

Impact of the Training (Analysis, Design, and Development) on Employee Performance (Execution Skill, Knowledge, and Adapt to Work)

ADEL ELJALI ^{a*}, ALI AMEEN ^b

^{a,b} Lincoln University College, Selangor, Malaysia

* Correspondence: ali.ameen@aol.com

DOI: 10.29322/IJSRP.10.08.2020.p10429

<http://dx.doi.org/10.29322/IJSRP.10.08.2020.p10429>

Abstract

With the dramatic increase in competition between firms, organizations use employee training to improve their employee's performance and therefore the life of organization. Performance of employees is crucial in this aspect for the well-being of the organization. The main objective of the current study is to find the significance of training to improve the employee performance. The study population is composed of the personnel in three companies in Libya (Africa Engineering and Projects Company, Libya Investment Embracement Company and Africa Trade & Investment Company). The size of the study population reaches 1016 individuals. 287 responses were usable. PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilizing the software SmartPLS 3.0. results show that training (analysis, design, development) has a significant impact on the employee performance (execution skills, knowledge, adapt to work). The results shed some light on the importance of the training to improve the employee performance in the public sector in Libya.

Keywords: Training; employee performance

1. Introduction

Training is an important factor in the modern institutions and directly affects the employee performance. Training turned into a main part of the strategies of human resources in the business employees and governmental administrations and cannot be realized unless through the availability of accessible material potentialities and the qualifying cadres for training and the division of the training programs, that shall be designed and executed, as per the necessities of the employee (Altrawna, 2012) whereas training contributes significantly in the achievement of the goals and strategies of the institution and on the other hand, the changes may lead to the aging of skills learnt within a short period of time, whereas the employee changes and expansions pertaining to the sector of business through the introduction of modern technology in the various aspects of business increases the need of the individual for the update of his skills and gain new skill through elaborate training programs as per methodological and scientific bases (Rawia, 2005).

Altalbani et al. (2011) points that the inability to develop the employee performance in the Libyan employees in general is due to the lack of desire of taking hold of the scientific manners and modern teaching methods that are convenient for the work of the employee and also the unconcern for evaluating the methods and manners of modern training before proceeding in the start of such programs, which is corroborated by the study of Tawfik (2007) and Alzaed (2009).

According to the international indicators for the year 2015, they indicate the unconcern for the factor of training in the Libyan establishments in comparison with the countries of the world and comes in order 143 in training out of 144 countries and in case of its comparison with the Arabic countries, it order comes as the last of the Arabic countries. Find enclosed the illustrative table (the international indicators, 2015).

