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OFF-THE-JOB TRAINING EFFECTIVENESS: THE DIFFERENCE BETWEEN EXPECTATIONS AND EXPERIENCES OF TRAINEES

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Abstract

The purpose of this study was to comprehend the effectiveness of an training intervention. Trainees' direct reactions to training provide organizations with enough feedback concerning their current training and development efforts. The research hypotheses focused on the efficacy gap between the expectations of trainees before training and their experiences after it was conducted. A purposive sample of 45 participants attending a selling skills training course completed a survey adapted from Chimote (2010). The repeated measures test indicated that experiences did not fulfill expectations. The Chi-square test revealed that age and education did *not* significantly affect the responses of participants. The results are discussed in addition to future research directions and practical implications.

Keywords: Reactions, Expectations, Experiences, Kirkpatrick, Egypt, Training Effectiveness.

1. Introduction

With factors like globalization, rapid diffusion of technology and knowledge management, organizations have turned their attention to their human capital as the source of achieving a competitive edge (Gibson and Ruona, 2004; Aragon-Sanchez *et al.*, 2003). Training is known as the different methods employed by the organization to improve the individual's work-related skills, behaviors, knowledge, and competencies (Piccolo *et al.*, 2009; Bell *et al.*, 2008; Chiaburu and Lindsay, 2008; Chiaburu *et al.*, 2008; Van Eerde *et al.*, 2008; Rowold, 2007).

Hence, evaluation of the training efforts exerted by organizations has received a great amount of attention lately as human resource experts seek to understand whether their training goals have been met and to express the return on investment of their activities to top management (Agrawal and Gangai, 2016; Chimote, 2010; Borges-Andrade and Pilati, 2008).

The purpose of this study is to analyse the factors that affect the individual evaluations of one off-the-job training course through a comparison between trainees' expectations prior to training and their experiences after training has been received, and to test for the variables that may affect the training efficacy. While evaluation of effectiveness can be on four levels, individual, team, organization, and society (Borges-Andrade and Pilati, 2008), the focus of this study is on the individual level.

The importance of the hereunder study was reflected in the fact that organizations spend substantial number of financial resources on improving their "people" element to ensure that they have a quality workforce that is able to perform up to expectations, face any changes that occur in the business environment and support the sustainability of the business (Burke and Hutchins, 2008; Bates *et al.*, 2002). Organizations achieve this through the training efforts provided either on-the-job or off-the-job. Moreover, countries in the Middle East are often reported as having the highest expenditures on training per employee that reached \$783 (Ershkine *et al.*, 2002). A fact that should raise questions whether these expenditures pay back in terms of improved, and retained, skills and competencies of employees.

Organizations have started to question their training efforts and adopt ways to measure their effectiveness to learn if training has led to actual improvements in trainees (Chiaburu *et al.*, 2008). Moreover, one study on the Human Resources Management practices in Egypt reported that organizations are prone to develop the needed skills and qualities of employees inside the organization through training rather than get those skills externally through consultation or outsourcing (El-Kot and Leat, 2007).

Based on a review of the current literature, we concluded that most of the experiments were conducted in western countries, in Europe and in the United States, with no reference to Egypt or the Arab world (Boon *et al.*, 2009; Chiaburu and Lindsay, 2008; Birdi *et al.*, 2007; Rowold, 2007; Skule, 2004; Carter, 2002). Hence, results may not be conclusive as western countries have different levels of economic and technological developments. In addition, they differ in their cultural orientations, values, behaviors, and educational backgrounds (Apospori *et al.*, 2008; Bell *et al.*, 2008) which will affect trainees' acceptance of training interventions and the outcomes of them greatly (Rogers and Spitzmueller, 2009). Hence, the present study addressed the question of whether there is a training efficacy gap and what factors could have affected such gap if it exists.

The paper is structured as follows: it starts with a literature review of previous research. Following is a discussion of the research methods followed in this study. Afterwards, results and discussion are provided. Finally, limitations and practical implications are put forward.

2. Literature Review

The topic of training individuals in organizations has been receiving rising attention due to several factors that made the business environment complicated and dynamic such as globalization (Boyce *et al.*, 2003), technological breakthroughs (Bell *et al.*, 2008) and knowledge management (Apospori *et al.*, 2008). Throughout the past few decades, research about the outcomes of training activities has been extensive as well, to the extent that scholars concluded that the human asset is the main factor behind successful organizational performance (Ambuli *et al.*, 2010; Al-Emadi and Marquardt, 2007; Bates *et al.*, 2002).

Organizations rely on training as their armor that will equip all employees with the needed work-related knowledge, skills and behaviors to face the dynamic business world of today and achieve the needed results (Ambuli *et al.*, 2010; Rowold, 2007; Boyce *et al.*, 2003).

