

**CHAPTER - 4**

**DATA ANALYSIS**

**&**

**INTERPRETATION**

## **CHAPTER - 4**

### **DATA ANALYSIS AND INTERPRETATION**

This chapter is about data analysis and interpretation of the data obtained from the survey participants. This chapter discusses the data analysis, findings and interpretation in order to accomplish the research objectives of this study on the “Study of role efficacy and role stress among insurance sector employees working in government and private companies at Vadodara district, Gujarat, India. There were five research objectives purposed in this research. Each of the objective required primary data for its fulfillment. Therefore, primary data was collected by using a questionnaire. All questions of this questionnaire were close ended questions. The respondents were contacted in personal meetings and the responses were recorded. After data collection all questionnaires were scrutinized to find any missing or inappropriate or confusing response by the responded. It is to mention here that such scrutiny or editing was a part of each day during data collection and incase of any confusing response the respondent was contacted to get the response correct. So, chances of error in the final stage were almost negligible. Once all data from total sample size were obtained, the questions were coded and data was recorded in numeric form in MS-Excel which then exported to SPSS data editor file. During data analysis both MS-Excel as well as SPSS was used. The findings of data analysis and related interpretation have been discussed under various sections and each of the section has been named suitably.

PART-1      DESCRIPTIVE STATISTICS & RELIABILITY TESTING OF  
SCALE

Section-I      Respondents Background Analysis

Section-II      Key Variable Analysis (Motivation level, Job satisfaction, Overall  
Commitment, Employee effectiveness and role efficacy, Role Stress &  
Job quit)

Section-III      Key dimension analysis (Role Efficacy and Role Stress)

PART-2      TESTING HYPOTHESIS

Section-IV      Cross Tabulation between independent variable and dependent variable  
& Testing significance of Correlation

PART-3      UNDERSTANDING ROLE EFFICACY

Section-V      Calculation and analysis of Role Efficacy

PART-4      UNDERSTANDING ROLE STRESS

Section-VI      Calculation and analysis of Role Stress

PART-5      PROPOSED REGRESSION MODEL

Section-VII      Proposed model to relate Role Efficacy with independent variables

**PART-1**  
**DESCRIPTIVE STATISTICS & RELIABILITY TESTING**  
**OF SCALES**

**SECTION- I**  
**RESPONDENTS BACKGROUND ANALYSIS**

In this section, researcher discussed the details of the findings obtained after the analysis of demographic variables of the respondents like age, gender, marital status, education, work experience, salary, designation and types of company where respondent is presently working. The analysis of these variables aims to explain the composition of sample and also to explain what profiles of employees have been surveyed to explore role efficacy and role stress among insurance sector employees. Past research work proposed that different demographic profile has different effects on the various important work-related aspects of an employee (Coetzer & Rothmann, 2006). The data analysis of the above stated variables has been done by using frequency and percentages.

**Table No. 5: Showing Respondents Background Profile (Master Table)**

(N=150)

<b>Background Profile</b>		<b>Frequency</b>	<b>Percentage</b>
<b>Age Groups</b>	18-27	40	26.7%
	28-37	44	29.3%
	38-47	39	26.0%
	48-above	27	18.0%
<b>Gender</b>	Male	100	66.7%
	Female	50	33.3%
<b>Marital Status</b>	Married	107	71.3%
	Single	43	28.7%
	Other	0	0.0%
<b>Education (Highest)</b>	Up to 12th class	12	8.0%

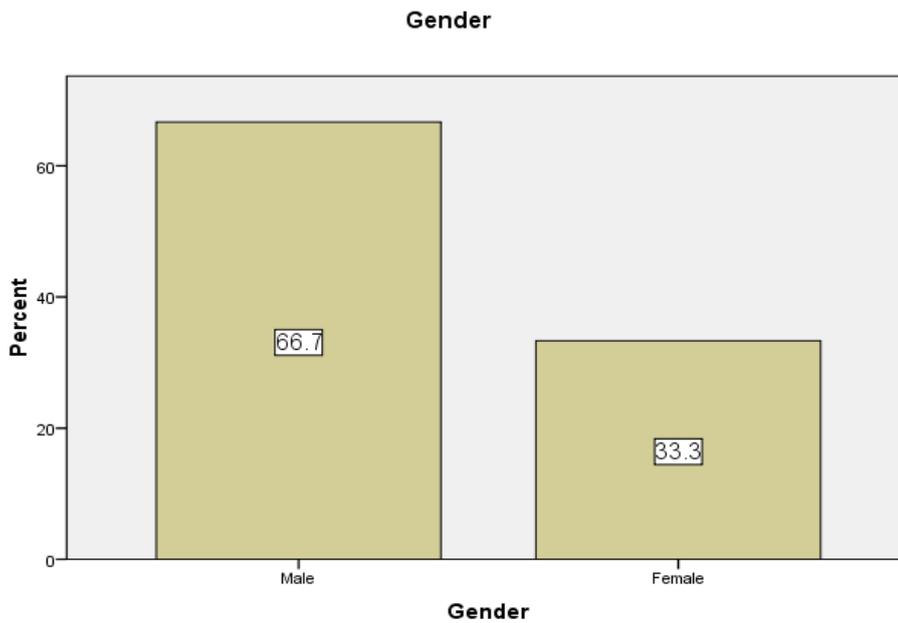
<b>level)</b>	Graduate	93	62.0%
	Post Graduate	42	28.0%
	Doctorate	1	0.7%
	Others	2	1.3%
<b>Total Work Experience</b>	1-10 years	90	60.0%
	11-20 years	31	20.7%
	21-30 years	17	11.3%
	31 years-above	12	8.0%
<b>Service length in present organization</b>	1-10 years	109	72.7%
	11-20 years	18	12.0%
	21-30 years	14	9.3%
	31 years-above	9	6.0%
<b>Designation</b>	Managerial Level	47	31.3%
	Executive Level (Mkt/Sales Exe./HR Exe. etc.)	103	68.7%
<b>Salary Category</b>	1-5 lac	103	68.7%
	6-10 lac	39	26.0%
	11-15 lac	6	4.0%
	16 lac- above	2	1.3%
<b>Type of Company</b>	Government Company	101	67.3%
	Private Company	49	32.7%

Sample demographic analysis describes the sample with the help of various demographic related variables. During the questionnaire drafting stage, various questions on respondents' demographic were included. This analysis helps to understand the composition of the sample and thereby it gives an opportunity to deduce about the population composition. Following are the details of data analysis of demographic variables:

**Table No.6: Showing Respondents Gender Distribution**

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	100	66.7	66.7	66.7
	Female	50	33.3	33.3	100.0
	Total	150	100.0	100.0	

A sample of 150 respondents was taken and the questionnaire was offered to each of them during data collection. There were approximately 66 % (100 out of 150) male while there were approximately 34 % (50 out of 150) respondents were female.

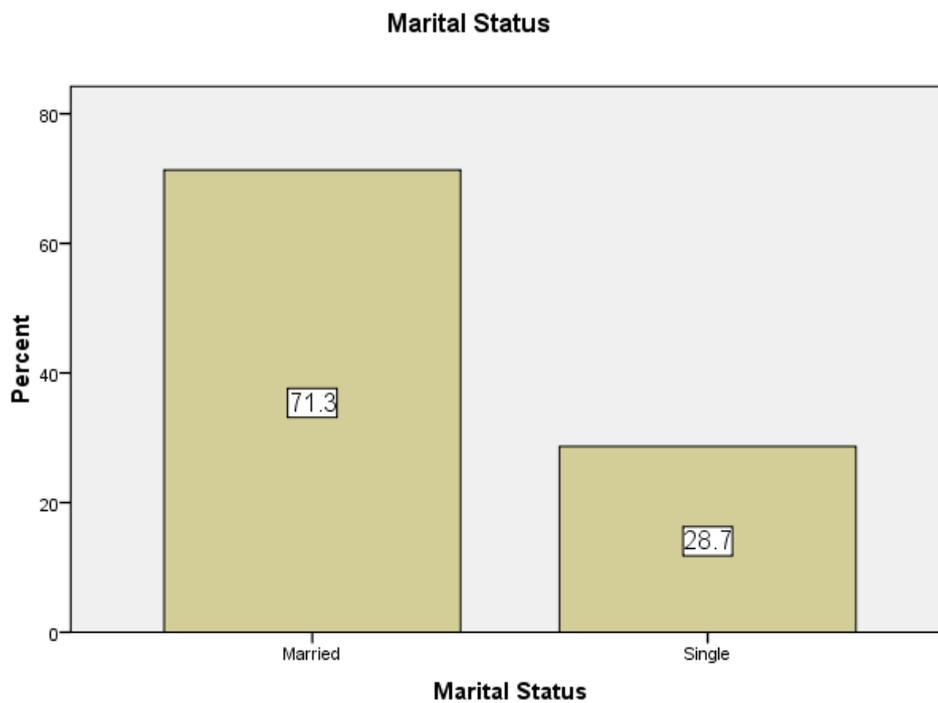


**Graph No. 1: Showing Respondents Gender Distribution**

**Table No. 7: Showing Respondents Marital Status**

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	107	71.3	71.3	71.3
	Single	43	28.7	28.7	100.0
	Total	150	100.0	100.0	

Marital status of the respondent is one of the key demographic variable. In the sample size of 150 approximately 71% respondents were married while approximately 29% of the respondents were single.

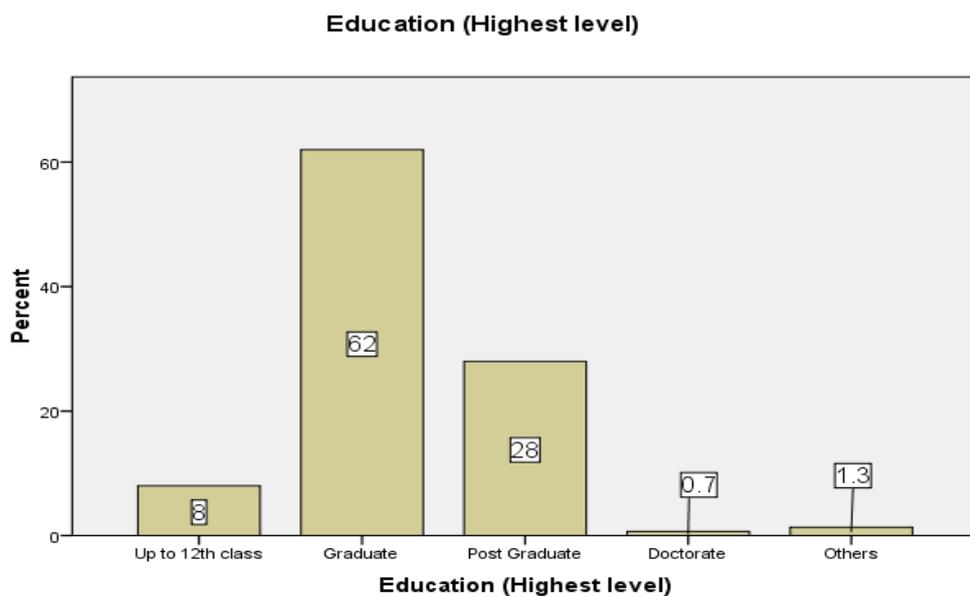


**Graph No: 2: Showing Respondents Marital Status**

**Table No. 8: Showing Respondents Education Level**

Education (Highest level)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 12th class	12	8.0	8.0	8.0
	Graduate	93	62.0	62.0	70.0
	Post Graduate	42	28.0	28.0	98.0
	Doctorate	1	.7	.7	98.7
	Others	2	1.3	1.3	100.0
	Total	150	100.0	100.0	

Since the research study involved the employees working with insurance companies so certain level of education supposed to be must. In the sample of 150 respondents majority of the respondents (62%) completed their graduation while the next highest level of education among the sample respondents was Post Graduate. 28% of the sample respondents were post graduated .However 8% respondents did managed to completed their education up to 12<sup>th</sup> class only and 0.7 % respondents were doctorate in their education qualification while 1.3 respondents opted for the other category.



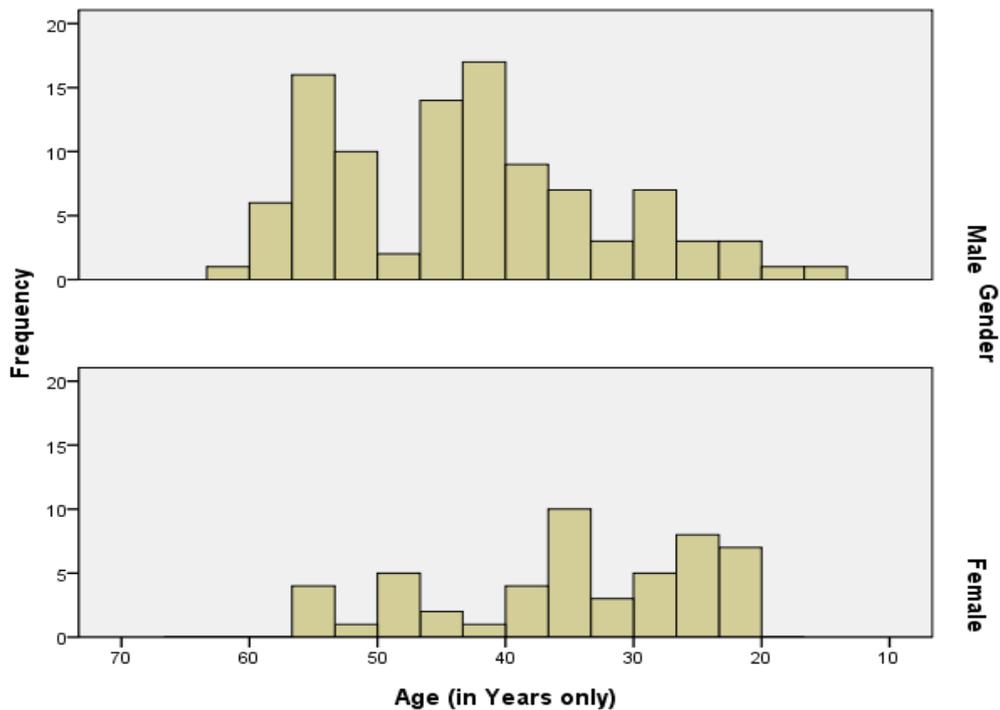
**Graph No. 3: Showing Respondents Education Level**

**Table No. 9: Showing Respondents Age**

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Age (in Years only)	150	46	19	65	36.41	10.645
Valid N (list wise)	150					

The average age of the sample is approximately 36.4. In the sample the minimum age found was 19 years while maximum age of respondent was found was 65. The standard deviation of 10.6 means that the age among all 150 respondents varied from +10.6 to -10.6 from the mean value.



**Graph No. 4: Showing Respondents Age**

The spread of the age in the sample among the male and female is not same. The distribution of the age in male category is dense within the age range of 35 years to 60 years while the distribution of age in female category is dense within 20 years to 40

years. Another interesting finding is those only male categories contain the respondent having age less than 20 years as well as the age more than 60 years.

➤ **Basic Descriptive Analysis**

Descriptive analysis of data was done to summarize the variables related to respondents. The purpose of this analysis is finding any un explainable departure in the vales and also to evaluate the demographic variables in various combinations.

• **Frequency Distribution of Professional Designations**

There were 150 respondents who were surveyed. The sample includes the employees from two levels, namely, managerial level and executive level. 31.3 % respondents were from managerial level while 68.7 % were from executive level.

**Table No. 10: Showing Respondents Frequency distribution of Professional Designations**

<b>Designation</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Managerial Level	47	31.3	31.3
Executive Level (Mkt/Sales Exe./HR Exe. etc.)	103	68.7	100.0
Total	150	100.0	

• **Frequency Distribution of Category of Companies**

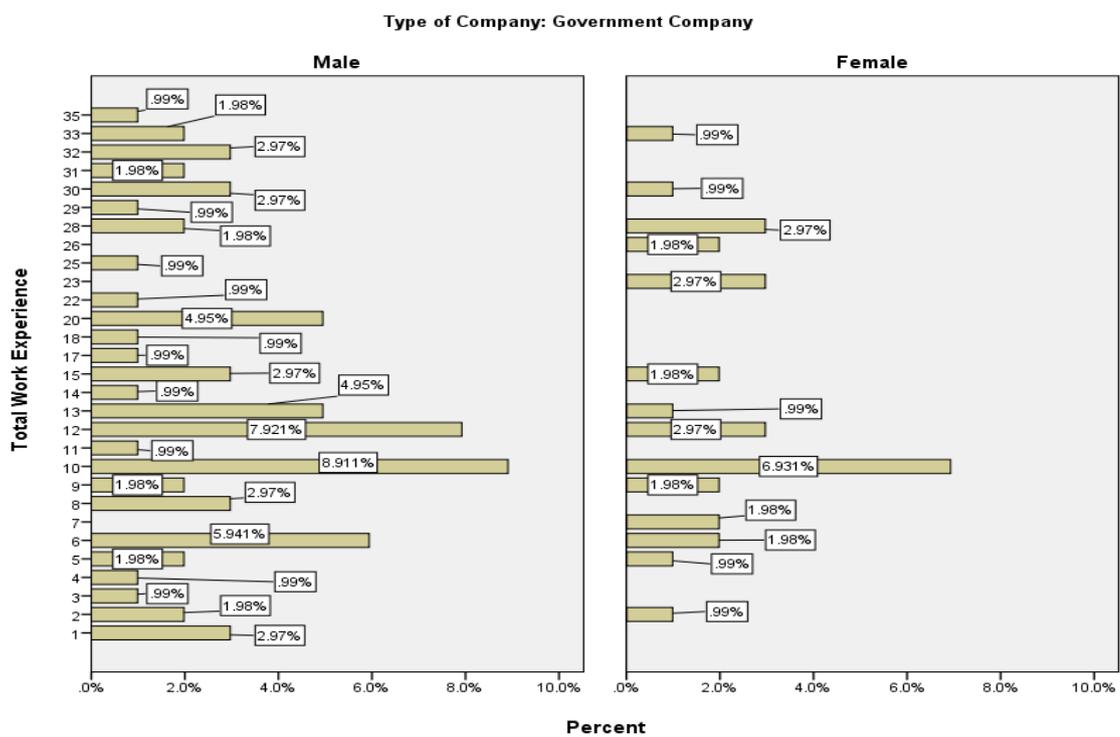
The respondents of different levels belonged to government as well as private companies. Total 67.33 % respondents were working in Government Company while 32.67% respondents were working in private companies.

**Table No.11: Frequency distribution of Category of Companies**

<b>Type of Company</b>	<b>Count</b>	<b>Percent</b>
Government Company	101	67.33
Private Company	49	32.67

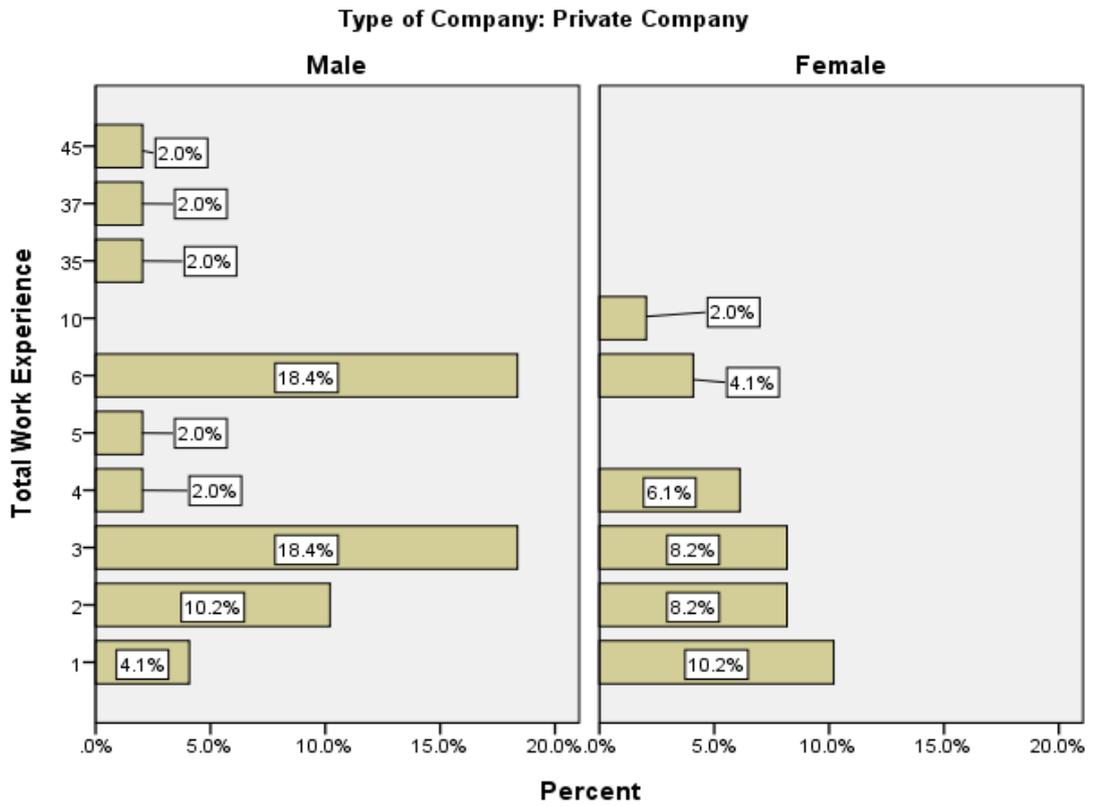
- **Gender Wise Distribution of Total Work Experience Among Different Categories of Companies**

Distribution of work experience was evaluated with the types of companies and gender of respondents. The analysis has been represented by the comparative bar chart. In the government companies the experience of female respondents centered around 15 years or less whereas the experience of male respondents centered around 15 years as well as 31 years. Comparatively less number of female respondents belongs to the category of experience that ranges from 25 to 35 years.



**Graph No: 5 Showing Respondents’ Experience in Government Company**

In case of private company, the respondents of male category show greater distribution of experience. Male respondents were found to have the experience up to 45 years while the maximum experience of female was about 10 years and most of the female were centred between the experiences of 1 to 10 years. Distribution of total experience among both the gender in private company is represented by using following bar chart.



