

IMPACT OF TRAINING AND DEVELOPMENT ON IMPROVING EMPLOYEE PERFORMANCE IN PUBLIC ORGANIZATIONS

Assistant Prof: Ibrahim Rasul Hani, Mahdi Abbas Abdul Mahdi, Ali Hamed Hassan and Maytham Khidr Mohammed

Faculty of Administrative Sciences, Al-Mustaqbal University, Babylon, Hillah, 51001, Iraq

<http://doi.org/10.35409/IJBMER.2026.3762>

Received: 19 March 2026/ Published: 26 April 2026

ABSTRACT

This study aims to investigate the impact of training and development on improving employee performance in public organizations. The research adopted a descriptive analytical approach, using a questionnaire distributed to a random sample of 50 employees. The findings revealed a strong positive correlation (Spearman coefficient = 0.52) between training and job performance, indicating a statistically significant relationship. However, the simple regression analysis showed that training explains only 10% of the variance in performance ($R^2 = 0.10$), and the F-value (3.456) was not statistically significant. This suggests that although employees perceive training programs as highly effective (with approval rates exceeding 90% on most items), their actual causal impact on performance remains unproven within this model. The study also found that training contributes to reducing job errors, increasing work speed, and improving time commitment. The research recommends linking training programs more closely to actual job needs, adopting advanced evaluation models, and introducing mediating variables in future studies.

Keywords: Training – Employee Performance – Public Organizations – Statistical Significance.

1. INTRODUCTION

1.1. Background of the Study

Public business organizations in the contemporary business environment face increasing challenges due to technological development, intense competition, and continuous changes in market requirements, making the human element the most influential factor in achieving competitive advantage.

Training and development are among the most important administrative tools that organizations rely on to raise employee efficiency and develop their skills and abilities, which reflects on improving the level of job performance, productivity, and service quality.

Hence comes the importance of studying the impact of training and development programs on improving employee performance within public business organizations, and demonstrating their contribution to achieving organizational efficiency and effectiveness.

Attention to training and development is no longer an organizational option but has become a strategic necessity imposed by the nature of modern work, as organizations seek to keep pace with

rapid changes in the business environment by investing in human capital as the primary source of creativity and innovation.

Effective training reduces the gap between actual performance and required performance, and also contributes to enhancing employee satisfaction and increasing the level of organizational belonging, which directly reflects on the stability of the organization and the achievement of its long-term goals.

2. RESEARCH METHODOLOGY FRAMEWORK

2.1. Research Problem

Many public business organizations suffer from weak employee performance, low productivity, and variation in the quality of performance despite the implementation of training programs, which raises the question: Do training and development programs actually contribute to improving employee performance? Or are they applied formally without real impact?

Accordingly, the research problem is represented in the main question: **What is the impact of training and development on improving employee performance in public business organizations?**

The severity of this problem increases due to the absence of clear mechanisms to evaluate the impact of training programs and the lack of linking them to actual work needs, leading to waste of financial and human resources and weak return on investment in training.

2.2. Research Importance

2.2.1. Scientific Importance

- Enriching the scientific literature in the field of human resource management.
- Clarifying the relationship between training, development, and job performance.
- Providing an applied model that can benefit future studies.

2.2.2. Practical Importance

- Helping departments design effective training programs.
- Raising employee efficiency and improving productivity.
- Supporting decision-makers in efficiently allocating training resources.
- Improving the quality of services provided to customers.

The importance of this research also lies in highlighting the gap between the theoretical and applied aspects in the field of training and development, and seeking to provide applicable practical results that contribute to improving the reality of job performance within public organizations.

2.3. Research Objectives

This research aims to:

1. Identify the reality of training and development in private business organizations.

2. Measure the level of employee performance.
3. Analyze the relationship between training, development, and job performance.
4. Determine the impact of training on productivity and work quality.
5. Provide recommendations to improve the effectiveness of training programs.
6. Identify employee satisfaction with the training programs provided.
7. Evaluate the efficiency of current training programs in terms of content and methods used.

2.4. Research Hypotheses

2.4.1. Main Hypothesis

There is a statistically significant impact of training and development on improving employee performance in public business organizations.

2.4.2. Sub-Hypotheses

- **H1:** There is an impact of training on job performance efficiency.
- **H2:** There is an impact of development on performance quality.
- **H3:** There is an impact of training on increasing productivity.
- **H4:** There is an impact of development on reducing job errors.
- **H5:** There are differences in performance attributable to the number of training courses.
- **H6:** There is a statistically significant impact of the appropriateness of training programs to work needs on improving job performance.