Any training activity requires the steps of Training Needs Analysis, planning and executing training and finally evaluating the training outcomes (Birdiet *et al.*, 2007). Accordingly, there are several training methods employed by organizations to facilitate the development of trainees and to achieve the desired goals of the organization (Carter, 2002).

2.1 Types of Training

On one hand, there is on-the-job training, where employees get assigned to work with senior or more knowledgeable workers (Birdi *et al.*, 2007). Employees get to learn whilst working through mentoring, trial-and-error, and supervisory feedback. However, as De Jonget *et al.* (2001) stated, on-the-job training could have a negative effect on productivity if it led to disruptions in the workflow while employees learn. Hence, their study focused on the analysis of "structured on-the-job training". It is one form of on-the-job training that takes place in the business environment; however, trainees are given a structured plan of tasks to be achieved; they are scrutinized and given continuous feedback by their supervisors. In their study, it was concluded that there is no optimal form of on-the-job training. However, success depends on tailoring training based on the "contextual environment of the organization" (p. 2).

However, unstructured, or informal learning is the truest form of training (Bell *et al.*, 2003). Examples include coaching, job rotation, ad hoc tasks, and self-administered

training (Clarke, 2004; Bell *et al.*, 2003). In addition, scholars believe that its importance increased as organizations realized that what employees mostly acquire is not from classrooms but rather from the ongoing interactions (Boon *et al.*, 2009; Clarke, 2004) with their colleagues and the work environment.

On the other hand, there is off-the-job training. It constitutes activities conducted outside the workplace to improve the employability of workers and it is the main type used by most organizations (Boon *et al.*, 2009; Bell *et al.*, 2003) through several methods (Carter, 2002). These include lecturing or instructor-led courses (Towler, 2009), simulations (Piccolo *et al.*, 2009), role-plays (Fish and Sojka, 2008), and case studies (Brown, 2001). Off-the-job training is the focus of the present study due to its importance and the relative practicality of evaluating it.

2.2 Training Effectiveness

Learning how effective the training of employees is needed and most importantly is associated with evaluating whether organizations will be able to live their missions and reach their visions (Chimote, 2010). Despite the rising concern of experts that training most often does not lead to the desired organizational results (Chiaburu *et al.*, 2008), most organizations are still not concerned about sufficiently evaluating their training interventions due to several reasons including cost and time constraints, inadequate knowledge on how to conduct evaluation and fear of evaluations revealing disappointing results (Casper *et al.*, 2004; Clarke, 2004; Aragon-Sanchez *et al.*, 2003). Scholars diverged when it came to defining effectiveness of off-the-job training. One study defines it as the "transfer of learning" from classrooms to the work field (Borges-Andrade and Pilati, 2008, p.228). Another study defines it as transfer, maintenance, and generalization (Chiaburu *et al.*, 2008) where transfer is the application of learning in work; maintenance is to continually apply the learned qualities in the organization and generalization is the usage of the qualities across different assignments and in different settings. A third study identified effectiveness as a measurement of the "knowledge gap" or the difference between what the trainer teaches and what the trainees grasp (Jayarajan *et al.*, 2009, p.272). A fourth study stated that understanding training effectiveness should be through the evaluation of "recall and problem solving" (Towler, 2009, p.69), that is to know if trainees were able to fully comprehend what they learned and use it in the business field. The literature review revealed that researchers have conceptualized training effectiveness in a variety of ways and that the research objectives pursued in the study of training effectiveness have changed over time. The subject of training effectiveness in organizations, although controversial, remains important to both practitioners and researchers (Arthur *et al.*, 2003). Given the wide variety of definitions and a lack of consensus in existing literature, the researchers believe that there are significant theoretical and methodological issues in the study of training effectiveness (Au, 1996) that can be addressed by focused research studies

such as the current one to develop empirically-based evidence on how to assess training effectiveness.

Furthermore, some scholars distinguish between assessment of training and effectiveness of training. Assessment is used to reveal changes in the thinking abilities of the trainees after the training was given with tools such as tests. In addition, it involves knowing whether it has led to change in the way of doing work and the outcomes of employees (Challangalla *et al.*, 2010; Boyce *et al.*, 2003). However, effectiveness is to know what factors led to the success or failure of any training intervention (Rowold, 2007; Kraiger and Mclinden, 2004). Chiaburu *et al.* (2008) defined training effectiveness as a factor of three elements. First is the transfer or transmission of the acquired qualities from classroom to the work field. Second is maintaining such qualities, or to continue applying them on the long run. Third is generalization or applying such qualities in other work areas in which the qualities were not initially intended for. Scholars agreed that there are abundant number of factors that influence training effectiveness (Punia and Kant, 2013).