**Graph No 6: Showing Respondents' Experience in Government Company**

## **SECTION II**

### **KEY VARIABLES ANALYSIS**

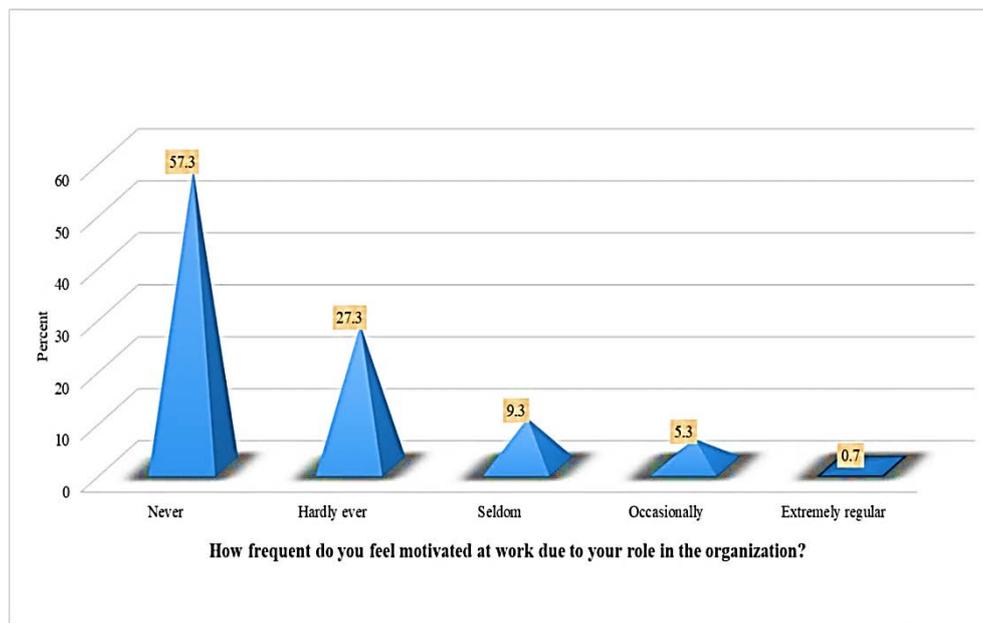
In this section, researcher is aiming to present the analysis of key variables such as level of employee motivation, overall commitment toward present organization and level of job satisfaction. Role stress as a reason to quit job has been analysed to understand the impact of role stress. Analysis of employee effectiveness and role efficacy has been also conducted to explore

Social work requires those people who join the job because of the feeling that developed after catering such needs that demand greater level of empathy with people. Insurance is one such industry where employees come due to various reasons but one prominent reason is having empathetic nature(Fisher, 2009). However, the call of role may many a times differ from just staying empathetic. Insurance is one such peculiar industry that has latent or indirect connects with social work (Wooten, Kim, & Fakunmoju, 2014). When employees of private and public insurance companies were asked to share “how frequent they feel motivated at work due to their role in the organization?” their response shows that their frequency of feeling motivated is very poor.

**Table No. 12: Showing Frequency of Feeling of Motivation At Work Due To Assigned Role**

	<b>Frequency</b>	<b>Percent (%)</b>
<b>Never</b>	86	57.3
<b>Hardly ever</b>	41	27.3
<b>Seldom</b>	14	9.3
<b>Occasionally</b>	8	5.3
<b>Extremely regular</b>	1	0.7
Total	150	100

From the table it can be infer, majority n=86 (57.3 percent) of the employee selected the category ‘never’ while n=41 (27.3 percent) employees were in the category of hardly ever motivated due to their role in the organization. Together 6 percent employees responded that they felt either occasionally motivated or extremely regularly motivated because of the role they have been assigned in the organization.



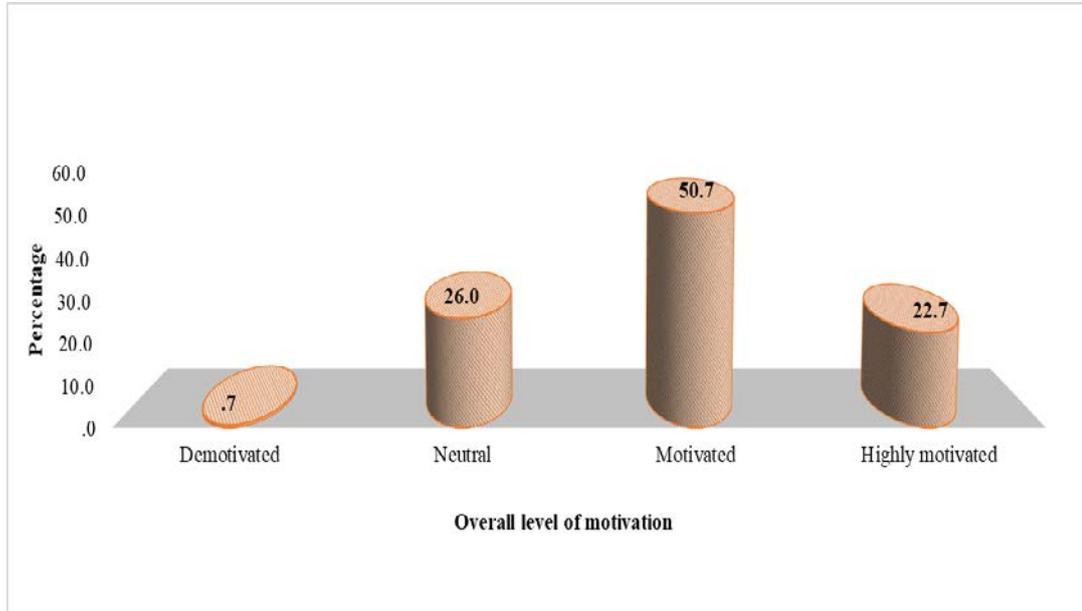
**Graph No. 7: Showing frequency of feeling of motivation at work due to assigned role**

In the analysis of another question different observation was obtained. The responses to level of motivation change with the change in the criteria used to rate the level of motivation. When the employees were asked to consider their stay in the organization to rate their level of overall motivation. The results of the overall motivation were highly different from the results when they were asked to share their level of motivation due to assigned role.

**Table No. 13: Showing Frequency of Overall Level of Motivation At Work**

	<b>Frequency</b>	<b>Percent (%)</b>
<b>Demotivated</b>	1	.7
<b>Neutral</b>	39	26.0
<b>Motivated</b>	76	50.7
<b>Highly motivated</b>	34	22.7
<b>Total</b>	150	100.0

From the above table that is showing the frequency of overall level of motivation at work it can be found that extremely low percentage of people (0.7 percent) were demotivated. It has been found that half of the respondents were under the category of motivated. Further a considerable difference can be seen in the category where employees rated their overall level of motivation as highly motivated (22.7 percent) and in the category of demotivated level. 26 percent employees rated their overall level of motivation under the neutral category.



**Graph No. 8: Showing frequency of overall level of Motivation at Work**

This analysis shows that may be the assigned role can result in less motivation however considering the overall stay in the organization resulted in relatively higher motivation among the employees of insurance companies.

Job satisfaction has been one of the suggested key variables in research related to organization context. In social work studies job satisfaction has been considered (Farmer, 2010). Insurance companies are in the backdrop of this research study where employees work as sales people. Why job satisfaction has been so dominantly researched in the social work organizations as well as in the ‘for-profit’ organizations is that research results have shown that greater the level of job satisfaction, lessen the chances that the employee will quit the job (Cole, 2004). The analysis of job satisfaction proved to be beneficial to employees as well as to the organizations. Insurance companies have not regarded as social work organizations but the nature of the business the insurance companies deal in is very close to the intent of social work organizations therefore when job satisfaction is taken care of then be the social worker or the sales people of insurance company, the employees become more responsive to clients (Gleasonwynn & Mindel, 1999) . Following table is showing the frequency of overall job satisfaction.

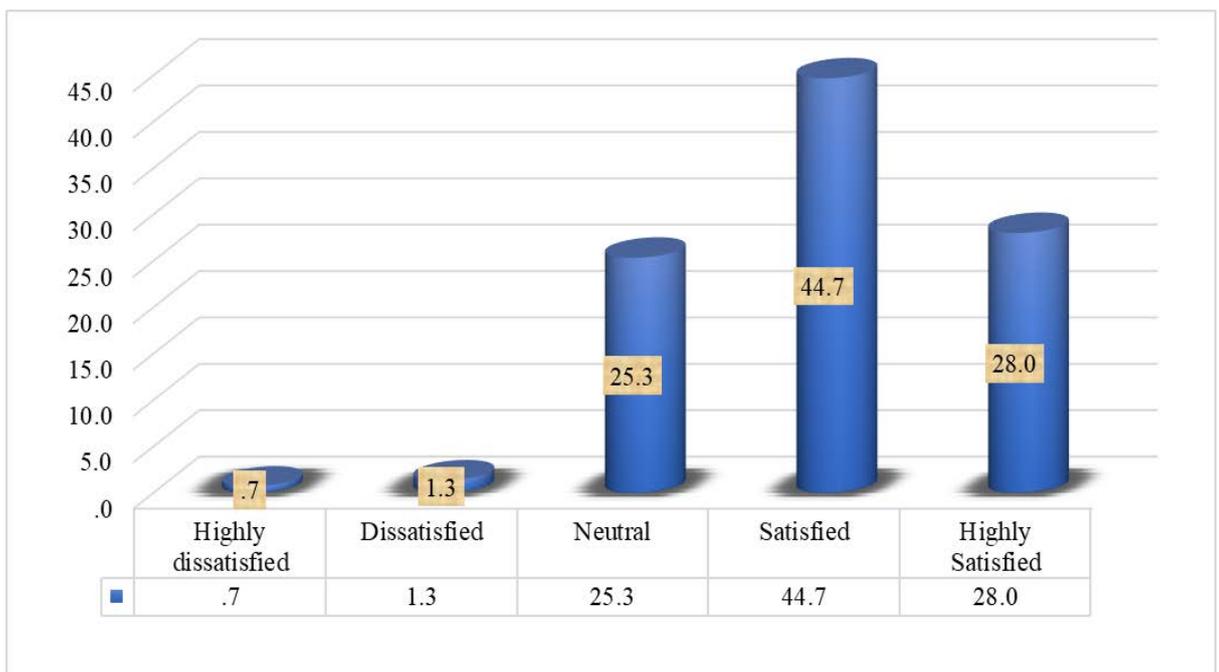
**Table No. 14: Showing frequency of overall Job Satisfaction in Current Role**

	<b>Frequency</b>	<b>Percent</b>
<b>Highly dissatisfied</b>	1	.7
<b>Dissatisfied</b>	2	1.3
<b>Neutral</b>	38	25.3
<b>Satisfied</b>	67	44.7
<b>Highly Satisfied</b>	42	28.0
Total	150	100.0

The analysis of the responses obtained about the job satisfaction in current role shows that majority of the respondents (44.7 percent) feel satisfied in their current role. 28 percent of the employees rated as highly satisfied category under the overall job

satisfaction. The interesting observation that can be seen in the above table is that together there were 2 percent employees who either dissatisfied or highly dissatisfied in their current role.

In many studies on job satisfaction in insurance sector, it has been found that job satisfaction is among some of the leading challenges for the organizations as the overall job satisfaction infer about the competence of organization as well as effectiveness of the human development related policy level framework(Reddy & Sumalatha, 2019). One of the key factors that influence the job satisfaction is the present role of the employees. Evaluation of the job satisfaction based on the present role in consideration infer about how employees feel about their overall involvement because by and large role determine the activities that employees need to perform. In social work organizations (Singh A. , 2012) .



**Graph No. 9: Showing frequency of overall Job Satisfaction**

Commitment towards organization refers to the extent to which individuals found themselves get identify with and also feel associated and involved in the organization. As a concept organizational commitment is perception-based response (Martin Geisler, Hanne Berthelsen , & Tuija Muhonen , 2019). The degree of commitment found to be affected by role demand. Social work, social service departments and the sum of other industries such as insurance are considered as highly demanding work

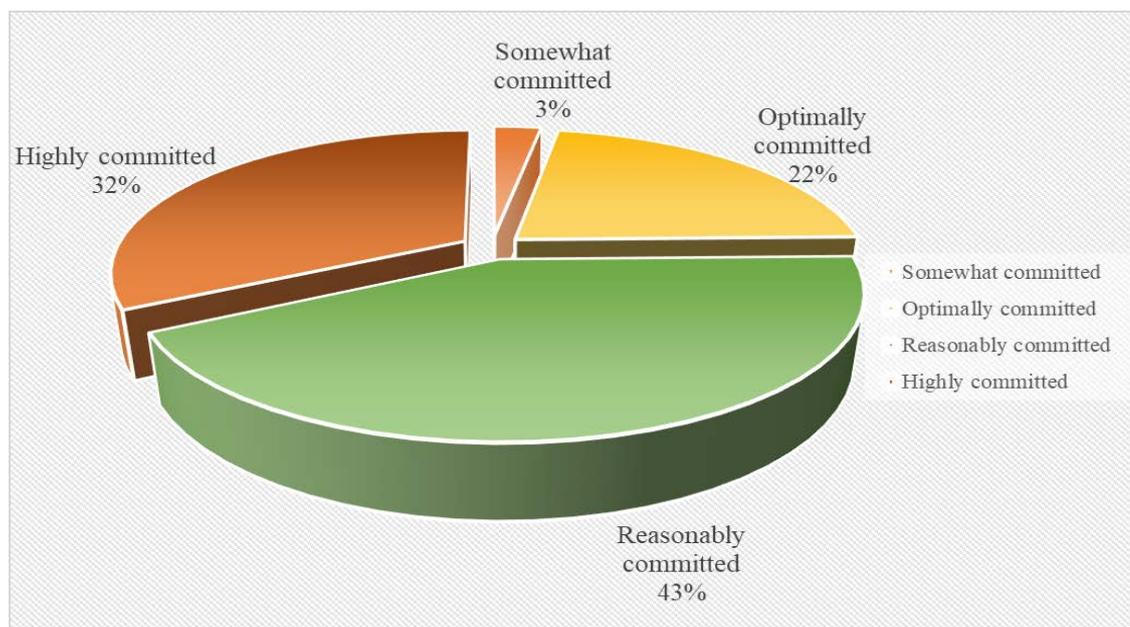
areas. Research studies shows that organizational commitment is associated with the type of organization and nature of work for example the employees of industries that are close to social work have least level of role conflict and so these employees are highly committed to their organizations (Mishra & Panda, 2012).

Public or private types of insurance companies are no exception to what is found correct in context of social work. The level of role conflict among the employees of insurance companies is also less because of the attitude and mind set these employees developed when they interacted with the needy and deprived people who seem most eligible for insurance coverage. These employees remain committed for their companies because insurance companies do offer some of the suitable least premium oriented insurance policies. The purpose of these policies is to serve the insurance need of these deprived people.

**Table No. 15: Showing frequency of Level of Commitment**

<b>Level of Commitment</b>		
	<b>Frequency</b>	<b>Percent</b>
<b>Somewhat committed</b>	4	2.7
<b>Optimally committed</b>	33	22.0
<b>Reasonably committed</b>	64	42.7
<b>Highly committed</b>	49	32.7
<b>Total</b>	150	100.0

The analysis of the responses obtained about the level of commitment shows that majority of the respondents (42.7%) respondents were found to be reasonably committed while 32.7% of the respondents were found to be highly committed and only 2.7% of the respondents were somewhat committed.



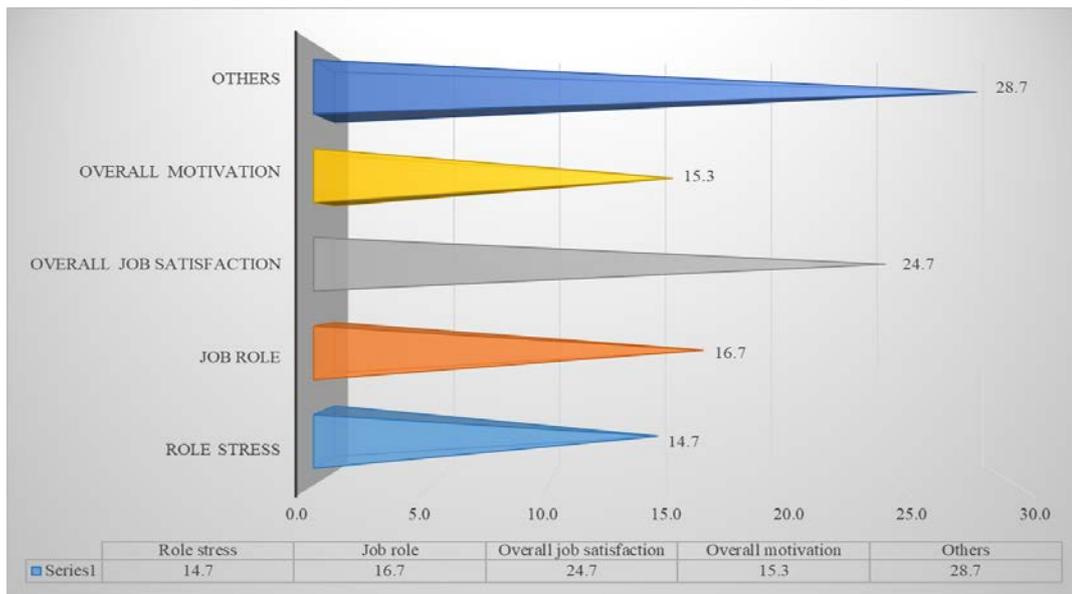
**Graph No. 10: Showing frequency of level of commitment**

Data analysis shows that majorly (28.7%) there were various miscellaneous reasons that cause an employee to leave the organization. Overall job satisfaction (24.7%) is one of the prominently quoted major reason of leaving current company.

**Table No 16: Showing frequency of Major Cause of Leaving Current Company**

Major Cause in case you leave current company		
	Frequency	Percent
<b>Role stress</b>	22	14.7
<b>Job role</b>	25	16.7
<b>Overall job satisfaction</b>	37	24.7
<b>Overall motivation</b>	23	15.3
<b>Others</b>	43	28.7
<b>Total</b>	150	100.0

Overall job satisfaction is followed by reasons related to job role (16.7%), overall motivation (15.3%) and role stress (14.7%) as a cause to quit the current job.



**Graph No. 11: Showing frequency of Major Cause of Leaving Current Company**

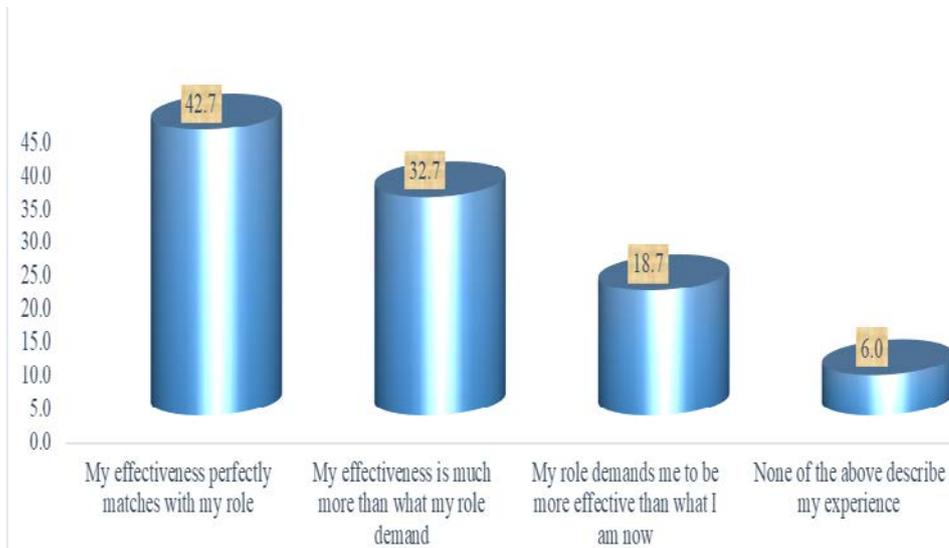
As an employee your potential effectiveness for a particular role in your organization is expressed as Role Efficacy. Select the one from the following that best can describes your experience about your effectiveness and your role on a broader side:

**Table No 17: Showing frequency of Categories of Effectiveness in Assigned Role**

<b>Your Experience about your effectiveness in your role</b>		
<b>Statement</b>	<b>Frequency</b>	<b>Percent</b>
My effectiveness perfectly matches with my role	64	42.7
My effectiveness is much more than what my role demand	49	32.7
My role demands me to be more effective than what I am now	28	18.7
None of the above describe my experience	9	6.0
Total	150	100.0

The data analysis shows that 42.7% of the respondents were from the categories who said, “My effectiveness perfectly matched with my role” whereas 32.7% of the respondents belonged to the category of the respondents who said, “My effectiveness

is much more than what my role demand” while 18.7% of the respondents fall in the category that represent the opinion “My role demands me to be more effective than what I am now” and 6% were such respondent who did not belong to any of these categories.



**Graph No. 12: Showing frequency of Categories of Effectiveness In Assigned Role**

**SECTION III**  
**ANALYSIS OF ROLE EFFICACY DIMENSIONS AND ROLE**  
**STRESS AREAS**

Essential skills, education and competency are required for employees. The employees in organizations assigned role and to perform in that role the employee use the acquired skills, education and competency (Pareek U. , 2002). Role efficacy reflects self-confidence of employees in their competencies and their aptitude to regulate their behavior while performing role and also during their interaction in the social work environment. The employees developed and grow when they perform in assigned role (Pestonjee & Pandey, 1996).

Dimensions of role efficacy are Centrality, Integration, Proactivity, Creativity, Inter-role Linkage, Helping relationship, Superordination, Influence, Growth and Confrontation. Integration, proactivity, Creativity and Confrontation are related to 'role making' construct of role efficacy, Centrality, Influence and Personal Growth Confrontation are related to 'Role Centering' construct of role efficacy and Inter-role linkage, helping relationship and Superordination are related to 'role linking' construct of role efficacy.

Key role stress areas are 'stress due to self-role distance', 'stress due to inter role distance', 'stress due to role boundedness' and 'stress due to personal inadequacy'. These four role stress areas represent stress due to role expectation, stress due to different roles, stress due to sacrifices of comfort and interest to meet the expectations of role and lastly due to incompetency respectively.

**PHASE 1**  
**ANALYSIS OF ROLE EFFICACY DIMENSIONS**

Centrality dimension refers to the extent of importance an employee feels due to role at work place. In the field of social work centrality dimension of role efficacy considered as important aspect because it is essential for work involvement (Sinha & Achhnani, 2017). The human resource experts suggest that improvement on centrality dimension improve the performance (Gavriloaiei, 2016).

