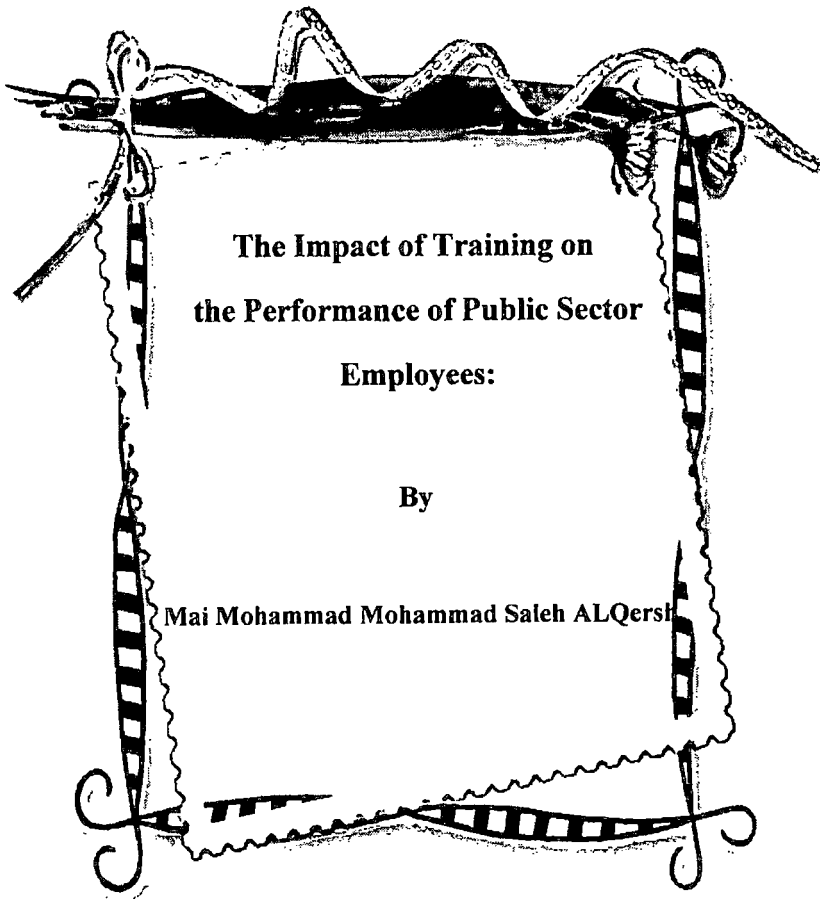


The Impact of Training on the Performance of Public Sector Employees: An Empirical Study on the Administrative Staff at Ain Shams University	العنوان:
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**The Impact of Training on
the Performance of Public Sector
Employees:**

By

Mai Mohammad Mohammad Saleh ALQershi

**The Impact of Training on the Performance of Public Sector
Employees:**

**An Empirical Study on the Administrative Staff at Ain
Shams University**

أثر التدريب على أداء العاملين بالقطاع الحكومي: دراسة تطبيقية على الموظفين الإداريين
بجامعة عين شمس

By

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Abstract

Purpose- Research on training in the public sector is scarce, and evidence regarding training impact on the performance of public sector employees in developing countries is limited. This study investigates the impact of four training variables (training design, trainer characteristics, trainee characteristics and post-training environment) on two dimensions of employee performance (task and contextual performance). The study also compares the differential impact of different training types on employees' performance.

Methodology- Data was collected using a structured questionnaire distributed on a sample of 183 administrative employees and 19 managers at Ain Shams University.

Findings- Training design, trainers' characteristics, trainees' characteristics and post-training environment were perceived

favorably by employees, and they all correlated positively with employees' task, contextual and overall performance. Training design and trainees' characteristics maintained the highest correlations with performance. Training impact differs according to training type, with on-the-job training having the advantage on two elements of training, namely training design and post-training characteristics.

