Chapter IV

Data Analysis

&

Interpretation

This chapter will cover the exhaustive analysis of the data regarding impact of E-HRM on transactional functions of HRM.

4.1: Introduction

The main aim of this chapter is to fulfill the objectives of the study; individually, the present FMCG Companies that are using e-HRM for day to day HR function in the state of West Bengal, the significant factors of this web-based e-HRM over the normal HRM function which has the capability to increase the efficiency of the entire organization, measure the degree of efficiency of an organization having web-based e-HRM system over normal HRM function in some different organizations. Hypothesis testing has been done to showcase the analysis in detail in the current chapter. The result and findings of the analysis with brief interpretation have been vouches in the current chapter. Concluding observations based on the findings will be done in the next chapter.

The present chapter is divided into four sections. The first section of the chapter will describe the organizational and respondents' personal profiles. The second section will describe the first objective of the study that is the present FMCG Company E-HRM utilization pattern for their day to day HR function in West Bengal. The third section describes the second objective that is to find out the significant factors of this web-based e-HRM over normal HRM function that can increase efficiency of the entire organization. For second and third section factor analysis has been done to find out the factors related to it. The fourth section of the chapter will describe the third objective of the study that is to measure the degree of efficiency of an organization having web-based e-HRM system over normal HRM function in some different organizations. For this section paired sample t-test, Multiple Linear Regression Analysis (MLR), E-T graph has been

done, and this section also deals with the overall impact of the E-HRM system on the transactional time of HR function.

4.2: Section 1

As stated above that this section will deal with the organizational and respondents' personal profiles. The organizational and respondent's personal profile's data was set in the part-A of the questionnaire. The organizational profile includes the size, existence of HRM department, and age of the organization, while personal profile includes gender, designation, age, and experience of the respondent. The frequency and percentage of the respondent of each category are showcased below. The essential data were collected from 150 different managers from the selected FMCG organizations. In the case of gender distribution, 69% male and 31% female respondents where 50% HR manager and 53% of respondents were more than nine years experienced.

4.2.1: Frequency distribution of the organizational profile

SPSS software used to build the frequency table where the followed command is: Analysis > Descriptive statistics > Frequencies.

The entire organization (n=30) is classified into three stages according to their yearly money transactions, shown in table 4.1; those are small (<50cr.), medium (50-100cr.), and large (>100cr.). The above table displays that six small (20%), seven medium (23.3%), and seventeen (56.7%) large organizations have been surveyed.

Table4. 1: Size of the organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Small (<50 cr.)	**6**	**20.0**	**20.0**	**20.0**
	Medium (50-100 cr.)	**7**	**23.3**	**23.3**	**43.3**
	Large (> 100 cr.)	**17**	**56.7**	**56.7**	**100.0**
	Total	**30**	**100.0**	**100.0**	

Source – Primary Data

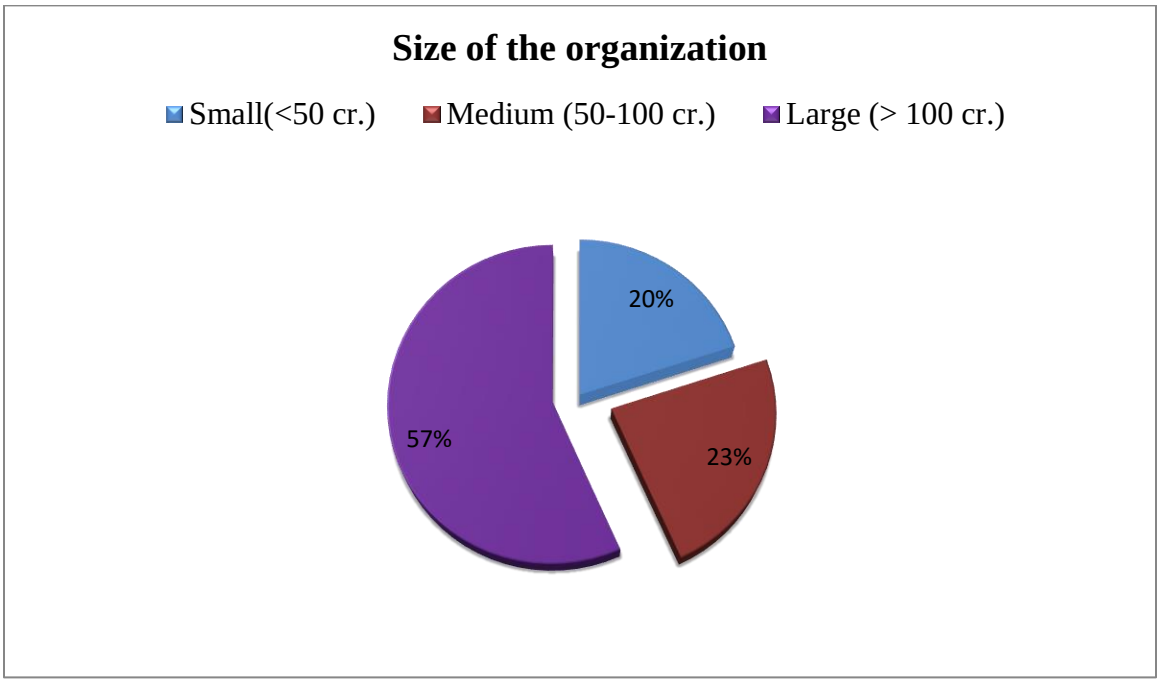


Figure 4. 1: Size of the organization

In this study, the researcher analyzed E-HRM efficiency. So, the existence of E-HRM activity is necessary for the study. The researcher has bounded more than forty percent of electronic activity in HRM functions categorized as 'Yes' and lower than that categorized as 'No.' In this

study, within thirty organizations, twenty-nine companies are involving with E-HRM activity with more than 40%. The data have shown in table 4.2.

Table-4.2: Existence of E-HRM Activity in HRM Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	**1**	**3.3**	**3.3**	**3.3**
	yes	**29**	**96.7**	**96.7**	**100.0**
	Total	**30**	**100.0**	**100.0**	

Source - Primary Data

The graphical presentation has been done through the pie diagram. The pie diagram has been done based on table 4.2 data.

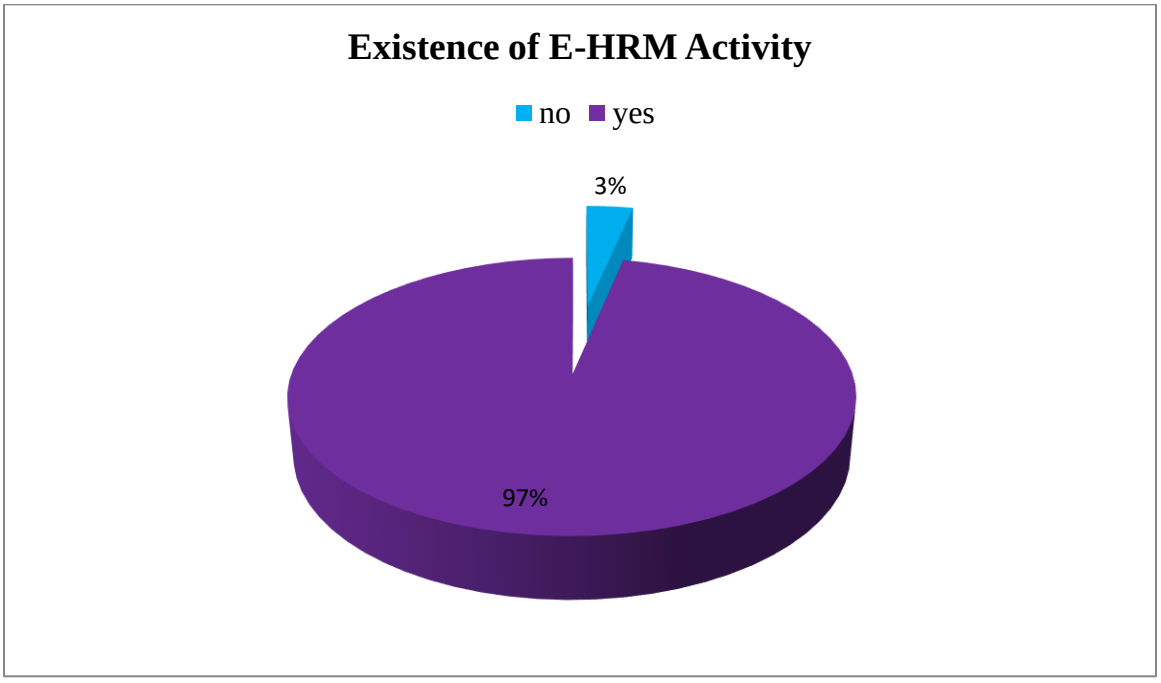


Figure 4. 2: Existence of E-HRM Activity in the HRM Department

In this study, an organization's establishment has been included in the questionnaire to know the relation between organizations' age and E-HRM practice. The year of organization establishment is classified into five categories; those are <5 yr (1), 50-10 yr (2), 10-15 yr (3), 15-20 yr (4), >20

yr (5). Within thirty organizations, three organizations are under category two (10%), six organizations are under category three (20%), two organizations are under category four (6.7%), nineteen organizations are under category five (63.3%). So, most of the respondents are from aged organizations.

Table- 4.3: year of establishment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5-10 yr	**3**	**10.0**	**10.0**	**10.0**
	10-15 yr	**6**	**20.0**	**20.0**	**30.0**
	15-20 yr	**2**	**6.7**	**6.7**	**36.7**
	> 20 yr	**19**	**63.3**	**63.3**	**100.0**
	Total	**30**	**100.0**	**100.0**	

Source – Primary Data

The bar graph has done based on table 4.3 data.

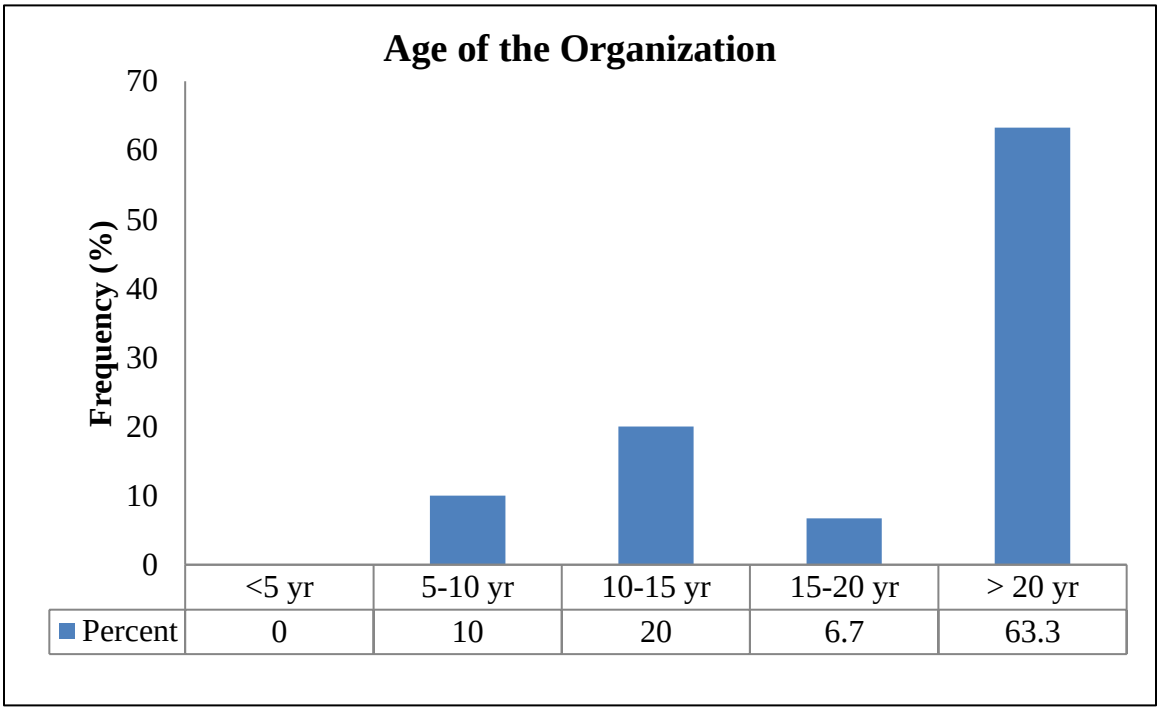


Figure 4. 3: Age of the organization

From the descriptive statistics of the organizational profile, it is clear that the number of organizations is 30, and there was nothing any missing values. The above stated three dimensions descriptive statistics have been depicting below. The size of the organization's descriptive statistics showcases that mean (2.37), median (3), SD (0.81), negative skewness (-.792), kurtosis (-.978), minimum value 1, and maximum value is 3. The existence of HRM department in the organization's descriptive statistics vouches that mean (1.97), median (2), SD (0.18), negative skewness (-5.47), kurtosis (30), minimum value 1, maximum value 2, and range is 1. The age of the organizations is five categories as stated above and the descriptive statistics of the age of the organization are showcasing the values: n=30, mean (4.23), median (5), SD (1.10), negative skewness (-.99), kurtosis (-.63), minimum value 2, maximum value 5, and range is 3. The descriptive statistics of the organizational profile vouches in table- 4.4.

Table-4.4: Descriptive Statistics

		size of the organization	HRM Department	year of establishment
N	Valid	**30**	**30**	**30**
	Missing	**0**	**0**	**0**
Mean		**2.3667**	**1.9667**	**4.2333**
Std. Error of Mean		**.14765**	**.03333**	**.20162**
Median		**3.0000**	**2.0000**	**5.0000**
Std. Deviation		**.80872**	**.18257**	**1.10433**
Variance		**.654**	**.033**	**1.220**
Skewness		**-.792**	**-5.477**	**-.991**
Std. Error of Skewness		**.427**	**.427**	**.427**
Kurtosis		**-.978**	**30.000**	**-.625**
Std. Error of Kurtosis		**.833**	**.833**	**.833**
Range		**2.00**	**1.00**	**3.00**
Minimum		**1.00**	**1.00**	**2.00**
Maximum		**3.00**	**2.00**	**5.00**

Source-Primary Data

4.2.2: Frequency distribution of demographic variables of the respondent's sample

The entire organization for this study was thirty FMCG sectors (n=30). According to their designation within the organization, there were 50% HR manager, 39% functional manager/HOD, and 11% General Manager included in this study. The frequency and percentage of the collected data are represented in the below table no 4.5.

Table- 4.5: Designation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	General Manager	**16**	**10.7**	**10.7**	**10.7**
	Functional Manager/Head	**59**	**39.3**	**39.3**	**50.0**
	HR manager	**75**	**50.0**	**50.0**	**100.0**
	Total	**150**	**100.0**	**100.0**	

Source: primary data

Based on table 4.5, the pie graph was drawn for graphical representation.

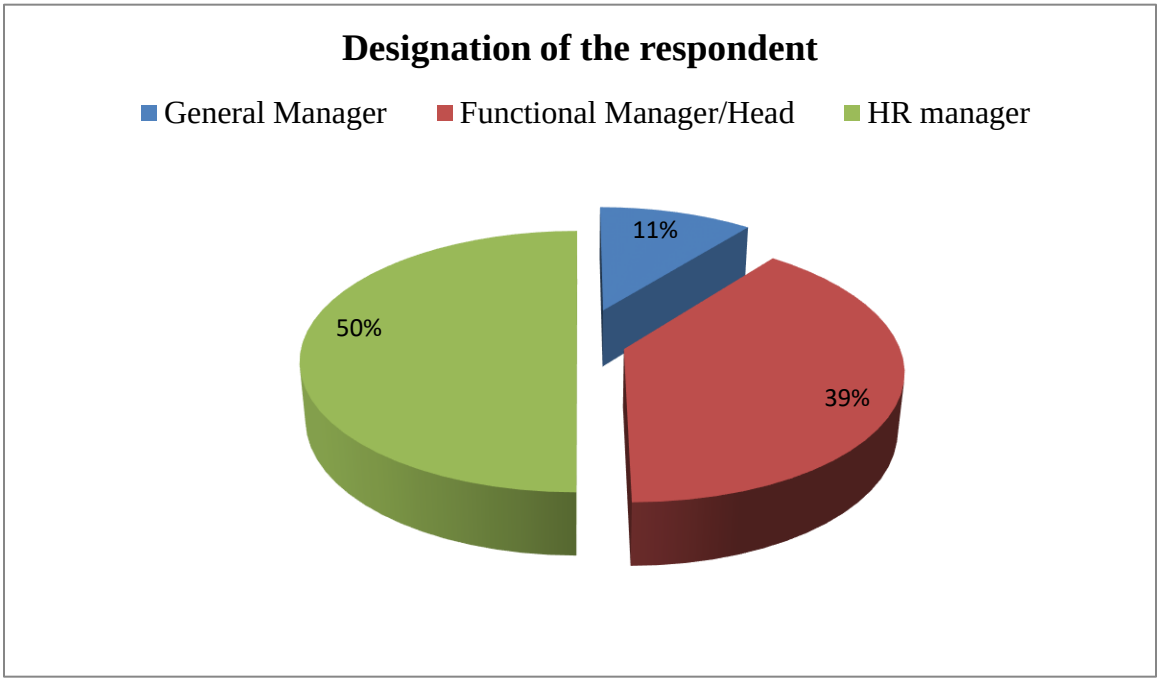


Figure 4. 4: Designation of the respondents

As stated above, the selected respondents were 150, out of which 103 males (68.7%) and 47 females (31.3%). The distribution of gender has shown in table 4.6.

Table-4.6: Gender Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	female	**47**	**31.3**	**31.3**	**31.3**
	male	**103**	**68.7**	**68.7**	**100.0**
	Total	**150**	**100.0**	**100.0**	

Source- Primary Data

Based on table 4.6, the pie graph was drawn for graphical representation.

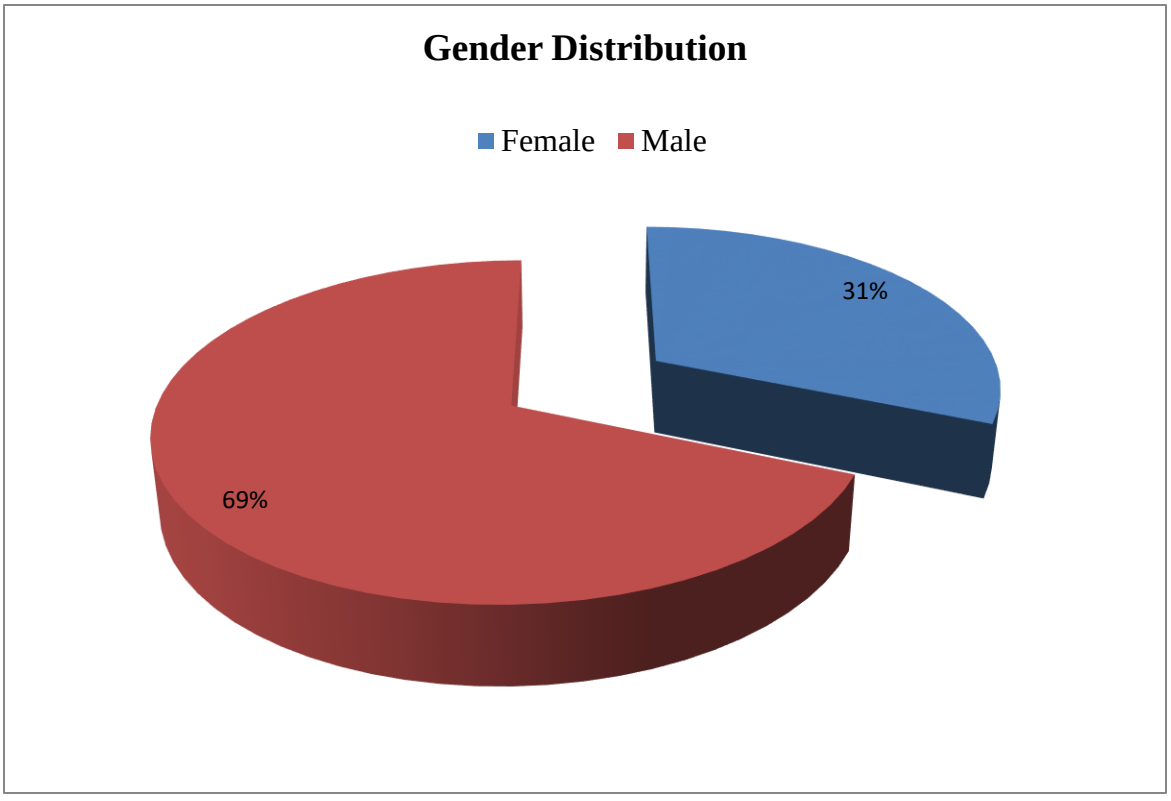


Figure 4. 5: Gender Distribution

The age of the respondent's frequency and the percentage has shown in table 4.7. The ages of the respondents are categories in four-step; those are as follows: below 25 yr (1), 25-35 yr (2), 35-45 yr (3), above 45 yr (4). Out of 150 respondents, 17 respondents are category one (11.3%), eight respondents are category two (5.3%), 20 respondents are from category three (13.3%), and 105 respondents have belonged from the last category (70%). In the study maximum no of respondents is above 45 years in age.