**Table No 18: Showing Respondents’ view related to Centrality Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Centrality	Very little importance is given to my role in this organization. I feel peripheral here	18	12.0%
	I am doing a useful and fairly important work.	71	47.3%
	My role is very important in this organization; I feel central here.	61	40.7%
Dimension Centrality	I feel I am peripheral in this organization	27	18.0%
	I think I am doing fairly important work	90	60.0%
	I feel quite central in the organization	33	22.0%

From the table showing respondents’ view related to Centrality Dimension of Role Efficacy, it can be observed that most of the respondents that is 47.3 percent perceived that they were doing a useful and fairly important work while 40.7 percent of the respondents perceived that their role is very important in the organization and they feel central in the organization due to their assigned role. Only 12 percent of the respondents perceived that they feel peripheral as very little importance is given to their role in this organization. It can be observed that more than half of the respondents that are 60 percent believe that they are doing fairly important work. While 22 percent of respondents perceived that their role is quite important in the

organization and they feel central in the organization. But 18 percent of the respondents think they are peripheral in the organization.

Gavriloaiei described that the centrality dimension reflects how the employee feel and act at the work place and also in the social interaction outside the work place. Based on the survey of more than two hundred employees on the centrality aspect it has been found that response on centrality dimension can be used as an indicator of pro-organization behaviour (Gavriloaiei, 2016).

Role of an employee bound the possibility to reveal skills and when such employees are offered the role which is superior or with greater scope as compared to other roles then employee realize the importance of his skill sets and his role as a result the role efficacy become greater and the employee become more involved in role and it is termed as self-role integration or integration(Singh R. , Role Efficacy: An Important Determinant of Effective Performance, 2018).

**Table No 19: Showing Respondents’ view related to Integration Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Integration	My training and knowledge are not used in my present role.	40	26.7%
	My training and expertise are not fully utilized in my present role	16	10.7%
	I am able to use my knowledge and training very well here.	94	62.7%
Dimension Integration	I do not enjoy my role	19	12.7%
	I enjoy some parts of my role and not others	39	26.0%
	I enjoy my role very much	92	61.3%

From the table showing respondents’ view related to Integration Dimension of Role Efficacy, it can be observed that more than half of the respondents that is 62.7 percent believes that they are able to use their knowledge and training very well in the

organization while 26.7 percent of respondents perceived that in their present role, their knowledge and training are not utilized but 10.7 percent of the respondents stated their training and expertise are not fully utilized in their present role. The other very important finding in this analysis is that more than half of the respondents that is 61.3 percent enjoy their role in the organization while 26 percent of the respondents perceived that they only enjoy some parts of their role and not others in the organization. But 12.7 percent of respondents stated that they do not enjoy their role in the organization.

Social work and insurance industry share some of the common features for example, in both the cases the ability to work together with possibly high level of empathy and compassion for each other is essential for success.

Research shows that lacking of care, courtesy and politeness and also lacking of skills lead to weak self- role integration. Employees who are in the role of sales in insurance companies need to understand the desirability of the insurance products for people. They need to take a holistic approach towards people so that insurance need of the people can be better understood (Singh A. , 2012).

This becomes more complex when it comes to selling community-based insurance or group insurance. The employees who understand the social aspect of their job as a seller and also able to evaluate social aspect of insurance needs, all these employees enjoy their role and feel connected with colleagues as well as with customers. In case of social work, social worker discharges their responsibility to a wide range of people with diverse range of problems. Social workers do need to practice empathy and care a lot in their duty. Self-role integration become critical as it contribute to the clarity of role which finally help social workers in managing and solving complex and sensitive situations (OBE, 2017).

Initiative taking ability of the employee refers to proactivity and it is one the important dimensions of role efficacy (Upadhyay & Singh, 2012).

**Table No 20: Showing Respondents’ view related to Proactivity Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Proactivity	I have little freedom in my role; I am only an errand boy.	16	10.7%
	I operate according to directions given to me.	70	46.7%
	I can take initiative and act on my own in my role	64	42.7%
Dimension Proactivity	I have little freedom in my role	35	23.3%
	I have enough freedom in my role	64	42.7%
	I have a great deal of freedom in my role	51	34.0%

From the table showing respondents’ view related to Proactivity Dimension of Role Efficacy, it is perceived that 46.7 percent of respondents operate according to the directions provided to them in the organization while 42.7 percent of respondents take initiatives and act on their own in their role. But 10.7 percent of respondents have stated that they have very little freedom in their role in the organization.

The other very important finding in this analysis is that 42.7 percent respondents stated that they have enough freedom in their role while 34 percent of respondents stated that they have a great deal of freedom in their role. But 23.3 percent of respondents claimed that they have very little freedom in their role. Freedom in role help and motivate the employees to take initiatives.

When willingness of the employees joins the freedom in role offered by organization, it lead to low level of role efficacy (Upadhyay & Singh, 2012). In insurance companies’ sales role is designed with curtained level of policy guided freedom and

this act in positive manner for the employees who are into the sale positions irrespective of whether they are at executive level or at manager level.

Creativity promotes thinking and applying new alternative ways to solve problem. Employees who are good at this dimension and role also demand creative approach then the level of role efficacy is high (Pareek U. , 2002).

**Table No 21: Showing Respondents’ view related to Creativity Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Creativity	I have no time for creative work in my role	26	17.3%
	I am doing usual, routine work in my role.	45	30.0%
	In my role I am able to use my creativity and do something new	79	52.7%
Dimension Creativity	I have no opportunity to be innovative or to do something creative	27	18.0%
	I am able to be innovative in my role	67	44.7%
	I do a good job according to a pre-decided schedule	56	37.3%

From the table showing respondents’ view related to Creativity Dimension of Role Efficacy, it is observed that more than half of the respondents that is 52.7 percent use their creativity to do something new while 30 percent of respondents just do their routine work in the organization. But 17.3 percent of respondents stated that they don’t get enough time for creative work in their role.

Employees who deal with varied level of individual centric problem solving or need exploration, creativity helps them to bring better results in their role. Social workers who work in health and care or in the NGOs related to anti-addiction campaigning require creative approach to persuade people(Gleasonwynn & Mindel, 1999). Insurance sales people also need creative thinking to convince especially poor and

deprived people to take initiative and to become member of the groups that can cover them in group insurance with least premium.

From the table, it can also be perceived that 44.7 percent of respondents are able to be innovative in their assigned role in the organization while 37.3 percent respondents stated that they are doing well in pre decided schedule. But the very important thing to observe here is that 18 percent of respondents stated they have not been provided with the opportunity to be innovative or to do something new in the organization.

Inter role linkage dimension describe how role can generate the feeling of connectedness or even feeling of isolation. In this research respondents were asked some of the questions to explore their views on the inter-role linkage dimension of role efficacy(Pareek U. , 2002)

**Table No 22: Showing Respondents' view related to Inter-role linkage Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Inter-role Linkage	No one in the organization responds to my ideas and suggestions.	19	12.7%
	I am alone and have almost no one to consult in my role	31	20.7%
	I work in close collaboration with some other colleagues	100	66.7%
Dimension Inter-role Linkage	I do not work on any committees	40	26.7%
	I am a member of a task force of a committee.	57	38.0%
	Others in the organization see my role significant to their work	53	35.3%

From the table showing respondents' view related to Inter-role linkage Dimension of Role Efficacy, it is analysed that more than half of the respondents that is 66.7 percent stated that they work in close collaboration with some other colleagues in the organization while 20.7 percent of the respondents stated that they are alone in their job and there is no one available for consultation. But 12.7 percent of respondents

stated that there is no one in the organization who responds to my ideas and suggestions. The other very important finding in Inter-role linkage Dimension of Role Efficacy is that 38 percent of respondents are member of a task free committee while 35.3 percent of respondents stated that others in the organization see their role as significant in their work. But 26.7 percent of respondents stated that they do not work on any committees.

Helping relationship dimension of the role efficacy is important for all the roles but it become more important when the role of employee involve variety of conflicting situations or variety of questioning and convincing (Chaudhary & Jain, 2014). Time and again support and help are required by the employees when they perform in their role. Role efficacy found to be high for the role that involve group approach in dealing with a problem or a situation but under the constant or timely help and support (Singh R. , Role Efficacy: An Important Determinant of Effective Performance, 2018).

**Table No 23: Showing Respondents’ view related to Helping relationship Dimension of Role Efficacy**

	<b>Statement</b>	<b>Frequency</b>	<b>Percent</b>
Dimension Helping relationship	Whenever I have a problem, others help me.	24	16.0%
	When I need some help, none is available	29	19.3%
	Whenever I have a problem, others help me.	97	64.7%
Dimension Helping relationship	Hostility rather than cooperation is evident here	26	17.3%
	People operate more in isolation here	30	20.0%
	I experience enough mutual help here	94	62.7%

From the table showing respondents’ view related to helping relationship Dimension of Role Efficacy, it is observed that more than half of the respondents that is 64.7 percent stated that they get help from others whenever they are in problem while 19.3

percent of respondents stated that there is no one available for help in the organization. Apart from this 16 percent of respondents stated that others help them in problems. The other very important finding in this table is that majority of the respondents' that is 62.7 percent experienced mutual help in the organization while 20 percent of respondents stated that they operate in isolation. At the same time, 17.3 percent respondents stated that hostility is evident in their organization.

Superordination dimension is related to feeling that employee has because of importance of role for the organization as well as for the society. When role is scope full enough that it can contribute benefits to organization or society or to both then in such role employee feel superordinate (Malik R. M., 2016).

**Table No 24: Showing Respondents' view related to Superordination Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Superordination	I regret that I do have the opportunity to contribute to society in my role.	41	27.3%
	I have the opportunity to have some effect on the larger society in my role.	48	32.0%
	What I am doing in my role is likely to help other organizations or Society.	61	40.7%
Dimension Superordination	I wish I could do some useful work in my role	56	37.3%
	I am able to contribute to the company in my role.	55	36.7%
	I am able to serve the larger parts of society in my role	39	26.0%

From the table showing respondents' view related to subordination Dimension of Role Efficacy, it is analysed that 40.7 percent of respondents stated that their work is likely to help other organizations or society while 32 percent of respondents stated that with their role that have the opportunity to have some effect on the larger society. But 27.3 percent of respondents regret for not having the opportunity to contribute in

the society with their role. From the above that it can also be observed that 37.3 percent of respondents wish that they could do some useful work along with their role while 36.7 percent of respondents stated that with their role, they are able to contribute to the company. While only 26 percent of respondents believe that with their role, they are able to serve the larger parts of society.

Pethe and Chaudharistated that in an organization, the individual is expected to perform certain roles. The performance of these roles depends upon the individual's perception of whether he feels himself capable of executing these roles effectively. Apart from this the organization in which the individual is working also affects the execution of the role. If he feels that the organizational factors are beyond his control then the effectiveness of performing a particular role may get affected (Pethe & Chaudhari, 2000).

**Table No 25: Showing Respondents' view related to Influence Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Influence	I have no power here	22	14.7%
	I contribute to some decisions	66	44.0%
	My advice is accepted by my seniors	62	41.3%
Dimension Influence	I cannot make any independent decisions.	37	24.7%
	I am sometimes consulted on important matters	58	38.7%
	I am able to influence relevant decisions	55	36.7%

From the table showing respondents' view related to Influence Dimension of Role Efficacy, it is observed that 44 percent of respondents contribute in decision making while 41.3 percent of respondents have stated that their advices are accepted by their seniors. But 14.7 percent of respondents regret for not having any power in the organization. The other very important thing that can be analyzed from the above table is that 38.7 percent of respondents believe that they are sometimes consulted on important matters while 36.7 percent of respondents stated that they are able to

influence relevant decisions. But 24.7 percent of respondents stated that they cannot take any decisions independently.

Some role of an employee has such responsibilities to discharge that these roles describe how much a job is influential? In insurance companies and within the context of sales jobs the designation of employees by and large indicates the influence( Bell, 2017). However, degree of commitment related to the role, authorities, independence in decision making etc. affect the influence of role. Some influences are outside the actual construct of role because such roles have associated social cause and therefore their influence appeared to be comparatively more. For example, in case of social work-related roles have these kind of influence(Farmer, 2010).

The growth dimension is about the perception of employee about prospect of personal growth that the employee could have because of the work role at present. In sales roles, lack of growth prospect cause dissatisfaction and poor role efficacy(Malik R. M., 2016). In insurance companies, employees quit their jobs in sales area due to either conditional prospect of growth or target related growth. Conditional prospect of growth implies that some conditions related to stay in present organization, completion of some training etc. Sales roles are among such role that limits growth opportunity for employee and this lead to decrease in the level of role efficacy(Coetzer & Rothmann, 2006).

**Table No 26: Showing Respondents' view related to Growth Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Growth	I am slowly forgetting all that I learnt (my professional knowledge)	49	32.7%
	Some of what I do contribute to my learning	51	34.0%
	I have tremendous opportunities for professional growth in my role	50	33.3%
Dimension Growth	I am involved in routine or unrelated activities and have learnt nothing.	22	14.7%
	I learn a few new things in my role	74	49.3%
	I learn a great deal in my role	54	36.0%

From the table showing respondents' view related to Growth Dimension of Role Efficacy, it is observed that 34 percent of respondents believe that their role contributes in their learning while 33.3 percent of respondents stated that in their role they have tremendous opportunities for professional growth. But at same time 32.7 percent of respondents stated that they are slowly forgetting all that they learned. The other very important thing to observe in the above table is that almost half of the respondents that is 49.3 percent stated that they learn few new things in their role while 36 percent of respondents stated that in their role they learn great deal. But 14.7 percent of respondents have stated that they are involved in routine or unrelated activities and as a result they have not learnt anything new in their role.

**Table No 27: Showing Respondents' view related to Confrontation Dimension of Role Efficacy**

Statement		Frequency	Percent
Dimension Confrontation	I dislike being bothered with problems	14	9.3%
	I refer the problem to my boss or to some other person	47	31.3%
	When a subordinate brings a problem to me, I help to find a solution	89	59.3%
Dimension Confrontation	I dislike being bothered with interpersonal conflict	17	11.3%
	When people bring problems to me, I tend to ask them to work it out themselves.	30	20.0%
	I enjoy solving problem related to my work.	103	68.7%

From the table showing respondents' view related to Confrontation Dimension of Role Efficacy, it is analysed that more than half of the respondents that is 59.3 percent help their subordinates when they face problems while 31.3 percent of respondents stated that they refer the problem to their boss or to some other person. At the same time 9.3 percent of respondents stated that they dislike to be bothered about others problems. The other very interesting thing to observe here is that majority of the respondents that is 68.7 percent enjoy solving problems that are related to their work while 20 percent of respondents stated that when people bring problems, we ask them to find the solution on their own. But 11.3 percent of respondents expressed that they dislike being bothered with interpersonal conflicts.

**PHASE 2:  
ANALYSIS OF ROLE STRESS AREAS**

Stress refers to such a situation where one can feel tension and pressure and out of many sources of stress one is the role an employee is at present. Role stress developed gradually due to responsibilities and obligations that are linked to the role. Researchers found four stress areas and Self-role distance is one of these( Bell, 2017). It is the area of stress that includes conflict between the role expectation and self-concept. The distance specifies the conflict and struggle that an employee feels.

**Table No. 28: Showing Respondents’ View Related To ‘Stress Due To Self-Role Distance**

		<b>Frequency</b>	<b>Percent</b>
I am not able to do many things for which have a great liking.	Never or scarcely feels	14	9.3%
	Occasionally feels	50	33.3%
	Sometime feels	48	32.0%
	Frequently	18	12.0%
	Always feels	20	13.3%
I feel duty-bound as an employee.	Never or scarcely feels	13	8.7%
	Occasionally feels	18	12.0%
	Sometime feels	48	32.0%
	Frequently	48	32.0%
	Always feels	23	15.3%
I am not able to use my strength in the various things I do.	Never or scarcely feels	21	14.0%
	Occasionally feels	39	26.0%
	Sometime feels	38	25.3%
	Frequently	34	22.7%
	Always feels	18	12.0%

From the table showing respondents’ view related to stress due to self-role distance, it is observed that 33.3 percent of respondents occasionally feels that they are not able to do many things for which they have a great liking while 9.3 percent of respondents

stated that they scarcely feel that they are not able to do many things for which they a great liking. As indicated in the table we can see that 32 percent of respondents feel that duty bound as an employee and an equal number of respondents sometimes feels duty bound as an employee while 15.3 percent of respondents always feel that as an employee, they are duty bound. From the table above it can be perceived that 26 percent of respondents occasionally feel that they are not able to use their strengths in various things they do while 25.3 percent of respondents stated that they too sometimes feel that they are unable to use their strengths in things they are doing. But at the same time 12 percent of respondents always have a feeling of not using their strengths in various things they do.

Stress due to inter role distance arise when an employee performs multiple roles within the organizational scope as defined by the roles and outside the organization scope. The distance among various roles increase with increase in the demand or expectations by one role as compared to other roles(Coetzer & Rothmann, 2006).

**Table No 29: Showing Respondents’ View Related To ‘Stress Due To Inter Role Distance’**

		<b>Frequency</b>	<b>Percent</b>
My role in the family conflicts with my work role.	Never or scarcely feels	33	22.0%
	Occasionally feels	27	18.0%
	Sometime feels	32	21.3%
	Frequently	33	22.0%
	Always feels	25	16.7%
I do not get enough time for my family or friends because of my other responsibilities.	Never or scarcely feels	27	18.0%
	Occasionally feels	37	24.7%
	Sometime feels	44	29.3%
	Frequently	23	15.3%
	Always feels	19	12.7%
I have some other obligations (in a club, a voluntary organization, a party etc.) which conflict with my main work.	Never or scarcely feels	30	20.0%
	Occasionally feels	41	27.3%
	Sometime feels	34	22.7%
	Frequently	19	12.7%
	Always feels	26	17.3%

From the table showing respondents' view related to stress due to inter role distance, it can be inferred that 22 percent of respondents scarcely feels that their role in the family conflicts with their work role but equal number of respondents stated that they frequently feel that their role in the family conflicts with their work role. From the above table it is also observed that 29.3 percent of respondents sometimes feel that they don't get enough time for their family or friends because of their other responsibilities while 12.7 percent of respondents stated that they always have a feeling of not getting enough time for their family and friends because of their other responsibilities. 27.3 percent of respondents stated that they occasionally feel that their other obligations conflicts with their main work while 17.3 percent of respondents always feel that their other obligations conflicts with their main work.

Stress due to inter role distance in insurance industry has been found to be because of various reasons and one of the most important one is the imbalance in work and personal life of employee followed by workload and motivation of employees by promotion or increments. Stress has got associated so deep that even the work areas of social welfare such as social work, here also employees experience stress due to inter role distance (Vinay, 2016).

Role boundedness is a situation when an employee gives more focus and follow ups to the responsibilities and pears associated and linked to the assigned role as a result employee have to give up own interests, preferences and comfort. Despite so much give ups and sacrifices employee can feel stress and this is stress due to role boundedness (Wooten, Kim, & Fakunmoju, 2014).

**Table No 30: Showing Respondents' View Related To 'Stress Due To Role Boundedness'**

		<b>Frequency</b>	<b>Percent</b>
I feel duty-bound as an employee.	Never or scarcely feels	13	8.7%
	Occasionally feels	18	12.0%
	Sometime feels	48	32.0%
	Frequently	48	32.0%
	Always feels	23	15.3%
The obligations of my roles are more important to me than my own wishes.	Never or scarcely feels	17	11.3%
	Occasionally feels	37	24.7%
	Sometime feels	50	33.3%
	Frequently	25	16.7%
	Always feels	21	14.0%
I am prepared to sacrifice my own values if they conflict with my duties in various roles.	Never or scarcely feels	27	18.0%
	Occasionally feels	40	26.7%
	Sometime feels	36	24.0%
	Frequently	27	18.0%
	Always feels	20	13.3%

From the table showing respondents' view related to stress due to role boundedness, it can be observed that 32 percent of respondents sometimes feel duty bound as an employee while equal number of respondents frequently feels to be duty bound as an employee. The table above also indicates that 33.3 percent of respondents sometimes feel that obligations of their roles are more important than their own wishes while 14 percent of the respondents have this feeling always. It can also be inferred that 26.7 percent of respondents occasionally feels that they will sacrifice their values if they conflicts with their duties in various roles while 13.3 percent of respondents stated that they always have a feeling of sacrificing their values if they conflicts with their duties in various roles in the organization.

Stress due to personal inadequacy develop due to laking of required skills that are needed for a specific role. The lacking of skills results into the failure in performance and failure to meet the expectations of the role. (Band, Shah, & Sriram, 2016)

**Table No 31: Showing Respondents’ View Related To ‘Stress Due To Personal Inadequacy’**

		<b>Frequency</b>	<b>Percent</b>
I don’t have enough knowledge / skills needed to do justice in my role.	Never or scarcely feels	30	20.0%
	Occasionally feels	36	24.0%
	Sometime feels	35	23.3%
	Frequently	32	21.3%
	Always feels	17	11.3%
I feel I am not doing justice to my family role (as a son, daughter/ husband, wife/ father, mother).	Never or scarcely feels	26	17.3%
	Occasionally feels	40	26.7%
	Sometime feels	41	27.3%
	Frequently	32	21.3%
	Always feels	11	7.3%
I wish I could be better equipped to perform my role more adequately.	Never or scarcely feels	21	14.0%
	Occasionally feels	30	20.0%
	Sometime feels	49	32.7%
	Frequently	22	14.7%
	Always feels	28	18.7%

From the table showing respondents’ view related to stress due to personal inadequacy, it can be inferred that 24 percent of respondents occasionally feels that they don’t have enough knowledge or skills that are required to do justice with their role while 11.3 percent of respondents have this feeling always and only 20 percent of respondents scarcely feels that they do not have the enough skills and knowledge that are required to justify their role in the organization. The other very important finding here to observe is that 32.7 percent of respondents sometimes feels that they wish to be better equipped to perform their role more adequately while 14.7 percent of

respondents have this feeling frequently. Chaudhary and Jain stated that finding workers who have employability or job readiness skills that help them fit into and remain in the work environment is a real challenge. Employers need reliable, responsible skills and attitude in employees who work together with other workers (Chaudhary & Jain, 2014).

