DESIGNING AN EFFECTIVE TRAINING PROCESS A CASE STUDY AT SOHAR DEVELOPMENT OFFICE SUTANATE OF OMAN

KHADEEM ALI AL-OMRANI

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#### ABSTRACT

Sohar Development Office (SDO), in the Sultanate of Oman, has invested time and resources on administrative training. Seemingly, this study explores the extent to which the seven conditions for a training process are being implemented at SDO so as to make the training effective. It specifically examines the relationship between the seven conditions which represent the independent variables and the training process. This research employed both quantitative and qualitative techniques, a questionnaire and an in-depth interview employing items that attempt to identify the respondents' perceptions of training. The seven conditions are needs assessment analysis (NA), readiness for training (RT), the learning environment (LE), transfer of training (TT), evaluation plan (EP), training method (TM) and monitoring and evaluation of training (ME). Based on regression analysis, NA, RT, EP, and TM are significantly related to effective training process while LE, TT and ME are not significant, thus confirming an earlier assumption that a poor traditional training design tends to thwart innovation and change. The study finally recommends an improved training process, with an action plan to overcome the deficiencies, among them include an improved job description that defines the job in terms of its purposes, key functions, and required tasks and competences that are necessary to carry it out. The study equally proposes that future research should look into the socio-cultural factors that impact training processes in the designing of effective training programmes. The investigation equally highlights the importance of on-the-job training, as a less costly and more effective alternative to off-the-job training, technical training, and e-training in matching high-end information technological tools such as modelling, instructions, and repairs.

Keywords: Needs Assessment Analysis, Training Design, Training Process.

### ABSTRAK

Pejabat Pembangunan Sohar (SDO), di Kesultanan Oman, telah membuat pelaburan masa dan sumber untuk latihan pentadbiran. Sehubungan dengan itu, kajian ini meninjau sejauh mana tujuh kondisi proses latihan, yang sedang dilaksanakan di SDO dapat membantu meningkatkan keberkesanan latihan. Kajian ini akan meneroka hubungan di antara tujuh kondisi latihan yang berfungsi sebagai pembolehubah bebas terhadap keberkesanan latihan. Kajian ini menggunakan teknik kualitatif dan kuantitatif di mana ia melibatkan penggunaan boring soal selidik dan temu bual menggunakan item-item untuk mengenal pasti persepsi responden terhadap latihan. Tujuh syarat tersebut ialah analisis keperluan penilaian (NA), kesediaan untuk latihan (RT), persekitaran pembelajaran (LE), pemindahan latihan (TT), rancangan penilaian (EP), kaedah latihan (TM) dan pemantauan dan penilaian latihan (ME). Berdasarkan analisis regresi, NA, RT, EP, dan TM mempunyai hubungan yang signifikan terhadap keberkesanan latihan manakala LE, TT dan ME adalah tidak signifikan. Hasil kajian ini mengesahkan andaian awal yang mengatakan bahawa corak perancangan latihan yang tradisional adalah cenderung untuk menolak inovasi dan perubahan. Hasil kajian akhirnya mencadangkan proses latihan yang lebih baik, dengan pelan tindakan untuk mengatasi kekurangan tersebut, di antaranya adalah menambahbaik deskripsi kerja terutama dari segi tujuan, fungsi utama, dan tugas-tugas dan kecekapan yang diperlukan untuk melaksanakannya. Kajian ini juga mencadangkan agar kajian akan datang meneroka faktor-faktor sosiobudaya yang memberikan kesan terhadap proses-proses latihan. Kajian ini juga cuba mengenengahkan latihan di tempat kerja sebagai alternatif yang lebih murah dan lebih berkesan berbanding latihan di luar tempat kerja, latihan teknikal, dan e-latihan bagi menyesuaikan dengan perubahan teknologi maklumat.

Katakunci: Analisis Keperluan Penilaian, Proses Latihan, Reka Bentuk Latihan

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# **ABBREVIATIONS**

GIS:	Geographical Information System
IPA:	Institute of Public Administration
ISD:	Instructional Systems Development
IT:	Information Technology
LSC:	Legal Services Commission
MCS:	Ministry of Civil Service
MSC:	Manpower Service Commission
NIOSH:	National Institute for Occupational Safety and Health
NVQ:	National Vocational Qualifications
PDO:	Petroleum Development Oman Company
PJDP:	Pacific Judicial Development Program
RO:	Rial Omani
SDO:	Sohar Development Office
SEPO:	Systems Engineering Process Office
SPSS:	Statistical Package for Social Sciences
TD:	Training Department
TIER:	Training Interventional Effectiveness Research

#### PREFACE

Khadeem Ali Dhahi Al-Omrani is a Civil Engineer. Right after his graduation from the University of Wales —College of Cardiff— UK in June 1991 he joined the Water and Landscaping Department of SDO, which falls under the jurisdiction of the Diwan of the Royal Court, as an Area Engineer. His duties involve looking after technical issues such as house water connection work, water wells drilling, pumps installations, projects supervising, projects implementation, preparing BOQs, selecting materials, as well as maintenance works. In 1997 the above Department split into the Water Department and the Landscaping & Gardening Department. At the same time he was appointed both as Deputy Director of the Water Department, which added administrative work to his responsibilities, and as an Engineer at the Landscaping & Gardening Department looking after technical issues such as irrigation pumps installation, landscaping maintenance, project supervision, preparing BOQs, planning projects, selecting materials as well as other administrative duties.

In February 2004, he registered for an MBA at his own expense at the School of Business, University of Hull, UK and graduated in July 2006. In June 2006 he was appointed Director of the Water Department and Supervisor for the Landscaping & Gardening Department. He is equally a member of the following committees: the Tender committee, the Technical committee, the Projects Supervision committee, the Five-Year Planning committee, the Human Resource Development committee, the Advance Metering Infrastructure committee within the Public Authority for Water and Electricity", the Industrial States Water Study committee within the Industrial States Authority. He is equally heads the Social Housing Committee in SDO, and co-headed the study and building of several dams in the Sohar Area within the Regional Municipalities and Water Resources.

In June 2008, he registered for a PhD at his own expense at the Faculty of law Government and International Studies, University Utara Malaysia.

#### CHAPTER ONE

#### INTRODUCTION

#### **1.1 INTRODUCTION**

In today's environment of increased accountability, training becomes part of a global organizational management. Organizations administrating the training programme are not only accountable for what employees learn, they also are accountable for ensuring that employees transfer their knowledge to their work performance reducing by so doing the employees complaint that they are not offered the opportunity to handle new technology. But the high costs of training and development led some organizations to disregard training for their employees. Other organisations, however, have no choice but to send their employees to training. For many years the field of training adopted a conventional trainer-centered approach whereby the trainer represents the focal point around which the entire training process revolves, while learners were relegated to a passive role. However, the field is undergoing many rapid changes in an effort to adapt to an ever changing world and galloping technology. To meet these challenges, new learning process and methods are devised to cover what have become essential workrelated skills, techniques and knowledge. However, to be achieved, these changes have to be followed by an evolution in corporate attitudes and expectations about what 'training' is, a not so easy task in the light of the inertia affecting most organizations' perception of 'training', a perception that typically confines training to work skills.

Training and efficiency are directly proportional. When trained appropriately, employees are able to perform more efficiently. Conversely, an institution that has little

money to spend on training and bad training facilities will get poor training and will have poor efficiency. All companies and public and private organizations are therefore looking for effective training that can improve the individual, the team and the overall corporate performance at a minimal costs. Appropriate training is known to directly affect quality, speed and overall productivity, and to improve operational flexibility by extending the range of skills possessed by employees (multi-skilling). It equally attracts high-quality employees by offering them learning and development opportunities, and increases their competence levels and enhances their skills, thus enabling them to obtain more job satisfaction and gain higher rewards and upward mobility within the organization. It increases the commitment of employees by encouraging them to identify with the mission and objectives of the organization. It helps to manage change by increasing the understanding of the reasons for change and providing people with the knowledge and skills they need to adjust to new situations. Finally, it helps develop a positive culture in the organization and provide higher levels of service to customers.

Training is costly but it pays off. The following examples are meant to illustrate the costs involved in training. During 1970s and 1980s, IBM spent \$2 billion per year on training to make it effective, which partly explains how IBM became a leader in its field. Similarly, Dell spends \$80 million on training. In 2005, the Petroleum Development Oman Company had a total investment cost of \$7.3 million on training. This allowed it to be recognized as the best organization and to provide the required oil production to cover the budged of development projects and recurring budgets for the Sultanate. Each year, McDonald trains almost 55,000 employees and dedicates over 10 million pounds

(\$18,200,000) to ongoing employee training, providing people with valuable skills. According to the LSC's National Employer Skills Survey, and the CIPD's L&D Survey, training spent per employee in the UK in 2007 was £1,500, up 11% from 2005's £1,355.

SDO departments were created in early years of the 1980s, they were filled with unskilled, untrained and unprepared Omani civil servants with the majority having only the basic literacy skills as a qualification. At the time, training was not provided or even heard of, simply because no training department existed in SDO. Initially, some nationals were sent abroad for training, and others had to rely on the goodwill of their expatriate colleagues for support and assistance. As the number of SDO departments began to increase, and for want of skilled Omani manpower, the management of SDO had no alternative but to rely more on foreign expertise in order to reduce chaos and complete the necessary infrastructure. However, it was not before long that an urgent need was felt to establish professionalism, meet the rising needs for trained nationals, and control a situation that had become increasingly chaotic.

Early in 1994, a decision was made to establish the training Department (TD). By 1997, the first phase of the TD was completed, and it became functional under the jurisdiction of the Diwan of the Royal Court. As specified in its founding text, the duties of the newly created department include:

- a) Improving the performance standards of SDO's civil servants through designing and providing general training and education courses aimed at attaining modern administrative skills and procedures
- b) Carrying out studies and empirical research on the operations and practices of existing SDO Departments and diagnose area of malfunction, thus providing the remedies necessary for more effective management and performance
- c) Providing SDO Departments with the consultation and advice they require or need in the area of public administration
- d) Conducting seminars, national symposiums and panel discussions aimed at raising awareness and addressing issues pertaining to administrative training and its future developments and challenges

Building strong and close ties between the TD and IPA and similar institutions so

as to enrich and consolidate the TD's professionalism and experience (TD

Records 2007)

The first step taken by the TD was to establish six training units for public administration, financial administration, personnel administration, clerical training, English language, and documentation.

Over a period of fourteen years, the TD's activities have witnessed a rise from a humble beginning with a limited number of personnel and barely adequate training facilities to modern facilities and equipment and an increased number of administrative staff and trainers. Given the training budget constraints and the fact that SDO pays for training services, one would expect SDO to be more careful in identifying needs, planning training and evaluating it in terms of its value, effectiveness and outcomes. According to TD, SDO spent US\$6,348,663 on training between 2004 and 2013 (Table 1.1).

The impact training has, both as a process and a product, can be measured from four different perspectives, along the lines outlined in Kirkpatrick, D. (1967) which follow Kirkpatrick's learning and training evaluation theory (the four levels of learning evaluation) that were initially introduced in 1959. The first perspective is "reactions". It is measured immediately at the end of training to understand how well the training was received by participant and subsequently to improve the training for future trainees. The second perspective is "learning", to measure what trainees have learned, how much their knowledge has increased as a result of the training. This is equally meant to help improve future training. The third aspect to evaluate is "behavior", or the extent to which trainees have changed their behavior, based on the training they received. Finally, we have "results", to analyze the effects of training on the organization and employees.

This study addresses the condition in which training can be delivered effectively at Sohar Development Office (SDO). It is believed that in order for training to be effective and successful, it must satisfy seven conditions (Noe, 2008). Therefore, this model is selected for the present study. It covers all stages before training, during and after, its variables are shown below:

- Needs assessment analysis (NA): this includes organisational analysis, person analysis and task analysis.
- Readiness for training (RT): this includes attitudes, motivation and basic skills.
- The learning environment (LE): this involves learning objectives, meaningful materials, practice, feedback, community of learning, modelling and programme administration.
- Transfer of training (TT): this includes self-management, and peer and manager support.
- Evaluation plan (EP): this includes identifying learning outcomes, choosing an evaluation design, plan and cost-benefit analysis.
- Training method (TM): this involves the choice between traditional learning and e-learning.
- Monitoring and evaluation of training (ME): this includes conducting evaluation and changes to improve the programme.

From this perspective, one legitimate issue arises: given the alarmingly disappointing outcomes of administrative training at SDO, it would be logical to argue that the requirements for successful training might not have been met, whether in their entirety, or in part. This is the question the present study attempts to explore.

#### **1.2 PROBLEM STATEMENT**

SDO has already spent huge amount of money on employees (Table 1.1) and more expenses are expected to be incurred in order for its employees to achieve adequate knowledge. As it can be seen from Table 1.1, the cost of training has been on the increase, except for the years 2005, 2006 and 2013.

Description				
Year	No. Of Training Programmes	No. of Trainee	Cost US (\$)	Cost US(\$)/Trainee
2004	12	189	116742	617.683
2005	13	125	67085	536.680
2006	12	140	102598	732.843
2007	18	185	117525	635.270
2008	19	200	140425	702.125
2009	17	250	152530	610.120
2010	20	280	174500	623.214
2011	22	350	206350	589.571
2012	26	400	280764	701.910
2013	23	360	215729	599.247
Total	182	2479	1,574,248	6,348,663

Table 1.1: Training Record

Source: SDO, TD

Based on the initial investigation and primary study, the focal point of administrative training at SDO is what has come to be known as the 'Master Training Plan". Accordingly, the Training Department (TD) issues SDO departments every year, usually in May, with a circular requesting them to identify areas where training for the subsequent year is thought to be required. Plans, which also include cost estimates and lists of nominees, are presented to the TD within a specified period of time. These are then scrutinised by a joint committee of the TD and the SDO officials. Deliberations of the committee result in a general training plan. Subsequent to this stage, the design and implementation of training become the responsibilities of the TD. Needs assessment (NA)

According to a primary study with the Training Department Director, TD regularly requests SDO departments to participate in the drawing of the plans. Though intrinsically correct, the process heavily relies on the ability of these departments to identify their training needs. Consequently, selecting and identifying training needs become almost exclusively the responsibility of direct managers and supervisors.

According to the initial investigation, the training programmes on offer in the master training plan are designed solely by trainers without any coordination or consultation with other departments. This may entice trainers to resort to readily available programmes. Plans are flawed at different levels: first, the training plan is not integrated into organisational training policies or strategies as these do not exist in the first place. Second, the plan is not based on the specific needs of individuals or organisations. Finally, the TD is not involved in the trainee selection process. This is confirmed by the fact that no contact between the organisation and trainees is established before the training programme is started.

Because of the above issues, the initial condition of needs assessment is not fulfilled, which leads to the following flaws:

- a) Training is incorrectly used as a solution to a performance problem.
- b) The training programmes do not have the adequate content, objectives, or method.
- c) Trainees are sent to training programmes for which they do not have the basic skills, or confidence needed to learn.

- d) Training does not deliver the expected learning, or yield the projected behaviour change.
- e) The money spent on training programmes is wasted.

#### Readiness for training (RT)

Not much is mentioned in the TD publications about how trainees are prepared for training. This means that the second condition is almost non-existing. There is no consideration for personal characteristics (ability, attitudes, beliefs, and motivation) which are necessary to absorb programme content and apply it on the job. Finally, TD does not seem to inform trainees about the training programmes, and when it does, this usually happens at a short notice, which does not enable trainees to prepare and make themselves ready for the training.

#### Learning environment (LE)

According to the initial study with TD, not enough facilities are available and there are no proper training halls. Besides, the training staff is limited in number compared to the huge amount of work required. The learning environment can therefore be qualified as unpredictable and highly variable.

#### Evaluation plan (EP)

Based on the initial investigation, the evaluation process has been the same over the years. Immediately after the training programme, trainees are required to fill in questionnaires consisting of closed and open-ended questions aimed at gauging the participants' reactions towards trainers and the training program. However, the fact that most programmes have retained their shape over the years only indicates that feedback has always been positive and that the subjective assessment of trainees is taken as a reliable measure for success. There are no pre-training tests, and as such, it is difficult to identify improvements or changes in the trainees' knowledge, skills and attitudes that might have occurred as a result of training.

#### Training method (TM)

Since the required facilities are limited, the following points will not be achieved satisfactorily, i) providing opportunities for trainees to practice and receive feedback, ii) offering meaningful training content, iii) identifying any prerequisites that trainees need to successfully complete the programme and, iv) allowing trainees to learn through observation and experience.

#### Transfer of training (TT) and monitoring and evaluation of training (ME)

According to the primary study with the director of TD, the end of the training marks the end of the relationship between the training department and trainers on the one hand, and the concerned departments and trainees on the other. From then on, the training event is considered completed, and trainers are not required to follow up training. On their part, trainees are not usually required to report to their managers or supervisors on their achievement, though brief and occasional post-training meetings take place. In fact, due to vagueness in organisational goals and to the absence of an agreed upon job description system, it is difficult to establish what trainees have learnt and whether it is suitable or not. As such, observing the employees' behaviour on the job becomes the only means to establish what knowledge, skills and attitudes have been

acquired as a result of training, and accepting or rejecting any changes in work behaviour is a matter left to the manager. However, it is argued here that not all managers are qualified or supportive, and not all work environments are favourable. Conditions six and seven are therefore not followed.

#### **1.3 RESEARCH QUESTIONS**

The following questions need to be addressed.

- 1. To what extent is the training process at SDO effective?
- 2. What are the critical conditions for effective training process?
- 3. What can be recommended to improve the existing training process at SDO?

#### **1.4 OBJECTIVE OF THE STUDY**

- 1. To explore the extent to which the seven conditions for an effective training process are being implemented at SDO.
- 2. To examine the relationship between the seven independent variables and an effective training process.
- 3. To recommend an improved training process.

#### **1.5 SCOPE OF THE STUDY**

This study looks specifically at the issue of designing and establishing an effective training process at SDO. SDO is a special organisation created by a Royal Decree to plan and develop the Willayat (governorate) of Sohar. It consists of a number of departments each representing a ministry. Thus, the Water Department for instance represents the Ministry of Water and Electricity, and the Land Affaires Department

represents the Ministry of Housing. This specificity of SDO implies that the study cannot be generalized to other organisations.

In order for training to be effective and successful, the following conditions must be satisfied: needs assessment analysis (NA), readiness for training (RT), learning environment (LE), transfer of training (TT), evaluation plan (EP), training method (TM) and monitoring and evaluation of training (ME). From this principle, and in view of the brief overview undertaken above, one legitimate issue arises: it would be logical to argue that the requirements for successful training might not be met, whether in their entirety, or in part. This is the question the present study attempts to answer. The first phase of the fieldwork, which was the quantitative data through questionnaires, was administered from September to October 2009. The second phase of the field-study, which handled the qualitative data, was equally conducted over the same period of time.

### **1.6 SIGNIFICANCE OF THE STUDY**

This study will help to understand how training has been conducted, and to agree on criteria against which these current practices can be judged. This should enable us to identify the gap, and propose the necessary solutions. In doing this, the study will explore the extent to which the seven conditions for effective training process are being implemented at SDO, and examine the relationship between independent variables (needs assessment analysis, readiness for training, learning environment, transfer of training, evaluation plan, training method and monitoring and evaluation of training) and the dependent variable (effective training process). Ultimately, the study will recommend an improved training process that follows the seven training steps.

#### **1.6.1 Theoretical Contribution**

It comes as no surprise that the investigation of such a field is almost nonexistent since the literature for Middle-East Countries is very limited. The work undertaken by Mehdi Ahmad Jaafar (1990) within the framework of a PhD dissertation represents an exception. Jaafar's effort bears the marks of a pioneering work. With the quick pace of development in the Sultanate of Oman, Jaafar's comprehensive work (undertaken over twenty years ago) requires a more in-depth, micro, scrutiny of the situation. Because of that, this research represents a replicate with some modifications inspired from Noe (2008). Therefore, the contribution represents an improvement over the model it is following. Noe's model is widely used as a universal model for training design. From this perspective, the study will find out whether this model is viable in the Middle East context and more particularly in the Sultanate of Oman. The present investigation initially focuses on one specific training institution; SDO. With this focus, it is thought that the attention given to a local context should yield results that better match the specificities of this area and would not of necessity be applicable to other contexts in the country. The second major aspect of the present work is its perspective. Instead of being exploratory, beginning with an investigation of the effectiveness of the training scene, it starts rather from the premise that training in SDO suffers from a number of deficiencies and tries to explore the reasons that lead to this situation and ultimately to offer some remedies.

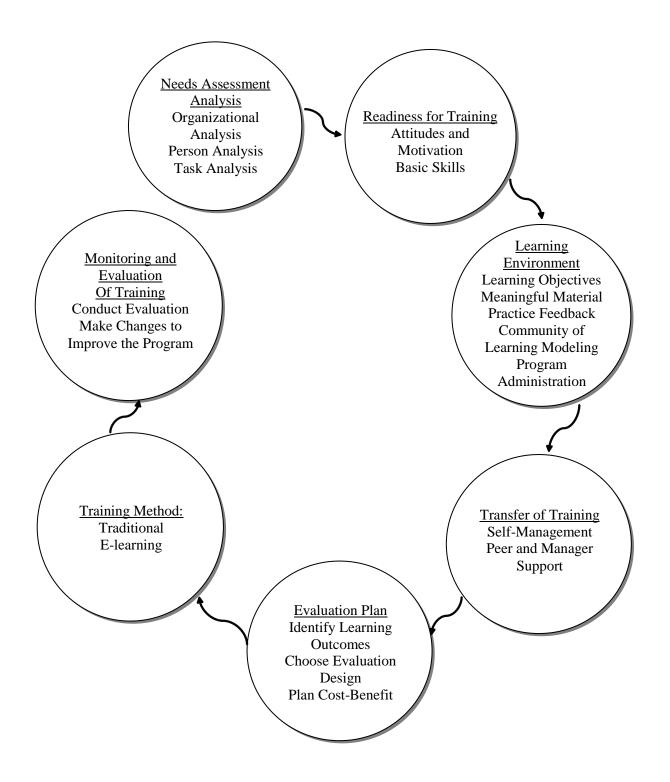
#### **1.6.2 Practical Contribution**

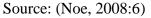
Focusing on the issue of training and the different shapes it can take, we can see that it can be conducted on the job via a training professional, or through coaching under the Manager or the Supervisor. It can also be carried out off-the-job in a specialized training institution. In our case, training on the job via a training professional is ruled out due to costs. At the same time, SDO lacks internal trainers and qualified training officers. Further, most managers and supervisors are not equipped in terms of skills, knowledge and qualifications to coach their employees or develop a learning culture. This may explain why most Managers opt for the off-the-job training alternative. Once these Managers develop themselves and their employees, they will be able to fetch for themselves and seek the right, effective and less costly alternatives. After all, it is for this same purpose that the TD was established. Yet, after many years in service, all that SDO has been able to provide is general training programmes that have failed to establish the aspired training culture or administrative skills in many of its departments. In order for SDO to develop and improve its services, it needs to respond to social and technological challenges in a timely and flexible manner. In other words, it needs to develop the skills, knowledge and attitudes of its employees through training. However, unless off-the-job training practice is effective, the declared targets and aspirations will remain only partially met.

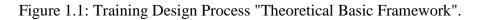
#### **1.7 THEORETICAL BASIC FRAMEWORK**

As will be discussed in Ch.3, the theoretical basic framework shown in figure 1.1, and which is directly derived from Noe (2008), can be adopted for our discussion. It

is a seven-step model known as the training design process. With its seven stages, it is detailed enough to ensure the appropriate coverage of the necessary training steps. The fact that there is no feedback between stages does not imply that interaction is rejected in this theoretical framework. On the contrary, it is believed here that this interaction is necessary and should be an inherent aspect of the implementation of the model without having to be indicated in the diagram.







## **1.8 OPERATIONAL DEFINITIONS**

Operational definitions are summarized in table 1.2 below.

No.	Variables	Description
1	Needs Assessment	• NA is an analysis spanning the organization, the individual and the tasks involved.
	(NA)	• NA helps direct resources to areas of greatest demand.
		• It helps identify the "gap" between the required performance and the current one.
		• It helps evaluate the level of organizational performance.
		• It helps alleviate the problems and weaknesses of the organization as well as enhance strengths and competencies.
		• It contributes to the identification of how well an individual employee is doing a job.
		• It determines an individual's capacity to perform new or different tasks.
		• It help the training designer describe how learners should be able to think and perform at the end of the training.
2	Readiness for Training	• RT focuses on attitudes and motivation. It is is a measure of employees' awareness of the purpose of training, such as training is meant to improve performance rather than uncover areas of incompetence.
	(RT)	• Managers can equally provide the necessary information about the training program.
3	Learning Environment	• LE is a measure of the learning objectives, materials, implementation and management of learning.
	(LE)	• It helps give a clear direction for the training activities.
		• It helps assess trainees' motivation to keep them interested.
		• It helps develop and provide meaningful materials based on the learners' needs and background.

# Table1.2: Operational definitions

No.	Variables	Description
4	Transfer of Training (TT)	<ul> <li>TT refers to the effective and continual implementation of knowledge and skills acquired through training to the job.</li> <li>It is influenced by trainee characteristics and training design.</li> <li>It is enhanced by a support network among the trainees.</li> </ul>
5	Evaluation Plan (EP)	<ul> <li>EP refers to the identification of learning outcomes and the most appropriate evaluation design that corresponds to it.</li> <li>EP equally integrates a Cost-Benefit Analysis plan.</li> </ul>
6	Training Method (TM)	• TM refers to the methods used in the delivery of the training program. This is usually identified along a continuum between traditional methods and methods making use of modern-day technology as with E-learning.
7	Monitoring and Evaluation of Training (ME)	<ul> <li>ME is concerned with the effectiveness of instructional design which is monitored through conducting evaluation tools and making the necessary changes and improvements that emerge.</li> <li>It involves a clear understanding of the trainee characteristics that can influence training outcomes.</li> <li>It requires an understanding of the learning outcomes themselves and the conditions of transfer</li> </ul>

## Table 1.2 continued: Operational definitions

8	Effective Training Process	• ETP is a measure of the impact of training. This spans the full organizational range starting from of individual trainees. It focuses on issues such as:	
	(ETP)	• Does training improve an individual or a team?	
		• Does training improve overall productivity, and operational flexibility?	
		• Does training increase job satisfaction?	
		• Does training encourage employees to identify with the mission and objectives of the organization?	n
		• Does training develop a positive culture in the organization?	
		• Does training reduce complaints?	
		ETP must involve the following:	
		• Skillful and knowledgeable trainers	
		Proper trainee selection	
		Sufficient planning and time scheduling	
		• Use of effective training methods/techniques	
		Proper learning environment	
		• Use of an evaluation tool to assess the program and the strength and weaknesses of trainer/trainee	18

### **1.9 RESEARCH FRAMEWORK**

The proposed research model was adapted from training design process adoption (Noe,2008). The research framework consisted of construct like needs assessment, readiness for training, learning environment, transfer of training, evaluation plan, training method and monitoring and evaluation of training and effective training process. The research framework is provided below in figure 1.2 it depicts the Independent variable and the Dependent variable:

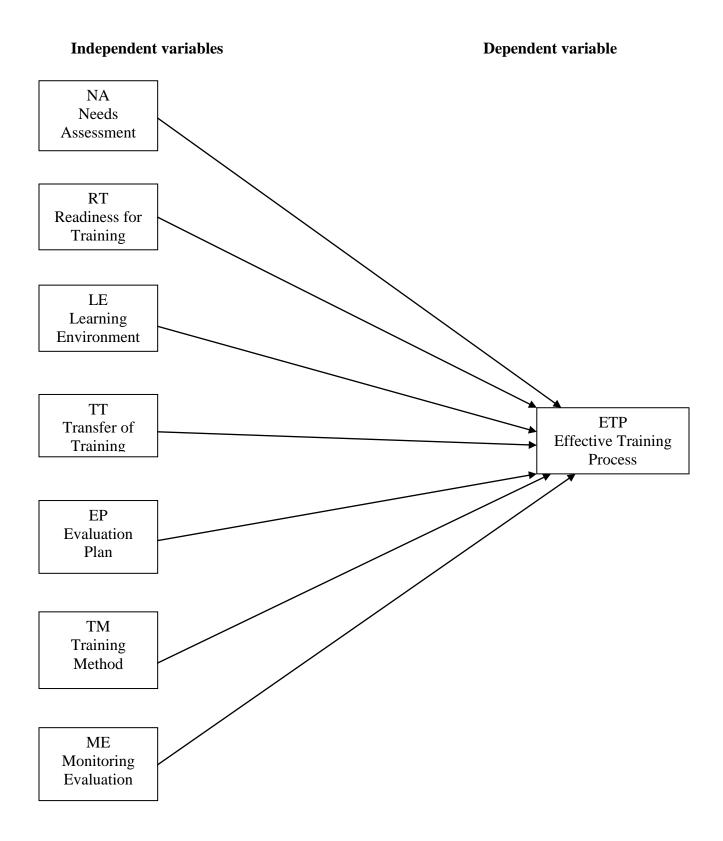


Figure 1.2: Research Framework

#### **1.10 HYPOTHESIS DEVELOPMENT**

This section addresses the independent variables (Needs Assessment Analysis, Readiness for Training, Learning Environment, Transfer of Training, Evaluation Plan, Training Method and Monitoring Evaluation) and their relationship with the dependent variable (Effective Training Process) within the research framework.

