

## **CHAPTER 4**

### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 Introduction**

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### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 INTRODUCTION:**

The present chapter represents analysis and interpretation of data collected from selected units of engineering industry in M.I.D.C. Satara. The data are collected through primary data source as well as secondary data sources. The data is analyzed using statistical tool.

#### **4.2 DATA ANALYSIS:**

The primary data collected from HR representative and workers of engineering industry. The analysis is presented into six different parts as per selected Units of Engineering Industry of M.I.D.C. Satara and comparative analysis between them.

These Parts are as follows:

- 4.2.1. Utkur Iron and Steel Co. Pvt. Ltd., Satara.
- 4.2.2. Mutha Spherocast (I) Pvt. Ltd., Satara.
- 4.2.3. Kavistu Transmission Pvt. Ltd., Satara.
- 4.2.4. Cooper Corporation Pvt. Ltd., Satara.
- 4.2.5. Alfa Laval (I) Pvt. Ltd., Satara.
- 4.2.6. Comparative Analysis

Motivational practices, techniques are different for each unit. So data analysis is divided into these 6 parts. The company wise analysis consists following three subparts:

- A. Existing Motivational Practice / Motivational Reforms.
- B. Data Analysis Regarding Motivational Practices.
- C. Hypothesis Testing-Impact of Motivational practices on Employee Productivity.

#### 4.2.1. UTKUR IRON AND STEEL CO. PVT. LTD., M.I.D.C. SATARA.

Organization applied different types of motivational practices for increase production, workers efficiency, and decrease rejection rate and attrition ratio. The employees has different economical, cultural background so their motivational factors are different, organization target these factors by propose schemes of motivation. The analysis of Utkur Iron and Steel Co. Pvt. Ltd., Satara is presented into three different parts as follows:

##### A. Existing Motivational Practice / Motivational Reforms in organization is as follows:

1. Incentives scheme- If workers are Produce more than one day targeted production quantity, then per day Efficiency (Extra production without defect and rejection) incentives are to be paid.
2. For minimization of Job rejection – As per limits of job rejection percentage incentives are given. An incentive in rupees varies as per change in department and designation. Following are the job rejection and incentives:

Table 4.2.1.1  
Job Rejection (%) and Incentives scheme

Sr.	Rejection (%)	Incentives in Rupees
1.	0.25% to 0.20%	150
2.	0.19% to 0.15%	200
3.	0.14% to 0.10%	225
4.	0.09% to 0.01%	280
5.	0.00% to 0.00%	300

(Source: Motivational scheme details report of Utkur Iron and Steel Co. Pvt. Ltd., Satara)

3. If any worker done more than 0.5% rejections in a month, then 1.5% salary should be deducted as penalty.
4. For minimization of accident rate safety instruction, training programs and equipments are provided. When month are going without accident, company celebrate at the end of month by giving small refreshment to Employees.

5. The motivational reforms are taken place from December-2010 and company has taken 4 month period to finish all implementation and sufficient time for assessment of this practices impact on Employee productivity.

**B. Regarding Motivational Practices:**

Regarding Motivational practices subpart data are analysed of motivational reforms implemented in organization, most motivational incentives program, satisfaction of employees towards HR department and top level management, Employees exact motivating factors and their perception on existing motivational policies.

**Table 4.2.1.2**

Incentives Program which are Most Motivational to Employees of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	30	100
2	Collective Financial Incentives	0	0
3	Individual Non-Financial Incentives	0	0
4	Collective Non-Financial Incentives	0	0
	Total	30	100

(Source: Field data)

Table 4.2.1.2 indicates that all respondent i.e.100% are motivated by Individual Financial Incentives.

**Table 4.2.1.3**

Satisfaction with HR department Support and Motivational Policy of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	10	33.33
2	Agree	15	50
3	Neutral	5	16.67
4	Disagree	0	0
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.1.3 indicates that 50% respondent are satisfied with HR department Support and Motivational policy, 33.33% respondent are highly satisfied while 16.67% respondent are neutral. It reveals that almost majority of sample respondents are satisfied with the motivational policy.

Table 4.2.1.4  
Satisfaction with Top Management Treatment and Support of Utkur Iron and Steel  
Co. Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	6	20
2	Agree	23	76.67
3	Neutral	1	3.33
4	Disagree	0	0
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.1.4 indicates that 76.67% respondent are satisfied with Top Management treatment and Support, 20% respondent are highly satisfied while 3.33% respondent are neutral. It can be conclude that almost 96% of sample respondents are satisfied with top management treatment and support.

Table 4.2.1.5

Employee Motivational Factor of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

In the Table 4.2.1.5 researcher has facilitate 17 factors of motivation to the employees to seek their opinions.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Salary increment	4.37	0.49	1
2	Job Security	3.6	0.50	13
3	Work Appreciation and Reward	3.8	0.41	8
4	Working Environment	3.43	0.50	14
5	Promotional Opportunity	3.87	0.57	6
6	Support from Co-worker and Superiors	3.63	0.49	12
7	Company recognize and acknowledge your work	3.83	0.46	7
8	Good relationship with co-workers	3.73	0.52	10
9	Welfare Facilities	3.73	0.52	10
10	Profit Sharing Incentives	3.93	0.52	3
11	Job Profile/ Design	3.27	0.45	15
12	Job Enrichment	3.17	0.53	16
13	Employee-Management involvement in decision making	3.97	0.41	2
14	Flexitime - Flexiwork	3.77	0.57	9
15	Interesting Work	3.9	0.48	4
16	Tactful Discipline	3.13	0.86	17
17	Regular Training program	3.9	0.61	4

(Source: Field data)

Table 4.2.1.5 shows motivational factors of employee which are motivating to them to give their best outcomes. All factors are motivating to employees since the mean score of all factors is more than 3. As per the rank salary increment is the most motivating factor having 4.37 Mean score for workers followed by Employee- management involvement in decision making with mean score 3.97. Profit sharing incentives got third rank having mean score 3.93, followed by that Interesting work factor and regular training program with 3.9 mean score each. Working environment are motivating factor got fourteenth rank with mean score 3.43 followed by job design

having 3.27 mean score, job enrichment and Tactful Discipline got last ranks with 3.17 and 3.13 mean. Hence, it is concluded that salary increment and employee involvement in decision making are most employee motivating factor while Job Enrichment and Tactful Discipline are least motivational factors.

Table 4.2.1.6

Opinion regarding existing and implemented Motivational reforms and policies of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D.	Rank
1	Encourages me to give best performance	4.17	0.38	3
2	Encourages me to stay in organization	4.10	0.31	4
3	Encourages me to less leaves	3.73	0.69	9
4	Gives financial assistance to me	4.50	0.51	1
5	Build a strong bonding with superior and Good relationship with co-workers	3.50	0.57	14
6	Gives more technical knowledge and information	3.17	0.91	16
7	Feels organization taken care of me	3.73	0.52	9
8	Create more interest in work and made strong relation with organization.	3.63	0.67	12
9	Increases Loyalty towards organization.	4.10	0.48	4
10	Finding opportunities for advancement in this organization.	3.50	0.68	14
11	Decreases rate of accidents	4.23	0.50	2
12	Helpful to career growth	3.60	0.62	13
13	Gives recognition and status	3.70	0.60	11
14	Gives Good Compensation and Rewards	3.93	0.52	7
15	Encouraging to perform efficient and effectively towards achieving the company goal	3.90	0.61	8
16	Satisfied with motivational practices	3.97	0.56	6

(Source: Field data)

Table 4.2.1.6 shows perception of employees towards motivational practices. Most of the Employee thinks that motivational practices gives financial assistance with first rank having mean score 4.50 and decrease rate of accidents with 4.23 mean score has



second rank. Encouragement giving best performance with Third rank and encourages staying in organization with Fourth rank having 4.17 and 4.10 mean score., followed by Increase in loyalty with mean score 4.10. Opinions of samples are not more about helpful to career growth and finding opportunities for advancement with 3.60 and 3.50 mean score, and last is Build a strong bonding with superior and Good relationship with co-workers and Gives more technical knowledge and information with mean score is 3.50 and 3.17. Hence, it is concluded that most of the employees perceps motivational practices gives financial assistance, decrease accident rate while least of the employees perceps motivational reforms build a strong bonding and relationship with superior and co-workers, gives more technical knowledge and information.

Table 4.2.1.7

Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of Utkur Iron and Steel Co. Pvt. Ltd., Satara.

Sr.	Particulars	Mean	S.D	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure.	3.47	0.51	8
2	Satisfied with the leaves system, rules and regulation	3.77	0.43	7
3	Satisfied with the lunch break, rest breaks system.	3.93	0.45	6
4	The medical benefits provided are satisfactory.	4.13	0.57	4
5	Visibility with top management is easily possible.	4.60	0.50	1
6	Superior always recognizes the excellent/good performance.	4.33	0.66	2
7	Organization having fair amount of team spirit.	3.37	0.72	9
8	Regular satisfactory Training programs is provided.	4.13	0.57	4
9	Organization provides required safety training and equipment at the Workplace.	4.30	0.60	3

(Source: Field Data)

Table 4.2.1.7 Shows Most of the Employee has positive opinion about general policies that are Visibility with top management is easily possible has first rank with mean score 4.60, followed by Superior always recognizes the excellent performance

with mean score 4.33, and third rank goes to regular training is provided with 4.30 mean score. Much respondent state that Satisfied with the leaves system, rules and regulation and Organization offer adequate and reasonable salary/ Pay Structure with 3.77 and 3.47 having seventh and eighth rank. Organization having fair amount of team spirit got last rank with 3.37 mean score. Hence, it is concluded that most of the employees has opinion about general policies that are Visibility with top management is easily possible, Superior always recognizes the excellent performance while least of the employees has opinion organization offer adequate and reasonable salary and have a fair amount of team spirit.

Table 4.2.1.8

Employees motivational Extra facilities of Utkur Iron and Steel Co. Pvt. Ltd., Satara.

Sr.	Particulars	Mean	S.D	Rank
1	Medical	4.23	0.43	1
2	Canteen	4.07	0.74	2
3	Recreation	0.00	0.00	4
4	Grievance Handling	3.47	0.68	3
5	Transport	0.00	0.00	4

(Source: Field Data)

Table 4.2.1.8 shows opinions of the employees regarding motivating Extra facilities, in which recreation and transport facility are not provided. In existing extra facilities Medical facility are most motivated to employees with first rank having 4.23 mean score followed by canteen and last one is grievance Handling with 4.07 and 3.47 mean score. Hence, it is concluded that Medical and canteen are the most motivational extra facilities.

**C. Hypothesis Testing : Impact of Motivational practices on Employee Productivity Parameters of Utkur Iron and Steel Co. Pvt. Ltd., Satara:**

Hypothesis is tested using t-Test: Paired Two Sample for Means. Impacts of motivational practices on productivity are measures by different parameters of Employee productivity and by comparing before and after motivational reforms (Pre and post motivational practices data) impact is assessed.

Ho- Motivational Practices does not lead to Productivity.

The Parameters of Productivity are:

1. Employee Efficiency
2. Rate of Rejection
3. Rate of Accidents
4. Attendance Ratio
5. Attrition Ratio

### 1. Extra Efficiency:

Extra efficiency is the employees extra production. Organization set target for every day without rejection. The extra production is converted into employee extra Efficiency. Table 4.2.1.9 and Table 4.2.1.10 show pre and post motivational reforms extra efficiency of employees.

Table 4.2.1.9

Mean and Variance for Extra Efficiency of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(March-10 to Nov-10)	After Motivational reforms(April-11 to Dec-11)
1	Mean	1.58949201	2.068398596
2	Variance	0.075994296	0.223248027

(Source: Compiled by Researcher)

Table 4.2.1.9 shows Mean before motivational reform is 1.58 and after motivational reform is 2.06. It has found increase into the mean efficiency after motivational reforms.

Table 4.2.1.10

t-Test: Paired Two Sample for Means Extra Efficiency in Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.227438388
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-2.932730258
5.	P(T<=t) one-tail	0.009459461
6.	t Critical one-tail	1.859548033
7.	P(T<=t) two-tail	0.018918923
8.	t Critical two-tail	2.306004133

(Source: Compiled by Researcher)

Table 4.2.1.10 shows that 'P' value is 0.0189 which is less than the alpha value i.e. 0.05. Hence, a null hypothesis is rejected at 0.5 level of significance. The efficiency of samples has got impact due to motivation technique implemented by organization. There found a significant difference into the efficiency of pre and post motivational practices implementation.

## 2. Rate of Rejection:

Rejection means reject the product after production due to not meeting per require standard. There are many reasons of rejection, rejection counter loss in terms of money, efforts, material and time. Table 4.2.1.11 and Table 4.2.1.12 shows pre and post motivational reforms rejection rate.

Table 4.2.1.11

Mean and Variance for Rate of Rejection of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(March-10 to Nov-10)	After Motivational reforms(April-11 to Dec-11)
1	Mean	0.000610872	0.000468
2	Variance	1.71691E-07	2.69E-07

(Source: Compiled by Researcher)

Table 4.2.1.11 shows Mean before motivational reform is 0.00061 and after motivational reform is 0.00046. It has found reduction into the mean rejection rate after motivational reform.

Table 4.2.1.12

t-Test: Paired Two Sample for Means Rate of Rejection of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.323197432
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	0.561169121
5.	P(T<=t) one-tail	0.295025314
6.	t Critical one-tail	1.859548033
7.	P(T<=t) two-tail	0.590050628
8.	t Critical two-tail	2.306004133

(Source: Compiled by Researcher)

Table 4.2.1.12 shows that 'P' value is 0.590 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis are accepted at 0.05 level of significance. The rate of rejection does not have any impact due to motivation technique implemented by organization. There found no significant difference into the rejection rate of pre and post motivational practices implementation.

### 3. Rate of Accidents (In Numbers):

Accidents are happens due to machine or Human fault. Machine accidents are reduces by maintenance of machines. As like this human made accidents are reduces by giving training, make them sound by satisfied with organization. Table 4.2.1.13 and Table 4.2.1.14 shows pre and post motivational reforms Accident rate.

Table 4.2.1.13

Mean and Variance for Rate of Accidents of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(March-10 to Nov-10)	After Motivational reforms(April-11 to Dec-11)
1	Mean	0.555556	0.222222
2	Variance	0.527778	0.194444

(Source: Compiled by Researcher)

Table 4.2.1.13 indicates Mean before motivational reform is 0.55 and after motivational reform is 0.22. It has found reduction into the mean accident rate after motivational reforms.

Table 4.2.1.14

t-Test: Paired Two Sample for Means Accident Rate of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.43355
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1
5.	P(T<=t) one-tail	0.173297
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.346594
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.1.14 shows that 'P' value is 0.346 which is greater than the alpha value i.e. 0.05. Hence, **null hypothesis is accepted at 0.5 level of significance**. The rate of accidents does not have any impact due to motivation technique implemented by organization. There found no significant difference into the accident rate of pre and post motivational practices implementation.

#### 4. Attendance Ratio:

Attendance ratio are implies available human resource and it affect on production. More attendance ratio gives full capacity of production and utilization of available human resource. Table 4.2.1.15 and Table 4.2.1.16 show pre and post motivational reforms Attendance Ratio.

