Chapter 4

DATA ANALYSIS AND INTERPRETATION

4.1 Overview

The focus of this research was to understand the role of leadership behavior in managing change, the impact of organization change on employee stress, the impact of leadership behavior on resistance to change and employee satisfaction. In addition, the intent was to identify the leadership behaviors to reduce the impact of stress among staff during organizational change and also to reduce resistance to change. This chapter presents the findings and discusses the results of the feedback obtained from the survey carried out as part of this research.

4.2 Formatting the Raw Data

The statistical package used was SPSS 20 using the Windows as the base platform. To use the raw data on the computer, the first and foremost necessity was of shaping the raw data to suit the requirement of the SPSS software. The following steps were taken to edit the raw data. Keeping in mind the variables used for the study the raw data was first arranged into categories as given below:

Type of Organization

(i) **Public**: It was assigned a numerical grade of 1.

(ii) **Private**: It was assigned a numerical grade of 2.

Duration of employment as a manager

(i) **Upto 5 years**: Junior Level Managers were assigned a numerical grade of 1.

(ii) **From 6 years to 15 years**: Middle Level Managers were assigned a numerical grade of 2.

(iii) **Beyond 15 years**: Top Level Managers were assigned a numerical grade of 3.

Gender of the Respondent

(i) **Male**: It was assigned a numerical grade of 1.

(ii) **Female**: It was assigned a numerical grade of 2.

4.3 Reliability of Instrument

The reliability of the questionnaire was assessed by computing coefficient of alpha (Cronbach's Alpha) that measures internal consistency. The calculated value of coefficient of alpha was 0.672 for 55 items, which is above the theoretical value of 0.6, which indicates reasonably good consistency among the variables (Table 4.1).

Table 4.1: Reliability Statistics

Cronbach's Alpha	No of Items
0.672	55

4.4 Demographic Summary

Demographic data pertaining to respondents' age, gender, type of organization, designation and duration of service as a manager was collected to appraise if there were any differences in respondents opinions with respect to demographic variables. The analyses related to the demographic data that stand out are discussed in this section.

77.1% of the respondents were male and 22.9% of the respondents were females. The 16.98 % of the respondents were between the age groups of 41 to 60. Age plays a critical factor on employee outlook about organization change as people over the age of 40 tend to form habits and have deep seated morals and values. Geller (2002) stated that employees between the ages of 40 and 50 who have worked most of their lives for one organization generally lack the modern skills that are required within the current market. Thus, employees above 40 years facing organization change can be a challenging process in itself, contributing to stress.

Table: 4.2: Distribution of respondents w.r.t. gender, sector and managerial experience (in years)

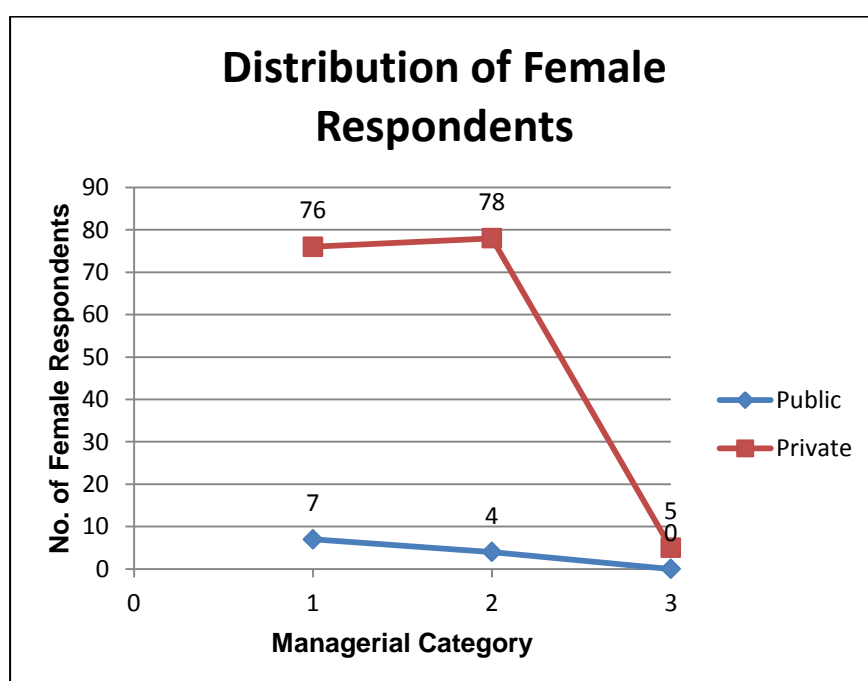| Gender / Managerial Experience		Male		Female		
		Public	**Private**	**Public**	**Private**	**Total**
Cat I	**Count**	19	200	7	76	302
	%	6.30%	66.20%	2.30%	25.20%	100%
Cat II	**Count**	25	274	4	78	381
	%	6.50%	71.90%	1.10%	20.50%	100%
Cat III	**Count**	13	41	0	5	59
	%	22%	69.50%	0%	8.50%	100%
Total	**Count**	57	515	11	159	742
	%	7.60%	69.50%	1.50%	21.40%	100%

Figure 4.1: Distribution of female respondents w.r.t sector and years of managerial experience
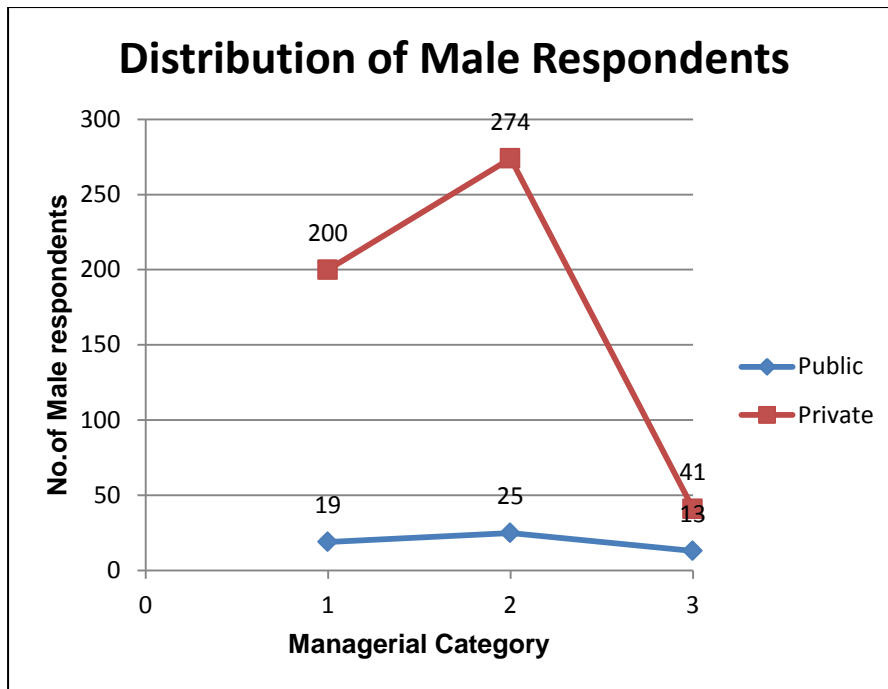
Figure 4.2: Distribution of male respondents w.r.t sector and years of managerial experience

The respondents have been categorized as Cat I who have 1 to 5 years managerial experience, Cat II who have 6-15yrs managerial experience and beyond 15 yrs as Cat III. 40.7% of the respondents belong to Cat I, 51.3% of the respondents belong to Cat II and 8% of the respondents belong to Cat III. The demographic summary of respondents with respect to gender, sector and managerial experience was also analyzed (Table 4.2, Figure 4.1, Figure 4.2).

4.5   Analyses of Responses

The findings of the various statistical techniques used for the purpose of analysis are given below:

4.5.1. Descriptive statistics

The analysis of data began with a simple computation of central tendencies. The various tables provide details about the respondents' views about the different aspects of the change initiative.

(a) What was the approximate cost of the change programme?

However, the cost of the change programme would vary between different change initiatives and from organization to organization but data was still collected to understand the magnitude of the change initiative. Most of the respondents gave approximate figures and many left it blank which was filled up using the missing variables methodology of research. The mean cost of the change initiative is Rs. 50,81,318.67 and the standard deviation is Rs. 34,58,477.08 (Table 4.3).

(b) What was the approximate duration of the change program in months?

Again, the duration of the change program would vary from program to program and from organization to organization. However, the data was collected to understand how much time most of the organizations took for implementing change initiatives. The mean is 5.6 months and the standard deviation is 2.85516 (Table 4.3).

Table 4.3: Descriptive Statistics for the cost and the duration of the program.

		What was the approximate cost of the change program?	What was the approximate duration of the change program in months?
N	Valid	742	742
	Missing	0	0
Mean		5081318.67722	5.6509
Median		3000000.0000	5.0000
Mode		3000000.00	6.00
Std. Deviation		3458477.0889	2.85516

4.5.2. Frequency Statistics

(a) How many people did the change initiative effect?

Frequency statistics was used to analyze the number of people affected by the change programmes. 61.9 % of the respondents stated that less than 25% of the people were affected by the change initiative. 8.5 % of the respondents stated that 51-75 % of the people were affected by the change initiative and only 0.8 % of the respondents stated that 76 - 100% of the people were affected by the change initiative (Table 4.4 and Figure 4.3).

Table 4.4: Frequency Statistics for the number of people affected by the change.

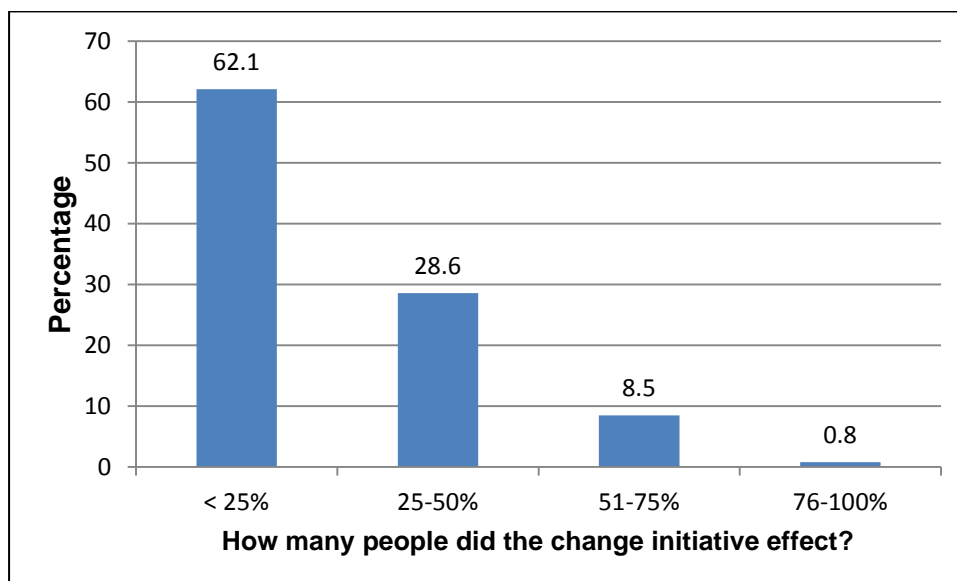|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 25%	461	62.1	62.1	62.1
	25-50%	212	28.6	28.6	90.7
	51-75%	63	8.5	8.5	99.2
	76-100%	6	0.8	0.8	100.0
	Total	742	100	100	

Figure 4.3: Frequency Statistics for the number of people affected by the change.