Table- 4.7: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 25 yr	**17**	**11.3**	**11.3**	**11.3**
	25-35 yr	**8**	**5.3**	**5.3**	**16.7**
	35-45 yr	**20**	**13.3**	**13.3**	**30.0**
	above 45 yr	**105**	**70.0**	**70.0**	**100.0**
	Total	**150**	**100.0**	**100.0**	

Source- Primary Data

Based on table 4.7, the bar graph was drawn for graphical representation.

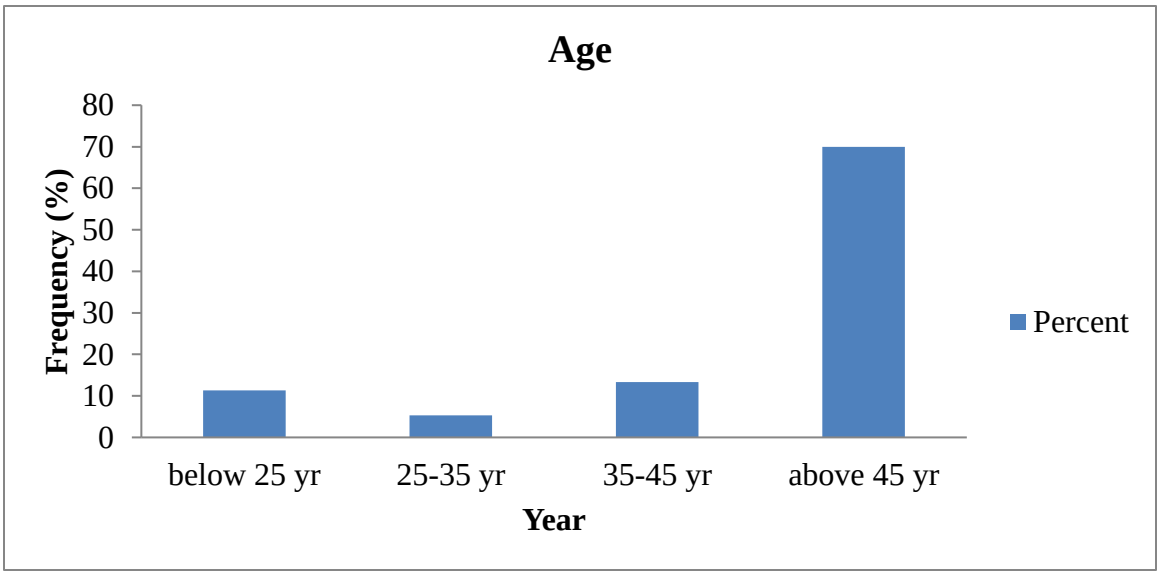


Figure 4. 6: Age of the respondents

As reflected in the below table 4.8, 52.7% of respondents having more than nine years of work experience in the organization, as compared to 36% respondents from 7-9 years, 6.7% from 5-7 years, 2.7% from 3-5 years, 2% from less than three years of experience.

Table-4.8: Work experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 3 year	**3**	**2.0**	**2.0**	**2.0**
	3-5 year	**4**	**2.7**	**2.7**	**4.7**
	5-7 year	**10**	**6.7**	**6.7**	**11.3**
	7-9 year	**54**	**36.0**	**36.0**	**47.3**
	>9 years	**79**	**52.7**	**52.7**	**100.0**
	Total	**150**	**100.0**	**100.0**	

Source- Primary Data

Based on table 4.8, the pie diagram is drawn for graphical representation.

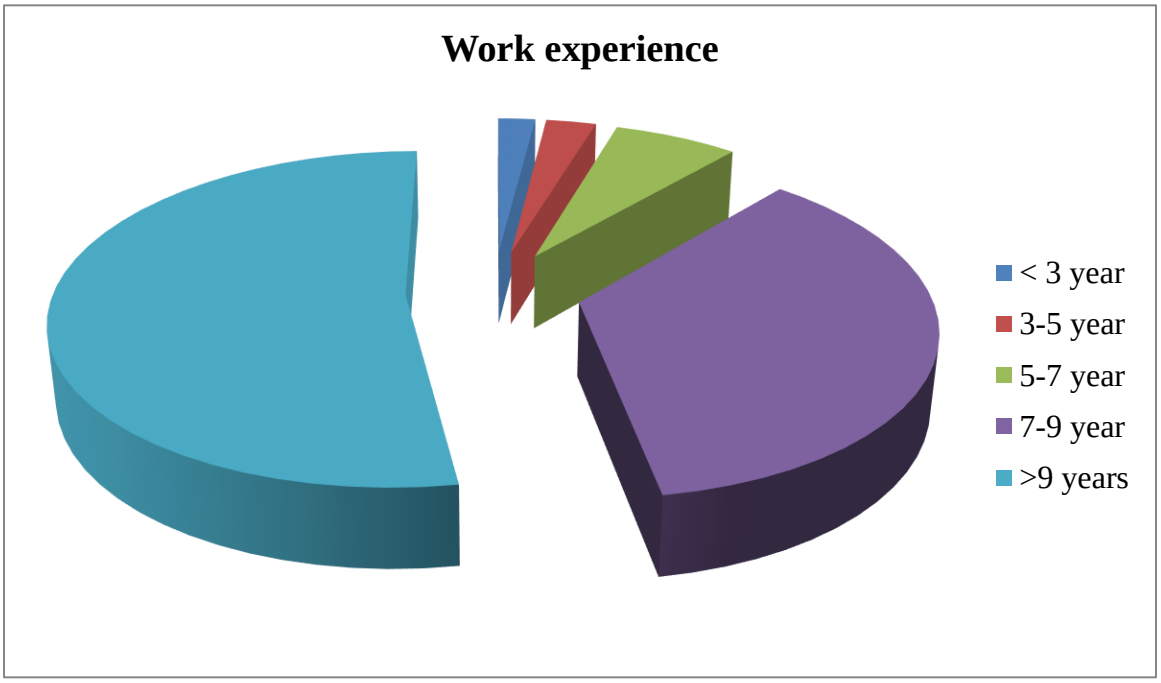


Figure 4. 7: Work experience of the respondents

From the descriptive statistics of the personal profile, it is clear that the number of respondents is 150, and there was nothing any missing values. The above stated four dimensions' descriptive statistics have been depicting below. The age of the respondents, mean value, is 3.42, median 4, mode 4, negative skewness (-1.57), kurtosis (1.02). The gender of the respondent's descriptive statistics is as follows: mean (1.69), median (2), mode (2), SD (.46), skewness (-.813), kurtosis (-1.36). The descriptive statistics of the work experience is as follows: mean (4.39), median (4.5), mode (5), SD (.67), skewness (-.668), kurtosis (-.635). The descriptive statistics of the organizational profile vouches in the table- 4.9.

Table-4.9: Descriptive Statistics of the personal profile

		Age	gender	Work experience	Designation
N	Valid	**150**	**150**	**150**	**150**
	Missing	**0**	**0**	**0**	**0**
Mean		**3.4200**	**1.6867**	**4.3467**	**4.3933**
Std. Error of Mean		**.08315**	**.03800**	**.07141**	**.05508**
Median		**4.0000**	**2.0000**	**5.0000**	**4.5000**
Mode		**4.00**	**2.00**	**5.00**	**5.00**
Std. Deviation		**1.01842**	**.46540**	**.87460**	**.67453**
Variance		**1.037**	**.217**	**.765**	**.455**
Skewness		**-1.577**	**-.813**	**-1.716**	**-.668**
Std. Error of Skewness		**.198**	**.198**	**.198**	**.198**
Kurtosis		**1.018**	**-1.357**	**3.455**	**-.635**
Std. Error of Kurtosis		**.394**	**.394**	**.394**	**.394**
Range		**3.00**	**1.00**	**4.00**	**2.00**
Minimum		**1.00**	**1.00**	**1.00**	**3.00**
Maximum		**4.00**	**2.00**	**5.00**	**5.00**

Source- Primary Data

4.3: Section 2

4.3.1: Reliability Test Interpretation

Cronbach's alpha is used to measure internal consistency, that whether all items within the instrument measure the same thing and it also assists in evaluating the goodness of a measure. Alpha has been computed on the same scale as a Pearson r (correlation coefficient) and typically varies between 0 and 1. The closer the alpha is to 1.00, the higher the internal consistency of items in the instrument is assessing. In this study, Cronbach's alpha was calculated to ensure the reliability of collected data to precede the factor analysis to find out the present E-HRM practices in FMCG organizations. In our study, the value of alpha is **0.904**which is highly desirable. This result implies that the data is ready for factor analysis to find out the significant factors related to the E-HRM practice.

4.10: Reliability Statistics

Cronbach's Alpha	N of Items
0.904	**20**

4.3.2: KMO measure of Sampling Adequacy& Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin (KMO) statistics, predicts if data are likely to factor well, based on correlation and partial correlation. KMO varies from 0 to 1.0, and KMO should be 0.60 or higher to proceed with factor analysis. For factor analysis, the SPSS function is Analyze>Dimension Reduction>Factor. According to Kaiser the range can be categories as unacceptable (0 - 0 .49), miserable (0.50 - 0.59), mediocre (0.60 - 0.69), middling (0.70 - 0.79), meritorious (0.80 - 0.89), marvelous (0.90 to 1) (Kaiser, 1974).

The formula of KMO test is-

$$MO_j = \frac{\sum_{i \neq j} r_{ij}^2}{\sum_{i \neq j} r_{ij}^2 + \sum_{i \neq j} u}$$

Where, R = [r_{ij}] correlation matrix and U = [u_{ij}] partial covariance matrix.

In our study, we got the KMO of **0.841,** which is quite logical to proceed for factor analysis. The result is shown below table 4.11.

Bartlett's test of sphericity test primarily evaluates the null hypothesis. The null hypothesis is that the correlation matrix is an identity matrix, which determines that the variables are unconnected with each other, and hence the variables are unbefitting for structure exposure. The small value of this test indicates that factor analysis may be proceeding.

In this study, the value of Bartlett's test significance level is 0.00, which indicates that the variables are suitable for factor analysis. In our study, these two significant tests provide a standard for factor analysis.

4.11: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.841
Bartlett's Test of Sphericity	Approx. Chi-Square	2521.658
	df	190
	Sig.	.000

4.3.3: Factor Analysis

On the basis of communalities table, the proportion of each variable's variances suitability was recognized founded on the principal component methods. Rotated component matrix with varimax was used to obtain interpretable explanation. The values in the total variance explained table (4.12) are includes % of variance, cumulative % of variance, and total values of three sections, such as: Initial Eigenvalues, Extraction Sums of Squared Loadings, and Rotation Sums of Squared Loadings. Factor loadings is primarily the values exhibits in factor pattern solution matrices and the factor loadings provide the regression of the variables on the factors. In factor analysis, the numbers of factors are determined based on the eigenvalues. Primary eigenvalues with a total value superior than one vouches a strong origin and less than one indicate insignificant. The result of factor analysis vouches that there are three factors eigenvalues exceeding one. Through the result of factor analysis, we can explain the total variance and the proportionate variance of each factor in our study, which is stated in table 4.12.

The table depicted three factors explored from twenty variables, with total and individual loadings, and percent of variance of each factor. All the factors cumulatively account for 69.85% of the cumulative variance.

From the below table, it is evident to us that relational e-HRM activity explains a 40.48 % variance followed by transformational (16.6%) and operational (12.79%). The names of the factors are discussed in below.

Table 4.12: Total Variance Explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.096	40.482	40.482	8.096	40.482	40.482	5.822	29.109	29.109
2	3.314	16.57	57.052	3.314	16.57	57.052	4.105	20.525	49.634
3	2.559	12.794	69.846	2.559	12.794	69.846	4.042	20.212	69.846
4	0.78	3.899	73.745						
5	0.738	3.688	77.433						
6	0.685	3.426	80.859						
7	0.641	3.207	84.067						
8	0.599	2.997	87.064						
9	0.475	2.373	89.437						
10	0.346	1.73	91.167						
11	0.311	1.557	92.725						
12	0.26	1.3	94.025						
13	0.247	1.233	95.258						
14	0.208	1.042	96.3						
15	0.19	0.948	97.248						
16	0.148	0.739	97.987						
17	0.139	0.696	98.683						
18	0.099	0.494	99.177						
19	0.094	0.468	99.645						
20	0.071	0.355	100						

Extraction Method: Principal Component Analysis.

Rotated component matrix table principally includes the rotated factor loadings where the weighted values are attached for each factor. In the case of rotated component matrix preparation researcher uses 0.5 as threshold value for blank the table, because more than 0.5 are allowed to include the strong correlations. Nevertheless, the rotated component matrix uses correlations, which possible value range within -1 to +1. This table vouches a clear viewpoint of the factors

and correlation values by removing the weak correlation values. We have constructed a rotated component matrix in order to identify the factors in our study. This is represented below table no 4.13.

Table -4.13: Rotated Component Matrix[a]

	Component		
	1	2	3
V1	**0.866**		
V2	**0.819**		
V3	**0.802**		
V4	**0.779**		
V5	**0.771**		
V6	**0.731**		
V7	**0.721**		
V8	**0.635**		
V9	**0.631**		
V10		**0.903**	
V11		**0.89**	
V12		**0.804**	
V13		**0.796**	
V14		**0.79**	
V15		**0.62**	
V16			**0.883**
V17			**0.849**
V18			**0.83**
V19			**0.813**
V20			**0.809**

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

As stated above, three factors are extracted from the factor analysis. We have given the name of the factors and highlighted the questions that are implemented in questionnaire Part-B. The questions are presented sequentially and changed the questions no of make better understanding.

The extracted three factors are named as: first factor "Relational E-HRM" which indicates those variables is related to the drivers of the relational E-HRM function. The second factor named as "Transformational E-HRM" which is the variable related with the transformational drivers of the E-HRM function. The third factor named as "operational" which includes operational drivers of E-HRM practice.

Table 4.14: Name of the factors

Parameter	Question	Name of the factor
V1	Human resource planning	
V2	Recruitment	
V3	Selection	
V4	Training & development	
V5	Performance appraisal	**Relational**
V6	Reward & compensation	
V7	Pen & paper (IT replacing)	
V8	Automation of HR transactions	
V9	Traditional HR function	
V10	Job design	
V11	Integrated set of web based tools	
V12	Mutation of HR transaction	**Transformational**
V13	Electronically	
V14	Strategic HR task	
V15	Centers of expertise	
V16	Administration	
V17	Time and labour management	
V18	Payroll Management	**Operational**
V19	The web presence of the HR function	
V20	Transactional HR function	

In a nutshell of section 2, the objective is trying to accomplish through factor analysis. The objective was to give some light on to the present FMCG Companies that are using e-HRM for

their daily day to the day HR function in the state of West Bengal. From the result we can see that FMCG organizations of West Bengal are adopting three types of drivers (operational, transformational, &relational) for their day to functions. However, Operational, relational, and transformational drivers are the prime steps to adopt E-HRM system.

4.4: Section - 3

4.4.1: Reliability Test Interpretation

Cronbach's alpha is used to measure internal consistency, that whether all items within the instrument measure the same thing and it also assists in evaluating the goodness of a measure. Alpha has been computed on the same scale as a Pearson r (correlation coefficient) and typically varies between 0 and 1.The closer the alpha is to 1.00, the greater the internal consistency of items in the instrument being assessed. In our study, the value of alpha is **.789**for twelve items, which is acceptable for factor analysis. The result depicts in table 4.15.

Table 4.15: Reliability Statistics

Cronbach's Alpha	N of Items
0.789	**12**

4.4.2: KMO measure of Sampling Adequacy& Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin (KMO) statistics, predicts if data are likely to factor well, based on correlation and partial correlation. KMO varies from 0 to 1.0, and KMO should be 0.60 or higher to proceed with factor analysis. For factor analysis, the SPSS function is Analyze>Dimension Reduction>Factor. According to Kaiser the range can be categories as unacceptable (0 - 0 .49), miserable (0.50 - 0.59), mediocre (0.60 - 0.69), middling (0.70 - 0.79), meritorious (0.80 - 0.89), marvelous (0.90 to 1) (Kaiser, 1974).

In our study, we got the KMO of **.755** which is quite logical (middling) to proceed for factor analysis.

Bartlett's test of sphericity test primarily evaluates the null hypothesis. The null hypothesis is that the correlation matrix is an identity matrix, which determines that the variables are unconnected with each other, and hence the variables are unbefitting for structure exposure. The small value of this test indicates that factor analysis may be proceeding.

In this study, the value of Bartlett's test significance level is 0.00, which indicates that the variables are suitable for factor analysis. In our study, these two significant tests provide a standard for factor analysis which presented in table no 4.16.

Table- 4.16: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.755**
Bartlett's Test of Sphericity	Approx. Chi-Square	**2635.169**
	Df	**66**
	Sig.	**.000**

4.4.3: Factor Analysis

On the basis of communalities table, the proportion of each variable's variances suitability was recognized founded on the principal component methods. Rotated component matrix with varimax was used to obtain interpretable explanation. The values in the total variance explained table (4.17) are includes % of variance, cumulative % of variance, and total values of three sections, such as: Initial Eigenvalues, Extraction Sums of Squared Loadings, and Rotation Sums of Squared Loadings. Factor loadings is primarily the values exhibits in factor pattern solution matrices and the factor loadings provide the regression of the variables on the factors. In factor analysis, the number of factors is determined based on the eigenvalues. Primary eigenvalues with

a total value superior than one vouches a strong origin and less than one indicate insignificant (Field, 2005). The result of factor analysis vouches that there are three factors eigenvalues exceeding one. Through the result of factor analysis, we can explain the total variance and the proportionate variance of each factor in our study, which is stated in table 4.17.

The table depicted that three factors was explored from twenty variables, with total and individual loadings, and percent of variance of each factor. All the factors cumulatively account for 83.65% of the cumulative variance.

Table-4.17: Total Variance Explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**4.293**	**35.773**	**35.773**	**4.293**	**35.773**	**35.773**	**4.215**	**35.123**	**35.123**
2	**3.511**	**29.257**	**65.03**	**3.511**	**29.257**	**65.03**	**3.1**	**25.834**	**60.958**
3	**2.234**	**18.618**	**83.648**	**2.234**	**18.618**	**83.648**	**2.723**	**22.691**	**83.648**
4	**0.723**	**6.023**	**89.672**						
5	**0.507**	**4.222**	**93.894**						
6	**0.358**	**2.98**	**96.874**						
7	**0.199**	**1.656**	**98.53**						
8	**0.071**	**0.593**	**99.123**						
9	**0.056**	**0.469**	**99.592**						
10	**0.025**	**0.207**	**99.799**						
11	**0.016**	**0.131**	**99.93**						
12	**0.008**	**0.07**	**100**						

Extraction Method: Principal Component Analysis.