Table 4.2.1.15

Mean and Variance for Attendance Ratio of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(March-10 to Nov-10)	After Motivational reforms(April-11 to Dec-11)
1	Mean	23.8863	24.85048
2	Variance	2.212878	1.495417

(Source: Compiled by Researcher)

Table 4.2.1.15 indicates Mean before motivational reform is 23.88 and after motivational reform is 24.85. It has found increase into the mean attendance rate after motivational reforms.

Table 4.2.1.16

t-Test: Paired Two Sample for Means Attendance Ratio of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.41908
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-1.26445
5.	P(T<=t) one-tail	0.12083
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.24166
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.1.16 shows that 'P' value is 0.241 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.05 level of significance. The attendance ratio does not have impact due to motivation technique implemented by organization. There found no significant difference into the attendance ratio of pre and post motivational practices implementation.

### 5. Employee Attrition rate:

Attrition rate implies employees leaving rate or separation from organization. More attrition causes to additional cost in recruitment, training and development and also waste time and money. Table 4.2.1.17 and Table 4.2.1.18 shows pre and post motivational reforms Employee Attrition rate.

Table 4.2.1.17

Mean and Variance for Attrition rate of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(March-10 to Nov-10)	After Motivational reforms(April-11 to Dec-11)
1	Mean	17.15122	1.701557
2	Variance	1010.431	4.528564

(Source: Compiled by Researcher)

Table 4.2.1.17 indicates Mean before motivational reform is 17.15 and after motivational reform is 1.70. It has found reduction into the mean attrition rate after motivational reforms.

Table 4.2.1.18

t-Test: Paired Two Sample for Means Attrition rate of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.360361
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1.491095
5.	P(T<=t) one-tail	0.087137
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.174274
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.1.18 shows that 'P' value is 0.174 which is greater than the alpha value i.e. 0.05. Hence, **null hypothesis is accepted at 0.5 level of significance**. The employee attrition rate does not have any impact due to motivation technique implemented by organization. There found no significant difference into the Attrition rate of pre and post motivational practices implementation.



Table 4.2.1.19

Summarized hypothesis Testing and Impact of Motivational practices on Productivity of Utkur Iron and Steel Co. Pvt. Ltd., Satara:

Impact of motivation practices are analyzed on different parameters of productivity. Hypothesis is also tested on every parameter of employee productivity. Table 4.2.1.19 shows Summarized Hypothesis testing and impact of motivational practices on productivity.

$H_0$ - Motivational practices does not lead to productivity.

Sr.	Productivity parameter	t-Test result (‘P’ value at 0:05 significant level)	Hypothesis Result
1.	Employee Efficiency	0.018918923	Hypothesis is rejected
2.	Rate of Rejection	0.590050628	Hypothesis is accepted
3.	Rate of accidents	0.346594	Hypothesis is accepted
4.	Attendance ratio	0.24166	Hypothesis is accepted
5.	Attrition ratio	0.174274	Hypothesis is accepted

(Source: Compiled by Researcher)

Table 4.2.1.19 indicate hypothesis testing result and impact of motivational practices on employee productivity with respect to Utkur Iron and Steel Co. Pvt. Ltd., M.I.D.C. Satara. There found no significant difference into the Rate of Rejection, Attendance ratio, Attrition rate , accident rate of pre and post motivational practices implementation. But has significant difference into Employee Efficiency of pre and post motivational practices implementation.

### Conclusion:

The analysis of part A indicates motivational policies to increase in production and minimizes of job rejection to avoid wastage of cost and efforts, Part B shows that individual financial incentives are motivates to employees, satisfaction of top management and HR department, motivating factors and opinions and part C denotes after implementation of motivational reforms impact on employee Efficiency, rate of rejection, Accident rate and attrition ratio are positive while does not affect on attendance ratio of employees.

#### **4.2.2. MUTHA SPHEROCAST (I) PVT. LTD., M.I.D.C. SATARA.**

Organization applied different types of motivational practices for increase production, minimization of employee absenteeism, recreation of employees. The employees has different economical, cultural background so their motivational factors are different, organization target these factors by propose following schemes of motivation. The analysis of Mutha Spherocast (I) Pvt. Ltd., Satara is presented into three different parts as follows:

##### **A. Existing Motivational Practice / Motivational Reforms:**

1. Production Incentives scheme- Every Production line has its own target of production and incentives and it changes as per change in production line and shift. If workers are achieve specified target then incentives are given.
2. For minimization of Absenteeism – Attendance bonus scheme are introduce to avoid or minimize absenteeism. For calendar full days attendance Rs.400/- are given as attendance bonus. For one day absentee Attendance bonus of Rs. 350/- are given. For new comers its Rs. 200 and Rs.150/- are estimated.
3. Yearly Sports Competitions are arranged for Employees.
4. Yearly Medical test are arranged by organization. Safety training and equipments are provided to the workers.
5. The production motivational reforms are take place from 2010. The Attendance Bonus schemes are started from March-2011 with revised scheme of production incentives. Organization has taken 4 month period to finish all implementation and sufficient time for assessment of these practices impact on Employee productivity.

**B. Regarding Motivational Practices:**

Regarding Motivational practices subpart data are analysed of motivational reforms implemented in organization, most motivational incentives program, satisfaction of employees towards HR department and top level management, Employees exact motivating factors and their perception on existing motivational policies.

Table 4.2.2.1

Incentives Program which are Most Motivational to Employees of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	30	100
2	Collective Financial Incentives	0	0
3	Individual Non-Financial Incentives	0	0
4	Collective Non-Financial Incentives	0	0
	Total	30	100

(Source: Field data)

Table 4.2.2.1 indicates that all respondent.e.100% are motivated by Individual Financial Incentives.

Table 4.2.2.2

Satisfaction with HR department Support and Motivational policy of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	3	10
2	Agree	27	90
3	Neutral	0	0
4	Disagree	0	0
5	Strongly Disagree.	0	0
	Total	30	100

(Source: Field data)

Table 4.2.2.2 indicates that 90% respondent is satisfied with HR department Support and Motivational policy while 10% respondent is highly satisfied. It reveals that almost majority of sample respondents are satisfied with the motivational policy.

Table 4.2.2.3  
Satisfaction with Top Management Treatment and Support of Mutha Spherocast (I)  
Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	5	16.66667
2	Agree	25	83.33333
3	Neutral	0	0
4	Disagree	0	0
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.2.3 indicates that 83.33% respondent are satisfied with Top Management treatment and Support, 16.66% respondent are highly satisfied. It can be conclude that almost 99% of sample respondents are satisfied with top management treatment and support.

Table 4.2.2.4

Employee Motivational Factor of Mutha Spherocast (I) Pvt. Ltd., Satara:

In the Table 4.2.2.4 researcher has facilitate 17 factors of motivation to the employees to seek their opinions.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Salary increment	4.17	0.37	1
2	Job Security	4.00	0.74	5
3	Work Appreciation and Reward	4.17	0.64	1
4	Working Environment	3.83	0.64	9
5	Promotional Opportunity	3.70	0.70	10
6	Support from Co-worker and Superiors	3.23	0.50	15
7	Company recognize and acknowledge your work	3.50	0.77	13
8	Good relationship with co-workers	3.87	0.34	8
9	Welfare Facilities	3.97	1.09	6
10	Profit Sharing Incentives	3.67	0.47	12
11	Job Profile/ Design	3.30	0.59	14
12	Job Enrichment	3.10	0.54	16
13	Employee-Management involvement in decision making	4.13	0.43	3
14	Flexitime - Flexiwork	3.70	0.46	10
15	Interesting Work	3.90	0.71	7
16	Tactful Discipline	3.00	0.37	17
17	Regular Training program	4.10	0.60	4

(Source: Field data)

Table 4.2.2.4 shows motivational factors of employee which are motivating to them to give their best outcomes. All are motivating factors for employees since the mean score of all factors is more than 3. As per the rank salary increment and Work Appreciation and Reward are the most motivating factor for workers with mean score 4.17 followed by Employee- management' involvement in decision making got third rank with 4.13 mean score. Regular Training program has 4.10 mean score for fourth rank, followed by motivational factor,are Job Security with 4.00 mean score. Job Profile/ design are motivating factors got fourteenth rank with 3.30 mean

score followed by Support from Co-workers and Superiors with 3.23 mean score each, job enrichment and Tactful Discipline got last ranks with mean score 3.10 and 3.00 so it is not more motivating employee to give their best performance. Hence, it is concluded that salary increment and Work Appreciation and reward are most employee motivating factor while Job Enrichment and Tactful Discipline are least motivational factors

Table 4.2.2.5

Opinion regarding existing and implemented Motivational reforms and policies of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D.	Rank
1	Encourages me to give best performance.	4.43	0.57	1
2	Encourages me to stay in organization.	3.93	0.58	5
3	Encourages me to less leaves.	3.83	0.65	9
4	Gives financial assistance to me.	4.23	0.73	2
5	Build a strong bonding with superior and Good relationship with co-workers.	3.90	0.55	7
6	Gives more technical knowledge and information.	3.27	0.45	16
7	Feels organization taken care of me.	3.87	0.63	8
8	Create more interest in work and made strong relation with organization.	3.83	0.70	9
9	Increases Loyalty towards organization.	4.10	0.80	4
10	Finding opportunities for advancement in this organization.	3.70	0.70	13
11	Decreases rate of accidents	3.83	0.59	9
12	Helpful to career growth	3.50	0.73	15
13	Gives recognition and status	3.77	0.43	12
14	Gives Good Compensation and Rewards	3.93	0.25	5
15	Encouraging to perform efficient and effectively towards achieving the company goal	4.17	0.70	3
16	Satisfied with motivational practices	3.70	0.47	13

(Source: Field Data)

Table 4.2.2.5 shows perception of employees towards motivational practices. Most of the Employee thinks that motivational practices encourages giving best performance with first rank having 4.43 mean score, gives financial assistance with second rank having 4.23 mean score and Encouraging to perform efficient and effectively towards achieving the company goal with third rank having 4.17 mean score . More opinions of samples are about Increases Loyalty towards organization are hold fourth rank with 4.10 mean score. Satisfied with motivational practices and Finding opportunities for advancement in this organization got thirteenth rank with 3.70 mean score, followed by helpful to career growth with 3.50 mean score, and last is Gives more technical knowledge and information 3.27 mean score Hence, it is concluded that most of the employees percepts motivational practices Encourages me to give best performance, gives financial assistance while least of the employees percepts motivational reforms Helpful to career growth, Gives more technical knowledge and information.

Table 4.2.2.6

Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of Mutha Spherocast (I) Pvt. Ltd., Satara.

Sr.	Particulars	Mean	S.D	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure	3.70	0.60	7
2	Satisfied with the leaves system, rules and regulation	3.87	0.35	4
3	Satisfied with the lunch break, rest breaks system.	4.10	0.40	1
4	The medical benefits provided are satisfactory.	4.03	0.41	3
5	Visibility with top management is easily possible.	3.23	0.43	9
6	Superior always recognizes the excellent/good performance.	3.80	0.41	6
7	Organization having fair amount of team spirit.	3.53	0.51	8
8	A regular satisfactory Training program is provided.	3.83	0.38	5
9	Organization provides required safety training and equipment at the Workplace.	4.07	0.52	2

(Source: Field Data)

Table 4.2.2.6 Shows Most of the Employee has positive opinion about general policies that are Satisfied with the lunch break and rest breaks system with 4.10 mean score, provides required safety training and equipment at the Workplace with second rank having 4.07 mean score and third rank goes to medical benefits satisfaction with 4.03 mean score, followed by satisfied with leave system 3.87 mean score. Some state that organization has reasonable salary structure with seventh rank having men score 3.70. Followed by satisfaction level is fair amount of team spirit with mean score 3.53 and last is top management visibility with 3.23 mean score. Hence, it is concluded that most of the employees has opinion about general policies that are satisfied with the lunch break and rest breaks system, gives required training while least of the employees has opinion Visibility with top management is easily possible.

Table 4.2.2.7

Employee Motivational Extra facilities of Mutha Spherocast (I) Pvt. Ltd., Satara

Sr.	Particulars	Mean	S.D	Rank
1	Medical	4.17	0.38	1
2	Canteen	0	0	4
3	Recreation	3.57	0.50	3
4	Grivance Handling	3.70	0.47	2
5	Transport	0	0	4

(Source: Field Data)

Table 4.2.2.7 shows opinions of the employees regarding motivating Extra facilities, in which Canteen and transport are not provided. In existing extra facilities Medical facility are most motivated to employees with first rank with 4.17 mean score followed by grievance Handling with 3.70 mean score and last one is Recreation with 3.57 mean score. Hence, it is concluded that Medical and grievance handling are the most motivational extra facilities.



**C. Hypothesis Testing: Impact of Motivational practices on Employee Productivity**

**Parameters of Mutha Spherocast (I) Pvt. Ltd., Satara:**

Hypothesis is tested using t-Test: Paired Two Sample for Means. Impacts of motivational practices on productivity are measures by different parameters of Employee productivity and by comparing before and after motivational reforms (Pre and post motivational practices data) impact is assessed.

Ho- Motivational Practices does not lead to Productivity.

The Parameters of productivity are:

1. Total Production
2. Rate of Absenteeism
3. Attrition Rate
4. Rate of Accidents

**1. Total Production (in Heats):**

Production is the major parameter of productivity. Total production is the output of employees and their motivation practices. Table 4.2.2.8 and Table 4.2.2.9 show pre and post motivational reforms Total Production.

Table 4.2.2.8

Mean and Variance for Total Production (in Heats) of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(July-11 to March-12)
1	Mean	1337.555556	1560
2	Variance	6440.777778	8281

(Source: Compiled by Researcher)

Table 4.2.2.8 indicates Mean before motivational reform is 1337.55 and after motivational reform is 1560. It has found increase into the mean total production after motivational reform.

Table 4.2.2.9

t-Test: Paired Two Sample for Means Total Production of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.11570341
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-5.209127704
5.	P(T<=t) one-tail	0.000406646
6.	t Critical one-tail	1.859548033
7.	P(T<=t) two-tail	0.000813293
8.	t Critical two-tail	2.306004133

(Source: Compiled by Researcher)

Table 4.2.2.9 shows that 'P' value is 0.0008 which is less than the alpha value i.e. 0.05. Hence, **null hypothesis is rejected at 0.5 level of significance**. The total production has got impact due to motivation technique implemented by organization. There found a significant difference into the production of pre and post motivational practices implementation.

## 2. Absenteeism rate:

Absenteeism rate are implies low availability of human resource and it affect on production. Less absenteeism gives full capacity of production and utilization of available human resource. Table 4.2.2.10 and Table 4.2.2.11 shows pre and post motivational reforms Absenteeism rate

Table 4.2.2.10

Mean and Variance for Absenteeism rate of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(July-11 to March-12)
1	Mean	30.2222222	26.55556
2	Variance	4.69444444	43.77778

(Source: Compiled by Researcher)

Table 4.2.2.10 indicates Mean before motivational reform is 30.22 and after motivational reform is 26.55. It has found reduction into the mean absenteeism rate after motivational reform.