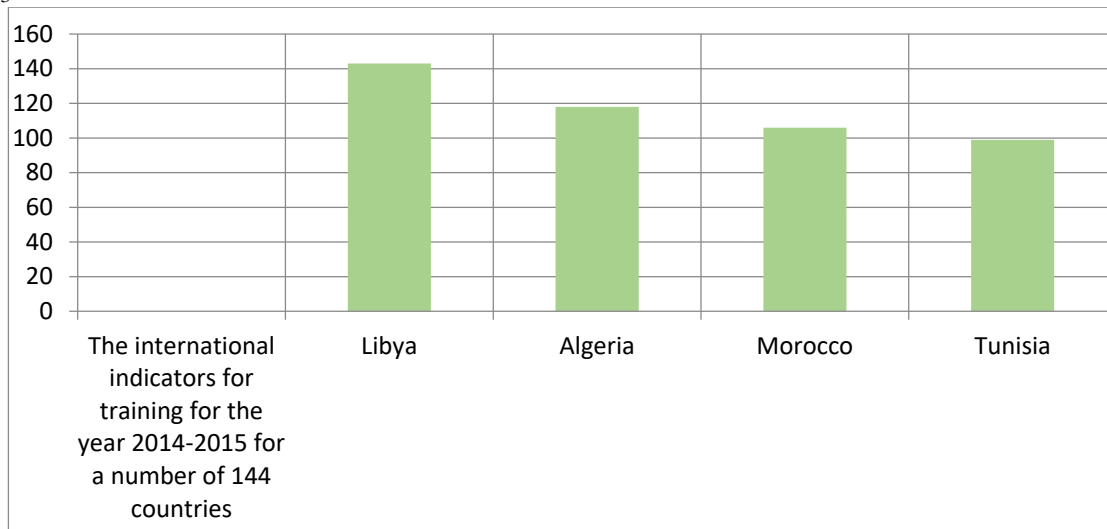


Figure 1.1: the international indicators of training

Therefore, the study shall discuss the problem represented in the weakness of functional performance and inability to develop the skills of the personnel and their knowledge in the field of business because of the improper application of the appropriate training for the establishment and lack of exercising training as per the modern methods together with the negligence in evaluating the results of training programs by the management of the establishment. The main objective of the current study is to examine the impact of training on the employee performance in public companies for construction, building and roads in Libya.

2. Literature Review

2.1 Employee Performance (EP)

Employee performance factor is one of the most significant parameters in the research related to management and perhaps the most significant guide to the overall performance of the employee (Gavrea, Ilies, & Stegorean, 2011). The performance of the employee is a benchmark or an indicator for efficiency, effectiveness, and environmental obligation like productivity, time of cycle, reduction of waste, and compliance of rules (Muchira, 2013). The large amount of definitions serve to view the performance of the employees as a tool for achieving objectives (Abu-Jarad, Yusof, & Nikbin, 2010; Shahzad, Luqman, Rashid Khan, & Shabbir, 2012) In short, the performance of the employee is the most significant factor in evaluation of employees, their activities, and the environments in which they work. This significance is represented by the continual use of performance of the employee as a dependent parameter in earlier research (Richard et al., 2009). The efficient performance and success of the employee is usually ascribed to exceptional strategy and excellent resources. On the basis of the theory of contingency, there is no best way or method to run employees (Gavrea et al., 2011).

2.2 Training (TR)

Training is meant by setting individuals targeted by training on the correct way (Helal, 2000:28). Training is considered to be one of the important notions (or concepts) in the world of business, particularly in the industrial and productive field, whereas this notion reflects the need for continuous development of experiences and skills of the personnel through developed and successful training programs (Greshi, 2005). Nagm and Talal (2011) define training as being a continuous operation for the promotion of the fields of cultivation of knowledge for the personnel and increase the proportion of gained information and improve their abilities, behaviors and the theoretical, practical and psychological inclinations. Training directly contributes in improving performance and makes gain the organized experience and create the appropriate opportunities in the conduct by expanding the knowledge of the personnel and refine their skills over learning and using the modern means in a job (Elham, 2011). Training is an important factor in arousing vigilance in the individuals and direct attention to the much important issues in the employee (Altelbani, 2011). The attention paid to the training increased in view of the link of this task to the standard of performance by the individual of the position occupied by him and the productive efficiency (Algotha, 2007) (Hael, 2009) (Altelbani, 2011) (Suhaila, 2003). Consequently, the following hypothesis is proposed:

H1: Training has a positive effect on execution skill.

H2: Training has a positive effect on knowledge.

H3: Training has a positive effect on adapt to work.

3. Research Method

3.1 Overview of the Proposed Conceptual Framework

Among the international models used in measuring training programs is ADDIE model as indicated in figure 1. it represents the framework that clarifies the general operations undertaken by the designers and developers of the training programs

(Morrison, 2010). This model may have been developed by a group of researchers in Florida University (Branson et al, 1975). The conceptual framework is depicting the relations suggested by this study based on the literature review.