## PART-2

### TESTING HYPOTHESIS

For the understanding whether significant association among specified independent variables such as age, education, salary, gender and experience happened to be with the dependent variable such as role efficacy and role stress and also for testing whether the observed distribution of the sampled data matches with the expected distribution, the researcher conduct analysis by using statistical techniques like hypothesis testing and correlation analysis. Hypothesis testing helps to acknowledge the availability of sufficient evidences in or against the assumptions or some belief of the researcher. This research study involves following hypothesis:

**H<sub>0</sub>1**      *There is no significant association between demographic background variable (Age, Education, Experience, salary and Gender) and Role Efficacy.*

**H<sub>0</sub>2**      *There is no significant association between demographic background variable (Age, Education, Experience, salary and Gender) and Role Stress.*

**H<sub>0</sub>3**      *There is not a significant correlation between REQ (Role Efficacy Quotient) and background variables namely, Annual Salary, Total Work Experience and Age*

**H<sub>0</sub>4**      *There is not a significant correlation between Role Stress and background variables namely, Annual Salary, Total Work Experience and Age*

**H<sub>0</sub>5**      *There is not a significant relationship between role efficacy and employee's overall job satisfaction, motivation and commitment toward organization*

**H<sub>0</sub>6**      *There is not a significant relationship between different dimensions of role efficacy and role stress*

## SECTION - IV

### CROSS TABULATION AMONG INDEPENDENT VARIABLES AND DEPENDENT VARIABLES & TESTING OF CORRELATION

This section is about the description of the analysis conducted by using cross tabulation of variables. In this section cross tabulation between background variables that are the independent variables (such as age, education, gender, experience and salary) and dependent variable (Role efficacy and Role stress) has been analyzed (Aswathappa, 2017).

The present research study is characterized by the features of descriptive research design and in this research design; hypothesis testing is one of the important characteristics. The background demographic variables which have been considered as independent variable are nominally scaled categorical variable by nature. Categories were also present in the dependent variables (role efficacy and role stress). The data of these variables is about the frequency and percentage. It is therefore the most appropriate hypothesis testing method chi-square test has been used (Prasad, 2011).

Chi-Square method is used to describe association between the variables. Chi square test of independence is used to evaluate whether two variables are associated with each other or not. Chi square test is applicable to the variables that have been measured on nominal or ordinal level of measurement (Cooper, 2014). Since these are nominal so these should have categories. In case of this part of analysis, the variables that have been considered for the hypothesis testing has further categories under them for example the variable gender has two categories namely male and female likewise the variable role efficacy has three categories (Creswell, 2018).

During the hypothesis testing, null hypothesis has been formulated and level of significance has been considered to finally accept or not to accept the null hypothesis. The calculation of Chi-square test has been done by using SPSS and the output tables have been used for further interpretation.

**PHASE-1**  
**CROSS TABULATION BETWEEN DEMOGRAPHIC BACKGROUND**  
**VARIABLES AND KEY VARIABLES**  
**(ROLE EFFICACY AND ROLE STRESS)**

*H<sub>01</sub> : There is no significant association between demographic background variable (Age, Education, Experience, salary and Gender) and Role Efficacy.*

The performance of an employee derived from his competence level, experience and the composition of his role. It means the performance of employee affected by his level of knowledge; competences as well as the scope that his role offered to perform. Role efficacy is the potential effectiveness of a role.

The demographic background aspect of employee also affects his potential to performance and thus potential effectiveness may also get affected. By nature, the demographic variables are categorical variables that means each of the demographic variable that has been considered here contain some of the non-overlapping categories.

Role efficacy has been measured in terms of role efficacy quotient (REQ) and three broad categories of were created for role efficacy quotient. These were named as category-A, category-B and category-C. The entire range of REQ was converted into following three categories:

Category-A : 75.00 REQ to 92.00 REQ value

Category-B : 57.00 REQ to 74.99 REQ value

Category-C : 38.00 REQ to 56.99 REQ value

Age, education, experience, salary and gender are among such demographic background variables that have been researched in context of employee performance and for this study it has been assumed that there may be significant association among demographic variables and role efficacy. Following null hypothesis has been proposed for testing:

*There is no significant association between demographic variable (Age, Education, Experience, salary and Gender) and Role Efficacy*

**Table No 32: Showing Cross Tabulation between Category of REQ and Age Groups**

		Category of REQ					
		A		B		C	
		Count	Row N %	Count	Row N %	Count	Row N %
Age Groups	18-27	11	27.5%	21	52.5%	8	20.0%
	28-37	14	31.8%	20	45.5%	10	22.7%
	38-47	19	48.7%	16	41.0%	4	10.3%
	48-above	10	37.0%	14	51.9%	3	11.1%
<b><i>Chi-Square= 6.177, Degree of Freedom=6, P=0.404</i></b>							

From the table it can be observed that 27.5 percent respondents who belong to the age of 18-27 years were found to have highest level of role efficacy quotient (REQ). These 27.5 percent respondents have the REQ in the range of 75.00 to 92.00. This range constitute category 'A' of REQ. More than half of the respondents (52.5 percent) from the age category of 18-27 have the REQ in the range of 57.00 to 74.99. This range constitute category 'B' of REQ. The category 'C' of REQ have 20 percent respondents from the age group of 18 to 27 years. The age category wise analysis implies that majority of the respondents from all the age categories fall in the category 'B' of REQ. Category 'A' of the REQ is at the second-place important category because after category 'A' majority of the respondents from all age categories found in category 'A' of REQ. Least number of respondents from all the age categories constitute category 'C' of REQ. Further the interpretation of the chi-square test results is that there is non-significant association ( $p = 0.404 > 0.05$ ) between age and role efficacy.

**Table No 33: Showing Cross Tabulation between Category of REQ and Gender Groups**

		Category of REQ					
		A		B		C	
		Count	Row N %	Count	Row N %	Count	Row N %
Gender	Male	46	46.0%	36	36.0%	18	18.0%
	Female	8	16.0%	35	70.0%	7	14.0%
<b><i>Chi-Square= 16.794, Degree of Freedom=2, P=0.000</i></b>							

From the table it can be observed that 46.0 percent respondents who belong to male category of gender were found to have highest level of role efficacy quotient (REQ). These 46.0 percent respondents have the REQ in the range of 75.00 to 92.00 (refer the REQ category details mentioned in the beginning of hypothesis) which constitute category 'A' of REQ. 36.0 percent respondents from the male category have the REQ in the range of 57.00 to 74.99 and this range constitute category 'B' of REQ. The category 'C' of REQ have 18 percent respondents from the male gender. The gender wise analysis implies that majority of the male respondents fall in the category 'A' of REQ. While majority of the female respondents (70 percent) fall in the category 'B' of REQ. Least number of respondents from male (18 percent) and female (14 percent) categories of gender constitute category 'C' of REQ. The interpretation of the chi-square test results is that there is a significant association ( $p = 0.000 < 0.05$ ) between gender and role efficacy.

**Table No. 34: Showing Cross Tabulation between Category of REQ and Salary Category**

		Category of REQ					
		A		B		C	
		Count	Row N %	Count	Row N %	Count	Row N %
Salary Category	1-5 lac	40	38.8%	45	43.7%	18	17.5%
	6-10 lac	12	30.8%	21	53.8%	6	15.4%
	11-15 lac	0	0.0%	5	83.3%	1	16.7%
	16 lac- above	2	100.0%	0	0.0%	0	0.0%
<b><i>Chi-Square= 8.602, Degree of Freedom=6, P=0.197</i></b>							

From the table it can be observed that 38.8 percent respondents who were getting the salary of 1-5 lac were found to have highest level of role efficacy quotient (REQ). These 38.8 percent respondents have the REQ in the range of 75.00 to 92.00. This range constitute category 'A' of REQ. 43.7 percent of the respondents from the salary category of 1-5 lac have the REQ in the range of 57.00 to 74.99. This range constitute category 'B' of REQ. The category 'C' of REQ have 18 percent respondents from the salary category of 1 to 5 lac. The salary category wise analysis explains that majority of the respondents from all the income categories belong to the category 'B' of REQ. Category 'A' of the REQ is second important category because after category 'B' majority of the respondents from all salary categories found in category 'A' of REQ. Minimum number of respondents from all the salary categories create category 'C' of REQ. The interpretation of the chi-square test results is that there is non-significant association ( $p = 0.197 > 0.05$ ) between salary and role efficacy.

**Table No. 35: Showing Cross Tabulation between Category of REQ and Total Work Experience**

		Category of REQ					
		A		B		C	
		Count	Row N %	Count	Row N %	Count	Row N %
Total Work Experience	1-10 years	26	28.9%	44	48.9%	20	22.2%
	11-20 years	20	64.5%	9	29.0%	2	6.5%
	21-30 years	3	17.6%	12	70.6%	2	11.8%
	31 years-above	5	41.7%	6	50.0%	1	8.3%
<b><i>Chi-Square= 18.517, Degree of Freedom=6, P=0.005</i></b>							

From the table it can be spotted that 28.9 percent respondents who were having the total work experience of 1-10 years were found to have highest level of role efficacy quotient (REQ). These 28.9 percent respondents have the REQ in the range of 75.00 to 92.00. This range constitute category 'A' of REQ. 48.9 percent of the respondents from the total work experience category of 1-10 years have the REQ in the range of 57.00 to 74.99. This range constitute category 'B' of REQ. The category 'C' of REQ have 22.2 percent respondents from the experience category of 1 to 10 years. The total work experience category wise analysis describes that majority of the respondents from all the experience categories (except the work experience category of 11-20 years) belong to the category 'B' of REQ. Interestingly majority of respondents (64.5 percent) from 11-20 years of experience belongs to the highest REQ category (Category 'A'). Including 64.5 percent respondents from the category of 11-20 years of experience who belong to REQ-Category 'A', it is found that Category 'A' of the REQ is second important category because after category 'B' majority of the respondents from all experience categories found in category 'A' of REQ. Lowest number of respondents from all the experience categories form category 'C' of REQ.

The interpretation of the chi-square test results is that there is a significant association ( $p = 0.005 < 0.05$ ) between work experience and role efficacy.

**Table No. 36: Showing Cross Tabulation between Category of REQ and Education Categories**

		Category of REQ					
		A		B		C	
		Count	Row N %	Count	Row N %	Count	Row N %
Education (Highest level)	Up to 12th class	8	66.7%	4	33.3%	0	0.0%
	Graduate	29	31.2%	43	46.2%	21	22.6%
	Post Graduate	17	40.5%	21	50.0%	4	9.5%
	Doctorate	0	0.0%	1	100.0%	0	0.0%
	Others	0	0.0%	2	100.0%	0	0.0%
<b><i>Chi-Square= 13.127, Degree of Freedom=8, P=0.108</i></b>							

From the table it can be depicted that respondents who are in the up to 12<sup>th</sup> class of education category scored high on REQ and therefore 66.7 percent of these respondents fall in the category 'A' of REQ. Category 'A' of REQ represents the category of highest REQ scores. Another interesting aspect about this education category is that no one from this education category falls in the Category 'C' of REQ. Further the analysis of all the education categories shows that from the categories of 'Doctors' and from the 'Others' category of education 100 percent respondents fall in the category 'B' of REQ. Majority of graduates (46.2 percent) and post graduates (50.0 percent) belong to category 'B' of REQ. There is no significant association between the education category and categories of REQ as the p value is greater than 0.05.

## **Association between Role stress and Education, Age, Experience, salary and Gender**

Role stress is socio-psychological construct as it has linkage with social environment of a person and role stress influences the cognitive reactions so it is considered as psychological construct (Band, Shah, & Sriram, 2016). Social life as well as professional life of an employee affected by the stress generated due to role. Role as well as various demographic variables contributes to role stress (Coetzer & Rothmann, 2006). Thus, demographic variables are also assumed to have significant association with role stress. With this background following have been proposed:

***H02: There is no significant association between demographic variables (Age, Education, Experience, salary and Gender) and Role Stress***

The relationship of role stress has been also studied with the demographic variables. During the analysis no missing values were identified and the results of case processing summary have been presented in the following table.

A significant issue in Insurance sector today is expanding work disappointment among its Sales Managers and executives hence Role Stress, job Satisfaction etc. in the Insurance sector has been researched, to feature the elements that influence the activity fulfillment of an employee in this sector and the relationship between the demographic variables and role stress has also been researched(Singh A. , 2012).

The psychology of employee at work and how employees feel about their jobs and roles are some of the important predictor of work behaviors. It has been found that high attrition rate, non-performance, absenteeism, decline motivation level and increasing stress levels due to assigned role gradually become almost unsolved problem for employee(Singh B. , 2017). Sales people in insurance sectors off the record during this research point out that their interaction with customers help them to know the level of stress prevailing in society in general and the observation how people are managing it give direction to manage stress due to an assigned role.

The social dimension which remains unnoticed in the sales job of insurance sector employees actually act like a reference for them to understand their own stress from a new view point which they have explored during their social interaction with customers. Exploration of social side of insurance sales job is one very important area

for research. Though its not at par with social work in terms of job roles and job description but the role performance in insurance selling appeared to be affected by most of the factors that are social in nature and appeal.

**Table No 37: Showing Cross Tabulation between Category of Role Stress Categories and age Categories**

		Role Stress Categories					
		0 to 2 Average Stress Score		2 to 3 Average Stress Score		3 to 4 Average Stress Score	
		Count	Row N %	Count	Row N %	Count	Row N %
Age Groups	18-27	16	40.0%	24	60.0%	0	0.0%
	28-37	22	50.0%	17	38.6%	5	11.4%
	38-47	23	59.0%	12	30.8%	4	10.3%
	48-above	24	88.9%	3	11.1%	0	0.0%
<b><i>Chi-Square= 25.545, Degree of Freedom=6, P=0.000</i></b>							

From the table it can be viewed that in case of role stress that majority of those who scored less on the role stress are from the age group of 48 and above. It can be observed that as the age is growing the percentages of employees from insurance companies increased in the low stress score category. 88.9 percent employees who were present in least stress category were from the age group of 48 and above. From the table, it may also be interpreted that with the growing age employees may become trained in management of stress. Majority of employees (60 percent) from the age of 18 to 27 found in the moderate stress category (2 to 3 Average Stress Score). In the 3 to 4 average stress score category there is no one from the age of 18 -27 as well as from 48 and above age. 10.3 percent from the age of 38- 47 years and 11.4 percent

from the age of 28-37 years found to be present in the highest average stress score categories.

It is also found that there is significant association ( $p=0.000$ ) between role stress and age of the employees who work in insurance companies.

Occupation related pressure and specially those pressure that are due to role has become a difficult issue for employing organizations and for their workers. It has been found that perception towards salary has shifted (Coetzer & Rothmann, 2006). Salary is the amount that employee receive for the offered services but continuous exposure of mild to high stress has impacting the thought of employees and during the conversation with sales employees of insurance companies it was notices that many of the employees were considering salary as the compensation for bearing the stress in a position and because of the assigned role and responsibilities.

**Table No 38: Showing Cross Tabulation between Category of Role Stress Categories and Salary Categories**

		Role Stress Categories					
		0 to 2 Average Stress Score		2 to 3 Average Stress Score		3 to 4 Average Stress Score	
		Count	Row N %	Count	Row N %	Count	Row N %
Salary Category	1-5 lac	46	44.7%	48	46.6%	9	8.7%
	6-10 lac	31	79.5%	8	20.5%	0	0.0%
	11-15 lac	6	100.0%	0	0.0%	0	0.0%
	16 lac-above	2	100.0%	0	0.0%	0	0.0%
<b><i>Chi-Square= 21.275, Degree of Freedom=6, P=0.002</i></b>							

From the table it can be viewed that in case of role stress that majority of those who scored less on the role stress are from the salary category of 11-15 lac and 16 and above. 100 percent respondents from these two salary categories were in the least role stress score category. It can be observed that as the salary grows the percentages of employees from insurance companies increased in the low stress score category. In the 3 to 4 Average Stress Score category there is no one from the salary category of 6-10 lac, 11-15 lac and 16 lac and above salary category. 8.7 percent from the salary category of 1-5 lac found to be present in the highest average stress score (3 to 4 Average Stress Score) categories.

It is also found that there is significant association ( $p=0.002 < 0.05$ ) between role stress and salary of the employees who work in insurance companies.

Stress is a common feature of almost every workplace and some of the research studies reported that level of education plays an important role in stress realization as well as in stress management (Chang, 2016) (Clark, 2014).

**Table No. 39: Showing Cross Tabulation between Category of Role Stress Categories and Education Categories**

		Role Stress Categories					
		0 to 2 Average Stress Score		2 to 3 Average Stress Score		3 to 4 Average Stress Score	
		Count	Row N %	Count	Row N %	Count	Row N %
Education (Highest level)	Up to 12th class	7	58.3%	3	25.0%	2	16.7%
	Graduate	45	48.4%	44	47.3%	4	4.3%
	Post Graduate	33	78.6%	6	14.3%	3	7.1%
	Doctorate	0	0.0%	1	100.0%	0	0.0%
	Others	0	0.0%	2	100.0%	0	0.0%
<b><i>Chi-Square= 21.483, Degree of Freedom=8, P=0.006</i></b>							

From the table there are two noticeable findings, one is 100 percent employees from the education category namely doctors and others were found in the moderate role stress (2 to 3 Average Stress Score) categories as a result there was no one from these two education categories in the lowest (0 to 2 Average Stress Score) role stress category and also in the highest (3 to 4 Average Stress Score) role stress category. Most of the employees (78.6 percent) under the least role stress category were from the post graduate education category followed by 58.3 percent from up to 12<sup>th</sup> class and 48.4 percent from graduate category of education. It has been also observed from the table that percentage of employees in the least stressed category is maximum followed by the employees in the stress (2 to 3 Average Stress Score) category. The role stress category with 3 to 4 Average Stress Score composed of 16.7 percent from up to 12<sup>th</sup> class, 4.3 percent from graduate and 7.1 percent from post graduate

education category. From the table it is also found that education level and role stress are significantly associated ( $p=0.002 < 0.05$ )

**Table No 40: Showing Cross Tabulation between Category of Role Stress Categories and Gender Categories**

		Role Stress Categories					
		0 to 2 Average Stress Score		2 to 3 Average Stress Score		3 to 4 Average Stress Score	
		Count	Row N %	Count	Row N %	Count	Row N %
Gender	Male	59	59.0%	36	36.0%	5	5.0%
	Female	26	52.0%	20	40.0%	4	8.0%
<b><i>Chi-Square= 0.931, Degree of Freedom=2, P=0.628</i></b>							

From the table it can be seen that most of the employees from male (59 percent) as well as from female (52 percent) category were present in the least role stress category (0 to 2 Average Stress Score). There were least number of employees from male (5 percent) and female (8 percent) group who were present in the highest role stress category (3 to 4 Average Stress Score). The role stress category marked by 2 to 3 Average Stress Score composed of 36 percent male and 40 percent female employees. It is also found that the gender and role stress are not significantly associated with each other as the p-value exceeded from 0.05 level of significance. Though the results of this analysis differ from some of the research findings of published research. It has been found that the reasons of stress and the degree of stress feeling varies greatly due to difference in the gender. In Insurance selling female found to be less stressed and reasons to this has been assigned to education level, marital status and age (Nagaraju & Nandini, 2013).

**Table No. 41: Showing Cross Tabulation between Category of Role Stress Categories and Total Work Experience Categories**

		Role Stress Categories					
		0 to 2 Average Stress Score		2 to 3 Average Stress Score		3 to 4 Average Stress Score	
		Count	Row N %	Count	Row N %	Count	Row N %
Total Work Experience	1-10 years	43	47.8%	44	48.9%	3	3.3%
	11-20 years	16	51.6%	9	29.0%	6	19.4%
	21-30 years	15	88.2%	2	11.8%	0	0.0%
	31 years-above	11	91.7%	1	8.3%	0	0.0%
<b><i>Chi-Square= 28.471, Degree of Freedom=6, P=0.000</i></b>							

From the table it can be found that 88.2 percent employees from the 21 to 30 years of total work experience category and 91.7 percent employees from the 31 years and above of total work experience category present in the least role stress (0 to 2 Average Stress Score) category. The noticeable finding from these two categories under total work experience is that none from these two categories was present in the highest level of role stress category (3 to 4 Average Stress Score). Only from the first category of total work experience, majority (48.9 percent) of employees found to present in the role stress category with 2 to 3 average stress score. Major contributor in the 3 to 4 average stress score category was from 11-20 years of total work experience category. It is also found that the total work experience and role stress are statistically significantly associated as the p-value is 0.000 and it is smaller than the 0.05 level of significance.

**PHASE-2:**  
**CORRELATION AMONG ROLE EFFICACY AND DEMOGRAPHIC**  
**VARIABLES**

High Role efficacy increases performance and high role efficacy has the link with so many factors and demography related factors are one of these. Role efficacy also promote comparison with others and the comparison begin with age, annual salary, work experience and like these factors(Chang, 2016).

***Ho3: There is not a significant correlation between REQ (Role Efficacy Quotient) and background variables namely, Annual Salary, Total Work Experience and Age***

Role efficacy of the respondents was estimated as role efficacy quotient (REQ). During the data collection the data on the age, salary and total work experience was obtained as absolute numbers. No categories were offered to the respondents. All the variable comprise of the properties of ratio scale as a result estimation of correlation among role efficacy and demographic variables has been done using SPSS. Following is the table showing correlation among role efficacy and demographic variables.

**Table No. 42 : Showing correlation among role efficacy and demographic variables.**

<b>Correlations</b>					
		Role Efficacy Quotient	Annual Salary (in Lac)	Total Work Experience	Age (in Years only)
Role Efficacy Quotient	Pearson Correlation	1	.265**	.281**	.265**
	Sig. (1-tailed)		.001	.000	.001
	N	150	150	150	150
Annual Salary (in Lac)	Pearson Correlation	<b>.265**</b>	1	.654**	.599**
	Sig. (1-tailed)	.001		.000	.000
	N	150	150	150	150
Total Work Experience	Pearson Correlation	<b>.281**</b>	.654**	1	.873**
	Sig. (1-tailed)	.000	.000		.000
	N	150	150	150	150
Age (in Years only)	Pearson Correlation	<b>.265**</b>	.599**	.873**	1
	Sig. (1-tailed)	.001	.000	.000	
	N	150	150	150	150
**. Correlation is significant at the 0.01 level (1-tailed).					

The correlation among role efficacy and demographic variables were found to be positive and important as these have been marked significant in the SPSS output

which means null hypothesis is rejected. Though the values of Pearson correlation coefficient are toward low correlation yet these values found significant.

Low degree of role efficacy is related with feelings of despair, worry and dependence. In insurance sector, the sales employees are trained to make customer realize and feel the probable pain of all these feelings if they are not insured for future( Bell, 2017). Demographic factors of the sales employees in insurance sector found to be positively related with the role efficacy(Malik R. M., 2016)and the assumptions to build this argument has been assigned is that promotion of the feeling of despair and dependence among the customer to sell the insurance products initiate inter-realization about these feeling among sales people and to avoid all these negative feeling sales people work hard to prepare themselves for their role.