(b) What is the source of change?

The change initiative in an organization can be driven by either internal or external forces. 60.6 % of the respondents stated that the change was driven by the internal forces and 39.4 % the respondents stated that the change was driven by the external forces (Table 4.5 and Figure 4.4). The data clearly indicates that most of the organizations recognized the internal forces of change.

Table 4.5: Frequency Statistics for the Internal or External forces of change.

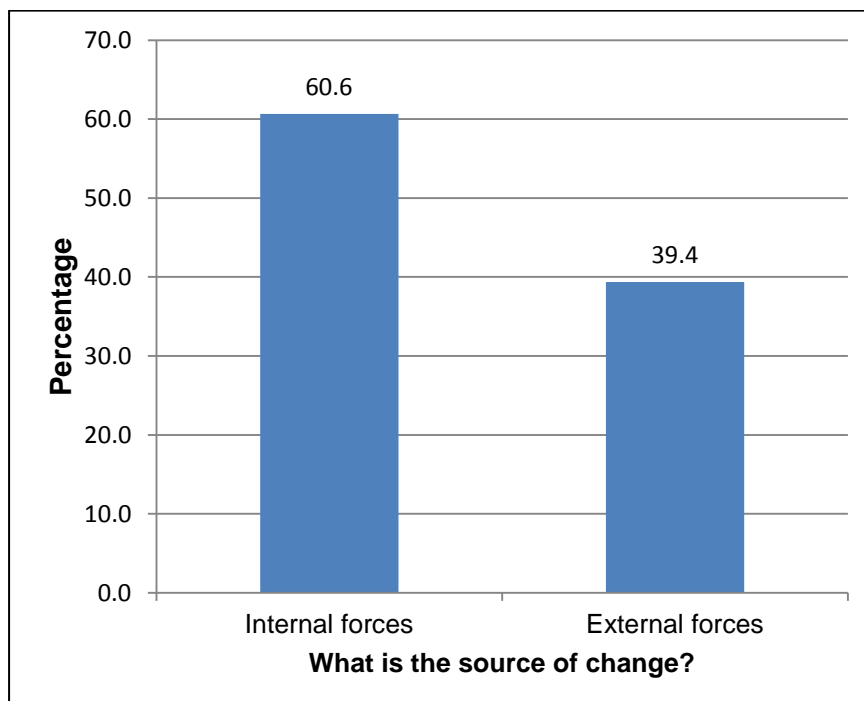|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internal forces	450	60.6	60.6	60.6
	External forces	292	39.4	39.4	100.0
	Total	742	100.0	100.0	

Figure 4.4: Frequency Statistics for the Internal or External forces of change.

(c) What was the reason for change?

The PESTLE forces (Political, Economic, Social, Technological, Legislative and Environmental) drive the change in the organizations. The respondents' response was analyzed using frequency statistics. 81.0 % of the respondents stated that the Technological forces were the reason for change. 10.5 % of the respondents stated that the Economic forces were the reasons for change (Table 4.6 and Figure 4.5). This clearly shows that most of the organizational changes in present times are driven by technological forces of change.

Table 4.6: Frequency Statistics for the PESTLE forces of change.

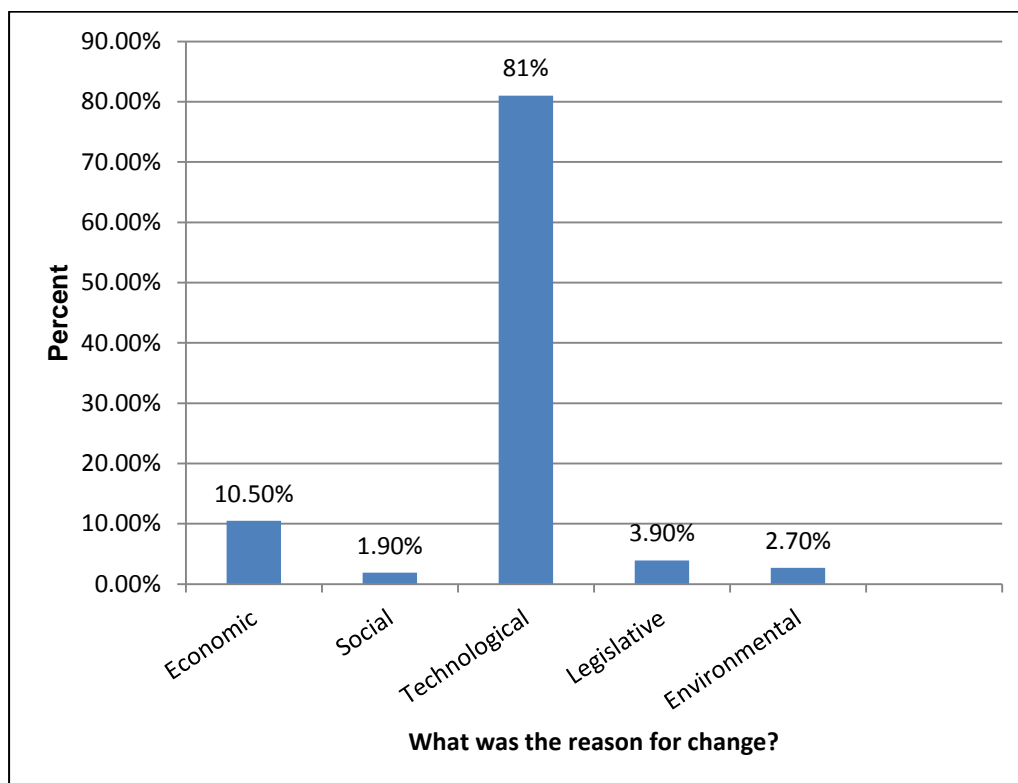|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Economic	78	10.5	10.5	10.5
	Social	14	1.9	1.9	12.4
	Technological	601	81.0	81.0	93.4
	Legislative	29	3.9	3.9	97.3
	Environmental	20	2.7	2.7	100.0
	Total	742	100.0	100.0	

Figure 4.5: Frequency Statistics for the PESTLE forces of change.

(d) What was the level of experience of people implementing the change process?

To understand why most of the change initiatives fail, it was important to find out the experience level of the people in implementing the change process. The respondents' response was analyzed using frequency statistics. 37.3% of the respondents stated that the level of experience of people implementing the change process is High. 53.0 % of the respondents stated that the level of experience of people implementing the change process is Medium. 9.7% of the respondents stated that the level of experience of people implementing the change process is Low (Table 4.7 and Figure 4.6). This clearly shows that most of the organizational changes are implemented by people with medium level of experience.

Table 4.7: Frequency Statistics for the Level of experience of people implementing the change.

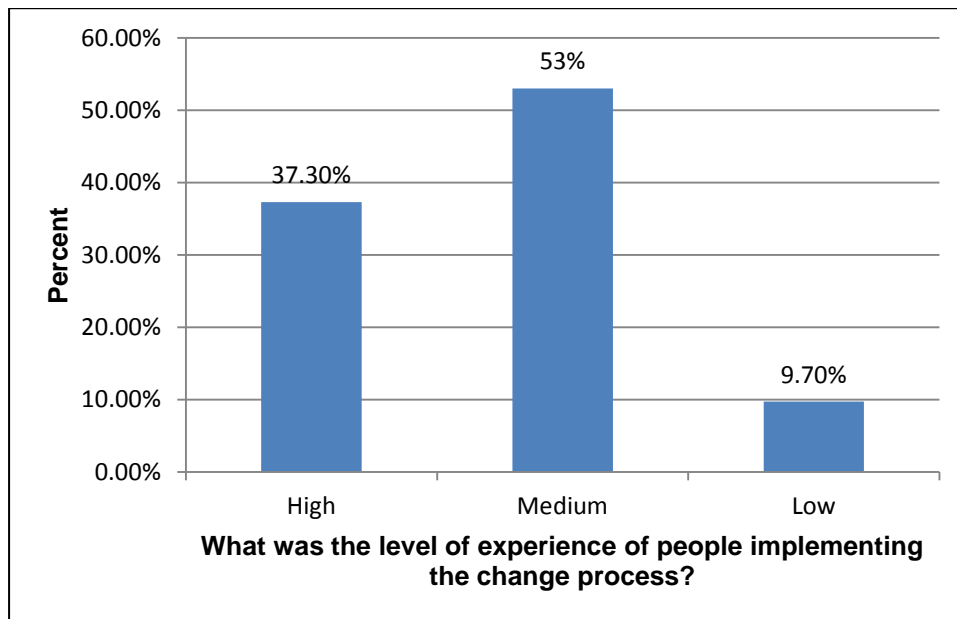|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	277	37.3	37.3	37.3
	Medium	393	53.0	53.0	90.3
	Low	72	9.7	9.7	100.0
	Total	742	100.0	100.0	

Figure 4.6: Frequency Statistics for the Level of experience of people implementing the change.

(e) What is the nature of change?

The nature of change could be Process/System oriented or People oriented. Process/System oriented changes focus towards changing the processes or systems. However, the people oriented changes focus towards changing the behaviors of people. The respondents' response was analyzed using frequency statistics. 75.6 % of the respondents stated that the nature of change was Process/System Oriented. 24.4 % of the respondents stated that the nature of change was People Oriented (Table 4.8 and Figure 4.7). This clearly shows that most of the change initiatives in various organizations focused on changing the processes or systems in the organizations.