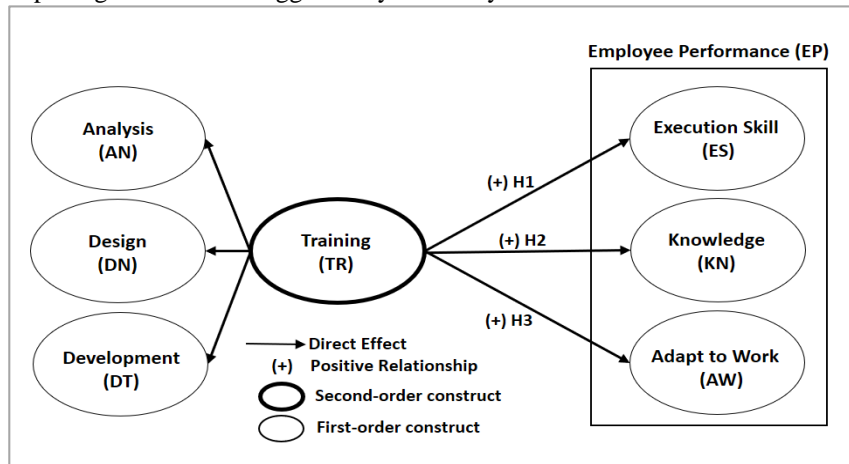


Figure 2: The proposed conceptual framework

3.2. Development of Instrument and Data collection

The study population is composed of the personnel in three companies in Libya (Africa Engineering and Projects Company, Libya Investment Embracement Company and Africa Trade & Investment Company). The size of the study population reaches 1016 individuals. 287 responses were usable. This study has adopted questionnaires to collect data. It was divided into two sections, the first measuring six core constructs using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (please refer to Appendix A for the instruments), while the second covered the demographic profile of respondents, measured using a nominal or ordinal scale. PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilizing the software SmartPLS 3.0.

4. Data Analysis and Results

PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilizing the software SmartPLS 3.0 (Ringle, Wende, & Becker, 2015).

4.1 Measurement Model Assessment

The individual Cronbach’s alpha, the composite reliability (CR), The average variance extracted (AVE), and the factor loadings exceeded the suggested value (Kline, 2010; Hair, Black, Babin, & Anderson, 2010) as illustrated in Table 1.

Table 1: Measurement model assessments

Constructs	Item	Loading (> 0.7)	M	SD	α (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Analysis (AN)	AN1	0.898	3.94	1.01	0.929	0.947	0.781
	AN2	0.921					
	AN3	0.892					
	AN4	0.806					
	AN5	0.897					
Design (DN)	DN1	0.917	3.90	0.99	0.871	0.912	0.722
	DN2	0.891					
	DN3	0.776					
	DN4	Deleted					
	DN5	0.807					
Development (DT)	DT1	0.843	4.05	0.96	0.934	0.950	0.791
	DT2	0.892					
	DT3	0.898					
	DT4	0.911					
	DT5	0.901					
Execution Skill (ES)	ES1	0.904	3.62	1.13	0.916	0.937	0.749
	ES2	0.882					
	ES3	0.814					
	ES4	0.830					
	ES5	0.891					
Knowledge (KN)	KN1	0.871	3.62	1.15	0.912	0.934	0.740
	KN2	0.878					
	KN3	0.852					
	KN4	0.839					
	KN5	0.860					
Adapt to Work (AW)	AW1	Deleted	3.05	1.21	0.944	0.959	0.855
	AW2	0.892					
	AW3	0.931					
	AW4	0.939					
	AW5	0.936					

Note: M=Mean; SD=Standard Deviation, α = Cronbach’s alpha; CR = Composite Reliability, AVE = Average Variance Extracted.

This publication is licensed under Creative Commons Attribution CC BY.

Key: AN: Analysis, DN: Design, DT: Development, ES: Execution Skill, KN: Knowledge, AW: Adapt to Work

Fornell-Larcker was used to test the discriminant validity, table 2 shows that all constructs of model fulfilled satisfactorily, it was discovered that the AVEs' square root on the diagonals is bigger than the correlations among constructs (Fornell & Larcker, 1981; Chin, 1998; Hair et al., 2017).

