Effect of Incentives Based Two Factor Theory on Employee Performance in Telecom Sector of Pakistan

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A R T I C L E   I N F O

A B S T R A C T

Motivated employees are the building block of any successful organization. This study is executed to analyze the relationship between incentive system and employee performance in Telecom Sector of Pakistan. The theoretical framework of this research is based on the effect of Two Factor Theory on employee performance i.e., motivation factors and hygiene factors. Employees of different telecom sector departments were being focused through the detailed survey by making use of questionnaire. The results of research show that incentive systems have significant impact on employees' performance. This research is presented in structured way to help practitioners to analyze the factors that may help them to enhance their employees' performance.

1.   Introduction

A positive attitude of employees is an enabler for an organization to perform well and achieve its goals successfully and it can be reinforced by keeping employees satisfied and motivated towards doing their best for organization's interests. They boost up employee's morale to put in more effort and show commitment towards work [1]. Incentives also have a psychological effect on employees because they feel their efforts are being noticed and they are being appreciated based on their performance. Incentives can be awarded to employees in different ways like bonus pay, profit sharing, Stock incentives, Retirement incentives, Vacation incentives and prizes [2]. Increased employee performance represents an important objective for companies in order to maintain their business success. Consequently, the organizational effort is directed towards improving individual performance, taking into account the organizational context in which the performance is produced. Formulated this way, contextual factors, such as cultural norms or the impact of new technologies, characteristic to all organizations, are part of performance management processes and need to be accounted for as an important research interest. Furthermore, new tactics concerning employee performance incentive systems in different organizations should be based on their precise structural framework, though developing new models on organizational contexts in relation to employee performance incentives is of outmost theoretical and practical interest.

Therefore, incentives are very crucial and can certainly work to achieve the goals of an organization. The critical requirements for incentives for an organization are:

1.   To enhance the productivity.

2.   To develop the sense of pulling together for a common goal by increasing the strength of relationship bonds between the co-workers and departments.

3.   To increase the commitment in work achievements and performance.

4.   To satisfy a worker psychologically which accelerates the job satisfaction successfully and avoid give up.

5.   To satisfy a worker psychologically, increasing job satisfaction and strife in work.

Therefore, in the light of this research, the main purpose of this current work is to identify the effect of incentives depending upon two factor theory i.e. Hygiene and Motivational factors with a significant influence on employee performance appraisal process and consequently, with a positive impact on increased employee work performance.

2.   Literature Review

Incentives create an atmosphere of keenness at work place and promote a healthy competition among employees. They can also be called as an influencing factor which stimulates job satisfaction among employees by encouraging the individual to work harder and harder [3]. The individual's skills are more enhanced when an incentive system raises the individual's spirits; his or her internal motives which then leads very diligent efforts [4]. The success of any organization whether it is private or public lies in its abilities to fully exploit the employee's

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abilities and talents to its own benefits. So, an incentive is that influential factor which is directly proportional to an individual's productivity and efficiency. Hence, the main idea is to align the organizational goals to the personal goals of the individuals [5].

2.1   Classification of Incentives

Two main primary types of incentives can be classified as incentives based on the purpose and incentives based on the kind of incentive itself [6]. All these types of incentives are explained in literature, however, most of the classification is vague, that no concrete differentiation for each type has been defined. So researchers divided them into two major types for their own convenience. These primary types are further classified into two types respectively as depicted in Fig. 1.

2.2   Theories of Motivation

Some important theories of analyzing the effect of motivation on employee performance are summarized in Table 1.

2.3   Two Factors Theory

According to this theory all individuals working in an organization may not be satisfied with the wages they are being given for work or satisfying working conditions provided rather they want achievement, responsibility, recognition, advancement and nature of work itself [13]. The two-factor theory has been clearly explained in Fig. 2.
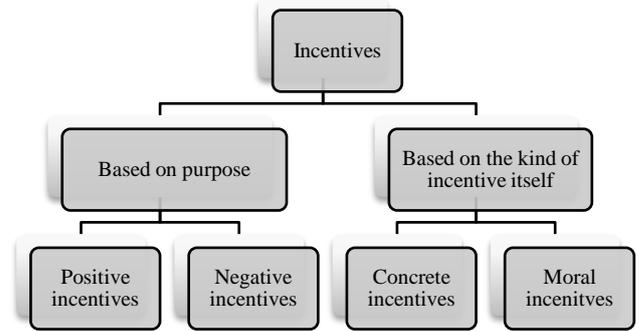