NA= Needs Assessment Analysis, RT= Readiness for Training, LE = Learning Environment, TT= Transfer of Training, EP= Evaluation Plan, TM= Training Method, ME= Monitoring Evaluation, ETP= Effective Training Process

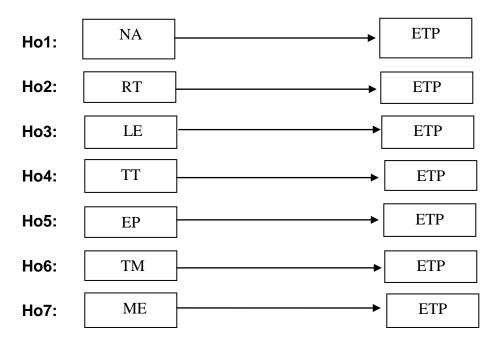


Figure 1.3: Hypothesis

#### 1.10.1 Hypothesis Statements

Ho1: Needs assessment analysis (NA) positively relates to the effective training process (ETP).

- Ho2: Readiness for Training (RT) positively relates to the effective training process (ETP).
- Ho3: Learning environment (LE) positively relates to the effective training process (ETP).
- Ho4: Transfer of training (TT) positively relates to the effective training process (ETP).
- Ho5: Evaluation plan (EP) positively relates to the effective training process (ETP).
- Ho6: Training method (TM) positively relates to the effective training process (ETP).
- Ho7: Monitoring evaluation (ME) positively relates to the effective training process (ETP).

#### **1.11 STUDY LIMITATIONS**

Training is a vast discipline with a long history and a well-established research tradition. It is a long process that requires meticulous planning in terms of resources, needs, design and evaluation. To be effective, it also requires motivated trainees, knowledgeable and dedicated trainers, and a supportive management. Therefore, claiming that a single study can adequately cover all issues involved in the training process is undoubtedly unrealistic. Rather, research would be of more value if different researchers concentrated on different aspects of the operation. Their combined efforts would then provide a more comprehensive, and coherent picture.

However, this type of approach, common in countries with well-established research traditions, is hard to apply in the Sultanate of Oman, where, apart from very few subjective and often incoherent studies (see Saleem, 1990), training remains an under-investigated and neglected field. Hence, rather than focusing on one single area, the present study purports to raise awareness as to the dangers of the current situation by highlighting existing problems and malpractices. Through identifying these problems, it is hoped that the way will be paved for the necessary research and investigation throughout the Sultanate to be undertaken.

# **1.12 CHAPTERISATION**

The present research consists of eight chapters. Chapter One introduces the topic and provides the rationale for the research. Chapter Two begins with general background information on the country. The task is then undertaken to depict a picture of the administrative machinery and administrative training practices in the Sultanate. In Chapter Three, the scene for the discussion will be set with an attempt to define training, which is taken here as the process of enhancing or changing one's skills, knowledge and attitudes, with the aim of improving job behaviour and organizational performance. This leads us to the question of what the process of training is and what it entails. In this study, the training cycle model will be taken as a practical guide to the complexities of the training operation. This by no means suggests that training is a linear and step-bystep process. Rather, the model will refer to a number of flexible, interrelated and interacting sub-processes that continue to influence each other as well as the outcomes before, during and after training. At the heart of the model lies the identification of the training needs process and determining where changes or improvements are required. Having considered different methods of identifying training needs, we will move on to examine training objectives that inform training design, delivery, and evaluation techniques.

Evidently, successful and effective training depends on people wanting to learn and change and on our ability to nurture that desire. This is equally discussed in this Chapter where we examine the motivational base for the reward strategy by briefly reviewing the works of some leading motivation theories. Other issues with direct impact on the trainee's level of motivation will be equally considered. These include: trainee's attitudes and characteristics, the selection process, the work environment, and the organisational culture. We equally look into the characteristics and attributes of a good trainer as a facilitator and one who is well versed in cognitive psychology and social learning theories. Closely linked to learning is the issue of training transfer. Hence, the chapter includes a section on the transfer of training models, the responsibility for transfer and the barriers to it. Training evaluation represents another issue of vital importance that will be considered. Here we will focus on the training value and effectiveness.

Chapter Four is concerned with the research methods that will be adopted in the study. It will begin with a general discussion of various methodological issues with a particular attention to qualitative and quantitative data collection methods and techniques, research validation and sampling. This will be followed by a description of data collection instruments which will be applied in the study, questionnaire and interview, and study sample. In Chapter Five, the questionnaire findings will be analysed. Chapter Six will analyse the interview findings. The questionnaire and interview findings will be discussed in Chapter Seven. In Chapter Eight the study will be concluded and the necessary recommendations will be made.

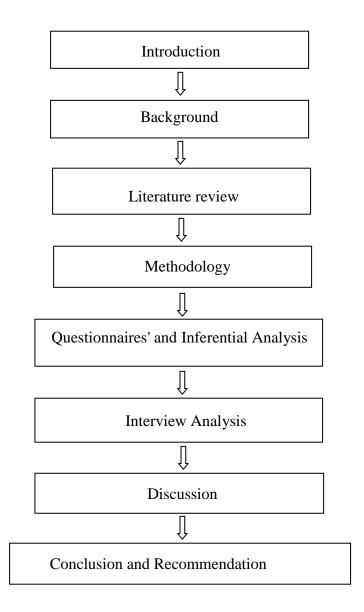


Figure 1.4: Chapterization

# **1.13 CONCLUSION**

In this chapter, it has been argued that in order for training to be effective and successful, the following conditions must be satisfied: appropriate identification of training needs, qualified and experienced trainers, motivated trainees, favourable learning environment, and supportive management. Also, the problem statement of administrative training practice in SDO has been looked into, beginning with the planning stage through to delivery and to evaluation and follow up. Then the research questions were addressed which are: How is administrative training at SDO perceived and planned? What role do trainers, trainees and managers play before, during and after the training process? What does effective training entail? And how effective is administrative training at SDO? The objective of the study was further explored into what, why and how. The conceptual framework of the study was introduced and explained in some detail. We have equally looked at the significance of the study and the study limitation. Finally the chapterisation was presented. The background of administrative training in Oman as well as in SDO will be looked into in the following chapter.

#### **CHAPTER TWO**

# BACKGROUND OF SOHAR DEVELOPMENT OFFICE

# **2.1 INTRODUCTION**

Identifying any problem requires a clear understanding of the situation. This is precisely the mission of the present chapter. The focus will be specifically on the Training Department at SDO, which is responsible for planning and delivering administrative training for the whole of SDO. An understanding of the internal functioning of the training department thus becomes a necessary component of the general goal of the present chapter. Before this undertaking, general background information on Sohar and SDO is provided below.

#### 2.2 BACKGROUND INFORMATION ON SOHAR

#### 2.2.1 Geography and Population

Sohar is located 250 km to the North of the Capital Muscat. It is surrounded by the towns of Saham, Khaborah, Yanqul, Al-Buraimi and Liwa, with a coastline on the Gulf of Oman (see Appendix 2 and Appendix 3). Sohar has a population of 180,000 (Ministry of National Economy, Census 2010).

## 2.2.2 Historical Background

Sohar is perhaps the oldest town thanks to which Oman, or Majan as it was called in the 3<sup>rd</sup> millennium B.C., was first known to the world. The history of the site of Sohar began over a hundred million years ago. At that time, the Arabian Peninsula was separated from the Indo-European continent (i.e. Iran and Pakistan of present day) by an ocean called "the Tethys", perhaps five or ten times wider than the present Arabian Gulf. After the land emerged from the sea, copper sulphides formed in the deep ocean weathered near the surface into copper carbonates and oxides. About 5000 years ago, the city's copper mines supplied the ancient civilisation of Sumer. Copper was transported overland to a city called Um Nar, better known today as Abu Dhabi (UAE), from where it was shipped abroad.

In the year 8 Hijri/ 630 A.D. Prophet Mohamad's Messenger Sahaabi Amr Bin Al-Aas arrived at Sohar starting the spread of Islam to all Oman. Since the advent of Islam and up to the 7<sup>th</sup> century Hijri/ 13<sup>th</sup> century AD, Sohar remained the richest and most active city of Oman. The roots of this prosperity can be traced back to the times when copper exploitation started. Agriculture equally continued to flourish in Islamic times. The markets of Sohar had an abundance of fruits and vegetables. Food-grains produced in excess, were even exported overseas. In the 16<sup>th</sup> and 17<sup>th</sup> centuries, the Portuguese considered the port vital for the control of the surrounding ocean and their trading routes with India.

# 2.2.3 Sohar at Present

The development of Sohar was slow until 1985 when Sohar Development Office was established. Appropriately enough, and given Sohar's seagoing tradition, regeneration started with a multibillion-dollar port that opened in 2004. The port, which is run by a joint venture between Oman's government and the port of Rotterdam, cost \$12 billion. Since the first commercial vessel arrived in 2004, developments in Sohar Industrial Port have included a \$2.4billion aluminium smelter, a \$750 million steel plant, a methanol plant, and many other projects.

With these developments all aspects of economy were boosted: real state, infrastructure, the standard of living. One of the latest developments is the airport project which will see the light in the near future. With a development rate higher than the average of the country, the city seems to be set to regain its former role as an economic pole in the region.

The city has become more cosmopolitan, with large numbers of expatriates who have come to work, either permanently or under limited contracts, hence the necessity to cater to their needs such as opening large supermarkets and schools for their children.

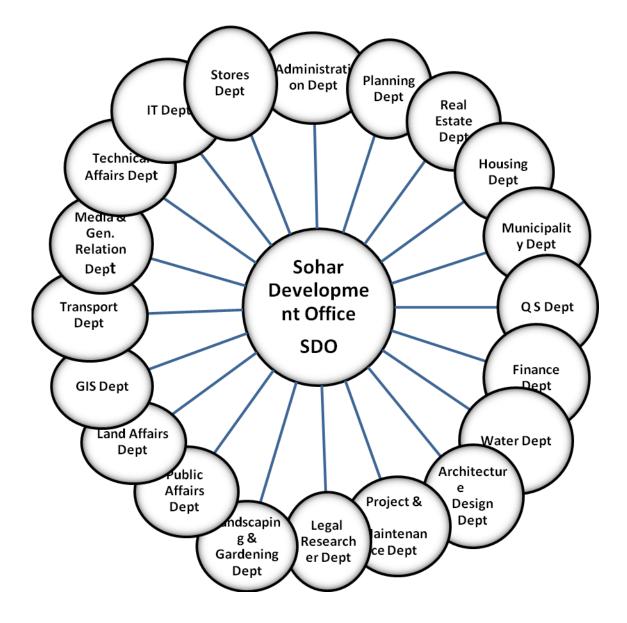
#### 2.3 SOHAR DEVELOPMENT OFFICE: AN OVERVIEW

SDO is a public institution with a special independent status. It was established owing to the immense care given by His Majesty Sultan Qaboos to the city of Sohar and its future. The establishment of SDO is in line with the supportive directive of His Majesty the Sultan expressed in the Royal Decree No. 11/85 which assigned the task of developing the city of Sohar under the care of the Diwan of the Royal Court, and the Royal Degree No. 67/1985 which authorized the establishment of SDO as the structure accountable for laying out the infrastructure plans required for a modern city. SDO consists of the following departments: Water, Municipality, Landscaping and Gardening, Land Affaires, Planning, Technical Affaires, Transport, IT, Geographical Information System, Public Relations, Finance, Quantity Surveying and Contracts, Training, Project, Administration, Designing, Housing, Media, and Real Estate. Each department is divided into sections and sub-sections and is autonomous in terms of management, budget, etc.

SDO enjoys a special independent status. Its management system is different from that adopted in the country's ministries. It is financially independent from the Finance Ministry as its incomes are recycled to finance its projects. SDO has in fact more magnitude than a mere office as its president has the status of a Minister.

The focus on SDO in the present work stems from the fact that during 22 years of service in this organisation the author of the present work has not witnessed any effectiveness in the training of SDO staff. Personnel, who are always reprimanded in case of fault, can only rely on self-development through experience and personal initiative. The present work is perhaps the most immediate illustration of this situation. Though representing an effort to develop first the abilities and performance of its author but equally, albeit indirectly, that of his staff and the institution he is working for, this thesis is self-financed. Figures 2.1 and 2.2 below show the SDO's Chart and an example for one of SDO's Departments Chart.

# **Diwan of Royal Court**



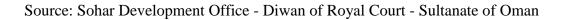
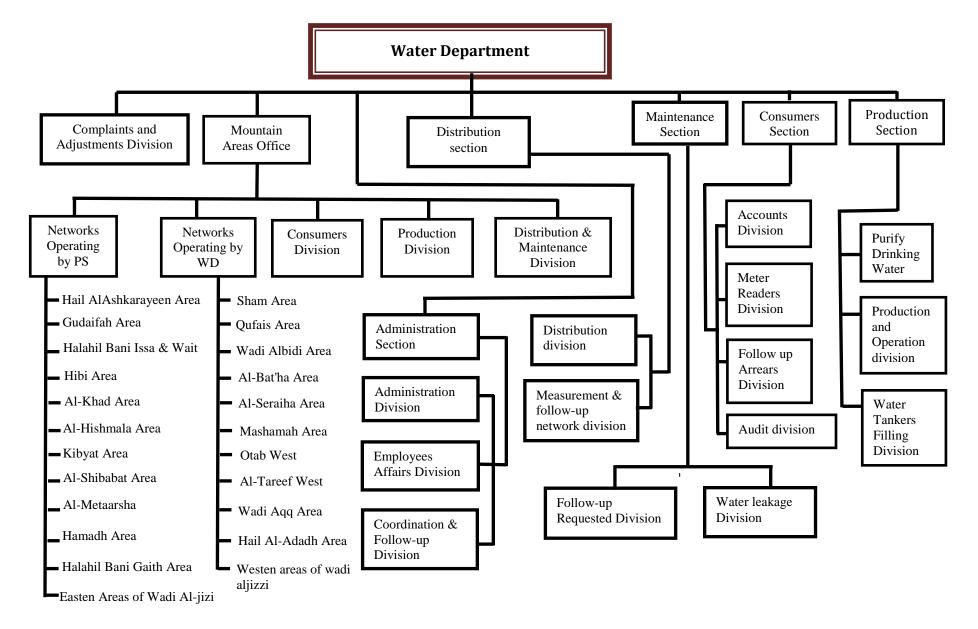


Figure 2.1: SDO Chart



Source: Sohar Development Office - Diwan of Royal Court - Sultanate of Oman Figure 2.2: Water Department's Chart

# 2.3.1 Financial Support

As a government authority, SDO bears the responsibility relative to the development and maintenance of infrastructure in the region. Financing projects is the responsibility of SDO. The Central Government provides the annual budget to maintain the staff and to implement projects while income generated by SDO is reinvested in the office's projects.

The development projects are planned over five-year periods and the government allocations are funded by the Ministry of National Economy, in order to commence the work as scheduled. SDO generates considerable incomes through providing services to citizen, such as real estate, land transaction, water supply, municipality work, etc.

Annual Budget	Year	Amount			
		R.O	US \$		
Allocation of the Ministry of National Economy	2007	3,638,405	9,450,402		
Income generated by the SDO	2007	6,850,541	17,793,613		
Allocation of the Ministry of National Economy	2008	4,298,111	11,163,924		
Income generated by the SDO	2008	9,089,033	23,607,878		
Allocation of the Ministry of National Economy	2009	5,650,000	14,675,325		
Income generated by the SDO	2009	11,805,450	30,663,506		
Allocation of the Ministry of National Economy	2010	7,340,550	19,066,364		
Income generated by the SDO	2010	8,745,675	22,716,039		
Allocation of the Ministry of National Economy	2011	3,032,000	7,875,325		
Income generated by the SDO	2011	9,085,975	23,599,935		
Allocation of the Ministry of National Economy	2012	5,898,000	15,319,480		
Income generated by the SDO	2012	9,575,540	24,871,532		
Allocation of the Ministry of National Economy	2013	6,528,000	16,955,844		
Income generated by the SDO	2013	10,356,780	26,900,727		

Table 2.1: SDO Annual Budget

Source: (SDO Yearbook 2007, 2008, 2009, 2010, 2011, 2012 and 2013)

The government's five-year development budget allocation for 2006 to 2010 consists of R.O.12,041,000 (US\$31,275,324) for water supply, R.O.8,000,000 (US\$20,779,220) for sewage network, R.O.1,300,000 (US\$3,376,623) for the construction of the new fish market, R.O.4,000,000 (US\$10,389,610) for roads, and for other small development projects and maintenance R.O.3,750,000 (US\$9,740,259 (SDO 5-year plan 2006-2010). The five-year development budget allocation for 2011 to 2015

consists of R.O.7,200,000 (US\$18701299) for water supply, R.O.16,800,000 (US\$43,636,363) for the sewage network and R.O.4,240,000 (US\$11012987) for roads (SDO 5-year plan 2011-2015).

#### 2.4 CONCLUSION

In this chapter, we looked into the administrative training practices in SDO, beginning with the planning stage through to delivery, evaluation, and follow up. As far as the present writer is aware, no studies on this issue have been conducted. To establish what goes on before, during and after training, attention was almost totally focused on the activities and practiced of the TD, the main administrative training provider at SDO. However, given the scarcity of literature on this matter, it would be an exaggeration to claim that the discussion has enabled us to formulate a clear picture. As such, it becomes necessary to determine what actually goes on in the real world through investigating those involved in the training operation: trainers, managers, supervisors and trainees. Towards this end, a series of interviews and questionnaires were conducted (Chapters 5 & 6). Put together, information derived from this introductory chapter, the interviews and the questionnaire should enable us to build a clearer picture of the situation. This will be judged against the conceptual framework introduced in the previous chapter Fig. 1.1.

# CHAPTER THREE

# **3.1 INTRODUCTION**

Identifying any problem requires a clear understanding of the situation. This was precisely the mission we attempted to undertake in the previous chapter. We looked into administrative training practices in SDO, beginning with the planning stage through to delivery, evaluation and follow up.

This chapter purports to review the underlying principles and to highlight the main issues of what are thought to be the cornerstone of the present research, namely the effectiveness of the training process which includes the seven variables; needs assessment, readiness for training, learning environment, transfer of training, evaluation plan, training method, monitoring and evaluation of training.

In the 1980s, the field of training witnessed a surge of interest in motivation theories that took over the classical focus on how to help trainees to enhance performance and acquire new skills (Baldwin et al., 1991; Campbell, 1988; Carlson et al., 2000; Goldstein, 1986; Harrison, 2000; Mathieu et al., 1992; Noe, 1986; Noe, 2008; Noe and Wilk, 1993; Tannenbaum and Yulk, 1992). In this chapter, some of the main motivation theories will be examined, and factors that influence motivation will be discussed. On their own, the identification of training needs and the coordinated efforts of trainers, managers and trainees do not guarantee effective training or successful transfer of learned skills and knowledge. What is required is a carefully designed programme to be delivered by an efficient trainer in a favourable learning environment. This issue is also the subject of this chapter.

## 3.2 The Training Process

Over the years, a number of models describing and analysing the training process have been proposed which mostly portray training as a cycle comprising a number of stages that usually begin with the identification of training needs and end with the evaluation of training effectiveness. The differences between these models are to be located at the level of the number of stages involved and the emphasis on one or the other of these. In the following overview, the models will be ordered from the simplest to the most intricate.

Kirkpatrick, D. L. & Kirkpatrick, J. D. (2006) refer to Kirkpatrick's learning and training evaluation theory – the four levels of learning evaluation – which was introduced in 1959. It has now become arguably the most widely used and popular model for the evaluation of training and learning. The four levels of Kirkpatrick's evaluation model essentially measure:

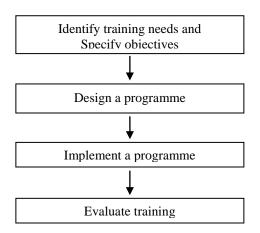
Level 1- The reaction of students: what they thought and felt about the training,

Level 2- Learning: the resulting increase in knowledge or capability,

- Level 3- Behaviour: extent of behaviour and capability improvement and implementation/application,
- Level 4- Results: the effects on the business or environment resulting from the trainee's performance.

None of these levels should be bypassed simply to get to the level that the trainer considers the most important.

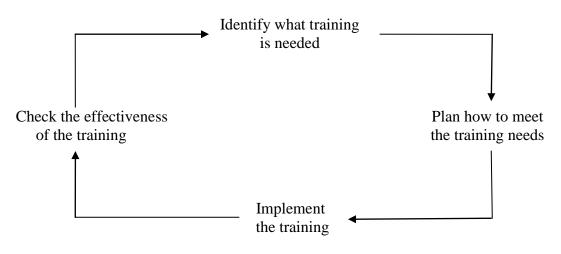
Bratton and Gold (1999) introduce an approach based on a four-stage process shown in Figure 3.1. According to them the approach neatly matches the conception of what most organizations would regard as rationality and efficiency.



Source: Bratton and Gold (1999:283).



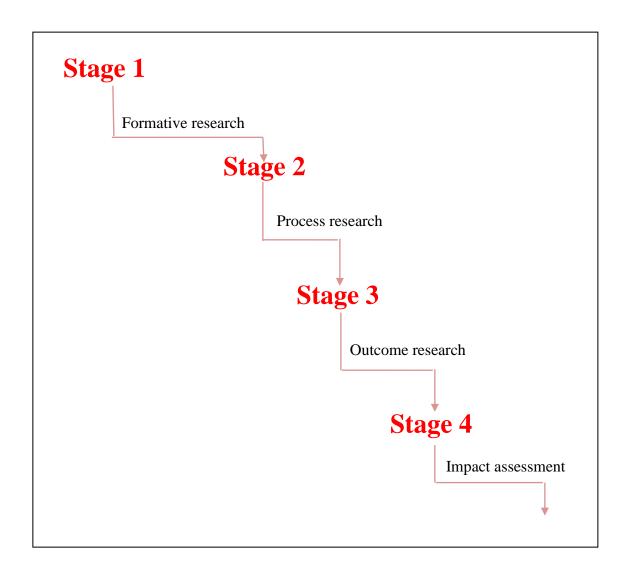
A similar proposal is advocated by Martin and Jackson (2000) for training and development. The noticeable difference is that their model is in the form of a training cycle which helps identify the main principles involved in managing both training and development activities (Figure 3.2).



Source: Martin and Jackson (2000:80).

Figure 3.2: The Training Cycle

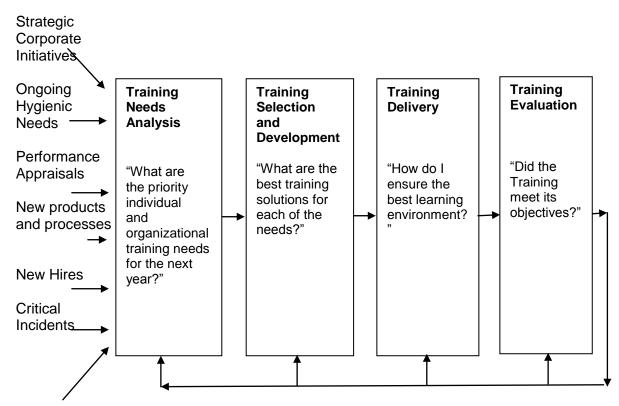
The National Institute for Occupational Safety and Health (NIOSH), U.S. Department of Health and Human Services (Publication No 99-142, 1999), advocates an approach or model according to which training effectiveness must go through four stages called TIER "Training Intervention Effectiveness Research" (Figure 3.3).



Source: National Institute for Occupational Safety and Health

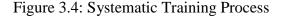
Figure 3.3: The TIER Model

Collins (2005) suggests a "systematic training process" model comprising training needs analysis, training selection and development, training delivery, and training evaluation. These steps are shown below in Figure 3.4.



**Reassignments/ Promotions** 

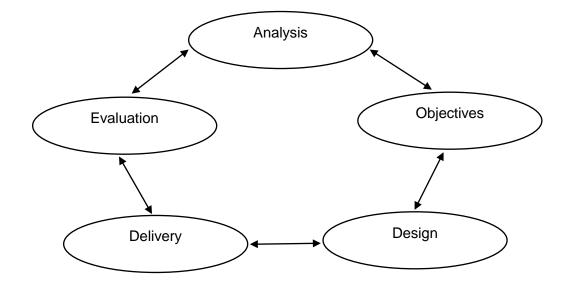
Source: Collins (2005).



St. Louis Community College (2008) suggested a systematic instructional design process involving: analysis, design, implementation and evaluation.

More complex models are usually elaborations on the basic four-stage model. Models with five stages, for instance, typically split the programme designing stage from basic models into two: identification of training objectives and programme design. As will be shown below, the needs analysis, implementation and analysis stages of the basic model are recurrent in most of the other models. This is the case of a group of models that involve what has come to be known as the training cycle. Marchington and Wilkinson (1996:183) note that although differences exist between the models of this group, they generally have a five-step cycle: identification of training needs, training objectives, selection and design of programmes, delivery of training, and evaluation. According to Marchington and Wilkinson, one popular variant of these models, known as the systematic training cycle, has guided the British National Standards for Training and Development (Appendix 3).