Table 2: Fornell-Larcker criterion

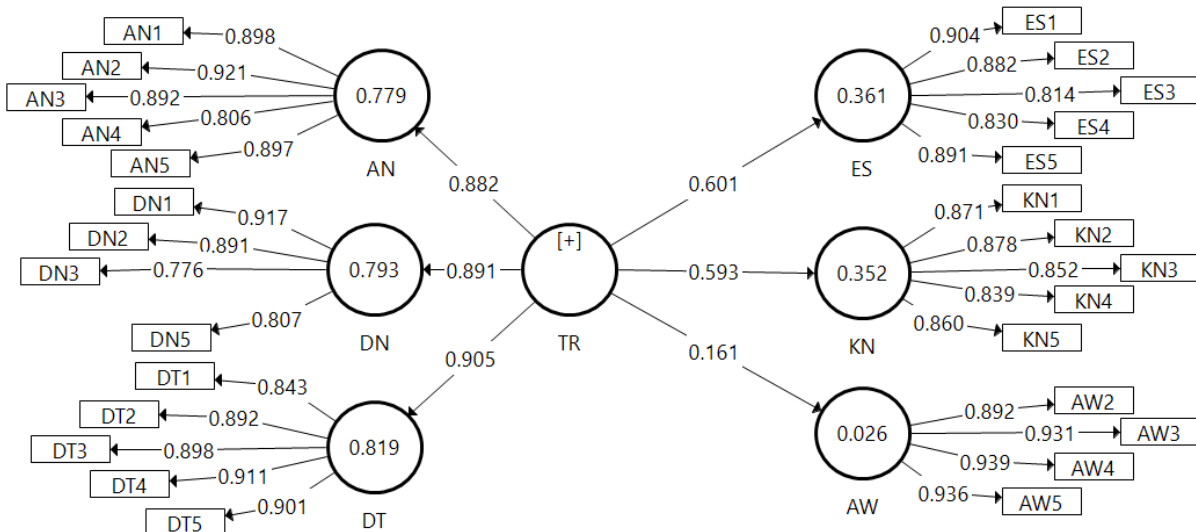
	AN	AW	DN	DT	ES	KN
AN	0.884					
AW	0.129	0.925				
DN	0.682	0.146	0.850			
DT	0.668	0.151	0.738	0.889		
ES	0.476	0.271	0.656	0.491	0.865	
KN	0.454	0.275	0.689	0.462	0.754	0.860

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.

Key: AN: Analysis, DN: Design, DT: Development, ES: Execution Skill, KN: Knowledge, AW: Adapt to Work

4.2 Structural Model Assessment

The structural model can be tested by computing beta (β), R^2 , and the corresponding t -values via a bootstrapping procedure with a resample of 5,000 (Hair, Hult, Ringle, & Sarstedt, 2017).



Key: TR: Training, AN: Analysis, DN: Design, DT: Development, EP: Employee Performance, ES: Execution Skill, KN: Knowledge, AW: Adapt to Work

Figure 2: PLS algorithm results

Figure 2 and Table 3 showing the results of the hypothesis tests. Training positively influences employee execution skill, knowledge, and adapt to work. Hence, H1, H2, and H3 are accepted with ($\beta = 0.601, t = 12.309, p < 0.001$), ($\beta = 0.593, t = 12.969, p < 0.001$), and ($\beta = 0.161, t = 2.690, p < 0.001$) respectively.

Training explains thirty-six percent of the variance in execution skill, thirty-five percent of the variance in knowledge, and three percent of the variance in adapt to work. The values of R^2 have an acceptable level of explanatory power, indicating a substantial model (Cohen, 1988; Chin, 1998).

Table 3: Result of Direct Effect Hypotheses

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision	R ²
H1	TR→ES	0.601	0.049	12.309	0.000	Supported	0.36
H2	TR→KN	0.593	0.046	12.969	0.000	Supported	0.35
H3	TR→AW	0.161	0.060	2.690	0.007	Supported	0.03

Key: TR: Training, ES: Execution Skill, KN: Knowledge, AW: Adapt to Work

5. Discussion

The main objective of this research was to assess the impact of training (analysis, Design, development) on employee's performance (Execution Skill, Knowledge, and Adapt to Work) for the case of public companies for construction, building and roads in Libya.