From the above table, it is evident to us that financial benefit, employee's satisfaction, strategic capability explains 35.77%, 29.26%, 18.62% variance. In our study, we have explained total 83.65 % variance through the above-stated three components.

We have constructed a rotated component matrix in order to identify the factors in our study. Rotated component matrix table principally includes the rotated factor loadings where the weighted values are attached for each factor. In the case of rotated component matrix preparation researcher uses 0.5 as threshold value for blank the table, because more than 0.5 are allowed to include the strong correlations. Nevertheless, the rotated component matrix uses correlations, which possible value range within -1 to +1. This table vouches a clear viewpoint of the factors and correlation values by removing the weak correlation values. This is represented below table no 4.18.

Table-4.18: Rotated Component Matrix

Rotated Component Matrix[a]

	Component		
	1	2	3
A1	**.986**		
A2	**.986**		
A3	**.971**		
A4	**.970**		
A5	**.557**		
B1		**.978**	
B2		**.974**	
B3		**.959**	
C1			**.854**
C2			**.815**
C3			**.798**
C4			**.798**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

The factor analysis result explores three distinct factors of e-HRM function. We have given the name of the factors and highlighted the questions that are implemented in the questionnaire. The questions are presented sequentially and changed the questions no to make better understanding.

The extracted three factors are named as: first factor "Financial Benefit" which indicates those variables is related to the financial profitability of the organization. The second factor named as "Employee Satisfaction" which is the variable related with the satisfaction of the employees. The third factor named as "Strategic Capability" which includes the contribution of E-HRM on strategic involvement of the organization.

Table- 4.19: Name of the factors

Parameter	Question	Name of the factor
A1	Headcount reduction	
A3	Increased output	
A4	Quality improvement saving	**Financial Benefit**
A2	Improved data accuracy	
A5	Removal of duplication	
B1	Ease of use	
B2	Improved transparency	**Employee Satisfaction**
B3	Improved Internal communication	
C1	Administrative burden reduction of HR professionals	**Strategic Capability**
C2	Standardization of human resource practices	
C3	Competence development	
C4	Knowledge management	

In a nutshell of section 3, the objective is trying to accomplish through factor analysis. The objective was to find out the significant factors of this web-based e-HRM over normal HRM function that can increase efficiency of the entire organization. From the result we can see that FMCG organizations of West Bengal are adopting web based HRM over normal E-HRM activity to increase their organizational efficiency. In this case, financial benefit, employee satisfaction,

and strategic capability can increase the organizational efficiency. In the next section, the researcher will try to measure the efficiency of E-HRM in the organizations through correlation, regression, and paired sample t-test analysis.

4.5: Section-4

In this section correlation, multiple regression, scatter plot (E-T graph), and paired sample t-test has been done to find out the relation between E-HRM practice and its beneficial areas which reflect the efficiency of E-HRM.

4.5.1: Correlation Analysis

The Pearson correlation analysis has been used to identify the relations between operational E-HRM and other benefited areas. The correlation value ranges from -1 to +1. While, -1 showcase strongly negative and +1 showcase strongly positive relation between the variables. In this study, four variables coefficients are (.542, .491, and .551) positively correlated and significant based on the 150 observations. The result vouches in table 4.20.

Table: 4.20: Correlations

		1	2	3	4	5	6	7	8	9	10
1	designation										
2	gender	**-.075**									
3	work exp	**.541****	**-.012**								
4	Age	**.285****	**-.089**	**.175***							
5	ES	**.641****	**.008**	**.519****	**.270****						
6	FB	**.669****	**.022**	**.415****	**.153**	**.655****					
7	SC	**.652****	**.005**	**.528****	**.254****	**.994****	**.668****				
8	relational	**.837****	**-.166***	**.560****	**.374****	**.734****	**.721****	**.742****			
9	transformational	**.353****	**-.115**	**.186***	**-.004**	**.356****	**.338****	**.342****	**.260****		
10	operational	**.446****	**.223****	**.278****	**.194***	**.542****	**.491****	**.551****	**.447****	**.228****	

Note: N=150, * p <0.05, ** p <0.01.

ES= employee satisfaction, FB= financial benefit, SC=Strategic capability

The demographic profiles of the respondents are significantly related to the E-HRM drivers and the benefits of E-HRM. Designation in the organization positively leads to all the factors except gender. However, Gender only positively significantly contributes to the operational activity and negative with relational activity but partially. Age positively correlated with all the factors except financial benefit and transformational activity. Work experience is essential, and maximum organizations prefer it. In this study, work experience is positively significantly related to all the factors.

Pearson correlation analysis has been done to find out the relations between transformational E-HRM, employee satisfaction, financial benefit, and strategic capability. The correlation values showcase in the table 4.20, which depicts that there is a positively significant relation exists. However, the relations are not so strong between transformational E-HRM and other variables but significant relation carried out.

As like earlier, the researcher trying to showcase the correlations within the variables such as relational, employee's satisfaction, financial benefit, and strategic capability. In this study, the relation with relational E-HRM and other variables coefficients are (.734, .721, and .742) positively correlated and significant at 0.01 level of significant, based on the 150 observations.

The correlations between relational e-HRM and other benefited areas are showcased in the table 4.20. From the table it is clear that there is a strong positive relation between four variables. The relation between overall benefit and operational E-HRM is strongly positive (.573) and significant (0.01 level) with two tailed. Relational E-HRM correlated with overall benefit from the E-HRM is .80 which means a strongly positive relationship is there, and the relation is significant where p value is <0.01. The relation between transformational E-HRM and overall

benefit is positive (.377) not so much strong like earlier two E-HRM practices but the result showcased statistically significant relationship.

Table 4.21: Correlations between three types of E-HRM and overall benefit

		Mean	Std. Deviation	1	2	3	4
1	overall	4.2266	.42100				
2	operational	4.4853	.67331	.573**			
3	relational	4.3326	.54456	.800**	.447**		
4	transformational	3.8000	.61458	.377**	.228**	.260**	

Note: N=150, * p <0.05, ** p <0.01

So, the entire correlation table indicates that all the variables are statistically significant linear relationship developed with each other. This implies that there is a linear relationship between E-HRM practice and organization efficiency.

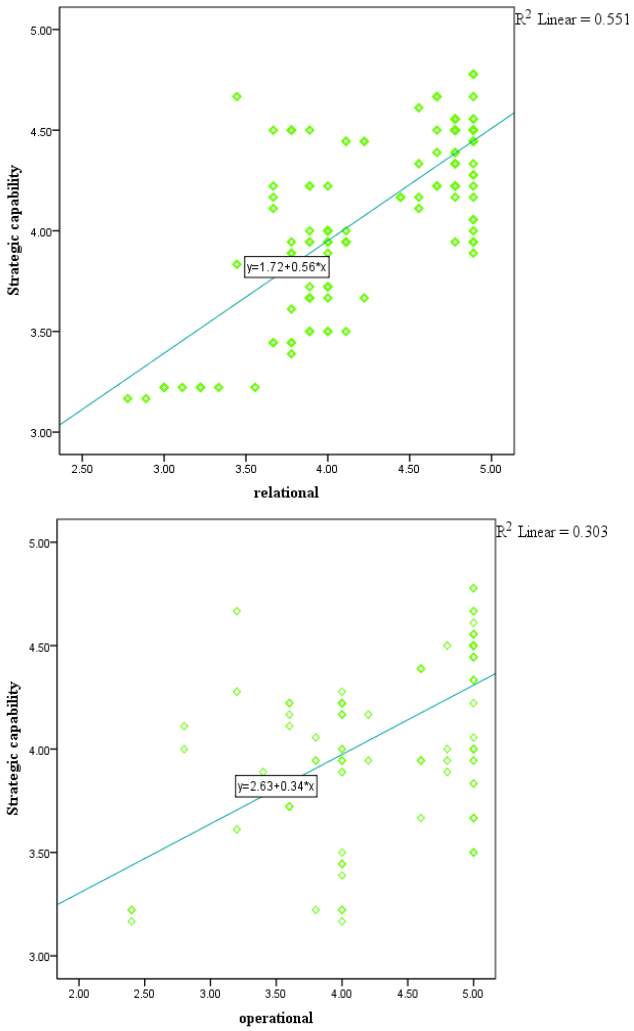
4.5.2: Multiple Regression Analysis

The statistical package for social science (SPSS) version 20 was applied to conduct multiple regression analysis. Multiple regression analysis has been done to find out the relations between three E-HRM practice with three impact factors. Total four Multiple Linear Regression (MLR) analyses have been done.

MLR 1

First of all, the researcher was trying to check that there are any linear relationships present or not for multiple linear regression model. Scatter plot is used to find out the relations and the diagrams vouches that there is a good relation between independent and dependent variable. Although, previous Pearson correlation analysis were gives the relation status of dependent and

independent variables. However, scatter plot is used to represent the relation graphically which is more attractive for understand.



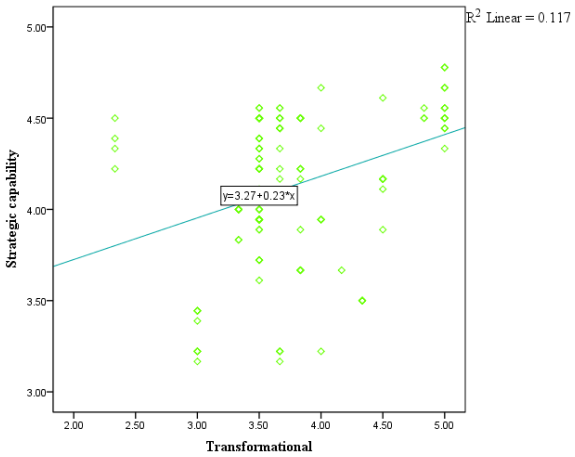
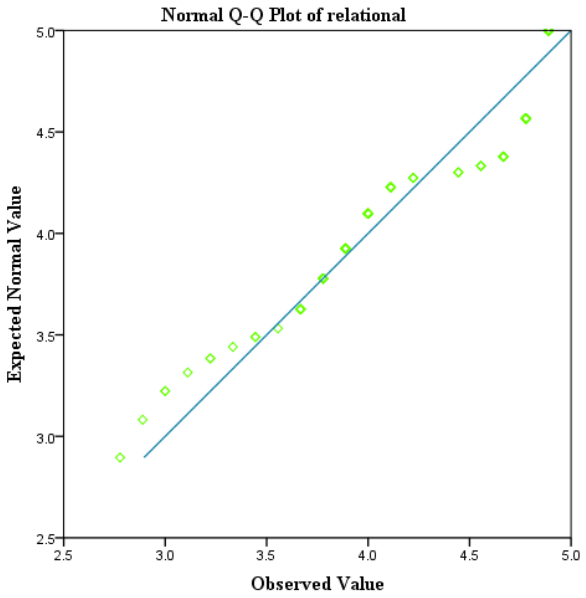
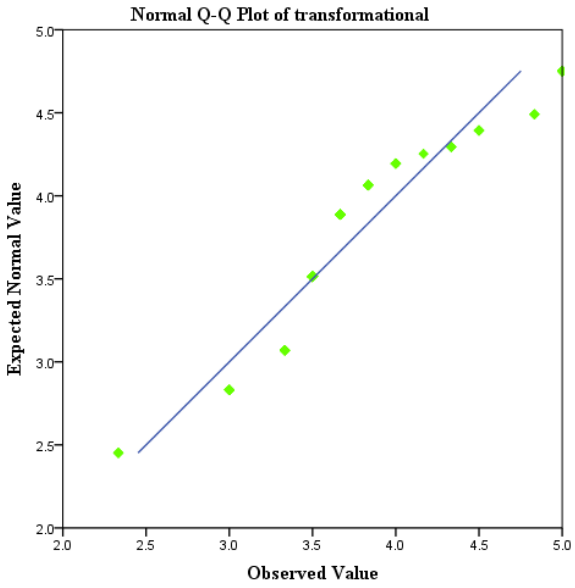


Figure 4. 8: Scatter Plot showcases the relation between strategic capability and relational, transformational, and operational E-HRM.

After scatter plot, Q-Q Plot is used to check the multivariate normality. The graph shown in below:





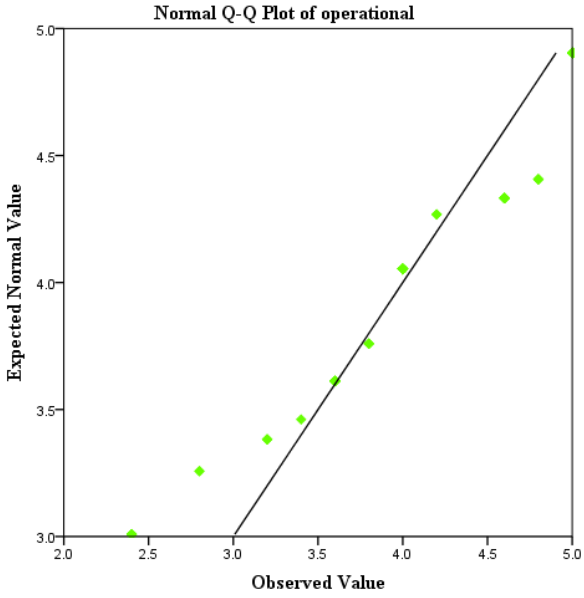


Figure 4. 9: Q-Q Plot between relational, transformational, operational, and strategic capability.

After Q-Q Plot, it is found that there is nothing any brief violation of the assumptions in the data set. The negligible violations are neglected and conduct the multiple linear regression (MLR). In this study, three regression analyses have been done to find out different relations between dependent and independent variables.

In first MLR, strategic capability is used as a dependent variable; operational, transformational, and relational variables are used as independent variable.

The below table 4.22, showcase the MLR model summary and overall fit statistics. The result depicts that the adjusted R2 of this MLR model is .618 with the R2 = .626. This indicates that the LR explains 62% of the variance in the data. The Durbin-Watson test value 2.26 vouches that there is no first order autocorrelation in the data because the value lies within 1.5 to 2.5.

Table 4.22: Relation between 3 types of E-HRM and Strategic capability

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.791[a]**	**.626**	**.618**	**.25309**	**.626**	**81.512**	**3**	**146**	**.000**	**2.260**

a. Predictors: (Constant), operational, transformational, relational
b. Dependent Variable: Strategic capability

In the table 4.23 is indicate F test value. The linear regression's F-test has the null hypothesis: The model is explaining zero variance in the dependent variable, means R^2=0. In this study, the model is highly significant which explains that a significant amount of the variance strategic capability.

Table 4.23: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	**15.664**	**3**	**5.221**	**81.512**	**.000[b]**
	Residual	**9.352**	**146**	**.064**		
	Total	**25.016**	**149**			

a. Dependent Variable: Strategic capability
b. Predictors: (Constant), operational, transformational, relational

From the coefficients table (4.24) it is clear that the entire variables including intercept are statistically significant.

Table 4.24: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	**1.173**	**.198**		**5.929**	**.000**
	Relational	**.447**	**.043**	**.594**	**10.328**	**.000**
	transformational	**.086**	**.035**	**.129**	**2.450**	**.015**
	Operational	**.156**	**.035**	**.256**	**4.480**	**.000**

a. Dependent Variable: Strategic capability

b. Predictors: (Constant), operational, transformational, relational

The result of multiple regression analysis is shown in upper table. As we know, the formula of multiple regression is:

$$Yp = \beta_0 + \beta_1 * x_1 + \beta_2 * x_2 + \beta_3 * x_3$$

As seen in the table, multiple regression between the types of e-HRM functions and strategic capability shows that three types of e-HRM contribute significantly to the model (F = 81.512, p <.010) account for 62 % variance in strategic capability. As a predictive analysis, multiple regression is used in our study to show the relationship between one dependent variable and two or more independent variables. In our study, independent variables explain 62 percent fluctuation of dependent variable. All the p values are significant.One unit changes in relational function leads to .447 units of positive changes in strategic capability. So, positive changes in the relational function lead to more positive strategic capability. One unit changes in transformational function highlights .086 units of positive change in strategic capability. One unit changes in operational showcases .156 units of positive change in strategic capability.

Formula:

$$\gamma_p = 1.173 + .447 * x_1 + .086 * x_2 + .156 * x_3$$

Lastly, the MLR model normality of residuals ensure with the help of histogram and a normal P-P plot. Histogram and P-P Plot shows that the normality curves in histogram and points in the P-P Plot are generally follow the diagonal (normal) line with no such sturdy deviations. This specifies that the residuals are normally distributed in the study.

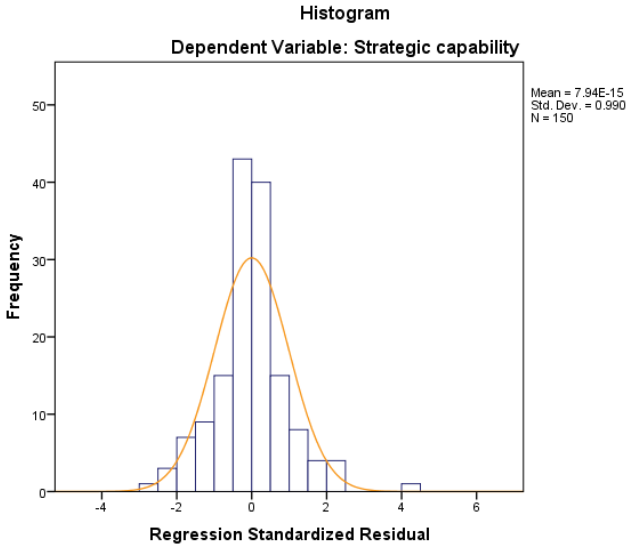


Figure 4. 10: Histogram

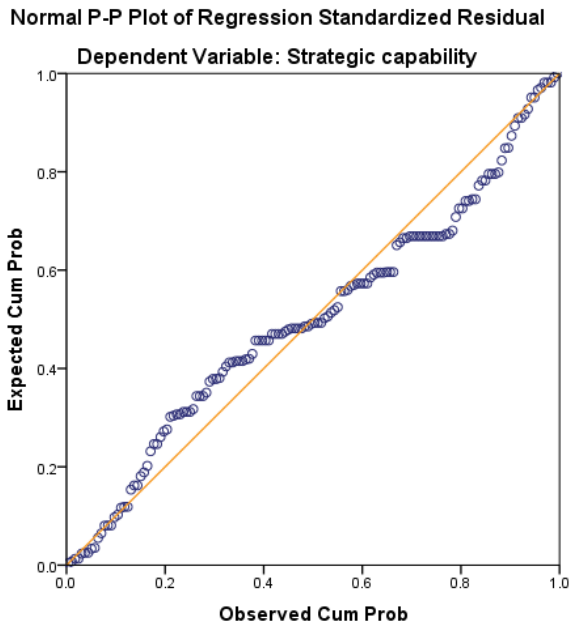


Figure 4. 11: P-P Plot

MLR 2

As like earlier MLR model testing, same steps have taken to check that there are any linear relationships present or not for multiple linear regression model. Scatter plot is used to find out the relations and the diagrams vouches that there is a good relation between independent and dependent variable.