2.3 Factors affecting training effectiveness

Training design

There are several training methods developed by organizations to deliver the knowledge and improve performance. Hence, the choice of the training method is considered important to create congruence between the tool used and the type of knowledge intended to be delivered (Bates *et al.*, 2002). Hence, the process of training design has become the centre of focus for the human resources development experts (Jacobs and Lin, 2008). Training design should be viewed as a strategic step that will lead to the creation of an effective training which would change the way of doing business rather than be a simple solution to a rising problem.

Organization climate

Another factor discussed by scholars is the analysis of the organizational environment affecting the impact of training (Bates *et al.*, 2002). Burke and Hutchins (2008) reported that organizations with the best training results are the ones which have a transactional environment of shared goals, employee commitment and sound communication between employees and their managers. Another study reported that a learning organizational climate is rather a critical aspect in ensuring training effectiveness and quality transfer to the workplace (Bell *et al.*, 2003). Additionally, it was concluded that support from colleagues, continuous feedback by supervisors and experts and participation of individuals in the learning process motivate employees to effectively acknowledge the training goals and fulfill them (Denessen *et al.*, 2008).

Individual differences

Human resource development experts are interested in understanding the differences between trainees that can affect training outcomes to design training courses that are effective for their learning (Rowold, 2007) and provide a sound judgment on the effectiveness of the training (Boyce *et al.*, 2003). There are several individual differences examined in the literature.

Cognitive abilities: As Anderson *et al.* (2003) argued, understanding the mental abilities of employees and their learning styles before providing them with training increase the possibility of learning effectively. Accordingly, Carter (2002) identified several levels on which mental abilities can be evaluated. In his study, Carter (2002) hypothesized that creating congruence between the mental abilities of trainees and the training methods employed will lead to better learning and training outcomes. For example, it was suggested that trainees who score high on oral and written abilities performed better in classroom lecturing where trainee participation is at the minimum.

Motivation: Most studies take motivation as a prerequisite held by trainees for the training to succeed (Chiaburu *et al.*, 2008). For example, Rowold's study argued that motivated trainees experience better training outcomes by three percent more relative to other trainees who lacked the motivation to attend training (2007). On the other hand, another study supported the notion that motivation of trainees post training was effective in the transfer of learning outcomes to work (Borges-Andrade and Pilati, 2008). Two motivation theories are quite linked to training effectiveness: the expectancy theory (Challangalla *et al.*, 2010; Chiaburu *et al.*, 2008) and the goal setting theory (Judge and Robbins, 2009).

Self-efficacy: A third aspect studied by scholars was the individual's self-efficacy (Chiaburu and Lindsay, 2008). Self-efficacy is the trainee's perception about himself/herself. It is how the trainee sees his/her capabilities and potential to sufficiently learn from the training and successfully apply what was learned on the job (Judge and Robbins, 2009). Accordingly, those with high self-efficacy will exhibit more willingness and motivation to learn from training and successfully transfer learning to the job unlike those with low self-efficacy (Chiaburu and Marinova, 2005). Such a claim was supported by several studies (Caetano *et al.*, 2007).

Age: It is believed that age can have a significant impact on training outcomes especially if technology-led methods were used (Brown, 2001). Studies reported that older generations have barriers to technology. This can lead to a negative impact on their learning if technological methods were used in training as well if the training required them to change their ways of doing business (Challangalla *et al.*, 2010). Another study suggested that younger employees perceived the training efforts more favorably than older ones as they were more prone to develop their careers (Bertolino

et al., 2011). Agrawal and Gangai (2016) also provided support to the notion that age influences training effectiveness.

2.4 Kirkpatrick's model of evaluation

Donald Kirkpatrick emphasized the importance of evaluating training interventions to maximize their effectiveness in organizations. He believed that evaluation is important to analyse how trainees' performance is expected to improve and provide top management with evidence on the return on investment achieved. Quesada-Pallarès and Gegenfurtner (2015) termed Kirkpatrick's model to as a *4-phase* model as opposed to the original 4-level approach. The four phases are reactions, learning, behaviors, and results (Kirkpatrick, 1979). The first two phases are related to the trainee himself/herself regardless of the working context.

In the first phase, reaction, trainee's instant responses to the training are evaluated. They are asked about their views regarding the training materials, methods of instruction and the instructors. These reactions are important to provide human resource experts with feedback regarding their design of the training. They also act as initial indicators of trainees' reactions after training. It is believed that trainees who form a positive reaction about training are more likely to exhibit commitment and start applying what they acquired in their jobs (Boyce *et al.*, 2003).

The second phase is learning. Kirkpatrick stressed on the point that experts test learning in the form of what trainees have acquired in terms of knowledge and skills. This is achieved in the form of tests given to trainees to analyse the amount of qualities they have grasped and knowledge retained. However, the scope of the method holds no reference to whether these skills are applied on the job or not.