Table 4.8: Frequency Statistics for the nature of change

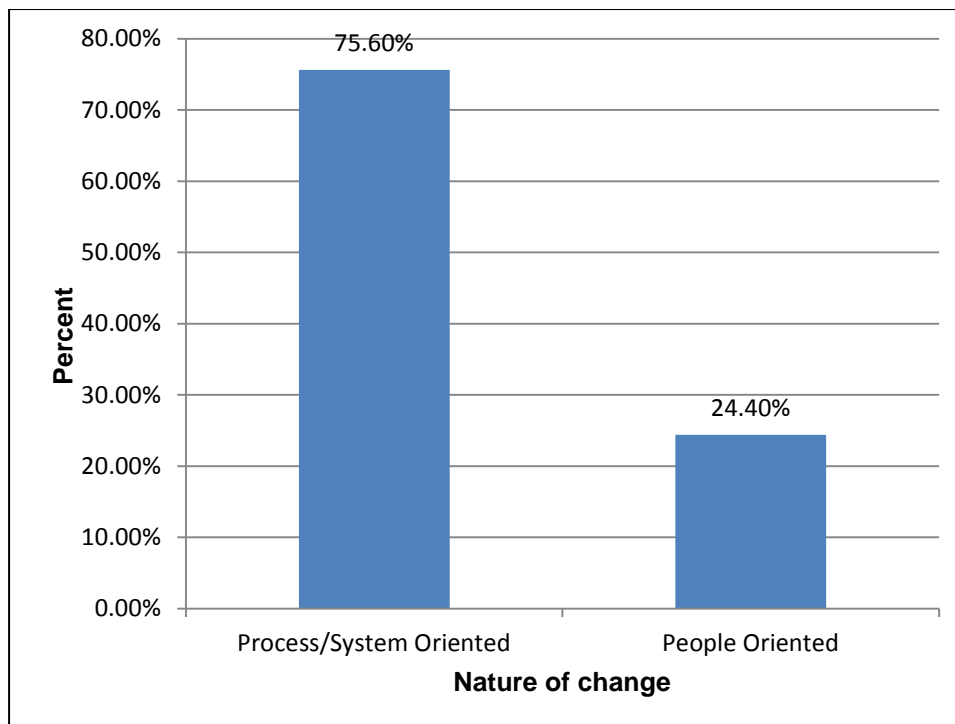|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Process/System Oriented	561	75.6	75.6	75.6
	People Oriented	181	24.4	24.4	100.0
	Total	742	100.0	100.0	

Figure 4.7: Frequency Statistics for the nature of change

(f) Where was the impact of change?

The impact of change could be on the department, a strategic business unit or on the entire organization. The respondents' response was analyzed using frequency statistics. 76.8 % of the respondents stated that the change initiatives in their organizations had an impact at the department level. 20.1 % of the respondents stated that the change initiatives in their organizations had an impact at the strategic business unit level. And only 3.1 % of the respondents stated that the change initiatives in their organizations had an impact at the entire organization level (Table 4.9 and Figure 4.8). This clearly shows that most of the change initiatives in various organizations targeted organizations at the department level.

Table 4.9: Frequency Statistics for the impact of change.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Department	570	76.8	76.8	76.8
	Strategic Business Unit	149	20.1	20.1	96.9
	Entire	23	3.1	3.1	100.0

	Organization				
	Total	742	100.0	100.0	
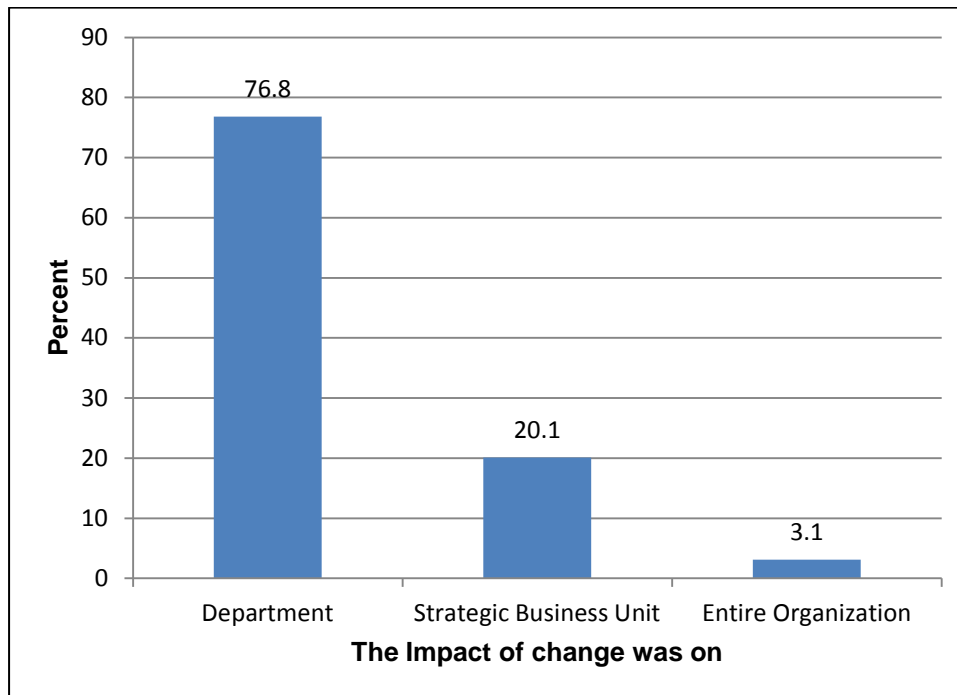
Figure 4.8: Frequency Statistics for the impact of change

(g) What was the degree of change?

The degree of change in organizations could be simple or complex. The respondents' response was analyzed using frequency statistics. Only 13.1% of the respondents perceived the degree of change was simple and 86.9 % of the respondents perceived the degree of change to be complex (Table 4.10 and Figure 4.9). The complexity of change depends on the number of organizational factors or elements getting affected by change. The more the numbers of factors get affected, the more complex is the change. However, the answer to this question is a respondents' perception and most of them viewed the degree of change to be complex.

Table 4.10: Frequency Statistics for the degree of change.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Simple	97	13.1	13.1	13.1
	Complex	645	86.9	86.9	100.0
	Total	742	100.0	100.0	
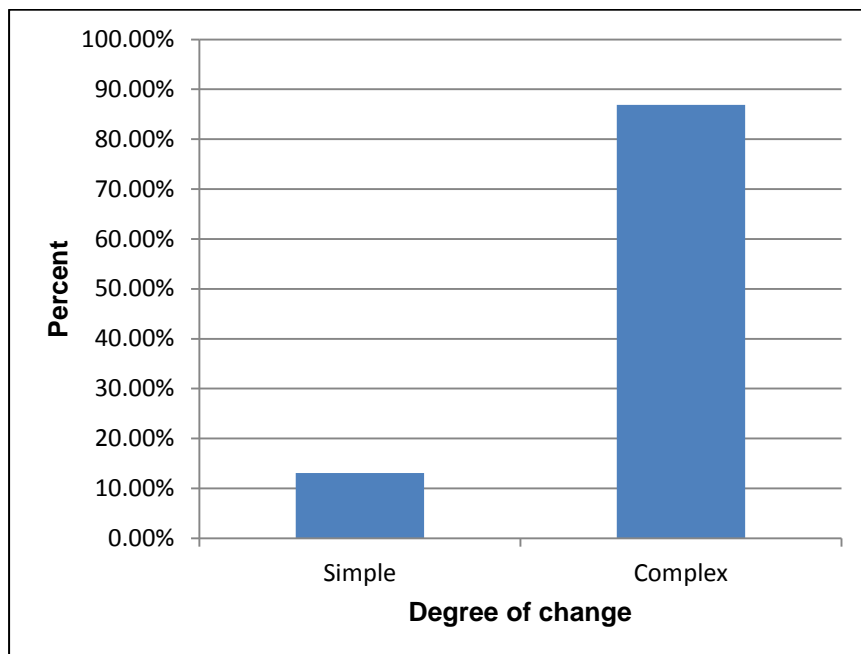
Figure 4.9: Frequency Statistics for the degree of change

(h) Were the change agents internal or external to the organization?

Change agents can be from within or outside the organization. These people generally are Organization Development (OD) specialists and can advice and guide the change process. Internal change agents have advantages in that they have a working understanding of the organization with regards to people, culture, behavioral norms, etc. Their difficulty comes in with their credibility and their ability to change something that

is already in motion. The advantage of using an outside change agent is their objectivity and the ability to give honest feedback to management without fear of reprisal. They also bring perspectives from other organizations and have a broad range of experience to share. The disadvantage of using an external change agent is that they don't have a working knowledge and understanding of the organizational culture. The other disadvantage is the organizations' ability to maintain momentum after the change agent leaves.

The respondents' response was analyzed using frequency statistics. 43.3% of the respondents stated that the change initiatives in their organization were implemented by internal change agents. 56.7% of the respondents stated that the change initiatives in their organization were implemented by external change agents (Table 4.11 and Figure 4.10). Thus, more number of organizations resort to external change agents for implementing their change initiatives.

Table 4.11: Frequency Statistics for Internal or External Change Agents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Internal Change agents	321	43.3	43.3	43.3
	External Change Agents	421	56.7	56.7	100.0
	Total	742	100.0	100.0	
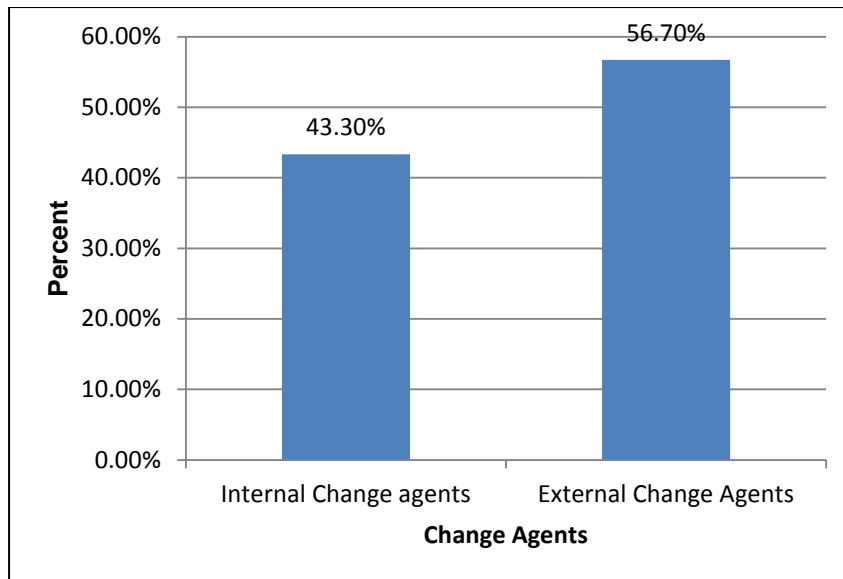
Figure 4.10: Frequency Statistics for Internal or External Change Agents.

(i) Was the change led by an individual leader or a team of people?

The successful implementation of change initiatives requires an effective leader or a team of change agents. The respondents' response with respect to how the change initiative was led was analyzed using frequency statistics. 29.9 % of the respondents stated that the change initiatives in their organization were led by an individual leader. 77.1 % of the respondents stated that the change initiatives in their organization were led by a team of people (Table 4.12 and Figure 4.11). Thus, more number of organizations resort to a team of people for leading the change initiatives.

