



# IMPACT OF TRAINING AND DEVELOPMENT ON THE PERFORMANCE OF EMPLOYEES IN DIRECTORATE OF ECONOMICS AND STATISTICS IN CHHATTISGARH

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## ABSTRACT

*Aim of the present investigation is to assess the impact made on performance of employees due to training & development practices of Chhattisgarh's Directorate of Economics and Statistics. A mixed method approach is undertaken in the present investigation in which both primary and secondary data is gathered. A self-administered questionnaire was used to gather primary data from the Directorate of Economics and Statistics in Chhattisgarh. 150 employee were selected through convenience sampling technique for survey as well as interview among the coordinators and HR personnel was conducted. SPSS 21 is used for analysing the collected data. Descriptive and inferential statistical analysis were performed to get results. According to the results, there was a statistically significant relationship exist among T&D and EP. The investigation concluded that T&D had a favourable effect on EP. The findings of the investigation have also shown that the directorate effective T&D practices; hence, the T&D activities weren't methodical. Therefore, the researcher recommended the employment of legal and methodical T&D approaches by the Chhattisgarh government along with other training coordinators. As a whole, the study indicated that T&D needed to be systematic and intentional in order to achieve the directorate's objectives.*

**KEYWORDS:** Training, Development, Employee Performance, Directorate of Economics and Statistics, Need Assessment, Training Delivery, Training Evaluation

## INTRODUCTION

The necessary number and kinds of staff will be chosen via a drawn-out and laborious recruitment and selection procedure (Safitri et al., 2019). Socialising the chosen staff members and exposing them to a wide range of training and development activities is the next crucial step for any manager (Shem and Ngussa, 2017).

Managing human resources is a primary responsibility for every organisation in the modern day. Since they may build or destroy a business and affect economic viability, employees constitute as the firm's most precious asset (Elnaga & Imran, 2013). Any organization's most precious asset is its human capital. Without labour, money, materials, and even machines are useless. Accordingly, training means the methodical advancement of the attitudes, skills, and information needed by workers for carrying out a specific activity or task well (Abiodun, 1999). Additionally, Elnaga and Imran (2013) contend that companies organizes training for maximizing the abilities of their workers in order to equip them to do their jobs as intended.

Similarly, one of the job function which may have a big influence on a firm's performance as a whole and profitability is employee T&D, according to Adeniyi (1995). As a result, companies and firms organizes training in different ways which includes both inhouse as well as outside the company. Nonetheless, every organization's process of delivering training need to be incorporate a methodical strategy for enhancing or growth of

employees' performance in the work, considering their skills, expertise, and dispositions. Therefore, by systematic T&D, employees' productivity and efficiency might be increased to reach the maximum output (Wacheke and Rosemarie, 2019).

Furthermore, the capacity to identify a company's mechanisms and components inside an organisation are an essential part of T&D initiatives. The goal of T&D is to promote organisational and personal competence by providing opportunities for skill enhancement in the workplace. Despite initially identifying the many processes operating inside the framework, it is hard to design and implement effective training interventions (Laird, 2003). Thus, training—also known as a health and fitness program—is the foundation of HR and helps employees develop their intellectual, emotional, and psychomotor abilities. This gives businesses an essential means of training staff members to boost output (Ezeani & Oladele, 2013).

According to Ampomah (2015), training and development refers to the formal, ongoing initiatives carried out inside businesses to improve staff efficiency and fulfilment in themselves employing a variety of instructional strategies and programs. These programs have discovered several applications in the modern workplace, spanning training in highly specialist job skills to long-term professional growth.

Nowadays, the government has begun to place more focus on enhancing the ability and competency of its workers, which leads to improved performance for the organisation and is consistent



with the practices of private organisations (Mishra and Panda, 2018). As a result, by determining the employees' T&D needs and creating the required plan and budget for training and development programs, every government office must enhance the ability and prospective of each employee, irrespective of their position (Sendawula et al., 2018).