In the third phase, behaviors, trainees' performance on-the-job and knowing whether any improvement happened in their work are assessed. Hence, in both learning and behaviour techniques, it is preferable to measure trainees' variables twice, before and after training to be able to accurately measure change, if any (Kirkpatrick, 1979).

Finally, the last phase proposed is results. With this technique, experts measure the effectiveness of the training in terms of evaluating organizational performance such as productivity, quality of final output and degree of efficiency. It is considered the most complicated and hardest technique to be applied (Kirkpatrick, 1979).

Despite its wide use, the Kirkpatrick model received criticism by several scholars (Boyce *et al.*, 2003). Scholars believed that the model may not be a true indicator of effectiveness as it fails to include several other transactional dimensions such as the individual differences previously discussed. In addition, scholars stressed on the point

that conceptual models of different intervening variables should be developed and tested to control for different factors that may affect training. Examples include training design, organizational climate and the individual differences in addition to the inclusion of time, or the evaluation of training prior, during and post providing it (Rowold, 2007). Nonetheless, Kirkpatrick's model continues to be the most prominent and commonly used tool (Agarwal *et al.*, 2014).

2.5 Trainees' Experiences versus Expectations

Trainees' expectations are typically shaped by their individual differences such as abilities (Anderson *et al.*, 2003), motivation, self-efficacy, and goal orientation. In addition, they are affected by the organizational elements such as receiving feedback from their managers (Rowold, 2007) and the relationships between employees and their superiors.

The research on using the reactions of employees in evaluating effectiveness has been criticized as it is perceived as insufficient. In addition, it is not a true indicator of effectiveness as a positive reaction does not necessarily lead to learning and future application on the job (Bates *et al.*, 2002). Hence, the topic of reaction has been an area of conflict between different scholars. For example, Cannon-Bowers *et al.* (1995)' results demonstrated that no relationship exists between reaction and learning while another study found some relationship between reactions and intention to transfer. However, the results were not conclusive regarding the reactions' effect on actual performance (Bates *et al.*, 2002). Nevertheless, measuring reactions is still the main method used for examining training effectiveness by organizations due to its ease of use and low cost (Giangreco *et al.*, 2009).

In addition, scholars started to break down reactions into several subdimensions to be tested (Boyce *et al.*, 2003). For example, one study divided reactions into two types. First, there are affective reactions which reflect the emotions of the trainee about the training. In other words, stating whether the trainee liked and was satisfied with the training. On the other hand, utility reactions reflect the perceived usefulness of the training and whether it is beneficial to the job (Rowold, 2007).

Another study conducted by Borges-Andrade and Pilati (2008) supposed that such criticized results may be due to wrong or insufficient measurement. In their study, it was suggested that multidimensional reactions were better associated with training effectiveness (pp. 233-234). While, in a third study, only utility reactions were positively related to an increase in trainees' intentions to apply what was learned in their jobs after receiving training (Bates *et al.*, 2002) unlike a study done by Boyce, Hall, and Tan, that showed a relationship between both reactions (affective and utility) and learning (2003). Interestingly, it is argued that negative reactions have stronger relationships with learning rather than positive ones. Scholars proposed that this is due

to individual differences in terms of education and self-efficacy. Trainees who scored high on both dimensions could have evaluated training negatively as it did not meet their expectations which were set high prior to taking the training (Boyce *et al.*, 2003).

Hence, scholars started to focus on pairing expectations prior to training and experiences of trainees post training as more practical indicators of training effectiveness. For example, Rowold's study discovered that trainees whom their experiences met their expectations exhibited positive reactions and were more likely to transfer what was learned to work (Rowold, 2007). Rowold believed that this area needs additional exploration.

In one study performed by Ambuliet *al.* (2010), trainees' expectations and experiences in the form of their perceptions about the training (for example: methods used, instructor's way of teaching, and others) were investigated and compared. Trainees were sampled from four industries, automobiles, chemicals, textiles, and electronics. Surprisingly, their research results showed that all trainees' expectations have not been met by their experiences. The scholars believed that this was due to incompetent training needs analysis which failed to identify the training areas in need of improvement.

In another study, Chimote (2010) included demographic variables such as age and gender. In addition, he based his investigations on the four levels of training evaluation developed by Kirkpatrick. His study has demonstrated that demographic differences did not have any significant effects on training perceptions. In addition, trainees' experiences post training did not exceed their expectations as well (Chimote, 2010). Chimote suggested that future studies should examine different industries and compare the results. Therefore, in this paper, a replica of Chimote's differential study is applied in Egypt.

2.6 Research Hypotheses

The efficacy gap with respect to the training programs provided by organizations was investigated. This was tested through a comparison between the expectations of trainees before training and their experiences after training. Additionally, age and education were analysed as intervening variables affecting trainees' perceptions.

