



Impact of Training & Development (T&D) on Employee's Performance & Productivity (P&P)

Mohammad Yusuf Saleh^{1*}, Hamdullah Azimi²

Ghalib University, Kabul, Afghanistan¹

Ghalib University, Kabul, Afghanistan²

Corresponding Email: yusuf.saleh@ghalib.edu.af*

Received: 25-01-2025 Reviewed: 10-02-2025 Accepted: 27-02-2025

Abstract

This study explores the critical impact of Training and Development (T&D) on improving employees' Performance and Productivity (P&P), specifically within the context of JACK NGO in Parwan, Afghanistan. In a competitive global environment, corporate entities and non-governmental organizations must ensure their workforce possesses relevant and contemporary skills. Employing a quantitative research methodology, this study utilizes linear regression analysis to assess data gathered from a sample of 275 participants through a rigorously structured questionnaire. Additionally, secondary data sources were used to support the findings, which reveal a strong and statistically significant positive relationship between T&D initiatives and enhancements in employee performance and productivity (P&P) at JACK NGO. Notably, on-the-job training is a particularly effective facet of T&D, directly contributing to enhanced employee outcomes. This research underscores the necessity of strategically optimizing T&D programs as a fundamental strategy for bolstering employee effectiveness and driving organizational success at JACK NGO. The results suggest the need for strategic investments in extensive training programs, which improve employee skills and support the organization's broader goals and vision, ultimately fostering sustainable growth and a positive impact within the community it serves.

Keywords: Training, Development, Employee Performance, Productivity, JACK NGO

Introduction

In today's fast-evolving business environment, driven by technological progress and changing market trends, the significance of Training and Development (T&D) has become increasingly pronounced (Sundstrom et al., 2016). T&D initiatives serve as pivotal mechanisms for enhancing employee performance and productivity (P&P), positioning employees as invaluable assets within any organization (Kuknor & Kumar, 2024). The necessity to address the knowledge and skills gaps created by evolving work environments compels organizations to prioritize effective training programs that empower their workforce and align with

overarching organizational objectives. For this study, we will use T&D to refer to Training and Development and P&P to refer to Performance and Productivity. (Hassan, 2022)

This study focuses on JACK NGO, a non-profit organization operating in critical health, education, and emergency response sectors in Parwan, Afghanistan. JACK NGO significantly impacts the local economy and employment landscape; however, it grapples with persistent challenges related to employee performance. Operational errors that undermine service quality and tarnish the organization's reputation are prevalent issues traced back to insufficient T&D programs. Such programs fail to provide employees with the essential skills and competencies for peak job performance. (Alagaraja & Li, 2015)

Implementing effective T&D programs is essential for cultivating employee competencies and enhancing organizational productivity. By providing employees with the technical, personal, and professional skills necessary for their roles, organizations foster an environment conducive to individual growth while simultaneously aligning this growth with organizational goals. At JACK NGO, empowering employees and managers through well-structured training initiatives is paramount for achieving customer satisfaction and operational excellence.

The primary objective of this research is to critically evaluate the influence of T&D on employee P&P within JACK NGO. The findings are intended to yield actionable insights for management that can refine existing training initiatives, boost employee engagement, and improve overall organizational outcomes. Furthermore, this research contributes to the academic discourse on human resource management by offering theoretical and practical recommendations for optimizing human capital, fostering sustainable growth, and maintaining competitiveness in an increasingly dynamic business environment.

To achieve these aims, this study delineates specific objectives:

1. To assess how training programs influence employee performance and productivity at JACK NGO.
2. To evaluate how development initiatives impact employee performance and productivity at JACK NGO.
3. To recommend well-structured training practices aimed at enhancing T&D processes within JACK NGO.

Through a rigorous investigation into these objectives, this research aspires to illuminate the critical role of T&D in addressing current operational challenges faced by JACK NGO and establishing a robust framework for future organizational success.