Table 4.2.2.11

t-Test: Paired Two Sample for Means Absenteeism rate of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.3671874
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1.43207802
5.	P(T<=t) one-tail	0.09500553
6.	t Critical one-tail	1.85954803
7.	P(T<=t) two-tail	0.19001107
8.	t Critical two-tail	2.30600413

(Source: Compiled by Researcher)

Table 4.2.2.11 shows that 'P' value is 0.190 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The absenteeism rate does not have impact due to motivation technique implemented by organization. There found no significant difference into the absenteeism rate of pre and post motivational practices implementation.

### 3. Attrition rate:

Attrition rate implies employees leaving or separation from organization. More attrition causes to additional cost in recruitment, training and development and also waste time and money. Table 4.2.2.12 and Table 4.2.2.13 shows pre and post motivational reforms Employee Attrition rate.

Table 4.2.2.12

Mean and Variance for Attrition rate of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(July-11 to March-12)
1	Mean	14.74338	8.414456
2	Variance	92.46692	52.45869

(Source: Compiled by Researcher)

Table 4.2.2.12 indicates Mean before motivational reform is 14.74 and after motivational reform is 8.41. It has found reduction into the mean attrition rate after motivational reform.

Table 4.2.2.13

t-Test: Paired Two Sample for Means Attrition rate of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.26045
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1.410477
5.	P(T<=t) one-tail	0.098038
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.196077
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.2.13 shows that 'P' value is 0.196 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The rate of Attrition does not have any impact due to motivation technique implemented by organization. There found no significant difference into the attrition rate of pre and post motivational practices implementation.

### 3. Rate of Accidents(In Numbers):

Accidents are happens due to machine or Human fault. Machine accidents are reduces by maintenance of machines. As like this human made accidents are reduces by giving training, make them sound by satisfied with organization. Table 4.2.2.14 and Table 4.2.2.15 shows pre and post motivational reforms Accident rate.

Table 4.2.2.14

Mean and Variance for Rate of Accidents of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(July-11 to March-12)
1	Mean	0.777778	0.555556
2	Variance	0.694444	0.527778

(Source: Compiled by Researcher)

Table 4.2.2.14 indicates Mean before motivational reform is 0.77 and after motivational reform is 0.55. It has found reduction into the mean attrition rate after motivational reform.

Table 4.2.2.15

t-Test: Paired Two Sample for Means Accident rate of Mutha Spherocast (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.39001
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	0.512148
5.	P(T<=t) one-tail	0.311192
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.622383
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.2.15 shows that 'P' value is 0.622 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The rate of accidents does not have any impact due to motivation technique implemented by organization. There found no significant difference into the accident rate of pre and post motivational practices implementation.

**Table 4.2.2.16****Summarized hypothesis Testing and Impact of Motivational practices on Productivity of Mutha Spherocast (I) Pvt. Ltd., Satara:**

Impact of motivation practices are analyzed on different parameters of productivity. Hypothesis is also tested on every parameter of employee productivity. Table 4.2.2.16 shows Summarized Hypothesis testing and impact of motivational practices on productivity.

$H_0$ - Motivational practices does not lead to productivity.

Sr.	Productivity parameter	t-Test result ('P' value at 0.05 significant level)	Hypothesis Result
1.	Total Production	0.000813293	Hypothesis is rejected
2.	Rate of Absenteeism	0.19001107	Hypothesis is accepted
3.	Attrition rate	0.196077	Hypothesis is accepted
4.	Rate of Accidents	0.622383	Hypothesis is accepted

(Source: Compiled by Researcher)

Table 4.2.2.16 indicate hypothesis testing result and impact of motivational practices on employee productivity of Mutha Spherocast (I) Pvt. Ltd., Satara. There found no significant difference into the Rate of Absenteeism, Attrition rate , accident rate of pre and post motivational practices implementation. But has significant difference into total Production of pre and post motivational practices implementation.

**Conclusion:**

The analysis of part A indicates motivational policies to increase in production level and minimizes of Employee absenteeism, Part B shows that individual financial incentives are motivates to employees, satisfaction level for top management and HR department, motivating factors and their opinions and part C denotes after implemeration of motivational reforms impact on Total Production, Rate of Absenteeism. Attrition rate and Rate of Accidents are positive.

### **4.2.3. KAVISTU TRANSMISSION PVT. LTD., SATARA.**

Organization applied different types of motivational practices for minimization of employee absenteeism, minimization of attrition ratio, satisfaction and recreation of employees. The employees has different economical, cultural background so their motivational factors are different, organization target these factors by propose following schemes of motivation. The analysis of Kavistu Transmission Pvt. Ltd., Satara is presented into three different parts as follows:

#### **A. Existing Motivational Practice / Motivational Reforms:**

1. Attendance Allowance - For minimization of late coming and absenteeism attendance allowance introduced. For full calendar day presence without late coming and leaves attendance allowance all applicable.
2. Personal Out pass: Through Personal out pass workers can go 2-3 hours for their personal Work once time in a month.
3. Yearly Social event are arranged that is 'Janai-Malai Jatra', Blood Donation Camp.
4. Yearly Health Check-up are arranged by organization. Safety training and equipments are provided to the workers and every employee has accident policy.
5. Celebration of Birthday of each Employee.
6. The Attendance Allowance schemes and Personal Out pass are started from March-2011. we are taken 3 month period to finish all implementation and sufficient time for assessment of this practices impact on Employee product

**B. Regarding Motivational Practices:**

Regarding Motivational practices subpart data are analysed of motivational reforms implemented in organization, most motivational incentives program, satisfaction of employees towards HR department and top level management, Employees exact motivating factors and theirs perception on existing motivational policies.

Table 4.2.3.1

Incentives Program which are Most Motivational to Employees of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	30	100
2	Collective Financial Incentives	0	0
3	Individual Non-Financial Incentives	0	0
4	Collective Non-Financial Incentives	0	0
	Total	30	100

(Source: Field data)

Table 4.2.3.1 indicates that all respondent i.e.100% are motivated by Individual Financial Incentives with 100%.

Table 4.2.3.2

Satisfaction with HR department Support and Motivational policy of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	5	16.67
2	Agree	19	63.33
3	Neutral	3	10
4	Disagree	3	10
5	Strongly Disagree.	0	0
	Total	30	100

(Source: Field data)

Table 4.2.3.2 indicate that 63.33% respondents are satisfied with HR department Support and Motivational policy, 16.67% respondents are highly satisfied while 10% are neutral and 10% are not satisfied. It reveals that almost majority of sample respondents are satisfied with the motivational policy.



Table 4.2.3.3  
Satisfaction with Top Management Treatment and Support of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	5	16.67
2	Agree	21	70
3	Neutral	1	3.33
4	Disagree	3	10
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.3.3 indicate that 70% respondent are satisfied with Top Management treatment and Support, 16.67% respondent are highly satisfied .3.33% are neutral and 10% are not satisfied. It can be conclude that almost 86% of sample respondents are satisfied with top management treatment and support.

Table 4.2.3.4

Employee Motivational Factor of Kavistu Transmission Pvt. Ltd., Satara:

In the Table 4.2.3.4 researcher has facilitate 17 factors of motivation to the employees to seek their opinions.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Salary increment	4.23	0.43	2
2	Job Security	3.97	0.32	11
3	Work Appreciation and Reward	3.83	0.59	12
4	Working Environment	3.83	0.65	12
5	Promotional Opportunity	4.00	0.37	9
6	Support from Co-worker and Superiors	4.23	0.63	2
7	Company recognize and acknowledge your work	4.00	0.45	9
8	Good relationship with co-workers	4.13	0.57	7
9	Welfare Facilities	4.40	0.77	1
10	Profit Sharing Incentives	4.17	0.70	5
11	Job Profile/ Design	3.70	0.60	14
12	Job Enrichment	3.10	0.31	15
13	Employee-Management involvement in decision making	4.23	0.43	2
14	Flexi time - Flexi work	3.10	0.55	15
15	Interesting Work	4.13	0.35	7
16	Tactful Discipline	3.07	0.58	17
17	Regular Training program	4.17	0.38	5

(Source: Field data)

Table 4.2.3.4 shows motivational factors of employee which are motivating to them to give their best outcomes. All factors are motivating to employees since the mean score of all factors is more than 3, but as per the rank Welfare Facilities is the most motivating factor for workers with 4.40 mean score followed by Employee-management involvement in decision making with 4.23 mean score. Salary increment and Support from Co-worker and Superiors having 4.23 mean score followed by that Regular Training program and profit sharing Incentives with 4.17

mean score. Job enrichment and Flexi time -Flexi work got fourteenth rank with 3.10 mean score and Tactful Discipline are got last rank with 3.07 mean score so it is not much motivating employee to give their best performance. Hence, it is concluded that Welfare facility and salary increment are most employee motivating factor while Job Enrichment and Flexi time - Flexi work are least motivational factors.

Table 4.2.3.5

Opinion regarding existing and implemented Motivational reforms and policies of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D.	Rank
1	Encourages me to give best performance	3.80	0.66	4
2	Encourages me to stay in organization	3.63	0.67	7
3	Encourages me to less leaves	3.83	0.59	3
4	Gives financial assistance to me	3.67	0.71	6
5	Build a strong bonding with superior and Good relationship with co-workers	4.03	0.49	1
6	Gives more technical knowledge and information	2.90	0.31	16
7	Feels organization taken care of me	3.60	0.72	10
8	Create more interest in work and made strong relation with organization.	3.70	0.53	5
9	Increases Loyalty towards organization.	3.87	0.35	2
10	Finding opportunities for advancement in this	3.50	0.57	12
11	Decreases rate of accidents	3.10	0.40	15
12	Helpful to career growth	3.13	0.43	14
13	Gives recognition and status	3.63	0.72	7
14	Gives Good Compensation and Rewards	3.17	0.59	13
15	Encouraging to perform efficient and effectively towards achieving the company goal	3.63	0.72	7
16	Satisfied with motivational practices	3.53	0.82	11

(Source: Field Data)

Table 4.2.3.5 shows perception of employees towards motivational practices. Most of the Employee thinks that motivational practices Build a strong bonding with superior and Good relationship with co-workers with first rank having mean score 4.03,

increase loyalty with second rank having mean score 3.87 and Encouraging to take a less leaves with third rank has 3.83 mean score. Encourages to give best performance are hold fourth rank with 3.80 mean score. Some respondent has opinions motivational reforms are helpful to career growth with fourteenth rank having 3.13 mean score, followed by decreases accident rate with mean score 3.10. Last rank goes to Gives more technical knowledge and information with mean score 2.90. Hence, it is concluded that most of the employees percepts motivational practices Build a strong bonding and relationship with superior and co-workers, increase loyalty while least of the employees percepts motivational reforms Decreases rate of accidents and gives more technical knowledge and information.

Table 4.2.3.6

Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure	3.40	0.97	9
2	Satisfied with the leaves system, rules and regulation	3.57	0.90	7
3	Satisfied with the lunch break, rest breaks system.	4.07	0.25	3
4	The medical benefits provided are satisfactory.	3.67	0.88	6
5	Visibility with top management is easily possible.	3.50	0.86	8
6	Superior always recognizes the excellent/good	4.07	0.52	3
7	Organization having fair amount of team spirit.	4.20	0.81	1
8	Regular satisfactory Training programs is provided.	3.93	0.83	5
9	Organization provides required safety training and equipment at the Workplace.	4.13	0.90	2

(Source: Field Data)

Table 4.2.3.6 Shows Most of the Employee has positive opinion about general policies. Organization having fair amount of team spirit has first rank with 4.20 mean score , followed by provides required safety training and equipment with 4.13 mean score and

third rank goes to recognition from superiors for excellent performance with 4.07 mean score. Satisfied with leave system have seventh rank with 3.57 mean score, followed by top management easily visibility got eighth rank with 3.50 mean score. Last rank goes to opinion that organization provides adequate salary structure with mean score 3.40. Hence, it is concluded that most of the employees has opinion about general policies that are Organization have a fair amount of team spirit, provides required safety training and equipment while least of the employees has opinion organization offer adequate and reasonable salary.

Table 4.2.3.7  
Employee Motivational Extra facilities of Kavistu Transmission Pvt. Ltd., Satara

Sr.	Particulars	Mean	S.D	Rank
1	Medical	4.07	1.08	1
2	Canteen	0.00	0.00	3
3	Recreation	0.00	0.00	3
4	Grivance Handling	4.07	0.78	1
5	Transport	0.00	0.00	3

(Source: Field Data)

Table 4.2.3.7 shows opinions of the employees regarding motivating Extra facilities, in which Canteen, recreation and transport facility are not provided. In existing extra facilities Medical facility and grievance Handling are most motivated to employees with having 4.07 men score. Hence, it is concluded that Medical and Grievance handling are the most motivational extra facilities.

**D. Hypothesis Testing : Impact of Motivational practices on Employee Productivity Parameters of Kavistu Transmission Pvt. Ltd., Satara:**

Hypothesis is tested using t-Test: Paired Two Sample for Means. Impacts of motivational practices on productivity are measured by different parameters of Employee productivity and by comparing before and after motivational reforms (Pre and post motivational practices data) impact is assessed.

Ho- Motivational Practices does not lead to Productivity.

The Parameters of productivity are:

1. Total Production(Rs.)
2. Attrition Rate
3. Rate of Absenteeism
4. Authorized Leave Rate
5. Rate of Accidents (In Numbers)

### 1. Total Production (In Rupees):

Production is the major parameter of productivity. Total production is the output of employees and their motivation practices. Table 4.2.3.8 and Table 4.2.3.9 show pre and post motivational reforms Total Production.

Table 4.2.3.8

Mean and Variance for Total Production (in Rupees) of Kavistu Transmission Pvt. Ltd.

Sr.	Particulars	Before Motivational reforms(May-10 to Feb-11)	After Motivational reforms(Jun-11 to March-12)
1	Mean	12724249.3	1.8E+07
2	Variance	4.83424E+13	2.5E+13

(Source: Compiled by Researcher)

Table 4.2.3.8 indicates Mean before motivational reform is 12724249.58 and after motivational reform is 1.8E+07. It has found increase into the mean total production after motivational reform.

Table 4.2.3.9

t-Test: Paired Two Sample for Means Total Production of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.271808253
2.	Hypothesized Mean Difference	0
3.	Df	9
4.	t Stat	-1.819346952
5.	P(T<=t) one-tail	0.051104537
6.	t Critical one-tail	1.833112923
7.	P(T<=t) two-tail	0.102209074
8.	t Critical two-tail	2.262157158

(Source: Compiled by Researcher)

\* Kavitsu transmission (I) Pvt. Ltd. does not have mass production, Company having customized production (as per customer requirement) so Total Production (in Rupees) to be consider to comparison of production.

Table 4.2.3.9 shows that 'P' value is 0.102 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The total

production does not have much impact due to motivation technique implemented by organization. There found no significant difference into the production of pre and post motivational practices implementation.

## 2. Attrition rate:

Attrition rate implies employees leaving or separation from organization. More attrition causes to additional cost in recruitment, training and development and also waste time and money. Table 4.2.3.10 and Table 4.2.3.11 shows pre and post motivational reforms Employee Attrition rate.

Table 4.2.3.10

Mean and Variance for Attrition rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(May-10 to Feb-11)	After Motivational reforms(Jun-11 to March-12)
1	Mean	2.468128	2.194078
2	Variance	1.933875	0.920657

(Source: Compiled by Researcher)

Table 4.2.3.10 indicates Mean before motivational reform is 2.46 and after is 2.19. It has found reduction into the mean Attrition rate after motivational reform.