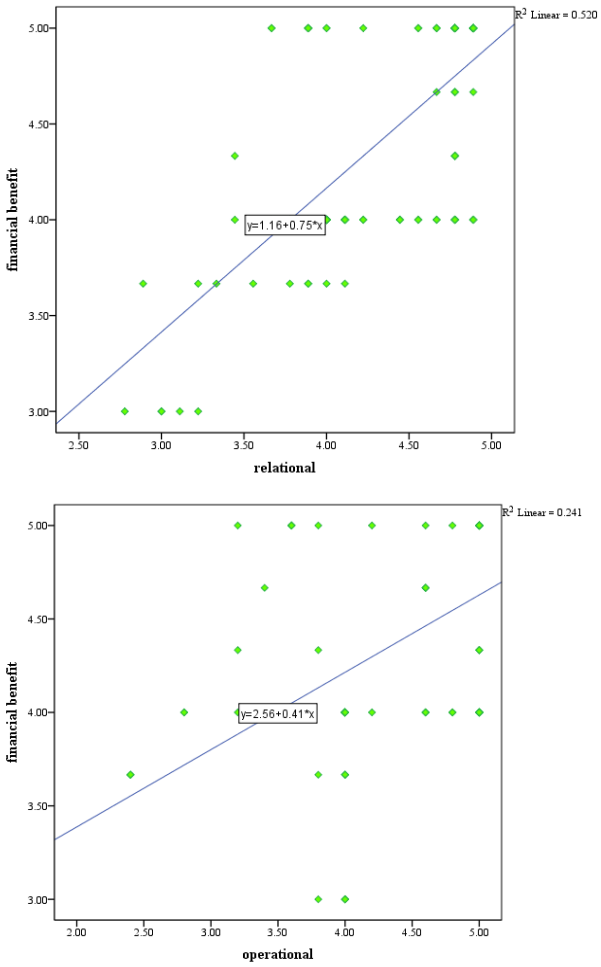


Figure 4.12: Scatter Plot between relational, transformational, operational, and financial benefit.

A Q-Q Plot is one type of scatter plot originated with the help of two sets of quantiles against one another. Q-Q Plot is primarily a statistical tool that helps us to identify the distribution pattern of the data. Although, it's not an air-tight proof but it used to show the distribution of data at a glance. Q-Q Plot allows us to check normal or exponential distribution and if the data is not well distributed then it helps to identify the violation pattern. In below table Q-Q plot is shown to visualize the data structure.

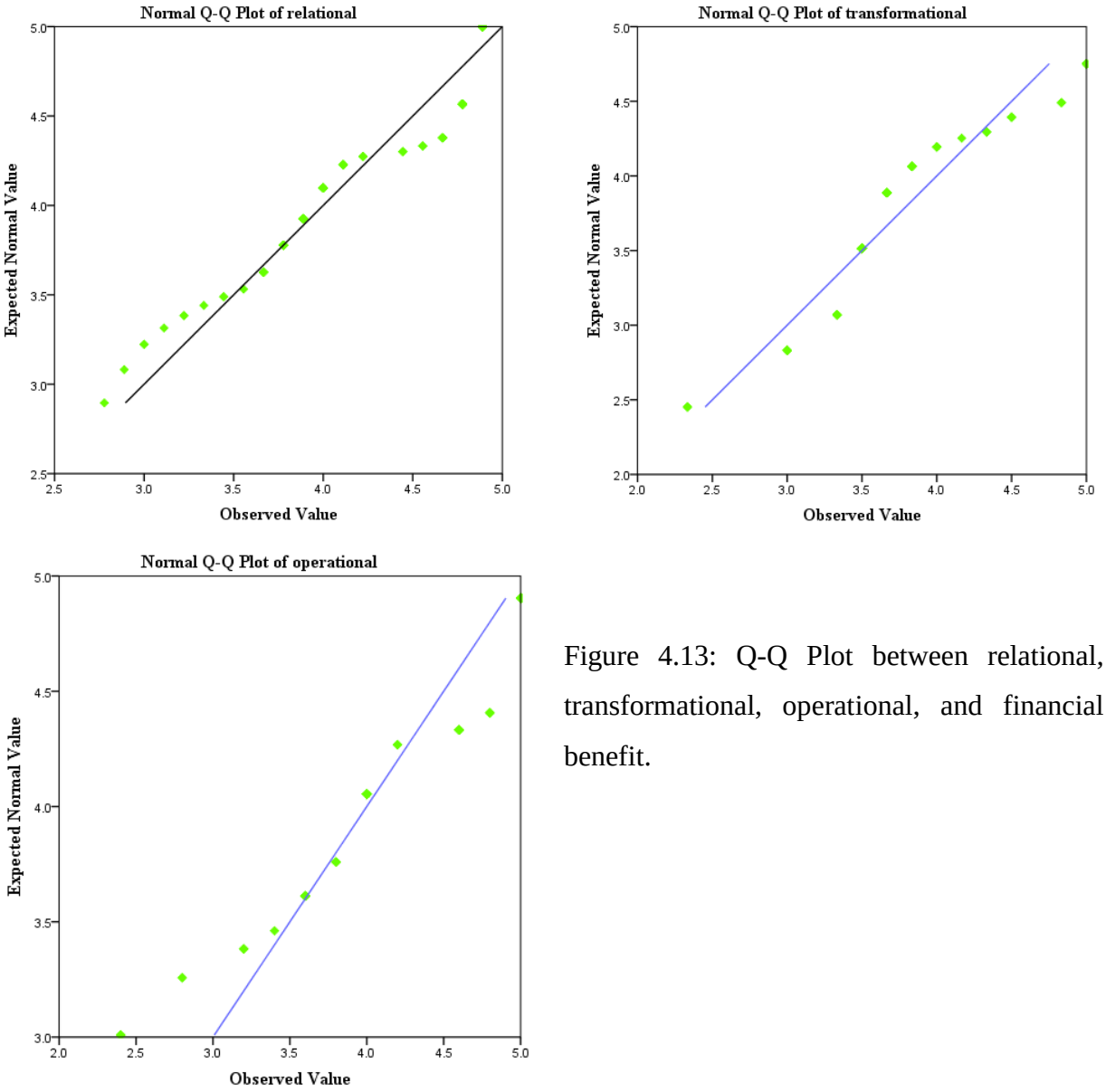


Figure 4.13: Q-Q Plot between relational, transformational, operational, and financial benefit.

In the below table, the value of R (.757) showcase the correlation between observed and predicted variables. However, R^2 is the proportion of variance in the dependent variable (financial benefit) which can be envisaged from the predictors (operational, transformational, and relational). The R^2 value indicates that 57.3 % of the variance in financial benefit can be predicted from the independent variables (operational, transformational, and relational).

Adjusted R^2 is endeavors to acquiesce a more sophisticated value to estimate the R^2 for the population. However, the value of R^2 and adjusted R^2 variation is dependents on the number of observations. The Standard Error of the Estimate or RMSE (Root Mean Square Error) is the SD of the error term. The Durbin-Watson test value 1.887, indicate that the value that there is no first order autocorrelation in the data because the value lies within 1.5 to 2.5.

Table-4.25: The relation between 3 types of e-HRM and Financial Benefit

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.757[a]**	**.573**	**.564**	**.37471**	**.573**	**65.253**	**3**	**146**	**.000**	**1.887**

a. Predictors: (Constant), operational, transformational, relational
b. Dependent Variable: financial benefit

The F test table (4.26) depicts that the F test is highly significant ($F=65.253$, $p<0.01$). In the table the degrees of freedom for total is 149 (150-1) because there were 150 respondents. The df for regression is 3 because intercept automatically included in the model and the formula (k-1) is used for df calculation. Including intercept as a predictor, there are 4 predictors. So, the model has 4-1=3 df. The residual df is the total df minus model df, (149-3) =146.

In this study the F value is 65.253 which is calculated by the help of Mean Square Regression divided by the Mean Square Residual. The p value of this study is highly significant. The result of F test indicates that the independent variables reliably predict the dependent variable. That means the predictors operational, transformational, and relational E-HRM practice can be used to reliably predict financial benefit.

Table-4.26: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	**27.486**	**3**	**9.162**	**65.253**	**.000[b]**
	Residual	**20.500**	**146**	**.140**		
	Total	**47.986**	**149**			

a. Dependent Variable: financial benefit

b. Predictors: (Constant), operational, transformational, relational

In the table 4.27, the coefficient for constant is not significant but all the variables are significant in this study. The coefficients for relational E-HRM (.625), transformational (.128), operational (.161) are statistical significant at 95% confidence level.

Table-4.27: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	**.500**	**.293**		**1.707**	**.090**
	relational	**.625**	**.064**	**.599**	**9.744**	**.000**
	transformational	**.128**	**.052**	**.139**	**2.455**	**.015**
	operational	**.161**	**.051**	**.191**	**3.136**	**.002**

a. Dependent Variable: financial benefit

As seen in table, multiple regression between the types of e-HRM functions and financial benefit shows that three types of e-HRM contributes significantly to the model ($F = 65.253$, $p < .010$) account for 56 % variance in financial benefit. As a predictive analysis, multiple regression is used in our study to show the relations between one dependent variable and two or more independent variables. In our study, independent variables explain 56 percent fluctuation of dependent variable. All the p values are significant.One unit changes in relational functionleads

to .625 units of positive changes in financial benefit. So, positive changes in relational function lead to more positive financial benefit. One unit changes in transformational function highlights .128 units of positive change in financial benefit. One unit changes in operational function leads.161 units of positive change in financial benefit.

Formula

$$\gamma_p = .500 + .625 * x_1 + .128 * x_2 + .161 * x_3$$

At last, Histogram and normal P-P plot has been established to ensure the normality of the data. The plot indicates that the normality curve generally follows the normal line with no such major violations. This indicates that the residuals of this model are normally distributed.

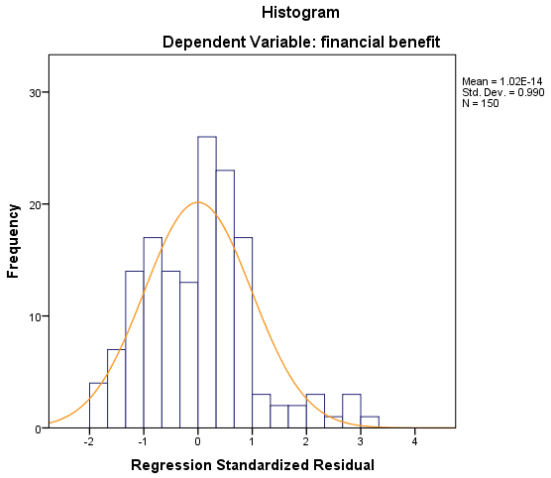


Figure 4.14: Histogram

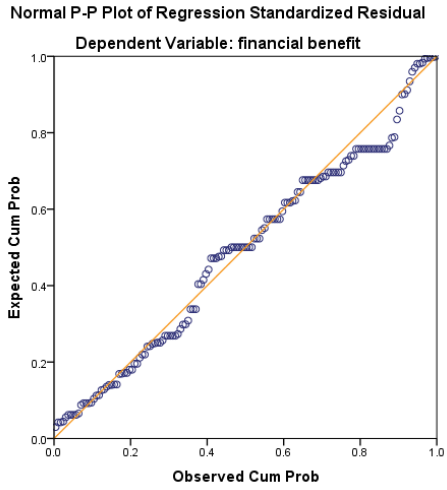


Figure 4.15: P-P Plot

MLR 3

In this step employee's satisfaction is used as a dependent variable and operational, relational, and transformational E-HRM practice are used as independent variables. To check the normality and frequency distribution scatter plot and Q-Q plot were used.

Scatter plot showing that there is a positive relation with employee's satisfaction and relational, transformational, and operational variables.

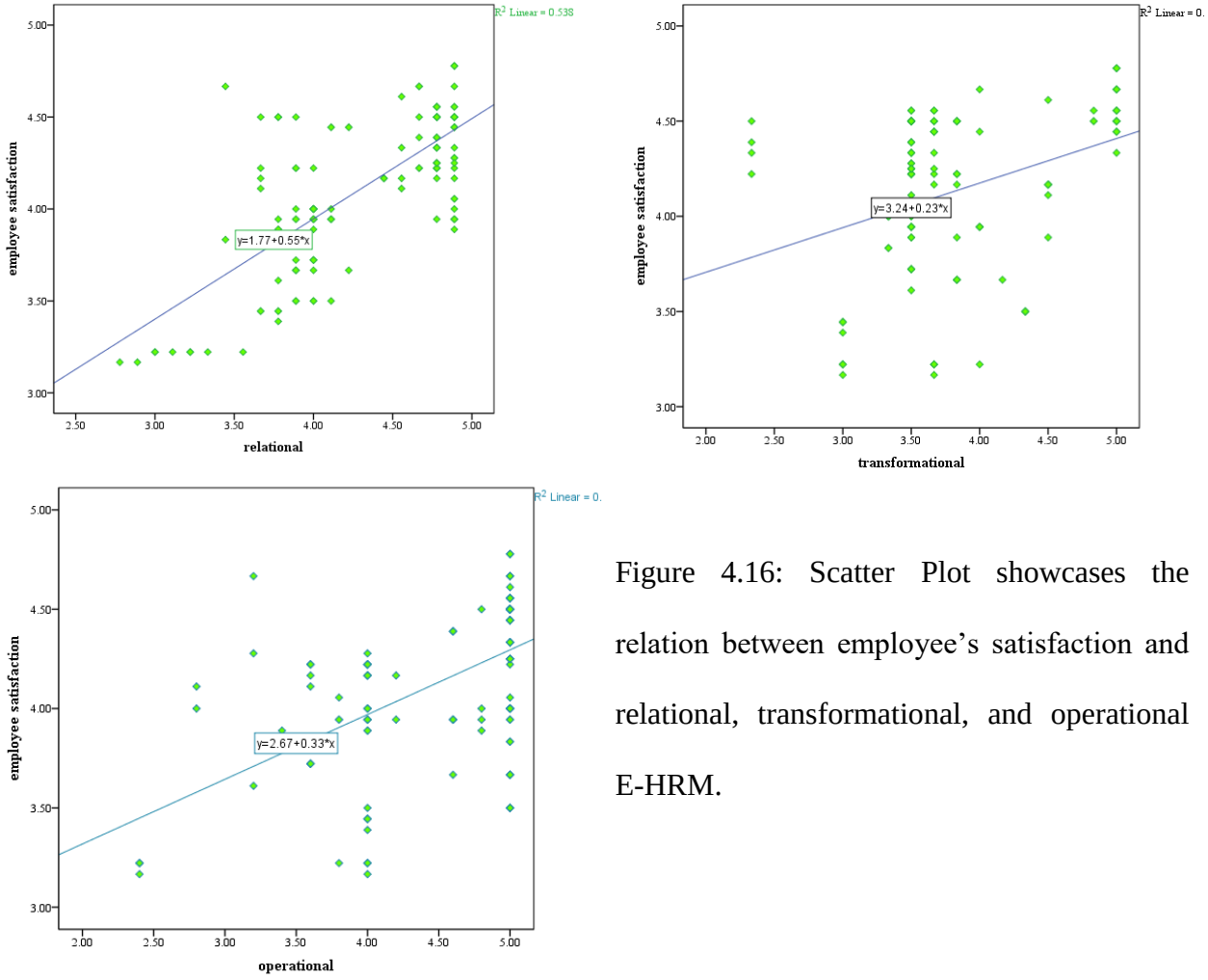


Figure 4.16: Scatter Plot showcases the relation between employee's satisfaction and relational, transformational, and operational E-HRM.

The Q-Q plot is used check the multivariate normality graphically. If the data are normally distributed then the data points will be near to the normality line. If the data points are not closer to the diagonal line then the distribution of the data is not normally distributed. In this study, normal Q-Q plot has been done of each variable over employee's satisfaction. The Q-Q plot is shown in below

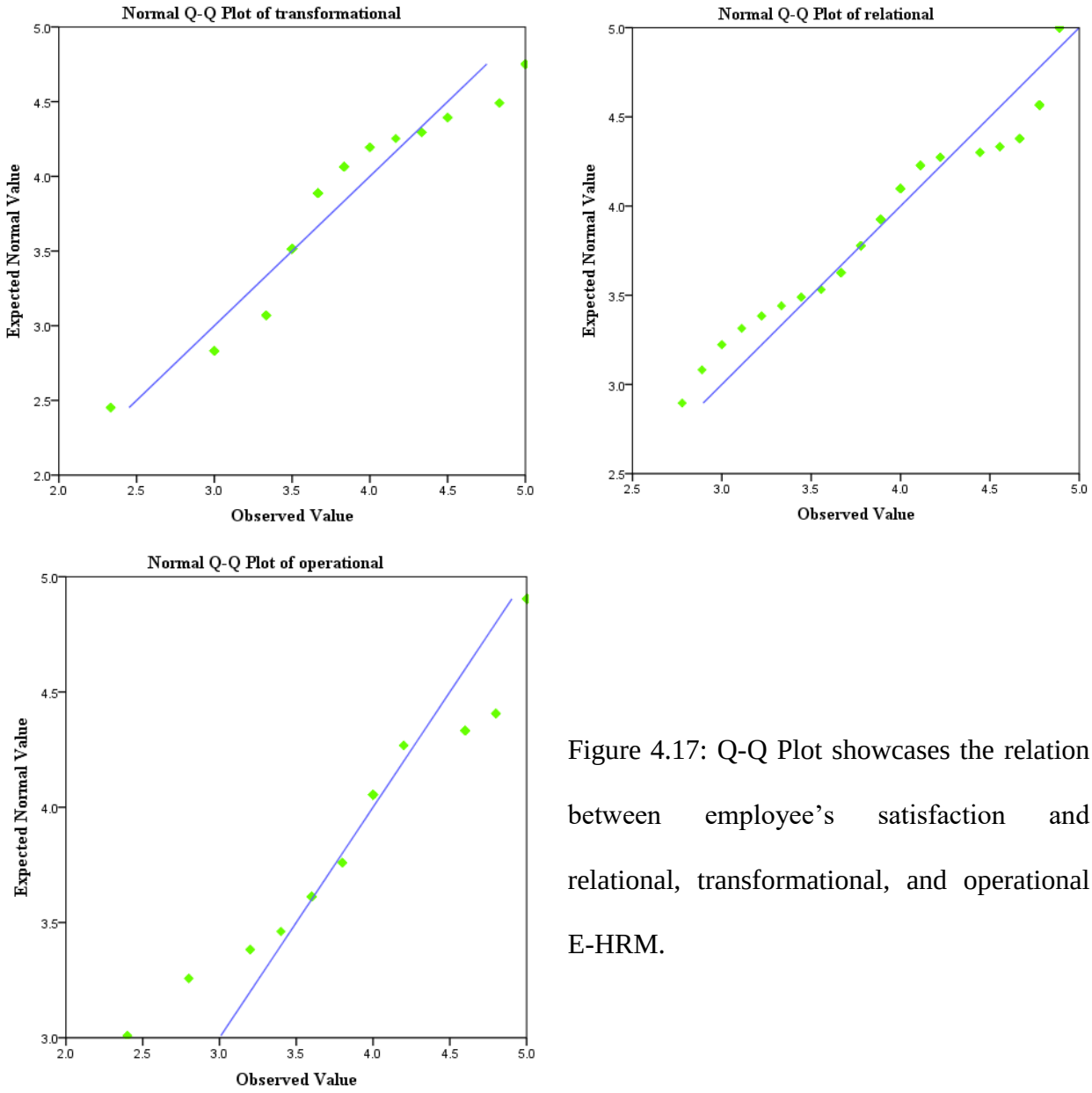


Figure 4.17: Q-Q Plot showcases the relation between employee's satisfaction and relational, transformational, and operational E-HRM.

In the below table, the value of R (.784) showcase the correlation between observed and predicted variables. However, R^2 is the proportion of variance in the dependent variable (employee's satisfaction) which can be envisaged from the predictors (operational, transformational, and relational). The R^2 value indicates that 61.5 % of the variance in employee's satisfaction can be predicted from the independent variables (operational,

transformational, and relational). The Durbin-Watson test value 2.27 vouches that there is no first order autocorrelation in the data because the value lies within 1.5 to 2.5.