Key Terms- Training, Employee Performance, On-the-Job Training, Off-the-Job Training, Task Performance, Contextual Performance

Introduction

For years, the public sector in Egypt has been criticized for being irresponsive of the technological changes taking place and the increasingly growing demand for more competent employees. Recently, however, new legal regulations have been imposed to ensure upgrading the skills capacity of public institutions to cope with the revolutionary changes taking place in local and global markets and to anticipate the increasing demand for better quality of public services. Specifically, the role of training has been highlighted in recent years as a means for improving the performance of public sector employees and creating a more competent workforce (Cotten, 2007; Erasmus & Swanepoel, 2005; Laing, 2009). Our knowledge of the training-performance relationship in developing countries, and specifically in the public sector, is limited (Thang, Quang, & Buyens, 2010; Gray et al cited in Schumaker 2004). Accordingly, this study seeks to extend the link between training and employee performance in the context of the Egyptian public sector, using four measures of training (training design, trainer characteristics, trainee characteristics and post-training environment) and two dimensions of employee performance (task and contextual performance).

Literature Review

Training

For decades, scholars have argued that investing in human resources through training has various advantages, for both the individual employee and the employer organization. They have stressed on the importance of training to individual and organizational performance to the extent that some researchers have established a significant difference between organizations that provide training opportunities for its employees and organizations that do not (Appiah, 2010). Specifically, training is likely to enhance a broad range of employee skills, including technical, human, conceptual and managerial skills— all of which are believed to contribute to the growth of the individual employee and of the organization as a whole (Oribabor as cited in Olanian & Ojo, 2008, p. 2).

Scholars have provided various definitions of training. Dessler defines training as a means for “giving new or present employees the skills they need to perform their jobs...[which] might involve simply having the current job-holder explain the job to the new hire, or, at the other extreme, a multi-week process including classroom or internet classes” (Dessler, 2008:294). Abiodun defines training as ‘a systematic development of the knowledge, skills and attitudes required by employees to perform adequately on a given task or job’ (Abiodun as cited in Olanian & Ojo, 2008, p.1). Robbins describes training as a systematic procedure for applying the ‘one best way’ of doing a job (Robbins as cited in Andrews, 1988, p. 132).

The systematic training procedure has been outlined by Armstrong as follows: (1) identify training needs; (2) decide what sort of training is required to satisfy these needs; (3) use experienced and trained trainers to implement training; (4) Follow up and evaluate training to ensure that it is effective (2009: 677).

Elements of Training

The success of training in achieving its goals depends on the appropriateness of the training elements involved in the training process. Previous researchers have highlighted these elements, which include training design, trainee and trainer characteristics and post-training environment.

Training design refers to the actual content and the method of delivering the training program (Armstrong, 2009). A well-designed training program is that which features a relevant, meaningful content supported by learning aids that help trainees recall this content when they are back to their work (Noe & Colquitt, 2002, as cited in Kraiger, 2003).

The attributes of the trainer are indeed central to the success of the training program. **Trainer Characteristics** that can contribute to trainees' satisfaction with the training program, and essentially the effectiveness of training, include the trainers' comfort level with the subject matter and his/her rapport with the trainees (Ghosh et al., 2011).

In addition, the individual characteristics of trainees are likely to influence the training outcomes. **Trainees' characteristics** which are significantly correlated with training effectiveness include trainees' motivation to learn and trainees' self-efficacy (Salas et al., 2012).

Literature highlighted the role of the **post-training environment** to the success of the training process. Research suggests that training outcomes are manifested in subsequent job-related behaviors only when the post-training environment is favorable (Edens and Suzanne, 2003, as cited in Okanya, 2008). The existence of a supportive post-training environment encourages employees to apply what they have learnt during training to their actual work environments. A supportive post-training environment exists when the trainee receives support and encouragement from his/her supervisor, peers and organization to

transfer what has been learned during the training program to the actual workplace (Facteau et al., 1995, as cited in Knyphausen-Aufseß et al., 2009).

Training Types

There are two major types of training: on-the-job and off-the-job training. Simply put, on-the-job training means "having a person learn a job by actually doing it" (Dessler, 2008:300); it takes place at the employee's normal workstation (Holden, 2001, as cited in Okanya, 2008). **On-the-job training** is used as a proxy for workplace learning, work-based learning, work-related learning, informal learning and non-formal learning (Berings et al., 2006). Thus, on-the-job training is given to employees while conducting their regular work at the same worksites. On the other hand, **off-the-job** training is that which requires taking employees out of their usual workstations (Nassazi, 2013).