The study found that training has a significant effect on employee performance (execution skills) with ($\beta = 0.601, t = 12.309, p < 0.001$). This means that, When The organization that, analyze the performance records of the staff before and after the training process to evaluate the training program, compares the level of production before and after the training process to evaluate the training program at the level of organizational results, analyzes the performance levels of the business unit to evaluate the training program at the organizational results level. The more employees are able to work under pressure with high quality, employees can plan and organize my work independently, and the foundation evaluates my work according to the tasks performed.

Likewise, imitability was found to positively affect employee performance (knowledge) with ($\beta = 0.161, t = 2.690, p < 0.001$). This is explained by the fact that, the more Designing training programs are suitable for the work, After completing the training, employee finds that the way the training program was implemented, improved my work skills, The training program is designed to increase the working knowledge of workers, The Foundation brings experts in training to design the training program in the best way, employee found the training methods easy and uncomplicated. The more employee is able to take the initiative at work, employee always accept and learn from my co-workers, employee cooperate with others to do these tasks, employee communicate effectively within the organization (for example, expressing ideas and intentions appropriately), employee has a good working background

Further, organizational aspects were found to positively affect employee performance (adapt to work) ($\beta = 0.161, t = 2.690, p < 0.001$). This is explained by the fact that the more employees see that you need training to do your job better, The Foundation studies the training needs of the employee based on the results of the performance evaluation, employee see that your competence qualifies you to perform higher tasks, Employee see that your job is done easily after the training is over, employee think that the training program you participated in helps you to develop your skills significantly. The more the employee have the flexibility to deal with stress, difficult situations, the employee can offer innovative solutions to new and challenging problems, the employee have the ability to remember everything needed to get the job done completely, The employees in my organization need to constantly update their business skills, the employees are able to deal with unstable and unexpected business situations.

6. Implications

In the modern and complex business environment, employee training and development is one of the reliable sources of competitive advantage to compete with the changing and competitive business world. Training and development are beneficial to employees in particular and the organisation in general. This research work will help organization to understand the importance of training and development. It will also help organization to understand which factors are important to keep in mind during the training and how a good training can be delivered to their employees. It will help them to understand that it is very necessary for them to give training to their employees so that they could perform the assign task in a better way. Above all, it becomes imperative to state that without training, there will be no development. Therefore, for every organization to survive, training must be seen by management as "a means to an end".

Based on the finding of the study the following suggestions are recommended: The employee training and development activity shall be based on a systematically identified knowledge and skill deficit so as it maximizes the effort of both the employee and the organization. second Ensuring adequate budget for training and development activities, utilizing the allocated resources in an efficient manner shall be maintained for organizational success. finally, involving employees in training evaluation activities and taking inputs for future similar activities and document best practices to scale up in similar settings. The impact of training on quality of services and client satisfaction shall be studied

7. Conclusion

Training is important for the survival of any organization. It is also imperative for the effective performance of employees, enhancement of employees' ability to adapt to the changing and challenging business environment and technology for better performance, increase employees' knowledge to develop creative and problem solving skills. Meanwhile, all the relationships proposed among the variables in the research model were tested and it was found that relationship exists amongst the variables having subjected the collected data to empirical analysis with the use of descriptive statistics. However, the results of the findings indicated that training and development affect employees' performance and organizational effectiveness, which implies that effort must be made to ensure that employees' skills and knowledge are fully underutilized through adequate and timely training design and implementation. The overall result showed that proposed hypotheses tested were accepted. It is therefore recommended that individuals should be more proactive and seek to be more creative and innovative to contribute their quota through their profession and skill. Employers of labor and decision-makers should endeavor to create enabling training environments and favorable training policies that will give every worker the opportunity to attend training. Management should also take into consideration the training need of each worker and act as appropriate.