Adjusted R^2 is endeavors to acquiesce a more sophisticated value to estimate the R^2 for the population. However, the value of R^2 and adjusted R^2 variation is dependents on the number of observations. The Standard Error of the Estimate or RMSE (Root Mean Square Error) is the SD of the error term.

Table 4.28: Relation between 3 types of e-HRM function and Employees satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.784[a]**	**.615**	**.607**	**.25367**	**.615**	**77.779**	**3**	**146**	**.000**	**2.270**

a. Predictors: (Constant), operational, transformational, relational

b. Dependent Variable: employee satisfaction

The F test table (4.29) depicts that the F test is highly significant ($F=77.779$, $p<0.01$). In the table the degrees of freedom for total is 149 (150-1) because there were 150 respondents. The df for regression is 3 because intercept automatically included in the model and the formula (k-1) is used for df calculation. Including intercept as a predictor, there are 4 predictors. So, the model has 4-1=3 df. The residual df is the total df minus model df, (149-3) =146.

In this study the F value is 77.779, calculated by the help of Mean Square Regression divided by the Mean Square Residual. The p value of this study is highly significant. The result of F test indicates that the independent variables reliably predict the dependent variable. That means the

predictors operational, transformational, and relational E-HRM practice can be used to reliably predict employee's satisfaction.

Table 4.29: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	**15.014**	**3**	**5.005**	**77.779**	**.000[b]**
	Residual	**9.395**	**146**	**.064**		
	Total	**24.409**	**149**			

a. Dependent Variable: employee satisfaction

b. Predictors: (Constant), operational, transformational, relational

The table 4.30 showcases the estimates of the relationship between dependent and independent variables. This estimate indicates the amount of increase in the employee's satisfaction that would be predicted by a one-unit increase in the predictor.

Table 4.30: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	**1.211**	**.198**		**6.105**	**.000**
	relational	**.435**	**.043**	**.585**	**10.021**	**.000**
	transformational	**.097**	**.035**	**.147**	**2.744**	**.007**
	operational	**.148**	**.035**	**.247**	**4.261**	**.000**

a. Dependent Variable: employee satisfaction

As seen in table 4.30, multiple regression between the types of e-HRM functions and employee satisfaction shows that three types of e-HRM functions contribute significantly to the model ($F = 77.779$, $p < .010$) account for 60 % variance in employee satisfaction. As a predictive analysis,

multiple regression is used in our study to show the relations between one dependent variable and two or more independent variables. In our study, independent variables explain 60 percent fluctuation of dependent variable. All the p values are significant.One unit changes in relational function leads to .435 units of positive changes in employee satisfaction. So, positive changes in relational function lead to more positive employee satisfaction. One unit changes in transformational function highlights .097 units of positive change in employee satisfaction. One unit changes in operational function showcase .148 units of positive change in employee satisfaction.

Formula:

$$\gamma_p = 1.211 + .435 * x_1 + .097 * x_2 + .148 * x_3$$

At last, Histogram and normal P-P plot has been established to ensure the normality of the data. The plot indicates that the normality curve generally follows the normal line with no such major violations. This indicates that the residuals of this model are normally distributed.

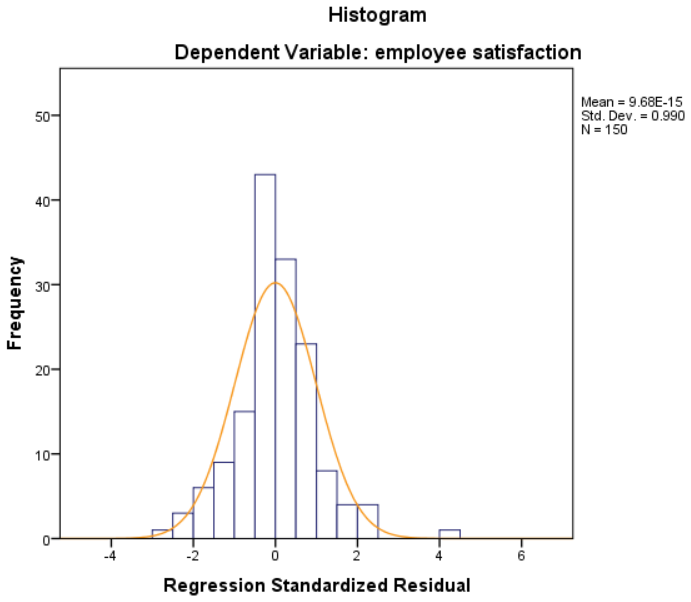


Figure 4.18: Histogram

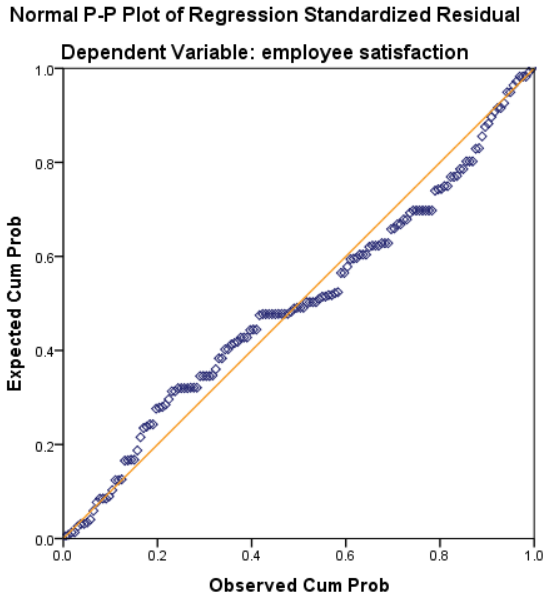


Figure 4.19: P-P Plot

MLR 4

In fourth MLR, overall benefit is used as a dependent variable. The formula of overall impact measurement:

$$O = \frac{F_b + S_c + E_s}{3}$$

O= overall impact; F_b=Financial Benefit; S_c=Strategic Capability; E_s=Employees satisfaction. As like earlier scatter and Q-Q plot is used to check normality.

Scatter plot showcase that there is a positive relation between the independent and dependent variable.

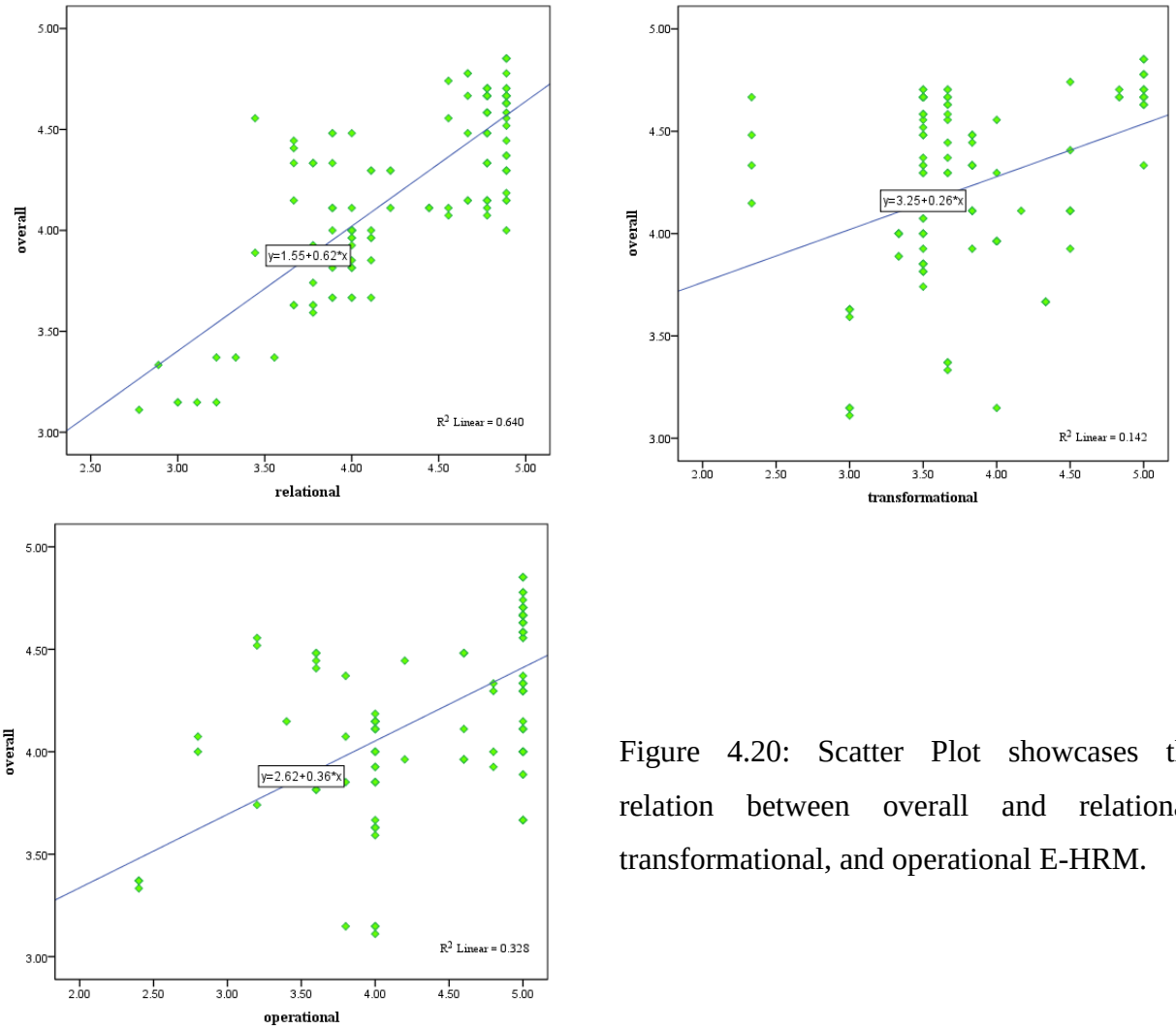


Figure 4.20: Scatter Plot showcases the relation between overall and relational, transformational, and operational E-HRM.

The Q-Q plot showcasing that the data is normally distributed and there is no such kind of violations.

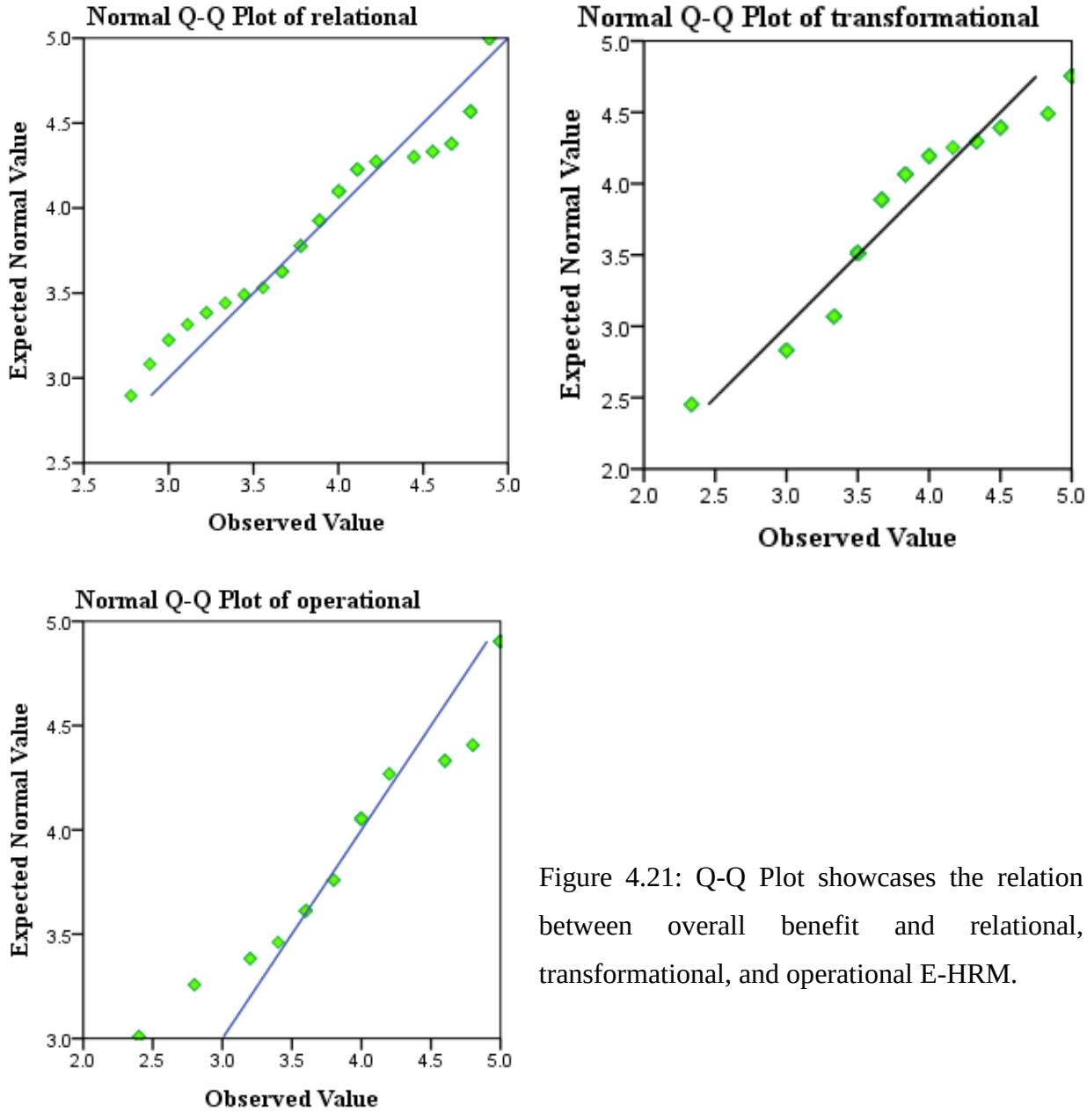


Figure 4.21: Q-Q Plot showcases the relation between overall benefit and relational, transformational, and operational E-HRM.

In the below table, the value of R (.848) showcase the correlation between observed and predicted variables. However, R^2 is the proportion of variance in the dependent variable (overall benefit) which can be envisaged from the predictors (operational, transformational, and

relational). The R^2 value indicates that 71.9 % of the variance in overall benefit can be predicted from the independent variables (operational, transformational, and relational).

Adjusted R^2(.713) is endeavors to acquiesce a more sophisticated value to estimate the R^2 for the population. The Durbin-Watson test value 1.84 vouches that there is no first order autocorrelation in the data because the value lies within 1.5 to 2.5.

Table 4.31: Relation between 3 types of e-HRM function and Overall benefit

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.848[a]**	**.719**	**.713**	**.22561**	**.719**	**124.280**	**3**	**146**	**.000**	**1.839**

a. Predictors: (Constant), operational, transformational, relational
b. Dependent Variable: overall

The F test table (4.32) depicts that the F test is highly significant (F=124.28, p<0.01). In the table the degrees of freedom for total is 149 (150-1) because there were 150 respondents. The df for regression is 3 because intercept automatically included in the model and the formula (k-1) is used for df calculation. Including intercept as a predictor, there are 4 predictors. So, the model has 4-1=3 df. The residual df is the total df minus model df, (149-3) =146.

Table- 4.32: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	18.978	3	6.326	124.280	.000[b]
	Residual	7.431	146	.051		
	Total	26.409	149			

a. Dependent Variable: overall
b. Predictors: (Constant), operational, transformational, relational

The coefficients are significantly different from alpha 0 to 0.05 level. The coefficient for relational (.502) is statistically significant ($p<0.01$). The coefficient for operational (.155) is highly significant ($p<0.01$). The coefficient for transformational (.104) is statistically significant because its p value is less than 0.01.

Table 4.33: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	**(Constant)**	.961	.176		5.450	.000
	relational	.502	.039	.649	13.012	.000
	transformational	.104	.031	.151	3.304	.001
	operational	.155	.031	.248	5.008	.000

a. Dependent Variable: overall

As seen in the table (4.33), multiple regression between the types of e-HRM functions and overall impact shows that three types of e-HRM functions contribute significantly to the model ($F = 124.28$, $p <.010$) account for 71.9 % variance in overall three factors. As a predictive analysis, multiple regression is used in our study to show the relationship between one dependent variable and two or more independent variables. In our study, independent variables explain 72percent fluctuation of dependent variable. All the p values are significant.One unit changes in relational function leads to .502 multiplication of positive changes in overall. So, positive changes in relational function lead to more positive overall. One unit changes in transformational function highlights .104units of positive change in overall. One unit changes in operational function showcase .155 units of positive change in overall benefit.

At last, Histogram and normal P-P plot has been established to ensure the normality of the data. The plot indicates that the normality curve generally follows the normal line with no such major violations. This indicates that the residuals of this model are normally distributed.

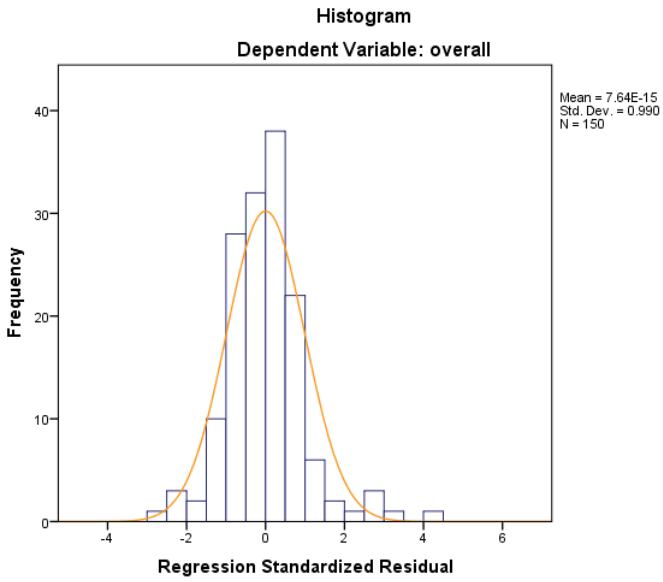


Figure 4.22: Histogram

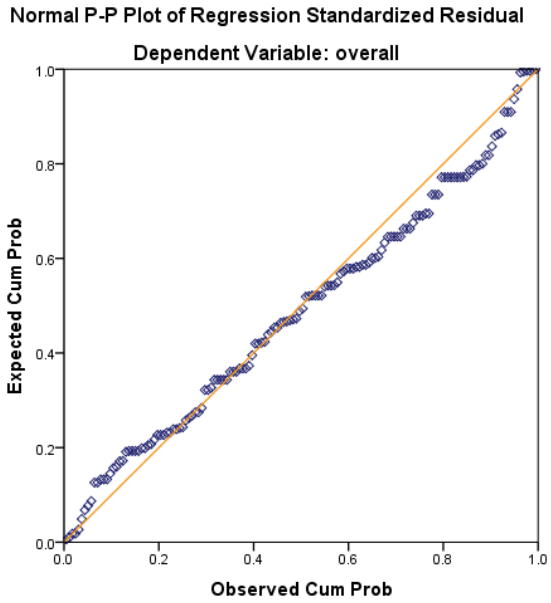


Figure 4.23: P-P Plot

4.5.3: Paired sample T-Test

To answer research hypothesis three, the organization adopted E-HRM to improve their organizational efficiency in HRM functions, the variables to be examined are the recruitment, selection, learning, training, performance management, compensation, employee profile handling, and HR planning. Box plot has been done to show the difference between normal HRM and electronic HRM. However, this assessment measured the significant difference between two. Thirty organizations data were collected from the respondents who are associated with the particular task. Descriptive statistics of the paired data has been shown in **ANNEXURE** part.

4.5.3.1: Recruitment & E- Recruitment

Box plots are utilized to showcase overall outline of the response for a group of variable. Graphical presentation provides several characteristics of the dataset. In this study, the box of E-HRM and HRM indicates that overall recruitment in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between recruitment and E-recruitment system. The box plot for E-HRM is much lower than HRM.

