

Table No.2 Analysis of Variance for Customer Satisfaction on Reliability –

MAIN EFFECTS	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Gender	1.04916	1	1.04916	1.95	0.1639
Age	3.41212	4	0.853031	1.58	0.1787
Level of Education	2.98656	3	0.99552	1.85	0.1386
Income	0.801782	4	0.200446	0.37	0.8284
Occupation	3.51519	5	0.703038	1.31	0.2618
RESIDUAL	151.896	282	0.538638		
TOTAL (CORRECTED)	164.667	299			

All F-ratios are based on the residual mean square error.

Diagram No.2 Graphical ANOVA for customer satisfaction over the Reliability item of banking service quality

The ANOVA table decomposes the variability of public sector bank customer Satisfaction on Reliability into contributions due to various personal and demographic factors. Since Type III sums of squares (the default) have been chosen, the contribution of each factor is measured having removed the effects of all other factors. The P-values test the statistical significance of each of the factors. Since, none of the personal and demographic factor predict the customer satisfaction over the banking Reliability factor. Since the P-values are more than 0.05, these five personal and demographic factors have a statistically insignificant effect on public sector customer Satisfaction on Reliability at the 95.0% confidence level. It is concluded that regarding the customer satisfaction over the reliability item of banking service quality are not influenced with a respect of different level of respondent age, Gender, education, income and occupation.
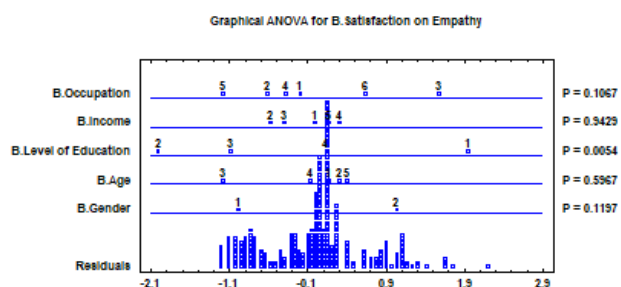
VIII. VARIANCE BETWEEN PERSONAL DEMOGRAPHIC FACTORS OF BANKING EMPATHY SERVICE QUALITY

Table No.3 Analysis of Variance for Public sector bank Customer Satisfaction on Empathy factor of banking service quality –

MAIN EFFECTS	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Gender	1.03873	1	1.03873	2.44	0.1197
Age	1.18334	4	0.295835	0.69	0.5967
Level of Education	**5.51346**	**3**	**1.83782**	**4.31**	**0.0054**
Income	0.326023	4	0.081506	0.19	0.9429
Occupation	3.90426	5	0.780852	1.83	0.1067
RESIDUAL	120.233	282	0.426359		
TOTAL (CORRECTED)	133.52	299			

All F-ratios are based on the residual mean square error.

Diagram No.3
Graphical ANOVA for customer satisfaction over the Empathy item of banking service quality

Graphical ANOVA for B.Satisfaction on Empathy

squares (the default) have been chosen, the contribution of each factor is measured having removed the effects of all other factors. The P-values test the statistical significance of each of the factors. Since, the Education factor has a P-values are less than 0.05, these factors have a statistically significant effect on public sector customer Satisfaction on Empathy factor at the 95.0% confidence level. The other personal and demographic factors such as, Age, Gender, Income and Occupation has no effect on the satisfaction over the empathy factor of banking banking service quality.

The ANOVA table decomposes the variability of public sector bank customer Satisfaction on Empathy factor of banking service quality into contributions due to various personal and demographic factors. Since Type III sums of

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Table No:4   Hypothesis test result summary

Hypothesis	MAIN EFFECTS	Tangible P value	Reliability P value	Empathy P value	Result
H1	Gender	**0.0117**	0.1639	0.1197	Gender has significant influence on banking Tangible factor.
H2	Age	**0.0146**	0.1787	0.5967	Age has significant influence on banking Tangible factor.
H3	Level of Education	0.3058	0.1386	**0.0054**	Education has significant influence on banking Tangible and Empathy factors
H4	Income	**0.0107**	0.8284	0.9429	Income has significant influence on banking Tangible factor
H5	Occupation	**0.0549**	0.2618	0.1067	Occupation has moderately influence on banking Tangible factor

XI RESULTS AND DISCUSSION

1. Since, Age, Gender and Income has a P-values are less than 0.05, these factors have a statistically significant effect on public sector customer Satisfaction on Tangibility at the 95.0% confidence level.

2. It is revealed that regarding the Public sector customer satisfaction over the reliability item of banking banking service quality with respect to their age, Gender, education, income and occupation has no effect on the satisfaction of Reliability items.

3. Since, the Education factor has a P-values are less than 0.05, these factors have a statistically significant effect on public sector customer Satisfaction on Empathy factor at the 95.0% confidence level.   The other personal and demographic factors such as, Age, Gender, Income and Occupation has no effect on the satisfaction over the empathy factor of banking banking service quality.

X. MANAGERIAL IMPLICATION:

The above analysis was clearly revealed that the customer with different personal and demographic factor was differing in their satisfaction over the banking services. The management/authorities must consider the demographic profile of their customer and based on this, the banks marketing their banking services in order to get fullest satisfaction from all level of bank customer.

XI CONCLUSION AND FUTURE SCOPE

Today's customers in the highly competitive and vibrant banking industry in India look forward to most satisfying quality of banking service from their respective banks irrespective of public or Private sector, right from their entry into their premises till the fulfillment of purpose of their visit - it may be withdrawing money, getting a loan, making deposits and the like or just making some enquiries. It is reasonable on the part of the customer to expect excellent service from their bank, failing which they cannot be blamed to switch himself over to another bank which keeps promising through advertisements of various types' meticulously immaculate service to the fullest satisfaction of its clientele. The above hypothesis test result was only predict the public sector bank customer concern. it is further do this research by the way comparing customer satisfaction over the banking service between Private and Public sector banks.

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