Summer 1998

Measuring and Evaluating Sales Force Training Effectiveness: A Proposed and an Empirically Tested Model

Ashraf Magdy Attia
Old Dominion University

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MEASURING AND EVALUATING SALES FORCE TRAINING EFFECTIVENESS:
A PROPOSED & AN EMPIRICALLY TESTED MODEL

by

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B.A., May 1990, Cairo University, Egypt
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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
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DOCTOR OF PHILOSOPHY
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August 1998

Approved by:

Earl D. Honeycutt (Director)

Kiran W. Karakida

Steven D. Maurer
ABSTRACT

MEASURING AND EVALUATING SALES FORCE TRAINING EFFECTIVENESS: A PROPOSED & AN EMPIRICALLY TESTED MODEL.

Ashraf Magdy Attia
Old Dominion University, 1998
Director: Dr. Earl D. Honeycutt

Recent reports show that 95% of organizations conduct some form of sales training and organizations spend more than $30 billion dollars annually on sales training programs. According to Sales & Marketing Management (1993), the average estimated field training costs for a sales trainee is $37,000. Due to the accelerating investments in sales training, Honeycutt, Ford, and Rao (1995) found that 57% of sales training executives said that the major area in greatest need of additional research is determining sales training effectiveness.

The research contained herein addresses a gap in the marketing literature by: (1) proposing and testing a model for evaluating sales training programs’ effectiveness; (2) conducting a simultaneous examination of the Kirkpatrick’s (1959) four levels of evaluation (reaction, learning, behavior, and results); (3) examining the various sales training evaluations performed by the salesperson, the trainer, and the sales manager; and (4) gathering information on evaluating sales training programs, drawing conclusions, and constructing a sales training program evaluation framework that would help companies evaluate future sales training programs. Survey data were collected from salespeople, sales managers, and the trainer. One large multinational company operating in the consumer industry in Egypt was employed. Experimental
design was utilized to measure Kirkpatrick's (1959; 1960) level 3 and 4. Unlike previous studies, this research effort was comprehensive in nature.

Although a comprehensive evaluation of sales training programs is difficult to conduct due to many extraneous variables, it can still be performed. In addition, since there are no cut-off points or standards for evaluation, there were some difficulties in the interpretation of evaluation outcomes, especially in reaction and learning. No differences were found between anonymous and non-anonymous responses, especially in measuring reaction. The trainer's evaluation of trainees and the utility analysis are two complementary techniques that were found to be useful when conducted in conjunction with the Kirkpatrick's model. Finally, a more comprehensive model for measuring and evaluating sales training effectiveness is proposed by the researcher, that can be tested to judge the feasibility of the model as a system.
ACKNOWLEDGMENTS

All my thanks and praise are due to Allah
The most gracious and the most merciful

As is the case in any major undertaking, there are many individuals who contribute to a project’s completion. A dissertation is no different in this respect.

First, I want to thank the members of my dissertation committee at Old Dominion University. My sincerest appreciation and gratitude go to my advisor Professor Earl D. Honeycutt, Jr., for his guidance and support that I will always remember. Professor Kiran Karande provided fruitful advice on the research methodology. Also, Professor Steve Maurer served on the committee and provided valuable insight concerning the training and development area. Their help and suggestions are greatly appreciated. In addition, I would like to express my gratitude to Dean Taylor Sims. The data collection for this research work has been highly supported by the Arab Training and Consulting Company (AT&C) operating in the Middle East through one of their sales training and consulting projects.

Finally, and most importantly, I want to thank my father Magdy, mother Nadia, wife Rana, son Mohamed, daughter Hibatullah, and newborn Omar. For three years they watched me spend most evenings in the library, computer room, or in my study. Without their love and support, none of this would have been possible, or worth it.
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CHAPTER I
INTRODUCTION

Training programs have changed significantly during the past decade. A survey of 184 Fortune 500 industrial and service companies showed that technological change drives training and education in companies today (Ingols 1987). Due to the rapid technological advances, the nature of knowledge and skills is changing radically over time (Bentley 1990; Rosenberg 1987; Churchill, Ford, and Walker 1985). According to Delaney (1987), companies train their employees in order to develop the knowledge and skills necessary to conduct business both currently and in the future, maximize the career growth opportunities for their employees, and, according to Warren (1969), develop the effectiveness of an essential organizational resource: its people.

Hahne (1987), Haislip (1989) and Bentley (1990) treated sales training as an investment; whereas, Rosow and Zager (1988) looked at training as the competitive edge for any organization. According to Feldman and Weitz (1988), and Jolson, Dubinsky, and Anderson (1987), sales training is a managerial prescription for removing blockages to the sales force career growth through developing appropriate skills for promotion. Wenschlag (1990) states that there are four ways sales training positively influences the organization: promoting leadership, encouraging sales force productivity, achieving strategic objectives, and developing growth of salespeople.

To Rosenberg (1987), training is increasingly becoming more important to both small and large organizations as well as for all levels of employees, from the lowest craft level to the Board of Directors. Dubinsky (1981b) emphasized that corporations
spend large amounts of time and money annually training their sales personnel. Rosenberg (1987) added that the accelerating interest and investment in training, the hiring of more competent and highly trained course developers, and the increased sophistication of training programs development and administration provide indications that attitudes toward training are changing positively in many organizations.

A 1978 Conference Board Study prepared by David Hopkins reported that 95% of companies surveyed conducted some type of sales training. Consistently, Miller (1980, p. 46) said: "It is a rare sales executive who would admit to having no sales training program." However, Gordon (1983) found that sales training is more important in some industries than others. For example, sales training in banking, finance, and real estate were rated as the most effective, followed by wholesale/retail trade, business services, manufacturing, communication/transportation/utility, educational services, and health services, respectively.

Rubash, Sullivan, and Herzog (1987), and Dalrymple (1985) believe that a common problem faced by companies is an inadequately trained sales force. According to Reid (1981), two studies took place in 1959 and 1979 to assess the sales force problems described as the most serious by sales managers, who were members of the Sales and Marketing Executives International (SMEI). In the first study, inadequacy of sales training was rated twenty-first in 1959 and this increased to second most important in the 1979 study. In a study conducted by Ingram, Schwepker, and Hutson (1992), proper sales training was classified as the second most important factor for ensuring a salesperson's success. Consistently, Grant and Cravens (1996) found that
increasing the amount of sales training for salespeople was ranked as the third factor for improving effectiveness. These studies reflect the increasing importance of sales training.

Morris, LaForge, and Allen (1994) found that sales training was the most important among all external and company factors that are crucial to success and causing sales force failure if not well-managed. In the same study, almost all senior sales managers (98.9 %) either agreed or strongly agreed that sales failure can be manageable and reduced with proper training.

More specifically, in the banking industry, Futrell, Berry, and Bowers (1984), and Berry, Bowers, and Futrell (1984) found that 38% of banker members of the Bank Marketing Association stated that the most important priorities for increasing selling effectiveness in banks was “sales training.” However, Futrell, Berry, and Bowers (1984) showed that around 35% mentioned that they had no sales training in their banks at all. Consistently, in health care institutions, Powers, and Bowers (1992) found out that the most common approach mentioned to increase the selling effectiveness of health care institutions was to improve some facet of sales management, such as sales training.

Due to the accelerating investments made in training and the more responsibilities given to the training departments, the significance of assessing and evaluating these programs’ effectiveness is increasing. However, the evaluation phase in the training cycle continues to lag behind the training development and implementation phases in
terms of sophistication, personal and organizational commitment, and time and resource allocation needed to get the evaluation job done (Rosenberg 1987).

Churchill, Ford, and Walker (1981) stated that sales training evaluation is still in its infancy. Chonko, Tanner, and Weeks (1993) emphasized that the challenge is determining the effectiveness of sales training programs. In a study conducted by Honeycutt, Ford, and Rao (1995), 57% of the surveyed sales training executives said that the area in greatest need of additional research is the determination of sales training effectiveness.

To justify the existence of training, it must be cost effective; the evaluation process is really a measure of this effectiveness (Anderson 1993; Dubinsky 1980). In addition, training should prove to make dollars (Shipp 1980). Honeycutt (1996) said that it is very difficult to know if the sales training program is successful or not if the evaluation phase does not take place. According to Bramley (1991), Brinkerhoff (1981), and Moore (1975), evaluation completes the cycle of training and is a major part of the system. In addition, Camp, Blanchard, and Huszczø (1986) mentioned that most management texts identify four basic management activities: planning, organizing, directing, and controlling. These four activities apply to training programs. For our purpose, controlling is synonymous with evaluation of training programs. Not to conduct a training evaluation is the same as when a business fails to examine its profits or return on investment.

According to Becker (1989) and Bakken and Bernstein (1987), top management usually asks trainers to provide proof of training success. Churchill, Ford, and Walker
(1981) added that the little experimental research evidence available is generally favorable; that is, sales training produces positive results. However, the unanswered question is whether or not the value is enough to justify the costs. Phillips (1991), Caffarella (1988), Boyle (1981), and Houle (1972) emphasize that the heart of a program evaluation is judging the value or worth of a training program. However, according to Dubinsky (1980) and Raphael and Wagner (1972), most training evaluations are conducted crudely because of the high difficulties encountered in measuring the effects of sales training.

STATEMENT OF THE PROBLEM

According to Newby (1992), Salisbury (1992), Caffarella (1988), Laird (1985), Dubinsky (1981b), and Michalak and Yager (1979), evaluation is a very essential and important phase of training; however, it is the most neglected. For example, Honeycutt and Stevenson (1989, p. 216) said “a literature search of the major marketing journals and other marketing publications as late as December 1988 revealed no articles focusing on the evaluation of sales training.” In addition, Hamblin (1974) said that the evaluation of sales training is as difficult to conduct as the evaluation of management training; this has given many trainers the excuse of not trying to evaluate sales training effectiveness. Bernhard and Ingols (1988) found that 30% of corporations conduct no formal evaluation of their training and development programs. In addition, Scovel (1990) reported that 13% of human resource executives do not have systematic evaluation in their corporations. More seriously, in a nationwide mail survey conducted by Honeycutt and Stevenson (1989), more than 20% of the responding field sales
managers stated that they would not evaluate training even if the necessary resources were available.

In two studies conducted by Erffineyer, Russ, and Hair (1991) and Erffineyer et al. (1993), it was found that sales training planning and implementation activities are perceived as more important than evaluation activities in both U.S. and Saudi Arabian firms; only 11.3% of the effort and 8.5% of the budget is invested in evaluation. More specifically, in a US banking industry study, Futrell, Berry, and Bowers (1984) concluded that planning, organizing, and directing sales training programs receive higher overall mean scores than evaluating sales training programs, which means that a very low level of attention is given to sales training evaluation. In addition, in the same study, when bankers were asked about the important priorities for improving sales training, measuring and evaluating sales training was ranked fourth with 11% frequency, after improving training curriculum (37%), improving support of training (22%), and increasing motivation to sell (18%).

Consistently, in the paper and plastics merchant wholesaler-distributor organizations, El-Ansary (1993) found that the sales training evaluation, according to sales managers, is on average either “sometimes” or “often” performed, but not “always.” However, El-Ansary added that the effectiveness of formal sales training evaluation does not lie in the frequency of these evaluations, but in management actions designed to affect changes suggested by evaluation results.

With the exception of two studies conducted by Meyer and Raich (1983) and Doyle and Cook (1984) within a retailing context, little or no research has been
discovered that replicates or, more importantly, advances the marketing discipline's knowledge of current practices in the sales training programs' evaluation. Moreover, in the best knowledge of the researcher, no published comprehensive study incorporating the four levels of evaluating sales training programs' effectiveness (reaction, learning, behavior, and results) has taken place. To date, it has been very difficult to evaluate sales training effectiveness. Additional research is needed to verify and document the current status of evaluating sales training programs' effectiveness. The major goal of this study is to bridge the literature in the area of evaluating the effectiveness of sales training programs.

PURPOSE AND PLAN OF THE RESEARCH

The major purposes of this dissertation are to enhance the understanding of current sales training evaluation practices, to provide an example companies can utilize to evaluate sales training effectiveness, and to propose and test a model for evaluating sales training programs' effectiveness. Achievement of these purposes requires identification and attainment of five research objectives. The first objective is to determine if sales training can be objectively evaluated through proposing and testing a model for evaluating sales training effectiveness. The second one is to examine the sequential relationships among the different levels of evaluation. The third aim is an examination and test of the correlation among the various sales training evaluations performed by the sales person, the trainer, and the salesperson's supervisor. The fourth objective involves determining the possible effects of experience, education, age, previous training courses, hiring date, and perceived job description on the success of
training. The fifth one is to draw conclusions that would help other companies evaluate future sales training programs.

The first objective can be summarized as follows:

1) To determine if sales training can be objectively evaluated by proposing and testing a model for evaluating sales training programs' effectiveness.

Large numbers of articles are documented in the literature that describes, theoretically, how to evaluate sales training programs. Other articles explain particular methods or techniques that guarantee to increase the effectiveness of training program evaluations. Few articles identify, in detail, how to empirically conduct an objective sales training program evaluation. In addition, no previous models or frameworks have been proposed or tested in the literature within a sales training context. That is why, in this dissertation, a model for evaluating sales training programs' effectiveness is proposed and tested. Consequently, this research establishes a departure point for improvement of the discipline. An objective evaluation of sales training programs is strongly supported mainly through both the second and third objectives.

The second objective can be summarized as follows:

2) To conduct a simultaneous examination of the different levels of evaluation as emphasized by Kirkpatrick (1959a, 1959b, 1960a, and 1960b): reaction, learning, behavior and results.

It is essential that the four levels of evaluation be examined and the strengths and weaknesses of each level be understood. Academicians and practitioners need to understand the existing relationships across the four evaluation levels in sales training programs. Although these four levels need to be empirically examined, according to Newstrom (1978), there is a high sequential intercorrelation among the criteria. That
is, favorable trainee reactions help in assuring learning that assist in applying the learned skills to the job, which finally lead to favorable results in the individual and organizational levels. Obtaining consistent results across the four levels ensures both the reliability of the research results and the objectivity of the evaluation.

The third objective can be summarized as follows:

3) To examine the various sales training evaluations performed by the salesperson, the trainer, and the salesperson’s supervisor.

It is very significant to get the perspectives of both trainees and trainers, who are the major parties directly involved in the training program. In addition, it is important to obtain the evaluations of the trainees’ supervisors when they come back to the job to make sure that the trainees are applying what they learned on the job.

The fourth objective can be summarized as follows:

4) To determine the possible effects of experience, education, age, previous sales training courses, and sales region on the evaluation of sales training.

In order to examine the success of sales training, some significant factors need to be addressed and studied, such as the experience of the trainee (total years of experience inside the organization, outside the organization, and in sales), his education level (Bachelor degree, some college, and high school), his age (young vs. old sales trainees), his previous sales training history (previously sales trained vs. non-sales trained), and his sales region (near headquarters vs. away from headquarters). According to Morgan (1978), the salesman’s work environment and corporate culture affects his job performance.
The fifth objective can be summarized as follows:

5) To gather information on evaluating sales training programs, draw conclusions, and construct a sales training program evaluation model or framework that would help other companies in evaluating future sales training programs.

Currently, very little empirical work has been done in evaluating sales training programs. This study provides a real application of a comprehensive evaluation of sales training programs, as well as suggestions for improving current practices of sales training evaluation. The accomplishment of this objective establishes a resource that businesses can use to evaluate sales training programs. The fifth objective extends the first four objectives by constructing a general framework for sales training evaluation. This final step in this dissertation has the potential for increasing the efficiency and effectiveness of evaluating sales training programs in multinational corporations.

The purposes of this dissertation will be achieved by meeting the five objectives identified, in sequence. Five separate questionnaires and forms will be completed and assimilated into this research. Questionnaires and forms will be completed by the salespeople, the trainer, and the salespersons’ supervisors (See Appendices A, B, C, D, and E). In Appendix A, the training program evaluation forms will be completed by every sales trainee at the end of the program to measure sales trainee reaction and learning. In Appendix B, the self-evaluation form will be filled by every member of both the experimental and control groups in order to measure changes in the behavior. In Appendix C, the trainer evaluation report will be completed by the trainer for each trainee in order to measure the evaluation of the trainer to his trainees. In Appendix D, the supervisory-evaluation form will be filled by the supervisor of every member of
both the experimental and control groups in order to measure changes in the behavior as perceived by the supervisor. Finally, Appendix E incorporates a demographic profile of every member of both the experimental and the control groups.

SIGNIFICANCE OF THE RESEARCH

This dissertation topic is of value to the academic, sales management, and training communities. Academic value is achieved by documenting this model in evaluating sales force training programs. The research is a logical progression in the development of a procedure that allows companies to better evaluate their sales force training programs. Such research also has the potential to generate future research as studies attempt to evaluate sales training programs under more specific or more general situations.

This research also has the potential utility for sales training practitioners, sales managers, and executives of companies. As the importance as well as the cost of training continues to escalate, it is essential that executives know there is a reward for huge training investments by objectively evaluating their sales training programs. Practitioners, managers, and executives are able to examine this research project and adopt methods that help and improve their sales training programs' evaluations. This dissertation can also assist managers in overcoming the frequently encountered difficulties when evaluating their sales training programs.

This research may also assist those companies who are not currently evaluating their sales training programs, as well as those companies who currently are having problems in conducting sales training programs' evaluation. Therefore, this research
project is considered as a module that may be immensely useful especially to large companies that currently spend significant sums of money, time, and effort training their sales force.

**ORGANIZATION OF THE DISSERTATION**

This dissertation consists of four major chapters following the introduction. Chapter II is a review of the literature that examines three major areas. First, the review of the literature focuses on the importance and cost of sales training/no sales training, and the barriers to training. The second part incorporates studies concentrating on the sales training development and implementation phase: needs determination, the program objectives, location, instructors, content, methods, and length. The last major area is the core and focus of the dissertation, the evaluation of the sales training program, which incorporates the evaluation objectives, neglect, problems, types, models, and levels with a major focus on the Kirkpatrick model. Chapter III explains the rationale for the approach followed in this research in addition to the proposed model. Specific data requirements, as well as the methodologies employed in data collection and analysis, are also discussed. Chapter IV is a discussion of the results of the study, and Chapter V is the conclusions of the findings as well as the implications for further research. Following chapter V is the reference section.
CHAPTER II
REVIEW OF THE LITERATURE

Over the years, sales training has become an integral part of most companies' sales efforts. Both academicians and practitioners have been the major contributors to the development of sales training practices over the years. According to Honeycutt (1986), one of the earliest sales training programs was started at NCR when John Patterson had his best salesman write down a presentation that all company salesmen learned and used. Since then, many companies have invested a lot of time, money, and effort to train both new and experienced salespeople.

This chapter is a review of the literature that examines three major areas. First, a review of the literature is undertaken that focuses on the importance and cost of sales training versus the cost of not providing sales training, and the barriers to training transfer. Second, studies concentrate on the sales training development and implementation phase: needs determination, the program objectives, content, methods, length, instructors, and location. The last major area is the core and focus of the dissertation, the evaluation of the sales training program, which incorporates the evaluation objectives, neglect, problems, types, models, and levels with a major focus on the Kirkpatrick (1959a; 1959b; 1960a; 1960b) model.

THE COST OF SALES TRAINING/NO SALES TRAINING

Recent reports show that organizations spend more than $30 billion dollars annually for training programs incorporating fifteen billion work hours with the
objective of improving the profitability of their firms through improving the productivity of their sales force (Huber 1985). According to Sales & Marketing Management (1976, 1983, and 1993), Table 1 represents the 1975, 1983, and 1993 estimated field costs, respectively, for a sales trainee for industrial products, consumer products, and service organizations. As becomes evident, the field training costs for a sales trainee have enormously increased over this period. In addition, Dubinsky (1996) said that the training costs can be as high as $100,000 for certain high-tech fields. Dubinsky (1981) emphasized the hidden cost of sales training, which stems from the sales revenues lost during the trainees' sales training program and is not generally noted in a company's accounting records; if the hidden cost is considered, the cost of the sales training programs will be even more expensive.

Table 1: The Estimated Field Training Costs for a Sales Trainee

<table>
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<tr>
<th>Year</th>
<th>Industrial Products</th>
<th>Consumer Products</th>
<th>Services</th>
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<tbody>
<tr>
<td>1975</td>
<td>$9,672</td>
<td>$4,528</td>
<td>$5,623</td>
</tr>
<tr>
<td>1983</td>
<td>$24,600</td>
<td>$16,600</td>
<td>$16,000</td>
</tr>
<tr>
<td>1993</td>
<td>$40,407</td>
<td>$37,513</td>
<td>$33,333</td>
</tr>
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According to Bramley (1991), the training program cost incorporates three elements:

1) The cost of designing the learning event, such as the costs of preliminary analysis of training needs, development of objectives, course development, lesson planning, programming, audio-visual aids production, consultant advice, contractors, offices,
telephones, production of workbooks, slides, tapes, tests, programs, and printing and reproduction; 2) the cost of actually running the event, such as some proportion of annual salaries of trainers, lectures, trainees, clerical/administration staff, costs of consultants and outside lecturers, travel costs, cost of conference centres, classrooms, buildings, offices, accommodation and food, office supplies and expenses, and equipment for delivering the training (slide projectors, videos, computers, simulators, workbooks, maintenance and repair of aids, expendable training materials or some proportion of cost relative to lifetime, and handouts); and 3) the cost of evaluation, which is usually low compared to the other two components, such as cost of designing questionnaires, follow-up interviews, travel, accommodation, analysis and summary of data collected, delivering the evaluation report, offices, telephones, tests, questionnaires, and postage.

Conversely, Thomas (1992) emphasized the point that not to conduct training also costs money and there are obvious and hidden costs associated with this lack of action. The obvious costs are re-work and warranty costs, increasing and stagnant level of customer dissatisfaction and complaints, reduction in market share, late orders, recurrent crises, overtime costs, costs of scrap, no systematic reduction of unit costs, underutilization of existing human and physical resources, unnecessary operations and systems, inspection costs, and failure to utilize new technology, materials, and methods. Some of the hidden costs are absenteeism, stress-related sicknesses, excessive staff turnover, inefficient staff recruitment and selection, resistance to change and progress, low employee moral, no pride in work, lack of commitment to the
organization, accidents, damage to organizational image, avoidable mistakes, minimal staff suggestions for improvements, new market opportunities not exploited, and no quality culture generated. Consequently, it can be implied that the cost of not training can be reduced by training. Furthermore, Thomas (1992) added that the costs of not training will exceed the costs of carrying the training out.

**THE BARRIERS TO TRAINING TRANSFER**

According to Broad and Newstrom (1992), little empirical research about transfer barriers has been conducted and reported. However, two relevant studies dealing with perceptions took place. The first study was conducted by Kotter (1988) to investigate top executives' perceptions of the factors that frequently inhibit the success of training efforts. Four factors were found: (1) 71% of the respondents reported lack of involvement by top management in the behavior change process; (2) 51% of the respondents indicated that the new improvement efforts were very centralized in the top management level resulting in low acceptance by lower-level participants; (3) 21% of the executives believe that new efforts to improve employee behavior were too staff centered, with insufficient participation by direct users; and (4) 17% of respondents believed that expectations from the training programs were often unrealistic since too much was expected too soon.

The second study was conducted by Newstrom (1986) to investigate the trainers' perceptions of training barriers. Nine Barriers were identified and ranked from most to least important: lack of reinforcement on the job to support trainees in applying training skills and knowledge to their jobs, interference from the work environment,
non-supportive organizational culture, trainees' perception of irrelevant training programs or contents, trainees’ discomfort with change, separation from inspiration or support of the trainer, trainees’ perception of poorly designed and delivered training, and pressure from peers to resist changes. In addition, according to Brinkerhoff and Gill (1994), there are four training myths or self-defeating practices: using misleading accounting models to compute the cost of training, overloading the content of the training program, not linking training to business goals, and lack of supervisory support (supervisors perceived as an enemy).

THE SALES TRAINING PROCESS

The early models of sales training encompass three phases (Anderson 1993; Dubinsky 1980). Figure 1 shows the three major phases of the sales training process, which are sales training needs determination, sales training program design and implementation, and sales training program evaluation. Here we will emphasize the third phase, sales training evaluation, as it is the focus of this study. In the discussion, the first two phases will be combined into one phase.

![Figure 1: The Sales Training Process](image-url)
PHASE 1: SALES TRAINING DEVELOPMENT AND IMPLEMENTATION

According to Anderson (1993) and Dubinsky (1980), the development phase is subdivided into two major sub-phases: sales training needs determination and sales training design. Here sales training implementation and sales training design are combined into one phase. However, Honeycutt, Ford, and Tanner (1994) and Dubinsky and Staples (1982) emphasized that both sales managers and sales trainers should work together in all phases of sales training programs.

A) SALES TRAINING NEEDS DETERMINATION

The first step in the design and development of any successful training program is to find out through gathering information on training needs about the people who should be trained and the type of training to be provided. The assessment provides the information required to decide on the objectives, content, and format of the program (Abella 1986). According to Anderson (1993), training needs analysis is the diagnostic part of the whole training process and without diagnosis, there is no solid prognosis.

Immel (1990) stated nine major benefits for conducting a sales training needs analysis: (1) enabling the training staff to identify the realistic needs and focus their training programs on them; (2) utilizing the organizations’ resources more effectively; (3) improving the coordination of other groups such as sales management; (4) having measures for assessing the effectiveness of the sales training programs; (5) enabling the training staff to justify their requests to management for training resources; (6) enabling all members of the training staff to contribute in a unified manner to the development and delivery of the program; (7) involving the sales organization and
others in the needs analysis will cause the other parties to be more supportive of the training effort; (8) enabling the trainer to prioritize training efforts better; and (9) maximizing the probability of training program success. However, Anderson (1993) sheds light on some constraints that may take place, such as the top management commitment to training in terms of the amount of resources available, actual costs, time, energy, opportunity costs, and the role of the trainees' managers.