Fig. 1:   Classification of incentives

Table 1:   Evolution of definitions

| No	Author & Year	Theory of motivation influencing employees performance
1.	Maslow's Hierarchy Theory [7]	Maslow's presented a theory for employee's satisfaction and performance by giving a simple but elaborated five step model which explains: -
		Self-actualization: challenging projects, opportunity of innovation, creating new paths for growth of organization.
		Esteem: self-recognition, intelligence, strength to excel in that field by focusing on given projects.
		Social needs: workplace environment, team work, associations, membership etc.
		Safety and security needs: social security, financial opportunities, freedom of speech.
		Physiological needs: health, shelter, medical treatments.
2.	Herzberg Theory [8]	According to this theory all individuals working in an organization may not be satisfied with the wages they are being given for work or satisfying working conditions provided rather they want achievement, responsibility, recognition, advancement and nature of work itself.
3.	Vroom's Expectancy Theory [9]	He suggests that level of motivation can be determined from a person's observation of the ending.
4.	Self-determination theory Edward Deci and Richard Ryan [10]	They have focused on the drive which makes people to progress by developing a sense of fulfillment. New experiences are crucial for mounting a unified sense of self.
5.	Alderfer's Hierarchy Need Theory [11]	Existence: refers to physical and social needs, materialistic existence of things.
		Relatedness: interpersonal relations between different levels of hierarchy model.
		Growth: personal self-esteem, sense of achievement, reliability etc.
		Alderfer's theory mostly explains that more than one need can be operative at the same time, by reducing frustration and regression.
		Frustration in higher level need = satisfaction in lower level need.
6.	Reinforcement theory [12]	Based on 'Law of effect', which states individual's attitude is a function of its consequences. This theory ignores inner feeling of individual rather it only focuses on one's behavior after its actions. It implies how individual learns positive behavior.
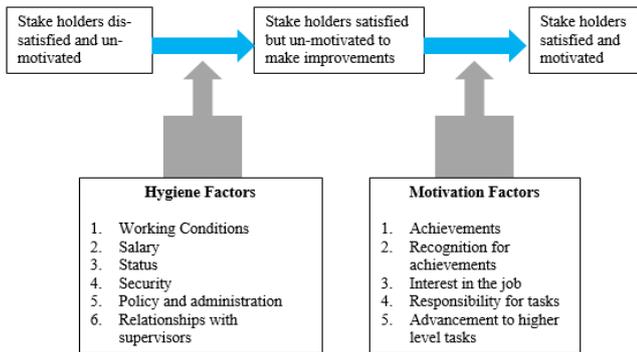
Fig. 2:   Herzberg theory of motivation [14]

2.4   Elements of Herzberg's Model

2.4.1   Job satisfaction

He suggested that job satisfaction refers to the emotional attitude of an individual. The idea of job satisfaction can make a general clarification, without involvement of processes, causes and job satisfaction to orientation. Satisfaction is basically an idea by which an employee can work in numerous tasks and arrangements to approach the surface, to be satisfied [8].

2.4.2   Employee performance

Performance can be defined as organization of a program of action to attain their objectives, and how to achieve a precise goal for a measure [14] proposed that employee performance indicators can be divided into behavioral performance (attendance and retention of employees, work or service quality rate) and service performance (customer satisfaction rates and access) [15]. Proposed that return to work is divided into two categories: the performance of the task and contextual performance.

2.4.3   Motivational factors

The success of any organization heavily depends on productivity of its employees. It was observed that the positive attitude of any employee is strongly affected by the factors which motivates or demotivates within certain workplace environment. All the above stated factors that certainly affect the employees' satisfaction and enhance his interest level, are considered to ab motivational factors. Results will show the impact of each factor towards analyzing employee performance. For instance, some factors will have a direct and strong impact on performance while others will have less or weak impact. But overall results will depict how motivational factors act as a driving force towards better performance.

2.4.4   Hygiene factors

As the name indicates hygiene factors means factors related to cleanliness of certain environment or condition. These are responsible for creating distress or dissatisfaction among employees related to their job. Herzberg's model is famous for its dual nature that not only emphasize on motivation but also on the factors which cause dissatisfaction. Thus, the overall performance of an employee is greatly reduced. There are many such factors but most important are used in our research are work place conditions, job equipment, policy and administration, security, relations with supervisors, assistants and peers and personal life. Motivation and hygiene factors are same but behave in different manner. Motivation increases the job satisfaction for a long-term while hygiene factors gives satisfaction only for short term purpose [16].