Table 4.12: Frequency Statistics for change led by an individual leader or team.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	An individual leader	170	22.9	22.9	22.9
	Team of people	572	77.1	77.1	100.0
	Total	742	100.0	100.0	
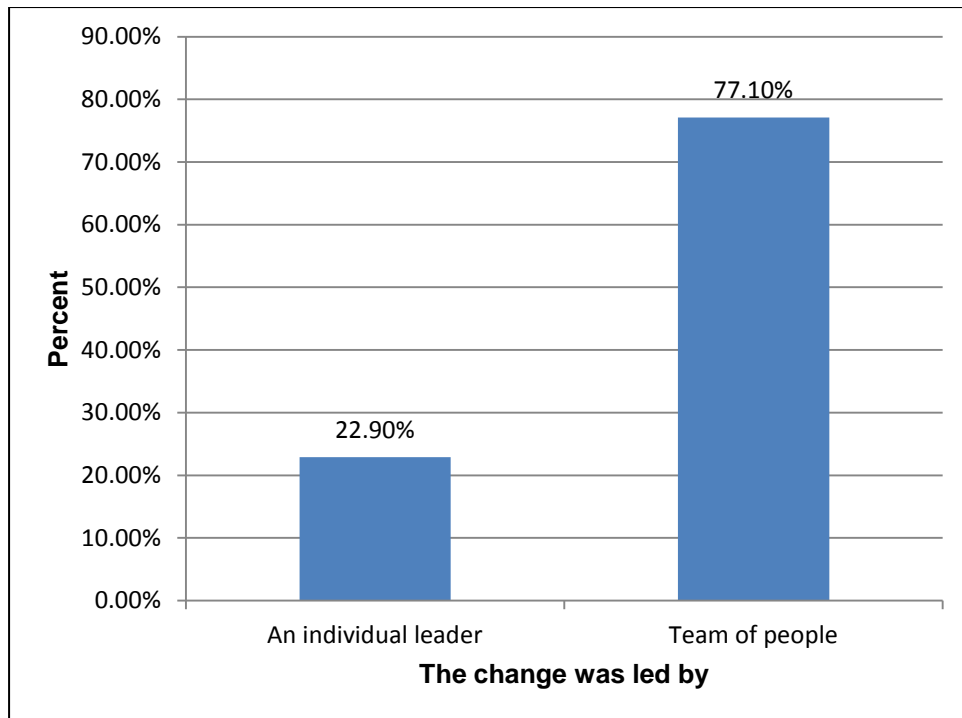
Figure 4.11: Frequency Statistics for change led by an individual leader or team.

(j) The change programme met its objective.

This statement is respondents' perception to the success of the change initiative in their organization. The response was on a 5 point Likert scale from Strongly Disagree to Strongly Agree. The respondents' response with respect to whether the change program met its objectives was analyzed using frequency statistics. 47.98% of the respondents were neutral about the change program meeting its objective. 30.73% of the respondents agreed on the change program meeting its objective. 17.92 % of the respondents disagreed on the change program meeting its objective. Only 2.96% of the respondents strongly agreed on the change program meeting its objective (Table 4.13 and Figure 4.12). Thus, this clearly shows that more than 50 % of the respondents were not sure of the change initiatives meeting their objectives.

Table 4.13: Frequency Statistics for success of change initiative.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	0.40	0.40	0.4
	Disagree	133	17.92	17.92	18.32
	Neutral	356	47.98	47.98	66.30
	Agree	228	30.73	30.73	97.03
	Srongly Agree	22	2.96	2.96	100.0
	Total	742	100.0	100.0	
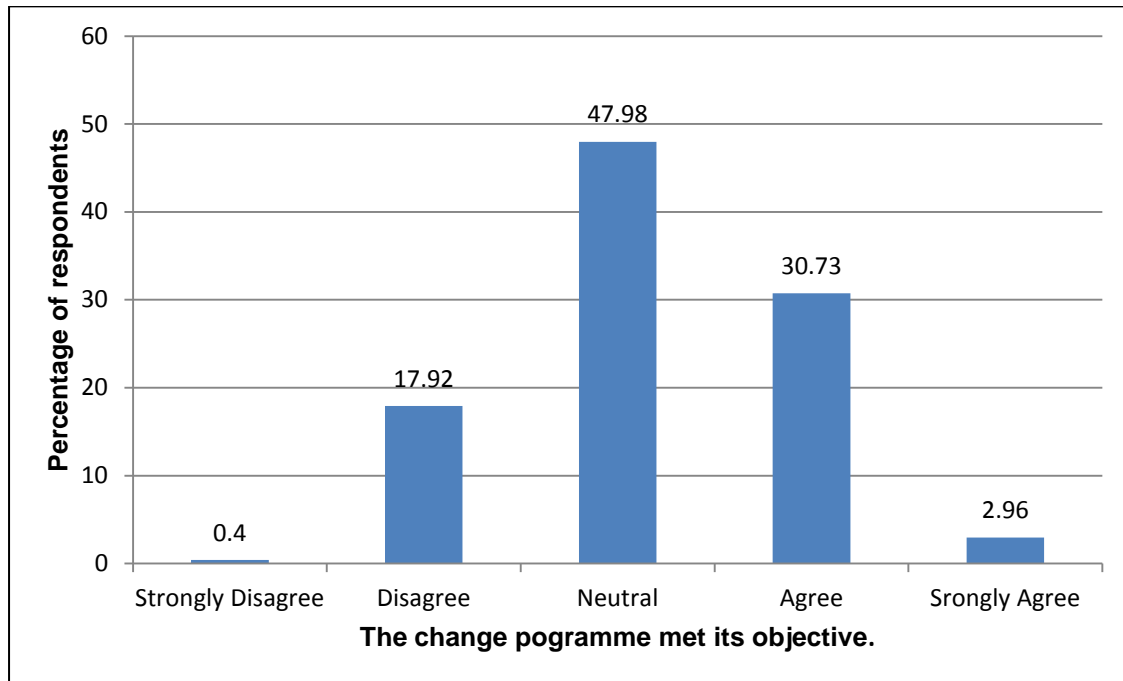
Figure 4.12: Frequency Statistics for success of change initiative.

(k) I was supportive of the change initiative.

This statement attempts to capture the attitude of the respondents towards the change initiative. The response was on a 5 point Likert scale from Strongly Disagree to Strongly Agree. The respondents' response with respect to whether he or she was supportive to the

change initiative was analyzed using frequency statistics. 53.50 % of the respondents supported the change initiative. 32.75 % of the respondents were neutral about supporting the change initiative. 10.51 % of the respondents strongly supported the change initiative. Only 2.96% of the respondents did not support the change initiative (Table 4.14 and Figure 4.13). Thus, this shows that more than 63 % of the respondents supported the change initiative.

Table 4.14: Frequency Statistics for respondent's support to the change initiative.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	0.27	0.27	0.27
	Disagree	22	2.96	2.96	3.23
	Neutral	243	32.75	32.75	35.98
	Agree	397	53.50	53.50	89.49
	Srongly Agree	78	10.51	10.51	100.0
	Total	742	100.0	100.0	

Figure 4.13: Frequency Statistics for respondent's support to the change initiative.

(l) Cross tabulation of the type of organization and source of change

55.9% of the respondents in public organizations stated that the source of change was internal to the organization and 44.1% of the respondents in public organizations stated source of change was external to the organization. Also, 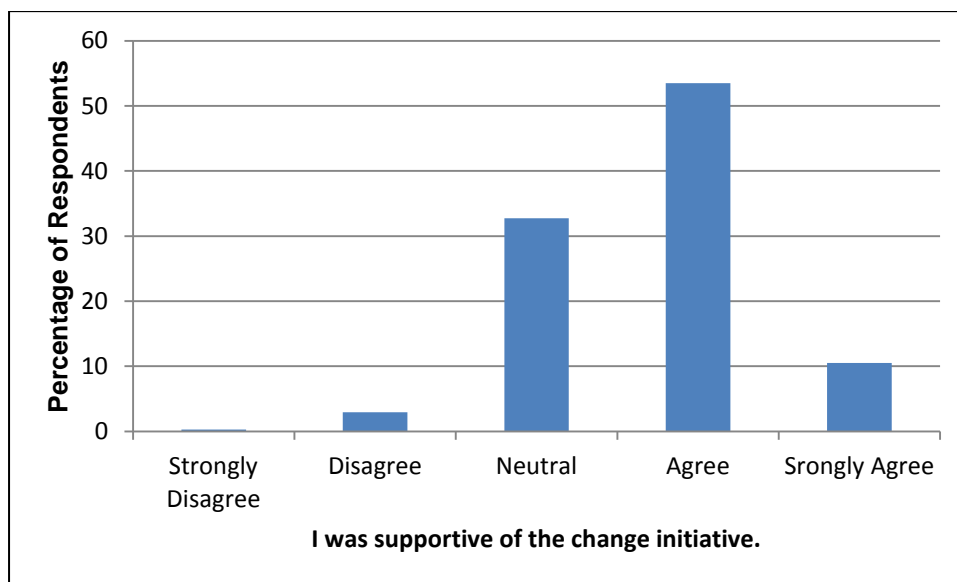61.1% of the respondents in private organizations stated that the source of change was internal to the organization and 38.9% of the respondents in private organizations stated source of change was external to the organization (Table 4.15).

Table 4.15: Cross tabulation of the type of organization and source of change

| | | | What is the source of change? | | Total |
			Internal forces	External forces	
Type of Organization	Public	Count	38	30	68
		%	55.9%	44.1%	100.0%
	Private	Count	412	262	674
		%	61.1%	38.9%	100.0%
Total		Count	450	292	742
		%	60.6%	39.4%	100.0%

(l) Cross tabulation of the type of organization and reason of change

58.8% of the respondents in public organizations stated that the reason of change was technological and 26.5% of the respondents in public organizations stated reason of change was economic. Also, 83.2% of the respondents in private organizations stated that the reason of change was technological and 8.9% of the respondents in private organizations stated reason of change was economic (Table 4.16).