Expectations versus Experiences

As was previously discussed, most trainees form expectations about the training courses they are about to attend. This could be in the form of assessing how they will be able to undergo the training and predicting the usefulness of the training for their future job performance and career. Moreover, trainees evaluate training interventions after they finish in the form of perceived satisfaction. This could be in terms of the

degree of likability (affective reaction) or the actual value-added (utility reaction) from the training course (Rowold, 2007). The meeting of expectations is considered a vital indicator of training effectiveness that leads to successful knowledge transfer to the workplace later (Cannon *et al.*, 1995).

However, to the authors' knowledge, there are insufficient numbers of studies tackling this area of research. Additionally, the two studies of Ambuli *et al.* (2010) and Chimote (2010) had the same results; mainly that expectations were not met by the training experiences. Accordingly, it was hypothesized that:

H1: Trainees' experiences will not fulfill their expectations.

Additionally, it is important to know what factors could influence the gap between expectations and experiences if it existed. Hence, we aimed to investigate the influences of age and education.

Age

As described in the literature, age can influence training effectiveness (Brown, 2001). As trainees get older, they fear two things. First is the usage of technological tools during training they are not familiar with. Second is the perceived fear that training will substantially challenge their current ways of doing business and change their approaches to work. Both factors negatively affect the overall judgment of training. However, another study found no relation between age and the level of training satisfaction (Schmidt, 2009). Chimote (2010) found insignificant relationship between age and training efficacy. Therefore, with mixed results and insufficient literature, it was hypothesized that:

H2: The expectation efficacy and age are dependent.

H3: The experience efficacy and age are dependent.

Education

How trainees perceive the usefulness of the training course is one reason why there could be a gap. If trainees perceived the training as value-adding to their skills and knowledge and that it would help them perform their jobs better and advance in their careers, their experiences would surpass their expectations (Giangreco *et al.*, 2009). Education plays an important role in this relationship. As trainees advance in their education, they typically engage in more training activities and they expect the training to fulfill more complex and advanced demands (Schmidt, 2009). Hence, it is more likely that their experiences will not exceed their expectations. Unlike trainees who are still at the start of their career, they are more likely to develop fewer expectations and have them met by their experiences.

Education negatively affects expectations and experiences as individuals who already received high levels of education do not consider themselves in need of training courses. Hence, both their expectations and experiences would be low as a function of less motivation to attend training (Rowold, 2007). Accordingly, it was hypothesized that:

H4: The expectation efficacy and education are dependent.

H5: The experience efficacy and education are dependent.

3. Methods

3.1 Sample

Participants were selected from training provider organizations in Egypt. These institutions offer different training courses provided by different instructors and for organizations from different industries. Hence, training provider organizations served the purpose of the study. Furthermore, the study focused on training providing institutions that served the pharmaceutical industry, controlling for the industry effect on the research study.

We collected data from trainees in one training intervention that was instructed by two professional trainers. The training materials were distributed at the beginning of the training course. The training tools were considered moderate in terms of the technology used. Pencil and paper, PowerPoint slide decks and different role-plays were used during the three-day training.

The purposive non-probability sample size was 45 participants and was comprised of 73.3% males and 26.7% females. 15.6% of the samples were below 25 years old, 51.1% between 26 and 35 years old, 33.3% were older than 46 years. 60% were BSc holders, 22.2% held a postgraduate degree and 17.8% had other types of professional certificates.

Procedure

Forty-five participants completed the questionnaire on two phases. The first set of questions addressing the expectations was completed one day before the course started. The second set of questions was completed ten days after the course ended to allow the employees to return back to work and test the knowledge and skills that they have learned; therefore, giving more accurate and less biased evaluations of their experiences.

3.2 Instrument

We adopted the questionnaire utilized by Chimote (2010) to collect our data from the participants. The questionnaire was organized based on Kirkpatrick's four levels of evaluation. The questionnaire consisted of three parts. The first part asked for the demographic information including age, gender, marital status, income, and education. The second part constituted of questions pertaining to trainees' expectations which the trainee filled prior to attending the course. Finally, the third part constituted of the questions to be answered post training regarding the trainees' experiences.

The questions were evaluated by participants using a five-point Likert scale. Participants were asked to state their perceptions toward training either favorably or unfavorably using a summated rating where five represented "strongly agree" and one represented "strongly disagree". A reliability test was conducted using Cronbach's alpha. The Cronbach coefficients were 0.73 and 0.86 for the second and third parts, respectively. This established that the measures used to compute expectations and experiences were reliable.