3.   Significance of Study

No doubt, the employees' incentive system is one of the crucial elements within the organizations, especially where labor is cheap and working environment and human resource utilization is very aggressive. Pakistan is one of the Asian countries where labor is cheap and having no definite structures in private sector organizations. This research primarily focuses on the private sector organizations as compared to government sector organizations as government organizations usually have definite organizational structure. Incentives are supposed to be most effective factors that encourage employees to put their maximum effort to achieve their objectives. This research will present the analysis in structured way that for what reasons people want to work in private telecom sector of Pakistan and is there any reason of incentive system that pulls them towards telecom sector. The success of any organization weather it is private or public lies in its abilities to fully exploit the employee's abilities and talents to its own benefits. Therefore, incentive is an influential factor which is directly proportional to the individual's productivity and efficiency. Hence, the main idea is to align the organizational goals to the personal goals of the individuals. The results of research will show how strong is the impact of efficient incentive system on employee's overall performance that how a fair and effective incentive system can increase the relative strength and productivity of employees. How mediating factors such as motivators and hygiene factors can increase the job satisfaction or dissatisfaction among employees. The present results will also be used to compare the employee's performance among different telecom companies in Pakistan. The obtained results show the strong impact on incentives of employee's overall performance. The three influential factors that are interpersonal relationships, workplace environment and nature of work being done; these have potential to affect employee's performance at higher level. Without reasonable incentives, may contrarily influence the hardworking and dedicated employee's performance; it may also debilitate their productivity and efficiency at work which declines the chances of achieving the promising objectives of the organization [5].

4. Research Framework and Design

The main purpose of our research is to find the relationship between incentive system and employees performance of Telecom Sector of Pakistan. We will analyze whether the incentive system is efficient or not and the impacts of Herzberg's model, that are motivators and hygiene factors, have any direct or indirect effect on employee performance in Telecom Sector of Pakistan. The theoretical framework is developed on the basis of the literature review discussed earlier.
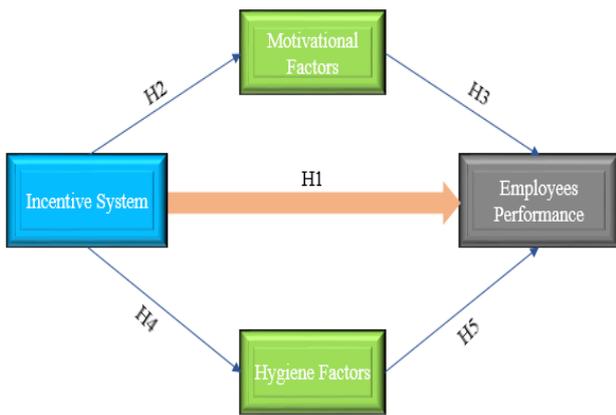
Fig. 3:   Proposed theoretical framework

5. Research Methodology

There are different types of research such as exploratory study or research means finding something new or gaining new insights to find out what is happening [17]. This type of study is normally done when the problem is not clear. For this purpose, the literature needs to be searched per the findings, interview of the experts of the relevant field, and focused group interviews, to find the problematic areas. Exploratory studies mostly are conducted through qualitative analysis method, using inductive approach. Descriptive Study or research means to explain or describe the actual details of the person, process, phenomenon or the problem on which data will be collected [18]. Explanatory study or research creates and explains the cause and effect relation between the different variables. In this type of research, the hypothesis is verified by identifying and examining the relationship between the independent and dependent variables. Explanatory studies mostly are conducted through quantitative analysis method, using deductive approach. Descripto-explanatory research is a mixture of descriptive and explanatory research. This type of study is used commonly when it is important to describe and study a phenomenon or issue to explain the relationship between independent and dependent variables. So, the research methodology adopted in our research is described in the Fig. 4.
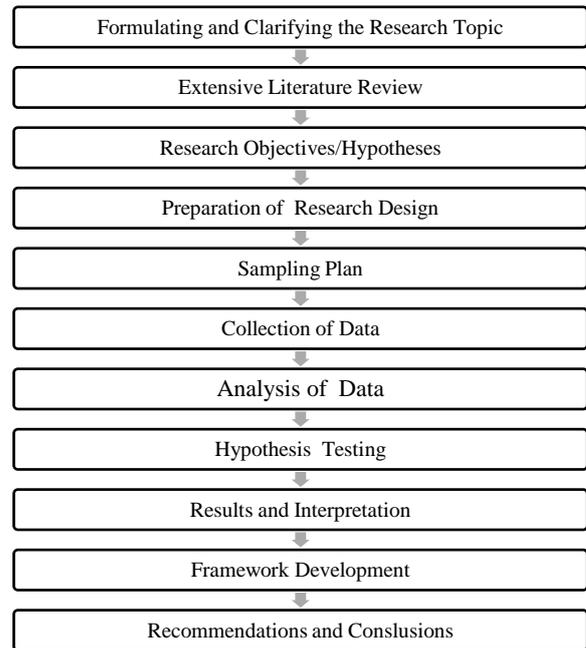
Fig. 4:   Research methodology

