

**Research Article****Workforces practices and project performance: Mediating by employees' involvement.****Sadaf Ishaque**

National transmission and Dispatch Company Limited, Pakistan.

Email: adaf.ishaque@ntdc.com.pk

**Citation**

Ishaque, I. (2024). Workforce practices and project performance: Mediating by employee involvement. *Digital Management Sciences Journal*, 2(1), pp. 18-26

This is an open access article distributed under the terms of

[Creative Commons Attribution License \(CC BY\).](#)



The reproduction, distributions and use in other forum is permitted, provided copyright owner(s) and cited properly.

**ABSTRACT**

The purpose of this study is to examine the impact of human resource (HR) practices, including recruitment and selection, compensation and rewards, and training and development, on project performance, with a particular focus on the PTCL 4G project. Additionally, the study investigates the mediating role of employee involvement in the relationship between HR practices and project performance. By employing a quantitative research methodology, data were collected from 225 employees working on the PTCL 4G project. Statistical tools such as correlation analysis, regression analysis, and the Baron and Kenny approach were utilized to explore direct and indirect relationships between the variables. The findings reveal that recruitment and selection, compensation and rewards, and training and development have a significant and positive impact on project performance. Furthermore, employee involvement plays a crucial mediating role, amplifying the effects of HR practices on performance outcomes. The results highlight that organizations can achieve enhanced project success by fostering employee engagement alongside implementing robust HR practices. The study emphasizes the importance of strategically aligning HR practices with organizational goals to improve project performance. It also demonstrates that employee involvement acts as a key driver for optimizing the benefits of HR practices, particularly in the dynamic and competitive telecommunications industry. These findings provide actionable insights for management, offering a framework to enhance both employee participation and project outcomes. The study underscores the necessity of integrating HR strategies with employee involvement to achieve sustainable organizational success.

**KEYWORDS:** Employee's involvement, rewards & compensation and employees training.

**Introduction.**

Knowledgeable insiders are playing a significant role in the organization. Such positive role enhances the competitive edge of an organization. No doubt, competitive and sincere workforce makes a difference. Irawanto (2015) getting an organization's goals requires competent operational and staff management, which is a valuable resource in any organizational structure to respond to dynamic and fast-paced environments and achieve better outcomes. Indeed, artificial intelligence totally transformed business environment. Technology advancement become a powerful tool for businesses to design and craft business strategies. Forecasting, trends and current scenario of the market needs reliable and verified information to make and take in time decisions. In this regards, well equipment and well informed workforce plays a dramatic role. Another challenge is the time constraint, opportunities are emerging in the market rapidly. To capture the opportunities businesses need smart workforce. Hunting and hiring a talent needs

vision and mission of an organization. Visionary management plays crucial role to achieve the organization's targets and goals. Best talent needs well compensation and rewards. Compensation and rewards depends upon financial soundness and market positioning of an organization. That is why strong and well informed HR team become the integral part of an organization. Beside, compensation and rewards an organization must training their employees for present as well as to prepare for future challenges/opportunities. Employees training shapes the organization and enhance the positive value and norms of an organization. In short leadership own principles, values, attitude, working style sincerity, competency, and knowledge, span of control, authority and responsibility play significant role in the organization. Answering the question of why human resources are so vital in the businesses. It is worth mentioning that hat the telecom sector's valuable asset is its human capital. Telecom sector needs to develop and use human resources effectively if they want to succeed. As a result, administrations must plan and select their human resources in accordance with their organizational structure and desired goals. Furthermore, it is crucial for management to support its employees in developing the skills and abilities they require by motivating them with appropriate tactics. Recent studies have further illuminated the critical role of human resource (HR) practices in enhancing project performance, particularly within the telecommunications sector. For instance, research by Kerdpitak and Jernsittiparsert (2020) demonstrates that HR practices significantly contribute to competitive advantage, with employee engagement serving as a vital mediator in this relationship.