Table 4.16: Cross tabulation of the type of organization and reason of change

| | | | What was the reason for change | | | | | Total |
			Economic	Social	Technological	Legislative	Environmental	
Type of Organization	Public	Count	18	0	40	4	6	68
		%	26.5%	0.0%	58.8%	5.9%	8.8%	100.0%
	Private	Count	60	14	561	25	14	674
		%	8.9%	2.1%	83.2%	3.7%	2.1%	100.0%

Total	Count	78	14	601	29	20	742
	%	10.5%	1.9%	81.0%	3.9%	2.7%	100.0%

4.5.3 Factor Analysis

Section II A of the questionnaire comprised of five items related to the variable Context of Change. Section II B contained three items related to overall change success. Section II C contained eight items related to employee stress. Section II D contained twelve items related to leadership behavior. Section II E had seven items related to resistance to change. Section II F comprised of three items related to organization culture. Section II G had five items related to employee satisfaction. These items in the questionnaire related to change success, employee stress, leadership behavior, resistance to change, organization culture and employee satisfaction for which six hypotheses were formulated and processed through factor analysis to understand the underlying trigger for a particular behavioral response.

For each variable factor analysis was carried out. Factor analysis is a statistical method used for data reduction to identify a small number of factors that explain most of the variance that is observed in a much larger number of manifest variables. However, the solution is unlikely to have any real meaning if the items analyzed are not relevant. Before conducting a factor analysis, it is important to assess the inter-correlation between items. Bartlett's test is used to assess that the correlational matrix is an identity matrix so that all items are correlated with other items. KMO test (Kaiser-Meyer-Olkin) is used to measure the sampling adequacy. For factor analysis to be appropriate, the Bartlett's test should be highly significant ($p < 0.001$). In addition, the value of KMO should be greater than 0.5 for a satisfactory factor analysis to proceed.

An eigenvalue represents the amount of information captured by a factor. The factor relationship would be considered worth analysis if the factor(s) has(ve) an eigenvalue of 1.00 or greater. Factor relationships returning a small or negative eigenvalues account for less variability than does a single variable and are not retained in the analysis (Brown, 2001). The interpretability of factors can be improved through rotation. Rotation maximizes the loading of each item on one of the extracted factors whilst minimizing the loading on all other factors. Varimax rotation which is an orthogonal rotation was used for extracting the factors.

The various tables extracted using factor analysis with respect to all the variables have been shown in Appendix- B.

The factor analysis for all the six variables is as given below:

Variable 1: Context of change.

The Bartlett's Test of Sphericity, the value of p = 0.000 thus it is highly significant, showing appropriateness for Factor Analysis. The value of KMO for the variable Context of change is 0.578 which is more than 0.5, thus there is sample adequacy (Table 4.17).

Table 4.17: KMO and Bartlett's Tests for the Variable: Context of change

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.578
Bartlett's Test of Sphericity	Approx. Chi-Square	879.826
	df	10
	Sig.	.000

Table 4.18 shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. The SPSS extracts all factors with eigenvalues greater than 1 and reduces the variable 'Context of Change' into two factors. The first factor varies with maximum and minimum factor loading score of -0.905 and 0.899, supporting initial eigenvalues of 2.063 and Rotation Sums of Squared Loadings Variance of 39.9%. The second factor varies with maximum and minimum factor loading score of 0.763 and min of -0.557, supporting initial eigenvalues of 1.110 and Rotation Sums of Squared Loadings Variance of 23.5%. The Rotated Component Matrix for variable 'Context of Change' is shown in Table 4.19.

Table 4.18: Total variance for variable **'Context of Change'**.

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.063	41.262	41.262	2.063	41.262	41.262	1.996	39.926	39.926
2	1.110	22.204	63.466	1.110	22.204	63.466	1.177	23.540	63.466
3	.882	17.646	81.112						
4	.742	14.835	95.946						
5	.203	4.054	100.000						

Total Variance Explained

Extraction Method: Principal Component Analysis.

Table 4.19: Rotated Component Matrix for variable **'Context of Change'**.

Item Description	Component 1	Component 2
The change impacted the whole organization.	-.905	
The change initiatives in my organization are incremental in nature.	.899	
The change initiatives in the organization were due to internal forces.	.146	.763
The degree of change implemented in my organization is simple in nature.	.428	.523
The change initiatives took into consideration the external environment of the organization.	.406	-.557

a. Rotation converged in 3 iterations.

Naming the factors: The two factors extracted are named as given below:

Factor 1: Incremental Change

Factor 2: Internal force of change.

Variable 2: Employee Stress

The Bartlett's Test of Sphericity, the value of $p = 0.000$ thus it is highly significant showing appropriateness for Factor Analysis. The value of KMO is 0.852 which is more than 0.5, thus there is sample adequacy (Table 4.20).

Table 4.20: KMO and Bartlett's Tests for the Variable: **Employee Stress**.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.852
Bartlett's Test of Sphericity	Approx. Chi-Square	2152.511
	df	28
	Sig.	0.000

Table 4.21 shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. The SPSS extracts all factors with eigenvalues greater than 1 and reduces the variable 'Employee Stress' into two factors. The first factor varies with maximum and minimum factor loading score of 0.813 and 0.466, supporting initial eigenvalues of 3.737 and Rotation Sums of Squared Loadings Variance of 39.721%. The second factor with factor loading score of -0.877, supporting initial eigenvalues of 1.077 and Rotation Sums of Squared Loadings Variance is 20.452%. The Rotated Component Matrix for variable '**Employee Stress**' is shown in Table 4.22.

Table 4.21: Total variance for variable **'Employee Stress'**.

Total Variance Explained								
Comp onent	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	3.737	46.708	46.708	3.737	46.708	46.708	3.178	39.721	39.721
2	1.077	13.465	60.173	1.077	13.465	60.173	1.636	20.452	60.173
3	.882	11.026	71.199						
4	.694	8.677	79.876						
5	.619	7.732	87.608						
6	.377	4.715	92.323						
7	.327	4.083	96.406						
8	.288	3.594	100.000						

Extraction Method: Principal Component Analysis

Table 4.22: Rotated Component Matrix for variable **'Employee Stress'**.

Rotated Component Matrix[a]	Component	
	1	2
The change initiative brought about more challenges for leaders.	.724	
The change introduced resulted in individuals feeling stressed about the change process.	.813	
Stress in individuals was a result of fear of losing status.	.697	
Stress in individuals was a result of being unable	.636	

to keep pace with change/innovations.		
During the process of implementation of change, the organization went through disorder and chaos.	.634	
During the transitional phase, the individual output reduced.	.689	
During the process of change, there were interpersonal problems in the organization.	.466	
The top leaders were hopeful of success and were not fearful of failure.	.102	-.877

a. Rotation converged in 3 iterations.

Naming the factors: The two factors extracted are named as given below:

Factor 1: Fear of uncertainty

Factor 2: Fear of failure

Variable 3: Leadership Behavior

The Bartlett's Test of Sphericity, the value of p = 0.000 thus it is highly significant showing appropriateness for Factor Analysis. The value of KMO is 0.901 which is more than 0.5, thus there is sample adequacy (Table 4.23).

Table 4.23: KMO and Bartlett's Tests for the Variable '**Leadership Behavior'**.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.901
Bartlett's Test of Sphericity	Approx. Chi-Square	6010.760
	Df	78
	Sig.	0.000

Table 4.24 shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance

of the factor and the previous factors. The SPSS extracts all factors with eigenvalues greater than 1 and reduces the variable 'Leadership behavior' into two factors. The Total Variance explained is 61.108%. The first factor varies with maximum and minimum factor loading score of 0.861 and 0.350, supporting initial eigenvalues of 6.714 and Rotation Sums of Squared Loadings Variance of 30.674%. The second factor varies with maximum and minimum factor loading score of 0.777 and 0.634, supporting initial eigenvalues of 1.230 and Rotation Sums of Squared Loadings Variance 30.435%. The Rotated Component Matrix for variable '**Leadership Behavior**' is shown in Table 4.25.

Table 4.24: Total variance for variable **'Leadership Behaviour'**.

Total Variance Explained									
Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.714	51.645	51.645	6.714	51.645	51.645	3.988	30.674	30.674
2	1.230	9.464	61.108	1.230	9.464	61.108	3.956	30.435	61.108
3	.999	7.685	68.794						
4	.859	6.608	75.401						
5	.705	5.421	80.822						
6	.481	3.702	84.524						
7	.450	3.459	87.983						
8	.359	2.762	90.745						
9	.309	2.380	93.124						
10	.261	2.010	95.135						
11	.253	1.947	97.082						
12	.207	1.592	98.673						
13	.172	1.327	100.000						
Extraction Method: Principal Component Analysis.									

Table 4.25: Rotated Component Matrix for variable **'Leadership Behavior'**.

Rotated Component Matrix[a]	Component	
	1	
The leader fully communicated the benefits of the change.	.668	
The leader motivated followers to embrace the change.	.669	
The leader rewarded employees to motivate them to implement the change process.	.617	
The leaders acted as a role model and led by example.	.813	
The leader recognized the follower needs.	.861	
The leader's role was crucial for the change to be successful.	.350	
Apart from change implementation, the leaders were also involved in developing people.	.608	
The leader took responsibility for his/her decisions.	-.050	.634
The leader created a clear vision of the future.	.561	.639
The leader directed all activities towards achievement of the vision.	.268	.743
The leader gave followers the authority to deal with the change.	.450	.692
The leader gave adequate feedback during the implementation of change.	.301	.777
The leader developed clear strategies to advance the vision.	.372	.751

a. Rotation converged in 3 iterations.

Naming the factors: The two factors extracted and named as given below:

Factor 1: People Oriented Leadership behavior

Factor 2: Task Oriented Leadership behavior

Variable 4: Resistance to Change

The Bartlett's Test of Sphericity, the value of $p = 0.000$ thus it is highly significant showing appropriateness for Factor Analysis. The value of KMO is 0.829 which is more than 0.5, thus there is sample adequacy (Table 4.26).

Table 4.26: KMO and Bartlett's Tests for the Variable: '**Resistance to Change**'.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.829
Bartlett's Test of Sphericity	Approx. Chi-Square	2645.611
	df	21
	Sig.	0.000

Table 4.27 shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. The SPSS extracts all factors with eigenvalues greater than 1 and reduces the variable 'Resistance to change' into two factors. The Total Variance explained is 71.596%. The first factor varies with maximum and minimum factor loading score of 0.903 and 0.719, supporting initial eigenvalues of 3.858 and Rotation Sums of Squared Loadings Variance of 41.01%. The second factor varies with maximum and minimum factor loading score of -0.832 and -0.643, supporting initial eigenvalues of 1.154 and Rotation Sums of Squared Loadings Variance 30.557%. The Rotated Component Matrix for variable '**Resistance to Change**' is shown in Table 4.28.

Table 4.27: Total variance for variable '**Resistance to Change**'.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.858	55.117	55.117	3.858	55.117	55.117	2.871	41.018	41.018
2	1.154	16.479	71.596	1.154	16.479	71.596	2.140	30.577	71.596
3	.717	10.247	81.843						
4	.463	6.614	88.457						
5	.328	4.681	93.138						

6	.261	3.732	96.870						
7	.219	3.130	100.000						
Extraction Method: Principal Component Analysis.									