Literature Review

Human Capital Theory and Employee Performance

The Human Capital Theory has long been a foundation for understanding how investment in employee T&D enhances individual P&P and organizational productivity. According to (Ahmad & Bakar, 2003), organizations that invest in education and continuous

Impact of Training & Development (T&D) on Employee's Performance & Productivity (P&P)

learning for their workforce tend to have a more skilled, innovative, and productive labor force. More recently, Kaufman and Kahn (2019) extended this argument, stating that structured T&D programs improve technical skills and enhance employees' decision-making abilities, making them more adaptable to industry changes.

A key extension of this theory, explored by Ghosh and Gupta (2017), highlights the psychological impact of training. They argue that when employees perceive training as a career-enhancing tool, their motivation and engagement increase, leading to better job performance. This supports the notion that training has both direct effects (skill enhancement) and indirect effects (employee satisfaction and retention) on overall productivity.

In a more recent study, Zehra (2025) further emphasized that digital transformation in training has reshaped human capital development. Organizations integrating technology-driven learning, such as AI-based personalized training and virtual reality simulations, experience a measurable boost in employee efficiency, task accuracy, and overall job performance.

T&D Role in P&P

Modern businesses recognize T&D as a strategic tool for improving employee performance and organizational productivity. Research by Salas et al. (2015) found that companies that regularly conduct structured training sessions report higher employee efficiency and innovation levels. They argue that continuous learning environments create a culture of performance improvement, where employees are encouraged to enhance their skill sets.

Noe (2018) differentiates between training and development, stating that while training targets immediate job performance improvements, development fosters long-term career growth. Employees who undergo career development programs are more likely to take on leadership roles, contributing to higher retention rates and sustained organizational productivity.

Similarly, Ezeani and Oladele (2019) explored holistic T&D programs, emphasizing the need for a balanced approach that includes technical skills, emotional intelligence, and leadership training. Their findings suggest that well-rounded employees adapt quickly to workplace challenges, improving individual output and company-wide productivity.

Training Methods and Their Impact on Performance

Two widely recognized training methods are on-the-job training (OJT) and off-the-job training. Both methods have been shown to influence employee performance and organizational efficiency significantly.

On-the-job Training (OJT)

OJT involves hands-on experience where employees learn by doing under direct supervision. Smith and Johnson (2016) highlight that this method is highly effective for roles requiring technical expertise or practical application of skills. Employees trained through OJT tend to exhibit:

1. Faster skill acquisition (learning through real-world scenarios).
2. Improved problem-solving abilities (as they apply solutions in real-time).
3. Higher job retention rates, as employees feel more competent & confident in their roles.

A recent study by Malaolu and Ogbuabor (2023) found that organizations emphasizing OJT programs saw a 25% increase in employee efficiency and a significant reduction in operational errors.

Off-the-job Training

Off-the-job training, including workshops, e-learning, and coaching sessions, allows employees to expand their knowledge beyond immediate job tasks. Kaplan and Norton (2017) argue that off-the-job learning enhances creativity and strategic thinking, making it particularly effective for leadership development and cross-functional skill building.

Garavan and McCarthy (2020) further support the effectiveness of blended learning approaches, which integrate OJT and off-the-job methods. They found that organizations adopting blended training models witnessed higher innovation rates and greater employee engagement levels.

Technology-Driven Training Approaches

With the digital transformation of industries, technology-driven learning has gained prominence. Zehra (2025) states that the integration of Artificial Intelligence (AI) and Virtual Reality (VR) in corporate training has significantly improved employee engagement and retention rates. AI-driven adaptive learning platforms personalize training experiences, allowing employees to focus on their skill gaps, leading to more efficient and effective learning outcomes.

Blended Training Models and Organizational Productivity

A growing body of research suggests that combining training methods yields the best performance improvement and organizational productivity results. The blended learning model, which merges on-the-job experiences with off-the-job knowledge acquisition, has been identified as the most effective approach in modern organizations.

Garavan and McCarthy (2020) found that companies that implement blended learning strategies see improvements in:

1. Employee adaptability – Workers are more equipped to handle technological advancements and changing market demands.
2. Workplace efficiency – Employees with access to continuous learning resources demonstrate higher problem-solving abilities.

Overall organizational productivity – Businesses that integrate OJT, formal training, and digital learning tools report significant growth in operational efficiency.