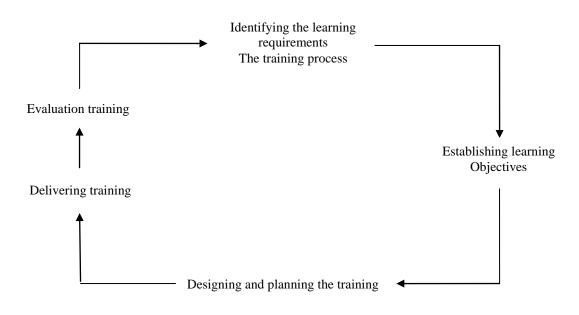
Clavelle (2008) argues that training is a key part of business growth and change. To help ensure that money is well spent, a company must choose their training programs wisely. Clavelle thus recommends five steps to any training process: analysis, design, materials development, implementation, and evaluation. Wallance (1999) proposes a model called the Instructional Systems Development model (ISD model), which consists of five phases: analysis, objectives, design, delivery and evaluation. As shown in Figure 3.5 the phases interrelate and form a continuous cycle.



Source: <u>www.llrx.com/columns/quide33.htm</u>. Retrieved March 9, 2012.

# Figure 3.5: The ISD Model

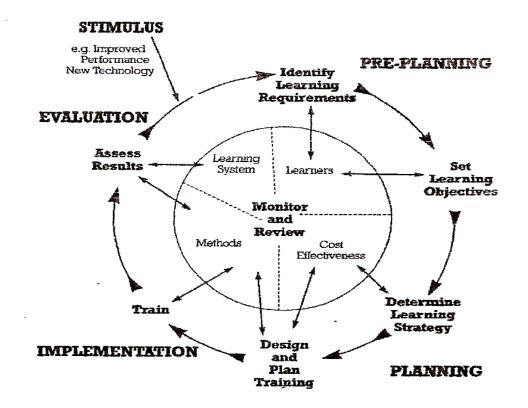
Another example stated by Leigh, D (2006) suggests a five-step model: identifying the learning requirements, establishing learning objectives, designing and planning the training, delivering training and evaluating training (Figure 3.6).



Source: Leigh, (2006).

Figure 3.6: The Training Process

The REPROLINE website (a service of JHPIEGO, an affiliate of John Hopkins University) equally recommends in 2001 a model of five essential phases: analysis, design, development, implementation, and evaluation. Reid and Barrington (1997:151) incorporate the sequence that covers preplanning, planning, implementation, and evaluation in their six-stage training process model, known as the procedural approach. These stages are: identification of training requirements, setting learning objectives, determining a learning strategy, designing and planning, conducting training, and assessing the results (Figure 3.7).



Source: Reid and Barrington (1997:151)

Figure 3.7: The Training Process

Arnold et al. (1991:247) equally analyse the training process into six stages: assessing training needs, analyzing jobs, skills and tasks, specifying aims and objectives, determining the content and nature of training, conducting training, and collecting evaluation data. High-leverage training involves the use of the instructional system design process to ensure that training is effective. This is taken up by Noe (1999) who suggests a model for designing effective training called the instructional design process. This model is made up of six steps as shown below.

1. Conducting Needs Assessment

Organizational analysis

Person analysis

Task analysis

2. Ensuring Employees' Readiness for Training

Attitudes and motivation

Basic skills

3. Creating a Learning Environment

Identification of learning objective and training outcomes

Meaningful material

Practice

Feedback

Observation of others

Administering and coordinating the programme

4. Ensuring Transfer of Training

Self-management strategies

Peer and manager support

5. Selecting Training Methods

Presentational techniques

Hands-on techniques

Group techniques

6. Evaluating Training Programs

Identification of training outcomes and evaluation design

Cost-benefit analysis

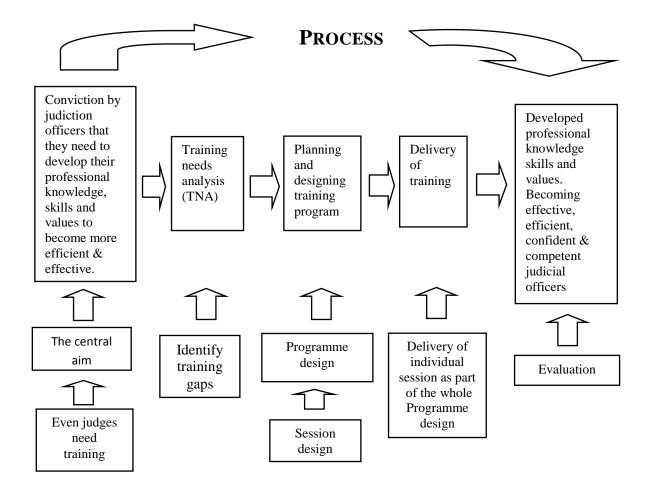
In 2008 Noe developed the above model as shown in Table 3.1 "summary of training models". Harrison (1992:244) suggests a problem-centred training approach that consists of eight steps: identifying major needs, agreeing on possible solutions, selecting training options, creating a training plan, prioritizing learning events, applying budgetary constraints, communicating results, and finally monitoring, evaluating, and implementation. In her opinion, this approach serves real work problems and can provide suitable answers to employers who feel a need for focused training.

It is to be noted that many of the most elaborate models are so not only because they add further stages to the basic model or split some of the latter's stages into an infinite number of independent stages, but also because they introduce an element of interactivity between the different stages. Hence, almost each stage provides feedback to another, making the model dynamic and reactive to its implementation environment instead of being static and rigid.

Wooldridge (1988) describes a model for a systematic design of training to increase the productivity of public-sector training. The model relates the instructional

strategies used, the selection of trainers, and the training environment to learning objectives and the anticipated learning styles of trainees.

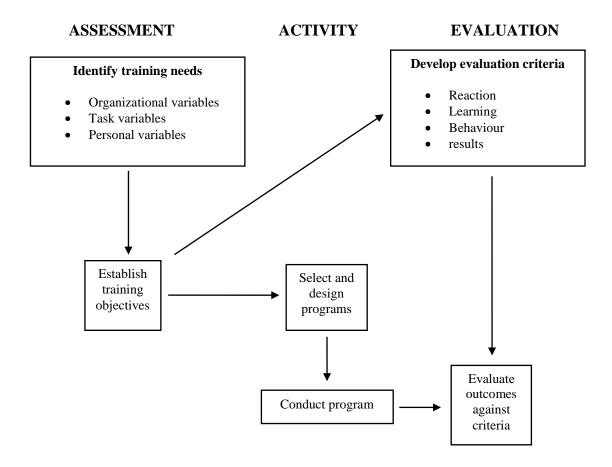
Pacific Judicial Development Program recommends a model as shows in Figure 3.8 below:



Source: <a href="http://www.paclii.org/PJDP/resources/leadership/diagram\_of\_training\_process.pdf">www.paclii.org/PJDP/resources/leadership/diagram\_of\_training\_process.pdf</a>. Retrieved January 4, 2009.

#### Figure 3.8: Diagram of Training Process

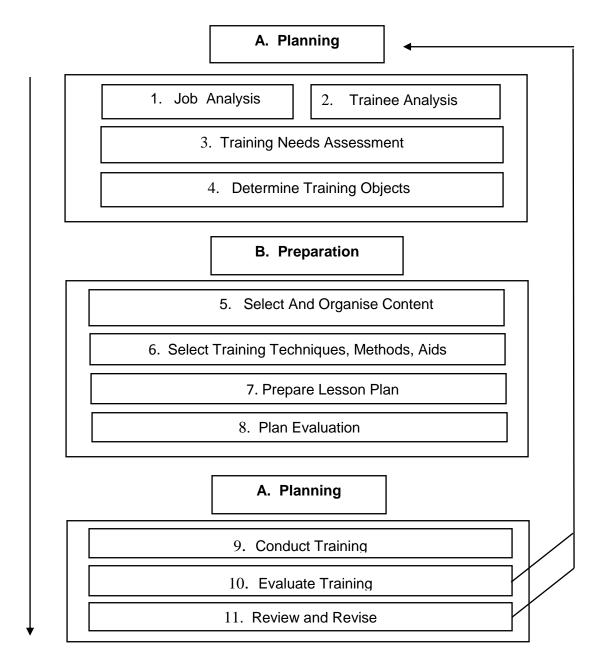
According to Stone (2005), the effectiveness of training and development is enhanced when training activities are preceded by a comprehensive analysis. This allows the HR manager to demonstrate how training and development contribute to the organization's strategic business objectives. Stone presents a systematic training and development model as shown in Figure 3.9.



Source: Stone (2005:338)

Figure 3.9: A Systematic Training and Development Model

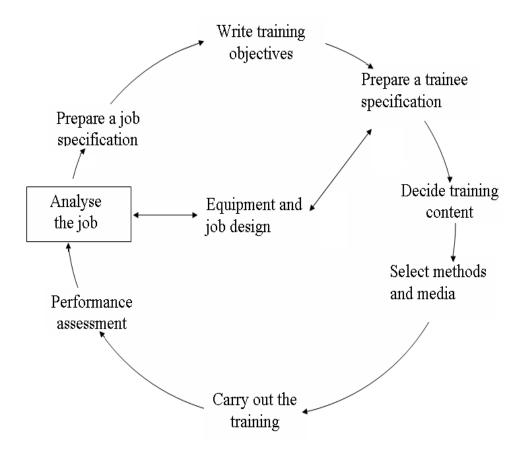
Moss (1988) portrays the training process as shown in Figure 3.10.



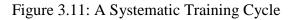
Source: Moss (1988:22)

Figure 3.10: Training Process

Bramley (1996:50) suggests a model based upon a detailed job analysis and the writing of behavioural objectives. The process follows the sequence shown in Figure 3.11.



Source: Bramley (1996:50)



All the training models above can be summarized in Table 3.1 below and identified according to time.

MODEL	VARIABLES							
Kirkpartick's Theory (1959)	Reaction	Learning	Behaviour	Results				
Arnold et al., 1991	Assessing training needs	Analyzing jobs, skills and tasks	Specifying aims and Objectives	Determining the content and Nature of training	Conducting training	Collecting evaluation data		
Harrison, 1992	Identifying major needs	Agreeing on solutions	Selecting options	Creating plan	Prioritizing learning events	Applying budgetary	Communicating results	Monitoring, evaluating and implementation
Bramley, 1996	Analyse	Job specification	Objectives	Trainee specification	Content	Methods and media	Carry out	Performance assessment
Reid and Barrington, 1997	Identification	Setting learning objectives	Determining a learning strategy	Designing and Planning	Conducting training	Assessing the results		
Bratton and Gold, 1999	Identification	Designing	Implementatio n	Evaluation				
NIOSH, 1999	Format	Process	Outcome	Impact				
Noe, 1999	Conducting needs assessment	Ensuring employees readiness	Creating a learning environment	Ensuring transfer of training	Selecting training methods	Evaluating training programs		
Martin and Jackson, 2000	Identification	Planning	Implementatio n	Evaluation				

# Table 3.1: Summary of Training Models

MODEL	VARIABLES							
JHPIEGO, 2001	Analysis	Design	Development	Implementation	Evaluation			
Collins,2005	Analysis	Selection and Development	Delivery	Evaluation				
Stone, 2005	Identifying	Establishing objectives	Selecting program	Conducting	Evaluating			
Leigh, 2006	Identification	Objectives	Designing and Planning	Delivery	Evaluation			
Clavelle, 2008	Analysis	Design	Develop Materials	Implementation	Evaluation			
St. Louis C C, 2008	Analysis	Design	Implementation	Evaluation				
Noe, 2008	Conducting Needs Assessment	Ensuring employees Readiness for Training	Creating a Learning Environment	Ensuring Transfer of Training	Developing an Evaluation Plan	Selecting Training Methods	Monitoring and Evaluating the Program	

# Table 3.1 (continued): Summary of Training Models

# **3.3 NEEDS ASSESSMENT**

Marchington and Wilkinson (1996:184) observe that the terms 'identification of training needs' and 'training needs analysis' are often used interchangeably. But for them the former term "is concerned with the process required to detect and specify training needs at an individual and organizational level", whereas the latter refers to the "process of examining training needs to determine how they might actually be met". Jackson (1989:6) claims that we can talk about training needs when:

- There is a gap between the actual performance and the required performance of individuals, operational units, and the organisation, either currently or in the future.
- The gap can be closed by developing skills and knowledge which increase performance of individuals and groups.

Despite discrepancies, there appears to be a consensus that the identification of training needs is the most critical component in the training system because it provides data to determine who is to be trained, what training is needed, how training can be carried out, and how the results can be evaluated (Ford and Noe, 1987; Goldstein, 1986; Hinrichs, 1976; Moore and Dutton, 1978).

Accordingly, the identification of training needs requires examining the organisation's objectives, the activities carried out to achieve them, the skills needed in

those activities, and then determining whether employees possess the necessary skills or not (Torrington and Huat, 1994).

The identification of training needs should be considered at three levels: the organization, the job or the occupation, and the individual (Bee and Bee, 1994; Bramley, 1996; Goldstein, 1986). Hackett (1997) demonstrates how this can be carried out (Table 3.2).

Area of Needs Level of Business Benefits	Organization	Group	Individual	
1. Implementing - doing things well	Meeting current organizational objectives	Working together to meet existing targets and standards	Being competent at the level of existing requirements	
2. Improving - doing things better	Setting higher objectives and reaching them	Continuous improvement teams	Having and using systematic, continuous improvement skills and processes	
3. Innovating - doing new and better things	Changing objectives and strategies	Working across boundaries to create new relationship and new products and services	Being able to work differently and more creatively with a shared sense of purpose	

Table 3.2: Three Levels of Identifying Training Needs

Source: Hackett (1997:36)

# 3.3.1 Organisational Training Needs

Organisational training needs are costly and time consuming, especially when carried out on a large scale. Reid and Barrington (1997) insist that the process is worthwhile. First, it can reveal a variety of job-specific training needs for groups of people and individuals. Second, it can generate data that would enable the organization to define priorities and decide on its short and long-term strategies. Third, by deciding what training is needed, the organization can establish the appropriate training strategy and objectives and, in turn, ensure that the training programme is effective and successful.

#### 3.3.2 Job Training Needs Analysis

In its broad sense, the term job analysis is used to refer to a number of concepts that can be utilized for different purposes. Thus it is not a particular document, but rather gives rise to certain documents, the product of an analytical examination of the job. Boydell (1977) includes here: job description, job specification, training specification, task analysis and fault analysis. A more revealing definition is probably that of Robinson (1981:38) who stated that job analysis is a

Process which involves the analysis of a job into its component parts or tasks to provide the data required for a variety of purposes. These include recruitment, management development, developing organizational and wage structure, improving job methods and safety and, of course, establishing of training needs.

To put the term job specification in an exclusively training perspective or context, Harrison (1992:263) coined the phrase, job training analysis, by which she means "the process of identifying a job and its component parts, and specifying what must be learned in order for there to be effective performance".

#### 3.3.3 Individual Needs Analysis

At this level, the intention is to assess performance levels against those required in the job. To this end, a variety of techniques are usually employed. Some of these are considered below:

# i. Observation

Observing a trade or job being performed is the least costly and most commonly used method (Marchington and Wilkinson, 1996; Reid and Barrington, 1997). This method enables researchers to observe jobs being undertaken, and, when necessary, seek clarifications. This, however, is a time-consuming process. Marchington and Wilkinson (1996) suggest that the method should not be used in isolation for two good reasons. First, different observers may come up with different analyses. Second, observed tasks may vary from one day to the other.

#### ii. Self-observation

Reid and Barrington (1997) and Bee and Bee (1994) describe self-observation as a useful method of collecting data for job analysis. The method requires of jobholders to keep a daily record of their own activities. They admit that the main disadvantage is subjectivity. Hence, the only immediate advantage is that since jobholders keep a daily record, they have to make sure that they spend time constructively.

#### iii. Questionnaire

Questionnaires are especially useful for a preliminary interview or a discussion on the job analysis. This method has two main advantages: it can be used on large numbers of respondents in a short time, and it is easy to analyze when a computer is used. Nevertheless, designing questionnaires is time-consuming and requires a high level of skill and expertise. Rae argues that two separate sets of questionnaires should be prepared, one to target knowledge and the other to assess skills and attitudes. When investigating the knowledge aspect, questions that require a 'Yes' or 'No' answer could be asked. For skills, it would be more appropriate to ask respondents to write down a list of skills that suit the job (for a detailed discussion on questionnaires, Chapter 6).

#### iv. Interview

Interviews are usually carried out to examine the weaknesses or strengths of the jobholder and identify the area where training is most needed. Walters (1983) notes that interviews are costly and time consuming, but adds that they are ideal for collecting data from managers, especially when those managers are the principal source of data.

#### v. Self Assessment/Self Reports

Self-assessment has become quite a trend. This approach simply requires the employee to fill in a self-appraisal form pertaining to the skill and knowledge requirements of his/her job. Bee and Bee (1994) mention a similar technique, Self-Report, which requires individuals to report on the knowledge and skills involved in the present or future jobs. For this purpose, use can be made of a checklist or some kind of self-appraisal questionnaire. The approach equally makes it possible for employees to state their training needs.

#### vi. Document or Record Analysis

The record of past and present performance could be used to assess performance gaps and the training required. If accurately documented, the data could represent a useful source of analysis.

#### vii. Assessment by a Coach

This form of analysis requires a coach to assess the skills and needs of the employees. As such, it makes it possible to single out their weaknesses and consider the possible solutions.

#### viii. Assessing New Employees

Normally, new employees would usually have the necessary skills and the ability to perform the job, and little or no training is required. However, Reid and Barrington suggest applying a "trainability test" to new recruits, which they define as a "validated test designed to assess whether a job applicant has the potential to reach a satisfactory standard after training" (MSC 1981, cited in Reid and Barrington, 1997:305).

#### ix. Assessment/Development Centre

This method is viewed as a combination of other techniques such as interviews, written tests, simulated tasks and individual and group exercise. Because this method is comprehensive in nature, it would provide reliable analysis of performance, especially when designed in a way to ensure that the various tests and simulations accurately reflect the job requirements. Reid and Barrington (1997) state that the major step towards devising an assessment/development centre is to identify what strengths or

characteristics would be tested. According to them, the most useful test is that of competencies. These should be measured in terms of input (personal attributes, such as leadership quality, interpersonal skills, confidence, control, etc.) or outcome (concerned with the discrete units of the job that can be assessed as given tasks).

### 3.3.4 Performance Appraisal

Within the context of 'identification of training needs', performance appraisal is defined as "the process whereby current performance in a job is described and discussed for the purpose of adding value to that of performance" (Randell, 1994:321). Bee and Bee (1994:52) present a more comprehensive definition:

Performance appraisal systems are generally understood to refer to the regular meetings between the employee and his/her manager to review and assess the employee's performance in the job, identify any action that is needed to improve performance ... (and) to identify potential and future development needs.

According to Cummings and Worley (2001), high involvement approaches have a number of advantages over the traditional ones:

- 1. They expand the appraisee's role, lead to a more reliable and comprehensive assessment, and take into consideration the needs of both this individual and those of the organization.
- 2. Unlike traditional approaches that focus on 'prescribed traits of behaviour', they require all participants to be engaged in negotiating ways of measuring and assessing performance.

- 3. Rather than bring passive recipients of feedback on their performance from their supervisors, appraisees play an active role with other participants (e.g. peers and supervisors) in gathering information and identifying their needs.
- 4. Compared to traditional approaches whereby training is determined by the manager or is based on administrative criteria (e.g. annual evaluation), high-involvement approaches allow for flexibility and make it possible to increase the frequency of feedback, which is necessary to motivate employees and improve their performance.

Table 3.3 shows a model set of questions that can guide both the trainee and the manager.

Where are we now?	This will involve a description and analysis of the current situation.
Where do we want to be?	This will require a description and analysis of the hoped-for target to be identified. If we don't know where we are going, then any road will do
How can we get there?	This will identify, describe and state the implications of a number of paths or solutions.
How will we know when we've arrived?	This assumes that the aims, goals and objectives of the process have been agreed beforehand, so that recognized evaluative outcomes can be identified.

Table 3.3: Model Set of Questions to Address Problems

Source: Hoy, et al. (2000:125)

# 3.3.5 Training objectives

The distinction between the terms 'training aims' and 'training objectives' in the words of Rae (1991:32):

Aims are general statements of intent which give the global approach to the problem but without exact definition ... [and] Objectives are specific and precise statements of intent with precise measures of terminal behaviour.

Reid and Barrington (1997:317) use the term, criterion behaviour, to define what the learner is expected to do at the end of the training. To them, this "specifies the tasks, procedures and techniques he (i.e. the trainee) should be able to carry out" as well as the required performance standard and "the circumstances in which the work will be undertaken". For Bee and Bee (1994) objectives are concerned with results of training, not training itself, and they should address three types of learning: knowledge, skills and attitudes. They also add that in order for training objectives to be clear, they must be focused on the gap between the current and desired performance, they must be achievable and realistic, and they must be expressed in measurable behavioural terms.

Without specified objectives, training has no value (Hardingham, 1996). Welldesigned and researched training objectives will (1) help the organization to validate and evaluate training, (2) assist trainers in deciding the contents and methods of training, (3) satisfy organizational goals and individual needs, and (4) motivate trainees and improve performance (Bee and Bee, 1994; Buckley and Caple, 2008; Goldstein and Ford, 2002; Marchington and Wilkinson, 1996; Rae, 1991; Reid and Barrington, 1997).

# 3.3.6 Training Plan

To ensure that the effort put into training needs analysis is rewarded and that it translates into effective action, a training plan becomes of vital importance. When devising the plan, three major points must be taken into consideration (Marchington and Wilkinson, 1996). One is the characteristics of trainees and what they bring to the training event in terms of knowledge, skills, attitudes, motivation, expectations, abilities and learning styles. Another is to establish training and objectives and consider the factors that influence the choice of training methods. The third point is to be aware of training costs and benefits. Bee and Bee (1994:158) regard the training plan as a "composite document" that consists of three parts:

- A statement of policy and direction for the period in question
- A training budget setting out the financial implications of the proposed programme of training
- An operational plan scheduling the training in terms of timing, resources, e.g. trainers, accommodation, etc.

#### 3.4 READINESS FOR TRAINING: MOTIVATION, ATTITUDE AND ROLE

# 3.4.1 Motivation Theories

Although researchers acknowledge that motivation is the bedrock of any learning process, it is difficult to agree on a single and coherent theory that explains it. Justifiably, because of their inability to conduct direct observation of the internal processes involved in motivation, those researchers are left with one option: to infer the existence of such processes from the individual's behaviour. As a results, the study of motivation remains characterised by numerous and sometimes conflicting ideas and theories. In our discussions, the main theories will be considered and summarized in table 3.4 below.

Table 3.4: Summary of Motivation Theories
---

Taylor (1911)/Skinner (1974)	Instrumentality (behaviourist) theory	People will be motivated to work if rewards and punishments are directly related to their performance.
Maslow (1943)	Need-Hierarchy theory	A sequence of five needs exist. Needs at the higher level emerge only when a lower-level need has been satisfied.
Herzberg(1959)	Two-Factor theory	Two groups of factors affect model job satisfaction: (1) those intrinsic to the job (intrinsic motivation satisfiers) such as achievement, the work itself, responsibility and growth and (2) extrinsic motivators or hygiene factors.
Vroom (1964)/Lawler and Porter (1968)	Expectancy theory	Motivation and performance are influenced by: (1) the perceived link between effort and performance; (2) the perceived link between performance and outcomes; and (3) the significance (valence) of the outcome to the person. Effort (motivation) depends on the likelihood that rewards will follow effort.
Adams(1963)	Equity theory	People will be better motivated if they are treated equitably, and demotivated if they are treated inequitably.
Rotter (1966)	Attribution Theory	For trainees, the reward expected from completing a task could be success or approval from the others.
		Attribute failure or success to:-
		Internal causes that are under our control, such as ability to undertake a given task, and the "effort" we exert in performing it.
		External causes over which we may not have control such as "luck" and "task difficulty"
Skinner (1953)	Reinforcement Theory	Reinforced include skill or attitude and may take different forms including praise, gifts, money and attention.
Ilgen and Klein (1989)	Social Learning Theory	(a) the development of the individual's cognitive, social and behavioural competencies through a mastery of modelling, (b) the development of the individual's belief in their capabilities, and (c) the enhancement of motivation through setting goals.

# **3.4.2 Motivational Factors**

Researchers agree that a multitude of variables should be regarded as important input into motivational equations. Steers and Porter (1991) mention three variables that affect the motivation process in organizational settings: (a) individual characteristics, including interests, attitude toward self and the job as well as social, security and achievement needs, (b) job characteristics that include the type of feedback and varieties of activities and tasks, and (c) work environment characteristics which are associated with the larger problem of organization-wide actions, e.g. relationship with others and reward system (Table 3.5).

INDIVIDUAL CHARACTIRISTICS	JOB CHARACTIRISTICS	WORK ENVIRNMENT CHARACTIRISTICS		
<ol> <li>Interests</li> <li>Attitudes</li> <li>Toward self</li> <li>Toward job</li> <li>Toward aspect of work situation</li> <li>Needs</li> <li>Security</li> <li>Social</li> <li>Achievement</li> </ol>	<ol> <li>Type of intrinsic reward</li> <li>Degree of autonomy</li> <li>Amount of direct performance feedback</li> <li>Degree of variety in tasks</li> </ol>	<ol> <li>Immediate work environment         <ul> <li>peers</li> <li>supervisors</li> </ul> </li> <li>Organizational actions         <ul> <li>Reward practices</li> <li>System rewards</li> <li>Individual rewards</li> <li>Organizational climate</li> </ul> </li> </ol>		

Table 3.5: Factors Affecting Motivation in Organisational Settings

Source: Steers and Porter (1991:20)

Noe and Schmit (1986) identify a range of factors believed to influence reactions to training, learning and behavioural change. These are: the locus of control, reaction to assessment and feedback, expectations from training, the importance of work for the participant's self-image and the extent to which he/she identifies psychologically with work, the extent of the participant's engagement in career planning, knowledge of oneself, perceptions of environmental favourability, and support from others. Herzberg (1968) presents a long list of variables that include: recognition, achievement, possibility of growth, advancement, responsibility, work itself, salary, working conditions, status, personal life, organisation's policy, supervisor's attitude, and relations with peers and subordinates. In fact, limitations of time and space make it difficult to go through the wide range of factors that inhibit motivation or facilitate it. In what follows, only some major variables will be examined.

### 3.4.2.1 Trainees' Attitude

Broadly speaking, two theories are available to explain the relationship between motivation and behavioural change on the one hand and the trainee's attitudes on the other: the theory of reasoned action, and the theory of planned behaviour. According to the first theory, once information is processed and a criterion of behaviour is reasonably defined, the person's intention whether to perform or not becomes the immediate determinant of that behaviour (Fishbein, 1979). Intention, itself, is seen as a product of two variables: the person's attitude towards behaviour and his/her perception of the social pressures whether to perform or not to perform (Fishbein and Stasson, 1990). This means that attitudes are based on one's belief: if a positive outcome of performance is perceived, a favourable attitude is formed. Bandura (1986:391) describes self-efficacy as "People's judgement of their capabilities to organise and execute courses of action required to attain designated types of performance". He also notes that the concept is not concerned with the skills one possesses, but with the judgements of what one can do with whatever skills he/she has.