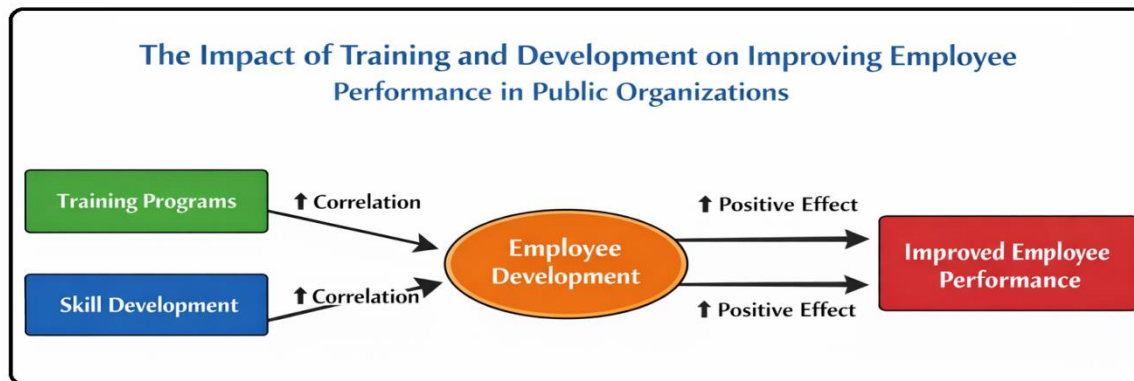


Figure 1: Training and Performance Diagram

2.5. Research Limitations

- **Spatial limits:** Public business organizations.
- **Temporal limits:** During the current academic year.
- **Human limits:** Employees working in public business organizations.
- **Subject limits:** Training and development and their impact on job performance.

2.6. Research Methodology

- **Research approach:** Descriptive analytical approach.

-
- **Research population:** All employees working in public business organizations.
 - **Research sample:** Random sample of employees (50 employees).
 - **Data collection tool:** Questionnaire.

Appropriate statistical methods will also be used to analyze data such as arithmetic means, standard deviation, T-test, and correlation coefficient, to test the research hypotheses and reach accurate and reliable results.

2.7. Operational Definitions of Terms

- **Training:** An organized process aimed at providing employees with new skills and knowledge to improve their current performance.
- **Development:** A long-term process aimed at developing employees' future capabilities.
- **Job performance:** The level of employee accomplishment of tasks according to criteria of efficiency, quality, and speed.

3. Section Two: Previous Studies

3.1. Summary of Previous Studies

3.1.1. Study of Ammar (2016)

This study aimed to identify the impact of training on employee performance in the private sector. It used a questionnaire (35 items) distributed to a sample of 60 individuals. The results showed a linear correlation between training and employee performance, skills, service quality, and sense of belonging.

3.1.2. Study of Al-Zalbani (2016)

This study confirmed that on-the-job training is fundamental for developing human resources in the industrial sector, especially in gas, oil, and petrochemical plants. It indicated that experienced operators are the best trainers after being properly prepared.

3.1.3. Study of Abu Salmiya (2016)

This study aimed to identify the effectiveness of training in improving human resources at UNRWA. One of its most important findings is that training needs identification is done in advance by asking managers and employees.

3.1.4. Study of Al-Shahri (2015)

This study aimed to identify the effectiveness of training programs at King Khalid Military College. The results showed that linking training to financial benefits motivates enrollment in courses.

3.1.5. Study of Sa'dia (2015)

This study aimed to evaluate the training process for employees at technical colleges in Gaza. The most prominent result was the presence of severe weakness in the financial budget for training.

3.1.6. Study of Bahr (2014)

This study aimed to identify the effectiveness of training programs at Al-Majid Establishment in the UAE. It confirmed that development and training are integrative processes involving all parties.

3.1.7. Study of Boyd (2010)

This study aimed to measure the effectiveness of disaster readiness training. The results indicated that 76% of the sample took preparatory steps after training.

3.1.8. Study of Qa'id (2006)

This study aimed to identify the role of training in raising the efficiency of educational leaders in Yemen. It concluded that developed countries take pride in their trained human wealth.