**PHASE-3:**  
**CORRELATION AMONG ROLE STRESS AND DEMOGRAPHIC**  
**VARIABLES**

*Ho4: There is not a significant correlation between Role stress and background variables namely, Annual Salary, Total Work Experience and Age*

The role stress of the respondents was estimated as average role stress and the age, salary and total work experience data was obtained without any category. Thus, all the variables contain properties of ratio scale so correlation among role stress and demographic variables was calculated and shown in the following table.

**Table No. 43: Correlation among Role Stress and Demographic Variables**

Correlations					
		Annual Salary (in Lac)	Total Work Experience	Age (in Years only)	Average Role Stress
Annual Salary (in Lac)	Pearson Correlation	1	.654**	.599**	-.416**
	Sig. (1-tailed)		.000	.000	.000
	N	150	150	150	150
Total Work Experience	Pearson Correlation	.654**	1	.873**	-.268**
	Sig. (1-tailed)	.000		.000	.000
	N	150	150	150	150
Age (in Years only)	Pearson Correlation	.599**	.873**	1	-.252**
	Sig. (1-tailed)	.000	.000		.001
	N	150	150	150	150
Average Role Stress	Pearson Correlation	-.416**	-.268**	-.252**	1
	Sig. (1-tailed)	.000	.000	.001	
	N	150	150	150	150
**. Correlation is significant at the 0.01 level (1-tailed).					

The correlation among role stress and demographic variables (total work experience, Age and annual salary) were found to be negative correlated but all of these correlation values have been marked significant in the SPSS output which means null hypothesis is rejected. This shows that as the age, total work experience and annual salary increases the role stress decreases.

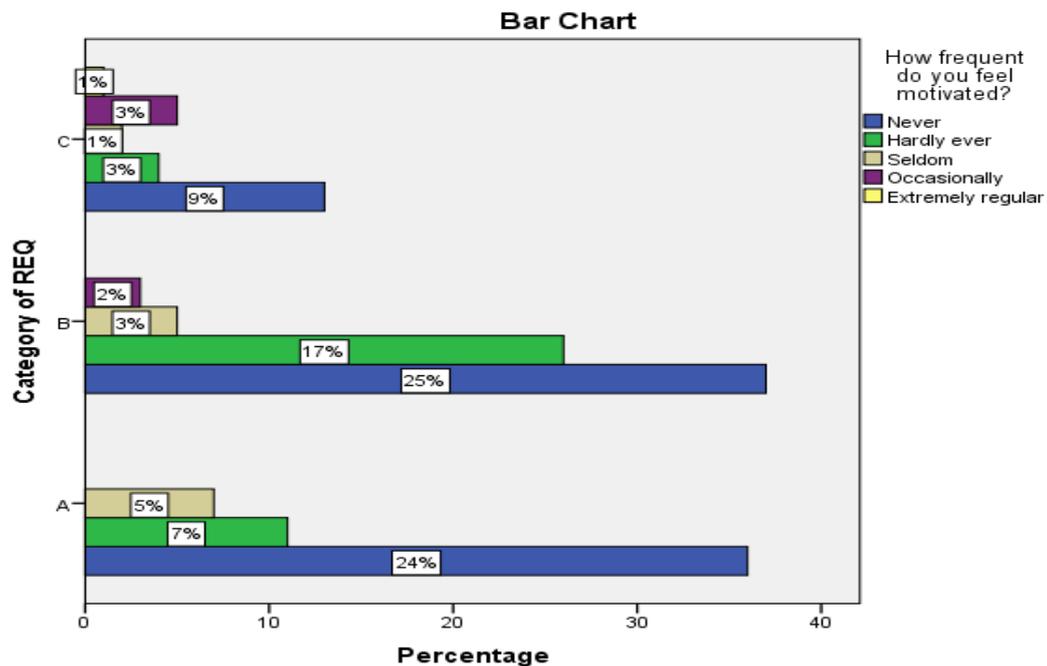
## PHASE-4

### ASSOCIATION OF ROLE EFFICACY WITH EMPLOYEE'S OVERALL JOB SATISFACTION, MOTIVATION AND COMMITMENT TOWARD ORGANIZATION

The association of role efficacy with employee's overall job satisfaction, motivation and commitment toward organization was evaluated in this phase. The association of the role efficacy with employee's overall job satisfaction, motivation and commitment toward organization was tested by using chi-square test of association.

**Ho5:** *There is not a significant relationship between role efficacy and employee's overall job satisfaction, motivation and commitment toward organization*

An analysis of the percentages of respondents who belong to different category of REQ were evaluated to estimate how many of these feel motivated. The results are represented in the following bar cart.

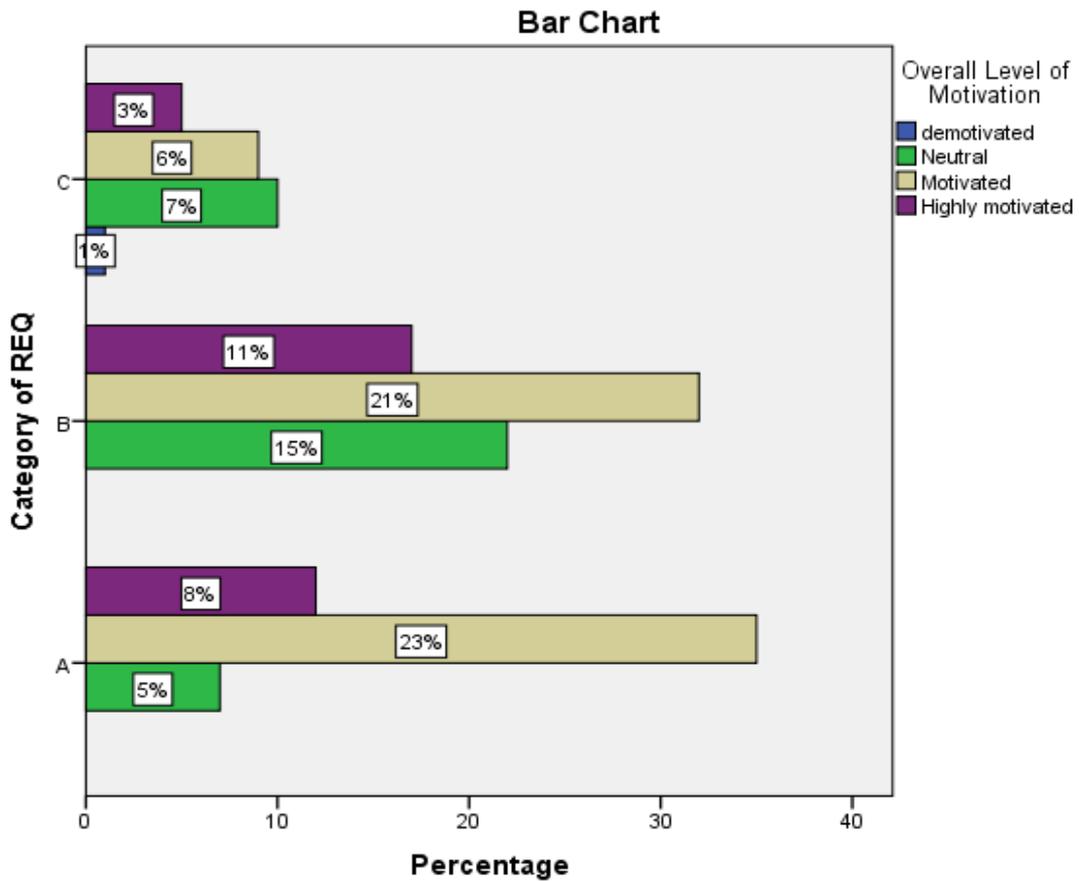


**Graph No. 13: Showing an Analysis of the percentages of respondents who belong to different category of REQ**

Except category 'C' of REQ no one in other two category found to be never motivated and even the percentage of respondent who felt never motivated was only

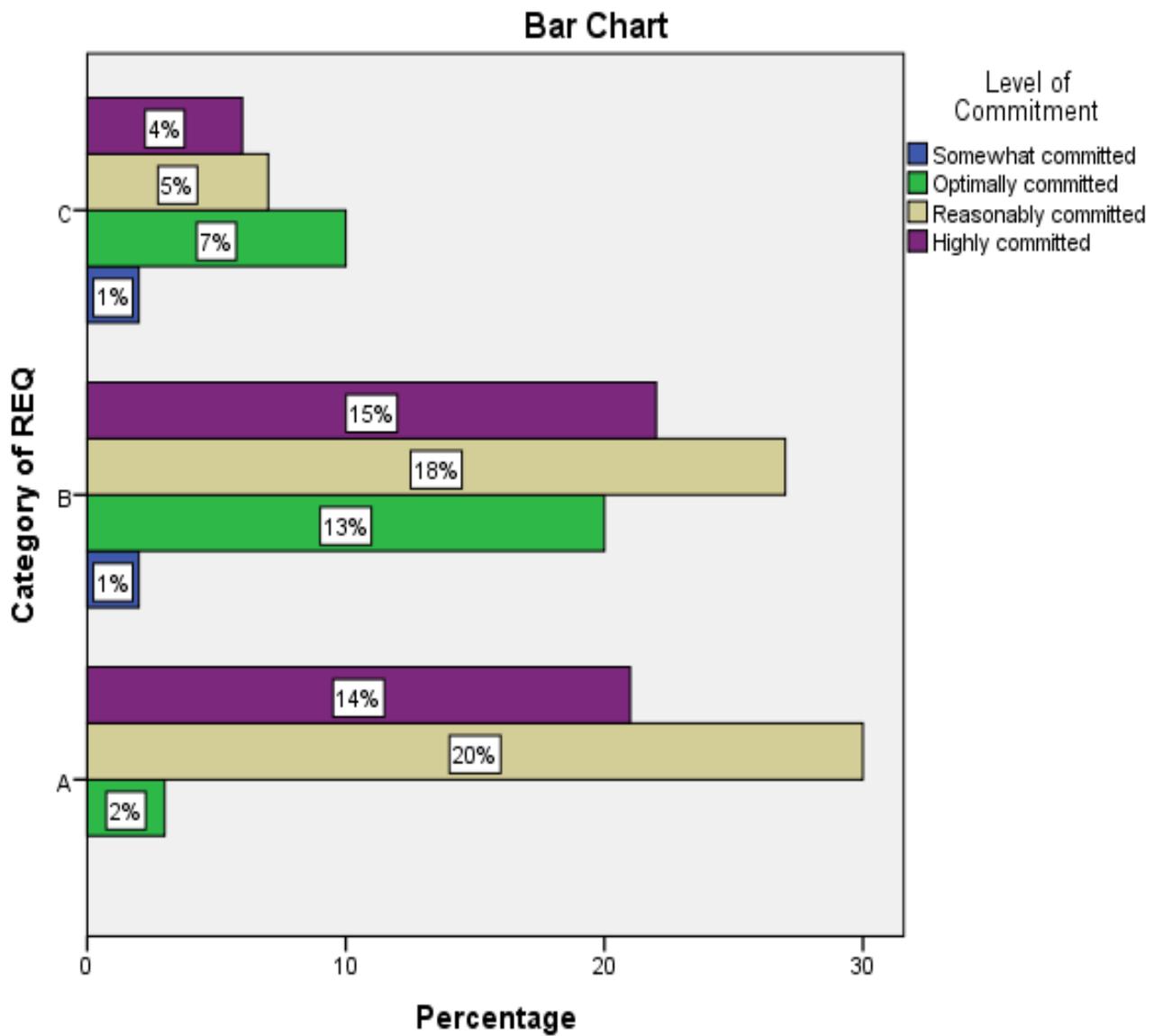
one percent. Majority of the respondents were found to felt motivated. Important finding has been that no one felt extremely motivated on regular basis.

The analysis of overall level of motivation as per different categories of REQ shows that in all category except 'C' category majority of the respondents were highly motivated or motivated. Only one percent respondent from category felt demotivated. The results are represented by the following bar chart.



**Graph No.14: Showing Overall Level of Motivation**

The analysis of level of commitment toward organization as per different categories of REQ, it was found that Category-C and Category-B has got one percent employee in each of the category that are least committed. Most of the respondents in other two categories were found to be reasonably committed to highly committed.



**Graph No. 15: Showing Level of Commitment**

Chi-square test has been used during the analysis to find the association of role efficacy and other three selective variables.

Following table shows the summary of variables used to test the association between role efficacy and other selective variables. No missing entry existed. Cross tabulation was created for role efficacy categories (A, B and C) with motivation level, job satisfaction and commitment level.

**Table No: 44: The Summary of Variables Used To Test the Association between Role Efficacy and Other Selective Variables**

Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How frequent do you feel motivated? * Category of REQ	150	100.0%	0	0.0%	150	100.0%
Overall Level of Motivation * Category of REQ	150	100.0%	0	0.0%	150	100.0%
Level of Commitment * Category of REQ	150	100.0%	0	0.0%	150	100.0%

The Chi-square test was performed using SPSS. SPSS used the cross table between category of REQ and the categories of the question how frequent do you feel motivated? Following table shows the results of the chi-square test. The p-value for Pearson Chi-Square for all the null hypotheses found to be smaller than 0.05 (5% level of significant). This indicates that there is no statistically significant association between role efficacy score (calculated as REQ) and level of motivation, level of satisfaction and level of commitment.

India is a country where the average selling of insurance policies is still lower than many Western and Asian countries. Indian insurance market is a prospective market for many multinational companies of insurance sector and Indian insurance companies are also trying to expand their business in new target markets(Binder & Mußhoff, 2017). In the quest of tapping new market the role of employees in insurance companies become more demanding as a result motivation level, satisfaction level and level of commitment has affected greatly. In this research no statistically significant association has been found and the reason can be that it may be the reasons that are outside the role and may be related to business environment of the company or the entire industry(Malik R. M., 2016). Such factors like threat of new

companies or increased level of competition actually affect the insurance company directly and role efficacy indirectly.

**Table No. 45: Showing Cross Table to check Association**

Cross table to check association	Null Hypothesis	Hypothesis testing coefficient	Pearson Chi-Square Value	df	Asymptotic Significance (2-sided) (Alpha=5%)	Decision about Null Hypothesis
How frequent do you feel motivated? * Category of REQ	There is no association between category of REQ of employee and his level of motivation	Pearson Chi-Square	24.991	8	.002	Accepted
Overall Level of Motivation * Category of REQ	There is no association between category of REQ of employee and his level of motivation	Pearson Chi-Square	14.861	6	.021	Accepted
Level of Commitment * Category of REQ	There is no association between category of REQ of employee and his level of commitment	Pearson Chi-Square	20.657	6	.002	Accepted

**PHASE-5**  
**RELATIONSHIP BETWEEN DIMENSIONS OF ROLE**  
**EFFICACY AND ROLE STRESS**

Role efficacy has multiple aspects and the concept of role efficacy can be defined in details with the help of ten dimensions namely centrality, integration, proactivity, creativity, inter role linkage, helping relationship, superordination, influence, growth and confrontation. Role stress has become a part of today's work and social life. In this study, it has been aimed to explore whether a relationship exists between role efficacy and role stress. The dimensions of role efficacy have been estimated by using role efficacy scale while the role stress has been evaluated by using general role stress scale and the individual level role stress has been calculated as average stress score. The ten dimensions of role efficacy and the role stress as average stress score were examined by using correlation coefficient calculations so that relationship between the dimensions of role efficacy and role stress can be analyzed and concluded.

***H06: There is not a significant relationship between different dimensions of role efficacy and role stress***

The results of SPSS have been presented in the following table. Correlation estimates the strength of the relationship between the variables. Correlation coefficient calculation assumed the relationship to be linear in nature. The value of the correlation coefficient varies from -1.00 to +1.00. The negative sign means the relationship is negative in nature while the positive sign means that the relationship is positive in nature. The values of correlation coefficient if fall close to zero then the relationship between the variables is weak while higher value of correlation coefficient towards one means strong relationship. SPSS produce the results of correlation analysis in the form of correlation matrix. The correlation matrix includes the values of Pearson's correlation along with the related significance (*Sig.*) and number of cases (*N*) involved in the analysis.

**Table No. 46: Showing Correlation Matrix**

CORRELATION MATRIX													
		Average Role Stress	RE D1 Centrality	RE D2 Integration	RE D3 Proactivity	RE D4 Creativity	ROLE Linkage	Helping Relationship	Superordinat ion	Influence	RE D9 Growth	Confrontatio n	
Average Role Stress	Pearson Correlation	1	-.058	-.170*	-.071	-.112	-.093	-.172*	-.235**	.154*	-.192*	-.172*	
	Sig. (1-tailed)		.239	.019	.193	.086	.128	.018	.002	.030	.009	.018	
	N	150	150	150	150	150	150	150	150	150	150	150	
RE D1 Centrality	Pearson Correlation	-.058	1	.205*	.124	.115	-.076	.025	.126	.189*	.218*	-.045	
	Sig. (1-tailed)	.239		.006	.065	.081	.176	.382	.062	.010	.004	.290	
	N	150	150	150	150	150	150	150	150	150	150	150	

RE D2 Integration	Pearson Correlation	- .170 *	.205* *	1	.107	.299* *	.241* *	.172* *	-.005	.13 8*	.185* *	.182* *
	Sig. (1-tailed)	.019	.006		.097	.000	.002	.018	.476	.04 6	.012	.013
	N	150	150	150	150	150	150	150	150	15 0	150	150
RE D3 Proactivity	Pearson Correlation	- .071	.124	.107	1	-.025	-.027	.068	-.062	.28 1**	.015	.105
	Sig. (1-tailed)	.193	.065	.097		.382	.371	.205	.225	.00 0	.426	.100
	N	150	150	150	150	150	150	150	150	15 0	150	150
RE D4 Creativity	Pearson Correlation	- .112	.115	.299* *	-.025	1	.109	.202* *	.026	.05 7	.177* *	.191** **
	Sig. (1-tailed)	.086	.081	.000	.382		.092	.007	.375	.24 5	.015	.010
	N	150	150	150	150	150	150	150	150	15 0	150	150
RE D5 Inter Role Linkage	Pearson Correlation	- .093	-.076	.241* *	-.027	.109	1	.251* *	-.049	.12 2	.164* *	.270** **

	Sig. (1-tailed)	.128	.176	.002	.371	.092		.001	.277	.068	.023	.000
	N	150	150	150	150	150	150	150	150	150	150	150
RE D6 Helping Relationship	Pearson Correlation	-.172*	.025	.172*	.068	.202*	.251*	1	-.025	.019	.029	.219**
	Sig. (1-tailed)	.018	.382	.018	.205	.007	.001		.382	.409	.360	.004
	N	150	150	150	150	150	150	150	150	150	150	150
RE D7 Superordination	Pearson Correlation	-.235**	.126	-.005	-.062	.026	-.049	-.025	1	-.074	.107	.012
	Sig. (1-tailed)	.002	.062	.476	.225	.375	.277	.382		.183	.097	.440
	N	150	150	150	150	150	150	150	150	150	150	150
RE D8 Influence	Pearson Correlation	.154*	.189*	.138*	.281*	.057	.122	.019	-.074	1	-.122	.036
	Sig. (1-tailed)	.030	.010	.046	.000	.245	.068	.409	.183		.069	.332

	N	150	150	150	150	150	150	150	150	150	150	150
RE D9 Growth	Pearson Correlation	- .192 **	.218* *	.185*	.015	.177*	.164*	.029	.107	- .12 2	1	.181*
	Sig. (1-tailed)	.009	.004	.012	.426	.015	.023	.360	.097	.06 9		.013
	N	150	150	150	150	150	150	150	150	150	150	150
RE D10 Confrontation	Pearson Correlation	- .172 *	-.045	.182*	.105	.191* *	.270* *	.219* *	.012	.03 6	.181*	1
	Sig. (1-tailed)	.018	.290	.013	.100	.010	.000	.004	.440	.33 2	.013	
	N	150	150	150	150	150	150	150	150	150	150	150
*. Correlation is significant at the 0.05 level (1-tailed).												
**. Correlation is significant at the 0.01 level (1-tailed).												

The diagonal values of the correlation matrix are ones because there will be definite perfect correlation between the same variable (means correlation of variable with itself). In relation to the objective under study, the correlation matrix showing very important pattern about the relationship between dimensions of role efficacy and role stress. All the Pearson Correlation coefficient values are negative which means that there is negative relationship between role stress and each of the ten dimensions of role efficacy. Which means as the score on role efficacy dimensions increase the score on role stress decreases. The other important finding is that though the relationship is not very strong but most of the Pearson Correlation coefficients (six out of ten relationships) were found to be significant. This mean, these results led to rejection of null hypothesis of no relationship between role stress and those six dimensions of role efficacy for which *p-value* found the be lesser than *0.05*. Alternatively, it can be stated that there is a statistically significant negative relationship between *role stress* and '*integration*' dimension, '*helping relationship*' dimension, '*superordination*' dimension, '*influence*' dimension, '*growth*' dimension, '*confrontation*' dimension. The relationships among these six are highly significant as per statistical evidences shown in terms of p-values. In other words, it can be concluded that the relationship that has been found in the correlation matrix is not due to any sampling error or by chance. As long as the low values of Pearson Coefficient of correlation are concerned, it can be attributed to the sample size used for this study. For this research study sample size of 150 was used yet with this sample size the analysis found significant relationship. The four dimensions with which their relationship with role stress found to be negative but not significant include '*centrality*' dimension, '*proactivity*' dimension, '*creativity*' dimension and '*inter role linkage*' dimension.

## **PART-3**

### **UNDERSTANDING ROLE EFFICACY**

#### **SECTION-V**

#### **CALCULATION AND ANALYSIS OF ROLE EFFICACY**

This research attempts to examine the role efficacy of managerial and executive level employees in order to give a comparative role efficacy profile of both the level. This objective has been accomplished by the data analysis performed at following different level of details in order evidently evaluate the role efficacy of managerial and executive level of employees.