Table 4.28 : Rotated Component Matrix for variable **'Resistance to Change'**.

Rotated Component Matrix[a]	Component	
	1	2
I felt change to be a threat to my personal values	.903	
I resisted change to protect my position and benefits.	.793	
I felt that I had less control over my own situations	.863	
I started losing trust in the management during change implementation.	.719	
I was aware of the long term benefits of change.	-.356	-.643
I had confidence that change would bring about improvement in the organization.	-.183	-.832
I felt undervalued due to lack of involvement in change implementation.	.076	.760

a. Rotation converged in 3 iterations.

Naming the factors: The two factors extracted are named as given below:

Factor 1: Change as a Threat

Factor 2: Communication of benefits of change

Variable 5: Employee's Satisfaction

The Bartlett's Test of Sphericity, the value of $p = 0.000$ thus it is highly significant showing appropriateness for Factor Analysis. The value of KMO is 0.736 which is more than 0.5, thus there is sample adequacy (Table 4.29).

Table 4.29: KMO and Bartlett's Tests for the Variable: **Employee's Satisfaction**.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.736
Bartlett's Test of Sphericity	Approx. Chi-Square	2245.213
	df	10
	Sig.	0.000

Table 4.30 shows all the factors extractable from the analysis along with their Eigen values, the percent of variance attributable to each factor, and the cumulative variance of the factor and the previous factors. The SPSS extracts factor with Eigen values greater than 1 and reduces the variable 'Employee's satisfaction' into one factor. The Total Variance explained is 61.952%. The factor varies with maximum and minimum factor loading score of -0.848 and 0.686, supporting initial Eigen values of 3.098. As there is only one factor extracted, Rotation is not done and component matrix is shown in Table 4.31.

Table 4.30: Total variance for variable **'Employee's Satisfaction'**.

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.098	61.952	61.952	3.098	61.952	61.952
2	.878	17.570	79.521			
3	.511	10.223	89.744			
4	.433	8.669	98.414			
5	.079	1.586	100.000			

Extraction Method: Principal Component Analysis

Table 4.31: Component Matrix for variable **'Employee's Satisfaction'**.

Component Matrix[a]	
	Component
	1
The change was well led by the leaders of the organization.	.686
My level of involvement in the change management was appropriate for my position in my organization.	.872
I lost my position due to the change implementation.	-.848
I was communicated the benefits of the change initiative.	.714
I fully supported the leader's approach to the management of the change.	.799

Naming the factor: As only one factor is extracted, the factor is given the same name as the variable.

Factor 1: Employee Satisfaction

4.5.4 Descriptive Summary Report based on the Factors Scores

The variation in employee stress due to organizational change with respect to gender was analyzed. Table 4.32 shows the descriptive statistics of male and female respondents for the two factors of variable 'employee stress' namely 'fear of uncertainty' and 'fear of failure'. It can be seen that there is some difference in the means of the 'fear of uncertainty' and 'fear of failure' in between males and females. The 'fear of uncertainty' is more in females compared to males and 'fear of failure' is slightly more in males compared to females. Thus, both the groups of respondents experience stress while undergoing change.

Table 4.32: Cross Tabulation between Gender and Employee Stress

		Fear of uncertainty		Fear of failure	
		Mean	Standard Deviation	Mean	Standard Deviation
Gender	Male	26.87	4.43	4.05	0.68
	Female	27.54	4.66	4.00	0.71

The variation in employee stress due to organizational change with respect to managerial experience (in years) was analyzed. Table 4.33 shows the descriptive statistics of respondents having below 5 years (Cat-I), 6-15 years (Cat-II) and above 15 years (Cat-III) of managerial experience for the two factors of the variable 'employee stress' namely 'fear of uncertainty' and 'fear of failure'. It can be seen that there is a difference in the means of the 'fear of uncertainty' and 'fear of failure' in between the three categories of managers. Category III managers have least 'fear of uncertainty' and 'fear of failure' compared to the remaining two categories of managers.

Table 4.33: Cross Tabulation between managerial experience (in years) and Employee Stress

		Fear of uncertainty		Fear of failure	
		Mean	Standard Deviation	Mean	Standard Deviation
Managerial Experience	Below 5 years	26.07	4.91	4.25	0.52
	6-15 years	27.29	4.03	4.17	0.66
	Above 15 years	25.48	6.59	4.00	0.77

The variation in resistance to change with respect to gender was also analyzed. Table 4.34 shows the descriptive statistics of male and female respondents for the two factors of the variable 'resistance to change' namely 'change as a threat' and 'communications of benefits of change'. It can be seen that there is a difference in the means of 'change as a threat' and 'communication of benefits of change' in between males and females. Females consider

'change as a threat' slightly more compared to males. Both the groups perceive 'communication of benefits' during the change initiative at a similar level.

Table 4.34: Cross Tabulation between Gender and Resistance to change

		Change as a Threat		Communication of benefit of changes	
		Mean	Standard Deviation	Mean	Standard Deviation
Gender	Male	10.16	2.97	10.45	1.25
	Female	11.33	3.10	10.38	1.36

The variation in resistance to change with respect to managerial experience (in years) was also analyzed. Table 4.35 shows the descriptive statistics of respondents having below 5 years (Cat-I), 6-15 years (Cat-II) and above 15 years (Cat-III) of managerial experience for the two factors of the variable 'resistance to change' namely 'change as a threat' and 'Communication of benefit of changes'. It can be seen that there is a difference in the means of 'change as a threat' in between the three categories of managers. Category II managers have the highest mean value for 'change as a threat'. This shows that managers in category II have the highest resistance to change. However, all the groups perceive 'communication of benefits' during the change initiative at a similar level.

Table 4.35: Cross Tabulation between managerial experience (in years) and Resistance to change

		Change as a Threat		Communication of benefit of changes	
		Mean	Standard Deviation	Mean	Standard Deviation
Experience as a Manager	Below 5 years	9.46	2.63	10.75	1.38
	6-15 years	10.45	3.03	10.50	1.15
	Above 15 years	9.88	3.56	10.46	1.47

The variation in 'employee satisfaction' with respect to gender was also analyzed. Table 4.36 shows the descriptive statistics of male and female respondents with respect to 'employee satisfaction'. It can be seen that there is a difference in the means of employee satisfaction in between males and females. Employee satisfaction of females is lesser than males with respect to the change initiatives.

Table 4.36: Cross Tabulation between Gender and Employee Satisfaction

		Employee Satisfaction	
		Mean	Standard Deviation
Gender	Male	16.91	1.96
	Female	15.59	1.91

The difference in employee satisfaction with respect to managerial experience (in years) was also analyzed. Table 4.37 shows the descriptive statistics of the three categories of managers with respect to employee satisfaction. It can be seen that there is a difference in the means of employee satisfaction in between the managerial categories. Employee satisfaction of Cat II managers is lowest compared to the other categories with respect to the change initiatives.

Table 4.37: Cross Tabulation between managerial experience (in years) and Employee Satisfaction

		Employee Satisfaction	
		Mean	Standard Deviation
Experience as a Manager	Below 5 years (Cat I)	17.25	2.05
	6-15 (Cat II)	16.58	1.85
	Above 15 years (Cat III)	17.35	2.17

4.5.5 Testing of Hypotheses

The hypotheses framed in chapter one were tested using Pearson correlation analysis and Multiple Regression. Pearson's coefficient of correlation assumes that each pair of variables is bivariate normal and it is a measure of linear association. The correlation table displays Pearson's correlation coefficient, significant value and the number of cases with non-missing values. The values of correlation coefficient range from -1 to +1. The sign of correlation coefficient indicates the direction of the relationship. The absolute value of the correlation coefficient indicates the strength, with larger absolute values indicating stronger relationships. A zero correlation indicates no relationship. The significance of each correlation coefficient is also displayed in the correlation table. If the significance level is very small, less than 0.05, then the correlation is significant and the two variables are linearly related, if the significance level is relatively large then the correlation is not significant.

Hypothesis 1:

H_{01}: There is no relationship between context of change and employee stress.

H_{a1}: There is a relationship between context of change and employee stress.

The correlation between 'Context of Change' and 'Employee Stress' is shown in Table 4.38. Both factors of Context of Change (Incremental Change and Internal force of Change) and Employee Stress (Fear of uncertainty, Fear of failure) were tested for the significance of the correlation. As the p-value is less than 0.05 for all cases, it is found that relationship between Incremental Change and Fear of uncertainty; Incremental change and Fear of failure; Internal force of change and Fear of uncertainty; Internal force of change and Fear of Failure are statistically significant. **Thus, the null hypothesis that there is no relationship between 'Context of Change' and 'Employee Stress' is rejected and the alternate hypothesis is accepted.**

As r = - 0.217, there is a negative correlation between 'Incremental change' and 'Fear of uncertainty'. Also, a negative correlation between Incremental change and Fear of failure as r = - 0.191. An incremental change would result in lower employee stress due to low fear of uncertainty and low fear of failure as the changes in the organization would be slow and continuous. Also, internal force of change is negatively related to fear of uncertainty

and fear of failure as the r-value is -0.152 and -0.138 respectively. Thus change initiatives which are driven from within the organization would have reduced fear of uncertainty and fear of failure.

Table 4.38: Correlation between Context of Change and Employee Stress.

Correlations			
		Fear of uncertainty	Fear of failure
Incremental Change	Pearson Correlation	-.217**	-.191**
	Sig. (2-tailed)	.000	.000
Internal Force of change	Pearson Correlation	-.152**	-.138**
	Sig. (2-tailed)	.000	.000
	N	742	742
**. Correlation is significant at the 0.01 level (2-tailed).			

Regression Model for 'Fear of Certainty' with the 'Context of Change'

Multiple Regression is used to test the strength of relationship and formulate a mathematical model between the dependent and independent variables. 'Fear of Uncertainty' is taken as a dependent variable and 'Incremental Change' and 'Internal force of Change' are taken as independent variables. The R value is 0.244 and R^2 is 0.080 and Adjusted R^2 is 0.057 indicating an average association for regression model (Table 4.39). Also, the regression model is significant at F= 23.424 (Table 4.40). The constant beta value is 26.870 and all factors are significantly associated (Table 4.41).