Employee Performance

Performance is defined as a "major multidimensional construct aimed to achieve results and has a strong link to strategic goals of an organization" (Mwita as cited in Kassahun, 2007). Employee performance is regarded as a cornerstone in the success of any organization. In fact, the success of the collective efforts of employees within an organization can, very much, entail the success of the entire organization. It has been well established in the business literature that there is a presumed link between employee performance and organizational performance (Merchant as cited in Kassahun, 2007). This explains why there is always a constant search for methods by which organizations can leverage employee performance.

Because, as mentioned earlier, performance is a "multidimensional construct," scholars have attempted to determine the major dimensions constituting employee performance. One of the taxonomies that has long influenced performance literature is Borman and Motowidlo's taxonomy

which suggests that performance is a function of both, task and contextual performance (Borman & Motowidlo, 1997). **Task performance** refers to the effectiveness with which employees perform the activities that contribute to the organization's technical core either directly or indirectly. On the other hand, **contextual performance** refers to the volunteering activities that job incumbents carry out that are not formally part of the job and helping and cooperating with other employees in the organization to get tasks accomplished. It is argued that overall performance is a function of both task and contextual performance (Borman & Motowidlo, 1997).

Impact of Training on Employee Performance

The relationship between training and performance of employees has been thoroughly investigated in literature. Yet, findings are mixed, and most researches show that the impact of training on employee performance is anything but straightforward. Owing to such, scholars have come to the conclusion that the relationship between training and performance is complex and, to be analyzed, requires attention to both the training measures and the performance measures used.

For instance, using the British 2004 Workplace Employee Relations Survey (WERS) which covered 2,300 workplaces, Jones et al. (2008) studied the impact of three training measures (training incidence, training content and training objectives) on five measures of performance (quit rates, absence rate, financial performance, labor productivity and quality). Their analysis showed a positive, but not significant, association between training measures and productivity, and that employees' quit rate was negatively related to customer service/liaison training. They also found that communication training was associated with lower absence rate. Surprisingly, their findings reflected a negative relationship between the aggregate proportion trained and product quality. When it comes to incidence-based and duration-based measures of training, the researchers reported a positive relationship between these measures and financial performance and labor productivity.

In addition, another study investigated the association between training and organizational citizenship behavior, an element of contextual performance (Borman & Motowidlo, 1997). The study measured the relationship between four measures of training (availability of training, support for training, motivation to learn, training environment and perceived benefits of training) and organizational citizenship behavior, and found that support for training, motivation to learn, training environment, and benefits of training are all significantly correlated with all components of OCB with the exception of sportsmanship (Ahmed, 2011).

On the other hand, some studies examined how different types of training affect employee learning and skills. For instance, in a study that examined on- and off-the-job sites as learning environments, the authors found that both on- and off-the-job learning have valuable, yet different, contributions to apprentices' learning (Harris, Willis, & Simons, 1998). In fact, one of the advantages of on-the-job training is that it facilitates learning as trainees learn by doing and get quick feedback on their performance (Dessler, 2008:300). On the other hand, off-the-job training has the advantage of allowing employees to gain new skills and knowledge without being distracted by their daily work (Barrett, 2002).

Nevertheless, surprisingly, one study of police training has found no relationship between training and job performance (VanMaanen as cited in Mullins 1992, p.3). However, this could be justified by the presence of moderator factors that influence the relationship between training and performance. Some of those factors include; skills, attitudes (Schein as cited in Mullins 1992), intelligence (Kleiman & Gordon as cited in Mullins 1992), time on the job and lack of instruction as to how to transfer learned skills, knowledge and attitudes to the workplace (Mullins, 1992).

Research Problem

The literature above shows that the relationship between training and performance is anything but straightforward. Some studies confirmed a positive training-performance relationship; whereas others found no relationship at all. As Jones et al. (2008) put it:

"The relationship between training and performance is complex, depending on both the particular measures of training and of performance used in the analysis."