3.2. General Commentary on Previous Studies

These studies were utilized in determining the research topic, objectives, and methods. They resembled the current study in addressing the impact of training on human resource performance but differed in research population and sample. The current study was limited to a sample of 50 employees in the public and private sectors. The results of previous studies showed a positive relationship between training and performance improvement, and the importance of preparing and evaluating training programs.

4. THEORETICAL FRAMEWORK

4.1. Concept of Training

Employee training and development is a program of educational opportunities provided by employers to employees, helping them develop a deeper understanding of their job role, improve their performance, and learn new skills.

Training consists of a set of activities including planning, designing, and implementing training programs. It contains a series of interconnected activities according to a specific scientific methodology characterized by logical sequencing leading to the achievement of desired goals. It also serves as a source of human resource development and improving their administrative and technical efficiency to achieve positive returns for the administrative process (Dessler, 2009: 245).

Training is "an organized and planned effort and activity to impart or modify the knowledge and attitudes of trainees to reach the best forms of human performance under the desired objectives" (Joudah, 2010: 117).

Therefore, it can be said: "Training is an activity through which trainees are brought to an advanced level of development in knowledge, behavior, and various skills with high efficiency in achieving the required results" (Al-Sen & Abdulaziz, 2005: 105).

Training is a form of education and development aimed at continuously and semi-permanently changing individual behavior in an organized and systematic manner. The training strategy aims at the progress and continued success of the organization through the distinctive skills and performance of employees and their continuous development through training.

4.2. Concept of Development

Development is defined as a set of new knowledge and skills added to previously trained knowledge to increase work efficiency. It is also defined as redirecting behavior, developing skills, and improving performance based on previous experience in the field of work or study (see: Dessler, 2009: 250).

Development is a useful tool in work sectors, contributing to supporting employees and helping them deal with new professional tools and methods. Development focuses on supporting employees' future plans, allowing them to develop their roles and plan for the future rather than merely focusing on their current jobs.

4.3. Objectives of Training

Training aims to provide trainees with updated information, skills, and various methods regarding the nature of their assigned work, improve and develop their skills and abilities, and attempt to positively change their behavior and attitudes, thereby raising performance and productive efficiency (Muneer Abbas, 2018: 35).

What training seeks is to achieve organizational goals of increasing employee efficiency and developing their performance, which in turn reflects the objectives of training as stated in (United Nations System Staff College, 2014: 8):

- Increasing trainees' performance, skills, abilities, and knowledge.
- Raising employee performance efficiency by training them on new work methods.
- Creating a positive relationship between individuals and the organization.
- Reducing costs by performing work with high efficiency and quality.
- Enabling employees to perform their work without follow-up and revision.
- Enabling employees to adapt and deal with work developments and technological advances.
- Helping reduce errors and their recurrence, thus improving production.
- Increasing employees' ability to discover problems and performance obstacles.
- Using training as a means to motivate employees for promotion.

4.4. Training Methods

According to a study (Abou Elnaga & Imran, 2014: 18), there are many training methods used in organizations:

4.4.1. Team Training

Individuals are trained to solve problems more effectively in groups (Salas & Cannon-Bowers, 2014: 485).

4.4.2. Mentoring

Mentors possess specific knowledge, skills, and abilities in problem-solving, conflict resolution, communication, goal setting, and planning (Hartenian, 2003: 25).

4.4.3. Simulation

It is the most common method of delivering training, enabling trainees to acquire practical skills and experiences realistically without real risks (Holladay & Quinones, 2003: 1096).

4.4.4. Seminars

These gather trainees in small groups for periodic meetings focused on a specific topic, helping employees become more familiar with their job tasks and participate more effectively.

4.4.5. Field Trips

These provide employees the opportunity to experience situations outside the workplace and obtain practical information about their job tasks (Hartenian, 2003: 27).

4.5. Performance Evaluation

Performance evaluation refers to the methods and processes used by organizations to assess the effectiveness of employee performance by comparing set objectives with outcomes. This process typically involves measuring employee performance and providing them with feedback on their performance level and quality. The main goal of performance evaluation in organizations is to improve employee performance, which can be achieved through three potential mechanisms (Kluger & Van Dijk, 2010: 1168-1170):

1. Using information from self-evaluation to make administrative decisions linking evaluated performance to organizational rewards or sanctions.
2. Providing performance feedback to enable employees to adjust their performance strategies.
3. Raising employees' awareness that they are being measured.