#### 3.4.2.2 Trainee Selection

Baldwin et al. (1991) divided trainees into three groups: the first group received the type of training they requested, the second were denied the training they chose, and the third were given training without being consulted.

Reid and Barrington (1997) state that training could be effective only when trainees are driven towards it by their own desire to achieve. Summing up those views, Fairbarn (1991, cited in Harrison, 2000) concludes that in order for motivation to be effective and of value, trainees should be persuaded that the skills and knowledge training is promoting are important to their job and recognized in the workplace. This view is emphasized by Rabey (2001) who argues that rather than impose training, it would be more constructive to create the proper atmosphere through encouraging employees to attend and proving to them that it has value and purpose. Monk (1996) adds that because motivation is an internal tension which occurs when a need is not satisfied, the only way to motivate employees that training can increase satisfaction, and another less friendly method is to point to them that lack of training could threaten their aspirations for development and promotion.

### **3.5 LEARNING ENVIRONMENT**

#### 3.5.1 Work Environment

There is a strong relationship between the motivation to attend training and the level of achievement on the one hand and work environment on the other (Noe and Schmitt, 1986). Trainees with a favourable attitude toward their organization and workplace can gain more than those with a negative attitude (Goldstein, 1986) and are more likely to apply what they have learnt to their jobs (Monk, 1996). This requires senior managers to be motivated themselves (McNamara, 1999) and to ensure that employees are motivated to the optimum level to undertake training, achieve the organisation's objectives and satisfy their needs (Barry, 1992).

Siddons (2001) suggests that managers have a duty to involve trainees in the planning process, appreciate the effort and time those trainees spend in learning, and ensure that any rewards on offer are valued. Constraints in the workplace can affect motivation to learn and training outcomes. According to Goldstein (1993) these can be in the form of lacking materials, facilities, time and flexibility.

### 3.5.2 Role Clarity and Ambiguity

If we agree with the statement that "One's relational behaviour is profoundly shaped by the roles one holds" (Woifensberger, 1998:39) we will accept the notion that unless their roles are well-defined, trainees (in their capability as employees) will be victims of the role definition crisis. This statement is particularly relevant to Omani employees in the public sector. Evidently, lack of clarity in the role those employees are expected to perform will reflect on their expectations, motivation, and achievement levels when they attend training.

Kahn et al. (1964) formulate a theory that explains how interpersonal and organizational aspects of work environment affect employees' motivation, behaviour and attitude. According to them, the individual's position in the organizational structure, or what they call office, is the basic unit of organizational relationships. Closely related to the term 'office' is the role set which refers to the functional relationship of each office to other offices. As a rule, members of the role set develop certain expectations as to how the employee should perform his/her role. At times, the receiver's interpretation of his role may not be compatible with that envisaged by the senders. In this case, different types of what Kahn et al. call, stressful role sending, may occur. One such type is role-conflict, and another is role-ambiguity.

# 3.5.3 Reward System

Wiley (1997) mentioned five factors that motivate trainees, and hence encourage them to improve performance through training: job security, promotion and growth in the organization, full appreciation of work done, and interesting and enjoyable work. Vroom (1964) and Wexley and Latham (1981) point out an individual's expectations that participation in training would lead to outcomes, such as feelings of accomplishment, greater responsibility, advancement opportunity, higher pay, job security, status, stimulating colleagues, and even words of appreciation, would all contribute to his/her motivation.

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Evidently, the purpose of any reward system is to motivate employees and trainees and increase productivity.

# 3.5.4 Trainees' Role

In her discussion on performance assessment, Saxe (1989) suggests that training candidates should measure their performance before and after training and should be able to answer the following three self-assessment questions:

- 1. In what areas of knowledge and skill do I need help?
- 2. How will I obtain the knowledge and skills?
- 3. Now that I have the knowledge and skills, what am I doing differently that demonstrates increased competence?

Carlisle (1985) identifies the duties and responsibilities of trainees as follows:

- Before training they should be prepared (e.g. study), ensure that they are motivated and interested in the subject, and set goals.
- During training, they should have good notes, play active role in discussions, be punctual, and able to relate new concepts to their pre-existing knowledge and understanding.
- After training, they have a duty to apply what has been learned to their jobs in the workplace.

## **3.6TRAINING METHOD**

Whether traditional or based on E-learning the effectiveness of training depends on the training design model. Traditional training, such as presentation methods, handson methods and team-building methods, is based on the classroom and the lecture and occur face-to-face with trainees. E-learning or Technology-based programmes involving the use of CD-ROMs, DVDs, videoconferencing and the internet/intranet are increasingly being used, thus enabling employees to learn from anywhere in the world. Also training method involves the following:

# 3.6.1 Trainer's Characteristics

Literature abounds with discussions on attributes and characteristics of good trainers. A list of these characteristics was compiled by Bartlett (1982, cited in Goldstein and Ford, 2002: 245-247). According to Bartlett, some trainer's characteristics are as follows: A good trainer is one who

- Is well-organised
- Designs the sequence of materials for maximum learning
- Emphasizes conceptual understanding
- Relates lectures to other aspects of the course
- Uses examples
- Encourages students to use their talents
- Encourages class discussion
- Introduces many ideas during each class

• Stimulates interest in the subject

Goldstein and Ford (2002) note that because not much research has been conducted on the role of these characteristics in fostering learning, it may be difficult to suggest that all are equally important. However, they do conclude that trainers who demonstrate all these characteristics would positively benefit the learning environment.

# 3.6.2 Trainer's Knowledge and Competences

Unless trainers have knowledge of the subject matter, understand the organization and business, and are aware of training and learning methods, it will be difficult to conduct effective training and achieve training effectiveness (Ledduchowicz and Bennet, 1983). Knowledge of the subject matter combined with a positive attitude towards trainees and training would gain the trainee the respect he/she needs and encourage learners to be attentive and more confident (Pont, 1991). To enrich their knowledge, trainers should make it a point to educate themselves about the fundamental training concepts and techniques, prepare for the challenges that lie ahead and make sure that they can address problems and difficulties (Reid and Barrington, 1997).

### 3.6.3 Trainer's Role and Responsibilities

Harrison (2000) notes that a trainer's role and responsibilities are influenced by five major factors that decide how training initiatives are planned and executed: the external environment of the organization, business goals and strategic organizational structure and culture, employee resource, and technology. From this, it follows that the trainer is expected to play a variety of roles: specialist, consultant, motivator, inspirer, change-agent, training provider or facilitator.

As a matter of fact, the list of trainers' roles encountered in the literature is much longer. However, although trainers are not expected to play all these roles, the proper option for them is to select the appropriate role they need in a particular context. Only then will they be able to meet the expectations of others as to what the roles involve (Pettigrew et al., 1982; Reid and Barrington, 1997).

### 3.6.3.1 Trainers as Change Agents

Trainers are often referred to as change agents whose primary concern is to bring about change in the individual and the organization with the aim of improving productivity and performance. Towards this end, they are expected to have leadership qualities and prove to the trainees and organizations that they are capable of leading them to the target.

### 3.6.3.2 Trainers as Facilitators

As facilitators, trainers are expected to share the knowledge, skills, and experience they have acquired over the years with trainees (Clarke, 1986). This leading and demanding role requires them to be fully aware of the trainees' needs, characteristics and abilities.

Siddons (1998:2) maintains that the role of the facilitative trainer is:

To help learning to happen, to create an environment and atmosphere that encourages the learning process; to organize and present information in such a way that employees can utilize it to increase their knowledge base; to organize activities that will reinforce the learning process; and to check and re-check that learning has taken place.

### 3.6.3.3 Trainer as Maintainers

Trainers in this position have a role totally different from those of change-agents or facilitators. In this role, the services they provide are primarily for maintenance purposes within the organization. Pettigrew et al. (1982) refer to this type of trainers as the 'passive providers' who only respond to demands made on them. Reid and Barrington (1997:189) add that the maintainer or passive provider

Takes a few decisions, waits for other to make demands or requests, is low in selfesteem and is not politically skilled in securing support... [and] in some cases, the role becomes one of simple administration.

#### 3.6.3.4 Other Roles

As stated above, the role of the trainer has been the subject of academic debate and discussion. In general, some view the trainer as the multitasker who is able to move easily between roles, and others throw light on some aspects of the trainer's job and ignore others. For the purpose of our study, although the role of the trainer is seen as that of the change-agent and the facilitator discussed above, it would be useful to consider other roles encountered in the literature.

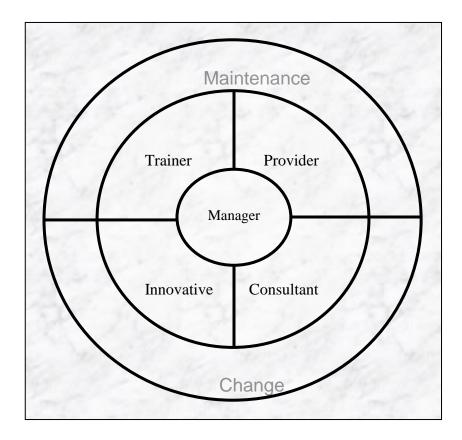
#### 3.6.3.4.1 Training Manager

As a training manager, the trainer is likely to be preoccupied with the establishment of training activities and the development of policies and procedures within the organization (Pettigrew et al., 1982). His role also includes organizing and controlling training, setting training goals, delivering and evaluating training activities, recruiting and training personnel, and liaising with other departments to explain how training can contribute to improving performance (Bennet, 1988).

# 3.6.3.4.2 Consultant Trainer

Leduchowicz and Bennet (1983) classify trainers' roles according to whether they are 'traditional' or 'interventionist', and according to their approach to organizational 'maintenance' or 'change'. Based on this classification they come out with four major roles adopted by trainers within the context of organizational activities: caretaker, educator, evangelist, and innovator. In a later work, Bennet (1988) maintains that five general trainer roles emerged from the literature he surveyed: trainer, provider, consultant, innovator and manager (Figure 3.12).

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Source: Adapted from Bennet (1988)

Figure 3.12: General Trainer Roles

## **3.7 TRANSFER OF TRAINING**

# 3.7.1 Responsibility for Transfer

Writers on training are not clear about who among the three key players, i.e. the trainee, trainer, or trainee's manager, is responsible for the transfer of learning. Many do, however, appear to agree that transfer is the shared responsibility of the three parties rather than the prerogative of only one side. It is sometimes argued that trainees have a duty to measure their performance before and after training and that if they are led to

believe that improving performance is the responsibility of others, it is unlikely that they consider transfer of skills to the workplace voluntarily (Saxe, 1989). Swanson and Sleezer (1987) argue that managers should take part in identifying the training needs of their employees and in monitoring their progress during and after training phases.

Broad and Newstrom (1992) postulate that decisions about improving performance should be the result of consultations between trainees, trainers and managers before, during and after training. They also suggest a number of strategies that can be applied by the three parties involved in the transfer process. These are summarized in Table 3.6, below.

	Before training	During training	After training
Trainee	Reviews pre-course material and clarify problems with manager and trainer	Draws action plan with specific objectives to be carried out after training	Undertakes early post- course review of training material to assist retention
Trainer	Develops a peer-coaching component for post- course applications of learned skills	Provides job aids that can act as memory joggers and reminders in the workplace	Sets up is problem-solving sessions to reinforce learning
Manager	Creates awareness for need of training	Allocates trainees workload to other employees in his/her absence	Follows up training and supports employee

Table 3.6: Strategies for the Transfer of Training

# 3.7.2 Barriers to Transfer

According to Newstrom (1986:36) some of the most important impediments to transfer are:

- 1. lack of on-the-job reinforcement
- 2. interference from the immediate environment
- 3. non-supportive organizational climate
- 4. poor delivery of the training programme
- 5. negative peer pressure

Sisson and Swanson (1990) identify three major causes for lack of transfer: poor needs assessment, lack of encouragement or opportunities to apply work skills, and lack of reward for training or transferring learned skill to the job. Other sources of lack of transfer can be the programme itself and/or training approaches. Thompson (1986:57) states that trainers who disregard the career stages of participants in their plans can expect transfer to be limited. To him, characteristics of training that contribute to disappointing results are the following:

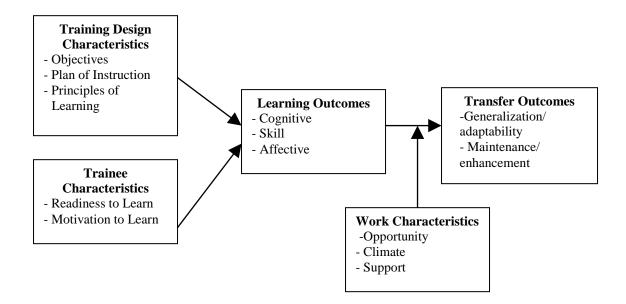
- providing the same training for everyone no matter what their job or level in the organization is
- repeating the same subject matter over and over
- setting quotas for class registration and filling classes at the last minute by poorly prepared participants

• setting individual quotas for training hours and filling classes with people who "have to be there" to fill their quota of training hours

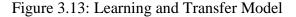
#### 3.7.3 Transfer of Training Models

Baldwin and Ford (1988) propose a transfer of training model with three components: training input, training output, and conditions of transfer. By training inputs, they mean trainee characteristics, training design and work environment. All these elements have a direct effect on training outputs or outcomes, i.e. learning and retention. Conditions of transfer refer to 'generalisations' or transfer of skill, and 'maintenance', or the length of time generalized skills remain stable. In this model, both training inputs and training outputs have a direct effect on generalization and maintenance of training. Once generalization occurs, the maintenance of skill over time must be addressed. Training design, goal setting, skill practice, trainees' attitude and feedback on training achievement and job performance were also found to facilitate retention and skill transfer (Reber and Wallin, 1984).

Goldstein and Ford (2002) present a learning and transfer model that incorporates five elements: instructional design, trainee factors, learning outcomes, transfer outcomes and work characteristics.



Source: Goldstein and Ford (2002:87)



# **3.8 EVALUATING TRAINING EFFECTIVENESS**

Although it is widely accepted that evaluation is a critical and necessary step in the training process, it is not usually conducted in a comprehensive or systematic fashion. For example, in the USA, it has been noticed that evaluation is focused on the trainees' reaction to the training programme rather than determining whether learning has occurred or job performance has improved (Goldstein and Ford, 2002). Similarly, although a high percentage of UK employers claimed that they usually measured training effectiveness, it has been found that the method of evaluation most commonly used was informed feedback from line managers or trainees (Holden and Livian, 1992). In the main, limited or unsystematic evaluation could be either due to the fact that training people are not clear about what to evaluate, or because evaluation is viewed as expensive or even risky in the sense that conducting it might show that training objectives had not been met (Goldstein and Ford, 2002). In either case, the lack of purpose appears to be a major hurdle. This brings us to the question of what evaluation is and what its purposes are.

#### 3.8.1 What is Evaluation?

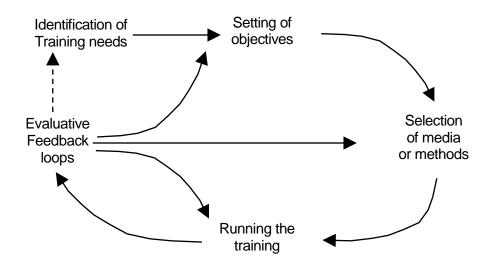
As a starting point in their work, British authors, in particular, refer to the distinction made in the *Glossary of Training Terms*, published by the Manpower Services Commission (MSC, 1981) between 'evaluation of training', and 'assessment of training'. According to MSC, evaluation is "the assessment of the total value of a training system, training course or programme in social as well as financial terms" (cited in Reid and Barrington, 1997:28), whereas assessment is "a general term for the process of ascertaining whether training is efficient or effective in achieving prescribed objectives. It covers both evaluation and validation" (cited in Reid and Barrington, 1997:28).

Warr et al. (1970) view evaluation from an angle wider than that of MSC. For them, evaluation has two basic aspects, input and output. The former is concerned with the procedures that are most likely to bring about change, and the latter is concerned with identifying the changes which have occurred as a result of training.

Several attempts have been made to identify the purposes of training evaluation, and a variety of reasons for conducting the activity have been proposed. Bee and Bee (1994) mention: improving the quality of training in terms of course content, level, objectives as well as training delivery and methods; and assessing the overall effectiveness of the training course. They also add that evaluation is often conducted simply to justify the role of training.

Referring to government departments in particular, Easterby-Smith and Mackness (1992) postulate four general purposes for evaluation: proving that the course has particular outcomes and consequences; using data of the evaluation exercise to improve the training course; helping trainees to sharpen what has been learnt; and control of how training and educational initiatives are implemented.

In agreement with Reid and Barrington (1997), Marchington and Wilkinson (1996), and Goldstein and Ford (2002), among others, Bramley (1996) notes that the criteria against which to evaluate should be established before designing the training programme (Figure 3.14).



Source: Bramley (1996:3)

Figure 3.14: The Central Role of Evaluation in the Training Cycle

Having established the purpose of evaluation, it should be possible to determine who is to conduct the evaluation activity, what to evaluate, when, and how. These issues are considered below.

### 3.8.2 Who Carries Out Evaluation?

Inconsistent data, inaccurate or incomplete information, and a biased, unskilled or inexperienced evaluator can simply invalidate the results. In order for evaluation to be credible and for results to be reliable, Harrison (1997) argues that the evaluator should: be an expert in the field he/she is evaluating, have the necessary skills and knowledge to carry out the activity, be able to establish a relationship based on trust and cooperation with stakeholders, and have the ability to maintain neutrality and objectivity when considering course design and training objectives, delivery methods and outcomes.

As noted above, although it is true that evaluation should be undertaken at all levels throughout the training process (Goldstein and Ford, 2002; Bramley, 1996), the level of importance attached to a particular issue may differ or vary from one stakeholder to the other. For example, whereas the finance manager may be more interested in the cost effectiveness of training, the trainer may be more concerned with his/her performance. At the same time, it would be unrealistic to expect the parties involved in training and evaluation to operate in isolation. For instance, without feedback from the line manger, it would be more difficult to establish whether or not training has been effective. Similarly, senior managers may need assistance to monitor the progress of trainees and ensure that training objectives are met.

### 3.8.3 Evaluation Design

Through evaluation design, the researcher aims to determine (1) if real change has occurred, (2) whether change can be attributed specifically to training, and (3) whether that is likely to occur again with a new sample (Campbell, 1988; Goldstein and Ford, 2002). To address these questions, the evaluation design should consist of a pretest, a post-test as well as a control group.

#### i. Post-Testing

According to this approach, measurement is taken only after training is terminated, and the results are compared to a pre-defined target or performance.

#### ii. Pre-Testing and Post-Testing

This technique requires measuring performance before and after training. Here, the assumption is that any behavioural, skill or knowledge differences between the two tests can be attributed to training. According to (Barmley, 1996; Bee and Bee, 1994; Reeves, 2001), when the post-training test is taken immediately after training, this does not necessarily mean that transfer of learning to the workplace will occur. Comparisons can then be made between the pre-test and the first post-test; the pre-test and the second post-test; and the first and second post-tests. Most important to remember though is that (a) on its own, a post-test immediately after training is not sufficient, and (b) expected changes associated with training should be specified so that statistically reliable differences between tests can confirm the degree to which training objectives have been achieved.

### iii. Control Groups

To eliminate the effects of other factors that might influence training results, the control group technique is often employed. The technique requires assessing the performance of two groups of employees before training. Training is then provided to one group only (i.e. the trainees). To specify whether changes in the behaviour of trainees group are due to training or to other elements, a post-training test on both groups is conducted and the results are compared.

### 3.8.4 Evaluation Approaches

Unless people agree on what to evaluate, they will not agree on how to evaluate (Brethower and Rummler, 1979). With this understanding, most writers appear to agree that evaluation evolves around four main points or concepts, although different terminologies are often used. For example, Warr et al. (1970) talk about what they call four levels of evaluation: context refers to the process of gathering information to determine training needs and objectives, input evaluation refers to information pertaining to the existing training resources, reaction evaluation describes trainees' current or subsequent reactions to a given training programmes, and outcome evaluation is concerned with the outcomes of the programme for the purpose of introducing improvements to any subsequent training. These are expressed by Brethower and Rummler (1979) in four simple statements. According to them, evaluation attempts to measure:

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- The trainee's level of satisfaction with training
- What trainees have learnt from training
- Whether learnt skills and knowledge are used on the job
- How far the organization has benefited from training

Hamblin (1974) uses other terms to describe the points addressed above:

- Reaction level or what trainees think and feel about training
- Learning level or what trainees have learnt from the course
- Job behaviour level or the effect training has on job performance
- Organization or ultimate performance level or the effect of training on the organization as a whole

Hamblin further notes that the ideal evaluation strategy is to select a level at which evaluation is required and then write the objectives to be achieved at the levels below it. Effects of training can be evaluated up to that level by assessing the extent to which preset objectives have been achieved.

Kirkpatrick and Kirkpatrick (2006) suggest some guidelines for evaluating reaction that will help trainers get maximum benefit from reaction sheets:

- Determine what you want to find out
- Design a form that will quantify reactions
- Encourage written comments and suggestions

- Get 100 percent immediate response
- Get honest responses
- Develop acceptable standards
- Measure reactions against standards and take appropriate action
- Communicate reactions as appropriate

Almost all commentators seem to agree that discussions on evaluation are influenced by Kirkpatrick (1967) who was the first to put forth his four-level evaluation model: reactions, learning, behaviour, and results. Kirkpatrick was also the first to argue that objectives for each level should be pre-defined. Table 3.7 presents a summary of the four-level evaluation model and shows the levels at which objectives can be set. Table 3.9 shows the data collection plan. The four levels are discussed below in turn. However, as noted earlier, it is important to remember that evaluation at all levels should be undertaken. Otherwise, it would be difficult to form a clear picture of training effectiveness.

performance	Area	Components	Kirkpatrick 1967	War, Bird and Reckham, 1970	Hanblin 1974
Organizational effectiveness• Measures of use of learningBehaviourIntermediateJob behaviourOrganizational effectiveness• Measures of change in organizational performanceBehaviourIntermediateJob	training At the job	<ul> <li>Feedback to trainees on learning</li> <li>Measures of gains or change</li> <li>Feedback to trainers about methods</li> <li>Relevance of learning</li> </ul>			
individual/actions plans		<ul> <li>Measures of use of learning</li> <li>Retrospective of feedback to trainers</li> <li>Measures of change in organizational performance</li> <li>Implementation of individual/actions plans</li> </ul>			Job behaviour Organization

Table 3.7: Evaluation Levels and Objectives

Adapted from Bramley (1996)

Evaluation Level	Objective(s)	Data Collection Method	Data Sources	Timing	Responsibilities
1	Reaction/Satisfaction - To measure participant satisfaction with career development training. - Achieve 4.0 on Overall Satisfaction and Relevance rating(s). - 80% identify planned actions	- Reaction Questionnaire - Impact Questionnaire	<ul> <li>Participants, managers, supervisors.</li> <li>Steering committee</li> </ul>	<ul> <li>After each session</li> <li>During session.</li> <li>30, 60 days.</li> </ul>	- HRD consultant - Participants - Managers - Steering committee
2	Learning - Identify individual skills, talents, and development opportunities per self & manager assessment inventories. - Demonstrate proficiency with development discussion guidelines.	<ul> <li>Skill Practice exercises, simulations.</li> <li>Skill assessment prework (self, manager).</li> </ul>	<ul> <li>Participants</li> <li>Managers</li> <li>HRD facilitator</li> </ul>	<ul> <li>During session</li> <li>Before/During</li> <li>One week after</li> </ul>	<ul> <li>Participants</li> <li>Managers</li> <li>HRD consultant</li> </ul>
3	Application Behaviour - Complete Development Discussion with manager with 60 days of program completion. - Apply critical skills/knowledge to designated performance priorities with 60 days of program completion.	<ul> <li>Individual action and development plans.</li> <li>Team project.</li> <li>Follow-up session(s).</li> </ul>	<ul> <li>Participants</li> <li>Steering committee</li> <li>Managers</li> </ul>	<ul> <li>During action plan implementation</li> <li>2 months after program</li> </ul>	- HRD consultant - Project Sponsor - Steering Committee - Participants - Managers
4	Impact/Results - To measure extent to which applied critical skills/knowledge impacted strategic goal of increasing labor efficiency - Increased operational capacity, increased labour efficiency	<ul> <li>Performance monitoring</li> <li>Impact Questionnaire</li> </ul>	<ul> <li>Steering committee</li> <li>Department recorder data</li> <li>Participants</li> </ul>	- 2 months after action plan implementation	<ul> <li>HRD consultant</li> <li>Subject matter experts</li> <li>Participants</li> <li>Managers</li> </ul>

Table 3.8: Data Collection Plan

Source: Kirkpatrick and Kirkpatrick (2006)

#### 3.8.4.1 Reaction Level

As understood by Kirkpatrick (1967) evaluation at the reaction level is concerned with what trainees think about the training programme. Buckley and Caple (2008) note that reactions reflect trainees' opinions on four main areas: skills and knowledge content (as expressed in the training objectives), trainers and training methods, general learning conditions and environment, and the degree to which attitudinal objectives have been achieved. Similarly, Goldstein and Ford (2002) state that assessment at this level requires trainees to provide information on their level of satisfaction with: the instructor, the training management or administration process, the course testing procedures, the utility of the training programme, and course materials.

The most appropriate time to measure the trainees' reactions to the training programme is a debated issue. Marchington and Wilkinson (1996) note that the usual practice is to collect data at the end of the programme. Buckley and Caple (2008) disagree and argue that data should be collected both during and at the end of training. In their opinion, one useful approach for gauging reactions involves the use of what they call 'learning journal', the aim of which is for trainees to record their reactions on a daily or sessional basis. They also describe informal meetings and discussions as useful sources of information. Bee and Bee (1994) maintain that trainees' views are usually elicited through short and highly structured questionnaires with one or two open questions.

#### 3.8.4.2 Learning Level

At this level, the analyst is concerned with measuring the knowledge, skills and attitudes that were specified as learning objectives. Being the focus of analysis, objectives must therefore (a) be expressed in such a way that can be measured and quantified, and (b) cover the span of required learning (Bee and Bee, 1994; Goldstein and Ford, 2002).

Bee and Bee (1994) and Bramley (1996) propose different techniques pertaining to different areas of change to be assessed, i.e. for testing knowledge skills and attitudes. According to Bee and Bee (1994) knowledge of rules, regulations and simple procedures can be assessed through simple questionnaires that require trainees to answer either yes/no or true/false, or multiple-choice questionnaires. As regards complex forms of knowledge, these can be tested by resorting to open-ended questionnaires. Bramley (1996) suggests techniques similar to those of Bee and Bee and adds that open-ended questions can be used to test knowledge of isolated pieces of information and procedures.

Attitudes, or the "tendency or predispositions to behave in certain ways in particular situations" (Bramley, 1996:89) is particularly difficult to assess. Bee and Bee (1994) give two main reasons. First, trainees are often aware of the right answer to give. Second, it is often argued that rather than assessing attitude, it is more practical to assess changes in behaviour where the trainee operates, i.e. in the workplace. In agreement with Bee and Bee, Bramley (1996) states that it is possible to follow up changes in attitude back at the workplace. He also states that the most common method for evaluating attitudes is that of measuring reactions to the programme itself. To him, repertory grid and semantic differentials are the two most effective techniques for attitude measurement. In the repertory grid method, trainees are asked to consider a number of examples of a given concept and say what criteria they use to differentiate between those examples. In the semantic differentials technique, trainees are asked to think about a concept and mark on a seven-point scale where their opinions lie, as in Table (3.9).