Immel (1990) proposed seven major methods for assessing sales training needs: use of questionnaires (most commonly used), structured interviews, performance appraisals, survey feedback (opinions, attitudes, and perceptions of relevant parties concerning the situation), trainee inputs from previous programs, the team approach (selecting representatives from relevant parties to sit on a training committee), and the observation method in field trips. Anderson (1993) added the following training needs determination methods: non-specific manifestations of need (such as customer or supplier complaints from late delivery), derived training needs from the corporate plan and manpower plan, the individual's views of training needs, the manager's vision of training needs, and the visions of others (assessment centers, psychometric testing, or outside consultants). Braun (1987) recommends the development of a complete, extensive, and wide-ranging list of knowledge skills and abilities particular to the training program as a result of the training needs analysis.

B) SALES TRAINING PROGRAM DESIGN AND IMPLEMENTATION

In this section, the emphasis is on the cornerstones of sales training program design and implementation in sequence as follows: the sales training objectives, who
should provide the sales training program, where should the program take place, the sales training program content, the sales training program methods, and the length of the sales training program.

1) SALES TRAINING PROGRAM OBJECTIVES

According to Szymanski (1988), when developing any training program, management must have a clear conceptualization of the program's objectives. A sales training objective, according to McLaughlin (1982), is the action or knowledge you desire as the result of studying a sales subject. In addition, an objective should be measurable and observable. Honeycutt, Harris, and Castleberry (1987) found that 90% of the sales trainers stated that they set objectives for their sales training programs. This is a higher percentage compared to a 1982 study conducted by Dubinsky and Barry, which reported that 64% of large companies set objectives. In addition, 81% of sales trainers reported that they set specific objectives. However, the cited examples of these objectives were not specific. So, according to Dubinsky (1982), Goldstein (1986), Honeycutt, Harris, and Castleberry (1987), Honeycutt, Ford, and Tanner (1994), and Honeycutt (1996), the sales training programs need to have more specific, measurable, and timely objectives. Otherwise, there is no way to measure success. According to Honeycutt, Howe, and Ingram (1993), specifically-stated objectives increase the top management commitment and support to the program, help in prioritizing training subjects, topics, and courses, serve as a communication vehicle for trainee expectations, help the trainer focus on the goal of the training, and provide criteria for measuring effectiveness.
Hawes, Hutchens, and Crittenden (1982), Churchill, Ford, and Walker (1985), Rubash, Sullivan, and Herzog (1987), Honeycutt, Howe, and Ingram (1993), Strafford and Grant (1993), and Honeycutt, Ford, and Tanner (1994) agreed upon the following broad objectives for sales training: increased sales and productivity, lower staff turnover, improved customer relations, better morale, greater sales force control (better management of time and territory), and reduced selling costs. In addition, Dubinksy (1996) emphasized that sales training stimulates communication inside and outside the organization, reduces inter- and intra-departmental misunderstandings, and improves supervision.

In an empirical study performed by Honeycutt, Harris, and Castleberry (1987), the most common initial sales training program objectives mentioned by sales trainers are: increase sales revenue (>80%), improve customer relations (14%), improve use of time (12%), product training (8%), selling skills (4%), decrease turnover (4%), decrease sales costs (4%), and improve control (3%). Each percentage represents the percentage of the objective mentioned singularly added to the percentage of the objective mentioned in combination with other listed objectives. Consistently, in another study conducted by Honeycutt, Howe, and Ingram (1993), the most highly and frequently cited objective by trainers, sales reps, and sales managers as well as by consumer, industrial, and service organizations is "increase sales volume." The next group of objectives mentioned incorporates "Decrease Turnover," "Improve Use of Time," and "Improve Customer Relations."

2) SALES TRAINING PROGRAM INSTRUCTORS

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In a survey conducted in Britain, Anderson (1993) emphasized the most important criteria with their weighted importance used by employers in determining the training providers, whether internal or external: level of expertise 66%, quality 44%, breadth of experience 41%, flexibility of provision 28%, value for money 24%, geographical location 20%, reputation of provider 12%, cost 12%, previous contact 11%, management recommendation 10%, and tradition 5%. In another study, Lashbrook (1981) found the following criteria that are employed by Training subscribers, Business Week subscribers, and clients of the Instructional Systems Association, for deciding on buying rather than developing inside programs: range of resources available (49%), quality of end product (43%), speed of delivery (34%), cost (34%), capability of personnel (33%), unique technology (17%), and other (13%).

In a study conducted by Shepherd and Ridnour (1995), the most perceived effective sales training instructors are ranked as follows: staff sales trainer, consultant, senior sales manager, sales vice president, national sales manager, and senior sales person. Although the staff sales trainer is the most widely used training instructor, the senior sales manager was ranked second followed by sales vice president, consultant, senior salesperson, and national sales manager, respectively.

According to Kirkpatrick and Russ (1976), sales training can be provided by the training department staff or by a line person, such as the sales manager, district sales manager, and sales supervisor. At times, outside training organizations are used. Chonko, Tanner, and Weeks (1993) found that the top sales executives, since they are
more knowledgeable, are used as trainers more than the immediate sales managers, company trainers and outside sales trainers.

Higgins (1993) and Salisbury (1992) recommended the use of an outside professional and experienced consultant rather than a busy sales manager despite the higher cost to provide the training program. However, Strafford and Grant (1993) see that the ideal person to train the sales force is the sales manager, but he may lack the time and experience. Consequently, an outside consultant is the best alternative in this case.

3) SALES TRAINING PROGRAM LOCATION

In a study conducted by Shepherd and Ridnour (1995), the most perceived effective as well as the most extensively used sales training locations are ranked as follows: corporate home office, hotel, regional/field office, resort, university, and satellite network. Strafford and Grant (1993) emphasized three primary places where formal sales training programs can be held: on company premises, in hotels, or in training centers. The major advantage of the first method is that there is less expense; whereas, the major advantage of having the sales training program in hotels is that no interruption will take place.

According to Kirkpatrick and Russ (1976), training can be centralized in the home office or in the field where the salesperson is working or it can be a combination of both. For large companies, home office training is expensive for all training because of travel costs. In a 1984 study published by the Sales & Marketing Management, the
most frequently used sites for sales training for industrial products, consumer products and services are shown in Table 2.

**Table 2: The Most Frequently Used Sites for Sales Training**

<table>
<thead>
<tr>
<th>Training Sites</th>
<th>Industrial Products</th>
<th>Consumer Products</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Offices</td>
<td>75%</td>
<td>44%</td>
<td>67%</td>
</tr>
<tr>
<td>Field Offices</td>
<td>50%</td>
<td>78%</td>
<td>67%</td>
</tr>
<tr>
<td>Regional Offices</td>
<td>42%</td>
<td>78%</td>
<td>17%</td>
</tr>
<tr>
<td>Central Training Facility</td>
<td>33%</td>
<td>22%</td>
<td>50%</td>
</tr>
<tr>
<td>Plant Locations</td>
<td>8%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>Non-company sites (hotels, restaurants...etc)</td>
<td>8%</td>
<td>11%</td>
<td>17%</td>
</tr>
</tbody>
</table>

4) **SALES TRAINING PROGRAM CONTENT**

According to Honeycutt, Howe, and Ingram (1993), Dubinsky (1981), and Still and Cundiff (1969), the sales training program content usually consists of four general topics/areas: (1) product knowledge training, which focuses on the company’s as well as the competitors’ products, their applications, uses, and benefits; (2) sales techniques training, which emphasizes salesmanship instruction (how to sell); (3) market orientation training, which focuses on the customers, their product preferences, their buying habits and motives, their location, and their financial condition; and (4) company orientation training, which emphasizes the firm’s policies, products services, personnel policies, and other administrative procedures. According to Kurzrock
(1990), several methods can be used to develop content for a training program: focus groups, field visits, individual interviews, and mail questionnaires.

Honeycutt, Harris, and Castleberry (1987) found that companies devoted 35% of their time to product information, followed by 30% to sales techniques, followed by 15% to market information, followed by 10% to each of company information and other topics. When these results are compared to the 1978 Hopkins study results, we find that the same sequence takes place. However, we notice that the percentage of the time devoted to product information decreased from 40% in 1978 to 35% in 1987; whereas, the time devoted to sales techniques increased substantially from 20% in 1978 to 30% in 1987. That is, the trend has been moving very fast in the last twenty years toward devoting more time to sales techniques rather than product information. Consequently, Chonko, Tanner and Weeks (1993) found that both the most important sales training topic and the sales training topic where most attention is needed, according to the sales personnel, is selling techniques followed by product knowledge.

Consistent with another study conducted by Honeycutt, Howe, and Ingram (1993), the training time allocated to sales techniques (average of 38.6%) far exceeded the time allocated to product information (average of 29.7%) in both consumer and service organizations. However, in the industrial organizations, the time allocated to product information (42.9%) far exceeded the time allocated to sales techniques (25.2%), which is consistent with the research results found by both Puri (1993) and Williams and Seminerio (1985). One explanation of this is that industrial products are more sophisticated when compared to both consumer products and services so that
sales reps need more emphasis on product information. In the same study conducted by Honeycutt, Howe and Ingram (1993), 60% of the training executives and 51% of the sales managers said more time should be spent on improving the sales techniques of the sales force. However the sales representatives, with their limited experience and scope when compared to the experience of the sales managers and the training executives, seem to be more comfortable with their existing selling skills as only 36% indicated a preference for more time being spent on improving their selling techniques, whereas 60% of them preferred more time to be devoted to product and market information.

In another study, Frantzreb (1990) mentioned that the specific sales training topics most desired by organizations are: effective listening (34%), closing and gaining commitment (32%), maintaining self-motivation (27%), time management (25%), and how to cold call (24%), when the client says “no” (23%), how to make presentations (23%), opening the call (22%), strategic questioning (22%), selling against price (21%), asking questions (21%), and problem-solving selling (19%). However, the five sales training topics desired least are: following up with clients (5%), providing service after the sale (4%), differentiating your product or service (4%), developing workable territory plans (3%), and prioritizing accounts (3%). These results are consistent with the selling skills being the dominant topic in sales training followed by product knowledge.

5) SALES TRAINING PROGRAM METHODS
Hopkins (1978) and Nilson (1992) emphasized a wide variety of sales training methods and instructional techniques. Hopkins (1978) found that the sales training methods employed by companies, classified from the most important to the least important, are as follows: on-the-job training, classroom training, coaching, observation, self-study, and outside training programs. According to Churchill, Ford, and Walker (1985), classroom training incorporating lecturing, conferences/discussions, case analyses, and role-playing.

After examining several hundred training programs in various types of organizations, Warren (1969) found that over 70% of all training actions used some form of lecture as their instructional method. Consistently, Gordon (1986) reported that 82% of organizations with 50 or more employees use lectures in training. Szymanski (1988) stated that training programs which only use lectures to aid and influence knowledge development are not likely to be wholly effective and additional training procedures, such as role playing and modeling, must be employed. Consistently, Honeycutt, Harris, and Castleberry (1987) found that lecturing was the most frequently used presentation method, followed by participation techniques with frequent use of role playing as well as role playing with video equipment. Case studies, on-the-job training, and the brainstorming techniques were listed next. Compared to the 1978 Hopkins study results, the time devoted to participation techniques, such as role playing with video equipment, had increased.

Chonko, Tanner, and Weeks (1993) reported that the training manuals are still the most frequently used training materials, followed by videotapes, role playing, audio
tapes, case analysis; whereas, computer simulations are used by relatively few sales organizations. Several studies (Martin and Collins 1991; Honeycutt, McCarty, and Howe 1993) indicated that many firms, such as Motorola Inc. and BellSouth Services use video enhanced sales training because it is a cost effective technology that decreases the amount of time required for training and improves sales training effectiveness.

In a recent study conducted by Shepherded and Ridnour (1995), both training methods and methodologies are emphasized. First, concerning training methods, the workshop was perceived as being the most effective, followed by on-the-job-training, classroom "lecture style", field coaching, mentoring, field travel, outside courses, and home study, respectively. However, on-the-job training was the most frequently used training approach followed by workshop, classroom "lecture style", field coaching, field travel, outside courses, mentoring, and home study, respectively.

Second, concerning sales training methodologies, the perception of the most effective one was role playing followed by case studies, seminars, video-tapes, workbooks, panel discussions, audio-tapes and self-study, simulations, and interactive videos, respectively. Although role playing was as well perceived as the most extensively used training methodology, seminar was ranked second followed by case studies, work-books, video-tapes, panel discussions, interactive videos, simulations, audio-tapes, and self-study, respectively.

El-Ansary (1993) found that experienced salespeople use a broader range of training methods than their new counterparts. Top methods include self-administered
training, on customer premises, special outside courses, plant tours, and rotation between departments. Rubash, Sullivan, and Herzog (1987) emphasized the importance of employing expert systems (using artificial intelligence) to train sales force, whereas Bentley (1990) and Lafferty and Range (1990) described the importance of simulation as a new training tool in a high-tech future in sales training. In addition, Baker (1990) recommended the use of videos and films in sales training because of their power in improving sales training presentations.

6) SALES TRAINING PROGRAM LENGTH

The length of sales training programs varies from a few days to several weeks (Hopkins 1978). Churchill, Ford, and Walker (1985) said that the sales training program takes from few days to more than a year, depending on company needs. According to El-Ansary (1993), the duration of training experienced salespeople often is under one week, whereas new salespeople training often is between three and nine months. Here we can imply that a shorter period represent the formal training program, whereas a longer period is the total time considered in training by company.

Consistently, Strafford and Grant (1993) said that more and more training programs are now being built on a regular module basis. Each module tends to last one to three days. The advantages of this idea are as follows: keeping the learning curve at a high level for two to three days is easier than for five days or more, allowing the skills to be tried out, and not keeping the sales force away from their jobs long periods of time.
In a cross-national study conducted by Erffmeyer et al. (1993), it was found that U.S. salespeople receive more than twice the amount of training than their Saudi counterparts receive during their first year (156 hours versus 59 hours) as well as in a typical year (47 hours versus 20 hours).

**PHASE 2: SALES TRAINING PROGRAM EVALUATION**

Caffarella (1988, p. 190) defines training program evaluation as “the process used to determine the effectiveness of the training activities and the results of those activities.” Brinkerhoff (1981, p. 66) defined training program evaluation as “systematic inquiry into training contexts, needs, plans, operations, and effects.” Goldstein (1986, p. 111) defines evaluation as “the systematic collection of descriptive and judgmental information necessary to make effective decisions related to the selection, adoption, value and modification of various instructional activities.” Bramley (1991) states that Goldstein’s definition is very valuable since it implies that evaluation is a set of information-gathering techniques. According to Honeycutt (1986), the major problem in sales training evaluation is the lack of a common definition of training evaluation as there is no commonly accepted definition for the term “evaluation.” However, this comprehensive definition of sales training evaluation is proposed by the researcher to serve the purpose of this study:

“the systematic collection of information necessary to determine the effectiveness of the sales training activities and the outcomes of those activities.”

In this study, the focus is not on the sales training activities themselves, but the outcomes and effects of these activities are being assessed.
Tracey (1968) said that all evaluative efforts should be guided by the following principles: evaluation must be goal-oriented, cooperative, continuous, specific, and based on uniform and objective methods and standards. In addition, evaluation must facilitate the means for trainers to be able to appraise themselves, their practices, and their products.

THE OBJECTIVES OF EVALUATING SALES TRAINING PROGRAMS

According to Kirkpatrick (1994), there are three general objectives or reasons to evaluate training: (1) to justify the existence of the training department; (2) to make a decision on continuing or discontinuing the training programs; and (3) to improve future training programs. Law (1990) provided eight reasons for evaluating sales training performance: measuring individual learning, measuring transfer of learning to the job, measuring skill and knowledge acquisition, assessing individual development planning, evaluating group performance, measuring the relevance of training to job and company needs, identifying the contribution of training to individual and group performance, and measuring the effectiveness of training design and delivery.

Honeycutt and Stevenson (1989), and Newstrom (1976) added the following reasons for evaluating sales training: assessing the achievement of training objectives, assessing the effectiveness of the trainer, justifying the training expenses through cost/benefit analysis, deciding whether other trainees should receive the program, and improving the program content and structure. Phillips (1991) emphasized the following additional purposes and uses of training program evaluation: (1) to identify the strengths and weaknesses of the training process; (2) to make a decision about
participants in future programs; (3) to identify which trainees benefited the most or the least from the training program; (4) to test the clarity and validity of tests and exercises reflecting the skills and knowledge of the trainees; (5) to create a human resource development data base that can assist management in making decisions and in marketing future programs; (6) to determine the appropriateness of the program; and (7) to reinforce the major points and skills made to the participant.

Newby (1992) added six direct benefits for evaluating training programs: (1) quality control, which is concerned with whether the work-related results can be demonstrated to arise from the training program; (2) efficient training design, which emphasizes defining the training objectives and identifying the criteria against which these learning activities must be evaluated; (3) trainers' professional self-esteem that can be gained from reliance on systematic evaluation data rather than intuitive assessments of their performance; (4) track record demonstrated of relevant and most cost-effective training over a period of time; (5) appropriate criteria of quality of training assessment used instead of judging training effectiveness based upon inappropriate criteria, such as emphasis on a head-count trainees; and (6) intervention or improvement strategy through changing the way training is integrated into the organization so that the training department would be more able to play a more active role in developing policy and identifying needs.

Other additional reasons mentioned for training evaluation include: (1) the boss asks for evaluation; (2) the trainees will enter the training program with positive attitudes if they know that there will be a follow-up; (3) the evaluation gives training
credibility; (4) the evaluation helps in discovering any environmental barriers and reasons why trainees are not improving even if they got trained; and (5) the evaluation provides a basis for rewards, reinforcement and celebration of achievements (Holcomb 1993).

Truelove (1997) added the following reasons for evaluating training: (1) helps in appraising the effectiveness of an investment in training, which helps in justifying the expenditures for future programs; (2) allows the evaluation and comparison among different approaches; (3) provides feedback for the trainers about their performance; (4) enables improvement in current and future programs; (5) motivates learners; and (6) helps in identifying any further training needs through indicating to what extent the objectives have been met.

According to Caffarella (1988), performing training program evaluation serves a number of purposes: (1) keeping the staff focused on goals and objectives; (2) providing information for decision making on all aspects of the program; and (3) allowing for program accountability. Bullard et al. (1994) added the following benefits for conducting training program evaluation: (1) determine the reasons for the training program success or failure; (2) provide an incentive for learning; (3) involve the trainer and the trainees in the training process; and (4) determine the trainees' progress.

Rosenberg (1987) suggests that good training evaluation efforts can remove the fear of evaluation, teach about evaluation, generate support for the program, bring a program into focus, improve performance, and contribute to the bottom line by saving time and money. In addition, Wiesen (1987) perceives training evaluation as a basis for
making personnel decisions, such as selection, retention, promotion, demotion, and compensation of individual employees.

In conclusion, Basarab and Root (1992) state that the purposes and uses of training evaluation list will never be complete as the needs and wants of businesses change from year-to-year due to the frequent modification of corporate strategies and objectives. Newby (1992) concluded that the benefits of evaluation substantially outweigh its costs.

THE NEGLECT OF TRAINING EVALUATION

Newby (1992) mentioned the reasons for neglect which falls within the boundaries of three areas: (1) training history; during the 1960s and most of the 1970s, training was a growing industry since government funds and corporate sources flowed generously. However, due to the significant rise of oil prices at the end of the 1970s, many training budgets were suspended and decreased and many training departments were closed; (2) academic analysis which created terminological confusion that trainers have been told and urged by academicians that evaluation ought to be done while providing them with very weak practical guidance and examples that show trainers how to do it; and (3) trainer anxieties, which concern the fear of response among trainers that can be understood partly as a misunderstanding of the objective of evaluation and partly as avoiding performance appraisal unless a positive outcome is guaranteed. However, Evered (1990) warns trainers that management will ask: “What did we get for what we spent?”
Honeycutt and Stevenson (1989) presented the managers' most frequently cited reasons for not evaluating their sales training programs: (1) the training program must be effective as long as the company is successful; (2) the strong belief that the training program is good; (3) it is too difficult and too time consuming; (4) the budget restrictions; (5) the evaluation results may show that training is not effective and I may lose my job; (6) evaluations should be conducted by the training staff; and (7) evaluations may not prove anything positive or negative.

Both Caffarella (1988) and Knowles (1980) provided three reasons for training program evaluation neglect: (1) conducting training program evaluations cost time, money, and efforts that most companies are not willing to spend as they don't need to as they believe in the worth of training as an investment; (2) current evaluation procedures may not be able to provide hard evidence that the most important aspects of the training program have been achieved; and (3) the outcomes of the training program may be too complicated with too many variables affecting those outcomes to be able to prove that training alone actually produced the desired changes. According to Dubinsky (1996), one of these external variables found to have significant positive influence on the sales training program effectiveness is the rate of product obsolescence experienced by the firm.

Phillips (1991) presented the following myths and faulty assumptions about the training evaluation process which have kept the human resource development professionals from measuring the contribution of their efforts: (1) the value of the training program can't be quantitatively measured; (2) inability to identify the type of
information needed to be collected; (3) evaluation of the training programs is useless if the Return On Investment (ROI) can’t be calculated; (4) measurement is only effective in the production and financial areas; (5) training program evaluation should not be done if the Chief Executive Officer (CEO) doesn’t ask for it; (6) there are too many variables affecting the behavior change other than training; (7) evaluation will lead to criticism; (8) evaluating training programs is very expensive; (9) measuring progress toward objectives is an adequate evaluation strategy; and (10) human resource development professionals or trainers have a proven track record and an excellent reputation so they don’t need to prove their existence. However, Phillips falsified all these myths and assumptions.

Camp, Blanchard, and Huszczo (1986) presented three arguments against evaluation: (1) no one really cares about evaluating training in the organization; (2) the trainees and their supervisors will mention how effective training was; and (3) training evaluation is a waste of time since it is extremely difficult to prove the effects of training.

**TRAINING EVALUATION PROBLEMS, PITFALLS, AND SOLUTIONS**

Honeycutt and Stevenson (1989) found that 38% of sales managers in large companies and 34% of sales managers in small companies stated that restrictions worked against their efforts to evaluate. The two most common evaluation restrictions were “time and money” and “difficulty in obtaining data.” In another study conducted by Clegg (1987), 22% of respondents said that a lack of adequate evaluation methodology was a constraint to management training program evaluation methods;
whereas, 42% of respondents reported that the most significant shortcoming to evaluation is the lack of evaluation standards and yardsticks.

According to Tracey (1968), one of the major problems in evaluation is the staff resistance as evaluation sometimes becomes a direct or an implied threat to the position, status and opportunities of every person in the organization being appraised. According to Tracey (1984), evaluation of training programs too often fails due to: inadequate planning, lack of objectivity, improper interpretation of findings, inappropriate use of results (for disciplinary action or for denying or granting special privileges or promotion), and evaluation errors, such as the error of central tendency (being reluctant to assign either extremely high or extremely low ratings), error of standards (overrating or underrating everyone in comparison to the ratings of other qualified judges), error of halo (being influenced in the scoring of the individual's performance or traits by a general impression the evaluator has about this individual), and logical error (if two or more similar traits or abilities are rated, they are given similar ratings). In addition, Smith (1987) mentioned some of the problems encountered when evaluating training programs: no data, unreliable data, incomplete data, and untimely data.

Based upon a study conducted by the Bureau of Training of the U.S. Civil Service Commission, Salinger (1989) provided six extraneous reasons (beyond the trainers control) for training failure: (1) the benefits of training is not clear to top management; (2) top management rarely evaluates and rewards managers and supervisors for carrying out effective training; (3) top management rarely plans and budgets
systematically for training; (4) managers usually do not account for training in production planning; (5) supervisors have difficulty meeting operations norms with employees in training; and (6) supervisors and managers train their employees mostly for short-term objectives.

Tracey (1968) emphasized that the success of training evaluation and overcoming the evaluation problems and pitfalls is based upon several critical items: top-management support, highly skilled personnel performing the training program evaluation, total involvement of all the staff performing the evaluation, effective communication and coordination within the training and development department as well as with other departments, use of the formal structure within the organization, realistic target dates for each phase of the evaluation, face-to-face contacts among the training evaluation project personnel and with other parties in the organization, complete and objective reports, and continuous feedback.

THE TYPES OF TRAINING EVALUATION

According to Basarab and Root (1992), Hawthorne (1987), Monteau (1987), and Goldestein (1986, 1974), there are two types of training evaluation: formative evaluation and summative evaluation. Formative evaluation provides information to staff in order to measure progress, improve the training program during its development and implementation phases, and make sure that the program meets the quality standards and provides a favorable learning environment for the trainees. Summative evaluation takes place after the training program is delivered in order to assess the merit and worth of the training program, and provide a summary report of
the training outcomes. According to Basarab and Root (1992), formative evaluation is typically conducted first and then is followed by summative evaluation.

Within the same context, Camp, Blanchard, and Huszczo (1986) and Goldstein (1986) emphasized two types of training evaluation: outcome evaluation (measures the results, or outcomes, of training program), and process evaluation (focuses on what occurred during the development and implementation of training).

If we try to find a link between these two classifications (formative and summative evaluation versus process and output evaluation), it is evident that the formative evaluation is related in context to the process evaluation as both are performed before the training takes place (during the training development and implementation phases). Similarly, the summative evaluation is closely related in context as well with the outcome evaluation since both are performed after the training program takes place. In conclusion, Camp, Blanchard, and Huszczo (1986, p. 135) said “Nearly all the professional literature advocates the use of an outcome evaluation.” Consequently, the focus in this study will be on the outcome and summative evaluation.

**THE TRAINING PROGRAM EVALUATION MODELS**

Phillips (1991) presented seven major training program evaluation models. Three of the seven models (AT&T, Saratoga Institute, and IBM) are very similar to the Kirkpatrick model, which incorporates four levels: reaction, learning, behavior, and results. The three other training evaluation approaches are: (1) The CIRO approach, which incorporates four levels: the context, and input levels are process-oriented, whereas the reaction and the outcome levels are outcome-oriented (level 1 and 4 in the
Kirkpatrick model); (2) the Xerox approach, which encompasses four outcome-oriented levels: entry capability (an evaluation of trainees at the time they enter a program to determine if the prerequisites for the program are satisfied), end-of-course evaluation (reaction and learning), mastery job performance (behavior), and organizational performance (results); (3) The CIPP model is process-oriented as it encompasses four levels; three of which are process oriented (context, input, and process), and only one is outcome-oriented (product evaluation).