Data analysis

Data were analysed using program SPSS. Paired t-tests were used to answer the question of whether there is a difference between expectations and experiences of trainees. It was chosen as two sets of data were extracted from the same sample at two different times. Hence, the variables were dependent, and the sample was paired. Additionally, The Chi-Square analysis was used to analyse whether there was a significant relationship between the demographic variables of age and education and a-priori expectations and post-hoc experiences of the trainees, independently.

4. Results

4.1 Expectations versus Experiences

With respect to the first hypothesis regarding the difference between expectations and experiences of trainees, the mean score of participants on the questionnaire was calculated for each set of questions separately (i.e., parts two and three). Training effectiveness would only be achieved if trainees' mean score on their experiences post-training were more than their expectations' score prior to training, and the difference was statistically significant. Our results demonstrated that there was a significant difference between the expectations ($M = 4.23$, $SD = 0.34$) and experiences of trainees ($M = 4.07$, $SD = 0.53$), $t(44) = 2.42$, $p < 0.05$. The average change of (-) 3.8% could be attributed to the training intervention itself. In other words, with a 95% confidence interval ranging from 0.03 (lower bound) to 0.30 (upper bound), the mean decrease was 3.8% (there was a decrease in the scores from before

training to after training). Moreover, by looking at the Pearson correlation, it is concluded that it is a moderate correlation of 0.54, meaning that almost all participants reported a decrease in their experiences relative to their expectations and they did so in a consistent way ($P < 0.05$). Hence, *the first hypothesis could not be rejected*; trainees' experiences did not fulfill their expectations. Accordingly, there is an actual efficacy gap with respect to the training program provided as perceived by the trainees.

4.2 Age

Using the Pearson's Chi-Square test of independence, age was first cross tabulated with every question from the participants' seventeen questions related to their expectations. Second, the same process was followed with respect to the questions related to experiences. Additionally, as per Kirkpatrick's (1979) model, the questions in both sets were grouped into four categories: Reaction, learning, behaviour and outcome. From the results presented in Table 1 below, it was concluded that age did not affect the expectations of participants significantly in all four levels of evaluation except for one item under *outcome* which tackles the point of decision making and interpersonal communication. Hence, the two variables were deemed uncorrelated.

Table 1 – Interactions with Age

	Reaction		Learning		Behavior		Outcome	
	Item	Pearson Chi-Square	Item	Pearson Chi-Square	Item	Pearson Chi-Square	Item	Pearson Chi-Square
Expectations	The subject to be covered in the program will be relevant to my job	5.51	The program will cover the topics I need to learn	10.37	The training program will bring in a change in my attitude and behavior	10.96	Training program will improve my quality of performance (productivity)	2.26
	The subject/content will be presented in an interesting way	8.56	The knowledge gained in the program will prove to be of great importance for learning new skills	10.21	The program will improve my skills of time management	10.62	The program will benefit me in terms of decision making and improved interpersonal communication	13.59*
	The instructor should be well prepared and an effective communicator	6.33	The new skills should be well rehearsed and test-checked by the trainer to ensure my proficiency	0.50	The program will make me efficient in team participation at work	9.60	I believe that amount spent on training program should be worth of yielding a good return on investment	5.99
	The teaching aids to be used in the training should be appropriate and enhance my understanding	1.3					The training program will help me in achieving the set targets at my job	8.35
	The facilities in the training program should be appropriate	8.44						
	The training schedule will be appropriate in its duration	6.84						

	The knowledge gained in the training program will be applicable to my job	4.76						
Experiences	The subject covered in the program is relevant to my job	6.80	The program has covered the topics I needed to learn	4.46	The training program has brought in a change in my attitude and behavior	16.76*	The training program has improved my quality of performance (productivity).	5.17
	The subject/content has been presented in an interesting way	10.87	The knowledge gained in the program will prove to be of great importance for learning new skills	7.89	The program has improved my skills of time management	13.83	The program has benefited me in terms of decision-making and improved interpersonal communication	12.75
	The instructor was well prepared and an effective communicator	7.11	The new skills were well rehearsed and test-checked by the trainer to ensure my proficiency	5.99	The program has made me efficient in team participation at work	8.35	I believe that amount spent on training program is worth of yielding a good return on investment	3.94
	The teaching aids used in the training were appropriate and enhanced my understanding	14.46					The training program has helped me in achieving the set targets at my job	12.14
	The facilities in the training program were appropriate	14.83						
	The training schedule was appropriate in its duration	10.29						
	The knowledge gained in the training program is applicable to my job	8.48						

For the experiences post hoc, it was concluded that age and the experienced reaction, learning, behaviour and outcome are independent as no relationship was significant ($p > 0.05$). Overall, hypotheses 2 and 3 were rejected. Apart from the expected outcomes, age and the training efficacy were independent.

Education

The same procedures followed while investigating age were replicated with education. The results are reported in Table 2. It was concluded that education was not significantly affecting the answers of participants in relation to their expectations on the four levels of Kirkpatrick's model.