##### **Level-1 Understanding of Role efficacy**

- i. Calculation of Role Efficacy Quotient(REQ) for each respondent*
- ii. Analysis of appropriateness level in all ten dimensions against the scale score of below 1, 1, 2, 3 and 4.*
- iii. Classification of all respondents in to following three categories formed against each dimension*
  - a. Appropriate category*
  - b. Minor Insufficiency category*
  - c. Major Insufficiency category*

##### **Level-2 Comparison of Role efficacy profile between managerial and executive level employees**

- i. Category development of REQ*
- ii. Comparison based on categories of REQ*
- iii. Designation-wise comparison of employees in different REQ categories*
- iv. Organization type and designation wise comparison in different REQ categories*

##### **Level-1 Understanding of Role efficacy**

The role efficacy scale had twenty items in total. There were ten dimensions and each dimension had two items while each item has to be evaluated by the respondent by selecting any one suitable statement out of given three statement per item to reveal his

actual exact feeling. Different statements were pre weighted and these pre-weights were already allocated within the scale. Weight of +1 has been allocated to useful statements while weight of +2 was allocated to positive statements. The weight of -1 was allocated to negative statements. Role efficacy quotient (REQ) was calculated for the quantitative understanding of the role efficacy

***i. Calculation of Role Efficacy Quotient(REQ) for each respondent***

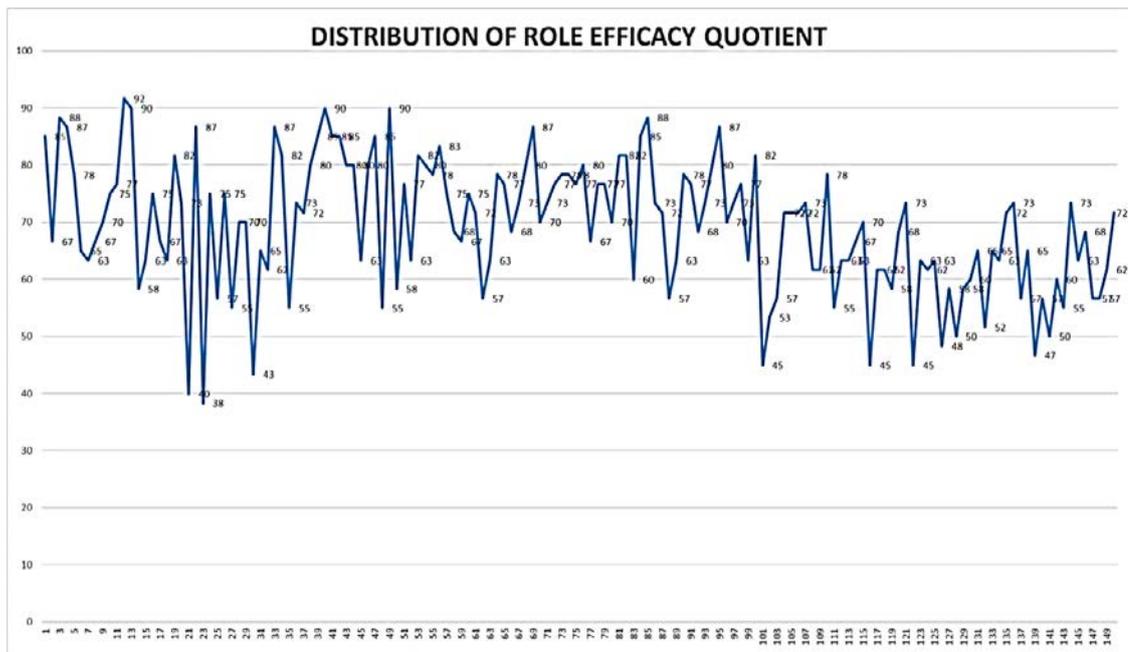
Based on pre weighted score, one respondent can have a maximum score of 4 while minimum score that can be obtained by a respondent could be -2 per dimension. Since there are ten dimensions so a respondent can have maximum score of 40 while minimum score that can be obtained by a respondent could be -20. Thus the formula for REQ would be equals to 20 added to the total of the score obtained by the respondent, which then divided by 60 and the resultant so obtained will be multiplied by 100. With the help of this formula REQ for each of the respondent was calculated and has been listed in the following table.

**Table No: 47- Listing of Role Efficacy Quotient (REQ for n = 150)**

Respon dent No.	RE Q								
1	85	31	65	61	72	91	77	121	73
2	67	32	62	62	57	92	68	122	45
3	88	33	87	63	63	93	73	123	63
4	87	34	82	64	78	94	80	124	62
5	78	35	55	65	77	95	87	125	63
6	65	36	73	66	68	96	70	126	48
7	63	37	72	67	73	97	73	127	58
8	67	38	80	68	80	98	77	128	50
9	70	39	85	69	87	99	63	129	58
10	75	40	90	70	70	100	82	130	60
11	77	41	85	71	73	101	45	131	65
12	92	42	85	72	77	102	53	132	52
13	90	43	80	73	78	103	57	133	65
14	58	44	80	74	78	104	72	134	63
15	63	45	63	75	77	105	72	135	72
16	75	46	80	76	80	106	72	136	73
17	67	47	85	77	67	107	73	137	57
18	63	48	55	78	77	108	62	138	65
19	82	49	90	79	77	109	62	139	47
20	73	50	58	80	70	110	78	140	57
21	40	51	77	81	82	111	55	141	50
22	87	52	63	82	82	112	63	142	60
23	38	53	82	83	60	113	63	143	55
24	75	54	80	84	85	114	67	144	73
25	57	55	78	85	88	115	70	145	63
26	75	56	83	86	73	116	45	146	68
27	55	57	75	87	72	117	62	147	57
28	70	58	68	88	57	118	62	148	57
29	70	59	67	89	63	119	58	149	62
30	43	60	75	90	78	120	68	150	72

### *Analysis of Role Efficacy Quotient for all ten dimensions against the scale score*

The values of role efficacy quotient (REQ) ranges between 38 to 92. The distribution of REQ is such that there seems the possibility of creation of categories. Furthermore, alone classification of REQ into some classes would not disclose the respondents standing on the ten dimensions.



**Graph No. 16: Showing Distribution of Role Efficacy Quotient**

It is therefore to examine the level of intolerability on ten dimensions, the respondents were categorizing into five categories on the basis of distribution percentage of respondents on the score of against scale values. The scale values considered in this study were below 1, 1,2,3, and 4. The maximum score that one dimension can have is four. It means if the respondent scored four on any of the dimension then it shows that such respondent has tolerable level on that dimension. Likewise, the respondent who scored three considered to have 75% tolerability and 25% deficiency or level of intolerability. Similarly, the respondents who scored two would considered to have 50% tolerability on that dimension while there would be 50% deficiency in that respondent on that dimension. The respondents who have scored one on a particular dimension would be considered to have 25% tolerability on that dimension along with 75 % deficiency or intolerability. All those respondents who scored less than one (zero or -1) considered to have deficiency or intolerability level of 0 to -25%. To be

competent about the role efficacy, an organization must have employees with more than 25% level of tolerability on the ten dimensions of role efficacy. It is therefore the values of 0 to -25 % deficiencies are together considered in one category titled 'below 1'. Based on the score of scales (4, 3, 2, 1, and below1) that are used to define different level of tolerability and deficiency along the ten dimensions of role efficacy, respondents have been distributed in a matrix consisting of all ten dimensions and the scores.

**Table No. 48: Showing Listing of Role Efficacy Quotient (REQ for n = 150)**

	Respondents having scored 4 on any of the dimension supposed to have Adequate positive perception on that dimension	Respondents having scored 3 on any of the dimension supposed to have 75% adequacy and 25% inadequacy or deficiency	Respondents having scored 2 on any of the dimension supposed to have 50% adequacy and 50% inadequacy or deficiency	Respondents having scored 1 on any of the dimension supposed to have 25% adequacy and 75% inadequacy or deficiency	Respondents having scored 0 or -1 on any of the dimension supposed to have 0 to -25% deficiency
Dimensions	4	3	2	1	Below
Centrality	10.7	30.0	31.3	11.3	16.7
Integration	46.7	13.3	6.7	17.3	16.0
Pro-activity	16.0	29.3	22.7	15.3	16.7
Creativity	20.0	38.0	12.7	12.0	17.3
Inter-role-linkage	23.3	34.7	6.7	20.7	14.7
Helping relation	43.3	20.0	4.7	20.7	11.3
Super-Ordination	10.0	26.0	9.3	20.7	34.0
Influence	19.3	30.0	19.3	9.3	22.0
Growth	12.0	28.7	18.7	16.7	24.0
Confrontation	45.3	27.3	7.3	10.0	10.0

***Classification of all respondents into categories formed against each dimension***

Role Efficacy Quotient (REQ) was calculated for each of the survey respondent. The individual level understanding of REQ is significant from the view point of employees but for the purpose of organization, it seems essential that the individual level REQ should be converted into a form that can provide a large scape view to know how many of the employees are lying in a particular range of REQ that require immediate action plan and how many of the employees are under such a category that appears to be the best in REQ holding employees. For this purpose, initially the REQ distribution was evaluated using line graph. Furthermore, distribution matrix containing percentages of employees as per the score of the scale against all ten dimensions was developed. Now to obtain a broader picture about the REQ, following three categories have been formulated for further broad classification of all respondents.

**Table No 49: Showing Respondents Categories**

Dimensions of Role Efficacy	Respondent Categories (Percentage distribution)		
	<b>Appropriate</b>	<b>Slight insufficiency</b>	<b>Major insufficiency</b>
Centrality	10.7	30.0	59.3
Integration	46.7	13.3	40.0
Pro-activity	16.0	29.3	54.7
Creativity	20.0	38.0	42.0
Inter-role-linkage	23.3	34.7	42.0
Helping relation	43.3	20.0	36.7
Super-Ordination	10.0	26.0	64.0
Influence	19.3	30.0	50.7
Growth	12.0	28.7	59.3
Confrontation	45.3	27.3	27.3

The three categories of respondents were the “Appropriate”(this category shows the percentages of the employees who found to have highest perceived (score of 4) score.) “Mild Insufficiency” (this category shows the percentages of the employees who found to have score of 3 on the given scale of role efficacy). The third category is

“Major Insufficiency” (The respondents who were found to have the score of 2,1 or 0 or -1).

This kind of classification of the employees shall help the organizations in identifying the pain points related to role efficacy and also be helpful in planning the areas of training. Besides, Employees are human being and there for they keep in touch with various social institution and other members of society. Due to inadequate level of role efficacy employees found under stressed and most of the time the reasons of their stress are related to the various dimensions of the role efficacy. The direct linkage of stress and role efficacy is least explored however in parts and in indirect interpretative association has been researched in some of the past studies. This association of the role efficacy with the stress will be helpful to find the most challenging area related to a person (here employee) which not only improved the role performance but also ultimately leads to reduced level of stress. Thus from society point of view, the contribution of such analysis will be to provide quantitative indication about how social organizations (profit or not for profit) can promote what to avoid to avoid stress at workplace as well as how role clarity is important in bringing stress free society.

The category named “Appropriate” represent the category of the participants who found to have highest perceived score on all ten dimensions. However, within this category percentage of participants against all ten dimensions found to vary. So three groups of dimensions have been explained. These three groups of dimensions within a category represent the group of dimensions for which relative percentage of participants found maximum, other group is of the dimension for which relative percentages found to be minimum and the third group within category consist of dimensions for which relative percentage found to be medium range. The other two categories namely “Mild Insufficiency” and “Major Insufficiency” are also explained in the same manner in order to give a comparative view point of the dimensions as well as participants.

The above table shows that the category “Appropriate” have different percentages of respondents against different dimensions of role efficacy. The percentages further can be seen as maximum, minimum and mediocre percentages depending on the highest and lowest value within “Appropriate” category. Maximum percentage of participants (46.7%) were found against “Integration” dimension within the “Appropriate”

category. It is followed by 45.3% of participants against “Confrontation” dimension while next to it is 43.3% of participants against “Helping relations”. This means approximately 44% of the participants have maximum perceived appropriateness on the dimensions namely, integration, confrontation and helping relations. So these are the strongest areas of the survey participants and organizations should consider these three dimensions while taking decisions about role of the employees. Organization can plan to take maximum advantages from employees by offering roles that demand or constitute of these three dimensions.

The minimum percentage of respondents were found against the dimension “Super-Ordination (10.0%), “Centrality (10.7%), “Growth (12.0%), and “Proactivity (16.0%) with in the “Appropriate” category. This means approximately only 12% of the respondents have maximum perceived appropriateness on the dimensions namely, super-ordination, centrality, growth and proactivity. It can be considered weak area if only number of respondents are considered otherwise these 12% respondents also scored highest and therefore these 12 % belongs to the category “Appropriate”. Since the number of people available for the roles that require above four dimensions are less (approx..12%) so organizations need to train people on these dimensions and should selectively push people on the roles that demand to perform on these four dimensions due to their less availability. The percentage of respondents that represent medium percentage of respondents were found against the dimension “inter-role linkage (23.3%), “creativity (20.0%) and “influence (19.3%) within the “Appropriate” category. Since the number of people available for the roles that require above three dimensions are sufficiently available so organizations should use these people as team on the roles that demand to perform on these four dimensions.

The category of mild insufficiency contains percentage of people ranged from 13.3 % to 38.0% against listed dimensions. In this category it can be observed that 38.0 % respondents had mild insufficiency on creativity dimension, the other dimensions that are key to mild insufficiency were inter-role linkage (34.7%), centrality (30.0%) and influence (30.0%). This group of dimensions under mild insufficiency category represents areas of key concern that can be controlled if training and guidance is provided aptly. The next group of dimensions in mild insufficiency consists of proactivity (29.3%), growth (28.7%), confrontation (27.3%), super-ordination (26.0%), helping relations (20.0%) and integration (13.3 %). This group of dimensions

represents the second priority dimensions that must be timely improved. If we observe the last category namely major insufficiency, the percentage of respondents with major insufficiency, were around super-ordination, centrality, growth, proactivity, and influence because the percentage of respondents ranges from 50% to 64 % found against these dimensions. The next group of dimension consist of creativity, inter role linkage, integration, helping relation and confrontation dimension.27% to 42% of respondents were found to have major insufficiency on these dimensions.

## **Level-2 Comparison of Role efficacy profile between Managerial and Executive Level Employees**

### *i. Category development of REQ*

Three broad categories have been created and these were named as category-A, category-B and category-C. These categories have been developed by referring the role efficacy quotient (REQ). The REQ of all respondent has been considered. The range of the REQ was obtained by referring to minimum and maximum REQ value. The range so obtained was 54 ( $92-38=54$ ). The range is then divided by three to obtained common distance factor for each category. It comes to be 18 ( $54 /3=18$ ). This way the entire REQ was converted to following three categories:

Category-A : 75.00 REQ to 92.00 REQ value

Category-B : 57.00 REQ to 74.99 REQ value

Category-C : 38.00 REQ to 56.99 REQ value

### *ii. Comparison based on categories of REQ*

Respondents were compared on the basis of their REQ scores which further have been used to create categories of respondents. Out of 150 respondents 36.1% found to be in category-A. This category shows that the respondents hare of higher REQ score amongst all other categories. These respondents (working as employees) can take challenging roles if the role demands to perform on the ten dimensions of role efficacy as defined earlier. In category-A, the mean of REQ score was 81.17 and the mode value was 76.6 while the standard deviation was 4.70. These data point shows that on an average the REQ score is excellent with comparatively lest deviation. The respondents have been comparatively consistent due to less standard deviation.

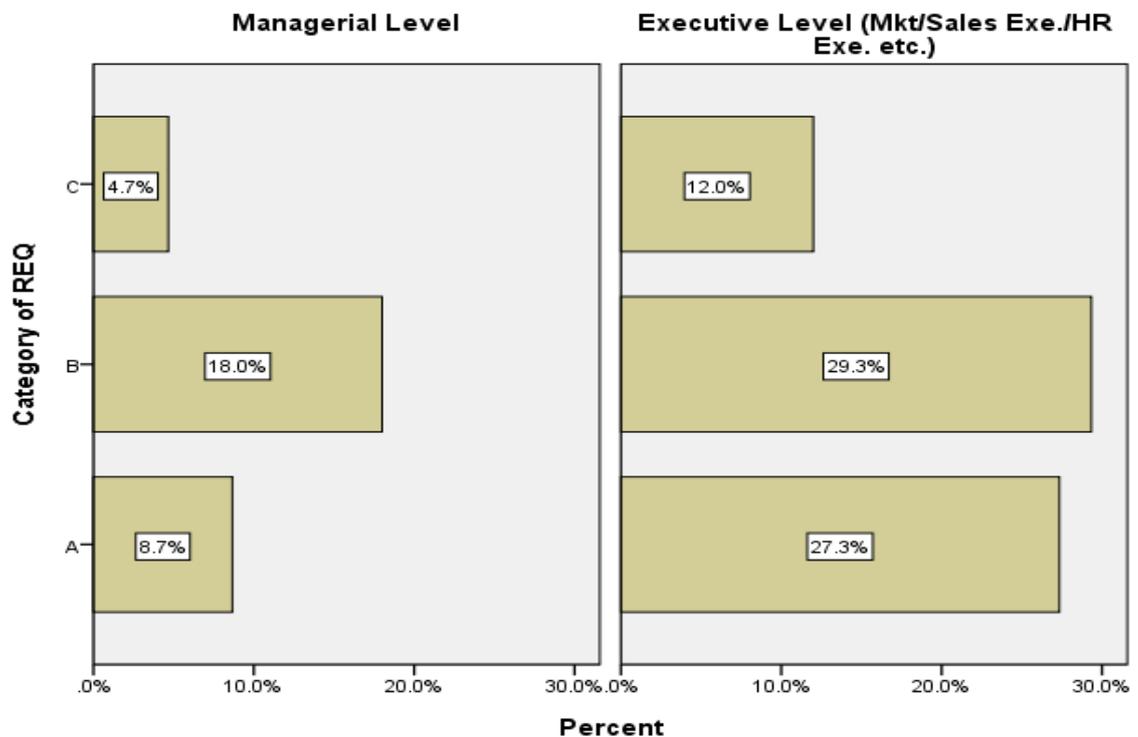
Category-B consist of 47.3 % of the total respondents (n=150). This category shows respondents having REQ ranged from 57 to 74.99. On an average the respondents of this category scored 66.57 REQ with slightly higher standard deviation (4.79) than the Category-A. It means this category is less consistent than Category-A. Category-C composed of 16.6% of respondents. This category represents the most challenging category of respondents (working employees) because these scored lesser REQ amongst all categories. It is challenging category because not only the average REQ is least but also the category is highly inconsistent in REQ scores because of highest standard deviation. The most common REQ score of this category found 56.6 and it is the least in in all three categories.

**Table No. 50: Showing Respondents Category wise Comparative Statistics**

Categories	Category wise Comparative statistics of the respondents ( based on Role Efficacy Quotient (REQ))	
A	N	<b>54.00</b>
	Mean	81.17
	Mode	76.67
	Std. Deviation	4.70
	Minimum	75.00
	Maximum	91.67
B	N	<b>71.00</b>
	Mean	66.57
	Mode	63.33
	Std. Deviation	4.79
	Minimum	58.33
	Maximum	73.33
C	N	<b>25.00</b>
	Mean	51.40
	Mode	56.67
	Std. Deviation	5.83
	Minimum	38.33
	Maximum	56.67

**iii. Designation-wise comparison of employees in different REQ categories**

The next level of comparison is between the different designations of employees. There were more employees at executive levels as compared to managerial level. Due to unequal presence of the employees in both the designations absolute percentage-based comparison would not explain correct picture so the proportion of the respondents in both the designation was overviewed and it has been found that the percentage accumulation of the employees in different categories of REQ were proportionately close. Which means that number of employees in category-A remain less irrespective of the designation and maximum number of employees found in category-B irrespective of designation.



**Graph No. 17: Showing Designation wise Comparison of Employees in Different REQ Categories**

**iv. Organization type and designation wise comparison in different REQ categories**

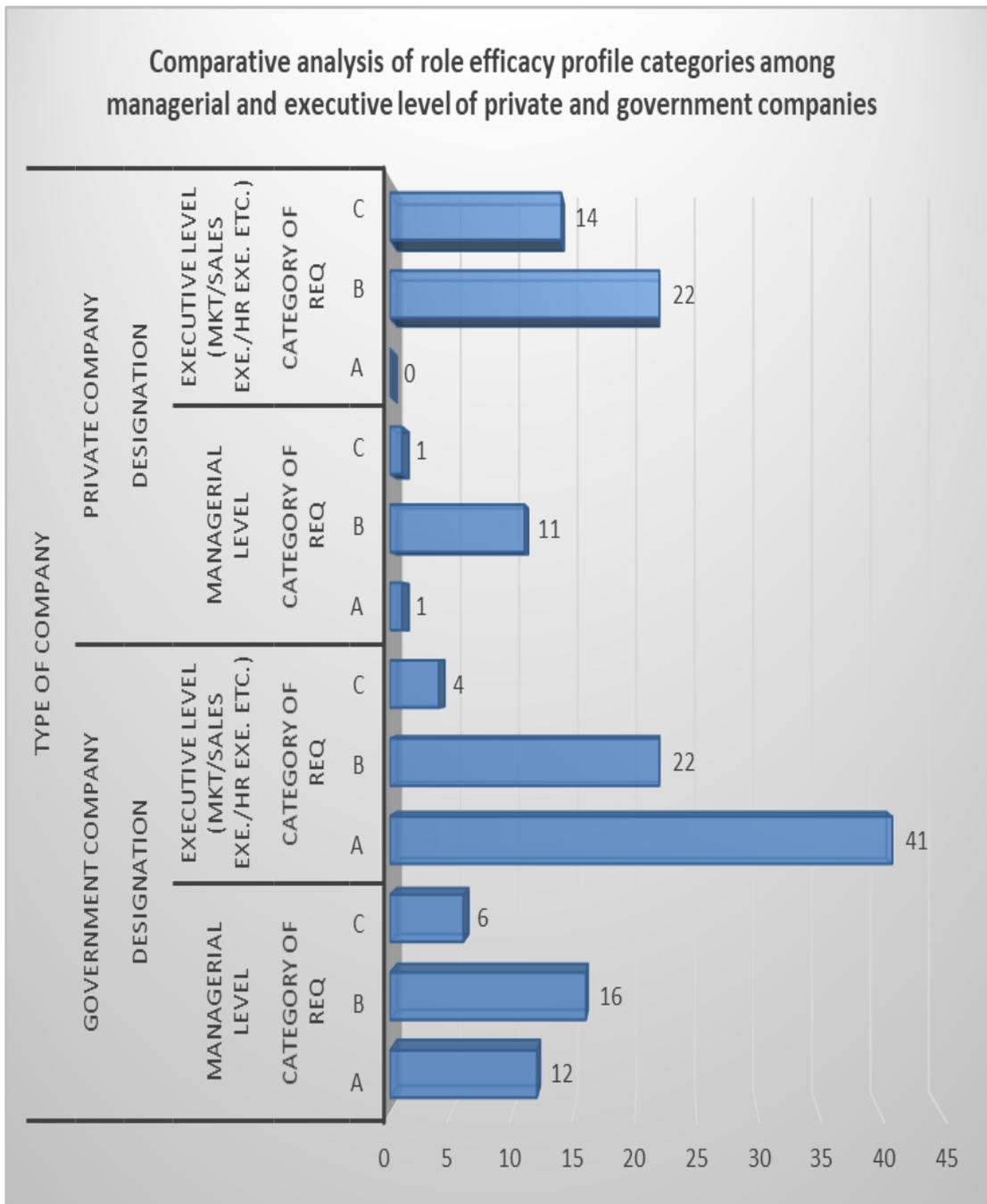
The REQ scores were comparatively analysed on the basis of types of companies and designation of the employees. Executive level employees in both type of companies were having similar representation in terms of numbers of employee in Category-B. Category-B includes the employees whose REQ score ranged between 57 to 74.99.