Organizational managers presently have challenges in detecting competent human resources for organizational goals. The various challenges, such as managerial ambiguity, corruption, internal problems, improper schedules, instable learning techniques, and a lack effective utilization of resources. The important first step in solving all of these issues is this study, which assesses methods for building and educating human capital to achieve goals and increase performance. A study by SaitGurbuz and wilmar b.Schaufeli published (2024) found that such practices, coupled with work engagement and personality traits, can significantly enhance employees' creative performance. These findings suggest that organizations aiming to improve project performance should focus on implementing comprehensive HR practices that not only attract and develop talent but also actively engage employees in the process. By doing so, they can create an environment conducive to innovation and high performance.

### **Problem statement and research gap**

Three key challenges that PTCL is facing now a days are Wise recruitment and selection, regular training and development and fair compensation and rewarding system. It has been seen that most of HR practices are not effectively implemented. Although the researches in effective HR practices regarding telecom sector i.e. PTCL are very scare, according to Alzyadatet'al, 2015 and Ekwoaba, 2015, PTCL management do not realize the importance of concepts of employee selection, training and development, motivation, involvement in decisions. Due to which non HRM experts make HR policies. They try to implement their practices and strategies forcedly which lost the value of proper managing HR practices. Ineffective planning and limited resources are also a big problem in PTCL. Efficient working of 4g project employees not possible without wise recruitment ,regular training and fair compensation and reward system. It is time for PTCL to focus on HRM practices and work towards 3 key practices recruitment and selection, training and development and compensation and reward.

**Research questions**

1. What is the association of employee's recruitment and selection with 4G wireless project performance?
2. Does employee training significantly influence the performance of 4G wireless project?
3. What is the role of employee compensation for increasing the 4G wireless project performance?
4. Does PTCL employee involvement mediate the relationship of PTCL HR practices and 4G wireless project performances?

**Review of literature**

A study by Gurbuz & Schaufeli (2024) found that HR practices such that training, development, recruitment and selection, coupled with work engagement and personality traits, can significantly enhance employees' creative performance. These findings suggest that organizations aiming to improve project performance should focus on implementing comprehensive HR practices that not only attract and develop talent but also actively engage employees in the process. By doing so, they can create an environment conducive to innovation and high performance. Recent studies have further illuminated the critical role of human resource (HR) practices in enhancing project performance, particularly within the telecommunications sector. For instance, research by Kerdpitak and Jermstiparsert (2020) demonstrates that HR practices significantly contribute to competitive advantage, with employee engagement serving as a vital mediator in this relationship.

Alzyadat et al. (2015) suggested that organizations can enhance their own and their employees' performance through methods beyond traditional training, development, recruitment, and selection practices. The significance of the HR, recruitment, and selection process has been regarded by management of any firm as the foundation for effective input. It largely depends on the person who was purposefully hired on the basis of distinction and selected for the unique tasks. Another study by Ekwoaba&Ufoma (2015), project supervisors are answerable for comprehending the significance of the appointment process, to hire the qualified candidates carefully, and establish proper hiring guidelines that will definitely increase overall organizational performance. It has been observed that the most popular limited recruiting strategy in many firms is advertising for the necessary seats, enlisting the help of employment agencies, and using current employees' referrals to find qualified candidates for the project.

Adeyemietal (2015) examined the selection process of employees. They have noticed that employment agencies and using present employee referrals are very helpful. Projects can hunt better talent through these methods. Off course these techniques have been found to be very helpful for recruiting the capable individuals, research showed the results that recruitment processes in different projects have based on many complicated challenges that requires the fair treatment for fair intake of individuals according to the research of Aguta and Hasret (2015) also examined the proper training opportunities and selection of employees. Their finding supported that training and selection directly associated with employee's satisfaction, employee retention and the level of organizational performance. From the past experience, it has been explained that the adequate training programs offer the lesser side employee turnover ratios in contrast to the organization that neglect the development opportunities for employees. Employee feel to be secured for their personal growth by training and developmental opportunities through longer and shorter courses and on job practice demonstrations and stimulations that keep them satisfied for better performances.