Table 2 - Interaction with Education

	Reaction		Learning		Behavior		Outcome	
	Item	Pearson Chi-Square	Item	Pearson Chi-Square	Item	Pearson Chi-Square	Item	Pearson Chi-Square
Expectations	The subject to be covered in the program will be relevant to my job	6.49	The program will cover the topics I need to learn	5.91	The training program will bring in a change in my attitude and behavior	4.29	Training program will improve my quality of performance (productivity)	5
	The subject/content will be presented in an interesting way	3.97	The knowledge gained in the program will prove to be of great importance for learning new skills	7.17	The program will improve my skills of time management	6.42	The program will benefit me in terms of decision making and improved interpersonal communication	2.14
	The instructor should be well prepared and an effective communicator	3.20	The new skills should be well rehearsed and test-checked by the trainer to ensure my proficiency	1.59	The program will make me efficient in team participation at work	8.43	I believe that amount spent on training program should be worth of yielding a good return on investment	8.6
	The teaching aids to be used in the training should be appropriate and enhance my understanding	2.74					The training program will help me in achieving the set targets at my job	1.84
	The facilities in the training program should be appropriate	5.29						
	The training schedule will be appropriate in its duration	3.39						
	The knowledge gained in the training program will be applicable to my job	3.19						
Experiences	The subject covered in the program is relevant to my job	9.28	The program has covered the topics I needed to learn	5.80	The training program has brought in a change in my attitude and behavior	7.85	The training program has improved my quality of performance (productivity).	3.34
	The subject/content has been presented in an interesting way	9.31	The knowledge gained in the program will prove to be of great importance for learning new skills	9.24	The program has improved my skills of time management	9.43	The program has benefited me in terms of decision-making and improved interpersonal communication	6.99
	The instructor was well prepared and an effective communicator	9.64*	The new skills were well rehearsed and test-checked by the trainer to ensure my proficiency	3.68	The program has made me efficient in team participation at work	7.04	I believe that amount spent on training program is worth of yielding a good return on investment	1.91
	The teaching aids used in the training were appropriate and enhanced my understanding	6.11					The training program has helped me in achieving the set targets at my job	2.62
	The facilities in the training program were appropriate	7.60						
	The training schedule was appropriate in its duration	7.15*						
	The knowledge gained in the training program is applicable to my job	11.08						

With respect to experiences, it was concluded that education only affected the answers of the items addressing the instructors' capabilities and the training schedule. *Overall, hypotheses 4 and 5 were rejected.* Apart from experienced reactions, education and training efficacy were considered independent.

5. Discussion

The literature on testing trainees' reactions (level 1 in Kirkpatrick's model) is full of debate and mixed findings as discussed in the literature review. The present study was conducted to validate the difference between the expectations (pre-training perceptions) and experiences (post-training direct reactions) of employees who have taken a training course that was directly related to their jobs. With respect to expectations versus experiences, the results indicate that trainees' experiences did not fulfill their expectations. The findings are in line with the two studies mentioned in the literature review (Ambuli *et al.*, 2010; Chimote, 2010). There are several reasons that could explain the gap between expectations and experiences.

Failure to notify employees about the content of the training and the aim behind it (building trainee rapport) lead them to have wrong expectations which are not met by their experiences (Jayarajan *et al.*, 2009; Boyce *et al.*, 2003). Another reason could be the reluctance of the employer to conduct Training Needs Analysis to know the needs of employees and their expectations about courses they need to develop their skills resulting in inappropriate or unnecessary training programs (Birdi *et al.*, 2007; Ambuliet *et al.*, 2010). Hence, the training interventions provided to the employees did not meet their expectations.

A third explanation for why experiences did not meet expectations relates to the administrative setting of the training course. The context of the training including the training materials, training tools, medium of instruction, class size, room temperature, duration of the course and the training place and even the food served all influence trainees' reactions (Giangreco *et al.*, 2009). The same aforementioned study highlighted the trainer's performance is a key determinant of training experience. Consequently, trainees' expectations could not have been met due to the trainer's performance in during the course. The more effective and professional the trainer is, the more trainees will be motivated and committed to the course and hence their experiences will be positive and vice versa.