Table 4.2.3.11

t-Test: Paired Two Sample for Means Attrition rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.25297
2.	Hypothesized Mean Difference	0
3.	Df	9
4.	t Stat	0.461281
5.	P(T<=t) one-tail	0.327771
6.	t Critical one-tail	1.833113
7.	P(T<=t) two-tail	0.655542
8.	t Critical two-tail	2.262157

(Source: Compiled by Researcher)

Table 4.2.3.11 shows that 'P' value is 0.655 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The rate of Attrition does not have any impact due to motivation technique implemented by



organization. There found no significant difference into the attrition rate of pre and post motivational practices implementation.

### 3. Absenteeism rate:

Absenteeism rate are implies low availability of human resource and it affect on production. Less absenteeism gives full capacity of production and utilization of available human resource. Table 4.2.3.12 and Table 4.2.3.13 shows pre and post motivational reforms Absenteeism rate.

Table 4.2.3.12

Mean and Variance for Absenteeism rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(May-10 to Feb-11)	After Motivational reforms(Jun-11 to March-12)
1	Mean	4.245	5.705
2	Variance	0.62303	6.845806

(Source: Compiled by Researcher)

Table 4.2.3.12 indicates Mean before motivational reform is 4.25 and after motivational reform is 5.70. It has found increase into the mean Absenteeism rate after motivational reform.

Table 4.2.3.13

t-Test: Paired Two Sample for Means Absenteeism rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.42222
2.	Hypothesized Mean Difference	0
3.	Df	9
4.	t Stat	-1.9296
5.	P(T<=t) one-tail	0.04286
6.	t Critical one-tail	1.83311
7.	P(T<=t) two-tail	0.08573
8.	t Critical two-tail	2.26216

(Source: Compiled by Researcher)

Table 4.2.3.13 shows that 'P' value is 0.08 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.05 level of significance. The absenteeism rate does not have impact due to motivation technique implemented by

organization. There found no significant difference into the absenteeism rate of pre and post motivational practices implementation.

### 3. Authorized leave rate:

Authorized leave rate are implies low availability of human resource and it affect on production. Table 4.2.3.14 and Table 4.2.3.15 pre and post motivational reforms Authorized leave rate.

Table 4.2.3.14

Mean and Variance for Authorize leave rate of Kavistu Transmission Pvt. Ltd., Satara

Sr.	Particulars	Before Motivational reforms(May-10 to Feb-11)	After Motivational reforms(Jun-11 to March-12)
1	Mean	4.67	4.94
2	Variance	2.926222	1.667111

(Source: Compiled by Researcher)

Table 4.2.3.14 indicates Mean before motivational reform is 4.67 and after is 4.94. It has found increase into the mean Authorized leave rate after motivational reform.

Table 4.2.3.15

t-Test: Paired Two Sample for Means Authorized leave rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.048898
2.	Hypothesized Mean Difference	0
3.	Df	9
4.	t Stat	-0.40809
5.	P(T<=t) one-tail	0.346372
6.	t Critical one-tail	1.833113
7.	P(T<=t) two-tail	0.692743
8.	t Critical two-tail	2.262157

(Source: Compiled by Researcher)

Table 4.2.3.15 shows that 'P' value is 0.69 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The Authorized leave rate does not have impact due to motivation technique implemented by organization. There found no significant difference into the Authorized leave rate of pre and post motivational practices implementation.

#### 4. Rate of Accidents(In Numbers):

Accidents are happens due to machine or Human fault. Machine accidents are reduces by maintenance of machines. As like this human made accidents are reduces by giving training, make them sound by satisfied with organization. Table 4.2.3.16 and 4.2.3.17 shows pre and post motivational reforms Accident rate.

Table 4.2.3.16

Mean and Variance for Rate of Accidents of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(May-10 to Feb-11)	After Motivational reforms(Jun-11 to March-12)
1	Mean	1	0.6
2	Variance	1.111111	0.488889

(Source: Compiled by Researcher)

Table 4.2.3.16 indicates Mean before motivational reform is 1 and after motivational reform is 0.6. It has found reduction into the mean Accident rate after motivational reform.

Table 4.2.3.17

t-Test: Paired Two Sample for Means Accident Rate of Kavistu Transmission Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.15076
2.	Hypothesized Mean Difference	0
3.	Df	9
4.	t Stat	0.937043
5.	P(T<=t) one-tail	0.186599
6.	t Critical one-tail	1.833113
7.	P(T<=t) two-tail	0.373199
8.	t Critical two-tail	2.262157

(Source: Compiled by Researcher)

Table 4.2.3.17 shows that 'P' value is 0.37 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The rate of accidents does not have any impact due to motivation technique implemented by organization. There found no significant difference into the accident rate of pre and post motivational practices implementation.

Table 4.2.3.18

Summarized hypothesis Testing and Impact of Motivational practices on Productivity of Kavistu Transmission Pvt. Ltd., Satara:

Impact of motivation practices are analyzed on different parameters of productivity. Hypothesis is also tested on every parameter of employee productivity. Table 4.2.3.18 shows Summarized Hypothesis testing and impact of motivational practices on productivity.

$H_0$ - Motivational Practices does not lead to Productivity.

Sr.	Productivity parameter	t-Test result ('P' value at 0.05 significant level)	Hypothesis Result
1.	Total Production(Rs.)	0.102209074	Hypothesis is accepted
2.	Attrition rate	0.655542	Hypothesis is accepted
3.	Rate of Absenteeism	0.08573	Hypothesis is accepted
4.	Authorized Leave rate	0.692743	Hypothesis is accepted
5.	Rate of Accidents(in numbers)	0.373199	Hypothesis is accepted

(Source: Compiled by Researcher)

Table 4.2.3.18 indicate hypothesis testing result and impact of motivational practices on employee productivity of Kavistu Transmission Pvt. Ltd., Satara. There found no significant difference into the total Production, Rate of Rejection, Attrition rate, Rate of Absenteeism, Authorized Leave rate and accident rate of pre and post motivational practices implementation.

### Conclusion:

The analysis of part A indicates motivational policies to increase in Attendance and provides welfare facilities, Part B shows that individual financial incentives are motivates to employees, satisfaction of top management and HR department, motivating factors and their opinions and part C denotes after implementation of motivational reforms impact on Attrition rate, Rate of Absenteeism. Authorized Leave rate and Rate of Accidents are positive white it does not lead to improvement in production.

#### 4.2.4. COOPER CORPORATION PVT. LTD., SATARA.

Organization applied different types of motivational practices for increase total production and labour Utilization, minimization of rate of rejection, employee absenteeism, and minimization of attrition ratio, satisfaction and recreation of employees. The employees has different economical, cultural background so their motivational factors are different, organization target these factors by propose following schemes of motivation. The analysis of Cooper Corporation Pvt. Ltd., Satara is presented into four different parts as follows:

##### A. Existing Motivational Practice / Motivational Reforms:

###### 1. Production Incentives:

Production Incentives are based on target achievement. For every department, units different target are set, on the achieving of target percentage incentives are given in same proportionate. Incentives amount are varies for skilled and semi-skilled workers, work nature, group and designation. These incentives are divided into two parts

1. Group Incentives
2. Individual Incentives

On the achievement of target one Silver Coin are given with photos in Cooper Pariwar (In-house magazine) applied only for group production.

2. For minimization of Rejection rate negative motivational technique are applied. The possible rejection rate is decided and if rejection is more than in that proportionate production incentives are deducted. On the unauthorized absence production incentives are not applicable.
3. Best attendance Award: For the 6 month fulltime calendar days presence 'Best Attendance Award' are given with certificate and Rs.1500/
4. 'ANKACHA MANAKARI': Employee who give consistently best performance in the form of good behavior, attendance, co-operative nature, gives more production are awarded as 'ANKACHA MANAKARI' in the Cooper Pariwar (In-house magazine)

5. Twenty and twenty-five years Service Tenure:

On the successful completion of Twenty and twenty-five years Service Tenure company appreciate to that employee with the Silver Coin, certificate frame, sweet box and Rs.7500/-

Gives honor in cooper Pariwar magazine with photos, make hoardings with thankful message for being with cooper.

6. Provides all safety equipments helmets, gloves goggles, shoes and uniforms. Even for private vehicles helmets are provided.

7. Provides refreshment with fruits and milk everyday to maintain energy and health of Workers.

8. Provides well equipped, latest and multi-subject books Library .

9. Yearly health-check and primary Medical facilities are provided.

10. Arrangement of Yearly Sport, game Competitions. For Employee child Winter and Summer camp are arranged.

11. Scholarship Schemes:

Every employee's child takes advantage of scholarship scheme. This Scheme are as follows:

1. Got 4th and 7th standard scholarship gives Rs.1000/- onetime.

2. Got marks 85% and above in 10<sup>th</sup> Rs. 1500/- onetime.

3. Got marks 75% and above in 12<sup>th</sup> Rs. 1500/- onetime.

4. For Medical and Engineering students Rs.2500/- quarterly and Rs.3000 yearly for reference book. For appreciating students cooper facilitate them and gives photo in Cooper Pariwar.

12. The production Incentives and negative motivational reforms are introduced at March-2011. Organization has taken 3 months period to finish all implementation and sufficient time for assessment of this practices impact on Employee productivity.

**B. Regarding Motivational Practices:**

Regarding Motivational practices subpart data are analysed of motivational reforms implemented in organization, most motivational incentives program, satisfaction of employees towards HR department and top level management, Employees exact motivating factors and their perception on existing motivational policies.

Table 4.2.4.1

Incentives Program which are Most Motivational to Employees of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	30	100
2	Collective Financial Incentives	0	0
3	Individual Non-Financial Incentives	0	0
4	Collective Non-Financial Incentives	0	0
	Total	30	100

(Source: Field data)

Table 4.2.4.1 indicates that all respondent i.e.100% are motivated by Individual Financial Incentives.

Table 4.2.4.2

Satisfaction with HR department Support and Motivational policy of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	16	53.33
2	Agree	12	40
3	Neutral	0	0
4	Disagree	2	6.67
5	Strongly Disagree.	0	0
	Total	30	100

(Source: Field data)

Table 4.2.4.2 indicates that 53.33% respondent are highly satisfied with HR department Support and Motivational policy, 40% respondent are satisfied while 6.67% are not satisfied. It reveals that almost majority of sample respondents are satisfied with the motivational policy.

Table 4.2.4.3  
Satisfaction with Top Management Treatment and Support of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	17	56.67
2	Agree	11	36.67
3	Neutral	0	0
4	Disagree	2	6.67
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.4.3 indicates that 56.67% respondent are highly satisfied with Top Management treatment and Support, 36.67% respondent are satisfied while 6.67% not satisfied. It can be conclude that almost 92% of sample respondents are satisfied with top management treatment and support.



Table 4.2.4.4

Employee Motivational Factor of Cooper Corporation Pvt. Ltd., Satara:

In the Table 4.2.4.4 researcher has facilitate 17 factors of motivation to the employees to seek their opinions.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Salary increment	4.53	0.51	2
2	Job Security	4.27	0.52	4
3	Work Appreciation and Reward	4.17	0.46	7
4	Working Environment	4.33	0.66	3
5	Promotional Opportunity	4.10	0.48	9
6	Support from Co-worker and Superiors	4.17	0.53	7
7	Company recognize and acknowledge your work	4.27	0.58	4
8	Good relationship with co-workers	4.00	0.59	13
9	Welfare Facilities	4.80	0.48	1
10	Profit Sharing Incentives	4.03	0.56	12
11	Job Profile/ Design	3.40	0.67	15
12	Job Enrichment	3.07	0.45	17
13	Employee-Management involvement in decision making	4.20	0.48	6
14	Flexi time - Flexi work	3.43	0.86	14
15	Interesting Work	4.07	0.45	10
16	Tactful Discipline	3.17	0.65	16
17	Regular Training program	4.07	0.37	10

(Source: Field data)

Table 4.2.4.4 shows motivational factors of employee which are motivating to them to give their best outcomes. All factors are motivating to employees since the mean score of all factors is more than 3, but as per the rank Welfare Facilities is the most motivating factor for workers with 4.80 mean score followed by Salary increment with 4.53 mean score having second rank. Working Environment got third rank with 4.33 mean score, followed by Job Security with 4.27 mean score. Flexi time -Flexi work has fourteenth rank with 3.43 mean score, followed by Job Profile with 3.40 mean score, Tactful Discipline with 3.17 mean score and Job enrichment with 3.07 mean score are got last ranks so it is not much motivating employee. Hence, it is

concluded that Welfare Facilities and salary increment in decision making are most employee motivating factor while Job Profile and Tactful Discipline are least motivational factors.

Table 4.2.4.5

Opinion regarding existing and implemented motivational reforms and policies of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D.	Rank
1	Encourages me to give best performance	3.97	0.67	9
2	Encourages me to stay in organization	3.93	0.78	12
3	Encourages me to less leaves	3.40	1.04	16
4	Gives financial assistance to me	4.43	0.77	2
5	Build a strong bonding with superior and Good relationship with co-workers.	4.27	0.94	3
6	Gives more technical knowledge and information	3.80	0.48	14
7	Feels organization taken care of me	4.10	1.03	5
8	Create more interest in work and made strong relation with organization.	4.10	0.71	5
9	Increases Loyalty towards organization.	4.23	0.57	4
10	Finding opportunities for advancement in this organization.	4.00	0.53	8
11	Decreases rate of accidents	4.53	0.51	1
12	Helpful to career growth	3.73	0.45	15
13	Gives recognition and status	3.97	0.61	9
14	Gives Good Compensation and Rewards	3.90	0.55	13
15	Encouraging to perform efficient and effectively towards achieving the company goal.	3.97	0.56	9
16	Satisfied with motivational practices	4.07	0.83	7

(Source: Field Data)

Table 4.2.4.5 reveals perception of employees towards motivational practices. Most of the Employee thinks that motivational practices decreases accident rate with first rank having 4.53 mean score, followed by it gives financial assistance with 4.43 mean score. Build a strong bonding with superior and good relationship with co-workers

with third rank having 4.27 mean score followed by increase loyalty with mean score 4.23. Some respondent has opinions motivational reforms are gives technical knowledge and information with fourteenth rank having 3.80 mean score, followed by helpful to career growth with 3.73 mean score. And last rank is encourages to less leaves with 3.40 mean score. Hence, it is concluded that most of the employees percepts motivational practices decrease accident rate, gives financial assistance while least of the employees percepts motivational reforms Helpful to career growth and Encourages to less leaves.