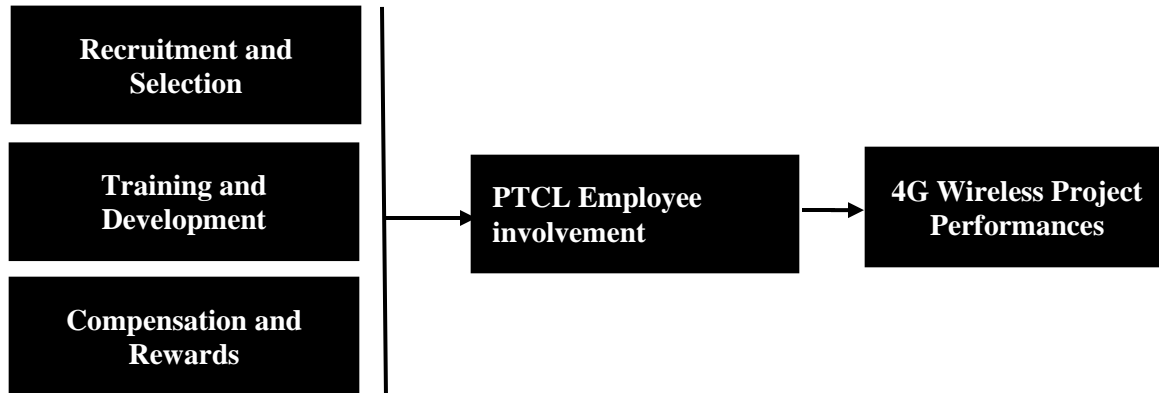
According to Neelam(2014) analysed the employee training and development (ETD) with respect to organizational output (OO). Her findings predicted that ETD statistically significant and has a positive relationship with OO. All of the results support developed hypotheses such as training strategies has a significant impact on organizational performance; On-the-job training for employees significantly influences organizational productivity, knowledge transfer plays a crucial role in enhancing organizational efficiency, and training and development uniquely contribute to improving overall organizational output.

Ghaffar and Furqan (2011) examined the training and development (TD) and organizational performance (OP). The study highlighted that TD is a good predictor to boost the OP. Similarly, Mohanty (2012) also found positive and negative impact on OP. Results showed that TD enhance the productivity. While TD also increases the cost of organization. The main factor influencing an organization's standing is its employees' motivation, which may be strategically increased through training. According to the aforementioned study, which was demonstrated by Batool's pilot research in (2012), it essentially explains the position of employee training in order to contribute to the market and reap benefits. Idress and Idress(2015) conducted a research to measure the impact of compensation and rewards (CR) with respect to employees' efficiency. The study concludes that the pay and reward structure affects worker productivity. Compensation and awards are usually used as a tool to channel an employee's personal energy and work handling inside an organization. He demonstrated the effectiveness of the sales force and explained that there are other ways to compensate salespeople, such as salary increases, direct commissions, a mix of commissions and salaries, bonuses, and financial incentives to raise the motivation of the sales team. Moreover, employees performance also predicted by non-monetary rewards. Another study conducted by Amanet *al.* (2018), explored human resource management (HRM) practices and innovative ability of employees. The study partially supported the relationship. Recruitment strategy found significant while oriented training found insignificant relationship with dependent variable. According to Agwu(2014), observed that the importance of the human part in attaining good performance in any company has been emphasized. Employee motivation and job satisfaction are crucial in supporting managers with in-line efforts in a symmetric manner. The contribution of employees who provide substantial input towards managing activities. Employee commitment, turnover, motivation, job satisfaction, and survival in the respective organization are all correlated with employee participation and engagement in decision-making process. Creative environment leads to new and innovative ideas to implement in the organization by considering the involvement of the employees in decision making process according to Isaksen&Akkermans, 2011.

Alsughayir (2016), describes when organization considers the involvement of employees in daily job related decisions the performance of organization also increases. More the involvement of employees in decision making more the performance level of employee and organization. George et al. (2016) conducted a study on the association of employee decision engagement and the performance level has result the facts that employee involvement offers the higher level of job satisfaction inside an organization that is equally beneficial for the employees as well as for the organizational benefits. By surviving in such environment, employee feel satisfied and offer higher individual performances that overall result as best outcomes of an organizational profitability.

### Research framework

#### HR Practices



### Research methodology.

The current study based upon causal research design. The main focus of said research to measure the cause-and-effect relationship of response and explanatory variables.

### Research population

The current study targeted population is all employees working in 4G wireless project of PTCL. The total population size of targeted employees to be surveyed is 940. Table method is used in this study to find out the sample size.

Sample size of the strata = size of entire sample / population size \* layer size

Targeted Population of PTCL employees working in 4G Project.

