

A STUDY ON IMPACT OF TRAINING AND DEVELOPMENT PROGRAMS ON EMPLOYEE PERFORMANCE

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ABSTRACT

Employee performance is a key factor in determining how productive and efficient an organization will be as well as how fast it grows. Therefore, training and development of employees are critical management functions within modern organizations. The purpose of the current study was to evaluate how employee training and development affect employee performance in a large organization involved in both engineering and manufacturing. Specifically, the study seeks to determine the affect that training programs have on employee productivity, communication skills, technical knowledge acquisition, confidence levels, and overall work performance. The study used a quantitative research approach through the use of descriptive research design methodology, whereby primary data was collected through a structured questionnaire from 210 employees from various departments in the participating organization, while secondary data was collected from (1) Journals, (2) books, (3) web sites, (4) company reports, and (5) previous studies regarding the training and development practices of both the organization and similar organizations. The researcher utilized several statistical tools including percentage descriptive analysis, mean score, correlational analysis, regression analysis, ANOVA, and chi-squared tests to analyze and interpret the data collected from the survey respondents. The findings of the study indicated that training and development programmes have a positive significant effect on the performance of employees and the correlative analysis showed a strong positive correlation ($r= 0.774$) between the amount of training and the level of employee performance. The regression analysis determined a significant

correlation between the level of effectiveness of training programs on both productivity and efficiency of employees. The conclusion is that a continuous training and development program for employees is imperative for enhancing organizational performance, employee satisfaction and achieving long-term organizational success.

Keywords : Training and Development, Employee Performance, Productivity, Organizational Growth, Employee Satisfaction.

INTRODUCTION

Human resources are seen as a major asset within all organizations. The success of an organization is largely predicated on employee efficiency, productivity and performance. In today's highly competitive business environment, organizations continually take measures to improve the skills and competencies of their employees through effective training and development programs. Training is a planned effort by an organization to improve the skills of its employees, as well as their technical knowledge, ability to communicate and effectiveness in the workplace for the purpose of performing their specific job responsibilities. Development is focused on long-term learning to improve leadership qualities, managerial skills and the overall career development of an employee. Modern organizations operate within a rapidly changing environment influenced by globalisation, technological advances, automation and changing customer expectations. As a result, organizations need to continually keep their employees' knowledge and skills up-to-date to be able to remain competitive in the market. Employees that have received sufficient training are typically more capable, productive, adaptable, and efficient at performing their job responsibilities. The engineering and manufacturing industries employ highly-skilled employees capable of operating complex machinery, industrial systems, and technological processes. Because employee performance directly affects the efficiency of operations, the quality of products, the safety of the work environment and ultimately customer satisfaction, engineering and manufacturing organizations place a strong emphasis on workforce development.

2. REVIEWS OF LITERATURE

Aguinis & Kraiger, 2020. Many researchers have suggested that training and development are critical to enhancing employee productivity and, ultimately, the growth of businesses

Aguinis & Kreiger's (2020) report demonstrates that training can enhance employees' skills and abilities, as well as the overall effectiveness of organizations.

Noe (2020) examined how training and development positively affect employee performance and discovered that employees who receive training possess higher levels of technical capability, enhanced communication skills, and, ultimately, better job performance.

Imran & Tanveer (2021) conducted a study to evaluate the effect that training and development have on employee productivity and job satisfaction and found that employees who had received training had higher productivity levels and were more satisfied with their jobs than employees who had not participated in any training programmer.

Otoo & Mishra (2022) also concluded that training is positively correlated with increased employee confidence and efficiency.

Additionally, Garavan et al. (2023) found that employees are more engaged and motivated when they have recurrent training opportunities.

Additionally, Singh & Kaur (2024) have shown that organizations' benefit from training programmed that enhance their employees' leadership abilities, adaptability, and overall organizational productivity.

Sharma & Kapoor's (2026) It is evident findings that the implementation of innovative training methods such as artificial intelligence and virtual learning technology will significantly improve employee performance.

3. OBJECTIVE

1. Assessing effectiveness of training /development programs.
2. Examining impact on productivity/job performance.
3. Evaluating levels of employee satisfaction with the organization's training activities.
- 4: Determining relationship between training and employee performance.
5. Explanatory insight on improving employee training/development practices.

4. Research GAP:

A number of prior research studies have identified the value of providing employees access to effective training/development programs in relation to enhancing productivity at work and job performance levels, as well as enhancing employee satisfaction. Still, research gaps within this area have previously existed as previous research was concentrated primarily on only providing employees access to technical types of training while ignoring many key areas such as behavioral development, improving manager/employee communication skills, and enhancing improvements in leadership; thus unable to provide an examination of the effectiveness of newer training modalities including but not limited to digital learning, virtual training, and hybrid methods. Furthermore, limited research has been conducted on the effects of training programs targeted specifically at employees within engineering and manufacturing facilities; however, job performance within these industries is crucial towards the efficient operation of the organization and achieving a safe working environment. Additionally, earlier studies have primarily focused on the evaluation of employee satisfaction with training programs; however, little to no studies have attempted to analyze the relationship between the effectiveness of training and employee productivity within a systematic approach utilizing advanced statistical procedures. The current study seeks to help resolve the referred-to gaps by evaluating the effects of providing employees with access to training and development programs.