Table 4.2.4.6

Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of Cooper Corporation Pvt. Ltd., Satara

Sr.	Particulars	Mean	S.D	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure	3.50	0.97	7
2	Satisfied with the leaves system, rules and regulation	3.10	1.12	9
3	Satisfied with the lunch break, rest breaks system?	4.17	0.38	4
4	The medical benefits provided are satisfactory.	3.80	0.71	6
5	Visibility with top management is easily possible.	3.27	1.01	8
6	Superior always recognizes the excellent/good performance.	4.30	0.92	2
7	Organization having fair amount of team spirit.	3.93	1.20	5
8	Regular satisfactory Training programs is provided.	4.30	0.65	2
9	Organization provides required safety training and equipment at the Workplace.	4.33	0.66	1

(Source: Field Data)

Table 4.2.4.6 Shows Most of the Employee has positive opinion about general policies that are provides required safety training and equipment with first rank having 4.33 mean score, followed by regular satisfactory training are provided with 4.30 mean score and third rank goes to recognition from superiors for excellent performance with mean score 4.30. Few respondent has opinion that Organization offer adequate and reasonable salary/ Pay Structure with seventh rank having mean score 3.50, followed

by Top management visibility are easily possible with eighth rank having 3.27 mean score. And last rank goes to opinion that Satisfied with leave system with 3.10 mean score. Hence, it is concluded that most of the employees has opinion about general policies that are Organization provides required safety training and equipment while least of the employees has opinion Visibility with top management is easily possible and Satisfied with the leaves system, rules and regulation .

Table 4.2.4.7

Employee Motivational Extra facilities of Cooper Corporation Pvt. Ltd., Satara

Sr.	Particulars	Mean	S.D	Rank
1	Medical	4.30	0.47	1
2	Canteen	4.13	0.57	3
3	Recreation	3.83	0.53	4
4	Grivance Handling	4.23	0.90	2
5	Transport	0.00	0.00	5

(Source: Field Data)

Table 4.2.4.7 shows opinions of the employees regarding motivating Extra facilities, in which transport facility are not provided. In existing extra facilities Medical facility are most motivated to employees with first rank having 4.30 mean score followed by grievance Handling with mean score 4.23. Canteen facility got third rank with 4.13 mean score, followed by recreation with mean score 3.83. Hence, it is concluded that Medical and grievance handling are the most motivational extra facilities.

**C. Impact of Motivational practices on Employee Productivity of Cooper Corporation Pvt. Ltd., Satara:**

Hypothesis is tested using t-Test: Paired Two Sample for Means. Impacts of motivational practices on productivity are measures by different parameters of Employee productivity and by comparing before and after motivational reforms (Pre and post motivational practices data) impact is assessed.

Ho- Motivational practices does not lead to Productivity.

The Parameters of Productivity are:

1. Total Production
2. Rate of Rejection
3. Cost of Poor Quality
4. Productivity-Labour Utilization (hrs)
5. Absenteeism Rate
6. Rate of Accidents (In Numbers)

**1. Total Production:**

Production is the major parameter of productivity. Total production is the output of employees and their motivation practices. Table 4.2.4.8 and Table 4.2.4.9 shows pre and post motivational reforms Total Production.

Table 4.2.4.8  
Mean and Variance for Total Production of Cooper Corporation Pvt. Ltd., Satara

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1	Mean	85.22222	96.88889
2	Variance	70.44444	10.11111

(Source: Compiled by Researcher)

Table 4.2.4.8 indicates Mean before motivational reform is 85.22 and after motivational reform is 96.88. It has found increase into the mean Total production after motivational reform.

Table 4.2.4.9  
t-Test: Paired Two Sample for Means Total Production of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.01301
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-3.8829
5.	P(T<=t) one-tail	0.002328
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.004656
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.9 shows that 'P' value is 0.004 which is less than the alpha value i.e. 0.05. Hence, **null hypothesis is rejected at 0.5 level of significance.** The production has got impact due to motivation technique implemented by organization. There found significant difference into the Total Production of pre and post motivational practices implementation.

## 2. Rate of Rejection:

Rejection means reject the product after production due to not made as per require standard. There are many reasons of rejection, rejection counter loss in terms of money, efforts, material and time. Table 4.2.4.10 and Table 4.2.4.11 shows pre and post motivational reforms rejection rate.

Table 4.2.4.10

Mean and Variance for Rate of Rejection of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1	Mean	5713.111	4090
2	Variance	8983096	838375

(Source: Compiled by Researcher)

Table 4.2.4.10 indicates Mean before motivational reform is 5713.11 and after motivational reform is 4090. It has found reduction into the mean rejection rate after motivational reform.

Table 4.2.4.11

t-Test: Paired Two Sample for Means Rejection Rate of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.44752
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1.389667
5.	P(T<=t) one-tail	0.10104
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.20208
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.11 shows 'P' value is 0.202 which is greater than the alpha value i.e. 0.05 hence, **null hypothesis is accepted at 0.5 level of significance**. The rate of rejection does not have impact due to motivation technique implemented by organization. There found no significant difference into the rejection rate of pre and post motivational practices implementation.

### 3. Cost of Poor Quality:

Cost of Poor Quality is monetary loss of organization for production of low quality and rejection of production. Table 4.2.4.12 and Table 4.2.4.13 show pre and post motivational reforms Cost of Poor Quality.

Table 4.2.4.12

Mean and Variance for Cost of Poor Quality of Cooper Corporation Pvt. Ltd., Satara

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1.	Mean	183727.2	146714.3
2.	Variance	3.67E+09	6.26E+08

(Source: Compiled by Researcher)

Table 4.2.4.12 indicates Mean before motivational reform is 183727.2 and after motivational reform is 146714.3. It has found reduction into the mean cost of poor quality after motivational reform.

Table 4.2.4.13

t-Test: Paired Two Sample for Means Poor Quality Cost of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.28378
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	1.545849
5.	P(T<=t) one-tail	0.080362
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.160725
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.13 shows that 'P' value is 0.16 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.5 level of significance. The cost of poor quality does not get impact due to motivation technique implemented by organization. There found no significant difference into the Cost of poor quality of pre and post motivational practices implementation.



#### 4. Productivity-Labour Utilization (hrs):

Productivity-Labour Utilization (hrs) is the employees' productivity in terms of labour utilization in hours. Table 4.2.4.14 and Table 4.2.4.15 shows pre and post motivational reforms Productivity-Labour Utilization (hrs).

Table 4.2.4.14

Mean and Variance for Productivity-Labour Utilization(hrs) of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1	Mean	73.88889	96.77778
2	Variance	318.3611	163.9444

(Source: Compiled by Researcher)

Table 4.2.4.14 indicates Mean before motivational reform is 73.88 and after motivational reform is 96.77. It has found increase into the mean Productivity-Labour Utilization (hrs)after motivational reform.

Table 4.2.4.15

t-Test: Paired Two Sample for Means Productivity-Labour Utilization(hrs) of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.03842
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-3.07129
5.	P(T<=t) one-tail	0.007659
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.015318
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.15 shows that 'P' value is 0.015 which is less than the alpha value i.e. 0.05. Hence, null hypothesis is rejected at 0.5 level of significance. The Productivity-Labour Utilization has got impact due to motivation technique implemented by organization. There found a significant difference into the Productivity-Labour Utilization of pre and post motivational practices implementation.

**5. Absenteeism rate:**

Absenteeism rate are implies low availability of human resource and it affect on production. Less absenteeism gives full capacity of production and utilization of available human resource. Table 4.2.4.16 and Table 4.2.4.17 shows pre and post motivational reforms Absenteeism rate.

Table 4.2.4.16

Mean and Variance for Absenteeism rate of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1	Mean	11.05	8.540556
2	Variance	0.832006	1.198753

(Source: Compiled by Researcher)

Table 4.2.4.16 indicates Mean before motivational reform is 11.05 and after motivational reform is 8.54. It has found reduction into the mean Absenteeism rate after motivational reform.

Table 4.2.4.17

t-Test: Paired Two Sample for Means Absenteeism rate of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.090851
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	5.535993
5.	P(T<=t) one-tail	0.000275
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.00055
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.17 shows that 'P' value is 0.0005 which is less than the alpha value i.e. 0.05. Hence, null hypothesis is rejected at 0.5 level of significance. The absenteeism rate got impact due to motivation technique implemented by organization. There found a significant difference into the absenteeism rate of pre and post motivational practices implementation.

### 6. Rate of Accidents (In Numbers):

Accidents are happens due to machine or Human fault. Machine accidents are reduces by maintenance of machines. As like this human made accidents are reduces by giving training, make them sound by satisfied with organization. Table 4.2.4.17 and 4.2.4.18 shows pre and post motivational reforms Accident rate.

Table 4.2.4.18

Mean and Variance for Rate of Accidents (In Numbers) of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jun-10 to Feb-11)	After Motivational reforms(Jun-11 to Feb-12)
1	Mean	0.444444	0.777778
2	Variance	0.527778	0.694444

(Source: Compiled by Researcher)

Table 4.2.4.17 indicates Mean before motivational reform is 0.44 and after motivational reform is 0.77. It has found increase into the mean Accident rate after motivational reform.

Table 4.2.4.19

t-Test: Paired Two Sample for Means Accident Rate of Cooper Corporation Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.596481
2.	Hypothesized Mean Difference	0
3.	Df	8
4.	t Stat	-1.41421
5.	P(T<=t) one-tail	0.097508
6.	t Critical one-tail	1.859548
7.	P(T<=t) two-tail	0.195016
8.	t Critical two-tail	2.306004

(Source: Compiled by Researcher)

Table 4.2.4.18 shows that 'P' value is 0.19 which is greater than the alpha value i.e. 0.05 hence, null hypothesis is accepted at 0.5 level of significance. The rate of accidents does not have impact due to motivation technique implemented by organization. There found no significant difference into the accident rate of pre and post motivational practices implementation.

Table 4.2.4.20

Summarized hypothesis Testing and Impact of Motivational practices on Productivity of Cooper Corporation Pvt. Ltd., Satara:

Impact of motivation practices are analyzed on different parameters of productivity. Hypothesis is also tested on every parameter of employee productivity. Table 4.2.4.20 shows Summarized Hypothesis testing and impact of motivational practices on productivity.

$H_0$ - Motivational practices does not lead to productivity.

Sr.	Productivity parameter	t-Test result ('P' value at 0.05 significant level)	Hypothesis Result
1.	Total Production	0.004656	Hypothesis is rejected
2.	Rate of Rejection	0.20208	Hypothesis is accepted
3.	Cost of Poor Quality	0.160725	Hypothesis is accepted
4.	Productivity-Labour Utilization(hrs)	0.015318	Hypothesis is rejected
5.	Absenteeism Rate	0.00055	Hypothesis is rejected
6.	Rate of Accidents(in numbers)	0.195016	Hypothesis is accepted

(Source: Compiled by Researcher)

Table 4.2.4.20 indicate hypothesis testing result and impact of motivational practices on employee productivity of Cooper Corporation Pvt. Ltd., Satara. There found no significant difference into the Rate of Rejection, Cost of Poor Quality, and Rate of Accidents (in numbers) of pre and post motivational practices implementation. But has significant difference into Total Production, Productivity-Labour Utilization (hrs) and Absenteeism Rate of pre and post motivational practices implementation.

### Conclusion:

The analysis of part A indicates motivational policies to increase in production, minimize rejection rate and absenteeism and provides welfare facilities, Part B shows that individual financial incentives are motivates to employees, satisfaction

of top management and HR department, motivating factors and their opinions regarding motivational existed reforms, general policies of organization and part C denotes after implementation of motivational reforms impact on Total Production, Rate of Rejection, Cost of Poor Quality, Productivity-Labour Utilization (hrs) and Rate of Accidents (in numbers) are positive, While impact are not positive on Absenteeism Rate.

#### **4.2.5. ALFA LAVAL (I) PVT. LTD., SATARA.**

Organization applied different types of motivational practices for increase total production, minimization of employee absenteeism, satisfaction and recreation of employees. The employees has different economical, cultural background so their motivational factors are different, organization target these factors by propose following schemes of motivation. The analysis of Alfa Laval (I) Pvt. Ltd., Satara. is presented into four different parts as follows:

##### **A. Existing Motivational Practice / Motivational Reforms:**

1. **Production Incentives:** Production incentives are group incentives. As working nature are required groups, so incentives are given on the Group Performance. This incentive is given in the efficiency proportionate and it varies as per work nature and department. also incentives are given to the supports departments
2. **Negative motivational scheme:** If any employee is absent for more than five days in a month, then that employee are not eligible to take benefit of production incentives.
3. For Every Groups leader give team leader allowance of Rs.2000/-.
4. **5'S Management:** 5S Principles in Manufacturing Management are based on the five Japanese terms namely Seiri, Seiton, Seison, Seiketsu and Shitsuke, which are the shorthand expressions for principles of maintaining an effective and efficient workplace in the manufacturing and production environment. The 5S also refers to a structured methodology of using these principles as the basis for continuous improvement in the workplace.

These terms can be described as follows:

1. Seiri, that is SORT and aims at eliminating everything that make the workplace cluttered and is not required for the job being performed.
2. Seiton, that is SET ORDER (Organize) which refers to the efficient placement, arrangement, organization and scheduling of the equipment and material.

3. Seison, that is SANITIZE (Sweep and Shine) which refers to maintenance of tidiness and cleanliness in the workplace.
4. Seiketsu that is STANDARDIZATION which refers to an ongoing, standardized, continually improving Seiri, Seiton, Seison.
5. Shitsuke, that is SUSTAIN that accounts for the discipline with leadership, involvement of people, integration into the performance measurement system.
5. Hospitalization Scheme: For serious diseases that are Heart attack, Accident, related Brain, paralysis etc. means those who are dangerous for human life Company gives 100% financial assistance.
6. Company takes care of all employees by providing them Safety shoes, Gumboot, Raincoats, Caps.
7. For all permanent employees gives Rs. 25000/- for arrangement of tour/ Picnic once in a year.
8. For entertainment- cultural program with family sports club gives Rs. 65000/- Once in a year.
9. The employee who proves that he requires less time and cost for his work productivity and efficiency, awarded With Cash Benefits.
10. Team Leader Incentives scheme and 5'S Management motivational reforms are introduced at December-2010. Organization has taken 3 months period to finish all implementation and sufficient time for assessment of this practices impact on Employee productivity.

**B. Regarding Motivational Practices:**

Regarding Motivational practices subpart data are analyses of motivational reforms implemented in organization, most motivational incentives program, satisfaction of employees towards HR department and top level management, Employees exact motivating factors and theirs perception on existing motivational policies.

Table 4.2.5.1

Incentives Program which are Most Motivational to Employees of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	0	0
2	Collective Financial Incentives	30	100
3	Individual Non-Financial Incentives	0	0
4	Collective Non-Financial Incentives	0	0
	Total	30	100

(Source: Field data)

Table 4.2.5.1 indicates that all respondent i.e.100% are motivated by Collective Financial Incentives with 100%.

Table 4.2.5.2

Satisfaction with HR department Support and Motivational policy of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	7	23.33
2	Agree	9	30
3	Neutral	5	16.67
4	Disagree	9	30
5	Strongly Disagree.	0	0
	Total	30	100

(Source: Field data)

Table 4.2.5.2 indicate that 30.33% respondent are satisfied with HR department Support and Motivational policy, 30% are not satisfied , 23.33% respondent are highly satisfied and 16.67% are neutral. It reveals that almost 53% of sample respondents are satisfied with the motivational policy.



Table 4.2.5.3

Satisfaction with Top Management Treatment and Support of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Parameters	No. of Respondent	Percentage (%)
1	Strongly Agree	10	33.33
2	Agree	9	30
3	Neutral	2	6.67
4	Disagree	9	30
5	Strongly Disagree	0	0
	Total	30	100

(Source: Field data)

Table 4.2.5.3 indicates that 33.33% respondent are highly satisfied with Top Management treatment and Support, 30% respondent are satisfied while 30% are not satisfied and 6.67% are neutral. It can be conclude that almost 63% of sample respondents are satisfied with top management treatment and support.