In addition, there is another outcome-oriented approach, introduced by Hamblin (1974), that includes five levels: reaction, learning, behavior, organizational level, and ultimate value. However, this approach is very similar to the Kirkpatrick model, except that it divides the fourth level of Kirkpatrick (results) into two sub-levels: organizational level, which focuses on results in the organizational level, and ultimate value, which looks at the results in the individual level.

Blanchard, and Huszczo (1986), Goldstein (1986, 1974), Churchill, Ford, and Walker (1985, 1981), Newstrom (1978), and Brethower and Rummler (1977). In addition, according to Bramley (1991), the Kirkpatrick model represents the general framework for training program evaluation and the other approaches offer only different categories. Because of these similarities and the popularity of this four-level model (Phillips 1991), these four levels of outcome-oriented training program evaluation will be used as a base for this study.

THE KIRKPATRICK MODEL

In the mid 1950s, training program evaluation was a critical issue among the negativists, the positivists, and the frustrates. The negativists believed that formal education evaluation was impossible and irrelevant, whereas the positivists insisted that scientific evaluation of training results is very important. In between, the frustrates recognized the importance of the training evaluation but did not know how to do it (Randall 1975).

In 1959, Kirkpatrick came with his model to solve this dilemma and introduced the four levels of evaluating training programs in a series of four articles called "Techniques for Evaluating Training Programs," published in the American Society for Training and Development Journal: reaction, learning, behavior, and results (Kirkpatrick 1959a, 1959b, 1960a, and 1960b). According to Honeycutt and Stevenson (1989), these four evaluation categories are classified in order from the least to the most difficult to measure. Kirkpatrick (1959a) added that the series of articles is
based upon one major assumption, which is that training directors can borrow evaluation techniques from one another, but they can not borrow evaluation results.

In an early study conducted by Catalanello and Kirkpatrick (1975), 77% of companies were found to measure reaction to the human relations training programs, 54% measure changes on-the-job behavior of the trainees, 50% determine the amount of learning that took place, and 45% determine whether the training program is bringing the desired results.

According to Honeycutt, Harris, and Castleberry (1987), the four evaluation levels have been studied within the context of sales training: (1) in the reaction level, it was found that 77%, 66%, 63%, and 46% of trainers indicated that they evaluate trainees’ reaction to course content and instructions, training methods, trainers, and training program discussion, respectively; (2) in the learning level, it was found that 55% of responding companies used testing to measure program effectiveness; (3) in the behavior level, 35% of the respondents reported that they conducted a field evaluation of trainees’ attitudes through gathering data through questionnaires from subordinates, supervisors, and customers; (4) in the results level, 73% of respondents reported that they conduct a field evaluation of performance.

In another study, Scovel (1990) determined the status of management training evaluation from the perceptions of human resource executives; 52% of the respondents reported that they assess the participants’ satisfaction with training, 17% said that they assess applications of skills to the job, 13% evaluate changes in organizational performance, and 5% test for skill acquisition immediately after training.
According to Honeycutt and Stevenson (1989), sales managers from large as well as small companies proposed almost the same evaluation methods. In large companies, sales managers suggested conducting field evaluations, giving tests, using written critiques, comparing performance against objectives, using observations, using before and after groups, and assessing sales results. In small companies, the suggested evaluation methods were the same excluding observation. The majority of the suggested evaluation methods proposed by sales managers were subjective in nature.

Tracey (1968) and Schein (1975) emphasized two different approaches for evaluating training programs: internal evaluation (reaction and learning in Kirkpatrick's model) and external evaluation (behavior and results in Kirkpatrick's model). Delaney (1987) differentiated between the evaluation of training efficiency, which focuses on whether or not the training achieved its immediate instructional objectives, and the evaluation of training effectiveness, which focuses on whether or not the training achieved its objectives beyond the immediate and short-term perspective. That is, internal evaluation focuses on evaluation efficiency, whereas external evaluation examines evaluation effectiveness. However, Gordon (1996) utilized the words of training program effectiveness, efficiency, or quality synonymously. Consequently, the word “effectiveness” will be used in this study for the four levels of evaluation.

LEVEL 1: REACTION

According to Honeycutt and Stevenson (1989) and Kirkpatrick (1978), measuring reaction focuses on the attitudes and feelings of the sales trainees about the program. This is the easiest way to measure training program effectiveness; that's why,
according to Kirkpatrick (1959a), it is the most frequently employed evaluation method by training directors.

Kirkpatrick (1994) stated four major reasons for the importance of measuring reaction: (1) it provides valuable feedback, comments, and suggestions that help in evaluating the current program and improving future programs; (2) reaction sheets can provide managers and others concerned about the program with quantitative information; (3) reaction sheets can help trainers use the quantitative data to set milestones of performance for future programs; and (4) measuring reaction gives trainees the impression that trainers are there to help them do their jobs better and that the trainers need valuable feedback from the trainees to determine how satisfied they are. In addition, Truelove (1997) listed additional reasons for conducting reaction evaluation: (1) to assess the level of satisfaction with the course; (2) to enable trainees to express their views and feelings about the program; (3) to give feedback to the trainer; and (4) to provide quality control and assurance.

Kirkpatrick (1994) also provided valuable guidelines for evaluating reaction:

1- Determine the criteria to be measured. Kirkpatrick (1994) emphasized several criteria that can be grouped under seven major headings: the training facilities (location, comfort, and convenience), the training schedule (time, length of program, breaks, and convenience), the training services (meals, and amount and quality of food), the training aids (how appropriate and effective the audiovisual aids are), the training materials (relevance and practicality to the job, and the way it was presented), the training subjects or topics (interesting, helpful,
and beneficial), and the trainer (knowledge of subject matter, preparation, communication, and experience). Bullard et al. (1994) added job relevance (whether the training is job relevant in the judgement of the trainees), and Kersen (1990) mentioned the people dimension (the participants, the trainer, and anyone else who becomes a part of the training situation) to the list of reaction criteria.

2- Design a form that will quantify reactions, provide the maximum amount of information, and require the minimum amount of time. When the training program is over, most trainees are anxious to leave, and they don’t want to spend much time completing the evaluation forms. In addition, quantified reactions can be used as standards for evaluating future training programs.

3- Encourage written comments and suggestions since the quantified reactions provide only part of the participants’ reactions, and they do not provide the reasons for those reactions or any suggestions for future program improvement. In order to maximize the written comments and suggestions so that trainees would not be anxious to leave, the trainer is recommended to make the completion of the reaction sheets as part of the program. Fast (1975) emphasized three dimensions to be incorporated in the evaluation: the strengths and weaknesses of the program as well as any additional comments (suggestions and recommendations for the program).

4- Get 100 percent immediate response through making sure that every trainee turns their reaction sheets before they leave the room. It is not recommended that the reaction sheets be distributed to participants with instructions to send them back
after they have a chance to complete them since this will reduce the response rate. In addition, allowing later responses reduces the value of the reaction sheets since most of the trainees will not comply and the forms that are returned may not be a good indication of the group's overall reaction.

5- Obtain honest responses by having anonymous reaction sheets that trainees are not required to identify themselves or sign the forms.

6- Develop acceptable standards. Kirkpatrick (1959a; 1983; 1994) provided a five-point scale that can be used to rate the responses on a reaction sheet:

Excellent = 5  Very good = 4  Good = 3  Fair = 2  Poor = 1

For each item, the number of responses are multiplied by the corresponding weighting followed by adding the products together. Then we divide by the total number of responses received. These ratings can be used to establish a standard of acceptable performance.

7- Measure reactions against standards and take appropriate action.

8- Communicate reactions as appropriate.

Kirkpatrick (1959b) emphasized the importance of obtaining favorable reaction as the more favorable the reaction to the program, the more likely the trainees are to learn the principles, facts, and techniques that are discussed. Bolar (1975) added that peers, supervisors, subordinates of the trainee, the trainee himself and the trainers are valid sources of information. Kirkpatrick (1959a) added that although measuring reaction provides an indication of satisfaction by the trainees, there is no guarantee that a favorable reaction to the training program assures learning, positive behavioral change,
and more favorable results. Consequently, Broadwell (1989) has described the reaction or “happiness sheet” as being worse than useless.

LEVEL 2: LEARNING

According to Weitz, Sujan, and Sujan (1986), knowledge is the critical characteristic enabling salespeople to cope effectively with their dynamic and competitive environment. Honeycutt and Stevenson (1989) state that sales knowledge (principles, facts, and techniques) are evaluated in the learning level during or at the conclusion of the training program. Currie (1990) says there are five reasons for measuring learning in sales training: (1) to determine whether learning objectives are being met; (2) to determine whether learning is transferable to the job; (3) to strengthen future programs; (4) to evaluate instructor effectiveness; and (5) to help sales trainers to survive in today’s business environment through showing that knowledge and skill enhancement actually occurred as a result of the training program.

Kirkpatrick (1994) presented some guidelines for evaluating learning: (1) to get a 100% response rate; (2) to evaluate knowledge, attitudes (through a paper and pencil test), and/or evaluate skills (through a performance test, such as role playing) both before and after the program; (3) to use a control group if practical (However, in most organizations, it is not practical, and the evaluation include only data for those who attended the training programs); and (4) to use the results to take appropriate action. In addition, Kirkpatrick (1959b) added that wherever possible, it is suggested that training directors devise their own methods and techniques. For example, an alternative approach to before and after measurements if not practical is emphasized by
Kirkpatrick (1994; 1960a): to ask the trainees after the program to identify any behavior that was different than it had been before the program. Here we can apply this alternative approach to measure learning in cases where before and after measurements are not practical. Consistently, Swierczek and Carmichael (1987) used the same concept in measuring the trainees' skills learned in the training program.

Currie (1990) presented three methods of measuring learning for the sales force:

1. Written tests: According to Currie (1990), there are two kinds of written tests:
   
   (A) Standardized tests, which are relatively easy to obtain and constructed by experts who understand how to reduce test bias and subjectivity. A possible disadvantage is that the standardized test design and instructions may not be compatible to the course content.

   (B) Tailored tests, which are designed by either the course developers or the trainers. Although the tailored tests are not designed by experts, the test will be more compatible with the course contents. However, according to Honeycutt and Stevenson (1989), there may be trainees who are good test takers, but who are unable to apply the knowledge they put onto paper. This is the major limitation of measuring learning.

2. Role Play: It is judged to be a more subjective measurement method than written tests, and is effective only to the extent that competent evaluators are used. However, if the trainer is competent as an evaluator, we should expect a reasonably valid measurement of learning.
3) Learner Evaluations: These provide more than a subjective reaction if formatted in such a way as to require the learner to think about what has been taught, such as asking the learner "in terms of its usefulness to me, I give this session (or training topic) a value rating of—"). Within this context, Bullard et al. (1994) added the following criteria: improvements (increase in knowledge, skill, and job performance), and effectiveness (the learning of the trainees), and needs/expectations (whether the training met the expectations/needs in the judgement of the trainees). In addition, Braun (1987) emphasized the dimension of the trainee participation in the program as a feasible measure of learning.

According to Currie (1990), measuring learning often produces results that are not totally satisfactory in that they are somewhat subjective and not completely quantitative. Kirkpatrick (1960a) added that there may be a big difference between knowing principles and techniques and using them on the job.

**LEVEL 3: BEHAVIOR**

Evaluating training programs in terms of the job behavior is more difficult than the reaction and learning evaluation (Kirkpatrick 1960a). Kirkpatrick (1994) proposed some guidelines for evaluating behavior: (1) allow time, two or three months, for behavior change to take place; (2) use before and after the program evaluation if practical (an alternative approach is to ask the trainees after the program to identify any behavior that was different than it had been before the program); (3) use a control group if practical (usually it is very difficult to have a control group as shown by Catalanello and Kirkpatrick (1975) who found that only one out of 21 firms that
measure change in behavior uses both control and experimental groups); (4) obtain 100% response rates or use a sample; (5) survey and/or interview one, but preferably more of the following: trainees, their immediate supervisors, their subordinates, their peers, and others who often observe their behavior, such as customers in the case of sales training; (6) repeat the evaluation at appropriate times; (7) consider cost versus benefits.

In this section, the emphasis on some of the qualitative measures frequently recommended to be used by researchers. In a study conducted by Jackson, Keith, and Schlacter (1983), the following qualitative bases were found to be used in performance evaluation: attitude (90%), product knowledge (89%), selling skills (85%), appearance and manner (82%), communication skills (81%), initiative and aggressiveness (80%), planning ability (78%), time management (73%), knowledge of competition (72%), judgement (69%), creativity (61%), knowledge of company policies (59%), report preparation and submission (59%), customer goodwill generated (50%), degree of respect from trade and competition (34%), and good citizenship (23%). In more recent studies, Jobber, Hooley, and Shipley (1993) and Morris et al. (1991) used almost the same criteria and found consistent results. The most noticeable fact from the three studies is that qualitative measures (level 3) are generally perceived as being more important than quantitative measures (level 4), especially in the Morris et al. (1991) study as the first ten most important measures, according to senior sales managers, were all qualitative, followed by sales volume in dollars (quantitative measure), which was ranked eleventh in importance.
Jackson, Schlacter, and Wolfe (1995) replicated the 1983 study conducted by Jackson, Keith and Schlacter to determine the evaluative bases actually used by sales managers. The findings indicate more emphasis on profit and cost control, a continued reliance on qualitative measures, and a wide variety of bases being utilized to evaluate the performance of salespeople.

Based upon a study conducted by Dubinsky and Ingram (1983), when compared to the outcome measures (level 4), the following three qualitative dimensions were rated the highest sales management promotion criteria used by small and large firms: customer relations, overall job knowledge, and time management ability, respectively. In another study conducted by Sharma (1990), salesperson credibility was shown to influence product evaluation and buying intention, which means that credibility can be used as an effective evaluation measure of salespeople behavior.

According to Reid (1981), the major salesperson problem found in two studies that took place in 1959 and 1979 was poor utilization of time and planned sales effort. Morris, LaForge, and Allen (1994) concluded that the following personal and behavioral-oriented factors, ranked from highest to lowest, are very crucial to salesperson success and cause failure, if they are not well-managed: lack of enthusiasm, lack of ambition, poor time management, poor planning/organizing skills, poor people skills, not persistent enough, insufficient product knowledge, and lack of experience. All of these personal factors, except lack of experience, scored higher means than all other external and company factors causing salespeople failure. This reflects the importance of measuring and evaluating sales training effectiveness on a behavior level.
Ingram, Schwepker, and Hutson (1992) conducted another study and found that the most significant factors contributing to salesperson failure are poor listening skills, failure to concentrate on top priorities, a lack of sufficient effort, inability to determine customer needs, lack of planning for sales presentation, and inadequate product/service knowledge. Conversely, Johnson, Hair, and Boles (1989) mentioned the following characteristics, which are frequently thought to increase the probability of success in selling: enthusiasm, good organizational skills, ambition, persuasiveness, ability to follow instructions, sociability, and previous sales experience.

In a study conducted by El-Ansary (1993) on selling skills training, three factors were found in the sales managers' responses to explain the variation (76%) in selling skills training: the technical skills (handling product/performance complaints skills, probing/supporting/closing skills, and handling objections skills) accounted for 51% of the variation, followed by presentation skills (presentation techniques, demonstration techniques, and listening techniques) which accounted for 15% of the variation, and team building skills (team building techniques, handling indifference techniques, handling skepticism techniques, and negotiation techniques) which accounted for 10% of the variation.

O'Hara (1989) proposed some dimensions for evaluating sales force behavior: enthusiasm, personal appearance, qualifying prospect, building rapport, introduction, probing, selling to needs, product knowledge, use of visual aids, summarizing benefits, isolating and overcoming objections, trial close and close, overall presentation,
organization of calls, general record keeping, preparation for follow-up, expense control, and time management.

McLaughlin (1982) emphasized the following evaluation criteria for the sales force: prepresentation skills (such as sales routing), presentation skills, postpresentation skills, and time management. Owens (1996) emphasized the dimension of relationship selling, which is the ability to establish long-lasting relationships with prospects and key prospects, resulting in repeat and referral business. In addition, Gschwandtner (1980) said that the most successful salespeople use their bodies to complement and support a convincing sales presentation and the nonverbal communication, the body language, is very important as a measure of sales behavior.

Howe (1981) presented the following criteria for sales performance evaluation: appearance (distinctive, professional, exercising good taste, stylish, neat, and clean), integrity (loyalty to colleagues and employer, supportive of company policy, and honesty in selling), self confidence (a self-starter, not afraid of criticism, willing to try new suggestions, and learn from mistakes), product knowledge (expert and complete knowledge of features and benefits of the company products), selling skills (ambitious, resourceful, initiator, understanding steps in making a sale, greeting customers promptly and warmly, effective presentation of merchandise, and stressing benefits or selling points), attitude toward others (sincere, understanding, friendly, sociable, and positive working relationships with colleagues), attitude toward customers (anxious to serve, friendly and interested, intelligently identifying customers' wants and needs,
handling difficult customers with confidence, and learning customers' names), and attitude toward job (willing and anxious to assume responsibility, hard-worker, enthusiastic, cooperative, and flexible).

Reid (1972) emphasized 25 criteria for measuring sales attitude and behavior: pleasant personality, even temperament, good appearance, analytic ability, memory for faces and details, vocabulary and word usage, harder than average workers, self-confidence, persuasiveness, ability to make friends, original and creative ideas, competitive attitude, persistence, accepting criticism and advice, problem-solving ability, practical-minded, poised and self-assured, adaptability, sincerity, sales ability, determination to succeed, reliability, enthusiasm, ability to learn quickly, and good listener. In addition, Kirkpatrick and Russ (1976) listed the following qualitative criteria: customer goodwill, planning ability, imagination, creativity, ambition, product and company information, and appearance.

**LEVEL 4: RESULTS**

Measuring sales training program results is the most beneficial, but the most difficult evaluation criterion (Erffymer, Russ, and Hair 1991; Honeycutt 1996). In this section, we will emphasize some of the quantitative measures frequently recommended by researchers to be used in evaluating the sales force.

Two successful evaluations of sales training results in retailing were conducted by Meyer and Raich (1983), and Doyle and Cook (1984). First, according to Meyer and Raich, the design incorporated matching fourteen stores into seven groups based upon market characteristics and location. By using the average sales commission as the
evaluation criterion, it was found that the employees who received training earned a commission rate statistically higher than those who did not receive training. In addition, it was found that the employee turnover of those who received training was also lower.

Second, within a UK retailing environment, Doyle and Cook used a before and after with control group experimental design procedure whereby matched pairs of stores were identified, one being subjected to training and the other operating as the control store. A major UK chain of 263 fashion shops was used. The results showed that the average weekly sales in stores subject to training were significantly higher than in the control group. In addition, multiple sales were found to be much higher in sales-trained shops. These are two of the most successful attempts for evaluating sales training program results that have been published.

Weitz (1981) recommended the use of the traditional measures of sales performance, such as sales or sales to quota, to measure sales effectiveness. Jackson, Keith, and Schlacter (1983) conducted a study and found eight major output bases and their categories used in performance evaluation accompanied by the frequency of usage. The findings are shown in Table 3. In a more recent study, Jobber, Hooley, and Shipley (1993) used almost the same criteria and found consistent results.

Evered (1990) proposed the following criteria for measuring sales training programs' results which would enhance the validity of the salespeople training program evaluation: total sales volume, expense to sales ratio, call/sales ratio on prospects, call/sales ratio on existing accounts, average dollar volume per sale on prospects, average dollar volume per sale on existing accounts, returned merchandise
Table 3: Sales Force Performance Measures

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>Frequency of usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales Measures</strong></td>
<td>sales volume in dollars (81%), sales volume to previous year's sales (78%), sales volume by product or product line (69%), amount of new account sales (58%), sales volume in units (54%), sales volume to dollar quota (54%), sales volume by customer (49%), sales volume to market potential (34%), sales volume to physical unit quota (24%), sales volume per order (15%), sales volume by outlet type (11%), sales volume per call (10%), and percentage of sales made by telephone or mail (8%)</td>
</tr>
<tr>
<td><strong>Market share</strong></td>
<td>market share per quota (18%)</td>
</tr>
<tr>
<td><strong>Accounts</strong></td>
<td>number of new accounts (71%), number of accounts lost (43%), number of accounts on which payment is overdue (22%), and number of accounts buying the full line</td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td>net profit dollars (26%), return on investment (16%), net profit contribution (14%), gross margin (14%), gross margin per sales (14%), and net profit as a % of sales (13%)</td>
</tr>
<tr>
<td><strong>Orders</strong></td>
<td>order-call ratio (26%), net orders per repeat order (17%), and number of cancelled orders per orders booked (14%)</td>
</tr>
<tr>
<td><strong>Calls</strong></td>
<td>calls per period (57%), and number of calls per number of customers (17%)</td>
</tr>
<tr>
<td><strong>Selling Expenses</strong></td>
<td>selling expenses to sales (41%), selling expenses to quota (22%), and average cost per call (13%)</td>
</tr>
<tr>
<td><strong>Ancillary Activities</strong></td>
<td>number of required reports turned in (44%), number of customer complaints (31%), training meetings conducted (28%), number of letters/phone calls to prospects (25%), number of demonstrations conducted (25%), number of service calls made (24%), number of dealer meetings held (15%), and advertising displays set up (12%)</td>
</tr>
</tbody>
</table>
(monthly average), customer complaints (monthly average), average calls per day on existing accounts, report inaccuracies (monthly average), late report frequency (average number of days), forecasting accuracy, collections (average dollars uncollected per month), new accounts obtained, new markets developed, and promotional programs conducted or implemented. In addition, Kirkpatrick and Russ (1976) emphasized the following measures: sales volume by product and by customer, relationship of sales volume to quota, gross margin, relationship of expenses to sales volume, orders classified as to size, ratio of sales to calls made, calls per day or week, days worked, and product demonstrations made.

Zemke (1976) conducted a training panel of top sales executives, who offered the following criteria for measuring the effectiveness of sales training: sales volume, sales force turnover, absenteeism, average commission per sale, average sale size, number of calls, calls-to-close ratio, customer complaints, complaint letters, compliment letters, implementation of promotional activities, new accounts per unit time, percent of objections overcome, volume increase for existing accounts, volume of returned merchandise, improvement of call quality, sales-to-travel ratio, new-to-old-account ratio, competitive investigations, sales-to-phone call ratio, customer satisfaction, items per order, and credits-to-collections ratio. O'Hara (1989) emphasized dimensions for measuring sales field performance which included: weekly sales, number of new contacts, and average dollar volume per account sold. Berry (1986) recommended the use of the following ratios to measure sales performance: sales/quota, sales/budget,
sales this period/sales in prior period, calls/period, sales/calls, accounts/territory or salesperson, and customers/prospects.

THE KIRKPATRICK MODEL'S IMPLICATIONS

Within a public personnel management context, Clement (1982) examined Kirkpatrick's hierarchy concept and found only partial support for it. Reactions were found to be strongly related to learning outcomes, which are somewhat less strongly related to improvements in job behavior, which were not related to the improvement in organizational results. According to Camp, Blanchard, and Huszczo (1986), the findings make intuitive sense about the increasing influence of the intervening external environmental factors when moving from level 1 (reaction) to level 4 (results), where it is more difficult to conduct training evaluation.

THE TRAINER'S EVALUATION OF TRAINEES

Bolar (1975) said that the trainer is a valid source of information in case of training program evaluation. As Kirkpatrick (1959a, 1959b, 1960a, and 1960b) emphasized the importance of measuring the trainees' learning and reaction to the training program, it is very significant as well to give the trainer the opportunity to evaluate his trainees. Some of the major variables that help in the success of training are the trainees' interest in the program, and a high level of participation, attendance, and dedication. In addition, as we are moving toward a relationship marketing era, it is very important to emphasize the relationship factor (relationship with the trainer, and relationship with the other trainees) in the trainer's evaluation of his trainees.
UTILITY ANALYSIS

Another powerful model or tool for expressing the outcomes of personnel programs, incorporating training programs, in terms of dollars is the utility analysis, or cost benefit analysis. Cascio (1989) said that to date, utility analysis has been used to demonstrate the firm economic value of its personnel programs, principally in the area of selection. However, according to Boudreau (1983), Landy, Farr, and Jacobs (1982), Schmidt, Hunter, and Pearlman (1982), it has been extended to training and development.

Wexley and Latham (1991) believed that conducting a utility analysis is important since there is a possibility for a training program to bring about favorable reaction, improve sales knowledge, behavior on the job, and results. However, it is also possible that the monetary costs of the training program outweigh its monetary benefits so the training program is not worth implementing in the organization. Within this context, Wexley and Latham (1991), Cascio (1989), Boudreau (1983), and Schmidt, Hunter, and Pearlman (1982) recommended the use of the following equation in order to estimate the utility of any training program:

\[ U = (T') (N') (d_i) (SDy) (1+V) (1-TAX) - NC (1-TAX) \]

Where

- \( U \) = the dollar value of the sales training program
- \( T' \) = \( T \) (the number of years' duration of the training effect on performance) reduced by the Discount Factor.
- \( N' \) = Number of people trained who are still employed by the organization in the particular job.
N = the number of people initially trained, regardless of whether they stayed
or left the job.

dt = the true difference in job performance between the average trained and
untrained employee expressed in standard deviation (SD) units.

Preferably, this should be calculated empirically by using one of the
recommended evaluation designs employing a control group.

SDy = the standard deviation of job performance in dollars of the untrained
(control) group. It can be estimated by simply calculate 40 percent of
the average salary level on the particular job.

(1 + V) = the effects of variable costs (V) on SDy.

(1-TAX) = the effects of the organization's marginal tax rate on SDy and on NC

C = the costs of training for each trainee, including all direct and indirect
expenses.
CHAPTER III
RESEARCH METHODOLOGY AND STRUCTURE

The review of the literature indicates a need for additional research about evaluating sales training programs. This approach, unlike prior studies, examines the four major levels of evaluation introduced by Kirkpatrick (reaction, learning, behavior, and results) in addition to the organizational level (staff/management analysis). It appears that little empirical research has been conducted and subsequently published about evaluating sales training programs by sales training experts. Until now, no comprehensive study that incorporates the four levels within the sales training context has taken place. Most prior studies, such as Meyer and Raich (1983) and Doyle and Cook (1984), covered only one or two levels of evaluation.