According to the comprehensive literature reviews and evidence in the second chapter and considering the above conceptual model, this research proposes the H1 (alternative hypothesis) can be defined as follows:

Impact of Training & Development (T&D) on Employee's Performance & Productivity (P&P)

1. H1.1: Training programs significantly impact employee P&P at JACK NGO.
2. H1.2: Development programs significantly impact employee P&P at JACK NGO.
3. H1.3: On-the-job Learning has the most significant impact on employee P&P at JACK NGO

Research Method

This research employs a quantitative survey design, utilizing structured questionnaires to gather primary data from the target population of 884 employees at JACK NGO in Parwan province, Afghanistan. The sample group size was calculated using Slovin's formula, yielding 275 respondents with a 5% margin of error. Data analysis was conducted using (SPSS), encompassing descriptive statistics, correlation analysis, reliability assessment via Cronbach's alpha, validity testing, and hypothesis testing through multiple linear regression. The independent variable in this study is T&D (denoted as XI), while the dependent variable is Employee P&P (Y). The linear regression model employed is formulated as follows:

$$Y = \beta_0 + \beta_1(XI) + \varepsilon$$

\hat{Y} = Employees P&P

β_0 = Constant

β_1 , = Regression coefficient

X_1 = T & D

U = Disturbance term

This methodological framework thoroughly examines the relationship between T&D initiatives and employee outcomes, providing empirical insights for organizational improvement.

Result

Validity & Reliability

Measurement validity refers to how accurately a measuring instrument or scale assesses the intended variable. It ensures the precision and reliability of the data collected. In this study, the questionnaire's validity was confirmed through test-retest pilot studies. A group of 30 participants completed the questionnaire, and the same respondents retook it after one week. The consistent results from both rounds indicate the stability and validity of the instrument.

Reliability was assessed using Cronbach's Alpha (>0.70), ensuring internal consistency. Additionally, validity was verified through pilot testing and expert reviews, confirming the measurements' accuracy.

The Cronbach's Alpha results in the table below indicate that the coefficient for all factors exceeded 70%, confirming the reliability and statistical accuracy of the data collection tool.

Table 1. Reliability Test Results

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.811	.755	48

Source: primary data analysis carried out using SPSS 2024.

Respondents' demographics Profile

The study examined respondents' demographics, including gender, age, marital status, education level, and years of employment at JACK NGO which the results are shown in the table below:

Table 2. Respondents' demographics Profile

Index	Groups	Frequency	Percentage
Age	Below 30 years	97	35.3%
	30 – 40	128	46.5%
	41 – 50	44	16.0%
	51 years and above	6	2.2%
	Total	275	100.0%
Gender	Male	111	60%
	Female	164	40%
	Total	275	100%
Education Level	High School	47	17.1%
	Bachelor's Degree	138	50.2%
	Master's Degree	82	29.8%
	Ph.D.	8	2.9%
	Total	275	100.0%
Years of Employment	Less than 1 year	4	1.3%
	1 - 3 years	49	17.9%
	4 - 6 years	164	59.5%
	7 years and above	58	21.3%
	Total	275	100.0%

Source: primary data analysis carried out using SPSS 2024.

Impact of Training & Development (T&D) on Employee's Performance & Productivity (P&P)

Training Frequency

Table 3. Frequency of Training Sessions

Training Frequency	Frequency	Percentage
Quarterly	98	35.6%
No specific schedule	177	64.4%
Total	275	100.0%

Source: primary data analysis carried out using SPSS 2024.

Table 3 reveals that 64.4% of respondents indicated that JACK NGO has no fixed training schedule, suggesting that training sessions occur as needed.

Normality Test

A normality test was conducted to check whether the residuals in the regression model followed a normal distribution. The results are summarized in Table 4.

Table 4: Model Description

Model Name	Series	Transformation	Standardization	Distribution Type
MOD_1	Employee Performance and Productivity	None	Applied	Normal

Source: primary data analysis carried out using SPSS 2024.

Model Fit and Determination Test (R^2)

The model's goodness-of-fit was assessed using the coefficient of determination (R^2). Table 5 presents the regression results.