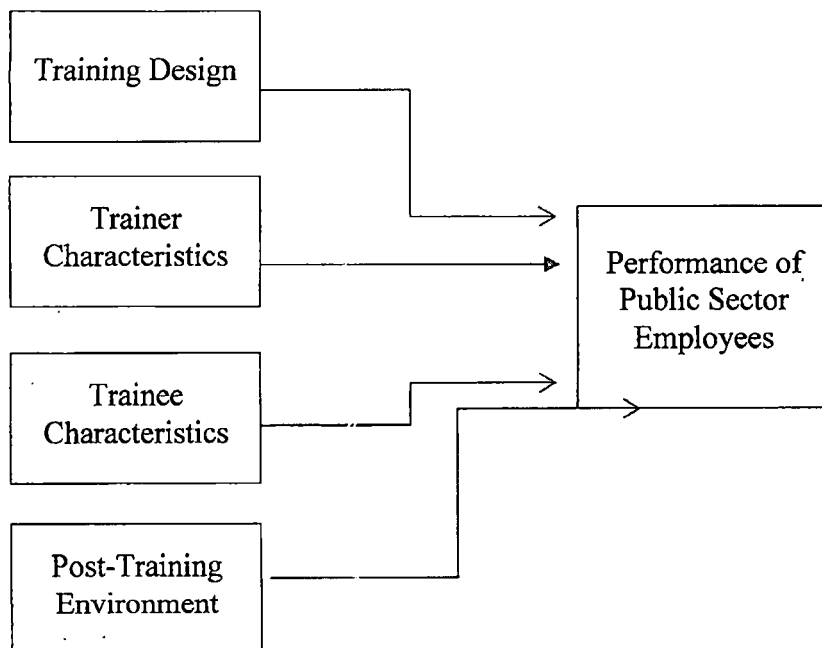
Given the complexity of the training-performance relationship, and the fact that this relationship has not adequately been investigated in the public sector organization (Gray et al cited in Schumaker 2004), and specifically in developing countries (Thang, Quang, & Buyens, 2010), this research aims at examining the impact of training on the performance of public sector employees in one of the developing countries, namely, Egypt. Specifically, the the impact of four training variables (training design, trainer characteristics, trainee characteristics and post-training environment) will be used to measure the training impact on two dimensions of performance, namely, task and contextual performance. In addition, the differential impact of different training types on employee performance will be investigated in this study.

Study Model

The following diagram (1-1) illustrates the basic variables of this study, where the independent variable is training and the dependent variable is performance. It also represents the assumed relationships among these variables, which are tested through the study hypotheses.

Independent Variable
Training

Dependent Variable
Performance



**This model is developed by the researcher.*

Study Problem

Our knowledge of the training-performance relationship in developing countries, and specifically in the public sector, is limited (Thang, Quang, & Buyens, 2010; Gray et al cited in Schumaker 2004). Accordingly, this study seeks to identify the impact of training on the employee performance in the context of the Egyptian public sector.

Specifically, the researcher aims at identifying the impact of training and four of its elements (training design, trainer characteristics, trainee characteristics, and post-training environment) on the task, contextual and overall performance of administrative employees working in one of Egypt's largest public universities, namely, Ain Shams University. In doing such, the study will be able to present practical findings to the university administration, and to the Egyptian public universities at large, that can help in making better future training-related decisions.

The study problem could be summarized in the following questions:

- 1- What is the impact of training on public sector employees' performance?
- 2- Which training type best affects public sector employees' performance?
- 3- How do the elements of training affect public sector employees' performance?
- 4- Which training elements best affect public sector employees' performance?

Study Objectives

The main objective of this study is to determine how the training provided to public sector administrative employees affect their performance. This will be achieved by focusing on four elements of training and how they impact employees' task, contextual and overall performance. Accordingly, this study has five main objectives as follows:

- 1- Measure the extent to which training at Ain Shams University is effective by measuring the effectiveness of

- four elements of training, namely, training design, trainer characteristics, trainee characteristics and post-training environment;
- 2- Measure the impact of training on the task, contextual and overall performance of public sector employees;
 - 3- Investigate the impact of four training variables (training design, trainer characteristics, trainee characteristics and post training environment) on employees' performance; and
 - 4- To identify the training elements which best contribute to improving employees' task, contextual and overall performance
 - 5- Measure the differential impact of different training types on employees' performance.

Study Hypotheses

Study hypotheses are as follows:

H1: Training has a positive impact on the performance of public sector employees.