The overall research is exploratory in nature. According to Dubinsky (1981), the basic objective of exploratory research is to gain insights and ideas about an area in which little knowledge is available. Because minimal empirical research has been published on this topic, it is logical that an exploratory study should be implemented. The results of this project can then be used to more precisely formulate sales training program evaluation, develop hypotheses, establish priorities for future research, and clarify concepts.

The central purpose of this dissertation is to enhance the understanding of current sales training evaluation practices and to propose and test a framework that companies
can adopt to evaluate sales training effectiveness. Achievement of this purpose requires
identification and addressing the five research objectives stated in Chapter I:

1) To determine if sales training can be objectively evaluated by proposing and
testing a framework for evaluating sales training effectiveness.

2) To conduct a simultaneous examination of the different levels of evaluation as
emphasized by Kirkpatrick: reaction, learning, behavior and results.

3) To examine the different types of sales training evaluations performed by the
salesperson, the trainer, and the salesperson's supervisors.

4) To determine the possible effects of experience, education, age, previous
sales training courses, and sales region on the evaluation of sales training.

5) To gather information on evaluating sales training programs, draw conclusions,
and construct a sales training program evaluation model or framework that
would help other companies evaluate future sales training programs.

In order to achieve these research objectives, this chapter incorporates four
major sections or topics. In the first section, the sales training program evaluation
framework and research hypotheses are proposed. The second section focuses on the
measurement instruments, mainly the data collection methods. The third section
emphasizes subjects and setting: the company and nature of the industry, the sales
training process, the sample, and the respondent characteristics. The last section
includes the data analysis techniques and use of experimental design.

THE PROPOSED SALES TRAINING EVALUATION FRAMEWORK

Figure 2 represents the proposed framework for evaluating the effectiveness of
sales training programs. Figure 2 addresses the first three research objectives, which
necessitate the design of five forms or questionnaires that are attached in Appendices
LEVEL 1 (REACTION)
Trainees' Reaction to the program

LEVEL 2 (LEARNING)
Trainees' Evaluation of Knowledge

LEVEL 3 (BEHAVIOR)
Trainees' Self-Evaluation (Behavior Improvement)

LEVEL 4 (RESULTS)
Trainees' Self-Evaluation (Results Improvement)

LEVEL 5 (STAFF/MANAGEMENT ANALYSIS)
Trainer's Evaluation of Trainees

Utility Analysis

C = Examine the correlations between two constructs (←→)
I = Test the effect of one construct on the other (→)
D = Examine the differences between two constructs (←→)

Figure 3: The Recommended Model for Evaluating Sales Training Effectiveness
A (the training program evaluation form), B (the self-evaluation form), C (the trainer report), and D (the supervisory-evaluation form). The second research objective will be met by examining the four levels of evaluation proposed by Kirkpatrick: reaction (See Appendices A and C), learning (See Appendix A), behavior (See Appendices B and D), and results (See Appendices B and D) in addition to the fifth level (staff/management analysis) as shown in the proposed framework in Figure 2. In order to meet the second objective and examine both the behavior and results levels, the research hypotheses are developed (See next subsection: Research Hypotheses). The third research objective will be satisfied by examining the sales training evaluations performed by the salesperson (See Appendices A and B), the trainer (See Appendix C), and the salesperson’s supervisor (See Appendix D). Achievement of both the second and third research objectives helps in testing the proposed sales training effectiveness evaluative framework.

Question four requires one additional form, shown in Appendix E (the demographic profile), that will be used to address the demographic profile of members of both the experimental and control groups (experience, education, age, sales region, and previous sales training programs). This form will be completed by all members of both groups. The answer to the final question requires a synthesis of data from all five questionnaires and a grouping of the data into a framework that will assist academicians and practitioners in future evaluation endeavors.
Research Hypotheses

Erffmeyer, Russ, and Hair (1991) emphasized five perspectives for measuring behavior (level 3), ranked from the most important and frequent to the least important. These are: supervisory appraisal, self appraisal, customer appraisal, subordinate appraisal, and co-worker appraisal. According to Bolar (1975), both the salesperson and the salesperson's supervisor are valid sources of information for sales training evaluation. In addition, Law (1990) recommended collecting information from both trainees and their supervisors in order to measure sales force behavior. Also Mezoff (1987) and Connolly (1987) recommended the use of self-evaluation of trainees as well as trainees’ supervisor’s evaluation so that we can be able to compare the scores together.

Although most researchers recommend using supervisory- and self-evaluations to measure behavior and results improvement in sales training program evaluation, Chonko, Howell, and Bellenger (1986) found that a low correlation exists between the sales supervisor’s evaluation and their subordinates’ evaluation. Connolly (1987), Preziosi and Legg (1989), and Mezoff (1989) indicated that the reason is that trainees tended to report higher ratings of performance than their superiors. Thus, this study examines both supervisory- and self-evaluations.

In a study conducted by Ingram, Schwepker, and Hutson (1992), proper sales training was classified as the second most important factor for ensuring a salesperson’s success. Consistently, Grant and Cravens (1996) found that increasing the amount of sales training for salespeople was ranked as the third factor for improving
effectiveness. Moreover, Morris, LaForge, and Allen (1994) found that sales training was the most important among all external and company factors that are crucial to success. More specifically, Futrell, Berry, and Bowers (1984), and Powers, and Bowers (1992) concluded that the most important factor for increasing selling effectiveness in banks and healthcare institutions is sales training. In summary, proper sales training makes a difference for trainees on the job, either through positive behavior or results improvement. Conversely, salespeople without proper sales training are not expected to improve in both the behavior and results levels.

Consequently, based upon the results of previous studies, the behavior and results improvement of trainees are expected to be significantly higher than those of non-trainees for both self- and supervisory-evaluations. Then, the following four hypotheses (D1-D4 in Figure 2) across levels 3 and 4 will be tested:

H1: The behavior improvement achieved by trainees' self-evaluation will be significantly higher than those achieved by non-trainees (D1 in Figure 2).

H2: The behavior improvement achieved by trainees' supervisory-evaluation will be significantly higher than those achieved by non-trainees (D2 in Figure 2).

H3: The results improvement achieved by trainees' self-evaluation will be significantly higher than those achieved by non-trainees (D3 in Figure 2).

H4: The results improvement achieved by trainees' supervisory-evaluation will be significantly higher than those achieved by non-trainees (D4 in Figure 2).

MEASUREMENT INSTRUMENTS

In Figure 2, there are eight major constructs to examine the five sales training evaluation levels. First, reaction was measured by one construct (evaluating the
trainees' reaction to the program). Second, learning was measured by only one construct (Trainees' evaluation of knowledge). Third, behavior was measured by two constructs (trainees' self-evaluation and trainees' supervisory-evaluation of behavior). Fourth, results were measured by two constructs (trainees' self-evaluation and supervisory-evaluation of results). Finally, the staff/management analysis was conducted by measuring two major constructs, which are the trainer's evaluation of trainees and utility analysis.

Addressing the five sales training evaluation levels and the eight constructs necessitates the design of six forms or questionnaires, which are shown in Appendices A, B, C, D and E. These forms were originally in Arabic, and translated by a bilingual person followed by two revisions by two other bilingual experts.

Training Reaction Measures

The two forms in Appendix A (the training program evaluation forms) are completed by each trainee at the conclusion of the program to address both the reaction and knowledge of trainees (Levels 1 and 2). More specifically, the first form measures the reaction of trainees based upon ten major dimensions. Kirkpatrick (1959a; 1983; 1994) provided a five-point scale that will be used to rate the responses on the reaction sheet:

Excellent = 5  Very good = 4  Good = 3  Fair = 2  Poor = 1.

The first five questions in form 2 (the training topics usefulness) address the reaction of trainees to the training topics emphasized in the program. Bolar (1975) added that the trainer is a valid source of information. Accordingly, the trainer evaluation report,
shown in Appendix C, is completed by the trainer to evaluate each of his trainees based upon the same five-point scale recommended by Kirkpatrick in measuring reaction.

Training Knowledge Measures

In order to measure learning (level 2), the learner evaluation method introduced by Currie (1990) is employed. This method requires the learner to think about what has been taught (training topics) in terms of its usefulness and give a value rating for each topic. Consistently, Truelove (1997) emphasized the attitude questionnaire as a key technique for evaluating knowledge. Within this context, knowledge is evaluated in the last ten dimensions in form 2 in Appendix A, which assists in finding out about the additional value of information gained through the ten major training topics of the program as perceived by the trainees.

Training Behavior Measures

Erffimeyer, Russ, and Hair (1991) emphasized five perspectives for measuring behavior (level 3), ranked from the most important and frequent to the least important: supervisory appraisal, self appraisal, customer appraisal, subordinate appraisal, and co-worker appraisal. According to Honeycutt and Stevenson (1989), changes in attitudes are measured through either collecting questionnaires from supervisors, subordinates, and clients, or by observing the sales person in action. However, because of the personal relationships with the sales person, the responses received by employing the observation method are considered subjective. In addition, the observation method is generally unstructured. On the other hand, Law (1990) recommended that questionnaires or personal interviews can be used to collect information from both
trainees and their supervisors in order to measure sales force behavior. In this research, personal interviews would be very costly, time consuming, and administratively infeasible to employ with such a large sample. Consequently, questionnaires will be used. Although Chonko, Howell, and Bellenger (1986) stated that a low correlation exists between the sales supervisor’s evaluation and the inflated evaluations of the sales force, this study will use questionnaires for both self-appraisal and supervisory-appraisal.

Training Results Measures

In his article on evaluating results Kirkpatrick (1960b), in one example, showed that a company used questionnaires to measure changes in results (cost reduction). Consistently, Kirkpatrick (1975) himself used a six point scale to measure performance and results, for such variables as quantity of production and employee turnover, for supervisors and foremen. Consequently, using questionnaires to measure results is feasible. The forms in Appendices B (the self-evaluation form) and D (the supervisory-evaluation form) were employed in measuring the results of the program.

Data Collection Procedures

In order to evaluate the behavior and results of the program (level 3 and 4), the employment of an experimental design approach (before and after measures, with a control group) is planned. The self-evaluation form shown in appendix B is completed by every member of the experimental and control groups. The self-evaluation form is based upon twenty-five criteria: criteria 1-3, and 5 measure the results of the program (level 4); whereas, criteria 4, and 6-25 evaluate behavior (level 3). A nine-point likert
scale will be employed with 9 as “Excellent,” 5 as “Average,” and 1 as “Needs Improvement,” which is used instead of “Very Poor” because it does not seem appropriate for trainees to use the term “Very Poor.”

Mezoff (1987) and Connolly (1987) recommended the use of self-evaluation of trainees as well as trainees’ supervisors’ evaluation so that the scores can be compared. Connolly (1987) said that trainees tended to report a greater degree of evaluation than their superiors. As a result, each supervisor of every member of both the experimental and control groups evaluates his subordinate based upon the same 25 criteria employed in the self-evaluation form. This supervisory-evaluation form is presented in Appendix D.

Salinger and Deming (1987) recommended testing trainees several times before and after training, although it is administratively difficult, to ensure that the knowledge or skill level gained through training is maintained over time. Accordingly, when evaluating the behavior and results (level 3 and 4), the post-treatment evaluation of trainees and non-trainees took place three (Posttest 1) and four (Posttest 2) months from the time the treatment, the sales training program, took place.

In addition, the results of the program (level 4) was measured by collecting performance data for every member of both the experimental and control groups based upon two criteria: sales, and sales/quota. Although this kind of data was intended to be collected, it was not that easy to perform due to numerous administrative difficulties. According to Dubinsky (1996) and Peterson (1990), objective measures of training program effectiveness, such as sales per trainee, are desirable. However, obtaining
such measures is administratively infeasible and difficult because, according to Kirkpatrick and Russ (1976), territories vary, factors other than the salesperson's efforts can have an influence on sales volume, and some criteria are qualitative and difficult to measure. In addition, Berry (1996) addressed the major problem of irregularity and seasonality of data. That is why, according to Dubinsky (1996) and Peterson (1990), many researchers often use subjective measures to assess training program effectiveness. Consequently, since the quantitative measures showed to be problematic, the forms in Appendices B (the self-evaluation form) and D (the supervisory-evaluation form) will help in measuring the results of the program by every member of the experimental and control groups, as well as their supervisor, in order to make the results more reliable.

In level 5, a staff/management analysis was performed by employing trainer's evaluation of trainees through the use of the form shown in Appendix C. Furthermore, a utility analysis formula was employed to assess the economic value of the sales training program. Consequently, the second research objective (simultaneous examination of the various levels of evaluation) will be met by addressing the five evaluation levels shown in the framework of Figure 2.

According to Connolly (1987), there is no single best set of questions to ask in a participant evaluation, but the development of the questions depends upon the types of information that need to be obtained for that particular study. Consequently, Braun (1987) recommended that the evaluative criteria should be based upon the training needs analysis in order to have an objective evaluation. Within this context, the
selection of the evaluation criteria were based upon the training needs determination within the boundaries and framework of the recent literature.

The third research objective was satisfied by examining the sales training evaluations performed by the salesperson, the trainer, and the salesperson's supervisor. According to Bolar (1975), the salesperson, the salesperson's supervisor, and the trainer are valid sources of information for sales training evaluation. In conclusion, achieving both the second (examining the various levels of evaluation) and third (evaluations performed by the salesperson, the trainer, and the salesperson's supervisor) research objectives also helps satisfy the first research objective, which is determining if sales training can be objectively evaluated. In addition, in Appendix E, the fourth research objective (determining the possible effects of demographic variables on the evaluation of sales training) is addressed through the use of the demographic profiles of every member of both the experimental and control groups (experience, education, sales region, age, and previous sales training programs). This form was completed by every member of both groups.

**SUBJECTS AND SETTING**

This section helps provide a solid background about the company, the nature of the industry, the sample, the sales training program design, and the respondents. Within this context, this section examines four major topics: the company and the nature of the industry, the sales training program design, the sample, and the respondent characteristics.
The Company and The Nature Of The Industry

In order to meet the research objectives and collect the appropriate data, one large multinational company operating in Egypt was used. Due to the high level of competition in this industry, the company requested anonymity. Consequently, the name of the company used in this study is company X and the industry in which the multinational company is operating will be industry X. In addition, there is only one major competitor in this industry, which is called company Y.

The Egyptian industry X is very competitive. In the last three years, company X Egypt has been losing sales and market share to its major competitor, company Y. Company Y’s International Division is supporting company Y in Egypt with a lot of assistance (experience, skills, and funds); whereas, company X International Division is significantly decreasing its assistance to company X Egypt. According to the CEO of company X, one of the major strengths of company Y is its highly trained sales force; whereas the major weakness of company X is its poorly trained sales force. The consulting firm responsible for handling the sales force training project has 38 years of sales training and consulting experience in the Middle East.

The hierarchy of the sales force in company X is as follows: Regional Sales Managers (of Cairo, Northern-Egypt, and Upper-Egypt), Division Sales Managers (in each factory or distribution center), Assistant Division Sales Manager, Section Heads, Sales Supervisors, and Sales Representatives. The sales representatives are drivers, who are characterized as order takers and distributors. Neither do they solve problems
nor open new sales territories. Every sales supervisor heads three to five sales representatives. The sales supervisor is the real person who sells the product, solves the problems, negotiates, closes the sale, and opens new territories. The sales supervisors spend all their time in the market, working from morning until the end of the day, with sales representatives.

In addition, every section head supervises two to three sales supervisors and his duties are to organize the work, supervise his subordinates (sales supervisors), negotiate, and spend time between the office and the market helping his subordinates. Actually, there is no job description in company X for all these job titles. However, this is according to the researcher's observation in addition to the description of both the regional sales managers and division sales managers. Based upon the sales training needs analysis performed by the consulting firm, the sales supervisors are the parties that needed to be trained in this period.

The Sales Training Program Design for Company X

In order to identify the training objectives and needs, various meetings took place at two levels. In the top management level, individual and group meetings were organized with the CEO of company X, the human resource manager, the three regional sales managers, and company X's international human resource consultant. There was a high level of confidence among the top management and decision makers of company X, especially the CEO, and the three regional sales managers (previous trainees of the consulting firm and the trainer), who have been strongly supporting the
# TABLE 4: THE SALES TRAINING PROGRAM DESIGN FOR COMPANY X

<table>
<thead>
<tr>
<th>DESIGN ELEMENTS</th>
<th>&amp; IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Sales Training Objectives</td>
<td>(1) to improve the sales force morale against their competitors; (2) to improve the efficiency of the sales force in order to increase their sales volume, market share and their competitiveness; (3) to improve the selling skills (handling objection, negotiation, bearing responsibilities, teamwork, customer service, innovation, initiation, credibility, and bearing responsibilities) of the sales force; (4) to improve the sales force time and self-management; (5) to manage sales routing; (6) to listen to and help the sales force solve their sales problems; and (7) to increase the company sales and market share.</td>
</tr>
<tr>
<td>2) Sales Training Instructor</td>
<td>A sales training consultant who has 38 years of sales training and consulting experience.</td>
</tr>
<tr>
<td>3) Sales Training Location</td>
<td>Centralized in the home office.</td>
</tr>
<tr>
<td>4) Sales Training Content</td>
<td>Sales techniques training: “Selling Techniques”</td>
</tr>
<tr>
<td>5) Sales Training Methods</td>
<td>Lecture combined with participation techniques (open discussions, role playing, case analyses, and brainstorming techniques) and three sales video-tapes.</td>
</tr>
<tr>
<td>6) Sales Training Program Length</td>
<td>Three full condensed and consecutive days (9:00 a.m. to 6:00 p.m. with four breaks)</td>
</tr>
</tbody>
</table>
project to be conducted by the consulting firm. At the sales force level, a group meeting was organized, with ten sales supervisors and four section heads as a sample of the trainees and their supervisors, to help identify the training objectives and needs. The brainstorming technique was employed at both individual and group meetings. These meetings generated the sales training program conducted for sales supervisors shown in Table 4 and resulted in a sales training program with general rather than specific objectives. Finally, both company X and the consulting firm support the Kirkpatrick model as an acceptable framework for measuring the outcome of the sales training program.

The Sample

This research effort incorporates a sample of the sales force in one large multinational company (company X) working in the consumer industry in Egypt and conducted a field performance evaluation, which is the recommended evaluation method by sales managers (Honeycutt and Stevenson 1989). Only one large multinational company will be employed in this study for the following reasons: (1) the amount of data available is huge; (2) the sales data is not usually accessible, due to its being very sensitive to the market competition; (3) the time, effort and money employed to collect data from a large multinational company with many factories and subsidiaries located all over the country; (4) the sample is relatively large; (5) receiving complete, reliable, and timely data is very difficult; (6) if more than one company is employed from another industry, the external environment (competition, government regulations, economic conditions) differs from one industry to the other, so the results
will probably not be accurate because the external environmental factors in this case will be a major determinant factor to the success of training; (7) it is not logical to think about gaining access to the records of competitive companies from the same industry; (8) until now, no comprehensive studies have taken place, so this research effort is considered an exploratory study; and most importantly, (9) the most effective and successful studies, such as Doyle and Cook (1984), Meyer and Raich (1983), and Roy and Dolke (1975), used only one company to evaluate training program effectiveness. However, these studies were not comprehensive since the first two studies evaluated the sales training program effectiveness, by measuring results (level 4), and the third study measured learning (level 2).

According to Tracey (1984), a training program can be evaluated from different but complementary perspectives: the trainee perspective, the trainer perspective, the training manager perspective, the line supervisor perspective, and the training evaluator perspective (if different from the trainer). Tracey added that the most common is the perspective of the training manager, who is totally responsible for the training program success or failure to the top executives in the organization, followed closely by the trainee’s perspective.

Three separate groups of respondents are included in this study. The first group of subjects consists of the sales supervisors. Their job duties are to sell the product, solve problems, negotiate, close the deal, and open new territories. The second group represents the consulting company represented by the training team (one trainer). The third group represents the section heads (the immediate supervisors of the sales
supervisors). These are the three major groups who are directly or indirectly involved in the training, as well as being the parties that are able to evaluate the sales training program effectiveness.

Based upon the sales training needs analysis, the sales training program was conducted for sales supervisors. At the time of the needs analysis, Company X had 143 sales supervisors. Based upon the contract between the consulting firm and company X, all the sales supervisors were to be trained in two phases: five groups trained in phase 1 (in March) before the season, and four groups in phase 2 after the season (in October).

In phase 1, 79 sales supervisors were trained. The 79 trainees represent the experimental group; whereas the remaining 64 sales supervisors represent the control group. Immediately after the training program, 11 of the sales trainees resigned and began working for the other competitor that doubled their salaries. However, in our analysis of level 1 and 2, the researcher used all the 79 trainees' data since the data were collected at the training location. In measuring level 3 and 4 (behavior and results), the final sample incorporated all the complete data of trainees and non-trainees. This decreased the sample size to 59 trainees and 42 non-trainees, for a total of 101 sales supervisors.

The assignment of sales supervisors to experimental and control groups was non-random. However, this was not manageable by the researcher or the consulting firm since the regional sales manager, the division sales manager, and the sector head (the immediate supervisor of the sales supervisor) jointly decided on who would first attend
the training program and consequently who joined the second phase of the training program. The criteria used in the assignment of sales supervisors to the experimental and control groups were based upon the market, the intensity of competition, the working conditions, and the working loads in each sales territory in addition to the availability of another sales supervisor to replace his peer in each sales territory during the training program. All the sales supervisors in one sales territory can not attend a full three-day training program leaving their sales territory to the competitor. In addition, a major selection factor was the training of the new sales supervisors who were recently hired.

The Respondent Characteristics

A demographic analysis using ANOVA was performed for both the experimental and control groups. The results are shown in Table 5. It appears that two important factors that need to be considered are the sales experience and the previous sales training factors, which were not significantly different between the control and experimental group. The third variable, the geographical sales region (Cairo, Northern-Egypt, and Upper-Egypt), did not show any significant mean differences. In addition, all sales supervisors in both the control and experimental groups are male, so there is no difference in mean scores due to the sex variable. The remaining five variables (total experience, company experience, total number of subordinates, age, and education) had significant mean differences between trainees and non-trainees. However, the mean difference in age (3 years) and total number of subordinates (3 subordinates) between the trainees and the non-trainees appears to be very small and is not expected to affect
<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Total # of Trainers ($N=591$)</th>
<th>Total # of Non-Trainers ($N=42$)</th>
<th>Total Sample of Trainers &amp; Non-Trainers ($N=101$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Experience</td>
<td>5 years</td>
<td>7 years</td>
<td>6 years</td>
</tr>
<tr>
<td>Total Experience *</td>
<td>7 years</td>
<td>10 years</td>
<td>8 years</td>
</tr>
<tr>
<td>Company Experience *</td>
<td>3 years</td>
<td>6 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Age *</td>
<td>29 years</td>
<td>32 years</td>
<td>30 years</td>
</tr>
<tr>
<td>Number of Subordinates *</td>
<td>9 subordinates</td>
<td>12 subordinates</td>
<td>10 subordinates</td>
</tr>
<tr>
<td>Education: *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) A bachelor degree</td>
<td>74%</td>
<td>53%</td>
<td>66%</td>
</tr>
<tr>
<td>(2) Some college</td>
<td>24%</td>
<td>29%</td>
<td>26%</td>
</tr>
<tr>
<td>(3) High school</td>
<td>2%</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Have Previous Sales Training?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Yes</td>
<td>52%</td>
<td>55%</td>
<td>53%</td>
</tr>
<tr>
<td>(2) No</td>
<td>48%</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td>Sex</td>
<td>100% Male</td>
<td>100% Male</td>
<td>100% Male</td>
</tr>
<tr>
<td>Region:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Cairo</td>
<td>59%</td>
<td>44%</td>
<td>52%</td>
</tr>
<tr>
<td>(2) Northern-Egypt</td>
<td>29%</td>
<td>48%</td>
<td>37%</td>
</tr>
<tr>
<td>(3) Upper-Egypt</td>
<td>12%</td>
<td>10%</td>
<td>11%</td>
</tr>
</tbody>
</table>

* the mean differences between the control and experimental groups are significant based upon 5% level of significance
the validity of the results. In addition, the mean difference in both the company and total experience between the control and experimental groups is not that important when compared to the significance of the sales experience variable that was shown not to be significant based upon a 5% level of significance. Finally, the mean difference in education between the trainees and non-trainees was significant. That is, the trainees have higher level of formal education than non-trainees.

To conclude, it was difficult to administratively control all nine demographic dimensions when assigning both experimental and control groups. Most important, the two major factors, sales experience and previous sales training, were not significantly different. This provides an indication that the assignment of respondents, while not truly random, produced two relatively balanced samples that can be used in the analysis to produce valid results.

**DATA ANALYSIS**

In Figure 2 (the proposed sales training evaluation framework), there are eight major constructs to examine the five sales training evaluation levels. First, reaction was measured by one construct (evaluating the trainees' reaction to the program). Second, learning was measured by only one construct (Trainees' evaluation of knowledge). Third, behavior was measured by two constructs (trainees' self-evaluation and trainees' supervisory-evaluation of behavior). Fourth, results were measured by two constructs (trainees' self-evaluation and supervisory-evaluation of results). Finally, the
staff/management analysis was conducted by measuring two major constructs, which are the trainer’s evaluation of trainees and the utility analysis.

Internal consistency, Cronbach’s alpha, was measured for each construct in order to ensure the reliability of the measuring device. In addition, to examine the differences [D1-D4 in Figure 2] between the experimental group and the control group in both level 3 (Behavior) and 4 (Results), ANOVA (Analysis of Variance) and MANOVA (Multivariate Analysis of Variance) were employed to determine if there were statistically significant differences between the perceptions and mean scores of the experimental and the control groups on the variables of interest (See the next subsection: the use of experimental design). In addition, factor analysis was employed for each construct represented in the sales training evaluation framework shown in Figure 2 in order to determine the underlying dimensions for measuring each construct. Finally, ANOVA was used in order to compare the similarities between both the experimental and control groups across the different demographic variables.