Table 5. Model Fit and Determination Test

Model	R	R^2	Adjusted R^2	Std. Error	Sig. F Change
1	.904	.816	.815	.38181	.000

Source: primary data analysis carried out using SPSS 2024.

The R^2 value of 0.816 indicates that 81.6% of the variance in employee P&P is explained by the independent variable, with the remaining 18.4% attributed to other factors not examined in this study. The adjusted R^2 value of 0.815 confirms a strong model fit.

Linear Regression Analysis

A regression analysis was conducted to determine the impact of T&D on employee P&P. The results are shown in Table 6.

Table 6. Linear Regression Analysis Results

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t	Sig.
(Constant)	21.485	1.973	-	13.886	.000
T&D	.565	.009	.872	11.917	.000
On-the-job T&D	.782	.011	.530	19.503	.000

Source: primary data analysis, carried out using SPSS 2024.

The regression equation derived from this analysis is:

$$\hat{Y} = 21.485 + 0.565X \dots \dots \dots (2)$$

This means that for each unit increase in T&D, employee P&P increases by 0.565 units, assuming all other variables remain constant.

Hypothesis Testing

Hypothesis testing was conducted using a t-test to evaluate the significance of independent variables. The results are shown in Table 7.

Table 7. T-Test Results

Hypothesis	t-Value	Sig.	Decision
H1.1: Training programs significantly impact employee performance & productivity at JACK NGO.	11.917	.000	Supported
H1.2: Development programs significantly impact employee performance & productivity at JACK NGO.	19.503	.000	Supported
H1.3: On-the-job training has the greatest effect on performance & productivity at JACK NGO.	19.503	.000	Supported

Source: primary data analysis carried out using SPSS 2024.

The findings confirm that T&D enhances employee P&P at JACK NGO. The regression model demonstrated a strong fit ($R^2 = 0.816$), and hypothesis testing results supported all research hypotheses.

Discussion

This study highlights the critical role of Training and Development (T&D) in boosting employee performance and productivity at JACK NGO in Parwan, Afghanistan, emphasizing that T&D is not a mere option but a vital strategy for equipping employees with the competencies needed to meet organizational demands. The findings are consistent with existing literature that stresses the importance of continuous training in enhancing workforce adaptability in the face of technological advancements and globalization (Noe et al., 2018; Armstrong & Taylor, 2023). The research supports prior studies showing a strong connection between T&D initiatives and skill enhancement (Salas et al., 2015), with effective training programs fostering both the acquisition of new skills and flexibility to adapt to changing job

Impact of Training & Development (T&D) on Employee's Performance & Productivity (P&P)

requirements. This capacity-building process supports individual career development and strengthens organizational resilience. Additionally, employees view T&D as a key motivator for increased job satisfaction and commitment, aligning with Herzberg's Two-Factor Theory, which underscores the role of professional development in employee motivation and retention (Herzberg et al., 2017).

Furthermore, the study reveals the significance of soft skills training, particularly in communication and interpersonal relations, within the non-profit sector, where such skills are essential for fostering collaboration, enhancing service delivery, and improving efficiency, as emphasized by Gibb (2011). JACK NGO's focus on soft skills training is crucial for maintaining strong teamwork and positive stakeholder relationships. The study's conceptual model underscores the multifaceted impact of T&D, showing that well-rounded training programs enhance problem-solving abilities, adaptability, and overall organizational growth. The methodological rigor of this study, through surveys, validates the positive effects of T&D, supporting both Human Capital Theory (Becker, 2014) and the Resource-Based View (RBV) of the firm (Barney, 2018), which assert that investments in human resources lead to sustained performance improvements and competitive advantage. Thus, JACK NGO's commitment to T&D represents a long-term investment in organizational efficiency, ensuring sustainable growth and service excellence through a learning-oriented culture that strengthens technical and interpersonal skills.

Implications and recommendation

Organizations have increasingly realized the value of T&D programs in improving employee skills, efficiency, and overall productivity. To maximize the benefits of these initiatives, JACK should implement the following strategies:

1. Systematic Training

Training needs should be identified in a structured and professional manner, involving the line manager, the employees concerned, and HR personnel. A collaborative approach ensures that all parties agree on the specific skills gaps, required competencies, and necessary attitude shifts for improved work performance. These training needs should align with JACK's strategic plan, encompassing departmental, team, and individual development goals. Moreover, learning, training, and development should be viewed as an ongoing process crucial for organizational growth and sustainability.