Regarding the factors that can affect trainees' assessments, age and education were examined. Unlike some studies which showed that age affected the outcomes of training (Brown, 2001), the present study found an insignificant relationship between age and trainee expectations and experiences, independently. One reason could be that age is considered irrelevant to trainees in this particular training setting as no technology-led tools were used and the participants' average age was moderate, 95.6%

were below 46 years old. Therefore, neither their expectations nor their experiences were influenced by age and both hypotheses two and three were rejected. Chimote (2010) did not find a significant relationship between age and training efficacy as well although no reasons for such finding were provided. A meta-analysis of prior research from 117 research articles and books that deal with age stereotypes in the workplace provides substantial evidence refuting age stereotypes (Posthuma and Campion, 2009). Interestingly and narrowly, age significantly affected only the expectations of trainees with respect to the training's influence on decision making. While such results could be attributed to biased perceptions of trainees, another reason could be that around 80% of the sample was between 26 and 35 years old. Employees at this start/middle stage in their careers typically look for opportunities that could develop their decision making and leadership skills which would allow them to be promoted at a faster pace. Hence, they may have weighted such question more heavily than others leading to these results.

With regard to education, the results of the present study found an insignificant relationship between education and trainee expectations and experiences leading to hypotheses four and five to be rejected. In other words, the level of education of the sample participants did not interfere with their evaluation of how the training will add value to them and how it actually was after they have completed it. Such results coincide with the studies of Schmidt (2009) and Chimote (2010) who found no relationship between education and training efficacy.

On the contrary, a previous study found that education significantly affects expectations and experiences. The study highlighted the fact that receiving high levels of education affects expectations in two ways. It either makes employees believe they do not need the organizational efforts to improve their competencies and hence, they expect less from the organization or they may develop very high levels of expectations that their experiences never fulfill them (Rowold, 2007). Both scenarios lead to less-than-optimal experiences after employees complete their training.

However, the current study finds a significant relationship between education and the answers related to the question of the experiences of trainees with respect to the training instructor. While such results may be due to participants' bias, it could also be justified as follows. Trainees with moderate levels of education (as 60% were graduates with BSc degrees) typically focus on areas of development that would compensate for having a higher (graduate or professional) degree. Hence, they appreciate having a qualified instructor who can listen to them, address their needs, and guide them properly during the training course. Therefore, they may have placed more emphasis on trainer qualifications and expertise.

In sum, this study contributes to the literature by further showing that trainees' experiences do not meet their expectations. This is alarming particularly those

organizations that invest sustainable amounts of resources in such interventions, and hence, they must realize their returns. In addition, in a fast-changing environment, ensuring that employees are equipped with the right skills and knowledge has never been underscored as it is at the current moment. In addition, our results indicated that age and education did not significantly affect the trainees' responses. Hence, future studies should further investigate potential factors that influence trainees' perceptions of training.

6. Practical Implications

The present study has important implications for organizations to consider in their practices. First, attention should be given to personnel selection in organizations. Organizations should hire those who have the ambition to develop themselves through the different training interventions. This way, organizations will be able to achieve positive returns on training investments as employees will be committed and willing to learn, and to apply the new knowledge and techniques in their jobs. Second, training professionals should conduct pre-training sessions to orient employees with the content of the training course, its goals, and the potential benefits. Third, this study has also highlighted the importance of conducting Training Needs Analysis prior to deciding which training courses to provide to employees. Fourth, reasons for why expectations were not fulfilled should be accurately provided by employees at the end of their training to further highlight the shortcomings of the provided training. These shortcomings could then be analysed and used in planning for future training interventions. Fifth, the present study focused on the first phase of Kirkpatrick's model. However, organizations should consider investigating other phases, mainly actual application of learned knowledge in the workplace and the resulting outcomes for the organization to effectively know how much the training efforts have added value to the organization.

7. Limitations and Future Research Directions

This research has several limitations that reduce the generalizability of its findings. First, the usage of Likert scale does not allow the participants to fully express their expectations and experiences effectively which made the researchers unable to get in-depth information regarding the participations' perceptions. Future scholars should consider triangulation in their data collection phase through using multiple methods in collecting and analysing their data. Second, the study only tested the participants' perceptions about the anticipated changes in Kirkpatrick's four phases (reaction, learning, behaviour and results) of training evaluation. We did not investigate actual changes on the job. Hence, future research could carry out more tests on the actual change in learning, behaviour, and organizational results across different time points.

Finally, future studies could expand their scope to include trainees from different organizations (to reflect different cultures, different industries, and different ways of doing business) and different training courses to explore potential differential results. This would further clarify whether the individual, organizational, and training contextual factors affect results.

8. Conclusion

In response to the call for more focused research in narrower contexts on training effectiveness (Saks and Burke, 2012; Grossman and Salas, 2011; Alvarez *et al.*, 2004), we investigated a sample of trainees' expectations and experiences in one training program provided in Egypt. Additionally, the effects of age and education on trainees' expectations and experiences were examined. The results demonstrated that expectations did not match experiences and that neither age nor education had any significant impact on trainees' perceptions. We linked the findings to existing literature and offered several explanations along with implications for future research and practice. This study contributes to the development of an understanding of training effectiveness which is needed to guide the designing, implementation, and evaluation of training programs.

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