The Use Of Experimental Design

According to Zenger and Hargis (1987), Dubinsky (1981) and Churchill, Ford, and Walker (1981), the use of experimental design (Before and After with a control group) introduced by Campbell and Stanley (1963), to measure the net effect of training is the most powerful and advantageous. In addition, Blumenfeld and Crane (1975) said that the minimally appropriate experimental design to be used in evaluating training programs is the use of pretest and posttest along with control group procedure.
According to Honeycutt and Stevenson (1989), training results can be measured by using before and after measures, comparing performance against course objectives, or by measuring changes of indicators, such as sales and number of calls. However, there are other extraneous factors that can influence these indicators other than sales training. A before and after experimental design with a control group is strongly recommended by Honeycutt, Harris, and Castleberry (1987) to be able to minimize the influence of extraneous variables other than sales training. The groups should also be randomly selected, although, this is often difficult to implement. In addition, reliable criteria must be selected and measured. Consistently, Hawthorne (1987) and Bakken and Bernstein (1987) said that the use of a control group provides added assurance that the training program or the treatment was indeed the cause of the outcomes. In addition, Kirkpatrick (1977) recommended the use of control groups in order to provide proof of the evaluation of training programs. Consequently, an experimental design will be employed to serve the purpose of this study in level 3 (behavior) and level 4 (results) through examining the four major hypotheses proposed in the previous section.

Mezoff (1989) emphasized the following benefits for pretesting trainees: to break the ice between the trainer and the trainees, to increase the trainees' readiness to learn, to help them learn from the training programs conducted, to sensitize trainees to the key training concepts, to establish a favorable learning climate, and to focus the trainer on exactly what s/he intends to teach in the training session. Rahn (1989) added that a pretest can help the trainees identify their weaknesses before the training begins. In
addition, the pretest aids in validating the training effectiveness as the scores of the pretest are subtracted from the posttest scores to determine the actual learning experience. However, one major problem of conducting a pretest is testing bias, which can be eliminated or controlled by dividing the participants randomly into experimental and control groups. In some cases, such as when we have a small group with fewer than thirty cases, it becomes difficult to assume that a random group assignment will result in the two groups being statistically equal.

Another form of experimental design emphasized by Rahn (1989) and Bunker and Cohen (1987) is the Solomon four group experimental design, which is composed of four groups (two experimental and two control groups) and six measurements (two pretests and four post-tests). This type of design is described as the ideal model for controlled experiments because of its ability to control for all sources of experimental error except measurement timing and reactive error. Due to the increased cost of securing two additional control groups, few examples of its usage in applied experimentation have been reported despite its many advantages. In conclusion, in order to serve the purpose of this study, a “before-after with a control group” method was employed.
CHAPTER IV

STUDY RESULTS

The fourth chapter serves as a presentation of the empirical research findings, which include the reliability analysis, and the sales training program evaluation of company X. First, the reliability analysis serves as a preliminary analysis that ensures the goodness and consistency of the measure. Second, the major analysis in this chapter incorporates applying the proposed framework with its five levels (See Figure 2) to the sales training program evaluation of company X. The five levels of evaluation incorporate the trainee evaluation of program (level 1 and 2: reaction and learning), the evaluation of trainee outcomes (level 3 and 4: behavior and results), and the organizational evaluation of program (level 5: staff/management analysis, which includes the trainer’s evaluation of trainees and utility analysis). The basic objectives of the research presented in Chapter 1 are translated into a narrative and series of tables that are analyzed and discussed in this chapter.

RELIABILITY ANALYSIS

According to Carmines and Zeller (1979, 11), measuring reliability aids in judging "the extent to which an experiment, test, or any measuring procedure yields the same results on repeated trials." Spector (1981, 13) added that reliability refers to "the consistency of a measuring device." According to Feuer (1989), a test or a survey is reliable if it yields consistent results over time or at two different points of time,
assuming that there are no changes in circumstances or people, and no intervening
treatments take place. Carmines and Zeller (1979) emphasized the internal consistency
measures that require only a single test administration and provide a unique estimate of
reliability for the given test administration. They added that the most popular of these
reliability estimates is the Cronbach’s alpha, which will have a value that ranges from
0.00 to 1.00, and the higher the value, the better reliability measure. It is difficult to
specify a single satisfactory level of reliability that should apply in all situations.
However, as a general rule, Carmines and Zeller believe that reliabilities should be over
0.80 for widely used scales because at that level, correlations are attenuated very little
by random measurement error. At the same time, it is often too costly in terms of time
and money to try to obtain a higher reliability coefficient.

Based upon the recommendation of Carmines and Zeller (1979), Cronbach’s
alpha was employed to measure the reliability and consistency of the measuring device.
The internal consistency results are shown in Table 6. In measuring reaction (level 1),
two forms were used: evaluating the trainees’ reaction to the program-anonymous
responses, and evaluating the trainees’ reaction to the program-identified responses. In
the two forms, Cronbach’s alpha was 0.8270, and 0.6291, respectively. It is
recommended that the first form, which has the highest reliability value, is the most
reliable, among the two forms, to measure reaction.

In measuring level 2, learning (trainees’ evaluation of knowledge), Cronbach’s
Alpha was even higher (0.8867). In measuring level 3 (behavior) through both self-
<table>
<thead>
<tr>
<th>Level</th>
<th>Evaluation</th>
<th>Appendix</th>
<th>Number of Variables</th>
<th>Trainees</th>
<th>Non-Trainees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reaction (Evaluating the trainees' reaction to the program- Anonymous responses)</td>
<td>A</td>
<td>10</td>
<td>0.8270</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Reaction (Evaluating the trainees' reaction to the program- Identified responses)</td>
<td>A</td>
<td>5</td>
<td>0.6291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Learning (Trainees' Evaluation of Knowledge)</td>
<td>A</td>
<td>10</td>
<td>0.8867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Self-Evaluation (Pretest)</td>
<td>B</td>
<td>21 (Q4, 6-25)</td>
<td>0.9640</td>
<td>0.9818</td>
<td>0.9741</td>
</tr>
<tr>
<td>3</td>
<td>Self-Evaluation (Posttest 1)</td>
<td>B</td>
<td>21 (Q4, 6-25)</td>
<td>0.9526</td>
<td>0.9780</td>
<td>0.9707</td>
</tr>
<tr>
<td>3</td>
<td>Self-Evaluation (Posttest 2)</td>
<td>B</td>
<td>21 (Q4, 6-25)</td>
<td>0.9528</td>
<td>0.9681</td>
<td>0.9653</td>
</tr>
<tr>
<td>3</td>
<td>Supervisory-Evaluation (Pretest)</td>
<td>D</td>
<td>21 (Q4, 6-25)</td>
<td>0.9817</td>
<td>0.9889</td>
<td>0.9863</td>
</tr>
<tr>
<td>3</td>
<td>Supervisory-Evaluation (Posttest 1)</td>
<td>D</td>
<td>21 (Q4, 6-25)</td>
<td>0.9734</td>
<td>0.9746</td>
<td>0.9747</td>
</tr>
<tr>
<td>3</td>
<td>Supervisory-Evaluation (Posttest 2)</td>
<td>D</td>
<td>21 (Q4, 6-25)</td>
<td>0.8650</td>
<td>0.9720</td>
<td>0.9262</td>
</tr>
<tr>
<td>4</td>
<td>Self-Evaluation (Pretest)</td>
<td>B</td>
<td>4 (Q1,2,3,5)</td>
<td>0.8694</td>
<td>0.9527</td>
<td>0.9160</td>
</tr>
<tr>
<td>4</td>
<td>Self-Evaluation (Posttest 1)</td>
<td>B</td>
<td>4 (Q1,2,3,5)</td>
<td>0.8618</td>
<td>0.9182</td>
<td>0.9020</td>
</tr>
<tr>
<td>4</td>
<td>Self-Evaluation (Posttest 2)</td>
<td>B</td>
<td>4 (Q1,2,3,5)</td>
<td>0.8568</td>
<td>0.8516</td>
<td>0.8668</td>
</tr>
<tr>
<td>4</td>
<td>Supervisory-Evaluation (Pretest)</td>
<td>D</td>
<td>4 (Q1,2,3,5)</td>
<td>0.9479</td>
<td>0.9509</td>
<td>0.9498</td>
</tr>
<tr>
<td>4</td>
<td>Supervisory-Evaluation (Posttest 1)</td>
<td>D</td>
<td>4 (Q1,2,3,5)</td>
<td>0.9378</td>
<td>0.9028</td>
<td>0.9224</td>
</tr>
<tr>
<td>4</td>
<td>Supervisory-Evaluation (Posttest 2)</td>
<td>D</td>
<td>4 (Q1,2,3,5)</td>
<td>0.9340</td>
<td>0.8957</td>
<td>0.9207</td>
</tr>
<tr>
<td>5</td>
<td>Trainer's Evaluation of Trainees</td>
<td>C</td>
<td>5</td>
<td>0.7123</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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evaluation and supervisory evaluation of trainees and non-trainees at three points (Prettest, Posttest 1, and Posttest 2), Cronbach's alpha ranged from 0.8650 to 0.9889, which are relatively very high measures. In measuring level 4 (results) through both self-evaluation and supervisory evaluation of trainees and non-trainees at three points (before training, May, and June), Cronbach's alpha ranged from 0.8568 to 0.9498, which is relatively high. In addition, the Cronbach’s alpha of the trainer’s evaluation of trainees was marginally acceptable (0.7123).

In conclusion, the measuring devices for all levels appear to have high reliability, especially for level 2, 3, and 4. For level 1, Cronbach’s alpha for the anonymous responses was higher than that for the identified responses. To a great extent, Cronbach’s alpha for all levels complied with the recommendations of Carmines and Zeller (1979) that reliabilities should exceed 0.80 for widely used scales.

THE SALES TRAINING PROGRAM EVALUATION FOR COMPANY X

In order to measure the sales training program effectiveness, the Kirkpatrick four levels in addition to the staff/management analysis (level 5) were employed. Three types of evaluation are incorporated in reporting the results of the sales training program evaluation of company X: trainee evaluation of program, evaluation of trainee outcomes, and organizational evaluation of program. The first type of evaluation is the trainee evaluation of program, which incorporates levels 1 and 2 (reaction and learning) and focuses on measuring the trainees’ reaction to the program and their sales knowledge growth at the conclusion of the sales training program.
The second type of evaluation is the evaluation of trainee outcomes, which includes levels 3 and 4 (behavior and results) and looks at measuring the behavior and results in the individual level after the trainees are given the opportunity to apply the sales knowledge and techniques they learned to their jobs. The third type of evaluation is the organizational evaluation of program, which incorporates level 5 (staff/management analysis) and focuses on results in the organizational or corporate level. Within this level, two types of analyses are emphasized: the trainer’s evaluation of trainees, and the utility analysis. Each of the three types of evaluation is discussed in the following sections.

**TRAINEE EVALUATION OF PROGRAM**

This first type of evaluation focuses on levels 1 and 2 (reaction and learning) and emphasizes measuring the attitudes and feelings of the sales trainees about the program in addition to their sales knowledge (principles, facts, and techniques) growth at the conclusion of the sales training program. This type of evaluation is conducted on the training site before the trainees go to their jobs and begin applying the sales principles, facts, and techniques learned during the program to their jobs. The importance of the trainee evaluation of program stems from the preliminary indications it provides to top management and trainers about the success or failure of the training program without waiting a substantial time until measuring behavior and results. Levels 1 and 2 are discussed in the following subsections.
**Level 1: Measuring Reaction**

In level 1, the trainees' reaction to the sales training program is measured (See form 1 & 2 in Appendix A). This is the easiest and the most frequently employed method by training directors to measure training program effectiveness. At level 1, the training managers are concerned about the milestones and criteria that organizations should give attention to when designing and conducting sales training programs. In addition, measuring reaction provides feedback, comments, and suggestions that help managers in improving future programs, and is an assessment of the level of trainee satisfaction with the course.

Within this context, Kirkpatrick recommended the use of anonymous responses in order to ensure obtaining honest responses. However, in order to assess the outcome evaluation (behavior and results) for trainees, it is recommended to employ identified responses where trainees are required to identify themselves or sign the forms. In this study, both anonymous and identified responses are used to determine whether both types of responses yield different outcomes. In addition, the general results, the underlying dimensions of reaction, and the evaluation of the underlying dimensions are emphasized in the following subsections for both anonymous and identified responses.

**Anonymous Responses**

In order to examine the anonymous responses, three topics are emphasized: general results, underlying dimensions of reaction, and evaluation of underlying dimensions of reaction.
A) General Results.

A 96.2% response rate was achieved. Although Kirkpatrick recommended achieving a 100% response rate, this is very ideal as some level of absenteeism is usually expected, especially if you have a large training program consisting of five groups like in this case. A small absenteeism rate can be expected in case of emergency, such as an important sales contract that needs to be signed right away, or a problem that can be solved only by the sales supervisor. So in a large sales training program, an absenteeism rate of 5% must be expected.

The results of the first survey are shown in Table 7. Both the trainer and the relationship with the trainer criteria were given the highest evaluation values (98.6% and 97.8%), most probably because of the trainer’s extensive experience in sales training. The second highest category (with items > 89%) included usefulness of the program, training techniques, training topics, and relationship with other trainees. The third category (with items > 80% and < 89%) included training aids, training schedule, and training services.

The training services criterion was rated the lowest because the top management cancelled the lunch meal (the major plate in Egypt) given in the middle of the day and the trainees, especially the ones who do not live in Cairo, were dissatisfied because of the very long training day (9:00 a.m. to 6:00 p.m.). In addition, the training schedule variable was rated as the second lowest because the three training days were very long, especially for the trainees living outside Cairo who were forced to travel back and
TABLE 7: MEASURING REACTION WITH ANONYMOUS RESPONSES

<table>
<thead>
<tr>
<th></th>
<th>MEAN SCORE (1-5)</th>
<th>MEAN SCORE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Usefulness</td>
<td>4.65</td>
<td>93.0%</td>
</tr>
<tr>
<td>2- Training Topics</td>
<td>4.54</td>
<td>90.8%</td>
</tr>
<tr>
<td>3- Training Services</td>
<td>4.04</td>
<td>80.8%</td>
</tr>
<tr>
<td>4- Training materials</td>
<td>4.46</td>
<td>89.2%</td>
</tr>
<tr>
<td>5- Training Techniques</td>
<td>4.59</td>
<td>91.8%</td>
</tr>
<tr>
<td>6- Trainer</td>
<td>4.93</td>
<td>98.6%</td>
</tr>
<tr>
<td>7- Training Aids</td>
<td>4.28</td>
<td>85.6%</td>
</tr>
<tr>
<td>8- Relationship w/ other Trainees</td>
<td>4.51</td>
<td>90.2%</td>
</tr>
<tr>
<td>9- Relationship w/ the Trainer</td>
<td>4.79</td>
<td>97.8%</td>
</tr>
<tr>
<td>10- Training Schedule</td>
<td>4.16</td>
<td>83.2%</td>
</tr>
<tr>
<td>Total</td>
<td>45.1 * 2 = 90.2%</td>
<td>45.1</td>
</tr>
</tbody>
</table>

forth everyday because company X would not provide them with a travel allowance. However, the trainer said: “there was no other alternative, because these are the sales supervisors and they can’t be away from their work more than three days; we can’t make it five or six days with four or five hours a day; the sales supervisors also were very busy due to their preparation for the season.”

B) Underlying Dimensions of Reaction

By running factor analysis, the ten measurement criteria of trainees’ reaction (anonymous responses) were grouped into three factors that had eigenvalues greater than one. Table 8 shows the factor loadings of the ten variables. The Bartlett test of sphericity was significant ($X^2 = 263.41673, P < 0.000$). Five variables (training topics, training services, training materials, training techniques, and training aids) loaded very highly on the first factor, which is labelled as “Training Prerequisites.” The second factor incorporated three variables (usefulness, trainer, and relationship with the trainer). This factor is called “Trainer & Usefulness.” The third factor incorporated
TABLE 8: FACTOR LOADINGS FOR REACTION-ANONYMOUS RESPONSES

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Usefulness</td>
<td>0.19316</td>
<td>0.68773</td>
<td>0.23963</td>
</tr>
<tr>
<td>2- Training Topics</td>
<td>0.57804</td>
<td>0.52025</td>
<td>0.4695</td>
</tr>
<tr>
<td>3- Training Services</td>
<td>0.36890</td>
<td>0.27295</td>
<td>0.33214</td>
</tr>
<tr>
<td>4- Training materials</td>
<td>0.85243</td>
<td>0.03586</td>
<td>0.19200</td>
</tr>
<tr>
<td>5- Training Techniques</td>
<td>0.70894</td>
<td>0.45859</td>
<td>-0.14565</td>
</tr>
<tr>
<td>6- Trainer</td>
<td>0.24483</td>
<td>0.81536</td>
<td>-0.07377</td>
</tr>
<tr>
<td>7- Training Aids</td>
<td>0.78185</td>
<td>0.11821</td>
<td>0.36319</td>
</tr>
<tr>
<td>8- Relationship w/ other Trainees</td>
<td>0.18626</td>
<td>-0.03122</td>
<td>0.85952</td>
</tr>
<tr>
<td>9- Relationship w/ the Trainer</td>
<td>-0.10103</td>
<td>0.65982</td>
<td>0.58475</td>
</tr>
<tr>
<td>10- Training Schedule</td>
<td>0.43116</td>
<td>0.34121</td>
<td>0.45811</td>
</tr>
</tbody>
</table>

two variables (relationship with other trainees and training schedule). This factor is named “Training Environment.”

C) Evaluation of the Underlying Dimensions of Reaction.

The cumulative percentage of variance explained by the first, second, and third factors were 42%, 12%, and 12%, respectively. In order to obtain this factor solution, a varimax rotation method was used and 66% of cumulative percentage of variance was explained by the three factors. In addition, Cronbach’s Alpha was 0.7765, 0.6367, and 0.3993 for the first, second, and third factors, respectively. In addition, when the average scores received by the three factors were compared, the “Trainer and Usefulness” factor obtained the highest score (4.79) followed by “Training Prerequisites” (4.38), and “Training Environment” (4.34). It appears that the trainer’s high level of experience may be a significant contributing factor to the success of the sales training program as emphasized by the very high score of “Trainer and Usefulness” factor. Anderson (1993) found that the most important criterion used by employers in determining the training providers is the level of expertise of the trainer.
**Identified Responses**

Kirkpatrick (1959a) recommended the use of anonymous responses in measuring reaction to ensure the objectivity of the responses. However, in order to conduct a comprehensive evaluation of sales training programs, assess the outcome evaluation (behavior and results) for trainees, and connect the responses provided by self-evaluation and supervisory-evaluation in level 3 (behavior) and 4 (results) for the pretest and posttest 1 and 2 phases, it is recommended that trainees be required to identify themselves. This is why, in the second survey (See Appendix A), each trainee was required to sign his name. In order to examine the identified responses of this survey, three topics are emphasized: general results, underlying dimensions of reaction, and the evaluation of underlying dimensions of reaction.

**A) General Results**

The results presented in Table 9 were excellent since none of the 79 trainees said that the training topics were less than expected, not important, and old and not recent. All trainees agreed that the training topics were either very important and related to their jobs or somewhat important, better than or the same as they expected, and mostly or somewhat recent. Nearly all trainees agreed that the training topics either helped them totally or to some extent helped them solve their sales problems and their non-sales problems. Only one trainee (1.3%) said that the training topics did not help him solve his sales and non-sales problems. In addition, as a mean average (%), the training topics criterion was given 90.3%, which is consistent with the 90.8% that the training topics criterion received in the anonymous form.
### TABLE 9: MEASURING REACTION - IDENTIFIED RESPONSES

<table>
<thead>
<tr>
<th>THE TRAINING PROGRAM TOPICS WERE</th>
<th>MEAN SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A)</strong> Better than I expected</td>
<td></td>
</tr>
<tr>
<td>Same as I expected</td>
<td>(83%)</td>
</tr>
<tr>
<td>Less than I expected</td>
<td>(17%)</td>
</tr>
<tr>
<td></td>
<td><strong>2.83</strong></td>
</tr>
<tr>
<td><strong>B)</strong> Very important and related to my job</td>
<td></td>
</tr>
<tr>
<td>Important to some extent</td>
<td>(93.5%)</td>
</tr>
<tr>
<td>Not important</td>
<td>(6.5%)</td>
</tr>
<tr>
<td></td>
<td><strong>2.94</strong></td>
</tr>
<tr>
<td><strong>C)</strong> Mostly recent</td>
<td></td>
</tr>
<tr>
<td>Somewhat recent</td>
<td>(76%)</td>
</tr>
<tr>
<td>Mostly old and not recent</td>
<td>(24%)</td>
</tr>
<tr>
<td></td>
<td><strong>2.76</strong></td>
</tr>
<tr>
<td><strong>D)</strong> Helped me solve my sales problems</td>
<td></td>
</tr>
<tr>
<td>Helped me to some extent solve my sales problems</td>
<td>(76.3%)</td>
</tr>
<tr>
<td>Did not help me solve my sales problems</td>
<td>(22.4%)</td>
</tr>
<tr>
<td></td>
<td><strong>2.75</strong></td>
</tr>
<tr>
<td><strong>E)</strong> Helped me solve my non-sales problems</td>
<td></td>
</tr>
<tr>
<td>Helped me to some extent solve my non-sales problems</td>
<td>(63.2%)</td>
</tr>
<tr>
<td>Did not help me solve my non-sales problems</td>
<td>(35.5%)</td>
</tr>
<tr>
<td></td>
<td><strong>2.62</strong></td>
</tr>
<tr>
<td><strong>MEAN AVERAGE = (2.83+2.94+2.76+2.75+2.62)/5</strong></td>
<td><strong>2.78</strong></td>
</tr>
<tr>
<td><strong>MEAN AVERAGE (%) = (2.78*100)/3</strong></td>
<td><strong>90.3%</strong></td>
</tr>
</tbody>
</table>

**B) Underlying Dimensions of Reaction.**

Here factor analysis was run using identified responses in order to identify the underlying dimensions of trainees' reaction to training topics, which is one criterion for measuring reaction through anonymous responses. The five measurement criteria of trainees' reaction were grouped into the two factors that had eigenvalues greater than one. Table 10 shows the factor loadings of the five variables. The Bartlett test of
TABLE 10: FACTOR LOADINGS FOR REACTION-IDENTIFIED RESPONSES

<table>
<thead>
<tr>
<th>THE TRAINING PROGRAM TOPICS</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Were Better/Same/Less than expected</td>
<td>0.50653</td>
<td>0.40842</td>
</tr>
<tr>
<td>B) Were very important/Important/Not important</td>
<td>-0.10698</td>
<td>0.84706</td>
</tr>
<tr>
<td>C) Were Recent/Somewhat recent/Old</td>
<td>0.21403</td>
<td>0.82638</td>
</tr>
<tr>
<td>D) Helped me/Helped me to some extent/did not help me solve my sales problems</td>
<td>0.84651</td>
<td>0.14984</td>
</tr>
<tr>
<td>E) Helped me/Helped me to some extent/did not help me solve my non-sales problems</td>
<td>0.88768</td>
<td>-0.13232</td>
</tr>
</tbody>
</table>

Sphericity was also significant ($X^2 = 73.80336, P < 0.000$). The first, fourth and fifth variables loaded very highly on the first factor, which is labelled as “The Perceived Value of Training.” The second factor incorporated the second and third variables. This factor is named “Importance & Recency.”

C) Evaluation of the Underlying Dimensions of Reaction.

The cumulative percentage of variance explained by the first and second factors were 41% and 28%, respectively. In order to obtain this factor solution, a varimax rotation method was used and 69% of cumulative percentage of variance was explained by both factors. In addition, Cronbach’s Alpha was 0.6700 and 0.5858 for both the first and second factors, respectively. In addition, when comparing the average scores of both factors, it is noticed that the “Importance & Recency” factor obtained a higher score (2.85) than the “The Perceived Value of Training” factor (2.73). One explanation is that the third variable in “The Perceived Value of Training”
is a non-sales oriented criterion (helped me solve my non-sales problems), which is expected to obtain the lowest score among all variables (2.62).

Conclusions and Discussion

In conclusion, there were some difficulties in the interpretation of the reaction outcomes. There are no cut-off points or standards for evaluation to differentiate what is acceptable from what is not, and what is significant from what is insignificant. Consequently, the evaluator's judgement must be utilized. In measuring reaction in this study, the trainer was given a score of 99%. That is, nearly all trainees were very highly satisfied and pleased with the trainer. On the other hand, training services obtained a score of 81%, which was the lowest rated criterion by trainees. That is, the trainees were displeased with this item because the top management cancelled the meal given in the middle of the day and the trainees, especially the ones who do not live in Cairo, were dissatisfied because of the very long training day. These findings communicate to management the areas trainees view as needing improvement. However, the difficulties encountered in the findings' interpretations are expected because this is an exploratory study and no framework with firm guidelines was previously developed for sales training evaluation.

In his first published article in 1959, Kirkpatrick urgently recommended obtaining honest responses, by using anonymous reaction sheets where trainees are not required to identify themselves or sign the forms. However, few differences were noticed between the anonymous and identified responses in this study, especially in measuring reaction. For example, the training topics criterion received 90.8% in the anonymous
form compared to 90.3% in the identified form. To conclude, both surveys (anonymous and identified responses) generated consistent results and supported each other.

**Level 2: Measuring Learning**

In today’s dynamic and competitive business environment, sales knowledge is the critical characteristic enabling salespeople to compete. Measuring knowledge helps in determining whether learning objectives are being met, strengthening future sales training programs, and evaluating the trainer’s effectiveness. In order to measure learning, the learner evaluation method introduced by Currie (1990) was employed. Here the additional value of information gained through the training topics is measured. In order to examine level 2, three topics are emphasized: general results, underlying dimensions of learning, and the evaluation of underlying dimensions of learning.