However, no representation from executive level was obtained in category-A from private companies while in this category and from this designation the representation from government company found to be maximum (27.3%)

**Table No: 51: Organization type and designation wise comparison of Role Efficacy Quotient score of Employees**

Organization type and designation wise comparison of Role Efficacy Quotient score of Employees							
						Count	Table N %
Type of Company	Government Company	Designation	Managerial Level	Category of REQ	A	12	8.0%
					B	16	10.7%
					C	6	4.0%
			Executive Level (Mkt/Sales Exe./HR Exe. etc.)	Category of REQ	A	41	27.3%
					B	22	14.7%
					C	4	2.7%
	Private Company	Designation	Managerial Level	Category of REQ	A	1	.7%
					B	11	7.3%
					C	1	.7%
			Executive Level (Mkt/Sales Exe./HR Exe. etc.)	Category of REQ	A	0	0.0%
B					22	14.7%	
C					14	9.3%	

Employees with managerial designation from private companies were insufficiently present in Category-A. However, from this designation 8% employees scored REQ to get in Category-A. Category-A includes those employees who scored in the range from 75 to 92 REQ value. To present the comparative view following bar chart is developed.



**Graph No. 18: Showing Comparative Analysis of Role Efficacy Profile Categories among Managerial and Executive Level of Private and Government Companies**

## **PART-4**

### **UNDERSTANDING ROLE STRESS**

#### **SECTION-VI**

#### **CALCULATION AND ANALYSIS OF ROLE STRESS**

This research also explored the association between role efficacy and role stress. The standard role efficacy scale was used to obtain data on role efficacy and individual level role efficacy quotient (REQ) was calculated. The measurement of role stress was done with the help of standard scale used for the measurement of role stress. This scale is named as “general role stress scale”. There were twelve items on this scale with associated five-point rating scale that contain values from 0 to 4. The average stress score for all the participants was calculated for further analysis of the association between role efficacy and role stress. Following are the summary steps of the data analysis related to this objective:

- i. Calculation of average stress score*
- ii. Calculation of REQ*
- iii. Examination of Association between role efficacy and role stress by using Scatter plot*

The calculation of role efficacy quotient (REQ) has been already completed in objective-1 so the values are directly referred in the calculation for this objective.

*i. Calculation of Average Stress Score*

The average of stress score was calculated by using the ratings given by the respondents to the twelve items of the general stress scale. The sum of the all ratings obtained on the twelve items was divided by twelve to calculate the average stress score. Following are the average stress scores of each of the participants.

**Table No: 52: Showing Respondents Average Stress Scores**

Respondent No.	Average Stress Score								
1	1.67	31	1.83	61	3.75	91	2.17	121	2.25
2	0.83	32	0.75	62	2.75	92	4.00	122	2.42
3	0.00	33	1.92	63	0.83	93	2.08	123	2.42
4	1.08	34	1.58	64	2.08	94	1.92	124	2.17
5	1.67	35	1.42	65	2.17	95	2.00	125	2.25
6	0.58	36	1.17	66	4.00	96	1.33	126	2.33
7	1.25	37	0.75	67	2.08	97	3.67	127	2.25
8	0.92	38	1.50	68	1.92	98	1.50	128	2.00
9	2.42	39	1.00	69	2.00	99	1.75	129	2.17
10	1.42	40	1.58	70	1.33	100	2.92	130	2.25
11	1.33	41	0.92	71	3.67	101	1.92	131	2.25
12	1.42	42	0.83	72	1.50	102	2.33	132	2.17
13	1.42	43	0.58	73	1.50	103	1.92	133	2.00
14	1.75	44	1.75	74	1.83	104	1.50	134	2.25
15	1.83	45	2.08	75	1.75	105	1.50	135	2.25
16	2.50	46	0.50	76	1.00	106	1.67	136	2.33
17	1.92	47	1.00	77	1.67	107	0.75	137	2.33
18	1.67	48	3.50	78	1.42	108	1.92	138	2.17
19	2.17	49	1.42	79	1.58	109	2.08	139	2.25
20	1.67	50	1.75	80	2.08	110	1.92	140	2.25
21	1.67	51	1.83	81	0.67	111	2.50	141	2.33
22	1.75	52	1.75	82	0.75	112	2.00	142	2.08
23	0.83	53	2.92	83	1.33	113	2.50	143	2.50
24	2.67	54	2.75	84	2.08	114	2.33	144	2.08
25	2.67	55	1.67	85	0.58	115	1.75	145	2.08
26	3.42	56	1.75	86	0.67	116	2.50	146	2.00
27	3.50	57	1.42	87	3.75	117	2.08	147	2.08
28	2.33	58	1.42	88	2.75	118	1.92	148	2.33

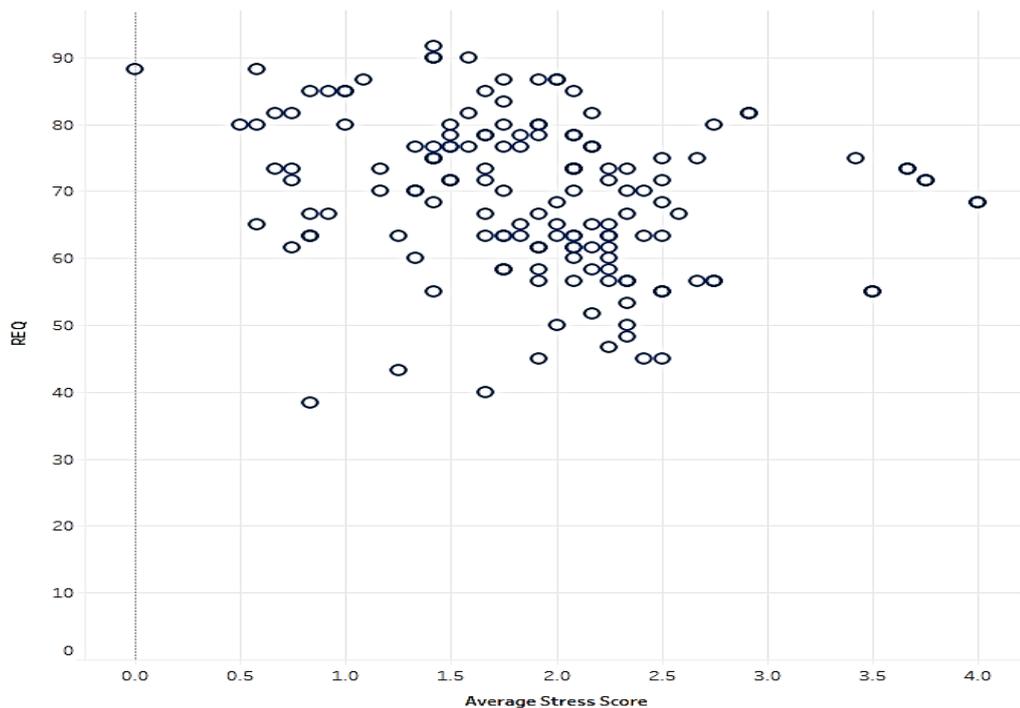
29	1.17	59	2.58	89	0.83	119	1.92	149	2.25
30	1.25	60	1.42	90	2.08	120	2.50	150	2.50

**ii. Calculation of REQ**

The calculation of role efficacy quotient (REQ) has been already completed in previous part so the values are directly referred in the calculation for this objective.

**iii. Examination of Association between role efficacy and role stress by using Scatter plot**

The relationship between the two variables (role stress and role efficacy) has been investigated by using scatter plot as it gives illustration about the possibility of association. However, if scatter plot indicates any kind of association then the Pearson coefficient of correlation can be calculated to see the quantitative nature of association. Following is the scatter diagram developed on Tablue software.



**Graph No.19: Showing Average Stress Score**

The dots of the plot represent the individual values of the respondents. The scatter plot demonstrates that there is no clear trend between stress score and the values of

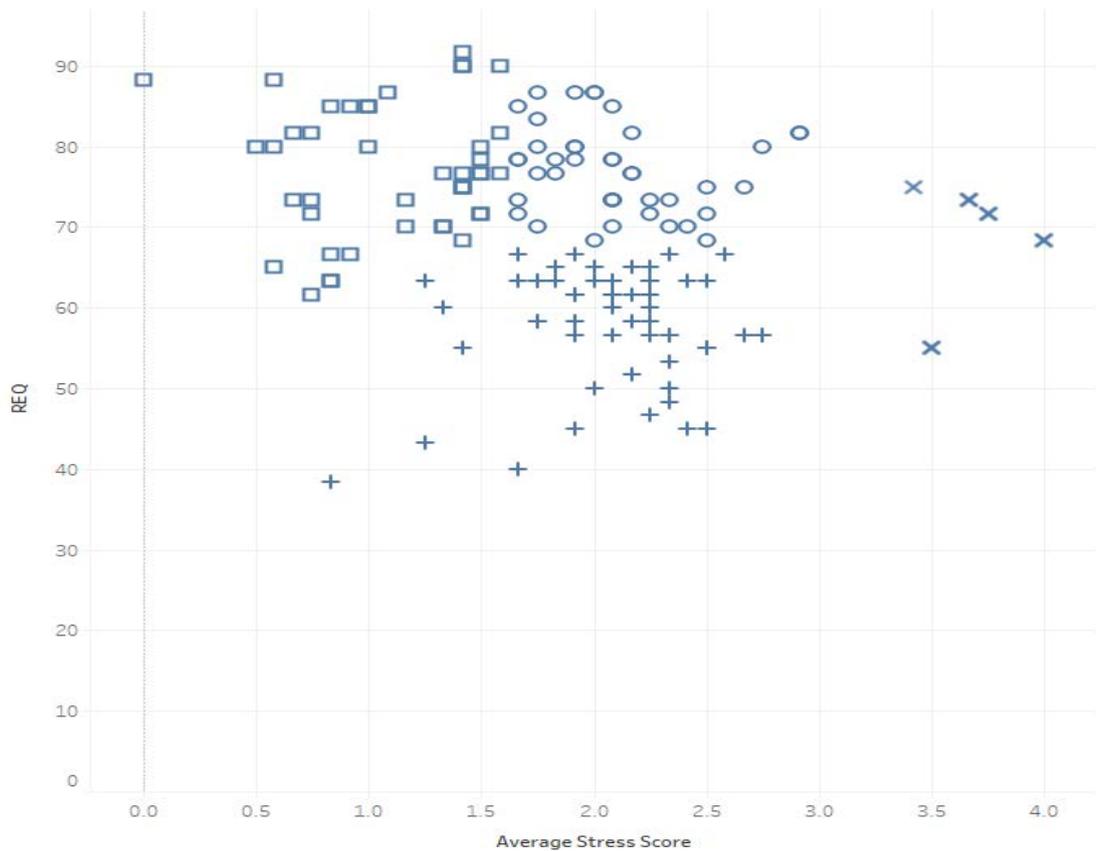
REQ. The values are so concentrated in patches over the scatter plot that the possibility of association over long distance can't be interpreted. In the further analysis Pearson's coefficient of correlation was calculated and the results confirms that there almost no association in terms of correlation. The correlation coefficient was found to be -.001 which clearly indicates absence of any correlation.

**Table No 53: Showing Correlations**

<b>Correlations</b>			
		<b>Average Stress Score</b>	<b>Role Efficacy Quotient</b>
Average Stress Score	Pearson Correlation	1	-.001
	Sig. (2-tailed)		.989
	N	150	150
Role Efficacy Quotient	Pearson Correlation	-.001	1
	Sig. (2-tailed)	.989	
	N	150	150

Even though there is no clear association between role efficacy and role stress and there could be various reasons to this observation. Micro analysis of the scatter plot indicates the presence of some groups of the data points which can be helpful to provide some more meaningful interpretation. These groups of data points have been named as clusters. Each cluster represents specific number of respondents within and related measures.

Association between Role Efficacy and Role Stress



**Graph No. 20: Showing Association Between Role Efficacy and Role Stress**

Four clear clusters were identified in the scatter plot. These clusters were denoted by different symbols. These symbols include box, circle, cross and plus sign. All 150 respondents' values on average stress score and role efficacy quotients were covered within these four clusters. The details of the membership of these four clusters have been given below:

### **Cluster Details**

#### **Cluster Number-1**

Total respondents in cluster = 41

Symbolic representation in figure = by circle symbol (Some values are overlapping so in figure symbols may found to mismatch but the details of members of cluster can be referred to following cluster membership details)

Cluster membership details:

**Table No. 54: Cluster 1 Membership Details:**

Cluster Member	Average Stress Score	REQ	Cluster Member	Average Stress Score	REQ
1	1.67	71.67	22	2.08	73.33
2	1.67	73.33	23	2.08	73.33
3	1.67	78.33	24	2.08	78.33
4	1.67	78.33	25	2.08	78.33
5	1.67	85.00	26	2.08	85.00
6	1.75	70.00	27	2.17	76.67
7	1.75	76.67	28	2.17	76.67
8	1.75	80.00	29	2.17	81.67
9	1.75	83.33	30	2.25	71.67
10	1.75	86.67	31	2.25	73.33
11	1.83	76.67	32	2.33	70.00
12	1.83	78.33	33	2.33	73.33
13	1.92	78.33	34	2.42	70.00
14	1.92	80.00	35	2.50	68.33
15	1.92	80.00	36	2.50	71.67
16	1.92	86.67	37	2.50	75.00
17	2.00	68.33	38	2.67	75.00
18	2.00	86.67	39	2.75	80.00
19	2.00	86.67	40	2.92	81.67
20	2.08	70.00	41	2.92	81.67
21	2.08	73.33			

## Cluster Number-2

Total respondents in cluster = 43

Symbolic representation in figure = by square symbol (Some values are overlapping so in figure symbols may found to mismatch but the details of members of cluster can be referred to following cluster membership details)

Cluster membership details:

**Table No. 55: Showing Cluster 2 Membership Details**

Cluster Member	Average Stress Score	REQ	Cluster Member	Average Stress Score	REQ
1	0.00	88.33	23	1.17	73.33
2	0.50	80.00	24	1.33	70.00
3	0.58	65.00	25	1.33	70.00
4	0.58	80.00	26	1.33	76.67
5	0.58	88.33	27	1.42	68.33
6	0.67	73.33	28	1.42	75.00
7	0.67	81.67	29	1.42	75.00
8	0.75	61.67	30	1.42	75.00
9	0.75	71.67	31	1.42	76.67
10	0.75	73.33	32	1.42	90.00
11	0.75	81.67	33	1.42	90.00
12	0.83	63.33	34	1.42	91.67
13	0.83	63.33	35	1.50	71.67
14	0.83	66.67	36	1.50	71.67
15	0.83	85.00	37	1.50	76.67
16	0.92	66.67	38	1.50	76.67
17	0.92	85.00	39	1.50	78.33
18	1.00	80.00	40	1.50	80.00
19	1.00	85.00	41	1.58	76.67
20	1.00	85.00	42	1.58	81.67
21	1.08	86.67	43	1.58	90.00
22	1.17	70.00			

### Cluster Number-3

Total respondents in cluster = 57

Symbolic representation in figure = by plus symbol (Some values are overlapping so in figure symbols may found to mismatch but the details of members of cluster can be referred to following cluster membership details)

Cluster membership details:

**Table No 56: Showing Cluster 3 Membership Details**

Cluster Member	Average Stress Score	REQ	Cluster Member	Average Stress Score	REQ
1	0.83	38.33	30	2.17	51.67
2	1.25	43.33	31	2.17	58.33
3	1.25	63.33	32	2.17	61.67
4	1.33	60.00	33	2.17	65.00
5	1.42	55.00	34	2.25	46.67
6	1.67	40.00	35	2.25	56.67
7	1.67	63.33	36	2.25	58.33
8	1.67	66.67	37	2.25	60.00
9	1.75	58.33	38	2.25	61.67
10	1.75	58.33	39	2.25	63.33
11	1.75	63.33	40	2.25	63.33
12	1.75	63.33	41	2.25	65.00
13	1.83	63.33	42	2.33	48.33
14	1.83	65.00	43	2.33	50.00
15	1.92	45.00	44	2.33	53.33
16	1.92	56.67	45	2.33	56.67
17	1.92	58.33	46	2.33	56.67
18	1.92	61.67	47	2.33	66.67
19	1.92	61.67	48	2.42	45.00
20	1.92	66.67	49	2.42	63.33
21	2.00	50.00	50	2.50	45.00
22	2.00	63.33	51	2.50	55.00
23	2.00	65.00	52	2.50	55.00

24	2.08	56.67	53	2.50	63.33
25	2.08	60.00	54	2.58	66.67
26	2.08	61.67	55	2.67	56.67
27	2.08	61.67	56	2.75	56.67
28	2.08	63.33	57	2.75	56.67
29	2.08	63.33			

#### **Cluster Number-4**

Total respondents in cluster = 9

Symbolic representation in figure = by cross symbol (Some values are overlapping so in figure symbols may found to mismatch but the details of members of cluster can be referred to following cluster membership details)

Cluster membership details:

**Table No 57: Showing Cluster 4 Membership Details**

<b>Cluster Member</b>	<b>Average Stress Score</b>	<b>REQ</b>
1	3.42	75.00
2	3.50	55.00
3	3.50	55.00
4	3.67	73.33
5	3.67	73.33
6	3.75	71.67
7	3.75	71.67
8	4.00	68.33
9	4.00	68.33

General role stress scale was used to develop an index of individual level role stress. As per this scale the main stresses can be divided into four categories. These are self-role distance, inter-role distance, role boundedness and personal inadequacy. This scale has 12 statements which in a particular arrangement of the statements shall measure the stresses.

The data analysis for this objective involved following:

- i. Calculation of individual level stress score*
- ii. Identification of stress areas*
- i. Calculation of Individual Level Stress Score***

The general role stress scale is a rating-based scale and respondents rated the given 12 items on a five-point scale. These rating points included '0' for never or rarely, '1' for occasionally, '2' for sometimes, '3' for frequently and '4' for very frequently. Thus, the scale values range from 0 to 4. The individual level stress score was measured by taking the sum of ratings given by respondent on all 12 statements and then divided the individual level sum by 12. Following table shows the individual level stress score.

**Table No 58: Showing Individual Level Stress Score**

Respo ndent No.	Avera ge Stress Score								
1	1.67	31	1.83	61	3.75	91	2.17	121	2.25
2	0.83	32	0.75	62	2.75	92	4.00	122	2.42
3	0.00	33	1.92	63	0.83	93	2.08	123	2.42
4	1.08	34	1.58	64	2.08	94	1.92	124	2.17
5	1.67	35	1.42	65	2.17	95	2.00	125	2.25
6	0.58	36	1.17	66	4.00	96	1.33	126	2.33
7	1.25	37	0.75	67	2.08	97	3.67	127	2.25
8	0.92	38	1.50	68	1.92	98	1.50	128	2.00
9	2.42	39	1.00	69	2.00	99	1.75	129	2.17
10	1.42	40	1.58	70	1.33	100	2.92	130	2.25
11	1.33	41	0.92	71	3.67	101	1.92	131	2.25
12	1.42	42	0.83	72	1.50	102	2.33	132	2.17
13	1.42	43	0.58	73	1.50	103	1.92	133	2.00
14	1.75	44	1.75	74	1.83	104	1.50	134	2.25
15	1.83	45	2.08	75	1.75	105	1.50	135	2.25
16	2.50	46	0.50	76	1.00	106	1.67	136	2.33
17	1.92	47	1.00	77	1.67	107	0.75	137	2.33
18	1.67	48	3.50	78	1.42	108	1.92	138	2.17
19	2.17	49	1.42	79	1.58	109	2.08	139	2.25
20	1.67	50	1.75	80	2.08	110	1.92	140	2.25
21	1.67	51	1.83	81	0.67	111	2.50	141	2.33
22	1.75	52	1.75	82	0.75	112	2.00	142	2.08
23	0.83	53	2.92	83	1.33	113	2.50	143	2.50
24	2.67	54	2.75	84	2.08	114	2.33	144	2.08
25	2.67	55	1.67	85	0.58	115	1.75	145	2.08
26	3.42	56	1.75	86	0.67	116	2.50	146	2.00
27	3.50	57	1.42	87	3.75	117	2.08	147	2.08

28	2.33	58	1.42	88	2.75	118	1.92	148	2.33
29	1.17	59	2.58	89	0.83	119	1.92	149	2.25
30	1.25	60	1.42	90	2.08	120	2.50	150	2.50

*ii. Identification of Stress Areas*

According to the scale there were four role stresses. Each of these was attached with specific item number on the stress scale. Following is the detail of the scale item number and related stress area:

**Table No. 59: Showing Scale Item Number and Related Stress area**

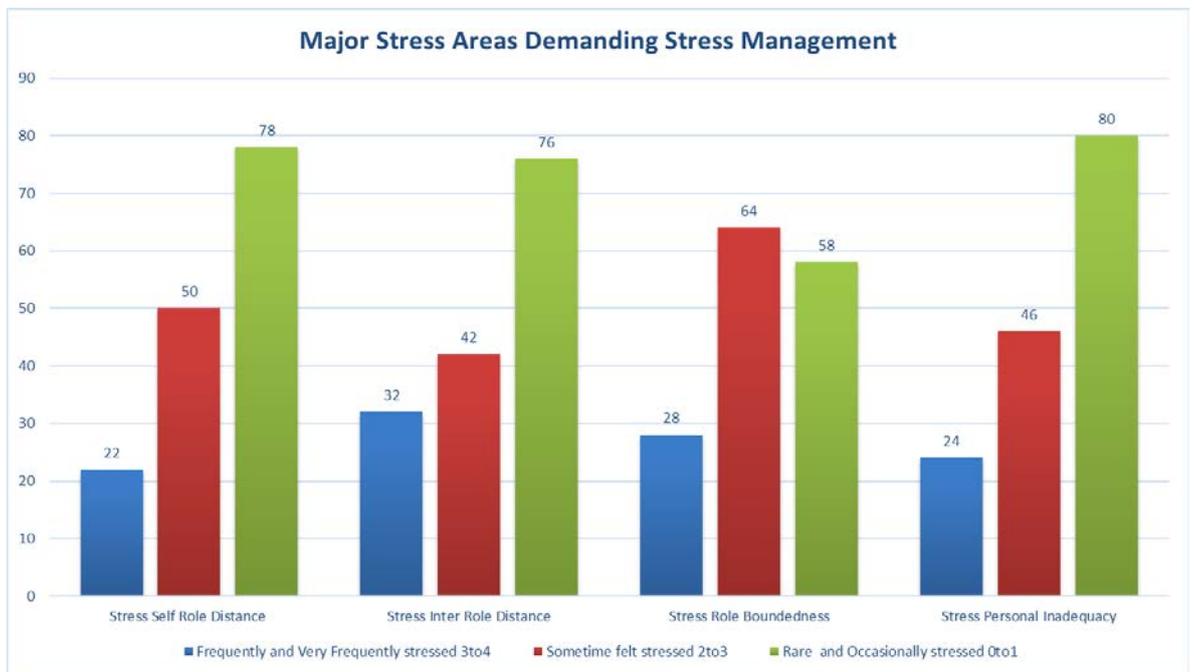
<b>Role stress area</b>	<b>Items number on the scale</b>
Stress due to self-role distance (due to role expectation)	1,5 and 9
Stress due to inter role distance (due to different roles)	2,6 and 10
Stress due to role boundedness (due to sacrifices of comfort, interest to meet role's expectation)	3,7 and 11
Stress due to personal inadequacy (due to incompetency)	4,8 and 12

For further analysis, the values of major stress areas were calculated by using the items as per above table. The scale values are such that the value of zero and one represent rare and occasionally stressed areas for a respondent. The values of role stress areas that lie between two and three represent sometime felt stressed areas. The major stressed areas were represented by the stress score that lies between three to four. The values were calculated as the average of the three scores by considering the above combination of three items for each of the major stress area.