Directorate of Economics and Statistics in Chhattisgarh is one of the crucial and important department under government of Chhattisgarh which carries out the compilation and analysis of desirable statistics for development programs and administrative use for the coordination of government public welfare schemes. Besides assessing the socio-economic condition of the state, it also carries out the work required by various departments of the state government. As a result, the proclamation placed a strong emphasis on training and development interventions and their results, including performance of employees, provision of services, sound governance, execution of reforms, and overall success of the company (Sasidaran, 2018). Additionally, the declaration encourages study in fields related to human resource development. Therefore, the aim of the present investigation is to know how the organization's real training practices affected employee performance. Additionally, the study concentrated on how training affected workers' performance at the mentioned company. The study will help the Directorate of Economics and Statistics' management understand that in order to improve worker performance, the company has to have and keep motivated, well-trained staff.

## AIM AND HYPOTHESIS

The present study is undertaken with the aim of assessing the impact of T&D initiatives on EP of employees of directorate of economics and statistics. Relied on the hypothesis, literature review and previous researches, following hypothesis were developed:

**H1:** T&D has a significant and positive relationship with the EP

**H2:** T&D practices has a significant impact on the EP

## RESEARCH METHODOLOGY

The study used a mixed-method approach. A cross-sectional survey is employed, which collected all pertinent data at one point in time. Using the convenience sampling approach, 150 employees from several directorate offices in various places or districts were chosen as a sample. A well-structured questionnaire with questions about employee performance at the company and training and development was used to gather primary data. An unbiased methodology and a questionnaire with an objective focused is the preferred technique of data-collection

for the present study as it allowed respondents to reply in a standard and straightforward manner. Additionally, information was obtained from management respondents through interviews. All pertinent information generated, gathered, as well as examined by different pertinent studies, research papers, textbooks, published and unpublished reports, and other sources pertaining to this investigation were included in the secondary source. Considering the nature and scope of the present study, key indicators were created to gauge the connection among EP and T&D. A five-point Likert scale was used to quantify the variables. The directorate granted permission to conduct the staff survey, and the questionnaire was given to the participants. In addition to the survey, managerial personnel did one-on-one interviews with a subset of the respondents. Triangulating and bolstering the data gathered from the questionnaire was the aim of the interview.

## PILOT TEST

To evaluate and verify the dependability of the questionnaire's items and make the required corrections, a pilot test was created. Dependability or truth-worthiness of the data should be the primary criterion used to measure data reliability. Cronbach's Coefficient alpha was calculated to verify construct internal consistency (Zikmund et al., 2009). Consequently, a sample of 20 randomly chosen employees was used to pre-test the revised questionnaire using Cronbach's alpha reliability assessment scales, yielding an Alpha value of 0.961. For item 34, the Cronbach alpha value was 0.961, indicating that the survey instrument is a credible one. In light of the results obtained from pilot test of the designed questionnaire, the investigator also spoke with experts to confirm its validity, and the rectification of the scale and questionnaire was done as per the points and errors indicated by the experts to come up with the refined and final version of questionnaire for conducting the survey.

## RELIABILITY OF THE INSTRUMENT

According to universal educational concepts, an instrument is deemed valid if it accurately achieves its intended purpose and evaluates the things it is meant to investigate. The questionnaire was presented to experts for judgement, appropriateness, and overall assessments for establishing the face, content and construct validity of the designed instrument. Conversely, reliability pertains to the consistency of the data that has been gathered. Cronbach's alpha is a reliability coefficient. In 1951, Lee Cronbach assigned it the original title since he intended to include additional components. The Kuder-Richardson Formula can be seen as being extended by the measurements. Reliability analysis was thus performed to verify the validity of the instrument used in this study, and the outcome is shown below:



*Table 1: Reliability Statistics*

S. No	Variables	No. of Items	Cronbach's alpha
1	Training need assessment	4	0.865
2	Training and development design	4	0.817
3	Effectiveness of training design	4	0.830
4	Factors effecting T&D delivery	3	0.785
5	Challenges of implementing T&D	5	0.904
6	Training design evaluation	6	0.926
7	Employees' performance	7	0.901
<b>Total</b>		<b>33</b>	<b>0.969</b>

As shown in the mentioned table, the data collection instrument's reliability value for all 33 elements is 0.969. Zikmund et al. (2009) state that scales having a coefficient alpha above 0.70 are regarded as having extremely excellent dependability in this respect. Thus, according to the test findings above, this instrument's Cronbach's alpha score was satisfactory, indicating

its reliability. The reliability score for each individual subscale varies from 0.785 to 0.926 as seen in table 1 above. Thus, each of the instrument's separate subscales received appropriate Cronbach's alpha scores based on the test findings above, and the scales are deemed trustworthy.