**A) General Results**

The results are shown in Table 11. As an overall, the mean information value added came out to be more than 70%, which is marginal in the researcher’s opinion. The Johari Window was identified to be the topic receiving the highest value-added (90%). The second highest category (with a mean value added of 77%) incorporated the following three topics: ten sales recommendations, how to prepare for a successful selling day, and the scientific selling methods. The third highest category (with a mean value added of 67%) incorporated four major topics: introductory skills & handling
TABLE 11: MEASURING LEARNING (THE ADDITIONAL VALUE OF INFORMATION GAINED THROUGH THE TRAINING TOPICS)

<table>
<thead>
<tr>
<th>The Training Topic</th>
<th>The Information Value-Added (MEAN %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Johari Window</td>
<td>90.5%</td>
</tr>
<tr>
<td>2- The Introductory Skills &amp; Handling Objections</td>
<td>69.2%</td>
</tr>
<tr>
<td>3- The Ten Sales Recommendations</td>
<td>79.3%</td>
</tr>
<tr>
<td>4- The Selling Steps</td>
<td>64.5%</td>
</tr>
<tr>
<td>5- The Promotion and Presentation Skills</td>
<td>60.1%</td>
</tr>
<tr>
<td>6- The Scientific Selling Methods</td>
<td>74.9%</td>
</tr>
<tr>
<td>7- The Sales Behavioral Skills</td>
<td>65.6%</td>
</tr>
<tr>
<td>8- How to Prepare for a Successful Selling Day?</td>
<td>77.7%</td>
</tr>
<tr>
<td>9- The Major Reasons for Sales Failure</td>
<td>67.2%</td>
</tr>
<tr>
<td>10- What I don’t Like in the appearance/ behavior/ attitude of salespeople</td>
<td>56.8%</td>
</tr>
</tbody>
</table>

OVERALL MEAN (%) = TOTAL/10 70.6%

objections, selling steps, sales behavioral skills, and major reasons for sales failure. The lowest category (with a mean value-added of 58%) included two topics, which are the promotion and presentation skills and what I do not like in the appearance/ behavior/ attitude of salespeople.

B) Underlying Dimensions of Learning

Employing factor analysis, the ten measurement criteria of learning were grouped into the two factors that had eigenvalues greater than one. Table 12 shows the factor loadings of the ten variables. The Bartlett test of sphericity was also significant.
TABLE 12: FACTOR LOADING FOR MEASURING LEARNING

<table>
<thead>
<tr>
<th>Training Topic</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Johari Window</td>
<td>0.24560</td>
<td>0.69203</td>
</tr>
<tr>
<td>2- The Introductory Skills &amp; Handling Objections</td>
<td>0.72507</td>
<td>0.23562</td>
</tr>
<tr>
<td>3- The Ten Sales Recommendations</td>
<td>0.64080</td>
<td>0.36749</td>
</tr>
<tr>
<td>4- The Selling Steps</td>
<td>0.82685</td>
<td>0.18746</td>
</tr>
<tr>
<td>5- The Promotion and Presentation Skills</td>
<td>0.70323</td>
<td>0.08455</td>
</tr>
<tr>
<td>6- The Scientific Selling Methods</td>
<td>0.70749</td>
<td>0.28620</td>
</tr>
<tr>
<td>7- The Sales Behavioral Skills</td>
<td>0.13893</td>
<td>0.79524</td>
</tr>
<tr>
<td>8- How to Prepare for a Successful Selling Day?</td>
<td>0.75260</td>
<td>0.29409</td>
</tr>
<tr>
<td>9- The Major Reasons for Sales Failure</td>
<td>0.68673</td>
<td>0.37472</td>
</tr>
<tr>
<td>10- What I don't Like in the appearance/behavior/attitude of salespeople</td>
<td>0.32193</td>
<td>0.74552</td>
</tr>
</tbody>
</table>

($X^2 = 315.44241$, $P < 0.000$). Seven variables (the introductory skills & handling objections, the ten sales recommendations, the selling steps, the promotion and presentation skills, the scientific selling methods, how to prepare for a successful selling day?, and the major reasons for sales failure) loaded very highly on the first factor, which is labelled as “The Selling Skills and Information Topics.” The second factor incorporated three variables: Johari Window, the sales behavioral skills, and what I don’t like in the appearance/behavior/attitude of salespeople. This factor is called “The Behavioral Training Topics.”
C) Evaluation of the Underlying Dimensions of Learning

The cumulative percentage of variance explained by the first and second factors were 51% and 10%, respectively. In addition, Cronbach’s Alpha for the first factor, 0.8758, was very high for the total number of trainees. Cronbach’s Alpha for the second factor was 0.6891 for the total number of trainees. In order to obtain this factor solution, a varimax rotation method was used and 61% of cumulative percentage of variance was explained by both factors. The average scores for both factors were almost identical (70.9% and 70.3%). This implies that both factors equally contributed to the additional value of information gained.

In conclusion, there were some difficulties in the interpretation of the learning outcomes. Again, there are no cut-off points or standards of evaluation to differentiate what is acceptable from what is not, and what is significant from what is insignificant. Consequently, the evaluator must use his judgement to decide. In measuring learning in this study, the Johari Window was given a score of 90.5%. That is, nearly all trainees are very highly satisfied and pleased with this topic. On the other hand, “what I do not like in the appearance/behavior/ and attitude of salespeople” topic resulted in a score of 56.8%, which was the lowest rated learning criterion by trainees. That is, the trainees did not get a very high value-added through this topic when compared to the value-added perceived by the Johari window. What is interesting is that both of these variables that scored the highest and the lowest in learning are classified as behavioral topics based upon the factor solution. However, the difficulties encountered in interpreting the findings was also expected in measuring learning since this is an
exploratory study and no framework has been previously developed for evaluating sales training at the learning level.

**EVALUATION OF TRAINEE OUTCOMES**

One of the major limitations of trainee evaluation of program is that it produces results that are not totally satisfactory in that they are subjective and not truly quantitative. Kirkpatrick (1960a) also reported that there may be a big difference between knowing principles and techniques and using them on the job. For example, if a person attends many lectures or reads various books about swimming, this does not mean that he or she knows how to swim; swimming requires practice and training in the swimming pool. The sales profession is similar to swimming in the aspect of improving selling skills (e.g. time management or listening skills) through the sales training program without applying these skills on the job. That is why, Kirkpatrick (1960a) recommended conducting the second type of evaluation, which is the evaluation of trainee outcomes, in order to make sure that the trainees applied what they learned.

The evaluation of trainee outcomes includes level 3 and 4 (behavior and results) and looks at measuring the behavior and results at the individual level after the trainees are given the opportunity to apply the sales knowledge and techniques they learned from their jobs. In this study, two types of evaluations are employed: self-evaluation and supervisory-evaluation. In addition, the experimental design approach is used in order to examine whether the behavior and results improvement for trainees is
significantly higher than those of non-trainees for both self- and supervisory-evaluations. Each level is discussed in the following subsections.

**Level 3: Measuring Behavior**

In level 3, the behavior improvement of the trainees due to the sales training program is measured (See questions 4, and 6 to 25 for both self-evaluation and supervisory evaluation in Appendices B and D). The experimental design approach is employed in order to examine the differences between the behavior improvement of trainees and non-trainees for both self- and supervisory evaluations. Table 13 presents the results for measuring behavior improvement of trainees versus non-trainees. In order to examine level 3, six topics are emphasized: types of evaluation and forms of analyses, general results, covariates, and discussion, the underlying dimensions of behavior through self-evaluation, the evaluation of the underlying dimensions of behavior through self-evaluation, the underlying dimensions of behavior through supervisory-evaluation, and the evaluation of the underlying dimensions of behavior through supervisory-evaluation.

**A) Types of Evaluation and Forms of Analyses.**

In this study, there are two types of evaluations: self-evaluation and supervisory-evaluation. Within each type, three forms of analyses were performed: (1) Self-Evaluation or Supervisory-Evaluation (posttest 1 - pretest), which emphasizes the behavior improvement for both trainees and non-trainees that is calculated by adding all the scores of the twenty-one criteria, separately, for each respondent for both pretest and posttest 1. Then, the total score of the pretest is deducted from the total score of the posttest 1.
score of posttest 1 to generate the behavior improvement score from the pretest period to posttest 1 (three months after training); (2) Self-Evaluation or Supervisory-Evaluation (posttest 2 - pretest), which emphasizes the behavior improvement for both trainees and non-trainees that is calculated by separately adding all the scores of the twenty-one criteria for each respondent for both pretest and posttest 2. Then, the total score of the pretest is deducted from the total score of posttest 2 to generate the behavior improvement score from the pretest period to posttest 2 (four months after training); and (3) Self-Evaluation or Supervisory-Evaluation \([\text{posttest 1 + posttest 2}/2 - \text{pretest}]\), which emphasizes the average behavior improvement for both trainees and non-trainees that is calculated by adding all the scores of the twenty-one criteria for each respondent for pretest, posttest 1, and posttest 2, separately. Finally, the total score of the pretest is deducted from the average score of posttest 1 and posttest 2 (the total score of posttest 1 is added up to the total score of posttest 2 then divided by two in order to get the average score) to generate the average behavior improvement score from the pretest period to posttest 1 and posttest 2 (three and four months after training).

B) General Results, Covariates, and Discussion

From the results shown in Table 13, it appears that for both self-evaluation and supervisory-evaluation, the behavior of trainees improved through the positive scores shown that range from 17.78 to 25.52 for the twenty-one criteria. That is, an average behavior improvement of one point \((17.78+25.52/2=21)\) per criterion along the nine-point scale, which means that the trainees' behavior improved significantly from the
pretest period to posttest 1 and posttest 2 (three and four months after the training program).

However, when using the experimental design approach (before-after with a control group) and performing both ANOVA (Analysis of Variance) and MANOVA (Multivariate Analysis of Variance), the behavior improvement exhibits insignificant statistical differences between the trainees and non-trainees for both the self-evaluation (Posttest 1: $F = 0.3294$, P-value = 0.5674, and degrees of freedom = 1,90; Posttest 2: $F = 0.0373$, P-value = 0.8474, and degrees of freedom = 1,92; Posttest 1 + 2: $F = 0.2652$, P-value = 0.6078, and degrees of freedom = 1,90) and supervisory-evaluation (Posttest 1: $F = 0.4439$, P-value = 0.5070, and degrees of freedom = 1,86; Posttest 2: $F = 0.5102$, P-value = 0.4770, and degrees of freedom = 1,86; Posttest 1 + 2: $F = 0.5744$, P-value = 0.4506, and degrees of freedom = 1,85). That is, H1 and H2 are not supported. Although H1 and H2 are not supported, if we look at Table 13, it is noticed that the behavior improvement of trainees is uniformly higher than the behavior improvement of non-trainees for all forms of analyses (posttest 1 - pretest, posttest 2 - pretest, and [(posttest 1 + posttest 2)/2] - pretest). This means that as a total, the sales training program was beneficial for the behavior level and the behavior improvement is in the appropriate direction.

As sales training is perceived as a long-term investment, it is expected that the behavior improvement of trainees and non-trainees will be influenced by the previous sales training experience. Here we controlled for the previous sales training experience as a covariate in measuring the effect of the current training program through self-
evaluation on the behavior improvement of sales supervisors. The adjusted behavior improvement means are shown between brackets in Table 13. The findings suggest that the effect of the previous sales training programs, and not the current sales training program, were responsible for the significant behavior improvement in posttest 1 and posttest 2 when using 5% level of significance (Posttest 1: $F = 3.667$, $P$-value $= 0.05$, and degrees of freedom 2,87; Posttest 2: $F = 5.001$, $P$-value $= 0.02$, and degrees of freedom 2,89). When the demographic profile of the trainees and non-trainees was compared, it was noticed that almost all trainees and non-trainees who received previous sales training experience did not receive any sales training for at least two years before the current sales training program. These significant covariate results imply that previous sales training programs, as perceived by sales supervisors (self-evaluation), have a positive long-term effect on behavior improvement. That is, sales training programs appear to be long-term investments.

In addition, a potential reason for the insignificant results associated with self-evaluation of behavior is emphasized by Arvey and Cole (1989) who said that self-report measures complicate the assessment of change because of the problems associated with the definition of change itself. Golembiewski, Billingsley, and Yeager (1976) and Zmud and Armenakis (1978) described three major kinds of change that can occur with self-reported data:

1. Alpha Change, which is the true observed difference between the pre-test and the post-test scores on the construct of interest due to the training intervention.

2. Beta Change, which refers to a case in which a true alpha change is confounded by
a recalibration of the scale used to measure the construct of interest. Rahn (1989),
Preziosi and Legg (1989), Mezoff (1987), and Howard and Dailey (1979)
described a common kind of beta change, called response-shift bias (participants in
a training program have a different frame of reference for a post-test than they did
for the pre-test). According to Rahn (1989), when the trainee takes the pre-test in
the beginning of the program, s/he probably feels that s/he already is an
expert. For example, a trainee scores 7 on a scale of one to nine on a criterion
assuming that s/he is knowledgeable about the subject. Then, when the trainee
takes the training program, s/he finds himself/herself already lacking knowledge
and skills, which caused an overestimation of 7 as a pre-test score; that is, a lower
score would have been more realistic. Consequently, after training, the trainee
again gives himself/herself a score of 7, giving the spurious impression that the
training had little or no effect. Preziosi and Legg (1989) and Mezoff (1987)
suggest that trainees often overestimate their capabilities, skills, and knowledge on
the pretest by producing inaccurate analysis of the effects of the training
program due to the response shift bias.

(3) Gamma change, which is the subject’s reconceptualization of the construct of
interest; that is, the subject’s personal understanding of time management for
example may change qualitatively as a result of training. Consequently, the
subject’s score on a questionnaire (designed to tap this construct) reflects different
criteria at pre-test as compared to the post-test period.
TABLE 13: MEASURING BEHAVIOR IMPROVEMENT FOR TRAINEES VS. NON-TRAINEES**

<table>
<thead>
<tr>
<th>TYPE OF EVALUATION</th>
<th>BEHAVIOR IMPROVEMENT FOR TRAINEES</th>
<th>BEHAVIOR IMPROVEMENT FOR NON-TRAINEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self- Evaluation</td>
<td>19.88 (19.64)</td>
<td>18.09 (17.38)</td>
</tr>
<tr>
<td>(Posttest 1 - Pretest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self- Evaluation</td>
<td>25.52 (25.01)</td>
<td>24.83 (24.43)</td>
</tr>
<tr>
<td>(Posttest 2 - Pretest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self- Evaluation</td>
<td>[(Posttest 1 + Posttest 2)/2] - Pretest</td>
<td>22.88 (22.5)</td>
</tr>
<tr>
<td>Supervisory- Evaluation</td>
<td>17.78 (17.55)</td>
<td>15.44 (16.13)</td>
</tr>
<tr>
<td>(Posttest 1 - Pretest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory- Evaluation</td>
<td>24.36 (23.97)</td>
<td>21.05 (22.15)</td>
</tr>
<tr>
<td>(Posttest 2 - Pretest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory- Evaluation</td>
<td>21.31 (20.99)</td>
<td>18.24 (19.15)</td>
</tr>
<tr>
<td>[(Posttest 1 + Posttest 2)/2] - Before</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** None of these differences are significant

( ) Mean figures after controlling for the previous sales training experience covariate
What complicates the issue is that alpha, beta, and gamma changes are not mutually exclusive; all of them can affect a single subject. Within the empirical results shown in Table 13 for level 3, both beta and gamma changes are potential sources of the insignificant results recorded through the self-evaluation of behavior.

C) Underlying Dimensions of Behavior through Self-Evaluation

Factor analysis was performed for both posttest 1 (three months after training) and posttest 2 (four months after training) in both the self-evaluation and supervisory evaluation models. In the self-evaluation level, the twenty-one measurement criteria of trainees' behavior were grouped into two factors for posttest 1 and posttest 2 that had eigenvalues greater than one. Table 14 shows the factor loadings for the twenty-one criteria for measuring behavior for posttest 1. The Bartlett test of sphericity was also significant (Posttest 1: $X^2 = 2076.44$, $P < 0.000$; Posttest 2: $X^2 = 1954.81$, $P < 0.000$). What was noticed is that the first factor for both posttest 1 and posttest 2 incorporated mainly the same variables (time management, efficiency in closing, planning of sales routing, negotiation, complaints rate, handling objections, relationship with customers, relationship with key customer accounts, willingness to accept feedback, maturity and bearing responsibilities, hard worker, initiation, creativity & innovation, challenging personality, credibility, and aggressiveness) that loaded very highly on the first factor, which is labelled as "Salesperson Capabilities & Skills." Consistently, the second factor incorporated almost the same variables (relationship with peers, relationship with subordinates, relationship with supervisors, team spirit, and teamwork). This factor is named "Working Environment & Culture."
TABLE 14: FACTOR LOADINGS FOR BEHAVIOR SELF-EVALUATION

<table>
<thead>
<tr>
<th>THE EFFECTIVE SELLING POINTS</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Effective time management</td>
<td>0.72817</td>
<td>0.30033</td>
</tr>
<tr>
<td>2- Efficiency in closing</td>
<td>0.82333</td>
<td>0.30624</td>
</tr>
<tr>
<td>3- A better planning of sales routing</td>
<td>0.56848</td>
<td>0.51494</td>
</tr>
<tr>
<td>4- Negotiation effectiveness</td>
<td>0.82436</td>
<td>0.33945</td>
</tr>
<tr>
<td>5- Decrease in the rate of complaints</td>
<td>0.59668</td>
<td>0.47911</td>
</tr>
<tr>
<td>6- Increase the Efficiency in handling objections</td>
<td>0.73591</td>
<td>0.43163</td>
</tr>
<tr>
<td>7- Relationship w/ customers</td>
<td>0.75699</td>
<td>0.33718</td>
</tr>
<tr>
<td>8- Relationship w/ key customer accounts</td>
<td>0.71685</td>
<td>0.28470</td>
</tr>
<tr>
<td>9- Relationship w/ peers</td>
<td>0.36516</td>
<td>0.8685</td>
</tr>
<tr>
<td>10- Relationship w/ subordinates</td>
<td>0.37697</td>
<td>0.79959</td>
</tr>
<tr>
<td>11- Relationship w/ supervisors</td>
<td>0.26801</td>
<td>0.80180</td>
</tr>
<tr>
<td>12- Building team spirit</td>
<td>0.33386</td>
<td>0.75839</td>
</tr>
<tr>
<td>13- Teamwork</td>
<td>0.42489</td>
<td>0.76902</td>
</tr>
<tr>
<td>14- Willingness to accept critics &amp; feedback</td>
<td>0.65219</td>
<td>0.41858</td>
</tr>
<tr>
<td>15- Maturity &amp; bearing responsibilities</td>
<td>0.80065</td>
<td>0.32556</td>
</tr>
<tr>
<td>16- Hard worker</td>
<td>0.76297</td>
<td>0.39107</td>
</tr>
<tr>
<td>17- Initiation</td>
<td>0.78806</td>
<td>0.31976</td>
</tr>
<tr>
<td>18- Creativity and innovation</td>
<td>0.67353</td>
<td>0.49005</td>
</tr>
<tr>
<td>19- Challenging personality with the sincerity in succeeding and growing</td>
<td>0.76463</td>
<td>0.42315</td>
</tr>
<tr>
<td>20- Credibility</td>
<td>0.59688</td>
<td>0.44057</td>
</tr>
<tr>
<td>21- Aggressive and a strong personality</td>
<td>0.72526</td>
<td>0.41257</td>
</tr>
</tbody>
</table>

D) Evaluation of the Underlying Dimensions of Behavior through Self-Evaluation

The cumulative percentage of variance explained by the first factor, salesperson capabilities and skills, was 64% for posttest 1 and 67% for posttest 2. In addition, Cronbach’s Alpha was very high for the first factor: 0.9665 and 0.9608 for the total number of trainees and non-trainees for posttest 1 and posttest 2, respectively. The second factor, working environment and culture, explained 6% of the cumulative percentage of variance for posttest 1 and 5% for posttest 2. In addition, Cronbach’s
Alpha was high for the second factor: 0.9144 and 0.9098 for the total number of trainees and non-trainees for posttest 1 and posttest 2, respectively. In order to obtain this factor solution, a varimax rotation method was used and 70% and 72% of cumulative percentage of variance was explained by both factors for posttest 1 and posttest 2, respectively.

**E) Underlying Dimensions of Behavior through Supervisory-Evaluation**

In the supervisory-evaluation level, the twenty-one criteria of trainees' behavior were grouped into two factors with eigenvalues exceeding one, for posttest 1 and posttest 2. Table 15 shows the factor loadings for the twenty-one criteria for measuring behavior for posttest 1. The Bartlett test of sphericity was significant (Posttest 1: \(X^2 = 2386.3624, P < 0.000\); Posttest 2: \(X^2 = 2347.1135, P < 0.000\)). What was noticed is that the first factor for both posttest 1 and posttest 2 incorporated almost the same variables (time management, efficiency in closing, planning of sales routing, negotiation, complaints rate, handling objections, relationship with customers, relationship with key customer accounts, maturity and bearing responsibilities, hard worker, initiation, creativity & innovation, challenging personality, credibility, and aggressiveness) that loaded very highly on the first factor, which is labelled as "Salesperson Capabilities & Skills." Consistently, the second factor also incorporated nearly the same variables (relationship with peers, relationship with subordinates, relationship with supervisors, team spirit, teamwork, and willingness to accept feedback). This factor is named "Working Environment & Culture."
### TABLE 15: FACTOR LOADINGS FOR BEHAVIOR

#### SUPERVISORY-EVALUATION

<table>
<thead>
<tr>
<th>THE EFFECTIVE SELLING POINTS</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Effective time management</td>
<td>0.70607</td>
<td>0.42129</td>
</tr>
<tr>
<td>2- Efficiency in closing</td>
<td>0.79272</td>
<td>0.43559</td>
</tr>
<tr>
<td>3- A better planning of sales routing</td>
<td>0.81383</td>
<td>0.29029</td>
</tr>
<tr>
<td>4- Negotiation effectiveness</td>
<td>0.77236</td>
<td>0.44064</td>
</tr>
<tr>
<td>5- Decrease in the rate of complaints</td>
<td>0.70674</td>
<td>0.38464</td>
</tr>
<tr>
<td>6- Increase the Efficiency in handling objections</td>
<td>0.81446</td>
<td>0.31171</td>
</tr>
<tr>
<td>7- Relationship w/ customers</td>
<td>0.65319</td>
<td>0.56308</td>
</tr>
<tr>
<td>8- Relationship w/ key customer accounts</td>
<td>0.64783</td>
<td>0.38316</td>
</tr>
<tr>
<td>9- Relationship w/ peers</td>
<td>0.35902</td>
<td>0.80442</td>
</tr>
<tr>
<td>10- Relationship w/ subordinates</td>
<td>0.28817</td>
<td>0.87539</td>
</tr>
<tr>
<td>11- Relationship w/ supervisors</td>
<td>0.27728</td>
<td>0.87415</td>
</tr>
<tr>
<td>12- Building team spirit</td>
<td>0.51129</td>
<td>0.68983</td>
</tr>
<tr>
<td>13- Teamwork</td>
<td>0.59220</td>
<td>0.62116</td>
</tr>
<tr>
<td>14- Willingness to accept critics &amp; feedback</td>
<td>0.42868</td>
<td>0.61689</td>
</tr>
<tr>
<td>15- Maturity &amp; bearing responsibilities</td>
<td>0.71055</td>
<td>0.44825</td>
</tr>
<tr>
<td>16- Hard worker</td>
<td>0.58171</td>
<td>0.57083</td>
</tr>
<tr>
<td>17- Initiative</td>
<td>0.79289</td>
<td>0.38727</td>
</tr>
<tr>
<td>18- Creativity and innovation</td>
<td>0.82140</td>
<td>0.30171</td>
</tr>
<tr>
<td>19- Challenging personality with the sincerity in succeeding and growing</td>
<td>0.82849</td>
<td>0.30575</td>
</tr>
<tr>
<td>20- Credibility</td>
<td>0.57437</td>
<td>0.54111</td>
</tr>
<tr>
<td>21- Aggressive and a strong personality</td>
<td>0.69865</td>
<td>0.46223</td>
</tr>
</tbody>
</table>

**F) Evaluation of the Underlying Dimensions of Behavior through Supervisory-Evaluation**

The cumulative percentage of variance explained by the first factor, salesperson capabilities and skills, was 67% for posttest 1 and 64% for posttest 2. In addition, Cronbach’s Alpha for the first factor was 0.9721 and 0.8934 for the total number of trainees and non-trainees for posttest 1 and posttest 2, respectively. The second factor,
working environment and culture, explained 6% of the cumulative percentage of variance for posttest 1 and 7% for posttest 2. In addition, Cronbach's Alpha was very high for the second factor: 0.9286 and 0.9325 for the total number of trainees and non-trainees for posttest 1 and posttest 2, respectively. In order to obtain this factor solution, a varimax rotation method was used and 73% and 71% of cumulative percentage of variance was explained by both factors for posttest 1 and posttest 2, respectively. To conclude, the variables that loaded on the first and second factors for both the self and supervisory evaluations were nearly identical.

**Level 4: Measuring Results**

In level 4, the results improvement of trainees due to the sales training program is measured (See criteria 1, 2, 3 and 5 for both self-evaluation and supervisory evaluation in Appendices B and D). The experimental design approach is employed in order to examine the differences between the results improvement of trainees and non-trainees for both self- and supervisory evaluations. Table 16 presents the comparison of measurement improvement results of trainees vs. non-trainees. In order to examine level 4, three topics are emphasized: types of evaluation and forms of analyses; general results, covariates, and discussion; and underlying dimension of results.

**A) Types of Evaluation and Forms of Analyses**

There are two types of evaluations: self-evaluation and supervisory-evaluation. Within each type, three forms of analyses were performed: (1) Self-Evaluation or Supervisory-Evaluation (posttest 1 - pretest), which emphasizes the improvement results for both trainees and non-trainees that is calculated by separately adding all the
scores of the four criteria for each respondent for both pretest and posttest 1. Then, the total score of the pretest is deducted from the total score of posttest 1 to generate the results improvement score from the pretest period to posttest 1 (three months after training); (2) Self-Evaluation or Supervisory-Evaluation (posttest 2 - pretest), which emphasizes the results improvement for both trainees and non-trainees is calculated by separately adding all the scores of the four criteria for each respondent for both pretest and posttest 2. Then, the total score of the pretest is deducted from the total score of posttest 2 to generate the results improvement score from the pretest period to posttest 2 (four months after training); and (3) Self-Evaluation or Supervisory-Evaluation \[\left[\frac{(\text{posttest 1} + \text{posttest 2})}{2} - \text{pretest}\right]\], which focuses on the average results improvement for both trainees and non-trainees is calculated by adding all the scores of the four criteria for each respondent for pretest, posttest 1, and posttest 2, separately. Then, the total score of the pretest is deducted from the average score of posttest 1 and posttest 2 (the total score of posttest 1 is added up to the total score of posttest 2 then divided by two in order to get the average score) to generate the average results improvement score from the pretest period to posttest 1 and posttest 2 (three and four months after training).