A questionnaire was developed for conducting a survey. The sampling technique was used to conduct the study by choosing random respondents from different departments in Telecom sector. The questionnaire was distributed to more than 350 respondents. The response rate was above 75%. The focus of our research is telecom sector which is based in Islamabad/Rawalpindi region; however, the survey was conducted in Lahore and Karachi as well. For validity of the questionnaire, pilot run of questionnaire is in Table 2:

Table 2:   Cranach alpha for pilot testing

Constructs	Cronbach's alpha	No. of items
Efficient Incentive system	0.813	7
Motivational factors	0.838	23
Hygiene factors	0.811	6
Employees performance	0.824	11

All the variables in this research are good and reliable as meeting the minimum acceptance level which is 0.7 which shows that the variables could be used for further analysis in the study. In this study the theoretical model was such that there were two mediating variables and proper attention and care has been exercised to measure and gather the data. The further analysis was also carried out to measure the impact very carefully.

6. Data Summary and Analysis

In order to successfully run statistical tests, it is mandatory for the data to be normally distributed. The values of skewness for all the variables lies between +1

to −1 [19] demonstrating that the data distribution is typical/ normal. Moreover, the values of the result for kurtosis for all the variables are within the range ± 3 demonstrating that the data distribution is normal.

6.1 Descriptive Testing

Table 3 presents the descriptive statistics and these results demonstrate the minimum and maximum value, average value measured by average, the dispersion of the series measured by the standard deviation and the value of the asymmetry to check if the series are positively or negatively biased in the range -1 to +1 considered a normal distribution. The kurtosis values were also identified, which represents the peak of the curve, of the series of values used in the study.

6.2 Interferential Analysis

Statistical correlation is the association among different constructs, identifying whether the relationship is positive or negative. In Table 4, a linear relationship is identified if the value lies between ±1.0, whereas a value greater than zero indicates a positive linear relationship and a value less than zero indicate a negative linear relationship. A value that is equal to zero signifies no linear relationship.

6.3. Regression Analysis

Simple linear regression uses a single independent variable then multiple regression analysis is a statistical technique that involves the prediction of an unknown value of the dependent variable across two or more independent variables and analyzes the linear relationship between dependent and independent variables. It can also be used to infer cause and effect between the independent and dependent variables as explained in Table 5, whereas coefficient for regression analysis and regression weights have been explained in Table 7 and Table 8 respectively.

6.4 Analysis of Variation (ANOVA)

In Table 6, analysis of variance shows that F = 121.091 with sig = 0.000 which means the model has sufficient explanatory power with regards to variance in employee's performance which is dependent variable in our research accounted against the predictors; Efficient incentive system, Motivational factors and Hygiene factors. At this point in the research, it is decided that the model is fit enough to proceed further with the results of regression analysis and conclude the hypothesis testing process.