References

- Abu-Jarad, I., Yusof, N., & Nikbin, D. (2010). A review paper on organizational culture and organizational performance. In *International Journal of Business and Social Science* (Vol. 1).
- Alazawi, Talal Nuseir and Nagm, 2011, "Effect of administrative innovation on the improvement of standard of performance of human resources management in the Jordanian commercial banks", Jordan.

- Alghoha, Ibrahim Abdelmageed, 2007, "Effect of training on the performance of small and very small projects in Gaza Strip", publications of the Islamic University, Gaza, Palestine.
- Altelbani, Nehaya Abdelhadi, Eman Abdelrahman and Badir, Ramez Azmi, 2011, Reality of the operation of evaluation of training programs in the local institutions in the southern provinces, Journal of Azhar University in Gaza, Series of Humanitarian Sciences, Volume 13, Issue 1, Azhar University, Gaza, Palestine
- Altrawna, Tahsin Ahmed, 2012, "Abidance by implementing the stages of training and its effect on the fields of personnel performance" The Arabic Journal for Security Studies and Training, Volume 26, Issue 5, Riyadh, Saudi Arabia
- Alzaed, Ehael Abdelwahab, 2009. Effect of training in raising the efficiency of personnel performance. Field study on the textile industrial companies, unpublished master degree thesis, University of Damascus, Syria.
- Branson, R. K., Rayner, G. T., Cox, J. L., Furman, J. P., King, F. J., Hannum, W. H. 1975. Inter service procedures for instructional systems development. Vol (5). Training and Doctrine Command. United States.
- Chin, W. W. (1998a). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), 7–16.
- Chin, W. W. (1998b). *The partial least squares approach to structural equation modeling*. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-358). New Jersey: Lawrence Erlbaum Associates. Mahwah, NJ: Lawrence Erlbaum.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd Editio). LawreAssociatesnce Erlbaum.
- Elham, Alnaser, 2011, "Evaluation of training effect". History of publication: 13.12.2011, electronic site.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gavrea, C., Ilies, L., & Stegorean, R. (2011). Determinants of organizational performance: The case of Romania. *Management & Marketing*, 6(2), 285–300.
- Greshi, Mohamed Alsaleh, 2005, "Evaluation of efficiency of human resources training programs: field study in the national institution for the equipment of public works", published master degree thesis, Mantouri University, Constantine, Algeria.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th Editio). Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). London: Thousand Oaks: SAGE.
- J. Richard, P., Devinney, T., Yip, G., & Johnson, G. (2009). Measuring Organizational Performance: Towards Methodological Best Practice. In *Journal of Management* (Vol. 35). <https://doi.org/10.1177/0149206308330560>
- Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Morrison, Gary R. 2010. "Designing Effective Instruction".6th Edition. John Wiley & Sons Publishing.
- MUCHIRA, W. N. (2013). *RELATIONSHIP BETWEEN STRATEGY IMPLEMENTATION AND PERFORMANCE IN COMMERCIAL BANKS IN KENYA*. UNIVERSITY OF NAIROBI.
- Nehaya, Abdelhadi Altelbani, Ramiz Azmi Badir, Ayman Abdelrahman, 2011, "reality of the operation of evaluation of training programs in the local institutions in the southern provinces, Journal of Alazhar University in Gaza, series of humanitarian sciences 2011, Volume 13, Issue (3).
- Rawia, Hassan, 2005, strategic introduction for planning and developing human resources, University House, Amman, Jordan
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. Bonningstedt: SmartPLS.
- Shahzad, F., Luqman, A., Rashid Khan, A., & Shabbir, L. (2012). *Impact of Organizational Culture on Organizational Performance: An Overview* (Vol. 3).
- Suhaila, Abbas, Ali Ali, 2003. "Human resources management", third edition, Wael Publishing House, Amman, Jordan.
- Tawfik, Abdelrahman, 2007, Encyclopedia of Training and Human development, fourth part for the evaluation of training, Publication House, Distinction Center for the Sciences of Management and Computer, Cairo, Egypt.