Table 4.2.5.4

Employee Motivational Factor of Alfa Laval (I) Pvt. Ltd., Satara:

In the Table 4.2.5.4 researcher has facilitate 17 factors of motivation to the employees to seek their opinions.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Salary increment	4.83	0.38	2
2	Job Security	4.30	0.47	7
3	Work Appreciation and Reward	4.37	0.49	5
4	Working Environment	4.20	0.81	9
5	Promotional Opportunity	3.80	0.89	13
6	Support from Co-worker and Superiors	4.37	0.67	5
7	Company recognize and acknowledge your work	4.27	0.64	8
8	Good relationship with co-workers	4.67	0.55	4
9	Welfare Facilities	4.87	0.35	1
10	Profit Sharing Incentives	4.03	0.41	11
11	Job Profile/ Design	3.70	0.70	14
12	Job Enrichment	3.07	0.69	16
13	Employee-Management involvement in decision making	4.73	0.45	3
14	Flexi time - Flexi work.	2.70	0.88	17
15	Interesting Work	3.93	0.37	12
16	Tactful Discipline	3.47	0.57	15
17	Regular Training program	4.13	0.63	10

(Source: Field data)

Table 4.2.5.4 shows motivational factors of employee which are motivating to them to give their best outcomes. As per the rank Welfare Facilities is the most motivating factor for workers with 4.87 mean score followed by Salary increment having second rank with 4.83 mean score. Employee management involvement in decision making got third rank with 4.73 mean score, followed by that Good relation with co-workers with mean score 4.67. Job design/ profile have fourteenth rank with 3.70 mean score, followed by Tactful discipline with 3.47 mean score. Last ranks are Job enrichment has 3.07 mean score, followed by Flexi time -Flexi work with 2.70 so it is not much

motivating employee to give their best performance. Hence, it is concluded that Welfare Facilities and salary increment are most employee motivating factor while Job Enrichment and Flexi time -Flexi work are least motivational factors.

Table 4.2.5.5

Opinion regarding existing and implemented motivational reforms and policies of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Mean	S.D.	Rank
1	Encourages me to give best performance	4.03	0.76	13
2	Encourages me to stay in organization	4.10	0.61	12
3	Encourages me to less leaves	2.53	0.63	16
4	Gives financial assistance to me	4.47	0.63	4
5	Build a strong bonding with superior and Good relationship with co-workers	4.57	0.63	2
6	Gives more technical knowledge and information	3.97	0.81	15
7	Feels organization taken care of me	4.57	0.73	2
8	Create more interest in work and made strong relation with organization.	4.27	0.69	8
9	Increases Loyalty towards organization.	4.40	0.50	5
10	Finding opportunities for advancement in this	4.30	0.47	7
11	Decreases rate of accidents	4.77	0.43	1
12	Helpful to career growth	4.03	0.41	13
13	Gives recognition and status	4.33	0.48	6
14	Gives Good Compensation and Rewards	4.23	0.68	9
15	Encouraging to perform efficient and effectively towards achieving the company goal	4.20	0.48	10
16	Satisfied with motivational practices	4.13	0.68	11

(Source: Field data)

Table 4.2.5.5 shows perception of employees towards motivational practices. Most of the Employee thinks that motivational practices Decreases rate of accidents with first rank having mean score 4.77, feels organization taken care and Build a strong bonding with superior and Good relationship with co-workers with second rank having mean score 4.57 followed by Gives financial assistance with 4.47 mean score. Few

respondent say motivational reforms are helpful to career growth and encourages to give best performance with thirteenth rank having mean score 4.03, last ranks are goes to it gives more technical knowledge and information with 3.97 mean score followed by, encourage to take less leaves with mean score 2.53. Hence, it is concluded that most of the employees percepts motivational practices decreases accident rate, build a strong bonding and relationship with superior and co-workers while least of the employees percepts motivational reforms gives more technical knowledge and information and Encourages to less leaves.

Table 4.2.5.6

Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of Alfa Laval (I) Pvt. Ltd., Satara

Sr.	Particulars	Mean	S.D	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure	3.70	1.06	7
2	Satisfied with the leaves system, rules and regulation	4.50	0.51	4
3	Satisfied with the lunch break, rest breaks system.	4.63	0.49	1
4	The medical benefits provided are satisfactory.	4.03	1.03	6
5	Visibility with top management is easily possible.	3.70	1.21	7
6	Superior always recognizes the excellent/good performance.	3.57	1.07	9
7	Organization having fair amount of team spirit.	4.60	0.89	2
8	Regular satisfactory Training programs are provided.	4.13	0.90	5
9	Organization provides required safety training and equipment at the Workplace.	4.60	0.50	2

(Source: Field data)

Table 4.2.5.6 Shows Most of the Employee has positive opinion about general policies that are satisfied with the lunch break, rest breaks system with first rank having mean score 4.63, followed by provides required safety training and equipment and organization having fair amount of team spirit with 4.60 mean score. Seventh rank got by opinion organization offer adequate and reasonable salary/ Pay Structure and top management easily visibility with 3.70 mean score and last ranks goes to opinion that

Superior always recognizes the excellent/good performance with mean score 3.57. Hence, it is concluded that most of the employees has opinion about general policies that are satisfied with the lunch break, rest breaks system, Organization having fair amount of team spirit while least of the employees<sup>o</sup> has opinion Superior always recognizes the excellent/good performance.

Table 4.2.5.7  
Employee Motivational Extra facilities of Alfa Laval (I) Pvt. Ltd., Satara

Sr.	Particulars	Mean <sup>o</sup>	S.D	Rank
1	Medical	4.37	0.61	1
2	Canteen	4.33	0.61	2
3	Recreation	3.77	0.63	4
4	Grivance Handling	4.20	0.96	3
5	Transport	0.00	0.00	5

(Source: Field data)

Table 4.2.5.7 shows opinions of the employees regarding motivating Extra facilities, in which transport facility are not provided. In existing extra facilities Medical facility are most motivated to employees with first rank with mean score 4.37 followed by canteen with 4.33 mean score, grievance Handling got third rank with 4.20 mean score, followed by last rank with 3.77 mean score is recreation facilities. Hence, it is concluded that Medical and canteen are the most motivational extra facilities.

**C. Hypothesis Testing : Impact of Motivational practices on Employee Productivity**

**Parameters of Alfa Laval (I) Pvt. Ltd., Satara:**

Hypothesis is tested using t-Test: Paired Two Sample for Means. Impacts of motivational practices on productivity are measures by different parameters of Employee productivity and by comparing before and after motivational reforms (Pre and post motivational practices data) impact is assessed.

Ho- Motivational practices does not lead to productivity.

The Parameters of Productivity are:

1. Total Production
2. Rate of Absenteeism
3. Rate of Accidents (in numbers)

**1. Total Production:**

Production is the major parameter of productivity. Total production is the output of employees and their motivation practices. Table 4.2.5.8 and Table 4.2.5.9 show pre and post motivational reforms Total Production.

Table 4.2.5.8

Mean and Variance for Total Production of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jan-10 to Nov-10)	After Motivational reforms(March-11 to Jan-12)
1	Mean	12724249.3	1.8E+07
2	Variance	4.83424E+13	2.5E+13

(Source: Compiled by Researcher)

Table 4.2.5.8 indicates Mean before motivational reform is 12724249.3 and after motivational reform is 1.8E+07. It has found increase into the mean production after motivational reform.

Table 4.2.5.9

t-Test: Paired Two Sample for Means Total Production of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	0.029369175
2.	Hypothesized Mean Difference	0
3.	Df	10
4.	t Stat	-0.759226367
5.	P(T<=t) one-tail	0.232618627
6.	t Critical one-tail	1.812461102
7.	P(T<=t) two-tail	0.465237255
8.	t Critical two-tail	2.228138842

(Source: Compiled by Researcher)

Table 4.2.5.9 shows that 'P' value is 0.465 which is greater than the alpha value i.e. 0.05. Hence, **null hypothesis is accepted at 0.5 level of significance**. The total production has not much impact due to motivation technique implemented by organization. There found no significant difference into the production of pre and post motivational practices implementation.

**2. Absenteeism rate:**

Absenteeism rate are implies low availability of human resource and it affect on production. Less absenteeism gives full capacity of production and utilization of available human resource. Table 4.2.5.10 and Table 4.2.5.11 shows pre and post motivational reforms Absenteeism rate.

Table 4.2.5.10

Mean and Variance for Absenteeism rate of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jan-10 to Nov-10)	After Motivational reforms(March-11 to Jan-12)
1.	Mean	10.52727	9.4
2.	Variance	1.712182	0.662

(Source: Compiled by Researcher)

Table 4.2.5.10 indicates Mean before motivational reform is 10.52 and after motivational reform is 9.4. It has found reduction into the mean Absenteeism rate after motivational reform.

Table 4.2.5.11

t-Test: Paired Two Sample for Means Absenteeism rate of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.60114
2.	Hypothesized Mean Difference	0
3.	Df	10
4.	t Stat	1.955826
5.	P(T<=t) one-tail	0.039491
6.	t Critical one-tail	1.812461
7.	P(T<=t) two-tail	0.078981
8.	t Critical two-tail	2.228139

(Source: Compiled by Researcher)

Table 4.2.5.11 shows that 'P' value is 0.07 which is greater than the alpha value i.e. 0.05. Hence, **null hypothesis is accepted at 0.5 level of significance**. The absenteeism rate does not have any impact due to motivation technique implemented by organization. There found no significant difference into the absenteeism rate of pre and post motivational practices implementation.



### 3. Rate of Accidents (In Numbers):

Accidents are happens due to machine or Human fault. Machine accidents are reduces by maintenance of machines. As like this human made accidents are reduces by giving training, make them sound by satisfied with organization. Table 4.2.5.12 and Table 4.2.5.13 shows pre and post motivational reforms Accident rate.

Table 4.2.5.12

Mean and Variance for Rate of Accidents of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Before Motivational reforms(Jan-10 to Nov-10)	After Motivational reforms(March-11 to Jan-12)
1	Mean	0.090909091	0.181818
2	Variance	0.090909091	0.163636

(Source: Compiled by Researcher)

Table 4.2.5.12 indicates Mean before motivational reform is 0.09 and after motivational reform is 0.18. It has found increase into the mean accident rate after motivational reforms.

Table 4.2.5.13

t-Test: Paired Two Sample for Means Accident Rate of Alfa Laval (I) Pvt. Ltd., Satara:

Sr.	Particulars	Results
1.	Pearson Correlation	-0.149071198
2.	Hypothesized Mean Difference	0
3.	Df	10
4.	t Stat	-0.559016994
5.	P(T<=t) one-tail	0.294224669
6.	t Critical one-tail	1.812461102
7.	P(T<=t) two-tail	0.588449338
8.	t Critical two-tail	2.228138842

(Source: Compiled by Researcher)

Table 4.2.5.13 shows that 'P' value is 0.58 which is greater than the alpha value i.e. 0.05. Hence, null hypothesis is accepted at 0.05 level of significance. The rate of accidents does not have impact due to motivation technique implemented by organization. There found no significant difference into the accident rate of pre and post motivational practices implementation.

Table 4.2.5.14

Summarized hypothesis Testing and Impact of Motivational practices on Productivity of Alfa Laval (I) Pvt. Ltd., Satara:

Impact of motivation practices are analyzed on different parameters of productivity. Hypothesis is also tested on every parameter of employee productivity. Table 4.2.5.14 shows Summarized Hypothesis testing and impact of motivational practices on productivity.

$H_0$ - Motivational practices does not lead to productivity.

Sr.	Productivity parameter	t-Test result (‘P’ value at 0.05 significant level)	Hypothesis Result
1.	Total Production	0.465237255	Hypothesis is accepted
2.	Rate of Absenteeism	0.078981	Hypothesis is accepted
3.	Rate of Accidents	0.588449338	Hypothesis is accepted

(Source: Compiled by Researcher)

Table 4.2.5.14 indicate hypothesis testing result and impact of motivational practices on employee productivity of Alfa Laval (I) Pvt. Ltd., Satara. There found no significant difference into the Total Production, Rate of Absenteeism and Rate of Accidents (in numbers) of pre and post motivational practices implementation.

### Conclusion:

The analysis of part A indicates motivational policies to increase in production and manufacturing capacity in systematic way, minimize absenteeism and provides welfare facilities, Part B shows that individual financial incentives are motivates to employees, satisfaction of top management and HR department, motivating factors and their opinions regarding motivational existed reforms, general policies of organization and part C denotes after implementation of motivational reforms impact on Rate of Absenteeism. And Rate of Accidents is positive while it does not have positive impact on total production.

#### 4.2.6 COMPARATIVE ANALYSIS:

Following is a comparative analysis of opinions of employees on incentives programs generally used for motivational purpose. The comparison is made into following selected five units:

- A. Utkur Iron and Steel Co. Pvt. Ltd., Satara.
- B. Mutha Spherocast (I) Pvt. Ltd., Satara.
- C. Kavistu Transmission Pvt. Ltd., Satara.
- D. Cooper Corporation Pvt. Ltd., Satara.
- E. Alfa Laval (I) Pvt. Ltd., Satara.

Table no: 4.2.6.1

Comparison of opinions of Employees on Most Motivational Incentives Program:

Sr.	Incentives Program	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Mutha Spherocast (I) Pvt. Ltd., Satara	Kavistu Transmission Pvt. Ltd., Satara	Cooper Corporation Pvt. Ltd., Satara	Alfa Laval (I) Pvt. Ltd., Satara	No. of Respondent	Percentage (%)
1	Individual Financial Incentives	30	30	30	30	0	120	80
2	Collective Financial Incentives	0	0	0	0	30	30	20
3	Individual Non-Financial Incentives	0	0	0	0	0	0	0
4	Collective Non-Financial Incentives	0	0	0	0	0	0	0
	Total	30	30	30	30	30	150	100

(Source: Compiled by researcher)

Table 4.2.6.1 indicate that employees of Unit Utkur Iron and Steel Co. Pvt. Ltd., Mutha Spherocast (I) Pvt. Ltd., Kavistu Transmission Pvt. Ltd. and Cooper Corporation Pvt. Ltd. get motivated by Individual Financial Incentives while employees in Alfa Laval (I) Pvt. Ltd., Satara unit get motivated by Collective Financial Incentives. Hence, it is concluded that most of the employees are motivated by Individual Financial Incentives.