4.6. Concept of Job Performance

Performance refers to the degree of achieving and completing the tasks comprising an individual's job, reflecting how the individual meets job requirements. Performance is measured based on outcomes, not effort (Abdul Ra'ouf, 2001: 45-48).

4.7. Importance of Job Performance

Performance is the main component of the process and the vital part because it is linked to the human element that manages the process and transforms raw materials and resources into manufactured goods of material value, achieving profit (Ibrahim, 2003: 92).

The importance of job performance can be summarized as follows:

1. The foundation upon which all organizations, whether industrial, commercial, or service, are built (Ibrahim, 2003: 93).
2. The working individual strives to acquire skill and gain experience to provide work or performance of certain value.
3. Performance contributes to self-development to reach creativity that leads to increased production (Ibrahim, 2003: 95).

5. EMPIRICAL STUDY

5.1. Research Population and Sample

Department, division, and administrative unit managers in the Babylon Textile Factory were selected as the study sample, as they are individuals responsible for training and evaluating employees.

5.1.1. Age Distribution

Table (1): Distribution of respondents by age groups

Age group	Frequency	Percentage %
30 years or less	10	20
31 – 35 years	6	12
36 – 40 years	6	12
41 – 45 years	10	20
46 years or more	18	36
Total	50	100

Source: Prepared by researchers based on questionnaire

5.1.2. Job Tenure Distribution

Table (2): Distribution of respondents by job tenure in current position

Job tenure	Frequency	Percentage %
1 – 5 years	20	40
6 – 10 years	12	24
11 – 15 years	2	4
16 years or more	16	32
Total	50	100

Source: Prepared by researchers based on questionnaire

5.1.3. Number of Training Courses

Table (3): Distribution of respondents by number of training courses inside and outside the organization

Training location	Number of courses
Inside organization	86

Training location

Number of courses

Outside organization

44

Source: Prepared by researchers based on questionnaire

5.2. Description of Research Variables

The three-point Likert scale (3: Agree, 2: Neutral, 1: Disagree) was adopted. A response was considered weak if the required weight was below 50%, moderate if between 50% and less than 75%, and high if 75% or above.

Table (4): Description and diagnosis of research variables

No .	Item	Agree (3)	Neutral (2)	Disagree (1)	Weighted mean	Required weight %	Evaluation
1	The organization provides periodic training programs	39 (2.34)	10 (0.4)	1 (0.02)	2.76	92%	High
2	The training I receive is related to my work nature	40 (2.4)	8 (0.32)	2 (0.04)	2.76	92%	High
3	Training program content is clear and understandable	32 (1.92)	15 (0.6)	3 (0.6)	2.58	86%	High
4	The trainer has high experience and competence	42 (2.52)	7 (0.28)	1 (0.02)	2.82	94%	High

No .	Item	Agree (3)	Neutral (2)	Disagree (1)	Weighted mean	Required weight %	Evaluation
5	Training helps me use modern technologies	45 (2.7)	5 (0.2)	0	2.9	96.6%	High
6	Training improves my problem-solving ability	43 (2.58)	7 (0.28)	0	2.86	94%	High
7	Training increases my confidence in performing my work	41 (2.46)	5 (0.2)	4 (2.08)	2.74	91.3%	High
8	The training program is evaluated after completion	42 (2.52)	7 (0.28)	1 (2.02)	2.82	94%	High
9	My job errors decreased after training	46 (2.76)	3 (0.12)	1 (2.02)	2.9	96.6%	High
10	I can accomplish a larger volume of work than before	36 (2.16)	9 (0.18)	5 (0.1)	2.44	81.3%	High

No .	Item	Agree (3)	Neutral (2)	Disagree (1)	Weighted mean	Required weight %	Evaluation
11	My work speed increased after training	44 (2.64)	4 (0.16)	2 (0.04)	2.84	94.6%	High
12	I complete my work on time	48 (2.88)	1 (0.04)	1 (0.02)	2.94	98%	High
13	I have greater motivation to accomplish tasks	45 (2.7)	5 (0.2)	0	2.9	96.6%	High
14	My work quality has noticeably improved	36 (2.16)	9 (0.18)	5 (0.1)	2.44	81.3%	High
15	My performance has become more accurate and organized	44 (2.64)	4 (0.16)	2 (0.04)	2.84	94.6%	High
16	My desire to work increased after training	48 (2.88)	1 (0.04)	1 (0.02)	2.94	98%	High

Interpretation of results (Table 4): All items received a "High" evaluation, with approval rates ranging from 81.3% to 98%.