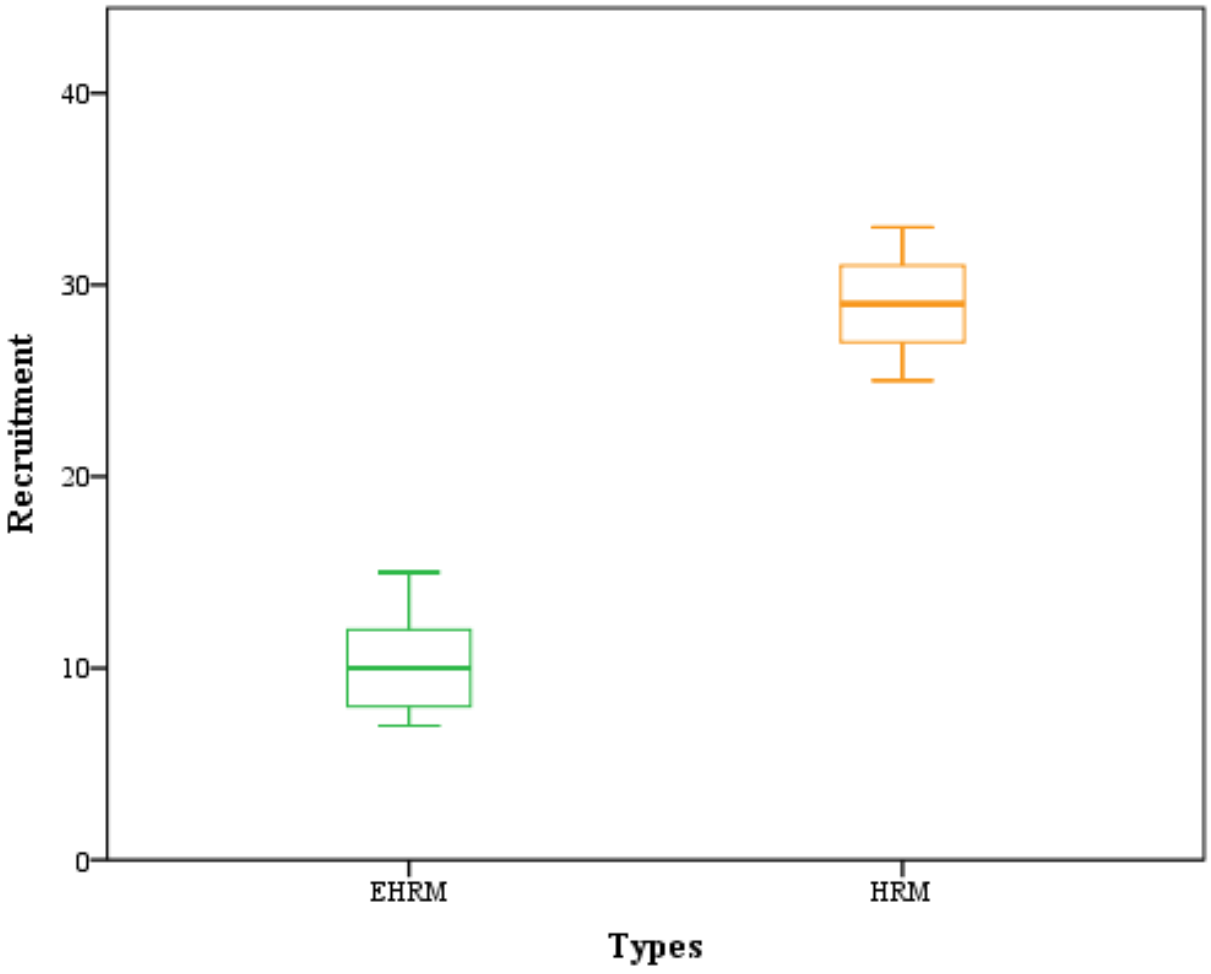


Figure 4.24: Box Plot of E-HRM and HRM of Recruitment

The recruitment ranged from **25** to **33** (M= **28.73**) for normal HRM and from **10** to **25** (M=**21.47**) after implementing E-HRM. As shown in table 4.34, the mean decreases in the recruitment time of **7.26** were significant, p = 0.00, t = **9.19**. The result is showcase in the table 4.36. Therefore the result showcases that there are significant difference between normal HRM and E-HRM. The E-HRM system is more efficient than HRM system in the case of recruitment process.

Table 4.34: Recruitment Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	R1 - R2	**7.267**	**4.331**	**.791**	**5.650**	**8.884**	**9.191**	**29**	**.000**

**p<0.01, n=30

4.5.3.2: Selection & E-Selection

Box plots are utilized to showcase overall outline of the response for a group of variable. Graphical presentation provides several characteristics of the dataset. In this study, the box of E-HRM and HRM indicates that overall selection in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between selection and E-selection system. The box plot for E-HRM is much lower than normal HRM process. It indicates that E-HRM take lower time than normal HRM system in selection procedure. Which lingering the organizational efficiency with the help of reducing the transactional time.

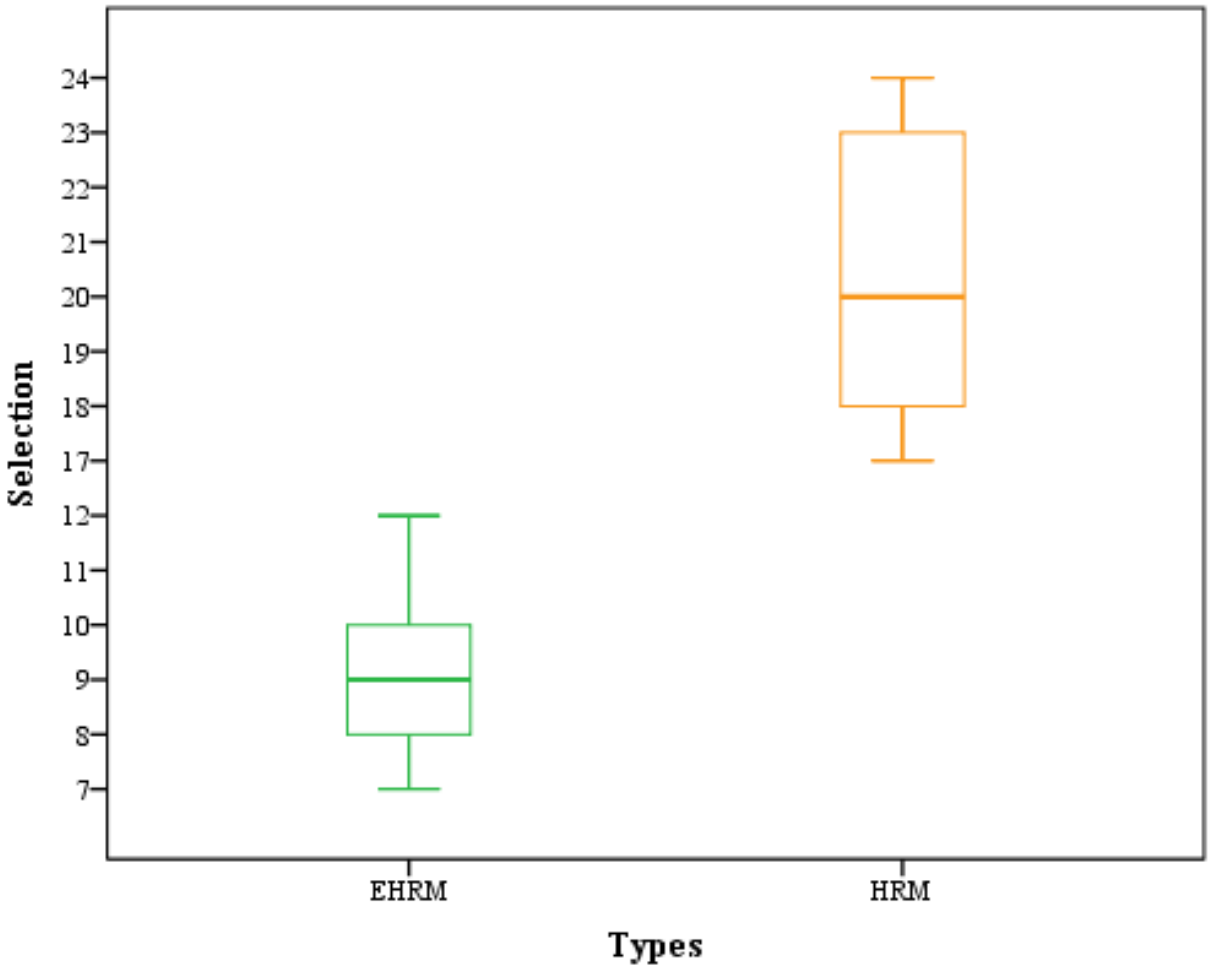


Figure 4.25: Box Plot of E-HRM and HRM of Selection

The selection ranged from **17** to **24** (M= **20.37**) for normal HRM and from **7** to **12** (M=**9.20**) after implementing E-HRM (E-selection). The standard deviation of selection **2.266**and the SD of e-selection is **1.645**. As shown in table 4.37, the mean decreases in the selection time of **11.16** were significant, $p<0.01$, $t = \mathbf{21.34}$. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of selection process.

Table- 4.35: Selection Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	s1 - s2	**11.167**	**2.866**	**.523**	**10.097**	**12.237**	**21.342**	**29**	**.000**

**p<0.01, n=30

4.5.3.3: Learning & E-Learning

In the case of learning process, different organizations adopt different time and schedule to make knowledgeable their employees. Average time (days) spend on learning system is used in this study because learning differs within the organizations also. Box plot were used to represent graphically the overall outline of the response for a group of variable.

Variable learning (HRM) has a maximum **67** and a minimum **54**, while E-selection has a minimum **11** and a maximum **18**. The mean E- learning score is much lower than learning scored (**14.43**Vs **61.33**). The no of sample are thirty with no missing observations.

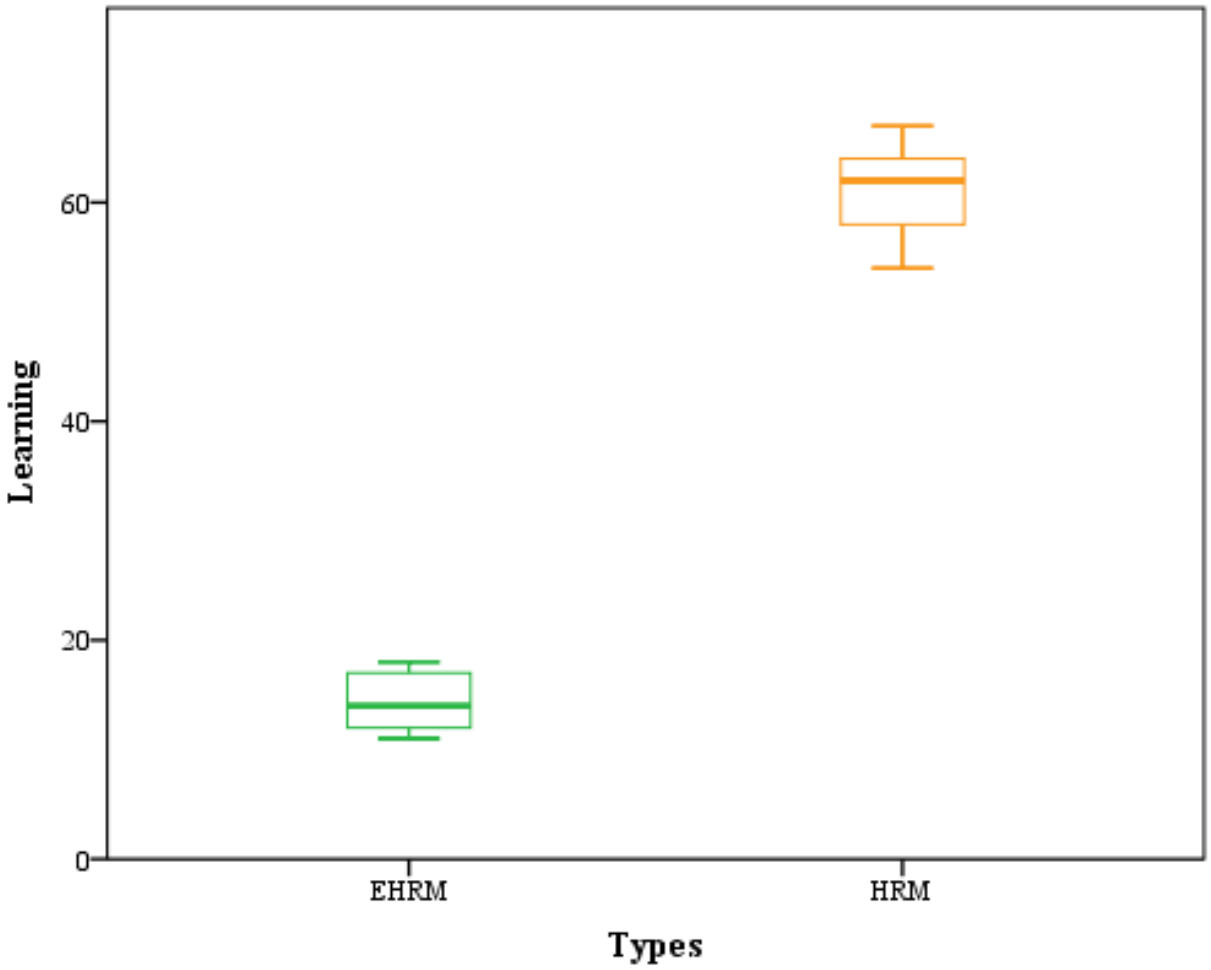


Figure 4.26: Box Plot of E-HRM and HRM of Learning

The learning ranged from **54** to **67** (M=**61.33**) for normal HRM and from **11** to **18** (M=**14.43**) after implementing E-HRM (E-learning). The standard deviation of learning **3.763** and the SD of e-learning is **2.459**. As shown in table 4.38, the mean decreases in the selection time of **46.9** were significant, $p < 0.01$, $t =$ **64.87**. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of learning process.

Table 4.36: Learning Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	L1 - L2	**46.900**	**3.960**	**.723**	**45.421**	**48.379**	**64.874**	**29**	**.000**

**p<0.01, n=30

4.5.3.4: Training & E-Training

In the case of training, different organizations adopt different time and schedule to train their employees. Average time (days) spend on training system is used in this study because training differs within the organizations also according to the requirement and position. Box plot were used to represent graphically the overall outline of the response for a group of variable. Paired variables are named T1 for training and T2 for E-Training.

Variable training (HRM) has a maximum **19** and a minimum **8** days, while E-training has a minimum **1**and a maximum **7**. The mean E- training days are much lower than training scored (**2.83**Vs **13.00**). The no of sample are thirty with no missing observations.

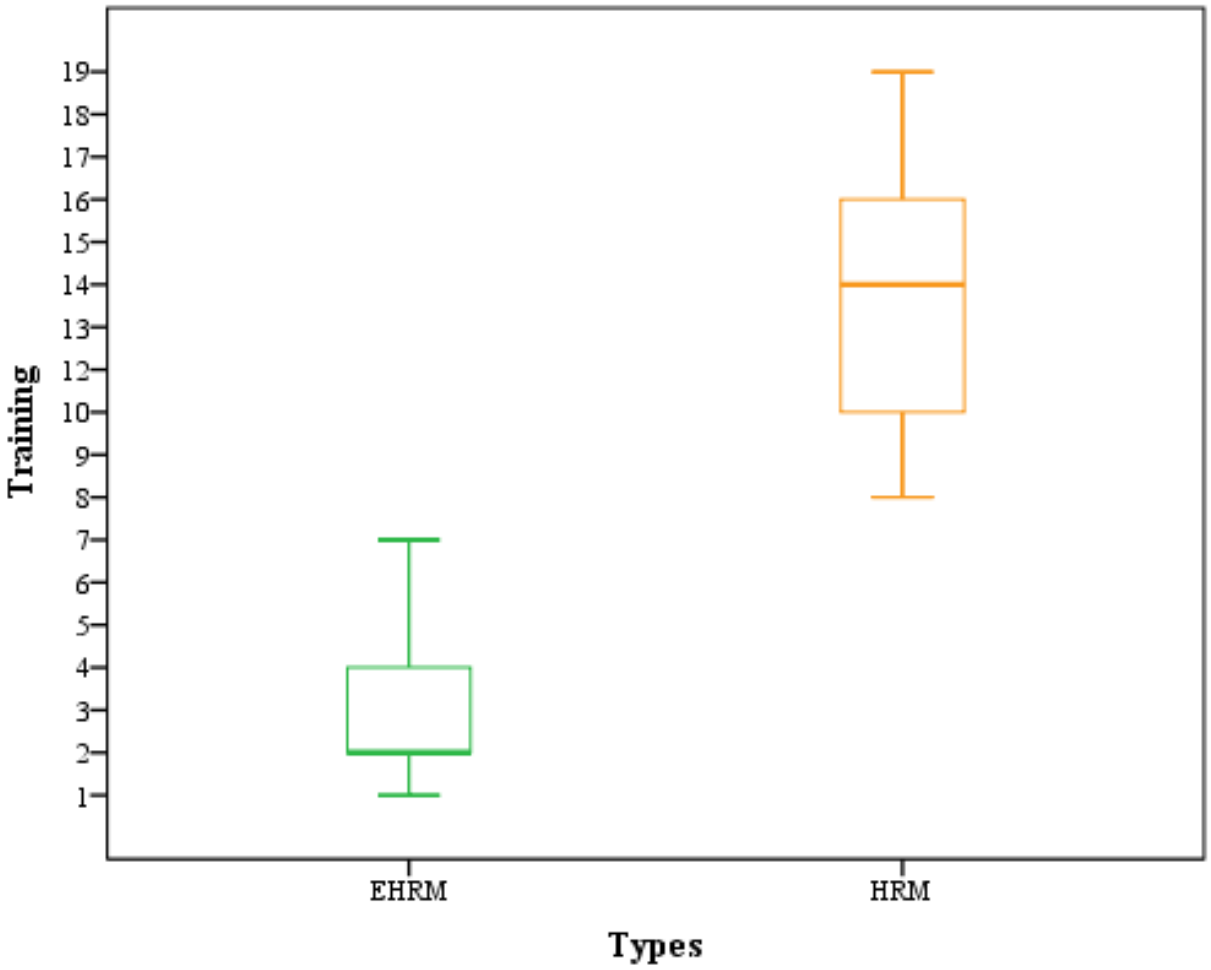


Figure 4.27: Box Plot of E-HRM and HRM of Training

The training ranged is **11** from **8** to **19** (M=**13.00**) for normal HRM practice and ranged **6** from **1** to **7** (M=**2.83**) after implementing E-HRM (E-training). The standard deviation of training **3.404** and the SD of e-training is **1.704**. As shown in table 4.39, the mean decreases in the training time of **10.167** were significant, $p < 0.01$, $t = 15.81$. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of training system.

Table 4.37: Training Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	T1 - T2	**10.167**	**3.668**	**.670**	**8.797**	**11.536**	**15.181**	**29**	**.000**

**p<0.01, n=30

4.5.3.5: Performance Management & E-Performance Management

Box plots are utilized to showcase graphically overall outline of the response for a group of variable. Graphical presentation provides several characteristics of the dataset at a glance. In this study, the box of E-HRM and HRM indicates that overall performance management in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between performance management and E-performance management system. Variable performance management (HRM) has a maximum **36** and a minimum **24** days, while E-training has a minimum **7** and a maximum **13**. The mean E-performance management days are much lower than normal performance management time (**10.30** Vs **29.70**). The box plot for E-HRM is much lower than normal HRM process. It indicates that E-HRM take lower time than normal HRM system in performance management. Which lingering the organizational efficiency with the help of reducing transactional time.