Table 4.2.6.2

Comparison of Satisfaction of Employees with HR department Support and Motivational policy:

Sr.	Name of Unit	Mean score of satisfaction	S.D.	Rank
1	Utkur Iron and Steel Co. Pvt. Ltd., Satara	4.17	0.70	2
2	Mutha Spherocast (I) Pvt. Ltd., Satara	4.10	0.31	3
3	Kavistu Transmission Pvt. Ltd., Satara	3.87	0.82	4
4	Cooper Corporation Pvt. Ltd., Satara	4.40	0.81	1
5	Alfa Laval (I) Pvt. Ltd., Satara	3.10	1.32	5

(Source: Compiled by Researcher)

Table 4.2.6.2 indicates that Comparative study of HR Department satisfaction between sample units. Employees in sample unit are satisfied with HR department because mean score for all units is above 3.00 but as per rank Cooper Corporation Pvt. Ltd., Satara receives first rank with 4.40 mean score signifies that employees are most satisfied, followed by Utkur Iron and Steel Co. Pvt. Ltd., Satara with 4.17 mean score, Mutha Spherocast (I) Pvt. Ltd., Satara with mean score 4.10. Kavistu Transmission Pvt. Ltd., Satara receives fourth rank with mean score 3.87 and last rank goes to Alfa Laval (I) Pvt. Ltd., Satara with 3.10 mean score. Hence, it is concluded that most of the employees of Cooper Corporation Pvt. Ltd. and Utkur Iron and Steel Co. Pvt. Ltd. are satisfied with HR department Support and Motivational policy.

Table 4.2.6.3

Comparison of Satisfaction of Employees with Top Management Treatment and Support:

Sr.	Name of Unit	Mean score of satisfaction	S.D.	Rank
1	Utkur Iron and Steel Co. Pvt. Ltd., Satara	4.17	0.46	2
2	Mutha Spherocast (I) Pvt. Ltd., Satara	4.17	0.38	2
3	Kavistu Transmission Pvt. Ltd., Satara	3.93	0.78	4
4	Cooper Corporation Pvt. Ltd., Satara	4.43	0.82	1
5	Alfa Laval (I) Pvt. Ltd., Satara	3.67	1.24	5

(Source: Compiled by Researcher)

Table 4.2.6.3 indicates Comparative study of opinion of employees towards Top Management satisfaction in sample units. Most employees in all sample units are satisfied with the treatment and support of top management because mean for all units is above 3.00 but as per rank Cooper Corporation Pvt. Ltd. Satara has receives first rank with 4.43 mean score, followed by Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd., Satara with 4.17 mean score. Kavistu Transmission Pvt. Ltd., Satara got fourth rank with mean score 3.93 and last rank goes to Alfa Laval (I) Pvt. Ltd., Satara with 3.67 mean score. Hence, it is concluded that most of the employees of Cooper Corporation Pvt. Ltd., Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd. are satisfied with Top Management Treatment and Support.

Table 4.2.6.4  
Comparison of Employee Motivational Factor:

Sr.	Employee Motivational Factor	Utkur Iron and Steel Co. Pvt. Ltd., Satara		Mutha Spherocast (I) Pvt. Ltd., Satara		Kavistu Transmission Pvt. Ltd., Satara		Cooper Corporation Pvt. Ltd., Satara		Alfa Laval (I) Pvt. Ltd., Satara	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Salary increment	4.37	1	4.17	1	4.23	2	4.53	2	4.83	2
2	Job Security	3.60	13	4.00	5	3.97	11	4.27	4	4.30	7
3	Work Appreciation and Reward	3.80	8	4.17	1	3.83	12	4.17	7	4.37	5
4	Working Environment	3.43	14	3.83	9	3.83	12	4.33	3	4.20	9
5	Promotional Opportunity	3.87	6	3.70	10	4.00	9	4.10	9	3.80	13
6	Support from Co-worker and Superiors.	3.63	12	3.23	15	4.23	2	4.17	7	4.37	5
7	Company recognize and acknowledge your work.	3.83	7	3.50	13	4.00	9	4.27	4	4.27	8
8	Good relationship with co-workers	3.73	10	3.87	8	4.13	7	4.00	13	4.67	4
9	Welfare Facilities	3.73	10	3.97	6	4.40	1	4.80	1	4.87	1
10	Profit Sharing Incentives	3.93	3	3.67	12	4.17	5	4.03	12	4.03	11
11	Job Profile/ Design	3.27	15	3.30	14	3.70	14	3.40	15	3.70	14
12	Job Enrichment	3.17	16	3.10	16	3.10	15	3.07	17	3.07	16
13	Employee-Management involvement in decision making	3.97	2	4.13	3	4.23	2	4.20	6	4.73	3
14	Flexi time - Flexi work	3.77	9	3.70	10	3.10	15	3.43	14	2.70	17
15	Interesting Work	3.90	4	3.90	7	4.13	7	4.07	10	3.93	12
16	Tactful Discipline	3.13	17	3.00	17	3.07	17	3.17	16	3.47	15
17	Regular Training program	3.90	4	4.10	4	4.17	5	4.07	10	4.13	10

(Source: Compiled by Researcher)

Table 4.2.6.4 indicates employee's priority of motivational factor of every company. Motivational factor opinion has impact of other environmental factors like

previously satisfied factors, facility provide by organization, unsatisfied current need, experience and economical background.

Salary increment is the important motivational factor since the mean score ranging from 4.17 to 4.83 across these five companies. With three company's welfare facilities is the most important motivational factor with mean score ranging from 4.40 to 4.87. Regular training program is also important motivational factor for four companies with mean score ranging from 4.07 to 4.17. While Tactful Discipline is the least important motivational factor since the mean score ranging from 3.00 to 3.47 across these five companies.

Table 4.2.6.5

Spearman's Rank Co-relation of Employee Motivational Factor amongst sample companies:

Following table narrate Spearman's Rank Co-relation of Employees in selected units regarding Employee motivational factors.

Sr.	Sample Unit	Correlation	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Mutha Spherocast (I) Pvt. Ltd., Satara	Kavistu Transmission Pvt. Ltd., Satara	Cooper Corporation Pvt. Ltd., Satara	Alfa Laval (I) Pvt. Ltd., Satara
1.	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Correlation Coefficient	1.000	.613**	.642**	.358	.370
		Sig. (2-tailed)	.	.009	.005	.159	.144
		N	17	17	17	17	17
2.	Mutha Spherocast (I) Pvt. Ltd., Satara	Correlation Coefficient	.613**	1.000	.477	.592*	.643**
		Sig. (2-tailed)	.009	.	.053	.012	.005
		N	17	17	17	17	17
3.	Kavistu Transmission Pvt. Ltd., Satara	Correlation Coefficient	.642**	.477	1.000	.598*	.768**
		Sig. (2-tailed)	.005	.053	.	.011	.000
		N	17	17	17	17	17
4.	Cooper Corporation Pvt. Ltd., Satara	Correlation Coefficient	.358	.592*	.598*	1.000	.774**
		Sig. (2-tailed)	.159	.012	.011	.	.000
		N	17	17	17	17	17
5.	Alfa Laval (I) Pvt. Ltd., Satara	Correlation Coefficient	.370	.643**	.768**	.774**	1.000
		Sig. (2-tailed)	.144	.005	.000	.000	.
		N	17	17	17	17	17

\*\* Correlation is significant at the 0.01 level (2-tailed). And \* Correlation is significant at the 0.05 level (2-tailed).

(Source: Compiled by Researcher)

Table 4.2.6.5 indicates spearman's rank Co-relation between opinions of employees in sample units towards motivational factor. Every company's employee motivating factors. For motivational factors the Correlation Coefficient is 0.613 signifies moderate positive correlation between Utkur Iron and Steel Co. Pvt. Ltd. and Mutha



Spherocast (I) Pvt. Ltd. and with Kavistu Transmission Pvt. Ltd. Correlation Coefficient is 0.642 signifies moderate positive correlation, with Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. Correlation Coefficient is 0.358 and 0.370 respectively signifies weak positive correlation.

The Correlation Coefficient is 0.477 signifies weak positive correlation between Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. And with Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. Correlation Coefficient is 0.592 and 0.643 signifies moderate positive correlation.

The Correlation Coefficient is 0.598 signifies moderate positive correlation between Kavistu Transmission Pvt. Ltd. and Cooper Corporation Pvt. Ltd. And correlation with Alfa Laval (I) Pvt. Ltd. 0.776 signifies strong positive correlation. The Correlation Coefficient is 0.744 signifies strong positive correlation between Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd.

It is concluded that Co-relation is positive amongst sample units except weak co-relation found in between Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd., Utkur Iron and Steel Co. Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd., Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd.

Table 4.2.6.6

Independent sample T-Test of Employee Motivational Factor of sample units:

To verify the result independent sample 't' test has been worked out as below.

Sr.	Sample Units	Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
1	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Mutha Spherocast (I) Pvt. Ltd., Satara	.987	.328	-.148	32	.883
2	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd., Satara.	1.243	.273	-1.499	32	.144
3	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	1.564	.220	-2.156	32	.039
4	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	4.650	.039	-2.288	32	.029
5	Mutha Spherocast (I) Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd. Satara.	.056	.814	-1.266	32	.215
6	Mutha Spherocast (I) Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	.210	.650	-1.902	32	.066
7	Mutha Spherocast (I) Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	2.142	.153	-2.084	32	.045
8	Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd., Satara.	.051	.823	-.676	32	.504
9	Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd., Satara	1.442	.239	-1.033	32	.309
10	Cooper Corporation Pvt. Ltd., Satara. And Alfa Laval (I) Pvt. Ltd., Satara	.893	.352	-.434	32	.667

(Source: Compiled by Researcher)

Table 4.2.6.6 shows Independent sample T-Test between selected units Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd. has value of test 0.883 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. has value of test 0.144 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd. has value of test 0.039 so test is significant mean the opinions of employees towards motivating factor has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. has value of test 0.029 so test is significant mean the opinions of employees towards motivating factor has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. has value of test 0.215 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Cooper Corporation Pvt. Ltd. has value of test 0.066 so test is significant mean the opinions of employees towards motivating factor has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. has value of test .045 so test is significant mean the opinions of employees towards motivating factor has significant relation. Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd. has value of test 0.504 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. has value of test 0.309 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. Cooper Corporation Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. has value of test 0.667 so test is not significant mean the opinions of employees towards motivating factor do not has significant relation. To conclude the test is significant only with the opinions of employees between sample units of Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd., Utkur Iron and Steel Co. Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd., and between Mutha Spherocast (I) Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara. The result of independent sample 't' test differ with Mutha Spherocast (I) Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd.

Table 4.2.6.7

Comparison of Employees Opinion regarding existing and implemented motivational reforms and policies of sample Units:

Sr.	Particulars	Utkur Iron and Steel Co. Pvt. Ltd., Satara		Mutha SpheroCast (I) Pvt. Ltd., Satara		Kavistu Transmission Pvt. Ltd., Satara		Cooper Corporation Pvt. Ltd., Satara		Alfa Laval (I) Pvt. Ltd., Satara	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Encourages me to give best performance	4.17	3	4.43	1	3.80	4	3.97	9	4.03	13
2	Encourages me to stay in organization	4.10	4	3.93	5	3.63	7	3.93	12	4.10	12
3	Encourages to take less leaves	3.73	9	3.83	9	3.83	3	3.40	16	2.53	16
4	Gives financial assistance	4.50	1	4.23	2	3.67	6	4.43	2	4.47	4
5	Build a strong bonding with superior and co-workers	3.50	14	3.90	7	4.03	1	4.27	3	4.57	2
6	Gives more technical knowledge and information.	3.17	16	3.27	16	2.90	16	3.80	14	3.97	15
7	Feels organization taken care of me	3.73	9	3.87	8	3.60	10	4.10	5	4.57	2
8	Create more interest in work	3.63	12	3.83	9	3.70	5	4.10	5	4.27	8
9	Increases Loyalty towards organization.	4.10	4	4.10	4	3.87	2	4.23	4	4.40	5
10	Finding opportunities for advancement in this organization.	3.50	14	3.70	13	3.50	12	4.00	8	4.30	7
11	Decreases rate of accidents	4.23	2	3.83	9	3.10	15	4.53	1	4.77	1
12	Helpful to career growth	3.60	13	3.50	15	3.13	14	3.73	15	4.03	13
13	Gives recognition and status	3.70	11	3.77	12	3.63	7	3.97	9	4.33	6
14	Gives Compensation and Rewards	3.93	7	3.93	5	3.17	13	3.90	13	4.23	9
15	Encouraging to perform efficient and effectively	3.90	8	4.17	3	3.63	7	3.97	9	4.20	10
16	Satisfied with motivational practices.	3.97	6	3.70	13	3.53	11	4.07	7	4.13	11

(Source: Compiled by Researcher)

In the Table 4.2.6.7 shows employees opinions mean and ranking existing and implemented motivational reforms and policies of selected units. Opinion has impact differentiations of every organizations motivational practice, reforms and policies. Four sample units most of the employees has opinion regarding existing and implemented motivational reforms and policies that it gives financial assistance with the mean score ranging from 4.23 to 4.50 across these companies and Increases Loyalty towards organization with the mean score ranging from 4.10 to 4.40 across these companies. With three company's employees have opinions because of existing and implemented motivational reforms and policies rate of accidents are decreases with mean score ranging from 4.23 to 4.77 and Build a strong bonding with superior and co-workers with mean score ranging from 4.03 to 4.57 across these companies. While five sample units employees has least of opinion regarding existing and implemented motivational reforms and policies that Gives more technical knowledge and information with mean score ranging from 2.90 to 3.97 across these five companies.

Table 4.2.6.8

Spearman's Rank Co-relation of Employee Opinion regarding existing and implemented motivational reforms and policies in amongst sample companies:

Following table narrate Spearman's Rank Co-relation of Opinion regarding existing and implemented motivational reforms and policies in selected units.

Sr.	Sample Unit	Correlation	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Mutha Spherocast (I) Pvt. Ltd., Satara	Kavistu Transmission Pvt. Ltd., Satara	Cooper Corporation Pvt. Ltd., Satara	Alfa Laval (I) Pvt. Ltd., Satara
1.	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Correlation Coefficient	1.000	.671**	.166	.360	.198
		Sig. (2-tailed)	.	.004	.540	.171	.463
		N	16	16	16	16	16
2.	Mutha Spherocast (I) Pvt. Ltd., Satara	Correlation Coefficient	.671**	1.000	.584*	.305	.225
		Sig. (2-tailed)	.004	.	.018	.250	.402
		N	16	16	16	16	16
3.	Kavistu Transmission Pvt. Ltd., Satara	Correlation Coefficient	.166	.584*	1.000	.250	.111
		Sig. (2-tailed)	.540	.018	.	.350	.683
		N	16	16	16	16	16
4.	Cooper Corporation Pvt. Ltd., Satara	Correlation Coefficient	.360	.305	.250	1.000	.874**
		Sig. (2-tailed)	.171	.250	.350	.	.000
		N	16	16	16	16	16
5.	Alfa Laval (I) Pvt. Ltd., Satara	Correlation Coefficient	.198	.225	.111	.874**	1.000
		Sig. (2-tailed)	.463	.402	.683	.000	.
		N	16	16	16	16	16

\*\* Correlation is significant at the 0.01 level (2-tailed). And \* Correlation is significant at the 0.05 level (2-tailed).

(Source: Compiled by Researcher)

Table 4.2.6.8 indicates Spearman's rank Co-relation between opinions of employees in sample units towards existing and implemented motivational reforms and policies. The Correlation Coefficient is 0.671 signifies moderate positive correlation between Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd., and with

Kavistu Transmission Pvt. Ltd. Correlation Coefficient is 0.166 signifies poor positive correlation, with Cooper Corporation Pvt. Ltd. Correlation Coefficient is 0.336 signifies weak positive correlation., and with Alfa Laval (I) Pvt. Ltd. 0.198 respectively signifies poor positive correlation.