Table 4.39: Table of Model Summary for Hypothesis Ia.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.244[a]	.060	.057	4.34889

a. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.40: ANOVA[a] Table for Hypothesis Ia

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	886.024		443.012	23.424	.000[b]
Residual	13976.607	39	18.913		
Total	14862.631	41			

a. Dependent Variable: Fear of uncertainty

b. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.41: Table of Coefficients[a] for Hypothesis Ia

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	26.870	1.889		14.226	.000
Incremental Change	-.379	.071	-.195	-5.359	.000
Internal Force of change	-.780	.248	-.114	-3.142	.002

a. Dependent Variable: Fear of uncertainty

Table 4.41 helps to construct the multiple regression model for measuring 'Fear of Uncertainty'. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \quad \text{……………………………………………………}\text{equation no. 4.1}$$

Fear of Uncertainty = 26.80 – 0.379 * Incremental Change - 0.780 * Internal force of Change

Regression Model for 'Fear of Failure' with the 'Context of Change'

Fear of Failure is taken as a dependent variable and Incremental Change and Internal force of Change are taken as independent variables. The R value is 0.217 and R^2 is 0.047 and

Adjusted R^2 is 0.045 indicating a good association for regression model (Table 4.42). Also, the regression model is significant at F= 18.328 (Table 4.43). The constant beta value is 4.082 and all factors are significantly associated (Table 4.44).

Table 4.42: Table of Model Summary for Hypothesis Ib

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.217[a]	.047	.045	.67337

a. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.43: ANOVA[a] Table for Hypothesis Ib

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.621	2	8.310	18.328	.000[b]
	Residual	335.084	739	.453		
	Total	351.705	741			

a. Dependent Variable: Fear of failure

b. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.44: Table of Coefficients[a] for Hypothesis Ib

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.082	.292		13.956	.000
	Incremental Change	-.051	.011	-.171	-4.673	.000
	Internal Force of change	-.110	.038	-.105	-2.875	.004

a. Dependent Variable: Fear of failure

Table 4.44 helps to construct the multiple regression model for measuring Fear of Failure. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\text{equation no. 4.2}$$

Fear of Failure = 4.082 - 0.171 * Incremental Change - 0.105 * Internal force of Change

Inference: The null hypothesis that there is no relationship between 'context of change' and 'employee stress' has been rejected. The value of 'r' being negative for all cases clearly shows that there is a negative correlation between 'incremental change' and 'fear of uncertainty' and 'incremental change' and 'fear of failure'. Also, there is a negative correlation between 'internal force of change' and 'fear of failure' and 'internal force of change' and 'fear of uncertainty'. It can be inferred that incremental changes in organizations result in lower employee stress due to low fear of uncertainty and low fear of failure as the changes in the organization would be slow and continuous. In addition, change initiatives which are driven from within would have reduced fear of uncertainty and fear of failure.

Hypothesis –2

H$_{02}$: There is no relationship between leadership behavior and context of change.

H$_{a2}$: There is a relationship between leadership behavior and context of change.

The correlation between leadership behavior and context of change is shown in Table 4.45. Both factors of Leadership Behavior (People Oriented and Task Oriented) and Context of Change (Incremental change and Internal force of change) were tested for significance of the correlation. As the p-value is less than 0.05 for all the cases, it is found that relationship between 'People oriented leadership behavior' and 'Incremental Change'; 'People oriented leadership behavior' and 'Internal force of change'; 'Task oriented leadership behavior' and 'Incremental change'; 'Task oriented leadership behavior' and 'Internal force of change' are statistically significant. **Thus, the null hypothesis that there is no relationship between 'Leadership behavior' and 'Context of Change' is rejected and the alternate hypothesis is accepted.**

As r = 0.346, there is a positive correlation between People oriented leadership behavior and Incremental change and as r = - 0.141, there is a weak negative correlation between People oriented behavior and internal force of change. People oriented leadership behavior have a positive impact on incremental change. However, as per this study people oriented behaviors have a negative impact on internal forces of change. Also, as r = 0.375, Task oriented leadership behaviors are positively related to incremental change. And, as r = - 0.146, Task oriented behavior are negatively related to internal force of change. Thus incremental changes in an organization require both task oriented and people oriented leadership behaviors.

Table 4.45: Correlation between 'Leadership Behavior' and 'Context of Change'

Correlations			
		People Oriented	Task Oriented
Incremental Change	Pearson Correlation	.346**	.375**
	Sig. (2-tailed)	.000	.000
Internal Force of change	Pearson Correlation	-.141**	-.146**
	Sig. (2-tailed)	.000	.000
	N	742	742
**. Correlation is significant at the 0.01 level (2-tailed).			

Regression Model for People oriented leadership behavior with the Change Context

People oriented leadership behavior is taken as a dependent variable and Incremental Change and Internal force of Change are taken as independent variables. The R value is 0.354 and R^2 is 0.125 and Adjusted R^2 is 0.123 indicating a good association for regression model (Table 4.46). The regression model is significant at F= 52.814 (Table 4.47). The constant beta value is 20.946 and all factors are significantly associated (Table 4.48).

Table 4.46: Table of Model Summary for Hypothesis IIa

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.354[a]	.125	.123	3.99424

a. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.47 : ANOVA[a] Table for Hypothesis IIa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1685.194	2	842.597	52.814	.000[b]
	Residual	11789.961	739	15.954		
	Total	13475.155	741			

a. Dependent Variable: People Oriented

b. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.48: Table of Coefficients[a] for Hypothesis IIa

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	20.946	1.735		12.074	.000
	Incremental Change	.613	.065	.331	9.431	.000
	Internal Force of change	-.498	.228	-.077	-2.185	.029

a. Dependent Variable: People Oriented

Table 4.48 helps to construct the multiple regression model for measuring People oriented behavior. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\text{equation no. 4.3}$$

People oriented behavior= 20.946 + 0.613*Incremental Change - 0.498*Internal force of Change

Regression Model for Task oriented leadership behavior with the Change Context

Task oriented behavior is taken as a dependent variable and Incremental Change and Internal force of Change are taken as independent variables. The R value is 0.383 and R^2 is 0.146 and Adjusted R^2 is 0.144 indicating a good association for regression model (Table 4.49). The regression model is significant at F= 63.360 (Table 4.50). The constant beta value is 14.947 and all factors are significantly associated (Table 4.51).

Table 4.49: Table of Model Summary for Hypothesis IIb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.383[a]	.146	.144	3.83175

a. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.50: ANOVA[a] Table for Hypothesis IIb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1860.534	2	930.267	63.360	.000[b]
	Residual	10850.238	739	14.682		
	Total	12710.772	741			

a. Dependent Variable: Task Oriented

b. Predictors: (Constant), Internal Force of change , Incremental Change

Table 4.51: Table of Coefficients[a] for Hypothesis IIb

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.947	1.664		8.981	.000
	Incremental Change	.649	.062	.360	10.405	.000
	Internal Force of change	-.482	.219	-.076	-2.204	.028

a. Dependent Variable: Task Oriented

Table 4.51 helps to construct the multiple regression model for measuring Task oriented leadership behavior. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\text{equation no. 4.4}$$

Task oriented behavior= 14.947 + 0.649*Incremental Change - 0.482*Internal force of Change

Inference: The null hypothesis that there is no relationship between 'leadership behavior' and 'context of change' has been rejected. The value of 'r' being positive clearly shows that there is a positive correlation between 'people oriented leadership behaviors' and 'incremental change' and 'task oriented leadership behaviors' and 'incremental change'. The value of 'r' being negative clearly shows that there is a weak negative correlation between 'people oriented leadership behaviors' and 'internal force of change' and 'task oriented leadership behaviors' and 'internal force of change'. It can be inferred that incremental changes in organizations require both task oriented and people oriented leadership behaviors.

Hypothesis – 3

H$_{03}$: There is no relationship between leadership behavior and resistance to the change initiative by the employees.

H$_{a3}$: There is a relationship between leadership behavior and resistance to the change initiative by the employees.

The correlation between leadership behavior and resistance to change is shown in Table 4.52. Both factors of Leadership Behavior (People Oriented and Task Oriented) and Resistance to change (Change as a Threat and Communications of benefits of change) were tested for the significance of the correlation. As the p-value is less than 0.05, it is found that relationship between 'People oriented leadership behavior' and 'Change as a Threat'; 'People oriented leadership behavior' and 'Communications of benefits of change'; 'Task oriented leadership behavior' and 'Change as a Threat'; 'Task oriented leadership behavior' and 'Communications of benefits of change' are statistically significant. **Thus, the null hypothesis that there is no relationship between 'Leadership behavior' and 'Resistance to Change' is rejected and the alternate hypothesis is accepted.**

As r = - 0.684, there is a strong negative correlation between People oriented behavior and Change as a Threat and as r = 0.240 there is a weak positive correlation between People oriented behavior and Communications of benefits of change. People oriented leadership behaviors have a negative impact on employees feeling change as a threat and a positive impact on communicating the benefits of change. Also, as r = - 0.755, there is a strong negative correlation between Task oriented leadership behaviors and Change as a Threat and as the r = 0.183, there is a weak positive correlation between Task oriented leadership behaviors and Communications of benefits of change.

Table 4.52: Correlation between 'Leadership Behavior' and 'Resistance to Change'

Correlations		Change as a Threat	Communication of benefit of changes
People Oriented	Pearson Correlation	-.684**	.240**
	Sig. (2-tailed)	.000	.000
	N	742	742
Task Oriented	Pearson Correlation	-.755**	.183**
	Sig. (2-tailed)	.000	.000
	N	742	742
**. Correlation is significant at the 0.01 level (2-tailed).			

Regression Model for 'Change as a Threat' with 'Leadership Behavior'

Change as a Threat is taken as a dependent variable and People Oriented and Task Oriented are taken as independent variables. The R value is 0.774 and R^2 is 0.598 and Adjusted R^2 is 0.597 indicating a very good association for regression model (Table 4.53). The regression model is significant at F= 550.791 (Table 4.54). The constant beta value is 22.919 and all factors are significantly associated (Table 4.55).

Table 4.53: Table of Model Summary for Hypothesis IIIa

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774[a]	.598	.597	1.90305

a. Predictors: (Constant), Task Oriented, People Oriented

Table 4.54: ANOVA[a] Table for Hypothesis IIIa

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3989.504	2	1994.752	550.791	.000[b]
	Residual	2676.373	739	3.622		
	Total	6665.877	741			

a. Dependent Variable: Change as a Threat

b. Predictors: (Constant), Task Oriented, People Oriented

Table 4.55: Table of Coefficients[a] for Hypothesis IIIa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.919	.425		53.987	.000
	People Oriented	-.182	.025	-.258	-7.156	.000
	Task Oriented	-.404	.026	-.558	-15.475	.000

a. Dependent Variable: Change as a Threat

Table 4.55 helps to construct the multiple regression model for measuring Change as a Threat. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\text{equation no. 4.5}$$

Change as a Threat = 22.919 - 0.258 * People Oriented behavior - 0.558*Task Oriented behavior

Regression Model for 'Communications of benefits of change' with 'Leadership Behavior'

Communication of Benefits of change is taken as a dependent variable and People Oriented and Task Oriented behaviors are taken as independent variables. The R value is 0.240 and R^2 is 0.057 and Adjusted R^2 is 0.057 indicating a reasonably good association for regression model (Table 4.56). The regression model is significant at F= 22.493 (Table 4.57).The constant beta value is 8.616 and factor people oriented behavior is significantly associated, however, task oriented behavior is not significantly associated (Table 4.58).