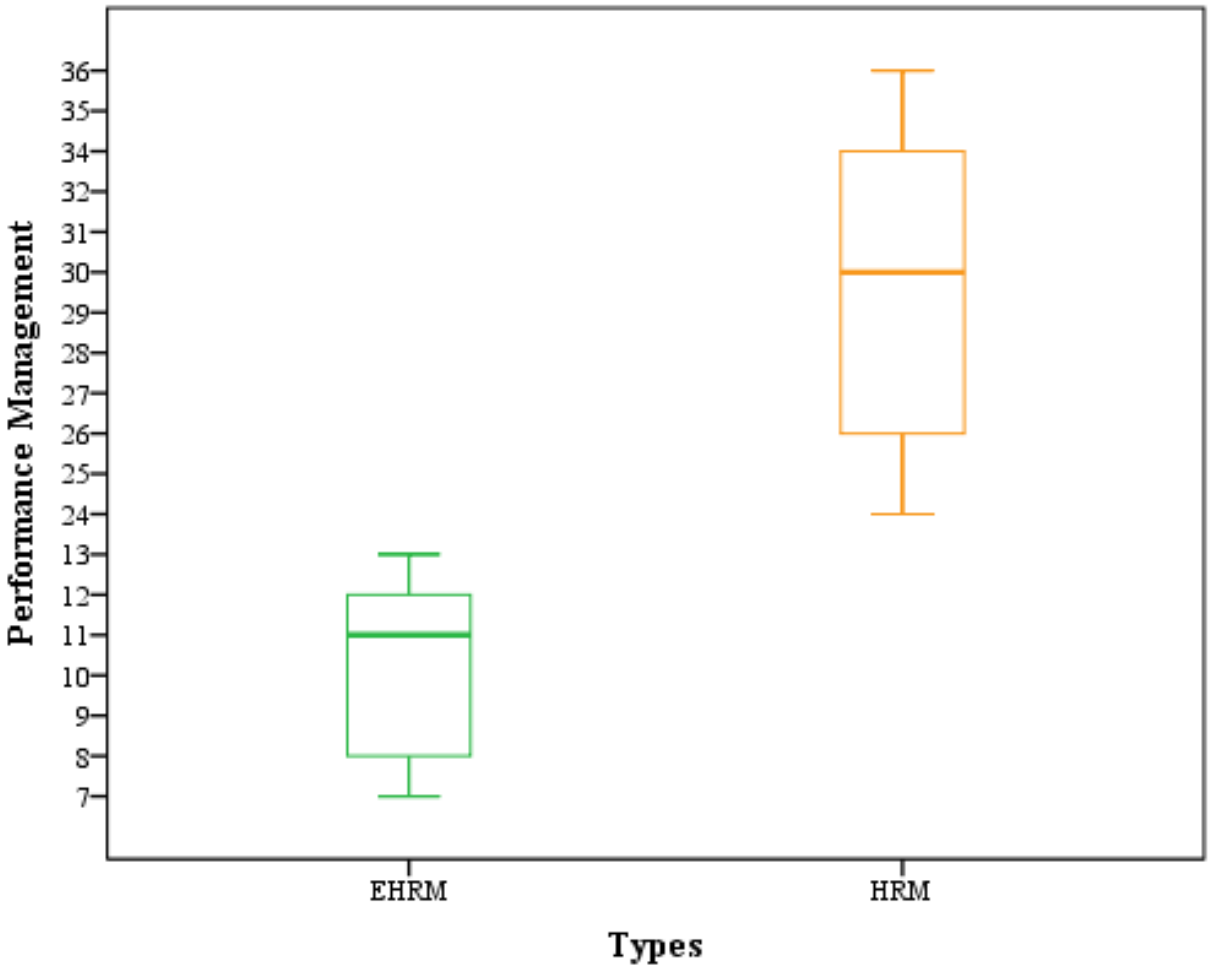


Figure 4.28: Box Plot of E-HRM and HRM of Performance Management

The performance management ranged is **12** from **24** to **36** (M=**29.7**) for normal HRM practice and ranged **6** from **7** to **13** (M=**10.3**) after implementing E-HRM (E-performance management). The standard deviation of performance management**3.789**and the SD of e-performance management is **2.037**.As shown in table 4.40, the mean decreases in the performance management time of **19.40** were significant, $p < 0.01$, $t =$ **24.329**. Therefore the result showcases that there are significant sample difference between normal HRM and E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of performance management.

Table 4.38: Performance Management Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PM1 - PM2	**19.400**	**4.368**	**.797**	**17.769**	**21.031**	**24.329**	**29**	**.000**

**p<0.01, n=30

4.5.3.6: Compensation & E-Compensation Management

In this study, the box of E-HRM and HRM graphically indicates that overall compensation management in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between HRM and E-HRM practice in compensation management. Variable compensation management (HRM) has a maximum **36** and a minimum **24** days, while E-compensation management has a minimum **3**and a maximum **8**. The mean E-compensation management days are much lower than normal compensation management time (**5.13**Vs**29.27**). The box plot for E-HRM is much lower than normal HRM process. From the graph it is clear that HRM and E-HRM practice has a clear difference in transactional time. It indicates that E-HRM take lower time than normal HRM system in compensation management. Which lingering the organizational efficiency with the help of reducing transactional time in compensation management.

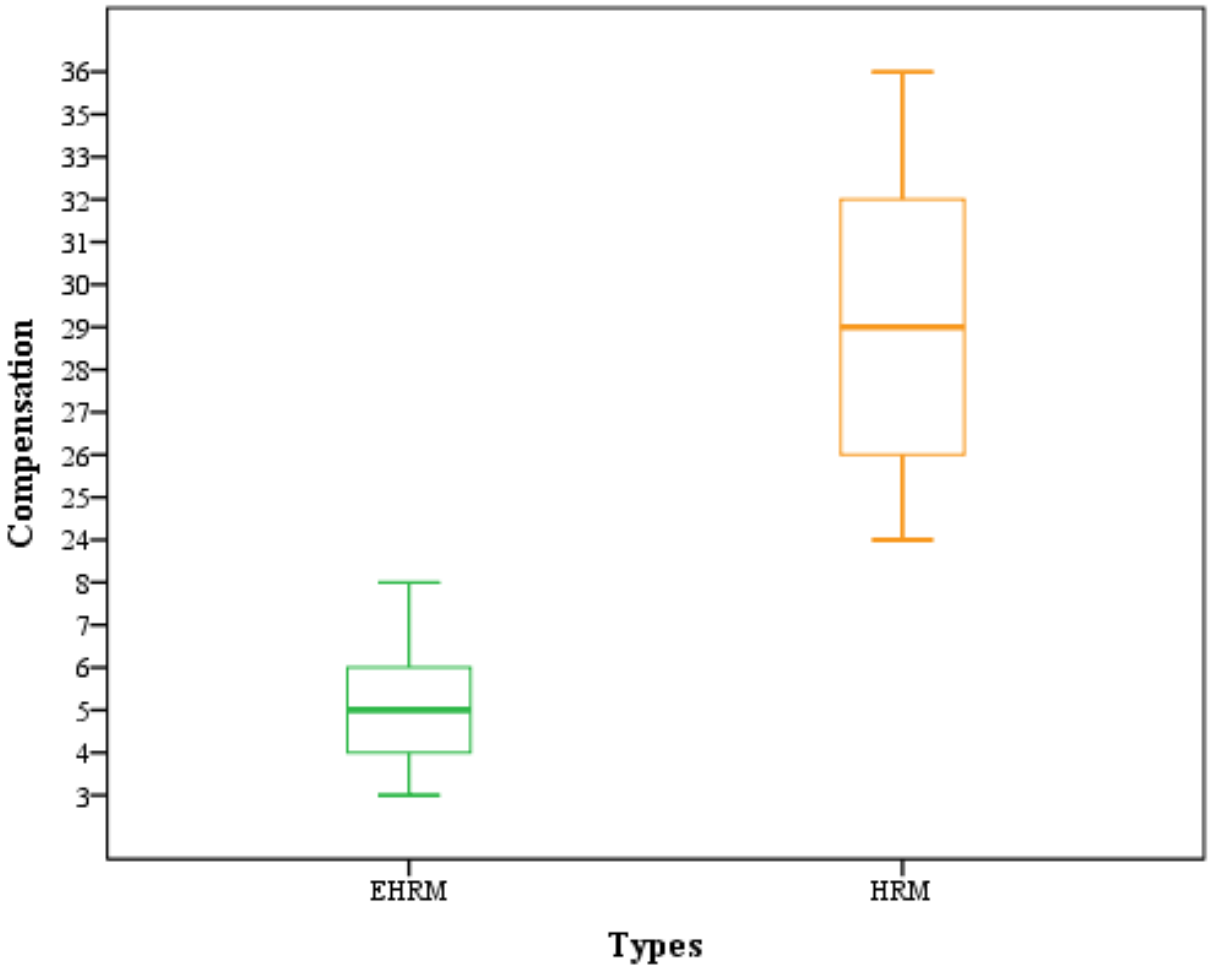


Figure 4.29: Box Plot of E-HRM and HRM of Compensation Management

The compensation management ranged from **24** to **36** (M=**29.27**) for normal HRM practice and from **3** to **8** (M=**5.13**) after implementing E-HRM (E-compensation management). The standard deviation of compensation management**3.55**and the SD of e-compensation management is **1.63**. As shown in table 4.39, the mean decreases in the compensation management time of **24.13** were significant, p <0.01, t = **33.50**. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of compensation management.

Table 4.39: Compensation Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	C1 - C2	**24.133**	**3.946**	**.720**	**22.660**	**25.607**	**33.501**	**29**	**.000**

**p<0.01, n=30

4.5.3.7: Employee Profile Handling

In this study, the box of E-HRM and HRM graphically showcases that overall employee profile handling in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between HRM and E-HRM practice in employee profile handling. Variable employee profile handling (HRM) has a maximum **8** and a minimum **16** days, while E-employee profile handling has been done on real time. In this study real time data were assume as 1 day because every comparative response collected as continuous day scale. The mean E-employee profile handling management days are much lower than normal employee profile handling time (**1** Vs **12.27**). The box plot showcases that there is a clear mean difference in HRM and E-HRM practice in employee profile handling. The reduction of transactional time helps HR executives to give more time on strategic planning to become a true partner of the organization and availability of real time data enduring HR planning.

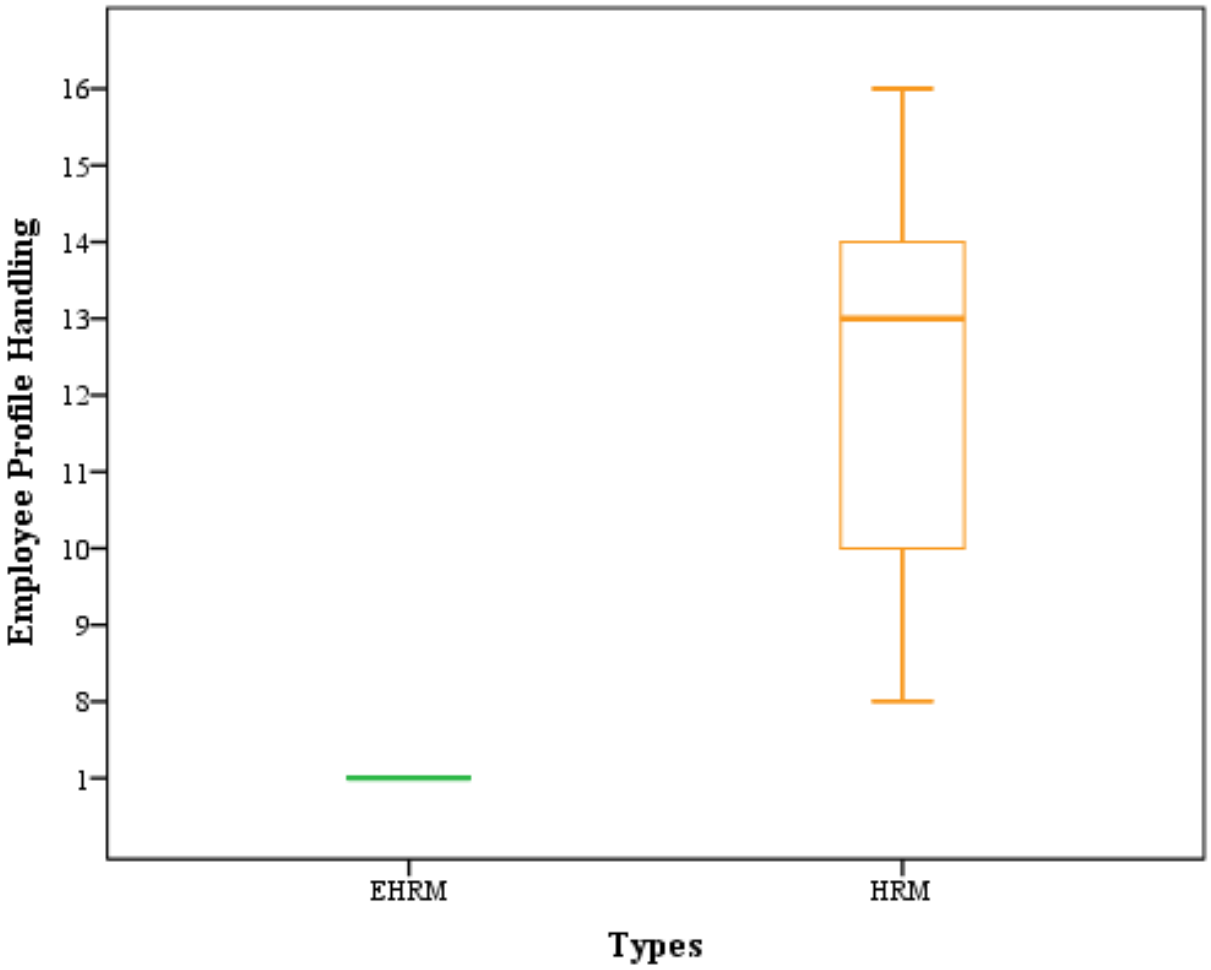


Figure 4.30: Box Plot of E-HRM and HRM of Employee Profile Handling

The employee profile handling ranged from **8** to **16** (M=**12.27**) for normal HRM practice and1 for (M=**1.0**) after implementing E-HRM (E-employee profile handling). The standard deviation of employee profile handling **2.32** and the SD of e-employee profile handling is **0** due to real time data collection and no variation in data as stated earlier. As shown in table 4.42, the mean decreases in the employee profile handling time of **11.267** were significant, $p < 0.01$, $t =$ **26.62**. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. It is evident that the E-HRM system is more efficient than normal HRM system in the case of employee profile handling.

Table 4.40: Employee Profile Handling Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	EP1 - EP2	**11.267**	**2.318**	**.423**	**10.401**	**12.132**	**26.618**	**29**	**.000**

**p<0.01, n=30

4.5.3.8: HR Planning

In this study, the box of E-HRM and HRM graphically indicates that overall HR planning in the organization is high level of agreement with each other. The box plot also suggests that there is a difference in groups between HRM and E-HRM practice in HR planning. Variable HR planning (HRM) has a maximum **34** and a minimum **24** days, while E-HR planning has a minimum **2** and a maximum **6**. The mean E-HR planning is much lower than normal HR planning time (**4.33**Vs **29.50**). The box plot for E-HRM is much lower than normal HRM process. From the graph it is clear that HRM and E-HRM practice has a clear difference in transactional time. It indicates that E-HRM take lower time than normal HRM system in HR planning. Which lingering the organizational efficiency with the help of reducing transactional time in HR planning. Effective HR planning ensures more efficient Human Resource Management.

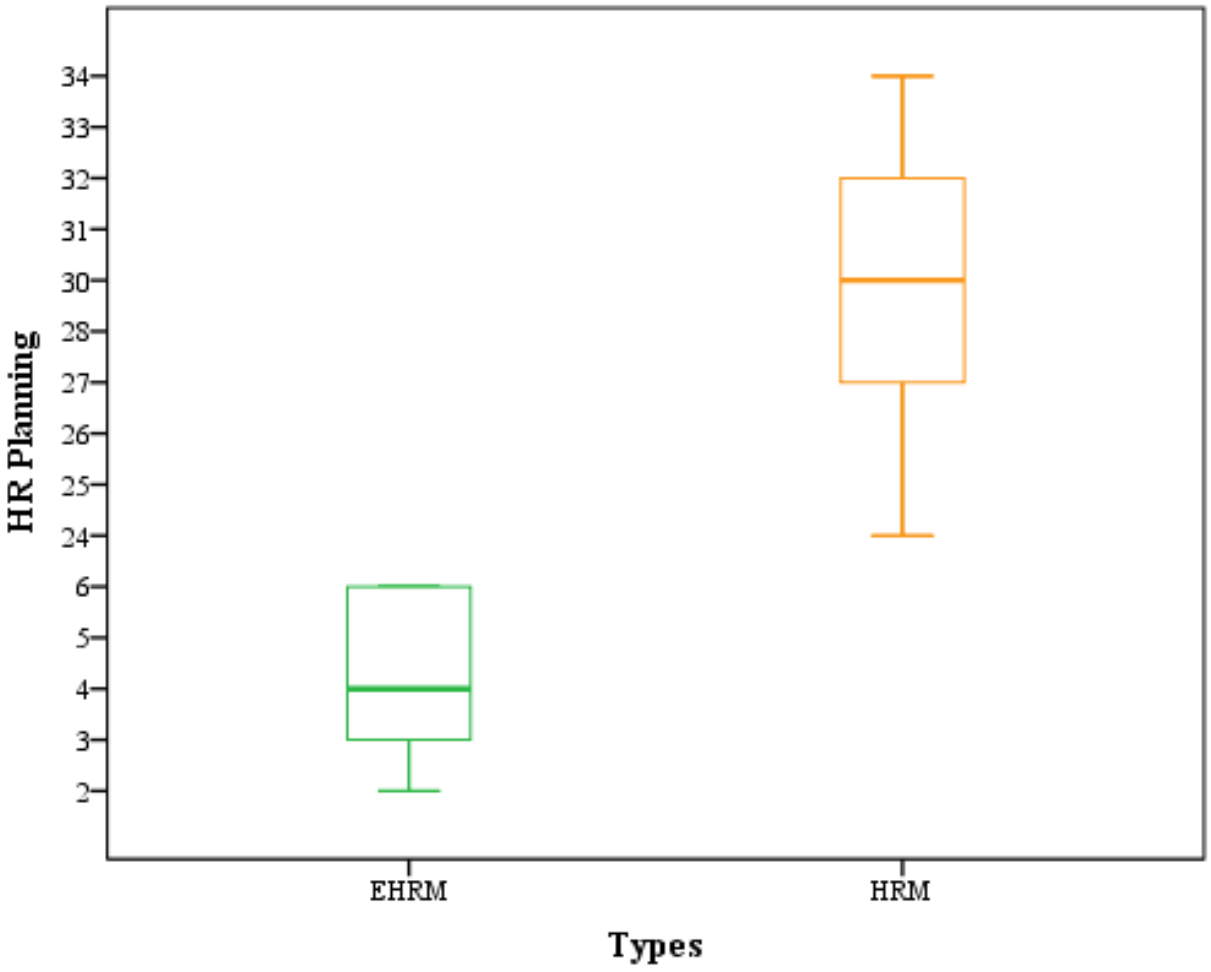


Figure 4.31: Box Plot of E-HRM and HRM of HR Planning

The HR planning ranged from **24** to **34** (M=**29.50**) for normal HRM practice and ranged from **2** to **6** (M=**4.33**) after implementing E-HRM (E-HR planning). As shown in table 4.41, the mean decreases in the HR planning time of **25.167** were significant, $p < 0.01$, $t = $ **45.845**. Therefore, the result showcases that there are significant sample difference between normal HRM and E-HRM system. It is evident that the E-HRM system is more efficient than normal HRM system in the case of HR planning.