*Table 2: Demographics*

Particulars		Frequency	%
<b>Gender</b>			
	Female	72	48.00%
	Male	78	52.00%
<b>Age group</b>			
	18-25	9	6.00%
	26-33	53	35.30%
	34-41	37	24.70%
	42-49	32	21.30%
	50 & above	19	12.70%
<b>Educational qualification</b>			
	Diploma	7	4.70%
	BA degree	90	60.00%
	PG & Above	53	35.30%
<b>Experience</b>			
	1-5 years	23	15.30%
	6-10 years	57	38.00%
	11-15 years	16	10.70%
	above 16 years	54	36.00%
<b>Position</b>			
	Managerial	15	10.00%
	None managerial	135	90.00%

To classify the employees, the researcher required to determine the respondents' overall gender distribution. As can be seen from the above table, 72 (48%) of the responders were female, while 78 (52%) were male. Compared to male respondents, the data indicates that female respondents were under-represented. In light of the age-group analysis, 9 respondents (6%) are in the age group of 18-25, whereas 53 respondents (35.7%) were from the age-group of 26-33, 37 respondents (24.7%) are in age group of 34-41, 32 respondents (21.3%) are in age group of 42-49, and 19

respondents (12.7%) belongs to 50 & above age group. In terms of educational background, the analysis indicates that 90 (60%) of the respondents have a bachelor's degree, 53 (35.3%), have a PG degree or above whereas 9 (6%) possess diploma level of qualification. With respect to experience of the sampled respondents, it was observed that 23 respondents (15.3%) had served for 1–5 years, 57 (38%) served for 6–10 years, 16 (10.7%) served for 11–15 years, and 54 (36%) has served for more than 16 years. This suggests that the organisation hires a range of



experts, both young and experienced, who require continual refresher training in order to improve their abilities and perform effectively at work. In terms of position in the directorate, about 15 (10%) holds managerial position whereas 135 (90%) holds non-managerial positions in the directorate.

### CORRELATION ANALYSIS

Aim of the present investigation is to ascertain how employee performance at the directorate of economics and statistics was impacted by their training and development. The dependent variable (EP) and independent factors (T&D) were linked using Pearson correlation. The degree and progression of a linear relationship among items are quantitatively expressed by a

correlation coefficient; the Pearson correlation coefficient shows the strength of the association (from -1 to +1) as well as its magnitude and direction (whether positive or negative). To determine whether there is a link between the variables as it was envisioned in the framework, a correlation analysis was conducted in this part. The outcome would allow the researcher to calculate the dependent variable's regression. Because Pearson correlation coefficient approaches often yield statistically accurate results, the researcher employed one of the most popular forms of correlation coefficients. According to Evans' (1996) approach, the correlation's strength would be shown in the following manner.

**Table 3: Pearson Correlation (Training & Development Vs Employee Performance)**

		Overall Employee Performance	Overall Training and Development
Overall Employee Performance	Pearson Correlation	1	.679**
	Sig. (2-tailed)		0.000
	N	150	150
Overall Training and Development	Pearson Correlation	.679**	1
	Sig. (2-tailed)	0.000	
	N	150	150

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

Overall employee performance is positively and significantly correlated with T&D ( $r = 0.679$ ,  $p < 0.001$ ). As a consequence, the p-value was less than 0.001, indicating a strong and significant relationship among T&D and EP. Thus, results obtained from correlation analysis supported **H1**. This finding is also found consistent with research by Hameed & Waheed (2011) and Athar & Shah (2015), which discovered a high and statistically significant correlation among T&D and EP.

### REGRESSION ANALYSIS

The relationship amongst two quantitative variables is measured using regression. The regression analysis of the impact of training on workers' performance is displayed in the table below. The

degree to which the predictor variable affects the criterion variable is indicated by the beta value. Accordingly, the study's beta value, as shown in table 6 below, is 0.679, meaning that a one standard deviation change in the predictor variable, training, led to a 67.9% standard deviation change in the criterion variable, which is employee performance. Training therefore has a greater impact on worker performance. Because the predictor variable's influence on the criterion variable increases with its beta value. Furthermore, beta is equal to the correlation coefficient between the predictor and the criterion variable in a model with a single predictor variable.