Table 4.56: Table of Model Summary for Hypothesis IIIb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.240[a]	.057	.055	1.23752

a. Predictors: (Constant), Task Oriented, People Oriented

Table 4.57: ANOVA[a] Table for Hypothesis IIIb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.893	2	34.447	22.493	.000[b]
	Residual	1131.755	739	1.531		
	Total	1200.648	741			

a. Dependent Variable: Communication of benefit of changes

b. Predictors: (Constant), Task Oriented, People Oriented

Table 4.58 helps to construct the multiple regression model for measuring Communications of benefits of change. The regression equation of the variable explained from the table is:

$Y = \beta + \beta_1 X_1$…………………………………………………..…………equation no. 4.6

Communications of benefits of change = 8.616 + 0.239 * People Oriented behavior

Table 4.58: Table of Coefficients[a] for Hypothesis IIIb

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.616	.276		31.211	.000
	People Oriented	.071	.017	.239	4.324	.000
	Task Oriented	.000	.017	.001	.011	.991

a. Dependent Variable: Communication of benefit of changes

Inference: The null hypothesis that there is no relationship between 'leadership behavior' and 'resistance to change' has been rejected. The value of 'r' being negative clearly shows

that there is a negative correlation between 'people oriented leadership behaviors' and 'change as a threat' and 'task oriented leadership behaviors' and 'change as a threat'. The value of 'r' being positive clearly shows that there is a positive correlation between 'people oriented leadership behaviors' and 'communication of benefits of change' and 'task oriented leadership behaviors' and 'communication of benefits of change'. It can be inferred that both task oriented and people oriented leadership behaviors are required to reduce resistance to change by reducing the perceived threat of change by the employees and increased communication of benefits of change.

Hypothesis – 4

H_{04}: There is no relationship between 'leadership behavior' and 'overall change success'.

H_{a4}: There is a relationship between 'leadership behavior' and 'overall change success'.

The correlation between 'leadership behavior' and 'overall change success' is shown in Table 4.59. Both factors of leadership behavior (people oriented and task oriented) and overall change success were tested for the significance of the correlation. As the p-value is less than 0.05, it is found that relationship between People oriented leadership behavior and Overall Change Success; Task oriented leadership behavior and Overall Change Success are statistically significant. **Thus, the null hypothesis that there is no relationship between 'Leadership behavior' and 'Overall Change Success' is rejected and the alternate hypothesis is accepted.**

There is a high positive correlation between People oriented leadership behavior and Overall Change Success as r = 0.616. Also, there is a high positive correlation between Task oriented leadership behavior and Overall Change Success as r = 0.711. Thus, a balance of both People oriented and Task oriented leadership behaviors are required for change initiatives to be successful.

Table 4.59: Correlation between 'leadership behavior' and 'overall change success'**.**

Correlations		
		Overall Change Success
People Oriented	Pearson Correlation	.616**
	Sig. (2-tailed)	.000
	N	742
Task Oriented	Pearson Correlation	.711**
	Sig. (2-tailed)	.000
	N	742
Overall Change Success	Pearson Correlation	1
	Sig. (2-tailed)	
**. Correlation is significant at the 0.01 level (2-tailed).		

Regression Model for Overall Change Success with Leadership Behavior

Overall change success is taken as a dependent variable and People oriented and Task oriented leadership behaviors are taken as independent variables. The R value is 0.541 and R^2 is 0.292 and Adjusted R^2 is 0.290 indicating a very good association for regression model (Table 4.60). The regression model is significant at F= 152.542 (Table 4.6).The constant beta value is 8.010 and all factors are significantly associated (Table 4.62).

Table 4.60: Table of Model Summary for Hypothesis IV

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541^a	.292	.290	1.05848

a. Predictors: (Constant), Task Oriented, People Oriented

Table 4.61: ANOVA^a Table for Hypothesis IV

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	341.807	2	170.904	152.542	.000^b
	Residual	827.956	739	1.120		
	Total	1169.763	741			

a. Dependent Variable: Overall Change Success

b. Predictors: (Constant), Task Oriented, People Oriented

Table 4.62: Table of Coefficients[a] for Hypothesis IV

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.010	.236		33.924	.000
	People Oriented	.037	.014	.285	2.608	.009
	Task Oriented	.133	.015	.539	9.167	.000

a. Dependent Variable: Overall Change Success

Table 4.62 helps to construct the multiple regression model for measuring Overall Change Success. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\text{equation no. 4.7}$$

Overall Change Success = 8.010 + 0.285*People Oriented + 0.539*Task Oriented

Inference: The null hypothesis that there is no relationship between 'leadership behavior' and 'overall change success' has been rejected. The value of 'r' being positive clearly shows that there is a high positive correlation between 'people oriented leadership behaviors' and 'overall change success' and 'task oriented leadership behaviors' and 'overall change success'. It can be inferred that both task oriented and people oriented leadership behaviors are required to have successful change programmes.

Hypothesis – 5

H$_{05}$: There is no relationship between 'supporting organizational culture' and 'success of change initiatives'.

H$_{a5}$: There is a relationship between 'supporting organizational culture' and 'success of change initiatives'.

The correlation between supporting organizational culture and overall change success is shown in Table 4.63. It is found that relationship between supporting organizational culture and overall change success is statistically significant as the p-value is less than 0.05. **Thus, the null hypothesis that there is no relationship between 'supporting organization culture' and 'overall change success' is rejected and the alternate hypothesis is accepted.**

The value of 'r' is 0.428, thus, there is a reasonably high positive correlation between supporting organizational culture and overall change success. If the culture of the organization i.e. the assumptions, values and beliefs are aligned to the organizational strategies and the culture supports the change initiatives then only the implementation of the change initiative would be successful.

Table 4.63: Correlation between Supporting 'Organization Culture' and 'overall change success'.

Correlations		
		Organization Culture
Overall Change Success	Pearson Correlation	.428[**]
	Sig. (2-tailed)	.000
	N	742
**. Correlation is significant at the 0.01 level (2-tailed).		

Inference: The null hypothesis that there is no relationship between 'organization culture' and 'overall change success' has been rejected. The value of 'r' being positive clearly shows that there is a high positive correlation between 'organization culture' and 'overall change success'. It can be inferred that a supporting organization culture having values and beliefs aligned to the change vision would have successful change implementation.

Hypothesis-6

H$_{06}$: There is no relationship between 'leadership behavior' and 'employee satisfaction'.

H$_{a6}$: There is a relationship between 'leadership behavior' and 'employee satisfaction'.

The correlation between leadership behavior and employee satisfaction is shown in Table 4.64. Both factors of Leadership Behavior (People Oriented and Task Oriented) and employee satisfaction were tested for the significance of the correlation. The relationship between 'People oriented behavior' and 'employee satisfaction'; 'Task oriented behavior' and 'employee satisfaction' are statistically significant as the p-value is less than 0.05. **Thus, the null hypothesis that there is no relationship between 'leadership behavior' and 'employee satisfaction' is rejected and the alternate hypothesis is accepted.**

The value of 'r' is 0.745, thus there is a high positive correlation between People oriented behavior and employee satisfaction. Also there is a high positive correlation between Task oriented behavior and employee satisfaction as the value of 'r' is 0.777. Therefore, a balance of both People oriented and Task oriented behaviors are required for the satisfaction of employees.

Table 4.64: Correlation between Leadership Behaviour and Employee Satisfaction.

Correlations		
		Employee Satisfaction
People Oriented	Pearson Correlation	.745
	Sig. (2-tailed)	.000
	N	742
Task Oriented	Pearson Correlation	.777[*]
	Sig. (2-tailed)	.000
	N	742
Employee satisfaction	Pearson Correlation	1
	Sig. (2-tailed)	
**. Correlation is significant at the 0.01 level (2-tailed).		

Regression Model for Employee satisfaction with Leadership Behavior

Employee satisfaction is taken as a dependent variable and People Oriented and Task Oriented behaviors are taken as independent variables. The R value is 0.812 and R^2 is 0.659 and Adjusted R^2 is 0.658 indicating a very good association for regression model (Table

4.65). The regression model is significant at F= 714.051 (Table 4.66). The constant beta value is 7.884 and all factors are significantly associated (Table 4.67).

Table 4.65: Table of Model Summary for Hypothesis V

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.812[a]	.659	.658	1.14220

a. Predictors: (Constant), Task Oriented, People Oriented

Table 4.66: ANOVA[a] Table for Hypothesis V

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1863.124	2	931.562	714.051	.000[b]
	Residual	964.111	739	1.305		
	Total	2827.235	741			

a. Dependent Variable: Employee Satisfaction

b. Predictors: (Constant), Task Oriented, People Oriented

Table 4.67: Table of Coefficients[a] for Hypothesis V

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	7.884	.255		30.942	.000
	People Oriented	.166	.015	.363	10.913	.000
	Task Oriented	.236	.016	.500	15.044	.000

a. Dependent Variable: Employee Satisfaction

Table 4.67 helps to construct the multiple regression model for measuring Employee satisfaction. The Multiple regression equation of the variables explained from the table is:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots..\text{equation no.4.8}$$

Employee Satisfaction = 7.884 + 0.363*People Oriented + 0.500*Task Oriented

Inference: The null hypothesis that there is no relationship between 'leadership behavior' and 'employee satisfaction' has been rejected. The value of 'r' being positive clearly shows that there is a high positive correlation between 'people oriented leadership behaviors' and 'employee satisfaction' and 'task oriented leadership behaviors' and employee satisfaction'. It can be inferred that both task oriented and people oriented leadership behaviors are required to have high employee satisfaction with respect to the change initiative.

4.6 Conclusion

The quantitative study in this chapter was conducted using primary data from 742 respondents by administering a survey instrument. This chapter brought out some important insights regarding leadership behavior and its role in managing change. The most important findings of this study are that both task oriented and people oriented leadership behaviors are required for having successful change initiatives. The resistance to change can be reduced and employee satisfaction can be improved by having effective task oriented and people oriented leadership behaviors. The context of change has a bearing on employee stress. Incremental and continuous changes and changes driven by the internal forces of the organization result in reduced employee stress. A supporting organization culture has a strong relationship with the success of the change initiative. Thus, effective change leaders need to not only concentrate on the technical aspect of the change programmes but also on the people/softer side.