Valuable	1	2	3	4	5	6	7	Worthless
Sincere	1	2	3	4	5	6	7	Insincere
Strong	1	2	3	4	5	6	7	Weak
Relaxed	1	2	3	4	5	6	7	Tense
Active	1	2	3	4	5	6	7	Passive
Warm	1	2	3	4	5	6	7	Cold
Fast	1	2	3	4	5	6	7	Slow

 Table 3.9: A Semantic Differential (The Concept of Participative Management)

### 3.8.4.3 Behaviour Level

Kirkpatrick (1967) uses the term 'behaviour' to refer to the measurement of job performance. 'Intermediate level' (Warr et al., 1970) and 'job behaviour level' (Hamblin, 1974) are two other terms that refer to the same thing, which is to measure "the impact of training on job performance and how effectively learning has been transferred back into the workplace" (Marchington and Wilkinson, 2002). However, as is the case with measurement at other levels, it is rather important that on-the-job

Source: Bramley (1996:97)

measures are related to well-defined, clear and specified objectives (Bee and Bee, 1994; Bramley, 1996; Goldstein and Ford, 2002; Hamblin, 1974; Kirkpatrick, 1967).

In most cases, assessment at the job behaviour level requires looking at how the job is done. This leads us to the question of who does the assessment and how. On the question of the assessor, there is a wide range of choices: the employee themselves (i.e. self-assessment), the supervisor or line manager, an external/independent expert, and the employee's peers or subordinates (Bee and Bee, 1994; Reid and Barrington, 1997). As to how behaviour on the job is assessed, Bee and Bee (1994) mention three main methods: observation, self-completed questionnaires, and interviews.

# 3.8.4.4 Results Level

Results, 'ultimate' assessment (Warr et al., 1970), or 'organizational level' assessment (Hamblin, 1974), are concerned with "measuring the effects of the training on the organizational performance" (Bee and Bee, 1994). In itself, this suggests that analysis at this level can be tiring, problematic and complex as the analyst is required to consider a wide range of issues, including costs, turnover, grievances, absenteeism and levels of productivity (Goldstein and Ford, 2002; Marchinton and Wilkinson, 2002). Bee and Bee (1994:258) suggest the following guidelines for carrying out the activity:

- 1. Identify the key indicators/measures of organizational performance that will be used for the assessment (these should be identified at the training needs analysis stage).
- 2. Ensure results are available in the right form before the training period.

- 3. Decide how long the training will take to affect the indicator.
- 4. Identify the other factors that might intervene and consider methods for minimising or measuring the effects of other factors.
- 5. Set up appropriate system to monitor the results.

# **3.9 MONITORING AND EVALUATION OF TRAINING**

Throughout our discussion, it has been emphasized that the major concern of training is to facilitate learning and the transfer of the acquired skills, knowledge and attitudes to the workplace. In order for this to materialize, Goldstein and Ford (2002) suggest that three critical issues must be addressed. The first is concerned with effective instructional design, the second involves a clear understanding of the trainee characteristics that can influence training outcomes, and the third requires an understanding of the learning outcomes themselves and the conditions of transfer (see figure 3.18 above). Elements that have already been discussed (training objectives, trainees' attitude, motivation, abilities, work environment, and transfer of training) will be referred to in passing and the focus will be on learning outcomes and principles.

# 3.9.1 Learning Outcomes

Learning outcomes, or the "behavior to be learned" (Goldstein and Ford, 2002) can be classified into three groups: cognitive, skill-based, and affective (Kraiger et al., 1993). Cognitive outcomes, refer to concepts like knowledge and cognitive strategies or how and when the individual uses the information he brings to the task. Affective outcomes refer to motivation and attitude. In line with the theorization of Kraiger and his associates, Gange, Briggs and Wager (1992, cited in Goldstein and Ford, 2002) describe a set of categories of learning outcomes:

- Intellectual skills that include concepts, rules and procedures (often called procedural knowledge)
- 2. Cognitive strategies that enable trainees to know when and how to choose intellectual skills and verbal information
- Verbal information or declarative knowledge which refers to the individual's ability to declare or state something
- 4. Attitudes of the individual and his/her preferences
- 5. Motor skills which refer to the observable human performances

Gange and his colleagues (1992) equally examine each of the five outcomes and suggest the learning conditions and the instructional events that can best support them (see Appendix 6).

# 3.9.2 Active Learning

Most writers argue that by emphasising the stimulus response or the product of learning, the classical learning theory of the behavioural school has depicted trainees/learners as passive recipients of information and failed to address the question of active and effective learning. Summing up this argument, Baldwin and Williams (1990) postulate that unless learners/trainees are "actively engaged and in control of their learning", positive learning outcomes may not be expected. Put differently, rather than concentrate on the learning product, trainers should focus on the training process of what goes on inside the head of trainees, their attitudes, abilities experience and the knowledge they bring to the training task (Hardingham, 1998; Mabey and Iles, 1994; Schuler and Huber, 1993).

For effective instruction, Sims (1993) presents trainers with a set of guidelines that includes: providing clear task instructions, encouraging active participation, increasing self-efficacy, providing opportunities for inactive mastery, ensuring timely diagnostics and practical feedback, and providing opportunities for trainees to practice new behaviour.

# 3.10 CONCLUSION

The most critical issue in training is the transfer of learned skills, knowledge and competencies to the job. This process requires careful and meticulous planning that begins with the identification of training needs and determining the training strategy and objectives. It also involves a committed trainee who finds value and reward in training and is willing and motivated to learn. These issues were the subject of discussion in Sections 3.3 and 3.4. In Section 3.5, the argument focused on effective learning/training as a precondition to transfer. On the one hand, it was argued that successful training requires a dedicated, experienced, flexible and knowledgeable trainer who plays the role of the active facilitator and motivator, as apposed to the role of maintainer or passive

information provider. Successful trainers have also been described as those who use a mix of instructional methods and take trainees' individual differences and learning styles into consideration. In particular, emphasis has been placed on the need for adopting a learning/training model that shifts the locus of control from the trainer to the trainee and that takes the characteristics and abilities and needs of adult learners into consideration. Closely related to training delivery is the issue of evaluation. As regards this matter, the argument has been that rather than concentrating on measuring how much trainees have learned, evaluation should be extended to include the trainee's reaction to the training event, its impact on the trainee's behaviour on the job, and its effect on the organization as a whole.

# CHAPTER FOUR

#### METHODOLOGY

# **4.1 INTRODUCTION**

The three cornerstones of the present research, namely training needs, the trainee, and the trainer, were the subject of the previous chapter and the argument focused on the effective learning/training process as a precondition for transfer. Successful trainers have also been described as those who use a mix of instructional methods and take trainees' individual differences and learning styles into consideration.

This chapter discusses the research design implemented in this study, population and sampling procedures, instrumentation, data collection procedures and the techniques of analysing the data from quantitative and qualitative sources. The study's measuring instruments validity and reliability were tested through a pilot study, especially as the questions were in Arabic. The chapter highlights the research model, develops the hypotheses from the framework and justifies each statement.

#### **4.2 RESEARCH DESIGN**

Research designs are plans that guide decisions about when and how often to collect data, what data to gather, from whom and how to collect it, and how to analyse it (O'Sullivan et al., 2003). Administrators may want a case to investigate a programme or policy that has had remarkable success, programmes or policies that have unique or ambiguous outcomes and a situation where actors' behaviour is discretionary (O'Sullivan

et al., 2003). To achieve its objectives, this study uses a multi-method approach that combines the quantitative approach, through a survey distributed to trainees, which addresses the first and second questions of the objectives of the study, and the qualitative approach through interviews to managers, supervisors and trainers, equally answering the first and second questions of the objectives of the study.

It is believed that a combination of both qualitative and quantitative methods in the study provides a better understanding of research problems than either approach applied individually. There are several reasons for using a multi-method approach, they are as follows:

- i) A multi-method approach from different paradigms focuses on different aspects of reality and therefore brings about a richer understanding of a research topic by combining several methods together in a single piece of research programme.
- ii) It allows for strengthening results, which can be useful not only at the single study level, but also at the meta-analysis or review level.
- iii) It allows for asking broader questions which increase reliability and validity.
- iv) It enables and confirms the discovery of unexpected outcomes.

### **4.3 QUALITATIVE DESIGN**

Studies using the qualitative design in the past proved to be more analytical and robust in gaining the needed result than any other method because they accurately reflect complex realities. In addition, they provide a more balanced representation of different stakeholders, a better understanding of processes, a better rapport with respondents and more continuous contact leading to more accurate information. External understanding of difference and the ability to get sensitive information may be more reliable if the investigation is not influenced by expectations or fear of consequences (Miles & Hurberman, 1994).

### 4.3.1 The Interview

Useful as they could be, interviews equally come with a number of shortcomings. They are time-consuming and involve demanding tasks such as wording questions and analyzing data. More importantly, there is always the risk of bias because the interviewer's attitude and manner may affect the respondent's behaviour and responses.

In the present study, the interview theme focuses on research aspect and evolves around the principle that in order for training to be effective and skill transfer to be successful, certain conditions must be satisfied before, during, and after the training operation. Throughout the three stages, the key players are administrators, trainers and managers. Here, it is necessary to involve senior managers instead of lower ranking managers, as it is thought that the information provided by them, i.e. decision and policy makers, would be certainly valuable.

With the aim of depicting a clearer picture as to how training is perceived and conducted in SDO, eight different sets of open-ended questions were prepared and semistructured interviews were conducted with seventeen trainers, ten supervisors and four focus discussion groups, each of the latter consisting of five senior managers (with a total of twenty managers). The choice of open-ended questions can be explained in terms of the flexibility and spontaneity they offer as well as the detailed and rich information they can reveal. In selecting the sample, what was more important than the number of respondents is the type and quality of information held by those interviewed and the relevance of that information to the study purpose and objectives. Attention was paid to make the questions relevant to the study and the interviewees, i.e. address the different responsibilities they hold and the roles they play in the training operation (see Appendix 7).

In order to secure better result in conducting interviews this study adapted Creswell (2008) sequentially stages in conducting interviews. These are as follows:

- Stage One: Arrival and introduction of researcher.
- Stage Two: Introducing the research topic.
- Stage Three: the actual interview
- Stage Four: Ending the interview session.
- Stage Five: the post interview.

The above stages provided by Creswell (2008) were strictly observed in this study. Interviews were geared toward providing answers to the research questions on the challenges affecting the achievement of effective training process.

#### 4.3.2 Face-to-Face and Focus Group Discussion Interview

Interviews are the most frequently used method in qualitative research (Mason, 2002). As suggested by (Bogdan & Taylor, 1984), face-to-face interviews were conducted simultaneously with data collection at the research study area. Interviews were recorded through the use of a minidisk recorder. Pictures and notes were taken during the interviews to support the recorded version.

#### 4.3.3 Background Work Before Conducting Interview

In this study, Face-to Face interviews were done to answer the third research question. In order to ensure validity, reliability, and trustworthiness in this study the interviews conducted followed the steps provided by Merriam (1998).

- i. Involving multiple sources of evidence which will confirm the emerging findings.
- Providing for members checks by allowing participants to examine and evaluate the findings and interpretations.
- iii. Eliminating research bias through clarifying the research's assumptions, worldview, and theoretical orientation at the outset of the study.
- iv. Providing for pattern matching: that means how findings match reality.

## **4.4 QUANTITATIVE DESIGN**

In the quantitative side of this study, the survey method was used because it involves the lowest comparative cost compared to other quantitative data collecting methods (Sekaran, 2003). Quantitative research is based on the assumption that anything that exists comes in quantities and can be measured numerically. Therefore, the quantitative research methodology is appropriate wherever quantifiable measures of variables of interest are possible, hypotheses can be formulated and tested, and inferences drawn from population samples (Adamu, 2006). Among the major advantages of the quantitative method in research is its power for generalisation, its predictive capability and its full explanations of causal relationship (Tashakkori & Teddlie, 1998).

#### **4.5 INSTRUMENTATION**

Data collected from the quantitative side of this study solely originated from the primary sources. Questionnaires were designed to answer questions which are related to the tested variables. The main instruments of each variable were adapted from Noe (2008) and sent to a certified agency for translation into Arabic, following which the pilot test was conducted.

Ten items were used to measure Needs Assessment (NA), seven items were used to measure Readiness for Training (RT), seven items were used to measure Learning Environment (LE), six items were used to measure Transfer of Training (TT), eight items were used to measure Evaluation Plan (EP), nine items were used to measure Training Method (TM), five items were used to measure Evaluating the Programme (EP) and seventeen items were used to measure Effective Training Process (ETP). All items used in this study possessed their own meanings and conceptualisation as they relate to this study.

Regarding appropriateness and non-repetitiveness of many measuring single items, this study conducted a factor analysis in which all the measuring items satisfied the factorability conditions through extracting items that are not suitable for use in the main analysis. On the qualitative side, this study used interviews as a survey instrument to get in-depth information from the stakeholders involved. Face-to-Face individual and focus group discussion interviews were conducted and taped. Notes were equally taken and a transcription of the interviews was produced.

#### 4.5.1 VALIDITY OF INSTRUMENTS

Regardless of the procedure the research follows for collecting data, it should be assessed to ensure that it is valid. Internal validity is reflected in the ability of the research design to sustain the causal conclusions we claim for it. Internal validity includes content and construct validity. Content validity refers to the measurement of the items in the instrument, which are the questionnaire and interview in the case of this study. Construct validity is the approximate truth of the conclusion that perception of the instrument can be translated into operational reality.

#### **4.5.2 Reliability of Instruments**

Reliability refers to the repeatability or consistency of what a research instrument measures and what it has been designed to measure. In other words, a reliable instrument is the one that gives the same 'reading' when used on different occasions (De Vaus, 2002). Kumar (1999:140) adds that "The greater the degree of consistency and stability in an instrument, the greater is its reliability".

In ensuring reliability Cronbach's Alpha Coefficient was used to explain how well items in a set are positively correlated to each other. Cronbach's Alpha Coefficient is the ratio of sum of the covariance among the components of the linear combination (items), which estimates true variance to the sum of all elements in the variancecovariance matrix of measures and which equals the observed variance (Nunally, 1979). The closer the value of the Cronbach's Alpha to 1 the higher the internal consistency.

Reliability between 0.50 and 0.60 is sufficient at the early stages of research. Sekaran (2003) suggested that 0.60 is the minimum acceptable reliability in behavioural research. In most technology adoption researches 0.60 is considered the minimum acceptable value (Davis, 1989; Venkatesh, et al., 2003). The 0.60 minimum acceptable values were applied in this study to evaluate the constructs in the framework. The study also conducted exploratory factor analysis in order to explore the effectiveness and at the same time take measures from different geographical settings. Bell (1999) observes that the check for reliability and validity should begin at the early stages when wording and piloting the questionnaire or the interview. Patton (2002) adds that research validity depends on careful instrument construction.

#### **4.6 THE QUESTIONAIRES**

The questionnaire used in the present study is of the closed type. In constructing and organising the questionnaire, the researcher was guided by the literature review as well as studies relevant to the theme of this research. The purpose of the questionnaire is to explore the perceptions of administrators on training and the role they play in the training operation. Administrators form the bulk of the civil service workforce, hold low-key positions and form the vast majority of those who undertake training.

The questionnaire consists of three parts. The first part covers demographic variables, including gender, designation, age, qualification, length of experience, the number of training programme attended during the present year, the number of training programmes attended over the last two years, and the department the participant belongs to. The second part covers the independent variables and consists of fifty one questions divided between the seven phases of independent variables: needs assessment, employees' readiness for training, learning environment, transfer of training, evaluation plan, training method, and monitoring and evaluating the programme. The third part covers the dependent variables and consists of sixteen questions (see Appendix 7).

# **4.7 DATA COLLECTION PROCEDURES**

The first phase of the fieldwork took place between September and October 2009, during which time arrangements for conducting the survey were made, questionnaires administered and data collected. Before conducting the questionnaire, an authorisation to carry out the survey was obtained from the Director General of SDO that urged all those concerned to lend the support and the cooperation needed. The researcher delivered the authorisation in person to all senior managers in the twenty participating departments and had a meeting with each one of them to know how many sections are in the department. Subsequently, the permission was taken to meet the head of each section to know who attended training then asked them for a list of these trainees. This gave the researcher the opportunity to introduce himself to the participants and agree with them on the arrangements and procedures for the distributing and collecting of the questionnaires. In early September 2009, 465 questionnaires were thus distributed randomly. The names of trainees in each department were each written on a piece of paper then put it in a box out of which the required numbers of trainees for each department were picked up. After that, the questionnaire was given to each trainee with a covering letter explaining the aims and importance of the research and a note thanking respondents for their participation and assuring them that confidentiality would be maintained. Participants were given a contact number in case they encountered problems in filling in the questionnaire. By mid of October, 420 completed questionnaires were returned of which 20 were excluded from the final analysis because too many questions were left blank. This brought the number of valid responses to 400, a rate of 86%. So that by the end of October the 400 responses were completed (Table 4.1).

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No.	Department	No. of Employees	No. of Employees who Attended Training	Questionnaires Distributed	Questionnaires Returned
1	Water	150	90	33	29
2	Municipality	330	140	50	45
3	Land Affairs	132	70	28	25
4	Technical Affairs	133	90	29	25
5	Planning	135	92	29	25
6	Transport	150	100	34	29
7	Project & Maintenance	132	93	28	25
8	Housing	17	9	8	7
9	GIS	60	18	16	14
10	IT	63	30	17	14
11	Finance	210	110	41	35
12	Administration	220	120	42	35
13	Real Estate	102	24	22	20
14	Quantity Surveying	18	9	7	5
15	Architecture	14	8	6	5
16	Landscaping & Gardening	130	30	29	25
17	Public Affairs	21	11	9	8
18	Media and General Relations	20	11	10	7
19	Stores	110	30	25	20
20	Legal Researcher	5	4	2	2
Total		2152	1089	465	400
	% of questionnair	% of questionnaires returned is 86%			

(For the percentage of sample please refer Sekaran (2000) & Leedy (1997:211))

The second phase of the field-study was conducted simultaneously to the first. Before conducting the interviews, participants were shown protocol documents and presented with an official letter explaining the purpose of the research. Later, they were contacted and the right times and places for interviews were arranged. Before conducting the interviews, the researcher introduced himself, explained the purpose of the research once more, assured interviewees of confidentiality and anonymity and stated how long the interview would take. The participants' permission to record the interviews was also requested and there were no objections from the majority of the interviewees, Table 4.2 shows the distribution of participants in the interview.

Survey tools	Senior managers	Trainers	Supervisors	Administrators	Total		
Interview	-	17	10	-	27		
Focus group discussion	20	-	-	-	20		
Total							

 Table 4.2: Interview Participants

During the interviews, the researcher listened attentively, gave verbal and nonverbal feedback, recorded the responses and made notes that consisted primarily of key phrases and major points made by the respondents. For note taking, a system of abbreviations and informed shorthand was adopted. Immediately after the interview, tapes were checked to make sure that no malfunction had occurred. Soon afterwards, notes about the setting and the conduct of the interviewe were added. Such notes helped the researcher to bring back the context of the interview at the analysis stage.

### **4.8 POPULATION AND SAMPLING**

# **4.8.1 POPULATION**

Cavana et al. (2001) define population as the complete collection of the subject of interest to be studied in research. Hair et al. (2010) and Cavana et al. (2001) define population as the collection of data and information whose properties are to be analysed in a given research. By their nature, questionnaire surveys are usually concerned with large populations, i.e. "all those who fall in a category of concern" (Oppenheim, 1992:38). However, due to time and cost considerations, it is often difficult and unrealistic to involve a whole population in the survey. The population of this study was obtained from twenty departments in SDO and a representative sample of 400 trainees was selected for questionnaires. In addition, 20 senior managers, 17 trainers and 10 supervisors were selected for the interview. This brings the total population to 447 participants.

# 4.8.2 SAMPLING

A representative sample, or subset of the population under investigation, is selected to take part in the survey with the aim of collecting information from that sample and then generalising the results on the whole population (Bell, 1999). Before selecting a sample, the researcher is faced with the question of its size. In social surveys in particular, it is accepted that large samples yield more reliable and generalisable results (Rice, 2003).

Leedy (1997:211) observes that sample size "depends on the degree to which the sample population approximates the qualities and characteristics of the general population". He equally suggests these general guidelines for determining the sample size:

- 1. The larger the population size, the smaller the percentage of those needed for the sample
- 2. For a small population, there is no point in sampling, and all are surveyed.
- 3. If the study population is around 500, fifty per cent of that population could be taken as a sample. If the population is around 1500, the percentage goes down to twenty.
- 4. Beyond a certain point, e.g. over 5000, a sample of 400 would be adequate.

When drawing their samples, researchers choose from a variety of sampling methods. These fall into two broad categories: probability methods and non-probability methods. In probability sampling, "Every individual element in the population is chosen at random and has a non-zero chance for selection" (Arber, 2003:31). By contrast, in non-probability sampling, the chance of selection for each member in a population is unknown. Furthermore, non-probability samples are not representative of the population and the findings cannot be generalised (Rice, 2003).

What has been said about the sample size and sampling strategies applies to the quantitative enquiry and not necessarily to the qualitative type only. In a qualitative enquiry, although there are no rules for the sample size, it usually consists of small

groups or even single cases (Patton, 2002) also according to (Creswell, 2008:217) "In some cases, you might study a single individual or a single site. In other cases, the number may be several, ranging from 1 or 2 to 30 or 40". Here, information-rich sources are given priority over others because the researcher can learn from them a great deal about issues of primary importance. As such, the purpose of sampling becomes credibility, not representativeness.

In the present study, the term, population, refers to all individuals classified as senior managers, trainers, supervisors, and administrator in the twenty two departments of SDO. One department, namely the Training Department, is the main provider of administrative training in SDO. Hence, including it in the survey is of vital importance to this study, without it, it would not have been possible to explore the trainers' perceptions of training or how training is conducted. Guided by the sampling principles and procedures outlined above, the simple random sampling technique was applied to select five of the twenty two departments. As was mentioned earlier, this probability-based method gives an equal chance for each member of the population under scrutiny to be selected. The simple random technique was re-applied three times to select representative samples of administrators from twenty two departments. In total, 400 individuals were selected (Table 4.1).

For the interviews, a sample of seventeen trainers was constituted from the training department and ten supervisors from different departments, since they are the leaders for each department so they represent the group. For the focus group discussion, a sample of twenty senior managers was selected. As stated in the discussion above, the

type of qualitative data to be obtained and the relevance of this data to study objectives and research questions are much more important than the sample size. In line with this theorisation, it is believed that the information extracted from the sample would address the key questions (Table 4.2).

# **4.9 DATA ANALYSIS**

The returned questionnaires were carefully coded and the data they contained entered into SPSS (Statistical Package for Social Sciences), often regarded as an ideal programme for analysing large amounts of data. A range of statistical analysis techniques was used. Descriptive statistics, including frequencies and percentages were utilised. In addition, correlation and regression analysis were used to summarise data and compare the distribution of group responses.

To analyse the interviews, the researcher had to transcribe data and repeatedly compare transcripts to the original to ensure accuracy. Upon initial analysis, it was found that the best approach was to take the three groups separately and write a case study for each person in the group and one for each of the four focus group discussions. Responses to interviews were then organized question by question. For instance, the responses to the first question of the four groups of senior managers (i.e. the procedures followed in planning and designing training programmes) were grouped together. The main concepts, theories and points of agreement or disagreement with each group of answers for each question were identified, highlighted and contrasted. Answers of different groups were then compared and contrasted and different perspectives on the central issues were analysed.

# **4.10 CONCLUSION**

To establish how training is conducted as well as how it is perceived by the key players in the field of the administrative training at SDO, the questionnaire and interview were employed as research instruments, and data pertaining to the independent and dependent variables was collected from a randomly selected sample of administrators for the questionnaires and a sample of trainers, supervisors and senior managers for the interviews. Data collected from participants was analysed. The findings of the study are presented in the following chapters.

#### **CHAPTER FIVE**

# **QUALITATIVE DATA ANALYSIS**

# **5.1 INTRODUCTION**

In chapter 4, the questionnaire and interviews carried out for this study were described, and issues pertaining to sampling, data collection and analysis techniques were discussed. The chapter equally highlighted the research framework, developed the hypotheses and justified the hypothesized statements. This chapter discusses the research designs and methodology used for qualitative data collection and analysis. The chapter was designed to answer aspects of research question one that are more qualitative in nature and integrates questionnaire findings to the next chapter.

### **5.2 THE INTERVIEW FINDINGS**

As was mentioned in the previous chapter, one set of questionnaires was conducted with administrators (trainees) and three sets of interviews were conducted with three other groups: twenty senior managers (focus group discussion, five managers in each), seventeen trainers, and ten supervisors. The rationale for these numbers of interviews is that these are the leaders for each department, and are therefore representatives of their groups.

### 5.2.1 Needs assessment

Concerning the formal procedures followed in the planning and designing of training, the trainers gave a detailed account of the administrative processes involved before action is approved and taken. According to one trainer,

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The process begins by asking the relevant departments at SDO to prepare their annual training plans where they define their training needs for the following year. All plans are subsequently submitted to a committee comprised of representatives from the department of training, the main authority involved in training staff at SDO. (Trainer from Training Department, September 6/2009)

After analysing the reports, the committee comes up with a general training plan and publishes a list of the training programmes. If it is seen that a reasonable number of institutions require a new type of training, the training department is assigned the responsibility of designing it. However, in most cases, the usual list of training programmes is left unchanged or is only slightly modified. One of the focus group discussion mentioned that:

The training department sends their departments a list of available courses and their duration. Then, candidates have to complete a special form and have it endorsed by their direct supervisors. (Manager, September 10/2009)

According to trainers, apart from the scenario outlined above, special programmes are sometimes designed to meet particular institutional needs. These are delivered by external trainers either locally at the training department or at private institutions. However, these tailor-made programmes remain costly and are usually limited in number and confined to the managerial level.

The managers and supervisors were asked whether they played a role, either direct or indirect, in designing the training programmes or determining their content. In answer to the question, all agreed that: The programmes' design, delivery and training objectives were totally under the responsibility of the training department. Summing this view up, one manger stated that: Contact between the training department and other SDO departments is initiated only after programmes have been designed and the training plan public. (Manager, October 4/2009)

From the interviews it was noted that if it is found that a particular programme meets the needs of a department, the training department is provided with a list of candidate together with background information on their qualifications, experience and job responsibilities. However, if other priorities arise or if allocations for training are deemed insufficient, the training programmes on offer are rejected.

As reported by seventeen interviewed trainers, the procedures are as follows: The annual reports of all SDO departments on their training needs for the following year are reviewed and examined. Following the review, an annual training plan for all departments is drafted.

All interviewees agreed that the bulk of the emerging training plan usually consists of previously introduced programmes. They also noted that "the high demand and need for such programmes explains why they are run for a long time". There was also a general agreement that the existing plans or programmes are sometimes adapted to better suit demand. However, interviewees argued that, "given the time constraints and the heavy workload, no drastic modifications can be carried out".