**Table No 60: Showing Major Stress Area Demanding Stress Management**

Stress Management Priority indicators	Scale Values	Major Stress Areas Demanding Stress Management			
		Stress Self Role Distance	Stress Inter Role Distance	Stress Role Boundedness	Stress Personal Inadequacy
Frequently and Very Frequently stressed	3 to 4	22	32	28	24
Sometime felt stressed	2 to 3	50	42	64	46
Rare and Occasionally stressed	0 to 1	78	76	58	80
Total		150	150	150	150

The analysis shows that the majority of the respondents (50% or more) rarely and occasionally got stressed in all the major areas of stress with one exception and it is stress due to role boundedness.



**Graph No. 21: Showing Major Stress Areas Demanding Stress Management**

The major stress areas that are demanding for speedy to instant focus includes stress due to role boundedness and stress due to self-role distance. However, 14% to 21% respondents were found to feel stress in all four major areas of stress. Thus, organizations can plan counseling sessions or training sessions or open discussions to resolve the major stress areas related causes and further can find policy level solutions that effectively can prevent employees to get into stress due to their official roles.

This research also intended to analyze the effect of the service length at the present company, total experience, age and salary of employee on role efficacy. The analysis of the data for the requirement of this objective was done as follows:

- i. Line graphs were used to evaluate the effect of each of the aforesaid variable on role efficacy.*
- ii. Regression analysis was conducted to drive a model that relates the role efficacy with other independent variables.*

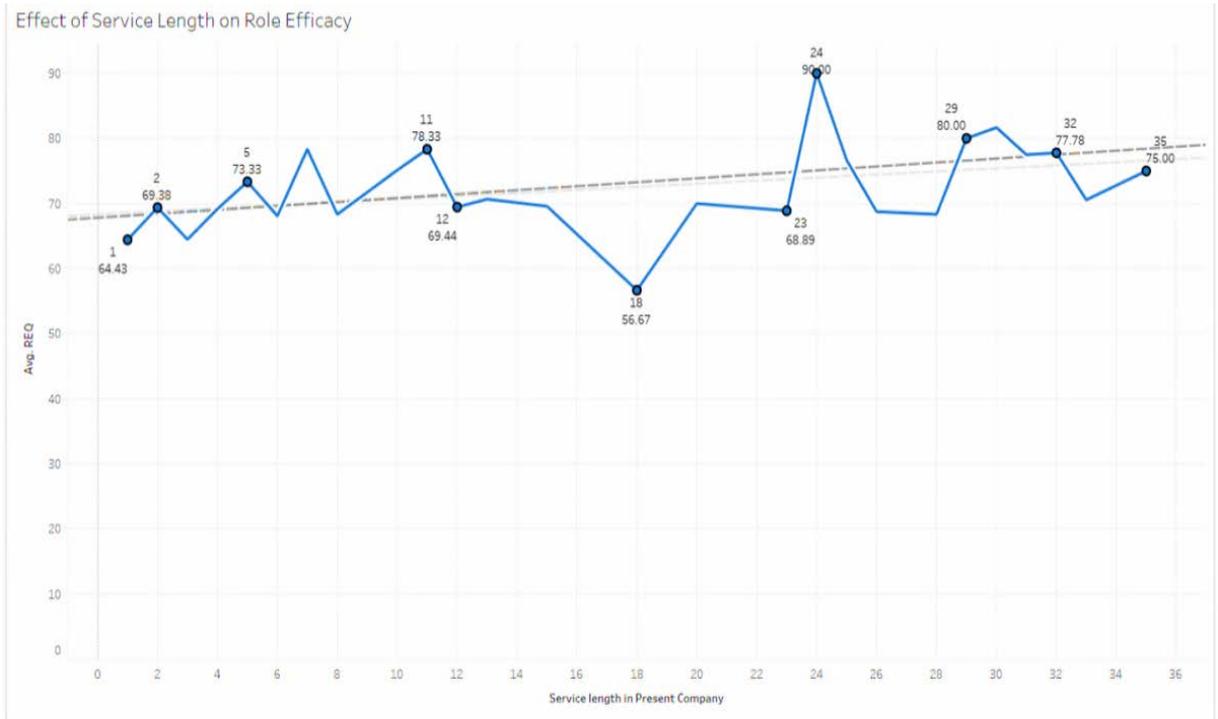
#### ***Effect of Service Length On Role Efficacy***

The role efficacy responses were obtained on role efficacy scale which further used to calculate role efficacy quotient. The data on service length was collected in year unit only. A frequency count was conducted to find how many respondents found to have same years of service length at their current organization. Following table shows the count of respondent for a particular number of years.

**Table No 61: Showing Count of Respondent for a particular number of Years**

Service length in Present Company (in years)	Count of Respondents	Service length in Present Company (in years)	Count of Respondents
35	1	15	4
33	3	13	5
32	3	12	3
31	2	11	1
30	1	10	14
29	1	8	7
28	3	7	4
26	4	6	14
25	1	5	5
24	1	4	4
23	3	3	16
20	4	2	16
18	1	1	29

It can be observed from the above table that number of respondents and their stay in the present organization can be seen as tiny groups for example for 33 years stay in organization there were three respondents likewise for the 15 years of service length in the present company there were 4 respondents. So the absolute REQ values can't be used to evaluate the effect of service length on the role efficacy. So average of the REQ was calculated. Following table list the REQ values for the all respondents that have common number of years of service at the present organization.



**Graph No. 22: Showing Effect of Service Length on Role Efficacy**

A line graph is plotted between service length and the average REQ to evaluate the effect of service length on the role efficacy.

**Frequency Count of REQ against Service Length**

Service len..	REQ Values
1	81.67 81.67 81.67 80.00 78.33 76.67 73.33 71.67 70.00 68.33 66.67 65.00 65.00 65.00 63.33 63.33 61.67 61.67 61.67 61.67 60.00 58.33 56.67 55.00 55.00 48.33 46.67 45.00 45.00
2	88.33 78.33 76.67 76.67 75.00 73.33 73.33 73.33 73.33 68.33 63.33 61.67 61.67 56.67 56.67 53.33
3	80.00 76.67 76.67 73.33 73.33 71.67 66.67 66.67 63.33 63.33 60.00 58.33 56.67 50.00 50.00 45.00
4	78.33 75.00 63.33 60.00
5	91.67 88.33 76.67 55.00 55.00
6	78.33 76.67 76.67 75.00 73.33 73.33 70.00 70.00 66.67 63.33 63.33 58.33 56.67 51.67
7	80.00 80.00 80.00 73.33
8	81.67 78.33 78.33 63.33 63.33 56.67 56.67
10	90.00 90.00 86.67 86.67 85.00 85.00 75.00 71.67 71.67 71.67 68.33 66.67 65.00 38.33
11	78.33
12	75.00 70.00 63.33
13	86.67 86.67 63.33 58.33 58.33
15	71.67 70.00 68.33 68.33
18	56.67
20	83.33 81.67 71.67 43.33
23	80.00 71.67 55.00
24	90.00
25	76.67
26	73.33 70.00 66.67 65.00
28	80.00 63.33 61.67
29	80.00
30	81.67
31	85.00 70.00
32	85.00 85.00 63.33
33	86.67 85.00 40.00
35	75.00

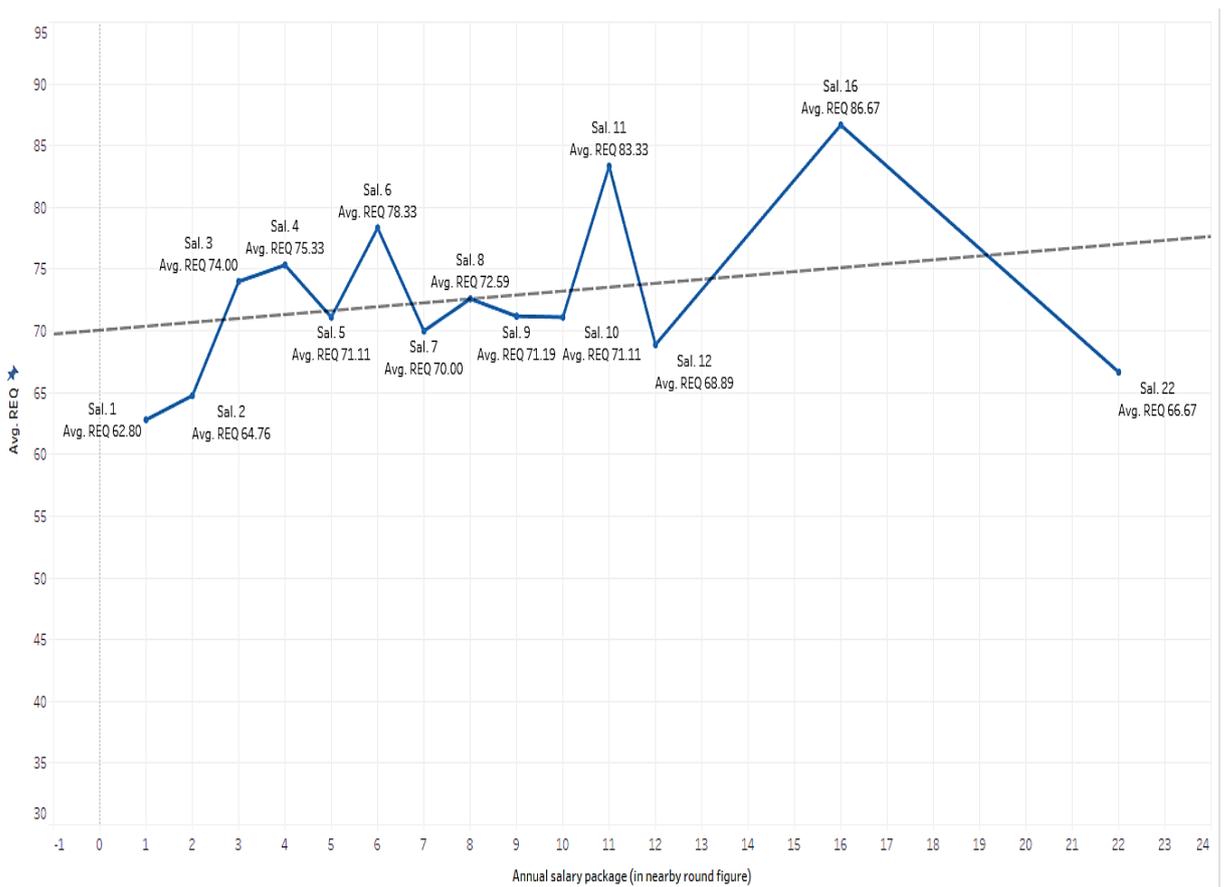
**Graph No. 23: Showing Frequency Count of REQ against Service Length**

It can be observed that as the number of years of service in present company increase that also affect the score of role efficacy quotient or in other words it can be said that the understanding of the role improved. However, this is overall trend based interpretation. The trend line is also supporting the existence of this kind of trend. Thus it can be concluded that service length at present company has an effect over the role efficacy.

***Effect of Average Salary Package on Role Efficacy***

Line graph was plotted for the data of annual salary package and average REQ. The trend line by enlarge shows that there is a positive upward trend which means as the annual salary package increase the role efficacy quotient also increase.

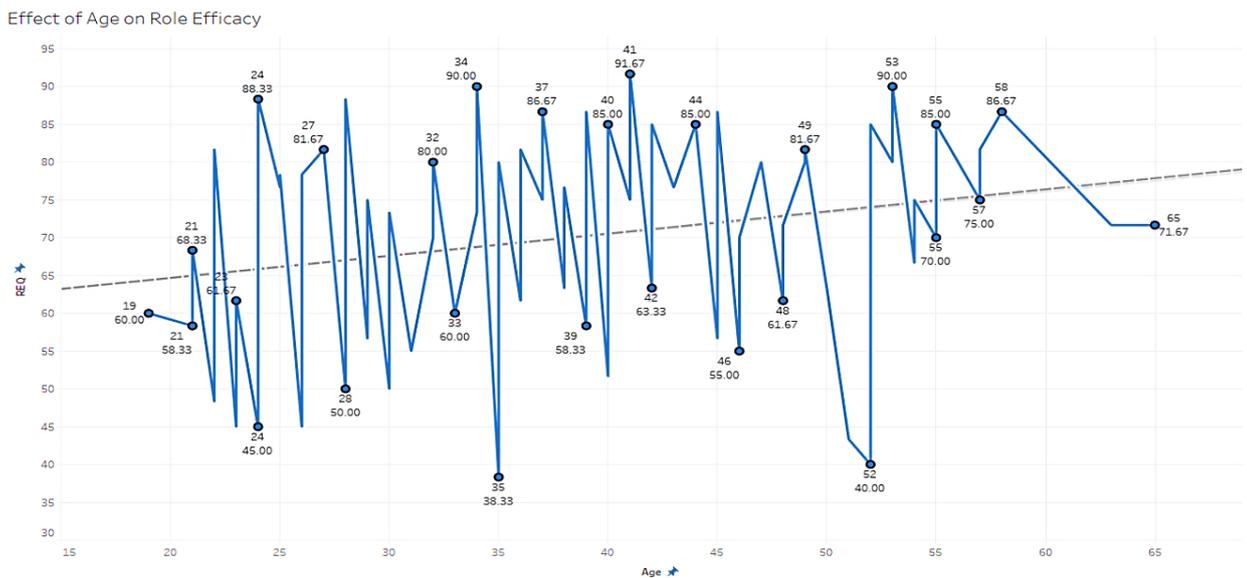
**Graph No. 24: Showing Effect of Average Salary Package on Role Efficacy**



Thus based on the observation of the line graph and the trend line, it can be infer that average salary package affect the role efficacy.

### *Effect of Age on Role Efficacy*

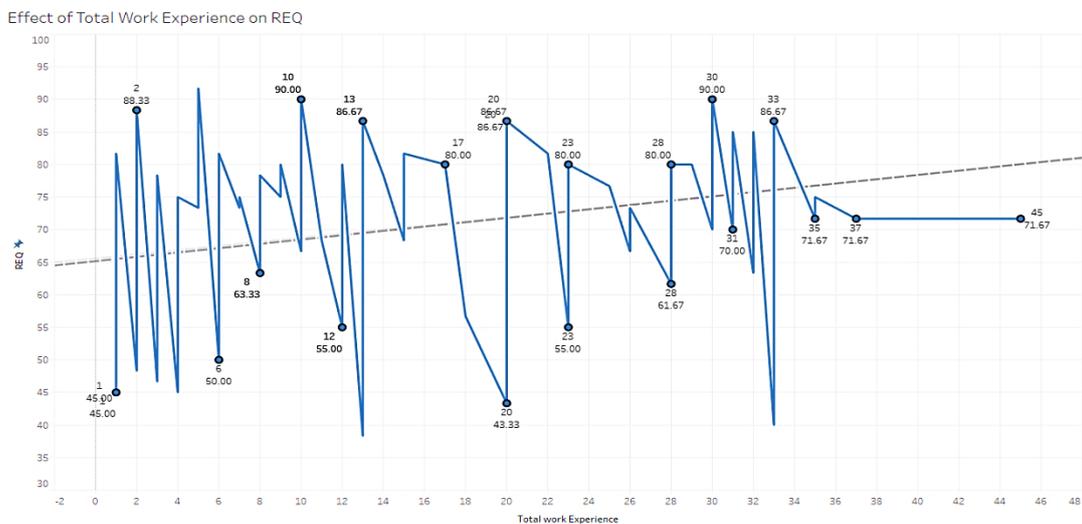
The line chart drawn between age of the respondents and their REQ shows that age effect the role efficacy. As the age increases the role efficacy quotient also increases. Following is the line chart that depicts the trend line showing upward trend between age and REQ.



**Graph No. 25: Showing Effect of Age on Role Efficacy**

### *Effect of Total Experience on Role Efficacy*

Line graph was plotted for the data of effect of total experience and REQ. The trend line shows that there is a positive upward trend which means as the total experience increase the role efficacy quotient also increase.



**Graph No. 26: Showing Effect of Total Work Experience on REQ**

**PART-5:**  
**PROPOSED REGRESSION MODEL**

**SECTION-VII**  
**PROPOSED MODEL TO RELATE ROLE EFFICACY WITH**  
**INDEPENDENT VARIABLES**

Regression analysis was conducted to drive a model that relates the role efficacy with other independent variables. Regression analysis helps to study the relationship among two or more variables. The relationship can be considered by including various independent variables and one dependent variable. As it has been found from the line graphs and trend line that the variables such as service length at present company, total experience, age and salary of employee have an effect over role efficacy. The regression analysis is used to study the quantitative aspect of the relationship.

Following table shows how many and what independent variables have been entered in the current regression. These variables along with the dependent variable together constitute the regression model and the table also included the choice of method used for the estimation.

**Table No 62: Showing Variables**

<b>Variables Entered/Removed<sup>a</sup></b>			
Model	Variables Entered	Variables Removed	Method
1	Annual Salary (in Lac), Age (in Years only), Service in current Company, Total Work Experience <sup>b</sup>	.	Enter
a. Dependent Variable: Role Efficacy Quotient			
b. All requested variables entered.			

Following is the table obtained from the output of regression analysis performed by using SPSS. The table contains the model summary. The summary of the model

contains the coefficient that shall explain the quantitative aspect of the relationship. The 'R' shows the relation between evaluated and expected values of the dependent variable based on the selected independent variables. 'R' is known as multiple correlation coefficient. The value of 'R' here is .331 and it shows a lower degree of correlation. The value of 'R-Square' explain how much of the total variation in the dependent variable (here role efficacy) can be explained by the independent variable

**Table No 63: Showing Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.331 <sup>a</sup>	.110	.085	11.01009
a. Predictors: (Constant), Annual Salary (in Lac), Age (in Years only), Service in current Company, Total Work Experience				

The value of 'R Square' is .110 and this is very small value as it explains that the independent variables used in this regression model can only explain 11.0% of the total variation. The value of adjusted R square is smaller than the value of 'R' Square. This implies that the additional input variables are not adding values to the model. In our opinion it might be due to the similar nature of the three variables namely age, service length at present company and total experience.

All these three variables measure the 'time' in different form but the basic nature of the variable is same. The following table is about the results of ANOVA and it indicates how good the regression equation fits the data. The regression model developed by using selective independent variable and role efficacy as dependent variable. The values indicate that the regression model has the potential to predict the dependent variable significantly well.

**Table No 64: Showing Regression model has the Potential to Predict the Dependent Variable Significantly Well**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2163.176	4	540.794	4.461	.002 <sup>b</sup>
	Residual	17577.213	145	121.222		
	Total	19740.389	149			
a. Dependent Variable: Role Efficacy Quotient						
b. Predictors: (Constant), Annual Salary (in Lac), Age (in Years only), Service in current Company, Total Work Experience						

The value of sig. column is less than 0.05 and this shows that the overall regression model is a good fit for the data. Following table provides the important information required to predict the role efficacy quotient from service in current company, total experience, age and salary of employee.

**Table No 65: Showing important information required to predict the Role Efficacy quotient from service in current Company, Total Experience, Age And Salary Of Employee**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	62.100	4.670		13.298	.000
	Service in current Company	-.395	B.229	-.326	-1.724	.087
	Age (in Years only)	.067	.174	.062	.385	.701
	Total Work Experience	.406	.244	.357	1.663	.098
	Annual Salary (in Lac)	.791	.393	.240	2.011	.046
a. Dependent Variable: Role Efficacy Quotient						

By using the values of mentioned under column ‘B’ following regression equation can be developed.

$$\text{Role efficacy} = 62.100 + (-.395) (\text{Service in current co.}) + .067 (\text{Age}) + .406 (\text{Total Exp.}) + .791 (\text{Salary})$$

The above regression equation explains how the service in current company, age, total experience and salary can affect role efficacy. The logical reasoning of above regression model is that it helps to explain that not each of the demographic variables is equally important as far as its contribution in the role efficacy is concern. 62.100 is the intercept value in the above equation and it represents the minimum level of role efficacy under the situation where the values of all other considered variables are zero. The most important variable is salary as its coefficient is highest among the other variables and the second most important variable is total experience.