5.3. Hypothesis Testing

5.3.1. Correlation Test

Table (5): Spearman correlation matrix between job performance and training

Variable	Job performance	Training
Job performance	1	0.42
Training	0.52	1

Source: SPSS v.16

The correlation coefficient between training and job performance is 0.52 (positive and strong).

Table (6): t-test for correlation significance

Correlation	Calculated t-value	Tabulated t-value
0.32	2.20	1.67

Source: SPSS v.16

Since calculated t (2.20) > tabulated t (1.67) at $\alpha = 0.05$, the hypothesis of a significant correlation is accepted.

5.3.2. Regression Test

Table (7): Simple regression results – impact of training on job performance

Model	Unstandardized coefficients	Standardized coefficients	Sig.	R ²
	B	Std. Error	Beta	
Constant	2.361	.953		.019
Job performance	.490	.264		0.073
				0.10

Source: SPSS v.16

Results:

-
- $R^2 = 0.10$ (training explains only 10% of variance in job performance)
 - Calculated F-value = 3.456 < tabulated F-value (4.00)
 - **Therefore, the hypothesis of a significant causal impact is rejected.**

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusions

The study reached a number of conclusions, including:

1. Training of employees at all levels in the organization under study is an important and essential means to keep pace with scientific developments.
2. Training evaluation is fundamental in reducing errors and occupational incidents by raising trainee efficiency through identifying weaknesses and addressing them, and reinforcing strengths during training periods.
3. Training evaluation is a successful means of improving relationships among organization members by making individuals at all levels aware of their duties and reinforcing this through training.
4. There is notable attention to training evaluation in the organization under study through the activities of the Training and Development Division and the Continuing Medical Education Center, and their direct connection to the General Manager's office.

6.2. Recommendations

1. To improve the level of training evaluation skills among managers at all administrative levels in the organization under study for the purpose of accurately identifying training needs, it is preferable to enroll these managers in appropriate training courses.
2. Conduct multiple studies on work negatives, errors, and incidents accompanying service delivery in all organizations, so that training evaluation is realistic and contributes to preparing training programs to overcome these negatives and errors.
3. Increase the number of training studies conducted within the organization and not rely solely on centralized training courses opened by centers, as this allows the organization to identify its specific training needs.

REFERENCES

Dessler, G. (2009). *Human Resource Management*. Translated by Mohammed Sayed Ahmed Abdul Muta'al, reviewed by Abdul Mohsen Abdul Mohsen Joudah. Riyadh: Dar Al-Mareekh.

1. Joudah, M. A. (2010). *Human Resource Management* (1st ed.). Amman, Jordan: Dar Wael for Publishing and Distribution.
2. Al-Sen, A., & Abdulaziz, A. (2005). Evaluating the effectiveness of the training process and achieving training economics. Paper presented at the *Consultation and Training Conference*, Arab Organization for Administrative Development, Beirut, Lebanon. pp. 99-121.
3. Muneer Abbas. (2018). *The impact of determining training needs, training content and duration on employee performance: A case study of the Syrian Private University*. Damascus University.
4. United Nations System Staff College (2014). *About UNSSC*. Retrieved on May 16, 2014 from <http://www.unssc.org/home/about-unssc>.

-
5. Salas, E., & Cannon-Bowers, J. A. (2014). The science of training: A decade of progress. *Annual Review of Psychology*, 52, 471–499.
 6. Abou Elnaga, A., & Imran, A. (2014). The Impact of Employee Empowerment on Job Satisfaction: Theoretical Study. *American Journal of Research Communication*, 2(1), 13-26.
 7. Hartenian, L. S. (2003). Team Member Acquisition of Team Knowledge, Skills and Abilities. *Journal of Team Performance Management*, 9(1/2), 23-30.
 8. Holladay, C. L., & Quinones, M. A. (2003). Practice Variability and Transfer of Training: The Role of Self-efficacy Generality. *Journal of Applied Psychology*, 88, 1094–1103.
 9. Kluger, A. N., & Van Dijk, D. (2010). Feedback, the Various Tasks of the Doctor, and the Feedforward Alternative. *Medical Education*, 44(12), 1166-1174.
 10. Abdul Ra'ouf, F. (2001). *Human Performance Technology*. Amman: National Library Department.
 11. Ibrahim, A. B. (2003). *Human Performance Technology in Organizations*. Egypt: Publications of the Arab Organization for Administrative Development.