After the plan is endorsed, comes the implementation stage, which necessitates coordination with the other departments. The process usually requires the training department to provide those departments with sufficient information on the available courses, their nature, objectives, venues and durations. Departments willing to take part have to complete a standard training application form containing information on each candidate's educational level, training experience, a general description of his job, and the comments of the direct supervisors. This information is then examined by the training department in view of the selection of the final list. In this respect, ten trainers complained that the application forms they receive are often incorrectly filled in and incomplete. One added:

We notice how inaccurate information is only when we meet trainees the first time and realise that some may be unable to cope with the demanding programme. (Trainer from Training Department, October 15/2009)

Asked what measures were taken in such instances, he retorted that it was then too late to dismiss anybody.

All interviewees agreed that the issue of identifying training needs requires immediate attention. They agreed that candidates are usually selected on the basis of observation conducted by the supervisor or of the annual reports on the employee's performance. Job demands, poor performance or changes in the employee's position, and the nominee's previous training record were also mentioned as guiding selection criteria. Two interviewees stated that "new recruits and employees with little or no previous training were usually given priority".

Asked whether or not trainees were forced to attend training, the supervisors agreed that:

The usual practice was to request nominees to fill in the application forms without prior consultations, especially when training is related to their jobs. Also, they mentioned that in some cases, consultations precede the selection process.

(Supervisor from Landscaping & Gardening Department, September 27/2009)

According to one manager,

The first selection stage begins in the applicant's department at the time the training plan and the list of nominees are prepared and presented to the training department. Upon the publication of the training plan, the list of candidates is revised, depending on the available training programmes and material resources. As a second phase, departments are requested to present their final lists. Following a brief review of those lists, the training department writes back to the departments with the name of accepted applicants.

(Manager, October 25/2009)

Asked to elaborate on their selection procedures, the interviewees stated that determining selection factors were the demand on the training programme and general background information on the applicant, i.e. qualification, previous training, and job responsibilities. As regards the criteria departments apply in their selection process, the interviewee reiterated what was stated by others, i.e. that reliance on the observation conducted by the direct supervisor and the annual reports on the employee's performance were the usual practice.

Interviewees were then requested to state whether or not they were satisfied with the process identifying the training needs. Managers and supervisors, as well as one third of trainers, thought that training needs were properly assessed. Nonetheless, it is evident that the three groups of interviewees understood the needs assessment concept differently. When we come back to this issue in our discussion in Chapter 7, it will be seen how difficult it is to disagree with the majority of trainers who appear to suggest that the training needs assessment process requires further consideration. Some supervisors and seven trainers agreed with one supervisor who said that:

Changes in the needs and skills of the trainee might have occurred during the period between carrying out the training need identification activity and implementing training. (Supervisor from Water Department, October 18/2009)

The opinions of managers as well as supervisors were divided. Some thought that some form of re-assessment takes place in the training theatre, and some indicated that they either did not know what went on in the training department or questioned the significance of the task. A small majority thought that needs and abilities were neither assessed nor addressed. In contrast, the trainers' views were almost equally divided between those who thought they performed the activity and those who questioned its outcomes.

# 5.2.2 Employees' Readiness for Training

On the statement of how trainees are specifically prepared for training, only a few comments were made. One of the focus groups discussion mentioned that

The training department usually replies to the other departments with the list of accepted applicants and information on the programme duration, time, content and location. (Manager, October 25/2009)

In turn, this information is passed on to the candidates. One manager protested that "trainees sometimes receive information only a few days before the training event, which makes it difficult for them to make the necessary arrangements or preparations". Another manager added that "trainees are often hardly told anything about the course contents". A third suggested that even when trainees are informed about the programme's contents and objectives, not much is explained to them about it, and they remain unprepared.

Interview findings point to a lack of consensus and the absence of a standard form of practice as regards motivating trainees to undertake training and rewarding them upon its successful completion. Views on the matter were almost equally divided between those who found no relationship between training and incentives, and those who believed that a form of encouragement was needed. According to one manager,

*Civil service regulations stipulate that training forms part of the job. Another noted that most training is conducted during the working hours and, as such, employees should not expect any reward in return.* (Manager, October 25/2009)

Asked whether employees deserved to be rewarded for any training provided outside the working hours, one supervisor replied "encouragement if they are successful and reprimand if they fail". A second supervisor reported that high achievers are often promoted to higher positions and even granted financial awards. Asked whether such a practice was in line with the civil service regulations, managers answers were in the negative. One trainers stated that:

High training achievers are presented with letters of encouragement and honorific certificates from the training department. (Trainer from Training Department, September 24/2009)

About the issue of factors hindering effective training, replies referred mainly to the lack of material resources and shortages in skilled supervisors or training officers capable of identifying training needs as the two major problems. On the issue of training needs, one senior manager exclaimed "What is the point in establishing a training department when it is run by unqualified personnel!" Other problems identified by the respondents are: the absence of a recognized and fair reward system, inadequate numbers of qualified trainers, poor training aids and facilities, and lack of planning and coordination within and across the training department and the other departments. All trainers mentioned the following points: no clearly defined or identified training needs, absence of a training philosophy, unclear training plans or objectives, lack of coordination between the training department and other SDO departments, lack of a job clarification scheme, and no follow-up after training. Six interviewees pointed to the lack of awareness at the managerial level in SDO departments. Four noted that training officers and human resource management staff are not qualified. Another added the lack of incentives.

Responses to the question on describing the trainee's motivation and attitudes were unsurprisingly identical. For trainers, there are three types of trainees. The first is a small minority that shows complete lack of interest in training and appears to be unwillingly assigned to training. Some of these trainees find training irrelevant to their jobs, some fail to see a personal need for it, and others regard it as a "boring routine and an unrewarding exercise". The second type, equally represented by a minority, is made up of highly motivated trainees who recognize a need for training. However, not all these individuals are motivated by the desire to improve their performance on the job. The third and largest type is constituted by trainees with a satisfactory level of motivation.

This category, however, comes with a number of flaws. In the words of one trainer, they generally lack the basic knowledge and are not aware of training purposes

or objectives. According to another trainer, some of the motivations are purely personal, e.g. doing an IT course to improve one's skill or help family members. Others think that new skills and qualifications can create better employment opportunities outside their current organisation. Another trainer observed that trainees usually arrive unprepared. Another noted that some are interested only in certain aspects of the programme.

The statement on informing trainees about their duties and responsibilities at the beginning of the training programme aims at establishing whether trainees were encouraged to set up their training goals. Feedback shows that managers thought that trainees were informed about course demands and requirements. A number of supervisors disagreed with the opinion of the managers. In stark contrast, the overwhelming majority of trainers said that trainees were well informed of what to expect.

#### 5.2.3 Learning Environment

A sizeable majority of managers are of the view that training programmes are held in places and conducted at times that suit trainees. Similarly, nearly three in four trainers thought that trainees were satisfied with the training arrangements. What is interesting, however, is that most supervisors were not satisfied with the place and timing of training, which consolidates the findings of questionnaires in Section 6.5.2.3. Table 6.17 shows that 24.3% of administrators thought that the training environment is usually stressful and that as such one cannot expect a good outcome from the training. Over 26% of respondents were uncertain about this issue, and the rest thought they were satisfied with the measures taken to ensure a favourable learning environment. Similar positions are found in correlation and regression findings in Sections 6.6 and 6.7.

The majority of trainers seem to realize the importance of a healthy environment that is favourable to the training/learning process. As such, they seem to be doing all they can to ensure it is available. The rest suggest that some form of stress does exist but for reasons beyond their control. One supervisor thought that:

The training environment is usually stressful, but some of them thought trainees were satisfied with the measures taken to ensure a favourable learning environment. (Supervisor from Training Department, September 27/2009)

Naturally, unless training activities and taught skills and knowledge are related to the trainees' job, we cannot guarantee skill transfer. In this respect, trainers admit that the training programme is not necessarily always relevant to the job. Views similar to those of the trainers were expressed by supervisors as half of them agreed that training was relevant to trainees' jobs. The rest saw little connection between training and job demands. Yet most managers were either doubtful or pessimistic.

All trainers said that feedback on the progress of trainees is provided regularly. Yet, although managers thought that feedback was, indeed, provided, some participants in focus groups discussions appear to insist that progress during training was not monitored. As regards supervisors, the majority stated that feedback was provided.

# 5.2.4 Transfer of Training

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Almost all managers mentioned that trainees are usually informed about the demands of the training event and its objectives. By contrast, only few trainers thought that trainees are usually told what to expect, whereas supervisors had a different opinion: according to them, trainees are left in the dark, which is the same opinion found in the questionnaires in Section 6.5.2.4. Table 6.18 shows that a majority of trainees, 55.8%, indicated that they were not informed about the demands of the training event and its objectives. The question is: the situation being as it is, how do trainees identify their goals and how can they plan to reach them?

Over 61% of interviewees thought that their relationship with trainers, supervisors and managers ended once training was terminated. This point is really significant because if there is no follow up, the trainees cannot be sure that what they learnt is relevant to practice or actual work. Questionnaire data show that 49.7% of trainees were hardly involved in post-training activities. Similar positions are found from correlation in Section 6.6 and from regression in Section 6.7.

Responses to the question on measures taken to assess training and ensure successful transfer of learning to the job show that the issue is totally overlooked. One interviewee reported that

Meetings take place between trainees and their supervisors to discuss what changes have occurred as a result of training and the means of applying acquired skills and knowledge to the job. According to him, supervisors usually follow up the trainees' performance and provide them with guidance and encouragement. Asked whether supervisors were capable of providing the proper assistance, he confidently stated that:

Though it was true that supervisors may not possess all the skills and knowledge required by the job, they are certainly qualified to support and encourage their subordinates in the same manner they are, themselves, treated by their supervisors. (Supervisor at Project & Maintenance Department, October 22/2009)

Post-training meetings between trainees and supervisors were also reported by another senior manager. On the purpose of those meetings he said: "to congratulate high achievers and ask those with a low score for an explanation". As for the vast majority who fall between the two extremes, his view was that "these individuals do not need much attention and are expected to improve even further with time". A third interviewee mentioned that the end-of-training report is consulted in order to form a clear picture of the trainees' achievement. Asked to elaborate on the contents of the report, he gave "the examination mark and the impression of the examiner" as an answer.

Observing trainees' behaviour was the only form of assessment and follow-up techniques reported by the other two senior managers. As to how observation is conducted, the first interviewee noted that "any positive changes in the behaviour of the employees are encouraged and accepted. Otherwise, they will be requested to modify their behaviour". At this point, the interviewee was asked about the standard against which performance is measured, to which he answered that

Although some supervisors are not qualified, they understand the job demands better than their subordinates and, as such, dictate the rules. (Manager, September 14/2009)

The second senior manager was more critical. In his opinion, because training needs are not identified and job requirements are not clear, it would be unrealistic to talk about reliable assessment or constructive follow up. According to him, what happens in practice is that supervisors monitor trainees' behaviour and use the information they obtain only as input for the annual performance report.

A brief report is written about each trainee consisting of the training test mark and general comments. This report marks the end of the relationship with trainees and no further consultations or discussions are required. However, one trainer mentioned that although it is not his duty to follow up training in the workplace, he "sometimes" provides assistance "within the limits of his availability if the need for this arises". When asked what action they take to improve training in the light of the trainees' assessment to their programmes, all trainers agreed that their practices are usually unaffected. According to one trainer "some programmes are slightly modified, but this remains rare". Another commented that "any complaints against trainers are taken seriously". One of focus group discussions highlighted that:

Most of them were not in a position to talk about what goes on in the classrooms due to lack of communication between them and other parties, but some of them thought or probably supposed that discussions took place.

(Manager, October 25/2009)

A similar view was stated by supervisors. As regards trainers, some said that trainees did not usually take part in discussions, while others stated that trainees were able to express their views and ask for explanations.

Over 50% of trainers noted that their relationship with trainees ended once training was over. The rest stated that their post-training role is unclear, and equally mentioned that the trainees' job behaviour is monitored. Nevertheless, because formal contact between the trainer and the work organization is never required or maintained, the other 50% of trainers stated that managers and supervisors should follow up trainees after training. In total disagreement with the trainers' views, the vast majority of managers and supervisors stated that appropriate measures were not taken to ensure skill transfer.

# 5.2.5 Evaluation Plan

Most managers indicated that: "Trainees' abilities, knowledge, attitude and skill levels are taken into consideration before selecting them for training". Supervisors seemed to follow a similar line of thought. As regards trainers, more than half thought that the trainees' motivation and pre-training skill and knowledge levels were taken into account, while the rest were not satisfied with the usual procedures.

As expected, responses to the question on maintenance of communication between trainers, managers, supervisors and trainees show that only a small proportion of interviewees thought that some form of communication between the four parties is maintained during the training operation. Only about one third of managers thought that the reward system was acceptable and fair while the rest disagreed. Similar views were reflected in the supervisors' responses. The trainers are split; half stated that they were satisfied with the reward system, while the other half thought that it was unrealistic.

#### 5.2.6 Training Method

On the question of motivation, trainers reported that they used the first session to set the climate for learning by stating the objectives of the programmes and explaining to participants what they are expected to do. Throughout the training, trainees are given "interesting and relevant tasks" and discussions are encouraged. At the end of the training, high achievers are presented with letters and certificates of recognition, and an open day is organized for participants every year. As per trainers,

Lectures, group-work, discussions and workshops were described as the most common training techniques. Effective use of available training aids and materials was mentioned by one trainer. A few self-explanatory remarks were also made. First, under the pressure of time, it is often difficult to pace training activities or conduct one-to-one discussions or interviews. Second, most trainees are "too passive and receptive" and "expect trainers to initiate all activities and do all the talking". Third, some tasks and activities "do not appeal to some trainees although they are relevant to the training objectives. The majority of trainers indicated an unsatisfactory level of coordination between the managers, trainers, supervisors and trainees, and six of them mentioned that consultations took place, though this does not necessarily mean that they were personally involved. As regards managers, they thought that consultations between the four parties occurred during the planning phase. A different view is held by supervisors who thought that consultations and coordination did not materialise.

The majority of trainers, managers and supervisors seemed to agreed with the statement about Group Building Methods. It is acknowledged that "team training, action learning, adventure learning" focus on helping teams increase the skills needed for effective teamwork. The Team Training coordinates the performance of individuals who work together to achieve a common goal. The components of team performance are knowledge, attitudes, and behaviour. Action Learning gives teams or work groups an actual problem, has them work on solving it and committing to an action plan, and then holds them accountable for carrying out the plan. Adventure Learning appears to be best suited for developing skills related to group effectiveness such as self-awareness, problem solving, conflict management, and risk taking.

All the three groups of respondents agreed on that Multimedia Methods do motivate trainees to learn, provide immediate feedback and guidance (through online help), test employees' level of mastery, and allow employees to learn at their own pace. However, they conceded that these methods are costly, rather advanced and are not available in this training department.

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## 5.2.7 Monitoring and Evaluating the Programme

The quality of training programmes on offer was also questioned on the grounds that these programmes are designed to meet the overall needs of SDO departments without paying much attention to individual needs. Another problem is that time allocated to certain programmes is too short to cover the content.

As regards the impact of training on the departments, all interviewees reported general improvement in work practices. However, one complained that there was no noticeable change in the performance of some trainees. When asked whether it was the training to blame or the lack of support in his organization, he replied "both, but mainly, the training department".

Regarding the way training is evaluated, one trainer mentioned that:

Two standard evaluation techniques were reported: one is testing trainees' achievements, and the other is establishing what they felt or thought about the programme. (Trainer from Training Department, September 27/2009)

Concerning the achievement test, the trainees' performance is monitored both during and immediately after training, at which time they are given a written exam and a group project. As per one trainer:

At the end of training, trainees are required to complete a 'programme evaluation questionnaire' and state their opinions on the programme design, contents, training aids and the trainer's approach. The questionnaire contains a number of multiple-choice questions and four to five open-ended questions. Confidentiality is not maintained.

(Trainer from Training Department, October 12/2009)

Two trainers added that Evaluation at the reaction level is deliberately timed at the end of training to ensure that all questionnaires are returned and in order to provide trainees with assistance if needed.

When asked about the effectiveness of their evaluation methods, two trainers maintained that trainees' learning is accurately tested" and one of these also remarked that "as regards the trainees' reactions to the training programme, they always praise trainers and training and often ignore the open questions. A third trainer, however, thought that these methods were not entirely reliable, though he conceded that "there were no other alternatives, given the time limits".

All interviewees mentioned that evaluation takes place immediately at the end of the training programme. What is interesting to note is that although managers explicitly stated that they did not know much about the training environment or conditions, they still agreed unanimously on the precise timing of evaluation.

It can be seen that the three parties view training evaluation methods completely differently (for similar findings please see Sections 6.6 and 6.7). Whereas a small majority of trainers were satisfied with the assessment procedures, most managers were of the view that such procedures should be reconsidered. In itself, this means that the majority of managers were not satisfied with the trainees' post-training achievement level. In sharp contrast, roughly half the supervisors thought that the learned knowledge and skills were not properly tested.

## 5.2.8 "Dependent Variable", Effective Training Process

Over 50% of trainers mentioned that they did not know what happened in the trainee's workplace after training. Four thought that learnt skills and knowledge are never transferred, and the rest thought training meets both individual and organizational needs. In contrast, most managers thought that learning is transferred to the workplace. Supervisors stated that there were changes in trainees' work behaviour as a result of training.

Regarding whether the training programme helps to develop a positive culture in the organization, about one fourth of managers and a similar proportion of supervisors found it unnecessary for trainees to report on what has been learnt or on how it is going to be applied. The rest stated that trainees usually report on what they have learnt and how they are going to apply it. In contrast, trainers thought that trainees had a duty to inform managers and supervisors about the outcomes and effects of training to enable them to create a positive culture in their departments. Trainers were almost equally divided between those with the view that training enhanced self-confidence in their trainees and those who thought that training had no impact or effect at all on trainees' self-confidence. On their part, managers groups and supervisors thought that attitudes and behaviour are improved as a result of training.

Interview findings show that most trainers are hardly involved in post-training activities. This does not necessarily suggest that the remaining trainers play an active role to ensure skill transfer to the job. Almost all participants in the managers' group encourage trainees to apply learnt skills and knowledge. Whether encouragement is effective or not is still to be seen when we examine qualitative data obtained through interviews. In fact, we are already led to believe that the managers' and supervisors' methods are not necessarily effective or rewarding.

About the question concerning reflection time and improvement plans for trainees upon returning from training, the majority of trainers simply stated that their role ends with the end of the training programme. Managers and supervisors appear to be less optimistic about the idea that trainees are able to reflect and plan improvements in the department. This is thought to be due to the difficult and stressful working conditions.

### **5.3 CONCLUSION**

Interviews, as a second data collection technique, have resulted in a wealth of information provided by managers (through focus group discussion), trainers and supervisors involved in the training process at Sohar Development Office. By contrasting the views of participants, we were able to draw a clear picture as to how administrative training is perceived and conducted at SDO. It was thus possible to answer the first research question which combined the findings from this chapter to questionnaires findings from the next chapter to determine how improvement can be made. The next chapter will analyze the findings from the quantitative data.

#### CHAPTER SIX

## **QUANTITATIVE DATA ANALYSIS**

## **6.1 INTRODUCTION**

Chapter 5 discusses the research designs and methodology used for qualitative data collection and analysis. The chapter was designed to answer aspects of research question one that are more qualitative in nature and integrates questionnaire findings to this chapter.

The present chapter provides answers to research objectives and research questions one and two that dwell on descriptive analysis through the quantitative and inferential analysis. It answers part of research question one that is quantitative in nature through questionnaires as a research instrument and research question two that is inferential through correlation and regression. The data was screened, and outliers were detected and deleted.

The data collected from the respondents through questionnaires is presented and later analysed using the regression analysis technique to explain the relationship among the variables.

#### 6.2 Reliability test in the Pilot Study

Reliability is essentially about consistency in measure, and it allows for the estimation of error. In ensuring reliability, Cronbach's alpha was used to explain how

well the items in a set are positively correlated to each other. Nunnally (1979) asserted that the nearer the value of the Cronbach's alpha to 1 the higher the internal consistency and reliability. Also, Kaiser-Meyer-Olkin (KMO) was used to test the sampling adequacy for the factor analysis where 0.50 is deemed adequate enough for sampling adequacy. On the other hand, Bartlett's test of sphericity was also conducted to test whether the correlation matrix is an identity matrix. Here, significance at p<.000 which indicates that the factor model is considered appropriate.

SPSS Version 16 was used to test the reliability of measuring instruments used in this study. The independent variables within the research framework include needs assessment (NA), readiness for training (RT), learning environment (LE),transfer of training (TT), evaluation plan (EP), training method TM) and monitoring the programme (MP). The effective training process (ETP) is the independent variable.

Twelve items were suggested at the start of the pilot study for Needs Assessment (NA). When subjected to the reliability test, the Cronbach's Alpha value was at 0.580 for all the twelve items. This means that there is 0.664 error variance (random error) in the scores, which is not adequate for usage in the main study. Two items which were not yielding high scores were subsequently deleted. Then the remaining items were measured. This revealed that the measuring instruments are reliable as Cronbach's Alpha increased to 0.750, which is above the 0.60 recommended by Nunnally (1979) and Sekaran (2003). The KMO is 0.760 which shows a higher sampling adequacy as shown in table 6.1 below.

Seven items coded for readiness for training, RT(Q19), RT(Q20), RT(Q21), RT(Q22), RT(Q23), RT(Q24) and RT(Q25) were measured which revealed that the measuring instruments are liable at Cronbach's Alpha of 0.70, which is adequate enough for usage in the main study. The Kaiser-Meyer-Olkin is 0.750, which shows higher sampling adequacy (table 6.1).

Learning environment (LE) is one of the independent variables with 10 items. All the ten items showed reliable Cronbach's Alpha of 0.575 which has about 0.670 error variance (random error). After deleting three items which were not yielding high scores the Cronbach's Alpha increased to 0.710, which shows a good reliability level. KMO was at 0.782 which shows a higher sampling adequacy see table 6.1 below.

Transfer of training is another independent variable coded as TT(Q33), TT(Q34), TT(Q35), TT(Q36), TT(Q37) AND TT(Q38). The construct underwent reliability test as shown in table 6.1 below with Cronbach's Alpha value at 0.70, which indicates positive reliability, while the result of KMO and Barttlett's test showed a higher sampling adequacy of 0.743.

Evaluation plan (EP) is one of the independent variables with eight items as shown in table 6.1. When subjected to the reliability test, the result showed a higher Cronbach's Alpha of 0.762 and Kaiser-Meyer-Olkin value was 0.820, which showed a higher sampling adequacy. The sixth independent variables is Training Method (TM) and has nine items, all of them showed a reliable Cronbach's Alpha of 0.773 while the KMO level was 0.796, which showed good adequacy (table 6.1).

The last independent variable is Monitoring and Evaluating the programme (ME) and it consists of five items. When subjected to the reliability test the Cronbach's Alpha value was at 0.70, which is acceptable. KMO and Bartllett's test also showed an acceptable sampling adequacy of 0.738, which is higher than the recommended cut-off value (table 6.1).

Variables	No. of items	Cronbach's Alpha	KMO/Bartlett's Test
Needs Assessment (NA)	10	0.750	0.760
Readiness for Training (RT)	7	0.70	0.750
Learning Environment (LE)	7	0.710	0.782
Transfer of training (TT)	6	0.70	0.743
Evaluation Plan(EP)	8	0.762	0.820
Training Method (TM)	9	0.773	0.796
Monitoring and Evaluating Programme (ME)	5	0.70	0.738

Table 6.1: Summary of Reliability Test for Independent Variables of the pilot study (n=20)

#### **6.3 DATA SCREENING AND PRELIMINARY ANALYSIS**

Prior to the data analysis, data screening methods were employed in order to remove unwanted data that could negatively affect the analysis. The strategies utilised include the detection of missing data, checking outliers and treatment through Mahalanobis distance, the reliability test, KMO/Bartlett's test of sphericity and exploratory factor analysis.

## 6.3.1 Missing Data

Data is sometimes missing when the respondents refuse to fill some gaps, whether intentionally or unintentionally. Missing data can emanate from demographic information like age, sex, educational level etc or sometimes from the measuring scales in the questionnaire. Hair et al. (2010) suggest that questionnaires with missing data need to be deleted up to 50% if this does not affect the sample size. In this study some missing data was recorded and replaced with new questionnaire distributions to keep the target number of questionnaires valid.

#### 6.3.2 Outliers Detection and Treatment (Mahalanobis Distance)

Hair et al. (2010) define outliers as an observation with a unique combination of characteristics identifiable as distinct from other observations. On the other hand, Zikmund (1997) views outliers as a value that lies outside the normal range of the data and statistical significance (P Value), biasness and faulty conclusions (Robin, 2000).

After detecting outliers, their treatment can be conducted using Mahalanobis Distance. Mahalanabis distance is the distance between a particular case and the centroid (the point created by the means of all the variables in the analysis) of the remaining case (Zikmund, 1997). Mahalanobis Distance serves as an efficient technique for detecting outliers through the setting of some predetermined thresholds that will assist in defining whether certain points could be categorised as an outlier or not. For the present study to achieve this, the chi-square statistical table was used to determine the empirical optimal value. Hair et al. (2010) believe that a new SPSS excel could be created after completing all those values and only keeping those accepted to form the new sample that will be used in the analysis.

#### 6.4 RELIABILITY TEST IN THE MAIN STUDY

As was mentioned when dealing with the pilot study, some of the measuring items were not appropriate to the minimum value of Cronbach's Alpha test and Kaiser-Meyer-Olkin test. These were deleted and the remaining measuring items are deemed appropriate enough to measure what they are supposed to measure with a positive level of reliability. The same method was adopted to test reliability (Cronbach's Alpha), sampling adequacy (Kaiser-Meyer-Olkin-KMO) and appropriateness of the research model through Bartlett's test of sphericity.

At the initial stage of quantitative data analysis, the first step is to test the measuring items. The main reason for conducting a reliability test is to ascertain how suitable a set of items can fit into some sources of variance measured using Cronbach's

Alpha Coefficient. The minimum Cronbach's Alpha Coefficient should range from 0.50 to 0.70. Hair et al. (2006) recommend a minimum of 0.50, Churchill (1999) recommends 0.60 while both Nunnally (1979) and Venkatesh (2000) recommend a minimum Cronbach's Alpha Coefficient of 0.70.