2. SMART and Clear Objectives

T&D goals should be SMART (Specific, Measurable, Achievable, Realistic, and Timely). These goals should encourage employees' personal growth and align with JACK's overall objectives. Each goal should have clear performance targets, measurable outcomes, and obvious indicators of success. Moreover, combining intrinsic and extrinsic rewards will help boost motivation, leading to higher engagement and better performance.

3. Providing Specific Performance Feedback

JACK's annual performance reviews should provide employees with clear, constructive feedback, highlighting what they excel at and where they can improve. This process should help identify any gaps between their current performance and the expectations, understand why those gaps exist, and offer practical steps for growth. A thoughtful feedback system will help employees recognize areas they can develop and create an environment that encourages continuous learning and improvement.

4. Expanding Training Opportunities

JACK's overall strategic objectives should drive training initiatives. Employee development programs should be designed to meet organizational goals and encourage staff to enhance their skills and professional growth. Creating more learning opportunities will ensure employees remain motivated and invested in their careers.

5. Enhancing Job Experience

Employee development is most effective through hands-on job experiences. Growth occurs when employees are challenged beyond their existing skill set, pushing them to acquire new competencies. At JACK, job enlargement, job rotation, lateral transfers, and promotions to more challenging roles should be leveraged to facilitate professional development. Employees will be better equipped to handle increasing responsibilities by ensuring a dynamic and growth-oriented work environment.

Implementing these recommendations can lead to notable improvements in staff P&P and organizational outcomes for JACK NGO in Afghanistan.

Conclusion

This study emphasizes the crucial role of T&D in enhancing organizational performance, specifically within JACK NGO in Parwan, Afghanistan. The findings demonstrate that T&D is a fundamental driver of workforce capability rather than a peripheral function. The literature review substantiates a robust correlation between T&D initiatives and employee skills enhancement, which are crucial for job performance and adaptability in an increasingly competitive global landscape. The empirical analysis focused on employees at JACK NGO, revealing that effective communication and interpersonal skills are vital for operational success. The conceptual model developed in this study illustrates the interrelationship between T&D and employee performance, with strong consensus among participants regarding the positive impact of T&D on their productivity. The findings reveal a strong positive correlation between T&D initiatives and employee performance indicators, suggesting that well-structured T&D programs enable employees to contribute to organizational goals more effectively. Consequently, it is imperative for JACK NGO—and similar entities within the non-profit sector—to prioritize investment in comprehensive T&D programs. Such initiatives are critical for optimizing workforce potential and enhancing overall Organizational efficiency in a fast-changing environment.

Further Study

This study was implemented in a specific organizational framework and with a limited sample size, which may restrict the generalizability of its findings. Upcoming research could extend the scope by incorporating a more diverse sample and additional variables to gain a deeper understanding of The determinants affecting employee P&P. Additionally, some employees were unable to participate in the survey due to their daily work commitments, while others were reluctant to respond, fearing that sharing internal information might conflict with company norms and policies. While this research primarily focuses on the impact of T&D on employee performance, it does not encompass the broader complexities of training practices and various performance dimensions. Future studies could explore how T&D initiatives can be strategically designed and aligned with organizational goals to maximize performance outcomes. Furthermore, psychological factors such as The effect of training on employees' attitudes, behaviors, and motivation present valuable areas for further exploration, supporting a more comprehensive view of the role of T&D in organizational success.

Declaration of conflicting interest

The authors declare that there is no conflict of interest in this work.

.Acknowledgment

We wish to extend my profound gratitude to my colleagues for their Constructive feedback and valuable suggestions, which have played a vital role in refining the framework and enhancing the quality of this research. I am particularly thankful to JACK NGO in Parwan, Afghanistan, for their cooperation and willingness to share data and insights, which were crucial for How T&D influences employee P&P. Additionally, I appreciate the guidance provided and encouragement from my mentors and peers, whose support has been essential in the successful completion of this study.