Category	Size	Formula for Sample Size	Sample Size
Engineer	143	$(225/940) * 143 = 34$	34
Supervisor	290	$(225/940) * 290 = 69$	69
Managers	129	$(225/940) * 129 = 31$	31
Other team members	378	$(225/940) * 378 = 91$	91
Total	940		<b>225</b>

*Note.* Sample size calculations are based on proportional stratified sampling.

A structured questionnaire was developed to collect the data from the study respondents. The study survey offers five-point Likert, from strongly disagree to strongly agree.

Strongly agree = 5  
 Agree = 4  
 Neutral = 3  
 Disagree = 2  
 Strongly Disagree = 1

The respondents' data have placed in term of demographic, such as gender, qualification, age, and marital status. While second section of questionnaire, consisted of research variables measured through five point Likert scale response options.

### **Analysis and results**

A statistical tool (SPSS) used to study the data and get the results.

### **Test of reliability**

Reliability analysis by using Cron Bach's Alpha.

S. No.	Variable Name	No. of Items	Cronbach's Alpha
1	Recruitment and Selection	3	.799
2	Compensation and Reward	4	.833
3	Training and Development	4	.849
4	Employee Involvement	4	.700
5	Project Performance	5	.741

Note. Cronbach's Alpha values indicate the reliability of the scales used in the study.

The test of reliability used to measure the consistency of the variable scale. The outcomes of reliability test are mentioned in the above table. All the variables computed values are greater than the criterion value is .700.

### **Respondent's age distribution.**

Age Group	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 25	26	11.6	11.6	11.6
25–30	96	42.7	42.7	54.2
30–35	64	28.4	28.4	82.7
35–40	39	17.3	17.3	100
<b>Total</b>	<b>225</b>	<b>100</b>	<b>100</b>	

### Respondent's gender distribution.

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	194	86.2	86.2	86.2
Female	31	13.8	13.8	100
<b>Total</b>	<b>225</b>	<b>100</b>	<b>100</b>	

### Correlation Matrix

	Recruitment	Compensation	Training	Project Performance	Involvement
<b>Recruitment</b>	1	.106	.839**	.658**	.589**
<b>Compensation</b>	.106	1	.153*	.241**	.234**
<b>Training</b>	.839**	.153*	1	.632**	.685**
<b>Project Performance</b>	.658**	.241**	.632**	1	.787**
<b>Involvement</b>	.589**	.234**	.685**	.787**	1

*Note.*  $p < .01$ ; \* $p < .05$ . Correlation is significant at the two-tailed level.

### Direct effect

Variable	R	R <sup>2</sup>	F-Statistics	p	Beta	t-Value	Sig.
Recruitment and Selection	.692	.479	(3, 221) = 67.74	.000	.443	4.96	.000
Compensation and Rewards					.157	3.202	.002
Training and Development					.236	2.626	.009

*Note.* The F-statistics and significance levels indicate the direct effects of independent variables on project performance.

The table above presents a summary of the regression analysis results for the study's model. In the multiple regression model, a significant regression equation was observed with  $F(3, 221) = 67.221$  and a significance level of  $p < .005$ . The R-Square value of 0.479 indicates that 48% of the variance in employee performance is explained by the independent variables.



### The Indirect influence (Baron and Kenny approach)

Step	Regression Analysis	R	R <sup>2</sup>	F-Statistics	Sig.	Beta	t-Value	p-Value
<b>Step 1</b>	IV & MV	.661	.436	(1, 223) = 172.57	.000	.661	13.137	.000
<b>Step 2</b>	MV & DV	.787	.619	(1, 223) = 361.79	.000	.787	19.021	.000
<b>Step 3</b>	IV & DV	.672	.452	(1, 223) = 183.82	.000	.672	13.558	.000
<b>Step 4</b>	IV, MV & DV	.812	.660	(2, 122) = 215.49	.000	.271	5.196	.000
						.608	11.659	.000

*Note.* IV = Independent Variable, MV = Mediator Variable, DV = Dependent Variable. The F-statistics and significance levels confirm the indirect influence using the Baron and Kenny approach.

$$\text{Sobel test equation: } z\text{-value} = \frac{a*b}{\sqrt{(b^2*s_a^2 + a^2*s_b^2)}}$$

**A**=association between IV and mediator coefficient=0.766

**B**=association between mediator DV coefficient =0.841

**SE<sub>a</sub>**=Standard error of A=0.058

**SE<sub>b</sub>**=Standard error of B=0.044

Sobel test statistic=10.8654

Above results showed that employee's involvement mediate the project performance. The Sobel computed value (10.8654) is >the criterion value (1.98). In short, the study rejected the null hypothesis. It is predicted that employee involvement mediate personnel practices project performance.