In this study, needs assessment (NA) is one of the independent variables and it consists of ten items. This is after subjecting the variable to the reliability test and removing the items which were not yielding high scores. As was mentioned in the pilot study (Table 6.1), the Cronbach's Alpha value shows 0.780 for all the ten items. This is adequate enough for use in the main study and it shows an increased reliability compared to what was obtained in the pilot study. The sampling adequacy (KMO) is 0.760 and Bartlett's test of sphericity recorded the required significance level at 0.000. Readiness for training (RT) has seven items. All the seven items showed a reliable Cronbach's Alpha of 0.70, which is adequate enough for usage in the main study. The KMO sampling adequacy reached the required minimum value of 0.750 and Bartlett's test revealed higher significance at 0.000. Learning environment (LE), one of the independent variables, has seven items (LE(Q26), LE(Q27), LE(Q28), LE(Q29), LE(Q30), LE(Q31) and LE(Q32)). All the seven items showed a reliable Cronbach's Alpha of 0.710, which is adequate enough for use in the main study, and KMO at 0.782. Also, Bartlett's test revealed a positive significance at 0.000. Transfer of training (TT) has six items. When subjected to the reliability test, the Cronbach's Alpha value was at 0.70 for all the six items, which is adequate enough for use in the main study. The KMO sapling adequacy for all the six items stood at 0.745 while Bartlett's sphericity test was recorded at 0.000. Evaluation plan (EP) is the fifth independent variable with eight items

(EP(Q39), EP(Q40), EP(Q41), EP(Q42), EP(Q43), EP(Q44), EP(Q45) and EP(Q46)). The reliability test showed a higher Cronbach's Alpha of 0.762, which is suitable enough to be used in the main study. KMO was at 0.820 while the Bartlett's test was significant at 0.000. Training method (TM), also one of the independent variables, has nine items, all of them showing a reliable Cronbach's Alpha of 0.773, which is adequate for use in the main study. The KMO sampling adequacy for all nine items shows 0.796 and the Bartlett's test is significant at 0.000. The last independent variable is monitoring and evaluating programme (ME). It has five items; (ME(Q56), ME(Q57), ME(Q58), ME(Q59) and ME(Q60)). When subjected to the reliability test the Cronbach's Alpha value was at 0.70, which is according to Hair et al (2006) acceptable for the minimum Cronbach's Alpha Coefficient, and adequate enough for use in the main study. The Kaiser-Meyer-Olkin showed 0.738 and Bartlett's test was at 0.000. Table 6.8 below shows the reliability measurement in the main study after deleting the items which are not yielding high scores.

S. No.	Constructs	No. of Items	Cronbach's Alpha	KMO/Bartlett's Test
1	NA	10	0.78	0.760
2	RT	7	0.70	0.750
3	LE	7	0.710	0.782
4	TT	6	0.70	0.745
5	EP	8	0.762	0.820
6	ТМ	9	0.773	0.796
7	ME	5	0.70	0.738

Table 6.2: Reliability Measurement in the Main Study (n=400)

#### 6.5 THE QUESTIONNAIRE FINDINGS "DESCRIPTIVE ANALYSIS"

As reported in Chapter 4, the study questionnaire was distributed to one group of participants, namely administrators "Trainees". Respondents were drawn from twenty departments in Sohar Development Office. In total, 400 questionnaires were distributed, (Table 4.1). Table 6.3, below shows the number and rates of participants according to their job title.

Job position	Frequency	Percent
Administration officer	193	48.3
Professional	94	23.5
Supporting staff	78	19.5
Other	35	8.7
Total	400	100.0

Table 6.3: Number and Rate of Participants According to Position (n=400)

As seen from the table, administration officers represent 48.3% of the study sample. This seemingly high percentage is justified on the grounds that it refers to the employees who are usually required to undertake training. The second largest group consists of 94 professionals, i.e. 23.5% of the sample. In general, the sample is considered representative of the study population. In the previous chapter, the issues pertaining to questionnaire design and piloting, sampling, and data collection methods and analysis procedures were all investigated in some detail (Sections 4.5, 4.6, 4.7, 4.8, and Table 4.1).

The questionnaire consists of three parts. The first part covers demographic variables, including the respondent's sex, position, age, qualification, experience,

number of training programmes attended that year, number of training programmes attended over the previous two years, and department. The second and third parts are concerned with the responses of administrators to the main survey questions.

#### 6.5.1 Demographic Variables

i. Gender

Table 6.4 below shows the distribution of respondents according to gender: 312 males representing 78% of the sample, and 88 females who constitute 22% of the surveyed groups. Despite the gap between the two sexes, the figures do reflect the employment realities in the deeply conservative and traditional Omani society where women are still largely confined to household duties and are still largely restricted, when they take other activities, to teaching and health or social work professions.

Table 6.4: Sample Distribution by Gender

Gender	Frequency	Percent
Male	312	78
Female	88	22
Total	400	100.0

#### ii. Age

As seen in Table 6.5, the largest group of respondents (i.e. 171 individuals representing 42.8% of the sample) belong to the age group 31-40. The second largest group consists of 137 respondents (i.e. 34.2% of the sample) aged between 21 and 30.

Respondents aged 41 years or more represent 19.8% of the sample (79 individuals), compared to only 13 young participants aged 20 years or less.

Age	Frequency	Percent
20 years or less	13	3.2
21-30 years	137	34.2
31-40 years	171	42.8
41 years or over	79	19.8
Total	400	100.0

Table 6.5: Sample Distributions by Age

#### iii. Qualification

According to Table 6.6, 120 respondents (30% of the sample) hold a first degree. Generally speaking, given the relatively short history of university education in the country, the majority of these individuals should fall within the age group 20-30. As a whole, the relatively high number of graduates reflects the tendency of this group of people to seek employment in the public sector because of rare employment opportunities and low salaries for non-specialist jobs in private organizations and institutions. Lately, however, the rapidly evolving private sector has begun to attract more graduates. The least qualified respondents, who hold diplomas and secondary education or intermediate school certificates, represent 29.5%, 28.3% and 11.7% respectively. Given their modest qualification level, it is more than likely that most of them were employed at an early stage when graduates were in short supply. As such, members of these three groups are generally older and more experienced than the

graduate category. There are only two postgraduate certificate holders, who constitute 0.5% of the sample.

Qualification	Frequency	Percent
PhD	0	0
Masters	2	0.5
Bachelors	120	30
Diploma	118	29.5
Secondary Level	113	28.3
Intermediate Level	47	11.7
Total	400	100.0

Table 6.6: Sample Distribution by Qualification

## iv. Work Experience

Table 6.7 reveals that over one in three respondents have reported having spent between ten and fifteen years in service. An almost equal number, i.e. 124 respondents representing 31% of the sample, have also reported a work experience extending between four and nine years. These are followed by a group of 94 employees who have spent sixteen years or more in service. The least experienced group consists of forty individuals who have been employed for a maximum of three years.

Table 6.7: Length of Service

Work experience	Frequency	Percent
1-5 years	47	11.7
6-9 years	124	31
10-15 years	135	33.8
16 years or more	94	23.5
Total	400	100.0

#### v. Number of Training Programmes Attended this Year (2009)

From Table 6.8, it can be seen that not many respondents attended training programmes during the year 2009 whereas a majority of respondents, 36.5%, attended between 1 and 3 programmes and 14.5% attended between 4 and 6 programmes.

Programmes	Frequency	Percent
0	196	49
1-3	146	36.5
4-6	58	14.5
7-9	0	0
10-12	0	0
More than 13	0	0
Total	400	100.0

Table 6.8: Number of Training Programmes Attended in Year (2009)

#### vi. Number of Training Programmes Attended over the last Two Years

It is interesting to note that although the majority of respondents have been in service for more than ten years (33.8% in total. See Table 6.8, above), only 58% of the sample had a chance to attend a maximum of three training events during the two years prior to the investigation (Table 6.9). When we add another 132 respondents who attended a maximum of six training programmes, it becomes evident that the number of training interventions is relatively modest. On the other hand, as many as one in forty respondents reported taking part in at least ten training events, which may indicate a change of position in the employment hierarchy.

Programmes	Frequency	Percent
0	0	0
1-3	232	58
4-6	132	33
7-9	21	5.3
10-12	9	2.2
More than 13	6	1.5
Total	400	100.0

Table 6.9: Number of Training Programmes Attended in the Last Two Years

#### 6.5.2 Descriptive Analysis to the Main Questions

As stated in 4.6, the main body of the questionnaire consists of sixty nine statements that attempt to explore how administrative training is viewed and conducted in SDO. In the original questionnaire, respondents were asked to tick one of the five options on the Likert Scale: strongly disagree, disagree, uncertain, agree, and strongly agree. For data analysis processing purposes, the first two options were combined into one, i.e. disagree and the last two into another, agree.

To facilitate our discussion, the findings will be presented under two headings: before & during training with independent variables and after training with dependent variables. The independent variables will be given the subheading a) conducting needs assessment, b) ensuring employees' readiness for training, c) creating a learning environment, d) ensuring transfer of training, e) developing an evaluation plan, f) selecting the training method, and g) monitoring and evaluating the programme. Questions on the pre-training stage aim at establishing how trainees are prepared for training, the impact of selection and identification of training needs processes on their motivation, and the roles trainees play in the planning phase. The roles of this key player and activities that take place during training are then investigated. Of particular interest here are the training methods employed and the interaction between trainers and trainees. Questions on the post-training stage seek to establish how far trainees are able to transfer learned knowledge and skills to the job and the kind of assistance they receive.

## 6.5.2.1 Needs Assessment

Questions	Likert Scale						Total	%
Questions	Disagree	%	Uncertain	%	Agree	%	TULAI	70
Department take(s) part in identifying training needs	49	12.3	33	8.2	318	79.5	400	100
You are consulted about your abilities and needs.	246	61.5	22	5.5	132	33	400	100
Training needs are properly assessed.	64	16	114	28.5	222	55.7	400	100
You are usually selected according to your individual and organizational needs.	95	23.8	99	24.8	206	51.4	400	100
Your knowledge, attitudes, and skill are reassessed and addressed at the beginning of the training programme.	120	30	75	18.8	205	51.2	400	100
In general, trainees in your department are treated fairly with regard to training opportunities	21	5.2	59	14.8	320	80	400	100
In general, you are treated fairly with regard to training opportunities	22	5.5	61	15	317	79.5	400	100
Current selection policies for trainees should be changed in order to attract the best training	21	5.2	79	19.8	300	75	400	100
Current selection policies for training programmes should be changed in order to attract the best training	13	3.2	38	9.5	349	87.3	400	100
Employees in the organization participate in determining the training they need	297	74.2	46	11.5	57	14.3	400	100

Table 6.10: Responses to Independent Needs Assessment Variables Questions (n=400)

As seen in Table 6.10, the majority of respondents agreed that they or their departments take part in the needs assessment process and thought that training needs were properly assessed. They agreed that organisational and individual training needs are observed, and no distinction is made between all employees regarding training opportunities. About 75% agreed that selection policies for training should be changed if the training target is to be achieved. Their opinion about current selection policies for training programmes is that "if we are looking for effective training to improve daily work then the training department must change its policies". 74.2% of participants disagreed with the statement that trainees are not consulted about their needs before or during the selection of the training programme, which is in fact significant, showing that the selected programmes are in line with the need of trainees (for other opinions please refer to the table above).

## 6.5.2.2 Readiness for Training

	Likert Scale							0/
Questions	Disagree	%	Uncertain	%	Agree	%	Total	%
You are usually satisfied with the time and place of training.	205	51.2	13	3.3	182	45.5	400	100
You are usually prepared for training.	180	45	109	27.2	111	27.8	400	100
You are usually informed of their duties and responsibilities at the beginning of the training programme.	76	19	97	24.4	226	56.6	400	100
The Training Department conducts briefing sessions for training.	195	48.8	15	3.8	190	47.4	400	100
In general, trainees in your department are treated fairly with regard to motivation for training.	200	50	1	2	199	49.8	400	100
In general, you are treated fairly with regard to motivation for training.	200	50	1	2	199	49.8	400	100
When there is a need to complete a task of great importance to the department I am ready to be trained.	81	20.2	48	12	271	67.8	400	100

Table 6.11 shows that there is a slight difference between disagreeing and agreeing participants about four statements. By preparedness, it is meant whether or not trainees are mentally and physically prepared to meet the challenges and demands of training. On this point, only 45% of trainees thought they were prepared, which suggests that they had an acceptable level of self-efficacy and motivation. By contrast, 27.8% of them thought that they were not prepared to meet the challenge. This is a very critical

point because in case trainees are not prepared for training, the training becomes a waste of money and time. Almost an equal percentage of the respondents, about 27.2%, were uncertain. As seen from table 6.9, the results obtained show that most administrators thought they knew where they stood, over 56%. The rest were either unclear about what to expect or reported that they were not informed at all. Regarding readiness for training, the majority of participants, about 67.8%, agreed. This implies that the administrators are really waiting for any training opportunities. About 20.2% disagreed and 12% were uncertain.

## 6.5.2.3 Learning Environment

Questions			Likert Sca	ale			T-4-1	%
	Disagree	%	Uncertain	%	Agree	%	Total	%0
A stress-free learning environment is usually emphasized.	97	24.3	105	26.2	198	49.5	400	100
Connection between the taught skills and knowledge and the work environment is usually established.	43	10.8	125	31.2	232	58	400	100
You are given regular feedback on your performance.	27	6.8	163	40.8	210	52.4	400	100
Work environment makes it difficult for employees to apply what they have learnt.	153	38.2	39	9.8	208	52	400	100
I received accurate information about my job.	84	21	22	5.5	294	73.5	400	100
There are good links with the training module and my work.	100	25	52	13	248	62	400	100
The training department provides a welcoming learning environment.	120	30	20	5	260	65	400	100

Table 6.12: Responses to Independent	Variables Questions	"Learning Environment"	(n - 400)
Table 0.12. Responses to independent	variables Questions	Learning Environment	(11-400)

Table 6.12 shows that the majority of participants agreed with all statements. If the training environment is usually stressful, one cannot expect a good outcome from the training. Unless activities and taught skills and knowledge are related to the trainee's job, we cannot be sure that skill transfer will occur.

By failing to provide accurate information on trainees' work environment, 52% of administrators do inform us that even if they wanted to apply what they had learnt to

the job, the work environment would not allow it. What is the benefit of training if it cannot be applied? Again it is a waste of time and money.

## 6.5.2.4 Transfer of Training

Ornertierer			Tatal	%				
Questions	Disagree	%	Uncertain	%	Agree	%	Total	70
You are usually informed about the demands and objectives of training.	223	55.8	30	7.5	147	36.7	400	100
You usually take part in discussions about training programme.	13	3.2	106	26.5	281	70	400	100
Trainers and managers follow you up to ensure transfer of learning.	247	61.8	60	15	93	23.2	400	100
You are encouraged to apply newly learnt knowledge and skills.	132	33	70	17.3	198	49.7	400	100
I am encouraged to go to training programmes and to learn to the best of my ability.	47	11.8	14	3.5	339	84.7	400	100
Managers, trainers and trainees have respect for each other.	1	2	1	2	398	99.6	400	100

From the above table, it can be seen that the majority of trainees, 55.8%, have indicated that they are not informed about the demands of the training event and its objectives. In this case, the question is: how do trainees know their goal and plan their way to reach it?

Over 61% thought that their relationship with trainers, supervisors and managers ended once training was terminated. This aspect is really significant because if there is no follow-up then how can trainees be sure that what they learnt is correct in relation to practice or to actual work?

#### 6.5.2.5 Evaluation Plan

As it can be seen from Table 6.14, some critical points such as knowledge, skills and attitudes of trainees were completely ignored. The question here is how can the evaluation plan be performed properly?

Another critical point: in order for training to be effective, instruction methods and techniques should be varied and relevant to the trainee's learning styles and training tasks.

The third critical point concerns the fact that only a small proportion of respondents thought that some form of communication between the three parties was maintained during the training operation.

Questions	Likert Scale							%
Questions	Disagree	%	Uncertain	%	Agree	%	Total	70
Your abilities, knowledge, skills and attitudes are usually taken into consideration.	129	32.2	121	30.3	150	37.5	400	100
Training methods are varied and they take trainees' abilities and needs into consideration.	63	15.8	121	30.2	216	30.2	400	100
Communication between trainers, trainees and managers is usually maintained.	194	48.5	54	13.5	152	38	400	100
The current reward system encourages you to apply new skills and knowledge to the job.	208	52	45	11.2	147	36.8	400	100
I have the opportunity to learn in different ways.	25	6.2	158	39.5	217	54.3	400	100
In general, training evaluation identifies the strengths and weaknesses which includes determining if the programme is meeting the learning objectives.	169	42.2	12	3	219	54.8	400	100
The training evaluation assesses whether the content and administration of the programme contribute to learning and the use of training content on the job.	103	25.8	58	14.5	239	59.7	400	100
In general, the training evaluation identifies which trainees benefit most or least from the programme.	123	30.8	53	13.8	224	56	400	100

 Table 6.14: Responses to Independent "Evaluation Plan" Variables Questions (n=400)

Another significant point is to do with the statement about the reward system. Here, only 36.8% of administrators thought that the reward system was acceptable and fair, compared to 52% who were completely dissatisfied. Actually, to meet the objectives of the training, strengths and weaknesses must be identified through proper evaluation methods. Even if 54.8% of trainees agreed with the evaluation, the remaining were unhappy with it.

From the above it can be concluded that if SDO is to have an effective training, this variable has to be addressed seriously.

# 6.5.2.6 Training Method

Questions			Likert So	ale			Total	%
Questions	Disagree	%	Uncertain	%	Agree	%	Total	70
Consultations between trainers, trainees and managers usually precede the design of the training programme and its content.	280	70	74	18.5	46	11.5	400	100
The presentation methods are clear for you to receive the information.	59	14.8	54	13.5	287	71.7	400	100
Lecture methods "team teaching, guest speakers, trainee presentations" provide a good way of learning.	130	32.5	29	7.3	241	60.2	400	100
In general, audiovisual techniques "overheads, slides, video" help trainers to transfer the knowledge.	33	8.2	16	4	351	87.8	400	100
Hand-on methods "on-the-job training, simulations, self directed learning" incorporate the conditions needed for learning and transfer of the training programme.	33	8.2	21	5.2	346	86.6	400	100
Group building methods "team training, action learning, adventure learning" focus on helping teams increase the skills needed for effective teamwork.	26	6.5	30	7.5	344	86	400	100
In your opinion, multimedia training methods such as "CD- ROM and e-learning" allow trainees to pace themselves, receive feedback and reinforcement, and find information from experts on an as-needed basis.	358	89.5	13	3.2	29	7.3	400	100
The multimedia methods can create a more realistic training environment which increases the probability that training will transfer to the job.	85	21.2	19	4.8	296	74	400	100
Groupware and intranets help to capture the knowledge that trainees gain from training and facilitate their sharing of information.	252	63	81	20.2	67	16.8	400	100

# Table 6.15: Responses to Independent "Training Method" Variables Questions (n=400)

## Table 6.15 shows that the majority of trainees agreed with the statements.

## 6.5.2.7 Monitoring and Evaluating the Programme

Orrections		Total	%					
Questions	Disagree	%	Uncertain	%	Agree	%	Total	/0
Training is evaluated as soon as the programme is finished.	0	0	0	0	400	100	400	100
Training evaluation methods are effective and they accurately reflect achievement levels.	110	27.5	27	6.75	263	65.75	400	100
You are expected to brief your manager about what has been learnt and how you can apply it?	102	25.5	57	14.25	241	60.25	400	100
You usually apply the acquired skills and knowledge to your jobs.	99	24.75	66	16.5	235	58.75	400	100
You feel more confident after training.	74	18.5	56	14	270	67.5	400	100

Table 6.16: Responses to Independent "Monitoring and Evaluating the Programme" Variables
Questions (n=400)

All participants reported that evaluation takes place immediately at the end of the training programme. What is interesting to note is that although trainees have explicitly stated that they did not know much about the training environment or conditions, they still agreed unanimously on the precise timing of evaluation. Also from Table 6.16, it

can be seen that participants' views on training evaluation methods are completely different.

## 6.5.2.8 Dependent Variables, (Effective Training Process)

Responses to the dependent variable questions can be summarised in Table 6.17.

Table 6.17: Responses to Dependent "Effective Training Process" Variable Questions (n=400)

Questions		Likert Scale							
	Disagree	%	Uncertain	%	Agree	%	Total	%	
Induction training improved the overall productivity.	83	20.8	49	12.2	268	67	400	100	
Induction training improved your output.	97	24.3	45	11.2	258	64.5	400	100	
Induction training provided you with an excellent opportunity to improve the operational flexibility.	183	45.8	39	9.8	178	44.4	400	100	
The training programme provided you with the opportunity to learn comprehensively about your job.	291	72.7	8	2	101	25.3	400	100	
Senior managements have less complaints about your productivity.	169	42.2	45	11.3	186	46.5	400	100	
The induction training is to be evaluated and improved to provide more knowledge.	67	16.8	16	4	317	79.2	400	100	
You are helped to acquire technical knowledge and skills through training.	59	14.8	42	10.5	299	74.7	400	100	
Training of administrators is given adequate importance in your organization for more job satisfaction.	260	65	20	5	120	30	400	100	

Table 6.17 (continued): Responses to Dependent "Effective Training process" Variable Questions

# (n==400)

			Likert Sca	ale				
Questionss	Disagree	%	Uncertain	%	Agree	%	Total	%
The training programme gives you more encouragement to identify with the mission and objectives of the organization.	308	77	40	10	52	13	400	100
The training programme helps to develop a positive culture in the organization.	96	24	49	12.3	255	63,7	400	100
You go with a clear understanding of the skills and knowledge from the training.	146	36.5	45	11.2	209	52.3	400	100
Senior line managers are eager to help you to apply what you learned from the training to your job.	111	27.7	52	13	237	59.3	400	100
Upon returning from training, you are given adequate free time to reflect and plan improvements in the organization.	206	51.5	38	9.5	156	39	400	100
Trainers provide the right kind of climate to implement new ideas and methods acquired by their trainees during training.	140	35	33	8.2	227	56.8	400	100
Training programmes are carefully chosen with regard to quality and suitability for departments.	251	62.8	13	3.2	136	34	400	100
The training programme provides higher levels of service to customer.	148	37	59	14.8	193	48.2	400	100
The training programme results in a reduced number of customer complaints.	156	39	15	3.8	229	57.2	400	100

Regarding the improvement on productivity induced by training, most of the respondents, 67%, agreed. Concerning the statement about the improvement on the trainee's output induced by training, over 64% agreed. The participants were divided regarding the ability of the induction training to improve operational flexibility. Over 72% of participants disagreed with the statement that the training programme provides them with the opportunity to learn comprehensively about their job, which means that the learning was not as expected and required improvement.

Trainees were split concerning the reduced number of senior managements' complaints about the trainees' productivity. The majority of the participants, 79.2%, agreed with the statement that "the induction training is to be evaluated and improved to provide more knowledge". The table shows that over 74% of administrators agreed that changes in their work behavior occurred as a result of training, compared to 14.8% who saw no connection between training and their job demands or probably found it difficult to apply what they had learnt. Most administrators, 65%, did not believe that the training of administrators is given adequate importance in the organization for more job satisfaction, and they thought that the departments, especially the training department, does not give importance to training, while 30% agreed and only 5% were uncertain. Obviously, SDO must give this point more attention.

Another significant point is that training in general encourages administrators to identify with the mission and objectives of the organization. 52.3% of trainees agreed with the view that training enhances self-confidence in their skills and knowledge, 36.5% thought that training has little impact or no effect at all on their self-confidence.

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Regarding the issue of the appropriate climate to implement new ideas and methods acquired through training, the majority of trainees agreed. For other statements see the above table.

## 6.6 INFERENTIAL ANALYSIS

Correlation and regression analysis answer the second objective the study "to examine the relationship between the seven independent variables and an effective training process".

### **6.6.1 Correlation Analysis**

Correlation is a way to measure how associated or related two variables are. Here, the researcher looks at things that already exist and determines if and in what way those things are related to each other. The purpose of doing correlations is to be able to make a prediction about one variable based on what we know about another variable. There are two types or directions of correlation. In other words, there are two patterns that correlations can follow. These are called positive correlation and negative correlation. In a positive correlation, as the values of one of the variables increase, the values of the second variable also increase. Likewise, as the value of one of the variables decreases, the value of the other variable also decreases. In a negative correlation, as the values of one of the variables increase, the values of the second variable decrease. Likewise, as the value of one of the variables decreases. This is still a correlation. It is like an "inverse" correlation. The word "negative" is a label that shows the direction of the correlation. Correlations, whether positive or negative, range in their strength from weak to strong. Positive correlations will be reported as a number between 0.0 and 1. The range 0.2 to 0.4 is a weak correlation and a score of 0 means that there is no correlation (the weakest measure). Between 0.41 and 0.6 there is a medium correlation and above 0.6 we talk about a strong correlation. A score of 1 is a perfect positive correlation, but it does not really happen in the "real world". Negative correlations will be reported as a number between 0 and -1. Again, a 0 means no correlation at all while between 0.0 to -0.4 there is a weak correlation. From -0.41 to -0.6 the correlation is medium and beyond -0.6 it is strong. A score of -1 is a perfect negative correlation, which does not really happen. When judging the strength of a correlation, we just look at the number and ignore the sign.

As was mentioned above, the advantage of the correlation method is that it allows us to make predictions about things. The disadvantage of the correlation is that it does not measure the cause. The correlation tells us that the two variables are related, but we cannot say anything about whether one causes the other. This method does not allow us to come to any conclusions about cause and effect. Table 6.18 shows the correlation between the independent and dependent variables.

		NA	RT	ETP	LE	TT	EP	ТМ	ME
NA	Pearson Correlation	1	.138**	.211**	.094	.066	.210**	.065	.088
	Sig. (2-tailed)		.006	.000	.061	.185	.000	.192	.077
	Ν	400	400	400	400	400	400	400	400
RT	Pearson Correlation	.138**	1	.238**	.020	.144**	.199**	.115*	.118*
	Sig. (2-tailed)	.006		.000	.693	.004	.000	.021	.018
	Ν	400	400	400	400	400	400	400	400
ETP	Pearson Correlation	.211**	.238**	1	.038	.145**	.202**	.223**	.069
	Sig. (2-tailed)	.000	.000		.454	.004	.000	.000	.167
	Ν	400	400	400	400	400	400	400	400
LE	Pearson Correlation	.094	.020	.038	1	.009	.225**	.123*	.119*
	Sig. (2-tailed)	.061	.693	.454		.854	.000	.014	.017
	Ν	400	400	400	400	400	400	400	400
ТТ	Pearson Correlation	.066	.144**	.145**	.009	1	.199**	.091	.046
	Sig. (2-tailed)	.185	.004	.004	.854		.000	.069	.363
	Ν	400	400	400	400	400	400	400	400
EP	Pearson Correlation	.210**	.199**	.202**	.225***	.199**	1	$.108^{*}$	.150**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.031	.003
	Ν	400	400	400	400	400	400	400	400
ТМ	Pearson Correlation	.065	.115*	.223**	.123*	.091	$.108^{*}$	1	020-
	Sig. (2-tailed)	.192	.021	.000	.014	.069	.031		.690
	Ν	400	400	400	400	400	400	400	400
ME	Pearson Correlation	.088	.118*	.069	.119*	.046	.150***	020-	1
	Sig. (2-tailed)	.077	.018	.167	.017	.363	.003	.690	
	N	400	400	400	400	400	400	400	400

 Table 6.18: Correlation Table

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

NA= Needs Assessment, RT= Readiness for Training, ETP= Effective Training Process, LE= Learning Environment, TT= Transfer of Training, EP= Evaluation Plan, TM= Training Method, ME= Monitoring Evaluation.

It can be seen from the above table, there is a medium significant relationship between the majority of independent variables and effectiveness of training "dependent variables". The output from Table 6.18 contains the correlations between seven independent variables, expressed as: Needs Assessment, Readiness for Training, Learning Environment, Transfer of Training, Evaluation Plan, Training Method and Monitoring Evaluation, with the dependent variable "effective training process". The correlation ranges from medium strength to weak strength as shown in table 6.19 below. For further discussion of these outputs, please refer to section 8.5.