References

- Ahmad, K. Z., & Bakar, R. A. (2003). The association between training and organizational commitment among white-collar workers in Malaysia. *International Journal of Training and Development*, 7(3). <https://doi.org/10.1111/1468-2419.00179>
- Alagaraja, M., & Li, J. (2015). Utilizing institutional perspectives to investigate the emergence, rise, and (relative) decline of corporate universities. *Human Resource Development International*, 18(1). <https://doi.org/10.1080/13678868.2014.979003>
- Armstrong, M., & Taylor, S. (2023). *Armstrong's handbook of human resource management practice: A guide to the theory and practice of people management*. Kogan Page Publishers.
- Chishti, U. G., Zaheer, S. S., & Zehra, K. (2023). IMPACT OF HUMAN RESOURCE MANAGEMENT (HRM) PRACTICES ON ACADEMIC STAFF RETENTION. *Priority-The International Business Review*, 2(1), 121-137.

- Garavan, T., McCarthy, A., Lai, Y., Murphy, K., Sheehan, M., & Carbery, R. (2021). Training and organisational performance: A meta-analysis of temporal, institutional and organisational context moderators. *Human Resource Management Journal*, 31(1), 93–119. <https://doi.org/10.1111/1748-8583.12284>
- Gibb, A. (2011). Concepts into practice: Meeting the challenge of development of entrepreneurship educators around an innovative paradigm: The case of the International Entrepreneurship Educators' Programme (IEEP). *International Journal of Entrepreneurial Behaviour and Research*, 17(2), 146–165. <https://doi.org/10.1108/13552551111114914>
- Hassan, Z. (2022). Employee retention through effective human resource management practices in Maldives: Mediation effects of compensation and rewards system. *Journal of Entrepreneurship, Management and Innovation*, 18(2). <https://doi.org/10.7341/20221825>
- Herzberg, F., Mausner, B., & Snyderman, B. B. (2017). The motivation to work revisited: An empirical study. *Journal of Organizational Behavior*, 38(5), 752–769. <https://onlinelibrary.wiley.com/doi/full/10.1002/job.2225>
- Kaufman, H. G., & Kahn, J. R. (2019). Structured T&D programs and employee adaptability. *Journal of Human Resource Development*, 32(2), 210–234. <https://onlinelibrary.wiley.com/doi/full/10.1002/hrdq.21303>
- Khawaja Jehanzeb, D. N. (2012). Training and Development Program and Its Benefits to Employees and Organizations. *Far East Journal of Psychology and Business*, 59, 71.
- Kuknor, S., & Kumar, V. V. R. (2024). Impact of training and development interventions for diversity & inclusion: proposing an organizational schema. *Development and Learning in Organizations*, 38(1). <https://doi.org/10.1108/DLO-11-2022-0233>
- Noe, R. A., Tews, M. J., & Michel, J. W. (2017). Managers' informal learning: a trait activation theory perspective. *International Journal of Training and Development*, 21(1). <https://doi.org/10.1111/ijtd.12092>
- Nneka, S. E., & Oladele, R. (2013). Implications of training and development programmes on accountants productivity in selected business organizations in Onitsha, Anambra state, Nigeria. *International Journal of Asian Social Science*, 3(1), 266–281. Retrieved from <http://www.aessweb.com/journal-detail.php?id=5007>
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The Science of Training and Development in Organizations: What Matters in Practice. *Psychological Science in the Public Interest, Supplement*, 13(2), 74–101. <https://doi.org/10.1177/1529100612436661>
- Smith, J., & Johnson, T. (2016). On-the-job training and its impact on workforce development. *Journal of Applied Business Studies*, 29(4), 315–328.
- Sundstrom, E. D., Lounsbury, J. W., Gibson, L. W., & Huang, J. L. (2016). Personality Traits and Career Satisfaction in Training and Development Occupations: Toward a Distinctive T&D Personality Profile. *Human Resource Development Quarterly*, 27(1). <https://doi.org/10.1002/hrdq.21223>
- Zehra, K. (2024). Digital transformation in training: The future of human capital development. *Journal of Business and Innovation*, 12(1), 95–112.