Table 3:   Descriptive testing

	N	Min	Max	Mean	Standard deviation	Variance	Skewness	Kurtosis
Efficient incentive system	250	1.00	4.21	3.1739	0.72623	0.508	0.541	0.144
Motivational factors	250	1.00	4.64	3.0346	0.65133	0.422	0.277	-0.186
Hygiene factors	250	1.00	5.00	2.2738	0.74283	0.591	-0.418	0.051
Employees performance	250	1.00	5.00	4.4828	0. 82746	0.612	0.402	-0.025

Table 4:   Correlation matrix

		EIS	EP	MF	HF
EIS	Pearson correlation	1.000	0.758**	0.597**	0.485**
	Sig. (2-tailed)		0.000	0.000	0.000
EP	Pearson correlation	0.758**	1.000	0.588**	0.305**
	Sig. (2-tailed)	0.000		0.000	0.000
MF	Pearson correlation	0.597**	0.588**	1.000	0.306**
	Sig. (2-tailed)	0.000	0.000		0.000
HF	Pearson correlation	0.485**	0.305**	0.306**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed)

Table 5:   Regression analysis model summary

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.721[a]	0.592	0.596	0.51334

a. Predictors: (Constant), EIS, MF, HF

Table 6: Analysis of variation (ANOVA[a])

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	121.403	4.00	31.152	121.091	0.000[b]
	Residual	103.753	247	0.273		
	Total	225.156	251			

a. Dependent Variables: EP

b. Predictors: (Constant), EIS, MF, and HF

Table 7: Coefficient[a] for Regression Analysis

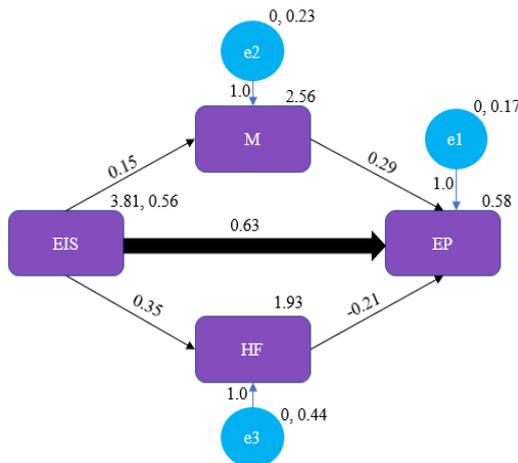| Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. error	Beta		
1	(Constant)	2.272	0.200		2.352	0.000
	EIS	0.121	0.059	0.212	7.223	0.000
	MF	0.110	0.053	0.208	5.769	0.004
	HF	0.102	0.049	-0.170	3.071	0.001

[a] Dependent variables: EP

Fig. 5: Structural model specifications using AMOS

7. Structural Equation Modelling (SEM) after Mediation

SEM can be calculated by proposed model which has been described earlier in section 2.4. According to proposed model, efficient incentive system is an independent variable and employee performance is dependent variable. While Motivational factors and hygiene factors are mediating variables. For SEM, path analysis is done using AMOS, in which dependent variable is endogenous variable, also called decision variable while independent variable is exogenous variable. All variables are observed variables while there are three error term variables (e1, e2, e3). AMOS performs iterations to some limit so that the desired model can be obtained. We can make some modifications in our proposed model in form of adding or deleting any

relationship, so that specific hypothesis could be accepted or rejected.

7.1 Fitness of Model

Chi-Square = 12.556

Degree of freedom = 1.00

Probability level = 0.023

Table 8: Regression weights: (Group number 1-Default model)

	Estimate	S. E.	C.R.	P	Label
M ◄ – – – EIS	0.155	0.045	3.462	***	Par_2
HF ◄ – – – EIS	0.348	0.062	5.640	***	Par_5
EP ◄ – – – EIS	0.635	0.042	15.164	***	Par_1
EP ◄ – – – M	0.287	0.059	4.836	***	Par_3
EP ◄ – – – HF	-0.213	0.043	-4.960	***	Par_4

8. Discussion

8.1 Main Effect

In order to investigate the effect of efficient incentive system on employees performance, the study was carried out by using Herzberg's model which is also called Dual-factor theory, by incorporating dual factors; Motivational factors and Hygiene factors, in the proposed framework. The whole idea was to observe whether the dual factors affect the relationship between incentive system and employee's performance or not (Table 9). From the results of inferential analysis, we came to know that there is a direct and strong relation between incentive system and employee's performance as well as both dual factors also contribute towards strengthening of this direct relation.

Table 9: Standardized regression weights: (Group number 1–Default model)

	Estimate
M ← EIS	0.235
HF ← EIS	0.366
EP ← EIS	0.742
EP ← M	0.221
EP ← HF	-0.237

The dependent variable (Employees performance) was regressed on all three independent variables. There is a direct relationship between efficient incentive system and employee's performance having (B = 0.121) with significant value of sig < 0.05. This shows that incentive system and employees performance are directly related with R= 0.551 values which shows it contributes to 55% variation towards dependent variable.