5. HYPOTHESES

Hypothesis 1

- H0: No meaningful link exists between training/development programs and employee efficiency.
- H1: A meaningful link exists between training/development programs and employee efficiency.

Hypothesis 2

- H0: Training/development programs don't greatly alter employee efficiency.
- H1: Training/development programs greatly alter employee efficiency.

Hypothesis 3

- H0: Age groups share little of the differences present in relation to employee efficiency when determining employee efficiency.
- H1: Age groups share most of the differences that relate directly to employee efficiency when determining employee efficiency.

Hypothesis 4

- H0: No relation exists when determining the effect of training on people of either gender.
- H1: A relation exists when determining the effect of training on people of either gender.

6. RESEARCH METHODOLOGY

This was a descriptive and analytical research methodology used to determine the effect of training and employee development programs on performance.

RESEARCH DESIGN

Descriptive method was used as it would help assess employee opinions concerning their training (if the training was effective or not), skills developed from the training, level of productivity and performance.

SOURCES FOR DATA

Primary data

It was obtained from the administration of a structured questionnaire given to employees requesting information from them.

Secondary Data

Secondhand data was obtained from journal articles, textbooks, company reports, internet source, and previous studies conducted in this area of research.

SAMPLE SIZE

The sample size included 210 employees drawn from the various departments of the company.

SAMPLING TECHNIQUE

A simple random sampling technique was utilized in selecting respondents.

• STATISTICAL ANALYSIS TOOLS USED

- Percentage Analysis
- Mean Score Analysis
- Correlation Analysis
- Regression Analysis
- ANOVA
- Chi-Squared Test

7. DATA ANALYSIS AND INTERPRETATION

Table 1: Gender Distribution

Gender	Number of Respondents	Percentage
Male	79	37.6%
Female	131	62.4%
Total	210	100%

Interpretation

The majority of respondents are female employees (62.4%), while male employees constitute 37.6% of the respondents

Table 2: Age Distribution

Age Group	Number of Respondent	Percentage
Below 25	90	42.9%
25–35	45	21.4%
36–45	63	30.0%
Above 45	12	5.7%
Total	210	100%

Interpretation

The majority of respondents belong to the below 25 age category, indicating higher participation from younger employees.

Table 3: Educational Qualification

Educational Qualification	Number of Respondents	Percentage
Undergraduate	64	30.5%
Postgraduate	112	53.3%
Professional	34	16.2%
Total	210	100%

Interpretation

Most respondents are postgraduates (53.3%), indicating higher educational qualification among employees.

Table 4: Mean Score Analysis

Variables	Mean Score	Standard Deviation	Result
Training Programs Improve Job Performance	4.12	0.86	Agree
Training Improves Technical Skills	4.05	0.91	Agree
Training Enhances Communication Skills	3.98	0.88	Agree
Training Increases Motivation and Confidence	3.89	0.94	Agree
Development Programs Support Career Growth	4.08	0.83	Agree
Overall Satisfaction Towards training program	4.01	0.90	Agree

Interpretation

The mean score analysis indicates positive employee opinions toward training and development programs. Employees strongly agree that training improves job performance, communication skills, technical competency, and confidence.

Table 5: Correlation Analysis

Variables	Correlation (r)	P Value	Result
Training & Development Programs and			

Interpretation

The correlation value indicates a strong positive relationship between training and development programs and employee performance.

Table 6: Regression Analysis

Variables	Beta Value	R Square	P Value	Result
Training & Development Programs → Employee Performance	0.834	0.599	0.000	Significant Influence

Interpretation

Regression analysis shows that training and development programs significantly influence employee performance.

Table 7: ANOVA Analysis

Variables	F Value	P Value	Result
Age and Employee Performance	1.209	0.308	Not Significant

Interpretation

The analysis shows no significant difference between age groups and employee performance.

Table 8: Chi-Square Analysis

Variables	Chi-Square Value	P Value	Result
Gender and Training Effectiveness	9.816	0.044	Significant Association

Interpretation

There is a significant association between gender and perception of training effectiveness.

8.FINDINGS

The study's findings demonstrate the strong positive correlation between employee training and employee performance. Training is perceived by employees to increase productivity, communication ability and technical skill.

- Correlation analysis shows there is a strong relationship between training and employee performance as expressed through regression analysis confirming that employee training programs significantly contribute to employee performance and workforce productivity.
- Employees who receive organization training find their organization's training programs to be effective.
- Continuous employee training within an organization positively contributes to overall employee performance, productivity, and employee satisfaction at work; development

programs provide employees increased self-confidence and motivation, as well as opportunity for upward career mobility.

- NEW activities created with modern approaches to training such as digital will ultimately continue to enhance employee productivity.

9. CONCLUSION

Training and development play an important role in enhancing employee performance in organizations. Proper and effective training enhances an employee's technical knowledge, communication skill, self-confidence, productivity, and overall work efficiencies. Continuing employee development is essential for an organization to achieve growth in a global market and to compete against other companies within an industry that is implementing technology for its business transactions. The Statistics from the study support a high percentage relationship of positive correlation exists between employee training/development and employee performance as determined through the analysis, employees who receive adequate quality training and development can do their job more effectively, adjust to change due to advances in technology, and contribute positively to the organization's goals. Furthermore, the study indicates that employees develop job satisfaction toward training provide by their organizations.

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