H2: Training design has a positive impact on performance of public sector employees

H3: Trainer characteristics have a positive impact on the performance of public sector employees

H4: Trainee characteristics have a positive impact on the performance of public sector employees

H5: Post-training environment has a positive impact on the performance of public sector employees

H6: There is a significant mean variation between on-the-job training and off-the-job training with regards to their impact on the performance of public sector employees

Study Significance

This study aims at examining training and its impact on employees' performance in a developing country, where research in this area is limited (Thang, Quang, & Buyens, 2010). The study is applied in Egypt in an under-researched sector, namely, the public sector, which has so far received little attention compared to the private sector (Gray et al cited in Schumaker 2004).

Specifically, the researcher has chosen to apply the study on the administrative staff working in the public higher education sector in Egypt. In fact, Oshaiba (2009) has highlighted the importance of university administration and its crucial role in the success of the university's efforts and activities. He argues that it is the university administration that is responsible for controlling and leading the academic work and creating a suitable environment that contributes to the betterment of the academic performance.

Nevertheless, studies show that the Egyptian universities are largely unable to cope with the continuous changes taking place in the local and global environment, and that the deficiencies in the university administration contribute, to a large extent, to such inability (Oshaiba, 2009). Oshaiba (2009) concludes that any attempt to develop higher education should first attempt to improve the university administration.

Accordingly, determining the exact impact of training on the performance of university administrative employees is of crucial importance as it will help policy makers and practitioners in making future training-related decisions. Specifically, findings of this research have shed light on the positive and negative

aspects of trainings provided in public institutions and the types of training that best contribute to employees' performance. In addition, the research identified the aspects of performance that can be leveraged best by training.

Study Methodology

This research uses cross-sectional study design to measure the trainees' attitudes towards training programs provided by Ain Shams University and how these programs affected their performance at work.

a) Data Collection

Secondary data was collected from textbooks, journal articles, conference proceedings, reports and book sections. Primary data was collected using a structured questionnaire following a retrospective survey design. Questions regarding training are adopted from a series of questionnaires developed by Kirkpatrick (2006) and performance-related questions are based on Borman and Motowidlo's taxonomy of performance (1997). The questionnaire has two formats, one distributed on employees and includes detailed questions about the training they attended. Another form is distributed on department managers, excluding questions related to training details.

b) Population and Sample

The study population is the total number of administrative staff working at Ain Shams University, which is 13000. The sample driven from the statistical equation is 261. One hundred and eighty-three valid questionnaires were returned from employees and 19 from department managers.

c) Statistical Analysis Techniques

To test the research hypotheses, data are treated using computerized techniques offered by the Statistical Programs for Social Sciences (SPSS). The statistical techniques used include percentages, averages, standard deviations, correlation coefficients, and regression models. In addition, an independent samples t-test is used to compare means of different training types.

Study Structure

The study includes these chapters:

Chapter 1: Research Framework

Chapter 2: Training

Chapter 3: Performance

Chapter 4: Field Study

Chapter 5: Discussion, Study Findings and Recommendations

References

Appendices

Field Study Findings, Hypotheses Testing and Recommendations

According to the field study and the statistical analysis performed, the study hypotheses can be accepted as follows:

- Training has a positive impact on the performance of public sector employees.
- Training design has a positive impact on performance of public sector employees
- Trainer characteristics have a positive impact on the performance of public sector employees
- Trainee characteristics have a positive impact on the performance of public sector employees
- Post-training environment has a positive impact on the performance of public sector employees
- There is a significant mean variation between on-the-job training and off-the-job training with regards to their impact on the performance of public sector employees

Recommendations

- 1- Expand the diagnosis of training needs analysis to identify training needs not only on the strategic and tactical levels, but also on the individual/ job level in order to determine the specific training requirements of individual employees.
- 2- More concern should be given to the evaluation of employees' yearly performance through a systematic, objective assessment process in such a way that makes

- enables identifying areas of performance deficiencies that need to be addressed through training.
- 3- Conduct a comparative study between public and private sectors with regards to their training efforts and the performance outcomes of each, in such a way that would enable the transfer of best practices from one sector to the other.
 - 4- Use experimental research designs to examine the impact of training on the performance of employees in order to evaluate this impact both prospectively and retrospectively.

Study Limitations

This study is restricted to one large-sized public sector organization, and, thus, generalizing study results to other public sector organizations needs to be considered carefully. A retrospective survey design was used to only measure changes in performance after the training.

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