**Table 4: Regression Model (Training & Development Vs Employee Performance)**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 <sup>a</sup>	0.461	0.458	0.63228

*a.* Predictors: (Constant), Overall Training and Development

The model summary table above shows that R is 0,679 and R square is 0.458, meaning that overall training and development (independent variable) can account for 45.8% of the variance in employee performance (dependent variable), while other

variables not included in the study account for the remaining 54.2%.



**Table 5: ANOVA (T&D Vs EP)**

**ANOVAa**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.658	1	50.658	126.714	.000 <sup>b</sup>
	Residual	59.168	148	0.4		
	Total	109.826	149			

a. Dependent Variable: Overall Employee Performance

Predictors: (Constant), Overall Training and Development

The ANOVA table's F-test result and P-value determine if the regression model as a whole is a good predictor and how likely it is that this outcome happened by accident. With a significance level of 0.05 and an F-test result of 126.714, the likelihood that the results are the product of chance is less than 0.001. Thus, the directorates' training and development practices have a significant impact on employee performance, meaning that independent variables T&D significantly predict the dependent variable, employee performance. The overall regression model is significant, with  $F = 126.714$ ,  $P < 0.05$ , and  $R^2 = 46.1\%$ . In other words, the regression model fits the data well. Additionally, the

stronger and more important the dependency of the variables—that is, employee performance and training and development—the smaller the standard error of the estimate and the higher the F-value. Consequently, it can be said that T&D have a considerable impact on EP, with  $P < 0.001$ . This suggests that employee performance is greatly impacted by the Bureau's efforts to increase its workforce and implement training and development procedures. This outcome is also consistent with research by Kum, Cowden & Karodia (2014) and Elnaga and Imran (2013), who discovered that training and development provided by organisations predicts workers' performance.

**Table 6: Coefficient (T&D Vs EP)**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.371	0.184		7.467	.000
	Overall T&D	0.700	0.062	0.679	11.257	.000

a. Dependent Variable: Overall Employee Performance

According to the coefficient table above, the beta value of 0.679 showed that total training and development and overall employee performance are positively correlated. performance of employees that, at a 99% confidence level, is statistically significant. Additionally, the unstandardised coefficient column's B-value of 0.700 indicates that we anticipate a 0.700 unit improvement in employee performance for every unit increase in T&D practice.

## CONCLUSION

The study's main goal was to ascertain how T&D affect EP in the Directorate of Economics and Statistics. Meanwhile, the study addressed the particular goals and brought up fundamental research issues. Thus, the following conclusions were reached based on the results of descriptive and inferential statistics as well as a summary of the main findings: The study explained, comprehended, and forecasted the link between variables using an explanatory research approach. Both primary and secondary data sources were employed in the study, which also took a mixed strategy. Cross-sectional survey is employed in the present investigation, which collected all pertinent data at one point in time. 150 employees and managers from middle level were

chosen using a convenience sampling technique, and the HR director and trainers were to gather primary data from the directorate. The findings of the investigation, which are in line with the vast majority of evaluated research studies, and the responses of the participants demonstrate that the workers' skill deficiencies and training needs were not properly and systematically identified, implemented, and completely exercised. As a result, the directorate did not completely execute the TNA. It should be mentioned that the directorate did not completely implement the training and development design. According to the information obtained from employee questionnaires and interviews, the directorate did not provide sufficient training opportunities for staff members. They also concurred with the workers' assessment that the Ministry's personnel had few opportunities for training. Generally speaking, it may be said that the design of training and development is not fully executed, which suggests that T&D initiatives is not at the desired level. Since it may raise the degree of organisational and effective training and employee skills are viewed as essential elements of improved performance. It assists in reducing the efficiency gap, which is the discrepancy among the anticipated





and real achievements of employees. In light of this, it is discovered that the implementation of training and development programs was not backed by clear criteria, and there are no predetermined laws, standards, or procedures exist to assess the effectiveness of the initiative. As a result, the ministry has very little experience evaluating the success of training and development programs. The data gathered from the interview supports this conclusion. Workers require a training program as a motivator to improve their abilities and performance, resulting in a rise (Sasidaran, 2018). Therefore, the organization's needs and objectives ought to direct the training's design. Effective training is the intentional intervention meant to accomplish the learning necessary for enhanced EP (Ruttledge and Cathcart, 2019).

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