8.2 Mediation Effect

Another independent variable is motivational factors which also has some significant value of (B= 0.110) along with sig = 0.004 which is <0.05. Thus, it shows it is not a direct independent variable but causing a mediation effect between incentive system and employees performance. Employees perform better when they are motivated, not only financial based incentives but some extrinsic factors such as job security, appreciation from co-workers or managers, acknowledgment of work, vacations or health insurances and most important performance based promotion mechanisms. All these factors greatly contribute towards positive change in employee's performance.

Table 10: Summary of inferential analysis

Hypothesis	Results
Efficient incentive system has direct positive relation with employee's performance	Supported
Efficient incentive system has direct positive relation with Motivational factors	Supported
Motivational factors have direct positive relation with employee's performance	Supported
Efficient incentive system has direct positive relation with Hygiene factors.	Supported
Hygiene factors have direct positive relation with Employees performance	Partially Supported

Another mediating variable is Hygiene factor, with (B= 0.10) and sig<0.05, which indicated that it is also not a direct independent variable but a mediating one. But its mediation effect is somehow less those motivational factors. Hygiene factors include the cleanliness and lighting at the workplace, the office management and organization, security provided in office timings, relations with co-workers or peers etc.

From the above results, we can observe there are two mediating, motivators and hygiene, factors. As motivator factors have strong correlation with employee performance however, hygiene factors do not show significance correlation with employee performance. The HF variable has least regression value that is R^2 = .011 with beta value= −0.170. This shows that HF partially supports the hypothesis "HF has direct effect on Employee performance". The results can further verified by structural equation modeling which shows the standard estimate weights between HF and EP = −0.237, a negative value shows very weak relationship between HF and EP. Summary of the whole research has been explained in Table 10.

9 Conclusions

From our research, there have been many factors concluded depending upon their importance, implications as well as limitations. Here now we are going to discuss some highly active factors. The most important is salary based incentive. From results, we can easily examine that majority of people state that periodic increase in salary is the main reason of either shifting from public sector organization to private sector organization. The young lot, which is energetic and enthusiast, wants to work day and night but on attractive salary packages. Second thing is the different types of incentives offered in private sector organizations. They want to make their best employees more loyal to company, and determined to their assigned task. But the choice of incentive is limited.

At the start of their careers while they have energy, want to work to their full potential, they prefer private sector organizations. Regardless to the time bounding factor they focus on attractive salary packages. On the other hand, public sector organizations have an advantage of limited timings. There are specific in and out timings and after off time, you need not to worry about your job tasks much. Whereas in private sector you have to be alert or on call after getting off from the office. While discussing with various respondents, they have their own opinions, constructive or destructive regarding their job scope. Either they are satisfied with the responsibilities that they perform or they have some dissatisfaction. But with the passage of time it happens mostly because job becomes autonomous. Same type of work being performed makes it less interesting.

10. Recommendations

Incentives should be connected essentially with the performance level as to recognize the outstanding employees per their performance; this will upgrade the workers to do their best in order to progress their performance, and consequently incentives will be connected to improve the performance. The results of performance evaluation should inevitably be the base for both appreciation and punishment, especially when using

either positive or negative incentives as to guarantee achieving the purposes of incentive and bonuses regulations. Performance based-evaluation must be transparent: there was a question in our questionnaire that is it getting difficult to evaluate high or low salaries on performance base. And most of the people gave response that yes, it's getting almost impossible to make a performance based evaluation transparent.

Implementation of performance and development plan (PDP): People were asked about the implementation of performance and development plan that either their companies emphasize on training and development of their employees or they just worry about their profit building. Then mostly respondents say that their companies take initiatives towards this step before starting any project but firstly they try to select experienced people for it to get maximum performance. It has been observed that public sector organizations are moved toward wage compression, Due to continue fluctuation in country economics, most of the people shift toward private sector organizations for better salary packages. One of the main factors of fast growing economy of private sector is excessive chances of promotion in a short time span as compared to public sector organization. There is overstaffing factor that badly damaging the performance of public sector organization.

Effects of hygiene or motivational factors on employee's performance: There is a prominent effect of these hygiene and motivational factors on employee's satisfaction or dissatisfaction. These are the factors which affect daily base working performance of every employee regardless its job specification and designation. Employees feel motivated by getting rewards and recognition of their efforts.

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