The Correlation Coefficient is 0.584 signifies moderate positive correlation between Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. And with Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. Correlation Coefficient is 0.305 and 0.225 signifies Poor positive correlation.

The Correlation Coefficient is 0.250 signifies poor positive correlation between Kavistu Transmission Pvt. Ltd. and Cooper Corporation Pvt. Ltd. And correlation with Alfa Laval (I) Pvt. Ltd. 0.111 signifies poor positive correlation. The Correlation Coefficient is 0.874 signifies strong positive correlation between Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd., Satara.

It is concluded that Co-relation is weak amongst sample units except positive correlation found in between Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. and in between Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd., Satara.

Table 4.2.6.9

Independent sample T-Test of employee Opinion regarding existing and implemented motivational reforms and policies of sample units:

To verify the results independent sample 't' test has been worked out as below.

Sr.	Sample Units	Levene's Test for Equality of Variances		t-test for Equality of Means		
		F <sup>a</sup>	Sig.	t	df	Sig. (2-tailed)
1	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Mutha Spherocast (I) Pvt. Ltd., Satara	1.231	.276	-.305	30	.762
2	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd.	.180	.675	2.573	30	.015
3	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	1.377	.250	-1.701	30	.099
4	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	.019	.890	-2.281	30	.030
5	Mutha Spherocast (I) Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd. Satara.	.461	.502	3.129	30	.004
6	Mutha Spherocast (I) Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	.001	.975	-1.541	30	.134
7	Mutha Spherocast (I) Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	.662	.422	-2.165	30	.038
8	Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd., Satara.	.532	.471	-4.617	30	.000
9	Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd., Satara	.157	.695	-4.352	30	.000
10	Cooper Corporation Pvt. Ltd., Satara. And Alfa Laval (I) Pvt. Ltd., Satara	.708	.407	-1.113	30	.275

(Source: Compiled by Researcher)



Table 4.2.6.9 shows Independent sample T-Test between selected units Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd. value of test .762 so test is not significant mean employee opinion regarding existing and implemented motivational reforms and policies do not has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. has value of test .015 so test is significant mean employee opinion has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd. has value of test .099 so test is not significant mean employee opinion do not have significant relation. Utkur Iron and Steel Co. Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd. has value of test .030 so test is significant mean employee opinion has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. Satara has value of test .004 so test is significant mean employee opinion has significant relation. Mutha Spherocast (I) Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd. a has value of test .134 so test is not significant mean employee opinion has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. has value of test .038 so test is significant mean employee opinion has significant relation. Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd. has value of test .000 so test is significant mean employee opinion has significant relation. Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. has value of test .000 so test is significant mean employee opinion has significant relation. Cooper Corporation Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. , Satara has value of test .275 so test is not significant mean employee opinion do not has significant relation.

To conclude the test is not significant only with the opinions of employees between sample units of Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd., Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd., Mutha Spherocast (I) Pvt. Ltd. and Cooper Corporation Pvt. Ltd. and between Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd., Satara.

Table 4.2.6.10

Employee Opinions (Perception) on Organizations general policies (Which directly and indirectly motivates) of sample units:

Sr.	Particulars	Utkur Iron and Steel Co. Pvt. Ltd., Satara		Mutha SpheroCast (I) Pvt. Ltd., Satara		Kavistu Transmission Pvt. Ltd., Satara		Cooper Corporation Pvt. Ltd., Satara		Alfa Laval (I) Pvt. Ltd., Satara	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Organization offer adequate and reasonable salary/ Pay Structure	3.47	8	3.70	7	3.40	9	3.50	7	3.70	7
2	Satisfied with the leaves system, rules and regulation	3.77	7	3.87	4	3.57	7	3.10	9	4.50	4
3	Satisfied with the lunch, rest breaks system.	3.93	6	4.10	1	4.07	3	4.17	4	4.63	1
4	Satisfactory medical benefits provided	4.13	4	4.03	3	3.67	6	3.80	6	4.03	6
5	Visibility with top management is easily possible.	4.60	1	3.23	9	3.50	8	3.27	8	3.70	7
6	Superior always recognizes excellent/ good performance.	4.33	2	3.80	6	4.07	3	4.30	2	3.57	9
7	Organization having fair amount of team spirit.	3.37	9	3.53	8	4.20	1	3.93	5	4.60	2
8	Regular satisfactory Training programs are provided.	4.13	4	3.83	5	3.93	5	4.30	2	4.13	5
9	Organization provides required safety training and equipment .	4.30	3	4.07	2	4.13	2	4.33	1	4.60	2

(Source: Compiled by Researcher)

In the Table 4.2.6.10 shows employees opinion on organizations general policies of selected units. Opinion has impact differentiations of every organization existing working nature and condition, rules and regulation system, structure, culture and policies.

Four sample units most of the employees has opinion regarding general policies that organization provides required safety training and equipment with the mean score ranging from 4.07 to 4.60 across these companies and Satisfied with the lunch, rest breaks system with the mean score ranging from 4.07 to 4.63 across these companies. With three company's employees opinion regarding general policies Satisfactory medical benefits provided with mean score ranging from 4.23 to 4.77 and Superior always recognizes excellent/ good performance with mean score ranging from 4.07 to 4.33 across these companies. While five sample unit's employees has least of opinion regarding general policies that Organization offer adequate and reasonable salary with mean score ranging from 3.40 to 3.70 across these five companies

Table 4.2.6.11

Spearman's Rank Co-relation of Employee Opinions on Organizations general policies amongst sample companies:

Sr.	Sample Unit	Correlation	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Mutha Spherocast (I) Pvt. Ltd., Satara	Kavistu Transmission Pvt. Ltd., Satara	Cooper Corporation Pvt. Ltd., Satara	Alfa Laval (I) Pvt. Ltd., Satara
1.	Utkur Iron and Steel Co. Pvt. Ltd., Satara	Correlation Coefficient	1.000	.000	-.059	.290	-.439
		Sig. (2-tailed)	.	1.000	.881	.449	.237
		N	9	9	9	9	9
2.	Mutha Spherocast (I) Pvt. Ltd., Satara	Correlation Coefficient	.000	1.000	.293	.393	.571
		Sig. (2-tailed)	1.000	.	.444	.295	.108
		N	9	9	9	9	9
3.	Kavistu Transmission Pvt. Ltd., Satara	Correlation Coefficient	-.059	.293	1.000	.727*	.574
		Sig. (2-tailed)	.881	.444	.	.027	.106
		N	9	9	9	9	9
4.	Cooper Corporation Pvt. Ltd., Satara	Correlation Coefficient	.290	.393	.727*	1.000	.228
		Sig. (2-tailed)	.449	.295	.027	.	.555
		N	9	9	9	9	9
5.	Alfa Laval (I) Pvt. Ltd., Satara	Correlation Coefficient	-.439	.571	.574	.228	1.000
		Sig. (2-tailed)	.237	.108	.106	.555	.
		N	9	9	9	9	9

\*\* . Correlation is significant at the 0.01 level (2-tailed). And \* . Correlation is significant at the 0.05 level (2-tailed).  
(Source: Compiled by Researcher)

Table 4.2.6.11 indicates spearman's rank Co-relation between opinions of employees in sample units towards Organizations general policies (Which directly and indirectly motivates) of selected units. The Correlation Coefficient is 0.000 signifies no correlation between Utkur iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd. and with Kavistu Transmission Pvt. Ltd. Correlation Coefficient is -0.059

signifies no correlation, with Cooper Corporation Pvt. Ltd. Correlation Coefficient is 0.290 signifies weak positive correlation., and with Alfa Laval (I) Pvt. Ltd. -0.439 respectively signifies moderate negative correlation.

The Correlation Coefficient is 0.293 signifies weak positive correlation between Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. And with Cooper Corporation Pvt. Ltd. Correlation Coefficient is 0.393 signifies weak positive correlation and with Alfa Laval (B) Pvt. Ltd. is 0.571 signifies moderate positive correlation.

The Correlation Coefficient is 0.727 signifies moderate positive correlation between Kavistu Transmission Pvt. Ltd. and Cooper Corporation Pvt. Ltd. And correlation with Alfa Laval (I) Pvt. Ltd. 0.574 signifies moderate positive correlation. The Correlation Coefficient is 0.228 signifies poor positive correlation between Cooper Corporation Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. Satara .

It is concluded that Co-relation is positive amongst sample units except negative co-relation found in between Utkur Iron and Steel Co. Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd, and no co-relation found in between Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd., Utkur Iron and Steel Co. Pvt. Ltd. Kavistu Transmission Pvt. Ltd., Satara.

Table 4.2.6.12

Independent sample T-Test of Employee Opinions on Organizations general policies of sample units:

Sr.	Sample Units	Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
1	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Mutha Spherocast (I) Pvt. Ltd., Satara	1.821	.196	1.256	16	.227
2	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd.	.561	.465	.980	16	.342
3	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	.347	.564	.712	16	.487
4	Utkur Iron and Steel Co. Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	.227	.641	-.799	16	.436
5	Mutha Spherocast (I) Pvt. Ltd., Satara and Kavistu Transmission Pvt. Ltd. Satara.	.922	.351	-.296	16	.771
6	Mutha Spherocast (I) Pvt. Ltd., Satara and Cooper Corporation Pvt. Ltd., Satara	3.806	.069	-.325	16	.750
7	Mutha Spherocast (I) Pvt. Ltd., Satara and Alfa Laval (I) Pvt. Ltd., Satara	4.040	.062	-2.126	16	.049
8	Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd., Satara.	2.128	.164	-.099	16	.922
9	Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd., Satara	2.230	.155	-1.840	16	.084
10	Cooper Corporation Pvt. Ltd., Satara. And Alfa Laval (I) Pvt. Ltd., Satara	.029	.866	-1.438	16	.170

(Source: Compiled by Researcher)

Table 4.2.6.12 shows Independent sample T-Test between selected units .Utkur Iron and Steel Co. Pvt. Ltd. and Mutha Spherocast (I) Pvt. Ltd. has value of test 0.227 so test is not significant mean Employee Opinions on Organizations general policies do not has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. has value of test 0.342 so test is not significant mean employee Opinion do not has significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Cooper Corporation Pvt. Ltd. has value of test 0.487 so test is not significant mean employee Opinion do not have significant relation. Utkur Iron and Steel Co. Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. has value of test 0.436 so test is not significant mean employee Opinion do not has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Kavistu Transmission Pvt. Ltd. a has value of test 0.771 so test is not significant mean employee Opinion do not has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Cooper Corporation Pvt. Ltd. a has value of test 0.750 so test is not significant mean employee Opinion has significant relation. Mutha Spherocast (I) Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd. has value of test .049 so test is significant mean employee Opinion has significant relation. Kavistu Transmission Pvt. Ltd. And Cooper Corporation Pvt. Ltd. has value of test 0.922 so test is not significant mean employee Opinion do not has significant relation. Kavistu Transmission Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. has value of test 0.084 so test is not significant mean employee Opinion do not has significant relation. Cooper Corporation Pvt. Ltd. And Alfa Laval (I) Pvt. Ltd. has value of test 0.170 so test is not significant mean employee opinion do not has significant relation.

To conclude the test is not significant only with the opinions of employees between sample units except in between of Mutha Spherocast (I) Pvt. Ltd. and Alfa Laval (I) Pvt. Ltd., Satara.

Table 4.2.6.13

HR Representatives opinion regarding outcomes of applied motivational practices of sample Units:

Table 4.2.6.13 shows integrated views of HR Representatives opinion regarding outcomes of applied motivational practices of selected five units of engineering industry in Satara.

Sr.	Employee Motivational Factor	Mean	S.D.	Rank
1	Motivational practices are increases Employee work Efficiency	4.80	0.45	2
2	Motivational practices are decrease Employee Turnover	4.40	0.55	4
3	Motivational practices are helpful to increases Employee Loyalty	4.80	0.45	2
4	Motivational practices are helpful to increases Employee Productivity	5.00	0.00	1
5	Motivational practices are helpful to decreases employee Absenteeism	4.00	0.71	8
6	Motivational practices are helpful to decreases employee retention rate	4.00	1.22	8
7	Motivational practices are helpful to decreases rate of accident	3.60	1.34	10
8	Makes Good relationship with sub-ordinates and workers	4.20	0.84	5
9	Create a healthy and good working Environment	4.20	0.45	5
10	Motivational practices are helpful to Full utilization of the available Human resource	3.60	1.14	10
11	Built a strong Culture	4.20	0.45	5

(Source: Compiled by Researcher)

Table 4.2.6.13 shows HR Representatives opinion regarding outcomes of applied motivational practices are Motivational practices are helpful to increases Employee Productivity with first rank having 5.00 mean score followed by Motivational practices are increases Employee work Efficiency and Motivational practices are helpful to increases Employee Loyalty with 4.80 mean score. Motivational practices are helpful to decreases rate of accident and Motivational practices are helpful to Full utilization of the available Human resource are got last rank with 3.60 mean score.



Table 4.2.6.14

Motivational programs which is more effective and preferred of Sample Units:

Table 4.2.6.14 shows integrated views of HR Representatives regarding Motivational programs which are more effective and preferred of selected five units of engineering industry in Satara.

Sr.	Types Of Rewards	Motivational Programs	Mean	S.D.	Rank
1	Intrinsic (Self-satisfaction)	Employee Recognition	4.40	0.55	2
2		Employee Involvement	4.80	0.45	1
3		Job Redesign and scheduling	4.20	0.45	5
4	Extrinsic (Rewards given by others)	Variable Pay	4.40	0.55	2
5		Skill based Pay	4.20	0.45	5
6		Flexible Benefits	4.40	0.55	2

(Source: Field Data)

Table 4.2.6.14 shows Motivational programs which is more effective and preferred. Most of the organizations think that Employee Involvement (Intrinsic) motivational program are most preferred with first rank having mean score 4.80, Employee Recognition, Variable Pay and Flexible Benefits with second rank having mean score 4.40, followed by Job Redesign and scheduling and Skill based Pay has last rank with mean score 4.20. It is concluded that Employee Involvement are more effective and preferred motivational program, while Job Redesign and scheduling are least effective and preferred motivational program.

Table 4.2.6.15

Considerable factors in forming motivational policy of Sample Units:

Table 4.2.6.15 shows integrated views of HR Representatives regarding Considerable factors in formation of motivational policy of selected five units of engineering industry in Satara.

Sr.	Particulars	Mean	S.D	Rank
1	Organization's current working environment	3.80	0.45	6
2	Rules and regulations	3.80	0.45	6
3	Top management Support	5.00	0.00	1
4	Organization's current requirement	4.60	0.55	2
5	Organization's Financial soundness	4.20	1.30	3
6	Leadership style	3.60	0.55	8
7	Employee Culture	4.00	1.00	4
8	Employees Expectations	4.00	1.22	4

(Source: Field Data)

Table 4.2.6.15 shows Considerable factors in formation of motivational policy. Most of the organizations think that Top management Support is most considerable factor with first rank having mean score 5.00, followed by Organization's current requirement with 4.60 means score and thirds rank goes to Organization's Financial soundness with 4.20 mean score. Rules and regulations band Leadership style has last ranked with mean score 3.80 and 3.60. Hence, it is concluded that Top management Support and Organization's current requirement are most Considerable factors while Leadership style are least Considerable factors in forming motivational policy.