### Conclusion

The principal motive of above research study was to find the direct and indirect association HR practices and project performance. To measure and find the said target the study used RS, CR and ET as explanatory variables. While project performance is used as dependent variable. For indirect effect employees involvement used as a mediating variable. The primary data (questionnaire) approached is used to collect the data. In keeping with study results, it is deduced the significant of direct effect and also found indirect effect of mediating variable between HR practices and project performance.

### Declaration of interest.

The study declares that there is no conflicts of interest in relation to the present research.



## References

- Gurbuz, S., and Schaufeli, W., B. (2024). Fueling creativity: HR practices, work engagement, personality, and creative performance. *International Journal of Human Resource Management*.
- Kerdpitak, C., & Jermstiparsert, K. (2020). The impact of human resource management practices on competitive advantage: Mediating role of employee engagement in Thailand. *Systematic Reviews in Pharmacy*, 11(1), 443-452.
- Adeyemi, S., Dumade, O. and Fadare, M. (2015). The influence of recruitment and selection on organizational performance. *International Journal of Advanced Academic Research-Social Sciences and Education*, pp.58-59.
- Aguta and Hasret (2015). The Impact of Human Resource Management Practices on Organizational Performance: A Case of Private Banks in North. Cyprus. *International Journal of Business and Social Science*. 6, pp.265-266.
- Agwu, O., and Olele, E. (2014). Perception Survey of Employees Participation in Decision Making and Organizational Productivity in Julius Berger Nigeria PLC Bonny Island. *British Journal of Economics, Management & Trade*, 4(2), pp.20-21.
- Alsughayir, A. (2016). Employee Participation in Decision-making (PDM) and Firm Performance. *International Business Research*, 9(7), pp.64-70.
- Alzyadat, M., Alatyat, Z. and Alnsour, J. (2015). The impact of human resource management on organizational performance in the greater Amman municipality, Jordan. *International Journal of Applied Business and Economic Research*, 13, pp.869-870.
- Aman, Q., Noreen, T., Khan, I., Ali, R., and Yasin, A. (2015). The Impact of Human Resource Management Practices on Innovative Ability of Employees Moderated by Organizational Culture, *International Journal of Organizational Leadership*, 7(4), pp. 426-439
- Batool, B. (2012). Effects of employees' training on the organizational competitive advantage. *Far East Journal of Psychology and Business*, pp.23-28.
- Ekwoaba, I., and Ufoma, N. (2015). The impact of recruitment and selection criteria on organizational performance. *Global Journal of Human Resource Management*, 2, pp-27-28.
- Georg, L., George O. and Caren A. (2016). The Effect of Participative Leadership Style on the Performance of COYA Senior Managers in Kenya. *Research journal's Journal of Management*, 4 (4), pp.1-12.
- Ghaffar and Furqan (2011). Impact of Training and Development on Organizational Performance. *Global Journal of Management and Business Research*, 11, pp.67-68.
- Idrees, Z., and Idrees, A., (2015). Effect of salary, training and motivation on job performance of employees. *American Journal of Business, Economics and Management*, pp.55-58
- Irawanto, D. (2015). Employee participation in decision-making: evidence from a state-owned enterprise in Indonesia. *University of Brawijaya, Faculty of Economics and Business, Management Department*.
- Isaksen, S., and Akkermans, J. (2011). Creative Climate: A leadership lever for organizational success.
- Mohanty, S. (2012). Impact of Training Practices on Employee Productivity. *Inter science Management Review*, pp.4-7.
- Neelam, K. (2014). The Impact of Training and Development on Employees' Performance and Productivity. *International Journal of Academic Research in Business and Social Sciences*, pp.31-36.