B) General results, Covariates, and discussion

From the results shown in Table 16, it appears that for both self-evaluation and supervisory-evaluation, trainee results improved as shown by the positive scores that range from 3.90 to 5.29 for the four criteria. That is, an average results improvement of more than one point \((3.90 + 5.29/2 = 1.15)\) per criterion along the nine-point scale.
took place, which means that the trainees' results improved significantly from pretest to posttest 1 and posttest 2 (three and four months after the training program).

In order to measure the effect of the current sales training program on both self- and supervisory-evaluations, the experimental design approach (before-after with a control group) was used and MANOVA was employed in order to control the experimentwide or overall error rate. In this case, there are two dependent variables (results improvement through self-evaluation and results improvement through supervisory-evaluation) and one independent variable (the sales training program). By using the F-test of significance with (1,86) degrees of freedom, the results improvement showed significant differences between the trainees and non-trainees for posttest 1 self-evaluation when a 10% level of significance was considered (F = 3.13; P-value = 0.08).

According to Morgan (1978), the salesman's work environment and culture affect his job performance. Within this context, the original culture of salespeople in rural areas will be different from the one in urban areas. For example, there are three company sales regions: 1) Upper Egypt sales region, which is considered totally as a rural area; 2) Northern-Egypt, which is mainly an urban sales region but incorporates a relatively small rural area; and 3) Cairo, which is totally an urban sales region. Consequently, the salespeople culture is expected to be different across the three sales regions of company X. Table 5 shows that 59% of the trainees and 44% of non-trainees work in Cairo. Although no significant statistical differences were shown, the sales region seems to be an important variable determining the effect of the current...
sales training program on results improvement of trainees versus non-trainees. After controlling for the sales region as a covariate and using the F-test of significance with (1,84) degrees of freedom for posttest 1 and (1,83) degrees of freedom for posttest 1 + posttest 2, the current sales training program had a significant effect on the results improvement of sales supervisors generated by self-evaluation for both posttest 1 (F = 3.44; P-value = 0.06), and posttest 1 + posttest 2 (F = 2.63; P-value = 0.10) analyses. Controlling the sales region covariate helped reduce the error variability, which improved the ability to identify the effect of the current sales training programs on results improvement. That is, H3 is supported. Consistently, by looking at the results improvement for self-evaluation, it is noticed that the trainee results’ improvement is slightly higher than the results improvement of non-trainees for all forms of analyses (posttest 1 - pretest, posttest 2 - pretest, and [(posttest 1 + posttest 2)/2] - pretest). This means that for self-evaluation as a total, the sales training program was beneficial at the results level.

For supervisory-evaluation, the experimental design approach (before-after with a control group) was used and both MANOVA and ANOVA were employed. In ANOVA, there was only one dependent variable (results improvement through supervisory-evaluation) and one independent variable (the training program); whereas in MANOVA, there were two dependent variable (results improvement through self-evaluation and results improvement through supervisory-evaluation) and one independent variable (the training program). However, in this case, both MANOVA and ANOVA generated consistent results. The results improvement showed significant
differences between the trainees and non-trainees for supervisory-evaluation for posttest 1 - pretest when using F-test with (1,90) degrees of freedom ($F = 8.39; P\text{-value} = 0.00$), and $[(\text{posttest 1} + \text{posttest 2})/2] - \text{pretest}$ when using F-test with (1,89) degrees of freedom ($F = 4.74; P\text{-value} = 0.03$). Therefore, H4 is supported. By looking at the results improvement for supervisory-evaluation, it is noticed that the results improvement of trainees is significantly higher than the results improvement of non-trainees for posttest 1 - pretest and $[(\text{posttest 1} + \text{posttest 2})/2] - \text{pretest}$). This means that, for supervisory-evaluation as a total, the sales training program was significantly more beneficial for trainees than for non-trainees in the results’ level.

However, at the self-evaluation level, the findings show that the effect of the previous sales training programs covariate, and not the current sales training program, was responsible for the significant results improvement when using F-test with (1,81) degrees of freedom in the posttest 2 period ($F = 3.90; P\text{-value} = 0.05$). An explanation is that since sales training is perceived as a long-term investment, it is expected that the results improvement of trainees and non-trainees will be influenced by the previous sales training experience. The adjusted results improvement means are shown in Table 16. When the demographic profile of the trainees and non-trainees was compared, it was apparent that nearly all trainees and non-trainees who received previous sales training had not attended any sales training for at least two years before the current sales training program. These significant covariate results imply that the effect of the previous sales training programs, as perceived by both sales supervisors (self-evaluation) and their supervisors (supervisory-evaluation), has a positive long-term
effect on results improvement. That is, sales training programs, as perceived by the sales force, should be considered as long-term investments for both the behavior and results improvements.

C) The Underlying Dimensions of Results

By running factor analysis, only one factor was extracted based upon the eigenvalue greater than one method. All the four variables loaded very highly on this factor—labelled as "The self- and supervisory-evaluation of results"—for self evaluation (pretest, posttest 1, and posttest 2), and supervisory-evaluation (pretest, posttest 1, and posttest 2). The Bartlett test of sphericity was shown to be significant for both self-evaluation (Pretest: $X^2 = 278.5312, P < 0.000$; Posttest 1: $X^2 = 260.8102, P < 0.000$; Posttest 2: $X^2 = 211.1932, P < 0.000$) and supervisory evaluation (Pretest: $X^2 = 382.8085, P < 0.000$; Posttest 1: $X^2 = 343.49437, P < 0.000$; Posttest 2: $X^2 = 332.3273, P < 0.000$). This factor solution explained 84% of the cumulative variance for supervisory-evaluation and 77% of the cumulative variance for self-evaluation. That is, this favorable factor solution allows the researcher to explain the four variables in terms of their common underlying dimension in further analyses.

In conclusion, the supervisory-evaluation of results showed more solid outcomes and support for the hypotheses tested (H3 for self-evaluation and H4 for supervisory-evaluation) than the self-evaluations of results because of three potential explanations. The first explanation falls within the boundaries of the alpha, beta, and gamma changes. Beta and gamma changes most probably affected the true alpha change by causing a recalibration of the scale used to measure the construct of interest and the
**TABLE 16: MEASURING RESULTS IMPROVEMENT FOR TRAINEES VS. NON-TRAINEES**

<table>
<thead>
<tr>
<th>TYPE OF EVALUATION</th>
<th>RESULTS IMPROVEMENT FOR TRAINEES</th>
<th>RESULTS IMPROVEMENT FOR NON-TRAINEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Evaluation</td>
<td>3.90</td>
<td>3.03</td>
</tr>
<tr>
<td>(Posttest 1 - Pretest) * c</td>
<td>(3.88; 3.94)</td>
<td>(3.20; 3.00)</td>
</tr>
<tr>
<td>Supervisory-Evaluation</td>
<td>4.04</td>
<td>2.54</td>
</tr>
<tr>
<td>(Posttest 1 - Pretest)***</td>
<td>(3.94; 3.99)</td>
<td>(2.65; 2.47)</td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>5.00</td>
<td>4.13</td>
</tr>
<tr>
<td>(Posttest 2 - Pretest)</td>
<td>(4.94; 5.02)</td>
<td>(4.33; 4.07)</td>
</tr>
<tr>
<td>Supervisory-Evaluation</td>
<td>5.29</td>
<td>4.10</td>
</tr>
<tr>
<td>(Posttest 2 - Pretest)</td>
<td>(5.10; 5.18)</td>
<td>(4.35; 4.03)</td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>4.45</td>
<td>3.58</td>
</tr>
<tr>
<td>[(Posttest 1 + Posttest 2)/2- Pretest] c</td>
<td>(4.41; 4.48)</td>
<td>(3.77; 3.53)</td>
</tr>
<tr>
<td>Supervisory-Evaluation</td>
<td>4.69</td>
<td>3.32</td>
</tr>
<tr>
<td>[(Posttest 1 + Posttest 2)/2- Pretest]**</td>
<td>(4.54; 4.61)</td>
<td>(3.50; 3.35)</td>
</tr>
</tbody>
</table>

*** Mean differences significant at the 1% level of significance between the results improvement for trainees and non-trainees.

** Mean differences significant at the 5% level of significance between the results improvement for trainees and non-trainees.

* Mean differences significant at the 10% level of significance between the results improvement for trainees and non-trainees.

c Mean differences significant at the 10% level of significance between the results improvement for trainees and non-trainees after controlling for the sales region covariate.

(A;B) The adjusted results improvement means after controlling for the previous sales training experience covariate (A) and the sales region covariate (B).
subject’s reconceptualization of the construct of interest. The halo-effect bias is another potential explanation. Here the supervisors of trainees and non-trainees knew who attended and who did not attend the training program so they could be biased in favor of the fact that sales training programs have more positive effects on the results of trainees than non-trainees. The third explanation is that the supervisors are expected to have a much broader understanding of the importance of training. The trainees’ and non-trainees’ supervisors know how people are doing and have the ability to evaluate; whereas, the trainees and non-trainees do not have this ability. In addition, from the factor solution obtained, all the four variables for all types of results evaluations loaded high on one factor, which means that this one factor can partially and completely replace the original set of variables for inclusion in subsequent analyses.

**ORGANIZATIONAL EVALUATION OF PROGRAM**

Both the trainee evaluation and the evaluation of trainee outcomes look at the individual levels of sales training program evaluation. Conversely, the third type of evaluation, the organizational evaluation of program, incorporates level 5 (staff/management analysis) and focuses on results in the organizational or corporate level. Within this level, two types of analyses are emphasized: the trainer’s evaluation of trainees, and utility analysis. Each of the two analyses are discussed in the following subsections.
Level 5: Staff/Management Analysis

Within this level, two complementary analyses are performed. The first analysis incorporates the trainer’s evaluation of trainees based upon a five-point scale. The second analysis includes applying the utility analysis formula to assess the economic value of the sales training program.

The Trainer’s Evaluation of Trainees

Bolar (1975) said that the trainer is a valid source of information in case of training program evaluation because the trainees get the opportunity to evaluate the trainer in level 1 and 2, and the trainers as well should evaluate their trainees because they are the experts in training methods, techniques, and procedures. In order for the trainer to evaluate his trainees, one separate measure was used (See Appendix C). Based upon the Kirkpatrick’s recommendations, a five-point scale was used in this form. The results are shown in Table 17. The relationship with the trainer variable received the highest value (92.4%), which is consistent with the results of the same variable in form 1 shown in Table 7. That is, both the trainer and the trainees highly perceived their relationships together; consequently, this can help as a critical success factor for the sales training program. The middle group of variables (Attendance & Dedication, and relationship with other trainees) received more than 80% and less than 90%. The lowest group of variables (Participation and Interest in the program) received an average of 68%.
TABLE 17: THE TRAINER’S EVALUATION OF TRAINEES

<table>
<thead>
<tr>
<th></th>
<th>MEAN SCORE (1-5)</th>
<th>MEAN SCORE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Attendance &amp; Dedication</td>
<td>4.20</td>
<td>84.0%</td>
</tr>
<tr>
<td>2- Participation</td>
<td>3.35</td>
<td>67.0%</td>
</tr>
<tr>
<td>3- Interest in the program</td>
<td>3.44</td>
<td>68.8%</td>
</tr>
<tr>
<td>4- Relationship w/ other Trainees</td>
<td>4.05</td>
<td>81.0%</td>
</tr>
<tr>
<td>5- Relationship w/ the Trainer</td>
<td>4.62</td>
<td>92.4%</td>
</tr>
<tr>
<td>Total</td>
<td>19.66 * 4 = %</td>
<td>78.6%</td>
</tr>
</tbody>
</table>

By running factor analysis, the five measurement criteria of trainer’s evaluation were grouped into the two factors that had eigenvalues greater than one. Table 18 shows the factor loadings for the five variables. The Bartlett test of sphericity was significant ($X^2 = 127.4249, P < 0.000$). Three variables (attendance & dedication, participation, and interest in the program) loaded very highly on the first factor, which is labelled as “Trainee Involvement.” The cumulative percentage of variance explained by the first factor was 48%. The second factor incorporated two variables: relationship with other trainees and relationship with the trainer. This factor, named “Training Relationships,” explained 23% of the cumulative variance. In order to obtain this factor solution, a varimax rotation method was employed and 71% of cumulative percentage of variance was explained by both factors. In addition, Cronbach’s Alpha was 0.7536 for the first factor and 0.4539 for the second factor.
TABLE 18: FACTOR LOADINGS FOR TRAINER’S EVALUATION

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Attendance &amp; Dedication</td>
<td>0.67736</td>
<td>-0.45287</td>
</tr>
<tr>
<td>2- Participation</td>
<td>0.86306</td>
<td>0.21621</td>
</tr>
<tr>
<td>3- Interest in the program</td>
<td>0.86919</td>
<td>0.22733</td>
</tr>
<tr>
<td>4- Relationship w/ other Trainees</td>
<td>0.08449</td>
<td>0.87292</td>
</tr>
<tr>
<td>5- Relationship w/ the Trainer</td>
<td>0.49474</td>
<td>0.50643</td>
</tr>
</tbody>
</table>

In conclusion, it is important to conduct the trainer’s evaluation of trainees in addition to the evaluation of the four levels. The trainer usually has a feeling about the reaction of the trainees to the program, such as the attendance, dedication, participation, and interest of the trainees in the program. In addition, the results showed that the relationship with the trainer scored very high in both the anonymous responses of trainees (level 1) and the trainer’s evaluation of trainees. Consequently, the relationship factor seemed to be a critical success factor for sales training programs.

Utility Analysis

In this section, another powerful tool for expressing the outcomes or economic value of the sales training program for company X is employed. Conducting utility analysis is important since there is a possibility for the sales training program to bring about favorable reaction, improve sales knowledge, behavior on the job, and results. However, if the monetary costs of the sales training program outweigh its monetary benefits, the training program is not worth implementing in the organization.
Consequently, the utility analysis formula shown at the end of Chapter II was used to estimate the utility of a three full-day sales training program aimed at improving the selling skills of sales supervisors in company X:

\[ U = (T') (N') (d_t) (SD_y) (1+V) (1- TAX) - NC (1- TAX) \]

\[ = (3.35 \ast 68 \ast 1.11 \ast 1,440 \ast 1.04 \ast 0.68) - (79 \ast 300 \ast 0.68) \]

\[ = $257,502 - $16,116 = $241,386 \]

N = 79 sales supervisors initially trained.

N' = 68 sales supervisors trained who are still employed by the organization.

(79 - 11 resigned = 68).

T = 5. It is estimated by management and the consulting firm that the effects of this training program are expected to last for about five years on a typical route sales supervisor's job performance. This is consistent with the findings showed in both the measuring of behavior and results section that previous sales training courses has a positive impact on the behavior and results improvement for more than two years.

T' = 3.35. By entering table 5.1 in Wexley and Latham (1991, 121), where T = 5 and i (interest rate) = 0.15 in Egypt, T is discounted to a T' of 3.35.

d_t = 1.11. We used a Pretest-Posttest control group design and find that the true difference in job performance between the average trained and untrained sales supervisors in standard deviation units is 1.11.

SD_y = $1,440. As the average annual salary of sales supervisors in company X is $3,600, then $3,600 * 40% = $1,440
(1 + \(V\)) = 1 + (0.04) = 1.04. In this case, the effects of the training improved the job performance of the sales supervisors. This increase in sales performance, in turn, decreased the variable costs (\(V\)) by some percentage because it was highly noticed by the consulting firm and the researcher that well-trained sales supervisors helped train other new, and less experienced non-trained sales supervisors and their subordinates. In this case, \(V\) was lowered by 4%, according to an estimate by the consulting firm. Now, (1+\(V\)) equals +1.04. Thus the company will derive 104 percent of the dollar value of the improvement in job performance.

\((1- \text{TAX})\) = 68 percent. Based upon the Egyptian Law of taxes on industrial companies’ profits, company X’s marginal tax rate is 32 percent. So, (1- \text{TAX}) equals 0.68. A company’s marginal tax rate is a function of its level of profitability in the past.

\(C = \$300\). The consulting firm stated that the total cost of the training program is \$300 per trainee, which was calculated by dividing the total contract cost (\$24,000) by the total number of trainees (79 trainees).

To conclude, the utility analysis formula when applied to this sales training program showed that \$241,386 will be considered as profits generated from the sales training program. That is, every \$1 spent on sales training generates \$17 (a multiplier of 17) in revenue (257,502/16,116) and \$16 profit (\$241,386/16,116). This is a very high Return On Investments (ROI). More conservatively, if \(T\) is calculated as 2 instead of 5, \(T’\) will be 1.62. Therefore, the utility of the program will be calculated as follows:
\[ U = (T')(N')(d_0)(SDy)(1+V)(1-TAX) - NC(1-TAX) \]
\[ = (1.62 \cdot 68 \cdot 1.11 \cdot 1,440 \cdot 1.04 \cdot 0.68) - (79 \cdot 300 \cdot 0.68) \]
\[ = $124,524 - $16,116 = $108,408 \]

In this case, the utility analysis formula showed that $108,408 should be considered as profits generated from the sales training program. That is, every $1 spent on sales training showed to generate a multiplier of 8 in revenues and a multiplier of 7 in profits. These figures are very conservative based upon the empirical findings of this study that previous sales training courses have a positive impact on the behavior and results improvement for more than two years. However, both the researcher and the consulting firm agreed that a more realistic figure is that the effects of this sales training program are expected to last for about five years. These figures economically justify the large amount of money invested in sales training programs. Utility analysis was shown to be a simple, fast, and powerful tool for expressing the outcomes of sales training programs in terms of dollars. It is a complementary technique that can be used in conjunction with the Kirkpatrick model.

Finally, as a general conclusion, staff/management analyses should be conducted in conjunction with the Kirkpatrick’s model so that objective measures can be obtained and consistent results can be ensured. For example, the training topics and the relationship between the trainer and the trainees are two criteria that had consistent results across different forms of evaluations.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

The final chapter serves as a summary and conclusions of the research findings, includes a discussion of implications of the findings and limitations of the research for marketers, and contains recommendations for future research directions and opportunities. The basic purpose behind this research was presented in Chapter III with the statement: To enhance the understanding of current sales training evaluation practices and to propose and test a model that companies can adopt to evaluate sales training effectiveness. This basic objective was translated into a narrative and series of tables that were analyzed and discussed in Chapter IV.

CONCLUSIONS OF THE FINDINGS

The general research objectives of this dissertation are outlined in Chapter I and involve: 1) determining if sales training can be objectively evaluated by proposing and testing a framework for evaluating sales training programs' effectiveness; 2) conducting a simultaneous examination of the different levels of evaluation as emphasized by Kirkpatrick (1959a, 1959b, 1960a, and 1960b): reaction, learning, behavior and results; 3) examining the various sales training evaluations performed by the salesperson, the trainer, and the salesperson's supervisor; 4) determining the possible effects of experience, education, age, previous sales training courses, and sales region on the evaluation of sales training; and 5) gathering information on evaluating
sales training programs, drawing conclusions, and constructing a sales training program evaluation model or framework that would help other companies in evaluating future sales training programs. Each objective is addressed in the following paragraphs:

**Objective 1: Can Sales Training BeEvaluated?**

A comprehensive evaluation of sales training programs, as demonstrated in this research, is difficult to conduct. There are many extraneous variables that influence the sales training evaluation process. One extraneous variable is managerial in nature and occurs when sales revenue is perceived as being more important than measuring sales training program outcomes. For example, several sales supervisors arrived late to some of the training sessions saying that their supervisors ordered them to complete a sale or solve a customer problem rather than attending the training program. That is why, there was an absenteeism rate in the reaction and learning levels. In addition, practitioners need to possess a solid background in statistics, especially when using experimental design in measuring behavior and results. Despite these difficulties, the sales training program evaluations can and should be performed as was demonstrated in this study.

**Objective 2: Conduct a Simultaneous Examination of the Different Sales Training Levels**

There were some difficulties in the interpretation of evaluation outcomes, especially in level 1 and 2 (reaction and learning). There are no cut-off points or standards for evaluation to differentiate what is acceptable from what is not, and what is significant from what is insignificant. Consequently, the evaluator must utilize his
judgement to decide. In measuring reaction in this study, the trainer was given a score of 99%. That is, nearly all trainees were very highly satisfied and pleased with the trainer. On the other hand, training services obtained a score of 81%, which was the lowest rated criterion by trainees. That is, the trainees were displeased with this item because the company’s top management cancelled the mid-day meal and the trainees, especially the ones that did not live in Cairo, were frustrated with the lengthy training day (9:00 a.m. to 6:00 p.m.). However, the difficulties encountered in interpreting levels 1 and 2 are not unusual because no framework with firm guidelines has previously been developed for evaluating sales training.

In his two major published articles in 1959, Kirkpatrick strongly recommended obtaining candid responses by using anonymous reaction sheets where the trainees are not required to identify themselves or sign the forms. However, in this study no differences were identified between the anonymous and identified responses, especially in measuring reaction. For example, the training topics criterion received 90.8% in the anonymous form compared to 90.3% in the identified form. In addition, the relationship between the trainer and the trainees was shown to be the highest in both the anonymous reaction sheet and the trainer’s evaluation of trainees.

The trainer’s evaluation of trainees is very important and should be conducted in addition to the evaluation of the four levels. The trainer comes to understand the reaction of the trainees to the program, such as the attendance, dedication, participation, and the interest of the trainees in the program. Utility analysis was also shown to be a simple, fast, and powerful tool for computing the outcomes of sales
training programs in terms of dollars. It is a complementary technique that can be used with the Kirkpatrick model. The utility analysis suggests that each dollar invested in conducting sales training generates $17 in revenue over a five-year period, which is a high Return On Investments (ROI). This ROI justifies the large amount of money invested in sales training programs.

**Objective 3: Examining Evaluations Conducted by the Salesperson, the Trainer, and the Salesperson's Supervisor**

If the findings of both self- and supervisory-evaluations are compared in the results level, supervisory-evaluation showed more solid outcomes and support for hypothesis 4 (H4) than the support that self-evaluations of results showed for hypothesis 3 (H3). There are three potential explanations for this study. The first explanation falls within the boundaries of the alpha, beta, and gamma changes that influence the self-evaluation of results. Beta and gamma changes most probably affected the true alpha change in the self-evaluation of results by recalibrating the scale used to measure the construct of interest and the subject's reconceptualization of the construct of interest. As noted earlier, beta change affects the true alpha change by the trainees overestimation of their capabilities, skills, and knowledge on the pre-test by producing inaccurate analysis of the effects of the training program due to the response shift bias. In addition, gamma change most probably affects the true alpha change through the subject's personal understanding of negotiation, for example, that may change quantitatively as a result of training.

Halo-effect bias is the second potential explanation. Because the supervisors of trainees and non-trainees knew who attended and who did not attend the training.
program, they could have been biased toward the fact that sales training programs have more positive effects on the results of trainees than non-trainees. The third explanation is that the supervisors are expected to have a much broader understanding of the importance of training. The trainees' and non-trainees' supervisors have more information about how people are performing and they have an ability to evaluate between employees; whereas, the trainees and non-trainees do not have this ability.

In addition, the results of this study showed that the relationship with the trainer correlated very highly with both the anonymous responses of trainees in measuring reaction (level 1) and the trainer's evaluation of trainees. Consequently, this relationship factor appears to significantly impact the success of sales training programs. This is consistent with the relationship marketing concept expected to dominate the marketing orientation of firms in the near future.

**Objective 4: Determining the Possible Effects of the Demographic Variables on the Evaluation of Sales Training**

After controlling for the previous sales training experience as a covariate in measuring the effect of the current training program through self-evaluation on both the behavior and results improvement of sales supervisors, this research found that the effect of the previous sales training programs, and not the current sales training program, were responsible for the significant behavior and results improvement of trainees. When the demographic profile of the trainees and non-trainees was compared, it was noticed that almost all trainees and non-trainees who have previous sales training experience did not receive any sales training for at least two years before the
current sales training program. That is, sales training programs appear to be long-term investments.

**Objective 5: Drawing Conclusions and Constructing a Sales Training Evaluation Framework that Would Help Other Companies in Evaluating Future Sales Training Programs**

The last conclusion for managers is that if an organization intends to provide a sales training program for its sales force, Figure 1 (the sales training process) in conjunction with Table 4 (sales training program design) can serve as a framework to be employed in sales training needs assessment and program design and implementation. Finally, if a company wants to measure and evaluate a sales training program, the model emphasized in Figure 2 provides a framework that can be employed or consulted by companies to learn how they can evaluate their sales training programs. The model presents a framework recommended by the researcher. This is not to imply that this model is the only way or necessarily the most effective way to measure and evaluate sales training programs. But it is one method that can be utilized to successfully evaluate sales training programs. In addition, the next three sections (implications of the findings, limitations of the study, and recommendation for future research) help in meeting and satisfying the fifth research objective of this dissertation.

**IMPLICATIONS OF THE FINDINGS**

The results of this study provide some interesting implications for top managers, trainers, and field sales managers. The first of these implications is that the level of difficulty in the data collection process increases, especially when the experimental
design approach is used to measure behavior and results. This supports the findings of Honeycutt and Stevenson (1989) who found that 38% of sales managers in large companies stated that restrictions, such as 'time and money' and 'difficulty in obtaining data' worked against their efforts to evaluate. In another study conducted by Clegg (1987), 22% of respondents said that a lack of adequate evaluation methodology was a constraint to program evaluation. More importantly, Honeycutt and Stevenson (1989) found that 20% of the responding sales managers mentioned that they would not evaluate training even if the necessary resource were available. Although it is not a simple process to complete, sales managers can evaluate sales training program effectiveness as shown by this research. Consequently, sales training program evaluation is highly recommended and possible to be conducted because it is very important for the top management to know if they are receiving a positive return on their extensive sales training program investment.

The second implication for managers is that a comprehensive evaluation is possible and can be conducted using the five evaluation levels proposed within this study. It is important for companies to evaluate the different levels because each level emphasizes different dimensions and provides management with different snapshots of the training process. Since sales training is a very complex process, a single measure of sales training will not provide a comprehensive picture of what is happening to the trainees. Within this context, the trainer's evaluation of trainees and the utility analysis are two complementary analyses that should be conducted in conjunction with the Kirkpatrick model. By using these three complementary forms of sales training...
program evaluation, more objective measures can be obtained and consistent results can be increased. For example, the training topics and the relationship between the trainer and the trainees are two criteria that demonstrated consistent results across different forms of evaluations.