Table 4.41: Human Resource Planning Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	HRP1 - HRP2	**25.167**	**3.007**	**.549**	**24.044**	**26.289**	**45.845**	**29**	**.000**

**p<0.01, n=30

4.5.4: Relation with e-HRM efficiency and Transactional time

To show the relation between E-HRM efficiency and transactional time scatter diagram were utilized to establish a perception based model and named it as "E-T graph. Where, E represent E-HRM efficiency and T represent Transactional time. On the basis of literature and above analysis, the model is established to represent the efficiency of E-HRM graphically. Above analysis find out that E-HRM has plays a significant role in reduction of transactional time. But the perceptions of managers towards E-HRM are so much different. This is the principle reason to establish their perception graphically with the E-T model. In the model four zones had drawn that showcase four distinct characteristics of the relation. In scatter diagram "X" axis indicates e-HRM efficiency, and "Y" axis indicates Transactional time. The characteristics of four zones have been discussed in the previous chapter.

The relations between E-HRM efficiency and transactional time vouches using scatter plot. This E-T graph indicates that there is a negative relationship between these two variables. It indicates that the improvement of e-HRM efficiency leads to reduce the transactional time. When transactional time has been reduced then the organizations are going to take competitive

advantage in the market. From the graph it is also observable that FMCG companies are now accepting E-HRM practices to reduce their day to day HR transactions.

The output of the relation showcases a negative relation. It indicates that the improvement of e-HRM efficiency leads to reduce the transactional time. The analysis of the model also supports previous statistical results in this study. From the paired sample t-test it is clear that there is a significant difference between E-HRM and HRM system.

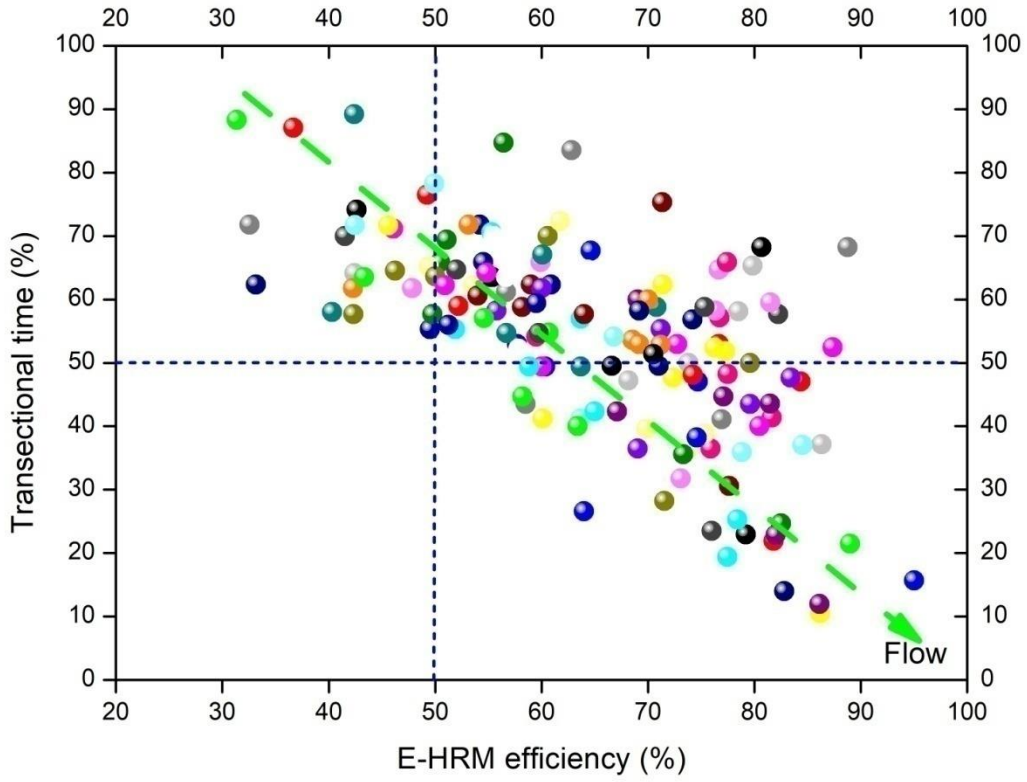


Figure 4.32: E-T Graph Plot

The E-T graph tells the story of E-HRM efficiency and transactional time. The graph highlights four distinct conditions about the relations between E-HRM efficiency and transactional time. For example, Low-High (Type A), Low-Low (Type B), High-High (Type C), and High-Low

(Type D). This is the reality of the E-HRM practice in a particular time and particular environment: which places are ideal for capture the competitive advantage, which the managers merely suit situations and which particular practice is beyond this trend.

These points are tentative, but their presentation is resolutely empirical. 'X' axes, 'Y' axes, gridlines, the term competitive advantage, and disadvantage are subjective, but the points with E-HRM efficiency and Transactional time Index values give an impression of closeness.

From the graph, we can easily understand that the maximum concentration zone is from advantage stage to competitive advantage. The result also depicts that type C categories are maximum that means FMCG companies are adopted E-HRM practice very well but day to day transactions are not minimized as per expectations. However, a trend has been found towards gaining competitive advantage which may be leading more effective HR practice.

In recent decades, many research works have been done regarding the influence of E-HRM on the different factors of the HRM transactions. Nevertheless, the relation between these two factors with their competitive advantage and disadvantage is not highlighting yet. In India, very few studies have covered this vital issue. From our study, we showcase relations between E-HRM efficiency and transactional time. We also showcase the competitive advantage and disadvantage scale according to the present condition of the organization related to the HR transactional time.

Nevertheless, still, there is very brief study remaining in this field. Our study prevails in the pioneer stage. This model needs to analyze more and implementation in different conditions which go towards more reliability. This model may be useful for any different sectors to measure

the relations. The graph support that there is a negative relation between E-HRM efficiency and transactional time.

In our study, we draw four zones to represent the relation between E-HRM efficiency and transactional time. Type 'A' zone highlights low E-HRM efficiency and high transactional time. This zone is extended from zero to fifty in X axis and fifty to hundred in Y axis. From our result, we find out some of the organizations in this category. These categories mainly indicate the competitive disadvantage stage. These organizations need to shift their position towards the competitive advantage stage.

Type B zone highlights low transactional time and low HR efficiency. This zone is extended from zero to fifty in X-axis and zero to fifty on Y-axis. In our study, we did not find any organizations in this category. Type C zone characterizes high transactional time but highly efficient HR practice. This zone extends from fifty to hundred in X-axis, and from fifty to hundred in Y-axis. In our study we find out most organizations have belonged from the category. E-HRM practice is mainly utilizing emerging technologies that may be the primary reason for high transactional time. Type D zone characterizes high transactional time with highest E-HRM efficiency. This zone extends from fifty to hundred in X-axis and zeroes to fifty on Y-axis. Some organizations are belonging to this category. The managers who love their work and those who are punctual with her work fall in this category. Type D zone showcases mainly the competitive advantage stage which is the ultimate goal of every organization.

The patterns in an E-T graph describe not just a condition is about the organizations but also provide evidence for better E-T graph. We could also derive information about manager's conditions through an E-T graph. For example, if there is highly E-HRM efficiency present but

still transactional time high then, we might suggest the working place is not comfortable for the employees or managers or need more training to improve skill. Despite this, it is essential to note that several local factors contribute to the patterns observed in the organizations; therefore, an E-T graph is not a foolproof tool that captures all the variation that might exist.

Discussion

The study commences about three objectives resulting in one hypothesis. Discussed below:

4.6: Discussion on objective I

The first objective was to give some light on the present FMCG Companies that are using E-HRM in their daily day to day HR function within West Bengal. Twenty questions were set to accomplish the first objective; and factor analysis was done. From the factor analysis, three drivers have been researched. It indicates that the FMCG sector was adopted by all the drivers related to E-HRM practice. The drivers were operational, transformational, and relational. The functions of these three drivers were briefly discussed in the background of the study.

The relational driver is the crucial factor with a total factor load of 40.48, influencing the FMCG sectors for E-HRM practice from traditional HRM. It indicates that the FMCG sector, which mostly adopted E-HRM practices for their relational working purposes such as HR planning, recruitment, selection, training, and development. This factor also showcases that HR professionals are mostly adopting relational drivers for additional possibilities in the organization, accomplishing the organization's goal. The background of the study also supports that the relational E-HRM functions can also help in reduction of transactional time (Jaquenoud, 2005).

The second factor is the transformational driver, which includes six questions with a total factor load of 16.57. Transformational drivers mainly include job design, integrated set of web-based tools, mutation of HR transaction, electronically, strategic HR task and centers of expertise. The

transformational factor defines that HR professionals have adopted this factor to gain a competitive advantage.

The third factor is the operational river, which includes five questions with a total load factor of 12.79% variance. The five questions are related to administration, time and labor management, payroll management, web presence of HR function, and transactional HR functions. This is the last but essential useful factor for HR executives, which provides them to take advantage ofa competitive market and helps them in managing the operational task efficiently.

From the factor analysis, it is clear that the FMCG sector adopts three types of drivers of E-HRM practice in the HR department for managing their day to day HR functions. The respondents from FMCG organizations assured that all the drivers are most important for their day to day transactions, and it is an advantageous system for them.

4.7: Discussion on Objective II

The second objective was to find out the significant factors of this web-based E-HRM over normal HRM function that can increase the efficiency of the entire organization. To fulfill this objective, twelve questions were set, and factor analysis was done to reduce the dimensions. From the factor analysis, three factors have been derived; the given name is Financial Benefit, Employee Satisfaction, and Strategic Capability. Primarily these three factors are providing advantages to adopt web-based E-HRM over traditional HRM.

The first factor, financial benefit, explains 35.77% of the total variance. The financial benefit includes five questions those are as follows: headcount reduction, increase output, quality improvement savings, improved data accuracy, and removal of duplication. HR professionals

must ensure that the financial benefits should help them to achieve the organizational goal more effectively. Literature also goes along with it. E-HRM practice improves productivity through headcount reduction, increased output with speed due to automation (Hawking, Stein, & Foster, 2004; Ruël, Bondarouk, & Looise, 2004; Strohmeier, 2007).

The second factor is "Employee Satisfaction," which includes three questions with a factor load of 29.26% forces the FMCG sectors to move towards E-HRM practices than normal HRM. Three questions are ease of use, improved transparency, and improved internal communication. This user-friendliness characteristic provides HR professionals and employees more satisfaction and helps them to be loyal to the organization. With the help of E-HRM, all the information is shared in the portal which is easily accessible to the employees, and it leads to employee satisfaction. An efficient communication system helps employees to build a good relationship with each other.

The strategic capability was the third factor with the factor loading of 18.62% variance among all the significant factors that lead FMCG sectors towards web-based HRM rather than traditional HRM practices. Strategic capability includes four sub-factors and those are administrative burden reduction, standardization of HR practices, competence development, and knowledge management. Previous literature also supports this result.

With the help of factor analysis, the second objective is fulfilled. These three principle factors have helped FMCG organizations to adopt a web-based HRM system over standard HRM system.

4.8: Discussion on objective III

The third objective was to measure the degree of efficiency of an organization with a web-based E-HRM system over normal HRM function in some different organizations. Correlation, multiple linear regression (MLR), paired sample t-test, and E-T graph have been adopted to accomplish objective three.

Correlation between independent (three drivers) and dependent variables (three significant factors for web-based E-HRM adoption) are significantly positive related to each other. The correlation between operational drivers and three web-based E-HRM factors are (.542, .491, .551) significantly and positively correlated with each other. The relation with relational E-HRM and other variables coefficients are (.734, .721, and .742) positively correlated and significant at 0.01 level of significance based on the 150 observations. The relation with transformational E-HRM and other variables coefficients are (.356, .338, and .342) positively correlated and significant at 0.01 level of significance.

Multiple linear regression (MLR) also defines that all the independent variables are significantly and positively lead dependent variables.

MLR 1 showcase that the adjusted R2 of this MLR model is .618 with the R2 = .626. This indicates that the LR explains 62% of the variance in the data. The Durbin-Watson test value 2.26 vouches that there is no first-order autocorrelation in the data because the value lies within 1.5 to 2.5. Multiple regression between the types of E-HRM functions and strategic capability shows that three types of E-HRM contribute significantly to the model ($F = 81.512$, $p < .010$) account for 62 % variance in strategic capability. One unit changes in relational function leads to .447 units of positive changes in strategic capability. So, positive changes in the relational function lead to more positive strategic capability. One unit changes in transformational function

highlights .086 units of positive change in strategic capability. One unit changes in operational showcases .156 units of positive change in strategic capability.

MLR 2 between the types of E-HRM functions and financial benefit shows that three types of E-HRM contribute significantly to the model (F = 65.253, p <.010) account for 56 % variance in financial benefit. All the p values are significant.One unit change in relational functionleads to .625 units of positive changes in financial benefit. So, positive changes inthe relational function lead to more favorable financial benefits. One unit change in transformational functionhighlights .128 units of positive change in financial benefits. One unit change in operational function leads.161 units of positive change in financial benefit.

MLR 3 between the types of E-HRM functions and employee satisfaction shows that three types of E-HRM functions contribute significantly to the model (F = 77.779, p <.010) account for 60 % variance in employee satisfaction. As a predictive analysis, multiple regression is used in our study to show the relations between one dependent variable and two or more independent variables. In our study, independent variables explain 60 percent fluctuation of the dependent variable. All the p values are significant.One unit change in relational function leads to .435 units of positive change in employee satisfaction. So, positive changes inthe relational function lead to more positive employee satisfaction. One unit changes in transformational function highlights .097 units of positive change in employee satisfaction. One unit change in operational function showcase .148 units of positive change in employee satisfaction.

MLR analysis showcases that there is positive but different units of influence independent variables (operational, transformational, and relational drivers of E-HRM) towards dependent variables (strategic capability, employee's satisfaction, and financial benefit).

The result of the paired sample t-test indicates that there is a significant difference between the sample mean of different functions of HRM and E-HRM.

The result of the **Recruitment** showcase that the mean decreases in the recruitment time of **7.26**days from HRM to E-HRM, were significant, t = **9.19,** p<**0.00**. Therefore, the result showcases the E-HRM system is more efficient than the HRM system in the case of the recruitment process. The works of literature could reveal that E-HRM is used to support recruitment and selection processes(Allen, Mahto, & Otondo, 2007; Girard & Fallery, 2010; Oswal & Narayanappa, 2014; West & Berman, 2001).

The **selection** ranged from **17** to **24** (M= **20.37**) for normal HRM and from **7** to **12** (M=**9.20**) after implementing E-HRM (E-selection). The standard deviation of selection **2.266**and the SD of e-selection is **1.645**. The mean decreases in the selection time of **11.16** were significant, p<0.01, t = **21.34**. Therefore, the result showcases that there is a significant sample difference between normal HRM and the E-HRM system. The E-HRM system is more efficient than normal HRM system in the case of the selection process (Girard & Fallery, 2010; Oswal & Narayanappa, 2014).

The **learning** ranged from **54** to **67** (M=**61.33**) for normal HRM and from **11** to **18** (M=**14.43**) after implementing E-HRM (E-learning). The mean day decreases in the selection time of **46.9** were very significant, p <0.01, t = **64.87**. The background of the study also supports that the E-HRM system is more efficient than normal HRM system in the case of learning process (Bharti, 2016; Chae, Prince, Katz, & Kabst, 2011; Lengnick-Hall & Moritz, 2003; Lepak & Snell, 1998; Martin, 2005; Ruta, 2005).

The **training** range is **11** from **8** to **19** (M=**13.00**) for normal HRM practice and range **6** from **1** to **7** (M=**2.83**) after implementing E-HRM (E-training). The mean day decreases in the training time of **10.167** were significant, p <0.01, t = **15.81**. It indicates that the transactional time for training is much reduced due to the uses of the E-HRM system. The literature also supports that e-training system is more efficient than training system (Hooi, 2006; Lengnick-Hall & Moritz, 2003; Lepak & Snell, 1998; Martin, 2005; Parry & Tyson, 2010; Reddington, Martin, & Bondarouk, 2011; Ruta, 2005; Sukarni, 2017; Troshani, Jerram, & Rao Hill, 2011).

The **performance management** range is **12** from **24** to **36** (M=**29.7**) for normal HRM practice and range **6** from **7** to **13** (M=**10.3**) after implementing E-HRM (E-performance management). The mean days decreases in the performance management of **19.40** were very significant, p <0.01, t = **24.329**. Several researchers also support the result, such as (Bharti, 2016; Lengnick-Hall & Moritz, 2003; Lengnick-Hall & Lengnick-Hall, 2006; Lepak & Snell, 1998; Martin, 2005; Parry & Tyson, 2010; Ruta, 2005; Walker, 2001).

In the case of **compensation management**, it ranged from **24** to **36** (M=**29.27**) for normal HRM practice; and from **3** to **8** (M=**5.13**) after implementing E-HRM (E-compensation management). The mean decreases in the compensation management time of **24.13** were significant, p <0.01, t = **33.50**. Therefore the result showcases that the E-HRM system is more efficient than normal HRM system in the case of compensation management (Bharti, 2016; Parry & Tyson, 2010).

The **employee profile** handling range from **8** to **16** (M=**12.27**) for normal HRM practice and1 (M=**1.0**) after implementing E-HRM (E-employee profile handling). The mean decreases in the employee profile handling time of **11.267** were significant, p <0.01, t = **26.62**. With the help of

technology, E-HRM provides transparent, more accurate, real-time data to handle employee profiles in real-time (Baldwin, 2007; Ulrich, 2019).

The **HR planning** range from **24** to **34** (M=**29.50**) for normal HRM practices and range from **2** to **6** (M=**4.33**) after implementing E-HRM (E-HR planning). The mean days decreases in the HR planning time of **25.167** were very significant, $p < 0.01$, $t = $ **45.845**. In the case of normal HRM, HR professionals invest an average of 29.5 days for HR planning, while E-HRM helps them to plan HR tasks within 4.33 days. The background of the study also supports the result (Oswal & Narayanappa, 2014; Stone & Dulebohn, 2013; Strohmeier, 2007; Tannenbaum, 1990).

At last, a model (graph) was build based on the respondent's perception of E-HRM efficiency and transactional time. The E-T graph showcases that there is a negative relation between E-HRM efficiency and transactional time. In the graph, four distinct zones were drawn based on four distinct characteristics of HR professionals. The zones are Low-High (Type A), Low-Low (Type B), High-High (Type C), and High-Low (Type D). According to the position in the graph, the graph will find out the characteristics of the respondents and what needs to improve for taking more advantage.

In this study, based on the result null hypothesis is rejected, and the alternative hypothesis accepted. This indicates that different factors associated with the E-HRM system have a significant impact on the overall efficiency of the organization.

Findings of the Study

4.9: Findings

Though the FMCG sector is one of the fast-growing service sectors in India, researches do not provide a clear idea of measurement of the benefits of E-HRM utilization on different types of E-HRM practices. This study gives on the light on the possible influence of different E-HRM practice on different types of significant factors such as financial benefit, customer satisfaction, and strategic capability for web-based HRM practice than normal HRM system.

Our empirical result shows that operational, transformational, and relational E-HRM practice positively influenced different types of benefits which enhance to achieve the organizational goal. In our study, we have found that operational, transformational, and relational E-HRM practices have a very significant direct impact on financial benefit, customer satisfaction, and strategic capability. These benefits over normal HRM provides HR professional to keep busy in the strategic part of the organizations which ultimately keep lingering efficiency of the organization.

Our empirical study confirms that the drivers of E-HRM practice are a significant determinant to measure the HRM efficiency and benefits in FMCG Company.

This study also indicates that there is a clear mean difference in the functions of HRM and E-HRM practice. This makes HR professionals more attractive to use the E-HRM system than normal HRM.

Our graphical model confirms that E-HRM practice is a significant relationship with the transactional time reduction of an organization.

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