The third implication in this dissertation is that it appears that most companies, according to the literature, evaluate the trainee's reaction or feelings about the training program because it is very easy to do it, while only a few companies measure knowledge, attitude, and results. However, when the time comes to interpret the reaction scores, there are no cut-off points, standards, yardsticks, criteria, and methodology for evaluation in order to differentiate what is acceptable from what is not. Here the evaluator's judgement must be utilized. If managers are to utilize reaction feedback from the training program, then acceptable levels of trainee evaluation must be stated.

The fourth implication concerns the evaluation of the sales training program results (level 4). According to Kirkpatrick and Russ (1976), obtaining objective measures, such as sales per trainee or sales to quota, to measure results is administratively infeasible and difficult, because territories vary, factors other than the salesperson's efforts can have an influence on sales volume, and some criteria are qualitative and difficult to measure. However, Dubinsky (1996) and Peterson (1990) said that objective measures of training program effectiveness are desirable. Although it is extremely difficult to assess objective sales force figures to measure results, extensive efforts may lead to successful attempts to assess and administer objective
measures. Objective measures are easier to administer when the researcher compares the total sales figures for the sales territories that were subject to training (the experimental group) and the ones that were not subject to training (the control group).

The last implication of this research project is that the trainer’s high level of experience appears to be a significant contributing factor to the success of the sales training program. This was shown in the results of this study as emphasized in level 1 as well as in the results of previous empirical studies. Anderson (1993) found that the most important criterion used by employers in determining the training instructors is their level of expertise. Therefore, it is recommended that companies select a trainer who has the experience and expertise to conduct successful sales training programs. Time spent by management in selecting an appropriate trainer would seem to be a worthwhile investment.

THE LIMITATIONS OF THE STUDY

It is difficult to make generalizations based upon data gathered from one large company operating in one industry in one country. It should be noted, however, that the most effective and successful studies, such as Doyle and Cook (1984), Meyer and Raich (1983), and Roy and Dolke (1975) used only one company to evaluate training program effectiveness. However, these studies were not comprehensive since the first two studies evaluated the sales training program effectiveness by measuring results (level 4), and the third study measured learning (level 2). In addition, sales data are
very sensitive and difficult to assess due to the competition as well as the time, effort, and money employed to collect data.

Some of the problems encountered in data collection are:

- Frequent extension or shrinking (in size) of sales territories.
- Frequent shift of sales representatives, sales supervisors and sector heads from one sales territory to the other.
- Promotion of some sales supervisors to section heads just after completion of training.
- Eleven sales trainees resigned immediately after the program and were hired by another competitor that doubled their salaries.
- Opening of new distribution centers or plants. Consequently, the sales force move to the new location with leaving their historical data in their previous locations. No data was available for the former year in the new location.
- The decentralization of data, which requires a lot of time, money, and effort to collect from all over the country.
- The seasonality of data, which causes some restrictions on comparing the current sales figures with previous sales figures.
- The sensitivity of sales data, especially in this extreme period of competition.
- Company X has been losing market share during the last three years due to the fact that the international division of company X completely cut its financial support; whereas, the international division of company Y has been continuously backing their Egyptian division with enormous financial support.
- Company Y has a highly trained sales force compared to the sales force of Company X.

- Three domestic competitors entered the Egyptian market in 1997, which began to erode the market share of company X.

- Almost no party was assigned to coordinate between the consulting company and the sales leaders in company X. During the five-month period that the sales training process (needs determination, training development, implementation, and evaluation) took place, two human resource managers were hired and resigned. So the burden of data collection was on the researcher who worked hand in hand with the consulting company. However, the good relationships with the sales leaders in addition to the trust that was put on the consulting company helped in facilitating the data collection.

- The sales leaders were very busy in managing their sales territories and sales people, especially that the training program had just taken place before the season and collecting the after-training data took place during the season.

- The strong competition and information secrecy among the three regional sales managers in company X as one of them totally refused to cooperate and provide sales figures about his region, which represented more than 20% of the total company sales.

- The huge amount of information collected from the sales people through the sales leaders which proved a burden on the sales supervisor himself and his supervisor as the data was collected before training, and three and four months after training.
The difficulty encountered in meeting with the regional sales leaders and their frequent apologies and breaking of promises due to their being very busy and their spontaneous movement from one sales region to the other for meetings, unexpected events, etc. It was apparent that day-to-day business was given priority over training. So the researcher and the consulting firm were following the sales leaders from one place to the other to meet with them and collect the data.

This was the first time that company X measured the effect of training so it was very difficult to apply the concept of evaluation and persuade the sales leaders to devote time and cooperate to execute the training program evaluation, especially concerning the experimental design approach and collecting data from non-trainees. A statement that the researcher frequently heard from the sales leaders was: "you would like to measure the effect of training on trainees, why do you then want to collect data from non-trainees?"

Another limitation relates to the sample. If one reviews the number of trainees and non-trainees, it is evident that the number of trainees with completed data exceeds the number of non-trainees with completed data. However, to some extent, it is difficult to manage the sample size of both the experimental and control group with completed data, especially in sales training where the sales force is in the market in the face of the competition.

The third limitation relates to the assignment of sales supervisors to the experimental and control groups, which was a non-random assignment. However, this was not managed by the researcher or the consulting firm since the regional sales
manager, the division sales manager, and the sector head (the immediate supervisor of
the sales supervisor) jointly decided who first attended the training program and who
was supposed to join the second phase of the training program based upon the market
and the nature of each sales territory independently. It was not realistic for all the sales
supervisors in one sales territory to attend a three full-day training program leaving
their sales territory for the competition. The selection was also based upon routing.
Although these limitations are acknowledged, it is still believed this study provides the
basis for additional research in the areas of measuring and evaluating the effectiveness
of the sales training programs.

RECOMMENDATIONS FOR FUTURE RESEARCH

Several recommendations for further research have emerged from this study. The
first recommendation is to conduct the same study in another country while using a
larger sample size from more than one industry and then compare the results with what
was found in this dissertation. Another alternative is to conduct the same study in two
or more industries in Egypt. Both alternatives help generalize the results of this
dissertation.

The second recommendation is to use the “pre-then-post testing” method which
was emphasized by Preziosi and Legg (1989) and Mezoff (1987) in case of self-reports
in order to remove the response shift bias since they advocate that participants must
rate themselves using the same frame of reference. After the program is finished, the
“then” score is measured by asking the participants to think back and rate their
knowledge, skill or ability before training. They are then asked to rate their knowledge, skill or ability in light of what they know now, which is the “post-test” score. The pre-test score is taken before the program begins. The same procedure is performed for both the experimental and the control groups. In this way the results can be compared in two ways: comparing the “pre-test” scores to the “then” scores for both experimental and control groups, and comparing the “then” scores to the “post-test” scores for both the experimental and control groups.

Mezoff (1987) emphasized the benefits of using the “pre-then-post” method as being easy to administer, requiring no modification of questionnaires used, substantially improving the accuracy of training program evaluation, and legitimately documenting the benefits of training that conventional evaluation procedures might fail to find. Preziosi and Legg (1989) tested this method empirically and found that: (1) for the control group, the self-ratings did not change appreciably along the “pre-test”, “then”, and “post-test” scores; (2) for the experimental group, the “pre-test” scores showed extremely higher scores than the “then” scores, which is due to the response shift bias. In addition, the “post-test” results showed extremely higher scores when compared to both the “pre-test” and “then” scores for the experimental group. In another cross-selling training study, the increases were even greater. Although this method is shown to be beneficial, it is more expensive than when only before and after scores are gathered.

The third recommendation is that there is a need to increase the amount of joint responsibility for the sales training process and the sales training program evaluation.
among top managers, trainers, and field sales managers of Egyptian corporations. If one accepts the premise that shared responsibility leads to a more effective training program evaluation, then the amount and quality of joint responsibility should continue to increase. Feedback from and communication with sales managers help trainers measure and evaluate the efficiency and effectiveness of sales training programs. Increased emphasis on joint responsibility might also lead both parties to seek a spirit of cooperation with one another regarding their role in the sales training process in general, and more specifically in the evaluation phase.

The fourth recommendation concerns the two types of training evaluation emphasized by Camp, Blanchard, and Huszczo (1986), and Goldstein (1986): outcome evaluation and process evaluation. This research focused on evaluating sales training outcomes. However, another type of sales training program evaluation is the sales training process evaluation, which focuses on what occurred during the development and implementation of the training program. This second type of evaluation is a potential area that requires further research.

The fifth recommendation is a proposal of a more comprehensive model for measuring and evaluating sales training effectiveness with twenty-seven research questions that need to be examined in order to judge the feasibility of the model as a whole system. Figure 3 represents the proposed model, which is illustrated in a separate section.
A RECOMMENDED MODEL FOR FUTURE RESEARCH

In this proposed model, further research is recommended to examine the sequential relationships among the four evaluation levels of the Kirkpatrick (1959a) model as assumed by Newstrom (1978). That is, favorable trainee reactions help in assuring learning that assist in applying the learned skills to the job, which finally lead to favorable results in the individual and organizational levels. Consequently, the sequential relationship from the Newstrom argument is assumed to be positive. In order to satisfy this objective, thirteen research questions (I1 to I13 in Figure 3) should be examined based upon the Newstrom (1978) assumption that there is a sequential intercorrelation among the four levels of the Kirkpatrick model. However, three groups of research questions will take place based upon this sequential relationship:

1) The effect of favorable trainees' reaction (level 1) on learning, behavior, and results (levels 2, 3, and 4). According to Honeycutt and Stevenson (1989) and Kirkpatrick (1978), measuring reaction focuses on the attitudes and feelings of the sales trainees about the program. This is the easiest way to measure training program effectiveness; that's why, according to Kirkpatrick (1959a), it is the most frequently employed evaluation method by training directors. Kirkpatrick (1959b) emphasized the importance of obtaining favorable reaction as the more favorable the reaction to the program, the more likely the trainees are to learn the principles, facts, and techniques that are discussed. Within a public personnel management context, Clement (1982) found that trainee reactions were strongly related learning outcomes. Kirkpatrick (1959a) added that measuring reaction provides an
Figure 2: The Proposed Framework for Evaluating Sales Training Effectiveness
indication of satisfaction by the trainees, which, of course, helps them in learning, behavior, and results. In addition, Kirkpatrick (1994) said that the benefits that can be derived from evaluation including changes in behavior and final results should be considered. Consequently, the following five research questions are recommended to be examined:

RQ1: Does trainees' reaction have a positive effect (I1) on trainees' learning?

RQ2: Does trainees' reaction have a positive effect (I2) on trainees' self-evaluation of behavior?

RQ3: Does trainees' reaction have a positive effect (I3) on trainees' supervisory-evaluation of behavior?

RQ4: Does trainees' reaction have a positive effect (I4) on trainees' self-evaluation of results?

RQ5: Does trainees' reaction have a positive effect (I5) on trainees' supervisory-evaluation of results?

2) The effect of favorable learning (level 2) on trainees' behavior and results (levels 3, and 4). According to Weitz, Sujan, and Sujan (1986), sales knowledge (sales principles, facts, and techniques) is the critical characteristic enabling salespeople to cope effectively with their dynamic and competitive environment. Currie (1990) said that one of the major reasons for measuring learning is to determine whether learning is transferrable to the job. Kirkpatrick (1960a) emphasized the idea of transition between learning and changes in behavior on the job. In addition, Kirkpatrick (1994) added that no change in behavior can be expected unless learning objectives have been accomplished. If there is no change in behavior, the likely conclusion is that no learning took place. That is, if little or no learning has taken place, little or no change in
behavior can be expected. Consequently, examining whether the sales knowledge helps trainees have favorable behavior when they go back to their jobs is important so that they can generate better results. Here are four research questions that need to be examined:

RQ6: Does trainees' learning have a positive effect (16) on trainees' self-evaluation of behavior?

RQ7: Does trainees' learning have a positive effect (17) on trainees' supervisory-evaluation of behavior?

RQ8: Does trainees' learning have a positive effect (18) on trainees' self-evaluation of results?

RQ9: Does trainees' learning have a positive effect (19) on trainees' supervisory-evaluation of results?

3) The effect of favorable behavior on the trainees' results. Based upon the Newstrom (1978) argument, favorable behavior has a positive effect on the trainees' results. In addition, Kirkpatrick (1994, 60-61) said "it is important to understand that change in behavior is not an end in itself. Rather, it is a means to an end: the final results that can be achieved if change in behavior occurs. If no change in behavior occurs, then no improved results can occur... No final results can be accepted unless a positive change in behavior occurs."

Consequently, four more research questions need to be examined:

RQ10: Does trainees' self-evaluation of behavior have a positive effect (110) on trainees' self-evaluation of results?

RQ11: Does trainees' self-evaluation of behavior have a positive effect (111) on trainees' supervisory-evaluation of results?

RQ12: Does trainees' supervisory-evaluation of behavior have a positive effect (112) on trainees' self-evaluation of results?
RQ13: Does trainees' supervisory-evaluation of behavior have a positive effect (113) on trainees' supervisory-evaluation of results?

In addition, as was performed in this dissertation, in order to ensure that the sales training programs yield favorable behavior (level 3) and favorable results (level 4), the experimental design approach (before and after measures along with a control group) is strongly recommended to be employed in order to measure the net effect of training. The use of experimental design has been described by Zenger and Hargis (1987), Dubinsky (1981), Churchill, Ford, and Walker (1981), and Blumenfeld and Crane (1975) as the most powerful and advantageous. Consequently, trainees must be compared to non-trainees through examining the following four research questions (D1-D4 in Figure 3) across levels 3 and 4:

RQ14: Is the behavior improvement achieved by trainees' self-evaluation significantly higher than those achieved by non-trainees (D1 in Figure 3)?

RQ15: Is the behavior improvement achieved by trainees' supervisory-evaluation significantly higher than those achieved by non-trainees (D2 in Figure 3)?

RQ16: Is the results improvement achieved by trainees' self-evaluation significantly higher than those achieved by non-trainees (D3 in Figure 3)?

RQ17: Is the results improvement achieved by trainees' supervisory-evaluation significantly higher than those achieved by non-trainees (D4 in Figure 3)?

Another part of the model is to examine and test the correlations among the various sales training evaluations performed by the salesperson, the trainer, and the salesperson's supervisor. According to Bolar (1975), the salesperson himself, the salesperson's supervisor, and the trainer are valid sources of information for sales training evaluation. Mezoff (1987), Connolly (1987), and Zemke (1996) recommended the use of self-evaluation of trainees as well as trainees' supervisors evaluation so that
we can be able to compare the scores together. Chonko, Howell, and Bellenger (1986) stated that a low correlation exists between the sales supervisor's evaluation and the inflated evaluations of the sales force. Connolly (1987) said that trainees tended to report a greater degree of evaluation than their superiors. In result, each supervisor of every member of both the experimental and control groups evaluates his subordinate based upon the same criteria employed in self-evaluation. Consequently, four research questions should be examined through investigating the correlations between the evaluations performed by salespeople (trainees and non-trainees) and their supervisors in both levels 3 and 4:

RQ18: Does trainees' self-evaluation of behavior have low correlation with trainees' supervisory-evaluation of behavior (C7 in Figure 3)?

RQ19: Does trainees' self-evaluation of results have low correlation with trainees' supervisory-evaluation of results (C8 in Figure 3)?

RQ20: Does non-trainees' self-evaluation of behavior have low correlation with non-trainees' supervisory-evaluation of behavior (C9 in Figure 3)?

RQ21: Does non-trainees' self-evaluation of results have low correlation with non-trainees' supervisory-evaluation of results (C10 in Figure 3)?

As both sales supervisors and trainers are in the same position of providing more objective measures than the inflated evaluations by the trainees, a low correlation is expected to take place between the trainer's evaluation to trainees and the trainees' inflated evaluations for themselves. Consequently, four additional research questions are recommended to be examined:

RQ22: Does the trainees' reaction to the program have a low correlation with the trainer's evaluation of the trainees (C1 in Figure 3)?
RQ23: Does the trainees' learning evaluation have a low correlation with the trainer's evaluation of the trainees (C2 in Figure 3)?

RQ24: Does the trainees' self-evaluation of behavior have a low correlation with the trainer's evaluation of the trainees (C3 in Figure 3)?

RQ25: Does the trainees' self-evaluation of results have a low correlation with the trainer's evaluation of the trainees (C5 in Figure 3)?

Conversely, a high correlation is expected to take place between the evaluations performed by the sales supervisor and the trainer for every trainee.

RQ26: Is the trainees' supervisory-evaluation of behavior highly correlated with the trainees' evaluation by the trainer (C4 in Figure 3)?

RQ27: Is the trainees' supervisory-evaluation of results highly correlated with the trainees' evaluation by the trainer (C6 in Figure 3).

In conclusion, examining all the twenty seven proposed research questions helps in judging the feasibility of the proposed sales training evaluation model as a system.
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APPENDICES
Appendix A: The Training Program
Evaluation Forms (filled by every trainee at the end of the program)
THE TRAINING PROGRAM EVALUATION FORM

Please evaluate the training program according to the following scale:

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1- Usefulness</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2- Training Topics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- Training Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Training materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5- Training Techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6- Trainer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7- Training Aids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8- Relationship w/ other Trainees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9- Relationship w/ the Trainer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10- Training Schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total ........* 2 = ......%
THE TRAINING TOPICS USEFULNESS

Name: .................................................................

1- THE TRAINING TOPICS EMPHASIZED IN THE PROGRAM WERE:
A) Better than I expected ( )
   Same as I expected  ( )
   Less than I expected ( )
B) Very important and related to my job ( )
   Important to some extent  ( )
   Not important  ( )
C) Mostly recent  ( )
   Somewhat recent  ( )
   Mostly old and not recent  ( )
D) helped me solve my sales problems  ( )
   helped me to some extent solve my sales problems  ( )
   did not help me solve my sales problems  ( )
E) helped me solve my non-sales problems  ( )
   helped me to some extent solve my non-sales problems  ( )
   did not help me solve my non-sales problems  ( )

2- THE ADDITIONAL VALUE OF INFORMATION GAINED THROUGH EACH OF THE FOLLOWING TRAINING TOPICS:

<table>
<thead>
<tr>
<th>The Training Topic</th>
<th>The Information Value Added (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- JOHARI Window</td>
<td></td>
</tr>
<tr>
<td>2- The Introductory Skills &amp; Handling Objections</td>
<td></td>
</tr>
<tr>
<td>3- The Ten Recommendations in Sales</td>
<td></td>
</tr>
<tr>
<td>4- The Selling Steps</td>
<td></td>
</tr>
<tr>
<td>5- The Promotion and Presentation Skills</td>
<td></td>
</tr>
<tr>
<td>6- The Scientific Selling Methods</td>
<td></td>
</tr>
<tr>
<td>7- The Sales Behavioral Skills</td>
<td></td>
</tr>
<tr>
<td>8- How to Prepare for a Successful Selling Day?</td>
<td></td>
</tr>
<tr>
<td>9- The Major Reasons for Sales Failure</td>
<td></td>
</tr>
<tr>
<td>10- What I don't Like in the appearance/behavior/attitude of salespeople</td>
<td></td>
</tr>
</tbody>
</table>

Total/ Average .................................. / ........
Appendix B: The Self-Evaluation Form
(filled by every member of both the experimental and control groups)
THE SELF-EVALUATION FORM

<table>
<thead>
<tr>
<th>Name: ...................................................................</th>
<th>Job Title: .........................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE EFFECTIVE SELLING POINTS</td>
<td>PRE-TEST (BEFORE TRAINING)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>1- Achieve profitable actual sales exceeding the sales targets</td>
<td></td>
</tr>
<tr>
<td>2- Help in increasing the company market share</td>
<td></td>
</tr>
<tr>
<td>3- Help in decreasing the sales expenses with keeping satisfied customers</td>
<td></td>
</tr>
<tr>
<td>4- Effective time management</td>
<td></td>
</tr>
<tr>
<td>5- Help in decreasing the discount rates accompanied by sales increase</td>
<td></td>
</tr>
<tr>
<td>6- Efficiency in closing</td>
<td></td>
</tr>
<tr>
<td>7- A better planning of sales routing</td>
<td></td>
</tr>
<tr>
<td>8- Negotiation effectiveness</td>
<td></td>
</tr>
<tr>
<td>9- Decrease in the rate of complaints</td>
<td></td>
</tr>
<tr>
<td>10- Increase the Efficiency in handling objections</td>
<td></td>
</tr>
<tr>
<td>11- Relationship w/ customers</td>
<td></td>
</tr>
<tr>
<td>12- Relationship w/ key customer accounts</td>
<td></td>
</tr>
<tr>
<td>13- Relationship w/ peers</td>
<td></td>
</tr>
<tr>
<td>14- Relationship w/ subordinates</td>
<td></td>
</tr>
<tr>
<td>15- Relationship w/ supervisors</td>
<td></td>
</tr>
<tr>
<td>16- Building team spirit</td>
<td></td>
</tr>
<tr>
<td>17- Teamwork</td>
<td></td>
</tr>
<tr>
<td>18- Willingness to accept critics &amp; feedback</td>
<td></td>
</tr>
<tr>
<td>19- Maturity &amp; bearing responsibilities</td>
<td></td>
</tr>
<tr>
<td>20- Hard worker</td>
<td></td>
</tr>
<tr>
<td>21- Initiation</td>
<td></td>
</tr>
<tr>
<td>22- Creativity and innovation</td>
<td></td>
</tr>
<tr>
<td>23- Challenging personality with the sincerity in succeeding and growing</td>
<td></td>
</tr>
<tr>
<td>24- Credibility</td>
<td></td>
</tr>
<tr>
<td>25- Aggressive and a strong personality</td>
<td></td>
</tr>
<tr>
<td><em><em>Total (.....</em> 4)/ 5 = ..%</em>*</td>
<td></td>
</tr>
</tbody>
</table>

The grade out of 9 points, according to the following scale:

- Excellent
- Average
- (-) Needs Improvement

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Average</th>
<th>(-) Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

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Appendix C: The Trainer Evaluation Report
(filled by the trainer for each trainee)
THE TRAINER REPORT

The trainer evaluates each trainee based upon five criteria through using the following scale:

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Name of the trainee: .............................................

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Dedication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest in the Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship w/ other Trainees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship w/ the Trainer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>*4 = %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Appendix D: The Supervisory Evaluation Form (filled by the supervisor of every member of both the experimental and control groups)
# THE SUPERVISORY EVALUATION FORM

<table>
<thead>
<tr>
<th>Name: ................................................</th>
<th>Job Title: .............................</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Supervisor Name: ..................................</td>
<td></td>
</tr>
</tbody>
</table>

## THE EFFECTIVE SETTING POINTS

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Achieve profitable actual sales exceeding the sales targets</td>
</tr>
<tr>
<td>2-</td>
<td>Help in increasing the company market share</td>
</tr>
<tr>
<td>3-</td>
<td>Help in decreasing the sales expenses with keeping satisfied customers</td>
</tr>
<tr>
<td>4-</td>
<td>Effective time management</td>
</tr>
<tr>
<td>5-</td>
<td>Help in decreasing the discount rates accompanied by sales increase</td>
</tr>
<tr>
<td>6-</td>
<td>Efficiency in closing</td>
</tr>
<tr>
<td>7-</td>
<td>A better planning of sales routing</td>
</tr>
<tr>
<td>8-</td>
<td>Negotiation effectiveness</td>
</tr>
<tr>
<td>9-</td>
<td>Decrease in the rate of complaints</td>
</tr>
<tr>
<td>10-</td>
<td>Increase the Efficiency in handling objections</td>
</tr>
<tr>
<td>11-</td>
<td>Relationship w/ customers</td>
</tr>
<tr>
<td>12-</td>
<td>Relationship w/ key customer accounts</td>
</tr>
<tr>
<td>13-</td>
<td>Relationship w/ peers</td>
</tr>
<tr>
<td>14-</td>
<td>Relationship w/ subordinates</td>
</tr>
<tr>
<td>15-</td>
<td>Relationship w/ supervisors</td>
</tr>
<tr>
<td>16-</td>
<td>Building team spirit</td>
</tr>
<tr>
<td>17-</td>
<td>Teamwork</td>
</tr>
<tr>
<td>18-</td>
<td>Willingness to accept critics &amp; feedback</td>
</tr>
<tr>
<td>19-</td>
<td>Maturity &amp; bearing responsibilities</td>
</tr>
<tr>
<td>20-</td>
<td>Hard worker</td>
</tr>
<tr>
<td>21-</td>
<td>Initiation</td>
</tr>
<tr>
<td>22-</td>
<td>Creativity and innovation</td>
</tr>
<tr>
<td>23-</td>
<td>Challenging personality with the sincerity in succeeding and growing</td>
</tr>
<tr>
<td>24-</td>
<td>Credibility</td>
</tr>
<tr>
<td>25-</td>
<td>Aggressive and a strong personality</td>
</tr>
</tbody>
</table>

---

**Total (......* 4)/5 = ....%**

The grade out of 9 points, according to the following scale:

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Average</th>
<th>Needs Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>---------</em></td>
<td><em>---------</em></td>
<td><em>---------</em></td>
</tr>
<tr>
<td>9-5-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: The Demographic Profile
(filled by every member of both the experimental and the control groups)
THE DEMOGRAPHIC PROFILE

Name: ...................................................... Job Title: ........................................

Factory: ................................................... Sales Territory: ..............................

Educational Level: .................................... From: ............................................

Job Title when first hired in the Company: ................................

Hiring date: ................................. Age: ..........................

Name of your Supervisor: ..............................................................

Name of your supervisor’s boss: ..................................................

Job Titles of your subordinates: ........................ Number of Subordinates (...)

...................................................... Number of Subordinates (...)

Total Years of Experience (......): 

- Inside the company (......)  - In sales (......)

- Outside the company (......)  - Fields ...................................................

My Previous Training:

<table>
<thead>
<tr>
<th>Year</th>
<th>Duration</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>......</td>
<td>..........</td>
<td>........</td>
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<td>......</td>
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</tr>
</tbody>
</table>

Signature: .................................

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