	Path of Relatio	nship	Results
NA		ETP	Significant, Medium strength
RT	$\rightarrow$	ETP	Significant, Medium strength
LE	$\square$	ETP	Significant, Weak strength
ТТ	$\rightarrow$	ETP	Significant, Weak strength
EP		ETP	Significant, Medium strength
TM		ETP	Significant, Medium strength
ME		ETP	Significant, Weak strength

Table 6.19 Summary of Results from correlation

\* The above Table refers to Figure 1.1.

## 6.6.2 Regression Analysis

On the quantitative side of this study, a multiple regression analysis was used as a statistical technique to determine the strength of the relationship between "effective training process" as the dependent variable and the series of changing variables expressed as: needs assessment, readiness for training, learning environment, transfer of training, evaluation plan, training method and monitoring evaluation known as independent variables. Regression analysis was used because it allows additional factors to enter the analysis separately so that the effect of each can be estimated. It is also valuable for quantifying the impact of various simultaneous influences upon the single dependent variable (Sykes, 1986). For further discussion, please refer to section 5.5.

Coefficients									
		Unstandardized Coefficients		Standardized Coefficients					
Model		В	Std. Error	Beta	Т	Sig.			
1	(Constant)	17.293	5.339		3.239	.001			
	NA	.292	.094	.150	3.122	.002			
	RT	.269	.080	.163	3.344	.001			
	LE	056-	.092	030-	610-	.542			
	TT	.168	.112	.073	1.507	.133			
	EP	.187	.089	.107	2.105	.036			
	TM	.376	.099	.181	3.786	.000			
	ME	.062	.122	.024	.511	.609			
Number * p < 0.	$P^{a} \cdot R^{2} = 0.143$ , Adjusted of Cases = 400 05, two-tailed or of the Estimate= 7.57		9.381*						

Table 6.20: Regression Model for Independent Variables and Dependent Variable

a. Dependent Variable: Effective Training process

b. Predictors: (Constant), NA=Needs Assessment, RT=Readiness for Training, LE=Learning Environment, TT=Transfer of Training, EP=Evaluation Plan, TM=Training Methods, ME=Monitoring Evaluation.

From Table 6.20, it can be seen that the regression fit is ( $R^2 = 0.143$  & adjusted  $R^2 = 0.128$ ). This means that the model has accounted for 12.8% to 14.3% of the variance in the dependent variable. This in turn means that some variables should be examined in future such as culture, social aspects, etc, while the overall relationship using the enter

method indicates that the overall model is statistically significant (F=9.381, p<.05). Furthermore, four independent variables are statistically significant, (NA= p<.002, RT = p<.001, EP= p<.036, TM= p<.000), whereas three independent variables are not significant, (LE= p<.542, TT= p<.133 and ME = p<.609).

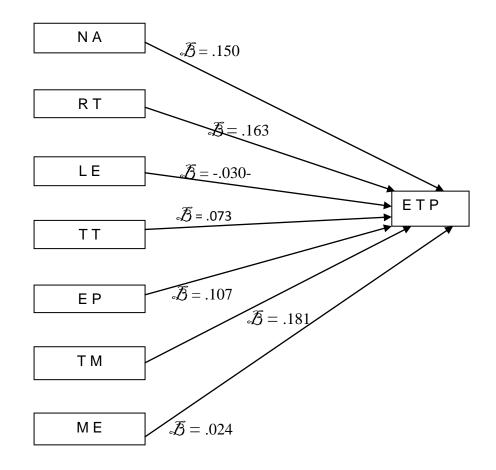
Some of the conclusions to draw here are as follows: If the trainees are unhappy with the learning environment, they will not get proper training, which represents a waste of money and time for training. In addition, if the transfer of training and the monitoring and evaluation of training are not performed correctly, the training programmes will never be improved. Again, these findings are supported by questionnaire data in Section "6.5.2.3", Table 6.12, which shows that 24.3% of administrators thought that the training environment is usually stressful. With the addition of 26% of respondents who were uncertain, one cannot expect a good outcome from the training.

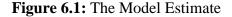
Also, it was noted in section "6.5.2.4" and table 6.14 that a majority of trainees, 55.8%, indicated that they were not informed about the demands of the training event and its objectives. The question here is: how do trainees know their goal and plan their way to reach it? Another issue concerns the 61% of respondents who thought that their relationship with trainers, supervisors and managers ended once training was terminated. This point is really significant because if there is no follow-up, trainees cannot be sure that what they learnt is appropriate to the practice or actual work.

As it will be seen in the next chapter, these aspects are corroborated by findings in section "5.2.1.1.4" (involving data from managers, trainers and supervisors) and section "5.2.1.1.7" where interviewees argue that the programmes are designed to meet the overall needs of SDO departments but do not necessarily pay much attention to individual needs (see also the correlation findings in Section "6.4").

# **6.7 TESTING OF THE HYPOTHESIS**

From Table 6.20 the model of estimate can shown in Figure 6.1.





NA=Needs Assessment, RT=Readiness for Training, LE= Learning Environment, TT=Transfer of Training, EP=Evaluation Plan, TM=Training Method, ME= Monitoring Evaluation, ETP= Effective Training Process

A multiple regression analysis was conducted to ascertain the relationship between independent variables, expressed as" needs assessment (NA), readiness for training (RT), learning environment (LE), transfer of training (TT), evaluation plan (EP), training method (TM) and monitoring evaluation (ME), and the dependent variable effective training Process (ETP). The study further looked for mediation and whether the existing training at SDO can help us to conceptualise and understand how NA, RT, LE, TT, EP, TM, and ME identify the problems effecting training in this organisation, thus making it ineffective.

### i. Needs Assessment positively relates to Effective Training Process

The analysis reveals that needs assessment (NA) is significantly related to the Effective Training Process (ETP) (B=.150, p=.002). The significant relationship between needs assessment and effectiveness of training indicates that needs assessment is a critical component in the training system. It provides data to determine who is to be trained, what type of training is needed, how training can be carried out and how the results can be evaluated. These findings are in line with Ford and Noe, 1987; Goldstein, 1986; Hinrichs, 1976; Moore and Dutton, 1978. Therefore the hypothesis is supported.

### ii. Readiness for Training positively relates to Effective Training Process

Results from the regression analysis show that readiness for training (RT) is significantly related to the effective training process (ETP) (B=.163, p=.001). The significant relationship between RT and ETP means that the preparation of trainees for

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training is very important. If trainees are satisfied with the time, place, and topic and if they are informed in advance about the timing of the training to enable them to get ready, the results will definitely be as planned. Therefore the hypothesis supported.

# iii. Learning Environment positively related to Effective Training Process

The analysis reveal that learning environment (LE) is not significantly related with effective training process (ETP) (B=-.030-, p= .542). The negative significance tells us that if the training environment is stressful then one cannot expect a good outcome from the training. The connection between the taught skills and knowledge and the work environment must be established. Unless activities and taught skills and knowledge are related to the trainees' job, we cannot be sure that skill transfer will occur. Also if the training environment is very different from the work environment, trainees would not be able to apply what they learn to the job even if they wanted to. The hypothesis is rejected.

### iv. Training Transfer positively related to Effective Training Process

From the regression analysis it can be seen that training transfer (TT) is not significantly related with effective training process (ETP) (B=.073, p=.133). This negative result shows the impact of terminating the relationship between trainers, supervisors, managers and trainees once training is over. This point is really significant because if there is no follow-up then how can the trainees be sure that what they learnt is adequate for practice or actual work? The result is in line with findings in Robinson and Robison (1985), involving learners, managers and organisations as actors. Learners

either feel that the taught concepts are opposed to their personal values and concepts of how the job should be performed, or they might lack confidence in their ability to apply new skills to the job. Managers and Supervisors do not coach trainees on how to use skills in the job situation. They do not provide feedback on performance, or are not capable of passing judgements. The presence in the organization of physical and motivational barriers in procedures or policies might inhibit the use of new skills, and lead to lack of coordination between different departments. The hypothesis is rejected.

#### v. Evaluation Plan positively related to Effective Training Process

The result from multiple regression analysis reveals that the evaluation plan (EP) is significantly related to the effective training process (ETP) (B=.107, p=.036). This indicates that in order for training to be effective, instruction methods and techniques should be varied and relevant to the trainee's learning styles and training tasks. Inconsistent data, inaccurate or incomplete information, and a biased, unskilled or inexperienced evaluator can simply invalidate the results. In order for evaluation to be credible and results reliable, Harrison (1997) argues that the evaluator should be an expert in the field he/she is evaluating, have the necessary skills and knowledge to carry out the activity, be able to establish a relationship based on trust and cooperation with stakeholders, and have the ability to maintain neutrality and objectivity when considering course design and training objectives, delivery methods and outcomes. Therefore the hypothesis is supported.

#### vi. Training Method positively related to Effective Training Process

One more useful result from the regression analysis reveals that the training method (TM) is significantly related to the effective training process (ETP) (B=.181, p=.000). This finding is consistent with the idea that in order for training to be effective, presentation methods should be clear and understandable to all trainees and methods should be diversified to account for different learning styles and therefore ensure that all trainees understand. In addition, unless trainers have knowledge of the subject matter, understand the organization and business, and are aware of training and learning methods, it will be difficult to achieve training effectiveness (Ledduchowicz and Bennet, 1983). Therefore the hypothesis is supported.

# vii. Monitoring Evaluation positively related to Effective Training Process.

The analysis reveals that Monitoring Evaluation (ME) is not significant with the effective training process (ETP) (B=.024, p=.609). The negative relationship here indicates that the findings from regression, questionnaires and interviews were not in line with Goldstein and Ford (2002), who suggest that three critical issues must be addressed. The first is concerned with effective instructional design, the second involves a clear understanding of the trainee characteristics that can influence training outcomes, and the third requires an understanding of the learning outcomes themselves and the conditions of transfer. Therefore the hypothesis is rejected.

	Path of Relationship	Results	Notes	
NA	ETP	R <sup>2</sup> = .045 Significant	Accepted Ho1	
RT	<b>—</b> ———————————————————————————————————	R <sup>2</sup> = .057 Significant	Accepted Ho2	
LE	$\rightarrow$ ETP	$R^2$ = .001 Not Significant	Fail to Reject Ho3	
ТТ	$\rightarrow$ ETP	$R^2$ = .021 Not Significant	Fail to Reject Ho4	
EP		$R^2$ = .041 Significant	Accepted Ho5	
ТМ	$\rightarrow$ ETP	$R^2$ = .050 Significant	Accepted Ho6	
ME	ETP	$R^2$ = .005 Not Significant	Fail to Reject Ho7	

Table 6.21 Summary of Results from Regression (Appendix 9)

\*The above table refers to Figure 1.1.

From Table 6.20 the regression fit is ( $R^2 = 0.143$ ), which means that the model has accounted for 14.3% of variance in the dependent variable, while the overall model is statistically significant (F=9.381, P< 0.05).

# **6.8 CONCLUSION**

The questionnaires data collection technique and inferential analysis have yielded a wealth of information from participants involved in the study and who represent the receiving end of the process. By contrasting the views of participants, we should be able to draw a clear picture as to how administrative training is perceived and conducted at SDO and should be able to answer the first of the research questions. By combining the questionnaire findings with the interview findings from previous chapter, we should be able to answer the second research question from the inferential findings and determine how improvement can be made. This is the subject of the remainder of this thesis.

# **CHAPTER SEVEN**

# DISCUSSION

### 7.1 INTRODUCTION

In this chapter, we reflect on the findings presented in Chapters 5 and 6 to convey a clear picture in answer to the objective of this study, i.e. how training is perceived by the key stakeholders and the roles they play in the training operation. It is equally important to synthesise the findings from the quantitative and qualitative analysis so as to provide an overall picture of the results of this study. This picture should enable us to determine how effective the training process is and to draw the necessary conclusions, based on the theoretical framework established in earlier chapters.

The discussion begins with a summary of the study. This is followed by a section on the pre-training stage, an issue frequently stressed as a key element in training and a major determinant of its outcomes. Training delivery and evaluation processes are examined next. Finally, we examine the measures taken to encourage trainees' transfer what they have learnt to the job and enhance their learning.

### 7.2 SUMMARY

### 7.2.1 Personal Information

It would be useful to begin our discussion with general background information on the study sample. First, females represent 22% of the sample (Table 6.4). Although this relatively low rate is not to be expected in similar studies conducted in a developed country, it still remains a positive and encouraging sign in Oman. Going back in time to the Omani society of the early 1970s, even the idea of women working outside the confines and safety of their homes was unthinkable. It simply did not fit within the social concepts of rectitude. In other words, the fact that more females are encouraged and willing to take employment indicates a positive cultural change, a change in attitude towards work, and for that matter towards training.

Nearly 38% of respondents were below the age of 31 (Table 6.5). Taking the history of education in the country into consideration, we arrive at the conclusion that the vast majority of individuals with university education fall within this age group. Regarding older individuals, these are expected to have had a lower level of education. This leads us to two important questions. First, are age differences between young and more mature trainees taken into consideration when delivering training? If that is not possible, would both groups of individuals be at least treated as a group of adult learners with learning capabilities and styles we may not witness in school children? Second, there appears to be a general agreement that training priority should be given to individuals with modest qualifications. In itself, this explains why applicants are required to state their educational level when applying for any training programme.

Without this, trainers would find it difficult to exercise discretion and deny some trainees the right to attend training on qualifications grounds. But, is formal education a good indicator of performance, attitude, achievement, and success? Answers to the age question will be given within the course of our discussion when we examine training methods. Meanwhile, a passing remark on education and qualification should enable us to build a clearer picture of the trainee's needs, abilities, qualities and attitude.

Closely related to educational achievement is the experience element. There are at least two good reasons to support the claim that a positive relationship exists between experience and learning. First, experience acts as a baseline for understanding the key concepts and procedures when attending training. Second, the more experienced an individual is, the less anxious he/she will be in a learning/training situation. According to this principle, a positive attitude towards learning and an acceptable level of attainment and performance are to be expected from our relatively experienced sample. But, the indications are that this may not necessarily be the case.

If we accept that our previous learning experience shapes our approaches to learning and affects our beliefs to see possibilities or opportunities for improvement, we should not attach high hopes on the experience-centred learning of the sample simply because most managers and supervisors do not encourage activities that involve learning or follow up that learning with mentoring, tutoring and support. Employees operate in a culture that equates mistakes with sin and in an unsupportive work environment where decisions are made for employees without them being consulted. This is the case for instance in the issue of selection for training and applying learnt skills and knowledge (Table 6.10 and Q1). It is natural that those individuals would not have the courage or self-confidence that would bring them face to face with challenges, setbacks, and mistakes that contain the seeds of learning and future success. Put differently, the assumption that the least experienced employees may need training most is a misconception that would result in the wrong conclusion and ineffective action. When selecting candidates for training, it is rather important that job demands and individual needs are given priority, regardless of the length of service. Indeed, it is always possible that employees with a long work experience become emotionally attached to (sometimes erroneous) fossilized behavioural patterns that would hamper the acquisition of new knowledge and skills.

What has been stated about work experience learning also applies to learning gained through actual training. First, it was noted earlier (section 3.3.4) that we are here concerned with individuals with no career planning strategies. Evidently, because such individuals are not aware of the connection between behaviour improvement and their careers, it would be legitimate to question their ability and willingness to apply the content of training to the job. As a matter of fact, respondents themselves repeatedly pointed to the difficulties involved not only in transferring newly learned skills to the workplace, but also, to those involved in learning (Table 6.13). Hence, by assuming a positive relationship between performance and the number of training interventions (Q3), managers and supervisors are violating the basic training principle which states that candidates should be selected on the basis of their needs and job demands. Further, considering the organizational changes that have taken place since the initiation of SDO, the introduction of new technology as well as mobility trends, including turnover,

attrition, promotion and new recruits, one would expect the number and quality of training interventions to be compatible with the constantly changing developments and needs. However, although training on the job is rarely provided, the average number of training courses attended by each employee throughout his/her work history remains extremely limited (Table 6.7).

### 7.2.2 Training Plan and Objectives

Reference has earlier been made to training objectives as a formal statement that describes what trainees are expected to do and achieve upon the completion of the training event (3.3.6). Such statement provides the input for the design of the training programme and serves as a measure of success or adequacy of the programme. With this in mind, let us now examine how training is perceived by the interviewed senior managers, trainers and supervisors and questionnaire administrators.

The basic principle in the training process (3.3.2) is to identify training needs and set training objectives as a pre-training stage. It is here that the duties and responsibilities of trainees, trainers, supervisors and managers are determined. The circular of the training department requiring other departments to prepare their annual training plan only partly observes this principle. Although it insists that training needs should be accurately identified, (Marchington and Wilkinson, 1996, Bee and Bee, 1994), it does not state how such needs can be substantiated, and leaves it in the hand of managers and direct supervisors to decide (Chapter 2). Furthermore, the circular does not require a department to state its training objectives in clear terms, nor does it suggest any form of

coordination between the training department and the other departments or seek the views of managers and trainees on issues of vital importance, such as programme content or design. As such, rather than a statement of policy and direction, the training plan described by the managers becomes no more than a bureaucratic and budgetary exercise.

The training plan raises other important questions. First, it is evident from the managers' responses that they tend to prepare their plan only when requested. Even then, some departments are reluctant to respond. This leads to the claim that for some departments training is not a priority or a pressing issue. It also explains why public spending reconsiderations and budget cuts are often undertaken at the expense of training allocations and plans. Second, the plan is hastily prepared and based on guesswork. Even if we assume that the current training needs are defined, pinpointing future needs or problems with an acceptable level of accuracy requires expertise, skills and probably external assistance, all of which are not available. Even more, during the time between preparing the plan and implementing it, some problems might appear unexpectedly, and others might disappear, e.g. the employee develops the required skills through practice and experience. Third, managers tend to regard formal training as the sole alternative without considering other less costly options, like mentoring and inservice training. Fourth, lack of coordination between trainers, managers and trainees makes it difficult to define the boundaries of the training programme.

Consequently, because trainees do not know what to expect or what is expected of them, they are subject to anxiety and pressures that affect their learning capability and motivation. Managers are not able to determine the kind of behaviour trainees are expected to exhibit as a result of training, and programme designers and instructors are left with few options that would inform their decisions. Because training is not properly planned and its objectives are not well-defined, frustration is encountered from the initial steps of the training programme until the end and beyond, as will be seen below.

### 7.2.3 Needs assessment

The analysis reveals that needs assessment is significantly related to effectiveness of training (Beta = .150, P=.002) and one of the most disturbing findings of this research is the lack of attention to the training needs identification principle (Marchington and Wilkinson, 1996:184). Not only is there a total disregard for a needs assessment at the organizational level, but also, determining the knowledge, skills and attitudes required for a particular job, assessing the employee's performance and identifying disparities in the work practice are, all, a matter of judgment, usually of the managers. In fact, civil service regulations stipulate that responsibility for detecting any problematic symptoms is incumbent on managers and direct supervisors, although it is recognized that some lack the ability and resources to undertake such a task. First, the majority of managers and supervisors belong to a generation of individuals who were employed during the formative years of the civil service, when qualifications and promotion were handled rather lightly and leniently. Second, departments are currently operating in a changing environment with a certain degree of uncertainty about people and human resources. As such, the training background and performance capabilities of some of those managers may be based on systems or philosophies that are now or will soon become obsolete. Our discussion will now focus on the needs identification methods.

Under Section 3.4, a distinction was made between individuals who earnestly acknowledge their need for learning and improvement and those who perceive training as irrelevant and ineffective, but who are coerced to attend. Evidently, because individuals of the first group are eager to learn, they will regard training as a reward that requires them to mobilize their capabilities and cognitive resources. Indeed, when these individuals believe that their efforts lead to the fulfilment of a need, they develop higher self-esteem and expectations (3.4.2), people want to be treated equally and fairly (Adams, 1965). Conversely, when members of the latter group find that their expectation and needs differ from what is on offer, they are likely to develop a negative attitude towards trainers and training. This hampers their intake, no matter how hard the trainers try to persuade them to respond positively, and irrespective of the quality of training. Unfortunately, the findings of this research show that some trainees belong to this last category.

In view of the position taken by the senior managers, it is not surprising that the majority of trainees are nominated without explanation or discussions (Table 6.10, Q2 and Q4). McGhee and Thayer (1961) draw a distinction between what they call "summary person analysis" (determining how well an employee is performing in his/her job) and "diagnostic person analysis" (the employee's level of skill, knowledge and abilities). Even when consultation takes place, it is often done in a controlled manner. The consequences of this authoritarian approach are, undoubtedly, far reaching and

negative training outcomes are to be expected. By contrast, one would expect more positive results and higher levels of motivation and achievement from the small minority who approached their supervisors with a request for training and brought a genuinely felt need to their attention. It is ironic that some highly motivated employees with a need and desire to undertake training are at times denied the opportunity. As was seen above (Table 6.10, Q2,3, 4), the causes for this could be their qualifications and past experience, the limited number of places on the course, budget constraints, heavy workload and personal commitments, the whims of the supervisor, and/or the unavailability of the required training.

Because the supervisors are the main authority to decide what training is needed and who are to be selected, the way they perceive needs and articulate training would certainly send strong messages to their subordinates about the value and importance of training. This would equally influence the employees' willingness to learn, and determine the shape of relationships within their departments. Against this background, let us now consider the trainee selection approach, (Saxe, 1989).

In an ideal situation, cooperation, coordination and a strong relationship are expected between all the departments and the training department. But in our case, this relationship is almost ruled out because the "unqualified" training officers do not enjoy recognized status or an identifiable training function (Chapter 2, Q2, Q4), (Bartlett, 1982, cited in Goldstein and Ford, 2002:245-247). In fact, based on their experience, it is argued here that most of those officers only act as clerks or postmen in charge of written communication between the different departments. Annual reports and training records,

mentioned by senior managers as a criterion for selection (Q2), are also to be ruled out as a reliable source of data because they are not comprehensive or easily retrievable and often lack consistency.

Added to this, as stated above, external assistance to assess needs is not a recognised practice, nor is assessment by trainers, colleagues or peers, (section 3.6.3, Harrison,2000). Hence, considering their own abilities and perceptions of training, supervisors usually find it convenient to resort to easier and less demanding assessment and selection methods: brief discussions and consultation with their staff, and observations conducted immediately before the training event (Q2, Table 6.10). The first method is occasionally applied, and the second is the dominant practice. But neither is necessarily reliable or effective.

To be fair, constructive discussions and consultations do take place. No doubt, this method is conducive to learning, and it results in a meaningful relationship between the management and the employees. But unfortunately, only a small minority have reported taking their needs to their supervisors and discussing with them the solutions to their problems (Table 6.10). What is shocking, however, is that consultations are not always focused or based on real and necessary department and job needs. According to some respondents, although training was not related to their jobs, they were still nominated as a reward for their distinguished job behaviour or to satisfy a personal desire (Table 6.10). This same view is echoed by some supervisors and senior managers who admit that training is sometimes granted as a favour (Q2). This, undoubtedly, results in manipulative relationships and a breakdown in communication between the

employees and their supervisors. In such a situation, even when discussions take place, employees are unlikely to openly and honestly convey their problems.

As for the second method, observation, this is often seen as an inadequate need assessment method when applied on its own. Further, because job demands and the employee's skills and knowledge are not static, observation should be a prolonged and continuous process. For example, rather than base his/her judgement on opinion and unstable facts, the observer should summarise and draw conclusions from what has happened since the last observation. Nevertheless, our findings show that some form of observation precedes training, albeit seasonally (Q2). Yet, unless those observed are provided with feedback on their performance, they find it difficult to establish what behavioural changes are required. Still, a number of administrators reported that they were not given an explanation for being selected and only speculated a need for improvement (Tables 6.10).

One final and important comment must be made about the identification of training needs. As seen in our discussion, in the absence both of a clear job specification scheme and systematic and accepted training need assessment criteria, supervisors use their personal judgment to determine the job demands and the individual's training needs, usually without declaring their perceptions of the job or their training objectives and without cooperating with trainers, (Harrison, 2002; Rae, 1991; Robinson, 1981; Marchington and Wilkinson, 1996:109). On the other hand, trainers have their own perceptions of the job at which the training programme is aimed, as well as some knowledge about the abilities of prospective trainees and their needs. Without this, they

will be unable to design their programme, nor will they be able to deliver or evaluate it. The problem is that the perceptions of trainers and supervisors may not coincide. For instance, because trainers lack the theoretical basis for what they are actually doing, they may fail to integrate training into its wider context and end up with activities that may not be job-related. Additionally, jobs involve a wide range of activities, tasks, and skills, some of which may be known to, or acquired by, the prospective trainee. But because not much is known about trainees, trainers may end up teaching what is already known. Consequently, precious training time is wasted and many trainees lose interest.

### 7.2.4 Readiness for Training

We are concerned here with the measures taken to ensure attendance and completion of the course by trainees, and more specifically the amount of time trainees are given to prepare for the event and the way they are prepared, in addition to the encouragements they receive as well as motivation (Baldwin et al., 1991; Campbell, 1988; Carlson et al., 2000; Goldstein, 1986; Harrison, 2000; Mathieu et al., 1992; Noe, 1986; Noe and Wilk, 1993; Tannenbaum and Yulk, 1992). As it can be seen from Table 6.11, this is significantly related with job performance (*Beta* = .163 and P= .001).

As regards the time element, responses of supervisors, senior managers and administrators (Q7, Table 6.11) clearly indicate that training is arranged in a hasty and haphazard manner by all parties involved. The few days notice given to trainees is certainly insufficient for them to conduct any valid enquiry, go through course particulars, set their learning objectives, and formulate a workable action plan to achieve them.

To add to their problems, trainees are usually given little information about course contents. Even when brief discussions with their supervisors take place, little and inadequate information is usually conveyed, as supervisors themselves do not have a comprehensive view of the training programme or its requirements and objectives. As such, it is not surprising that trainees are not recommended any reading assignments, or that they lose interest when they realize that they lack the required experience, knowledge or skills that would enable them to take advantage of training. Furthermore, the trainees' work responsibilities are usually not covered during the training period (Q11, Table 6.11), a factor that adds to their confusion and puts them under more pressure.

### 7.2.5 Learning Environment

One key component to successful learning is finding the means to determine the learners' competencies and needs, and devising learning activities that built on their strength and remedy their weakness (Noe and Schmitt, 1986; Monk, 1996; McNamara, 1999; Barry, 1992; Rabey, 2001; Swanson and Sleezer, 1987; Woifensberger, 1998; Huse and Barebo, 1980; Harrison, 2000; Saxe, 1989; Carlisle, 1985; McIagan, 1985). But, as evidenced in Section "5.6", Table 6.17, Table 6.18, Section "6.6.2", Table 6.19, Table 6.20 and Figure 6.1, the analysis is almost not significantly related to effective training process (*Beta*= -.030-, P=.542). So it can be said that when trainees arrive at the

training department, they know little about training objectives or the behaviour they are expected to exhibit upon the completion of the training course. It was equally established that the vast majority of those trainees are assigned to training often without consultation or a genuinely felt need (Tables 6.10). Moreover, positive feedback on performance is rarely provided (Q8), taking initiatives is not encouraged, little thought is given to training on the job, and cooperative experiential learning is almost non-existent.

It is natural that many of the trainees develop low self-esteem and negative thoughts and show doubts about their abilities to learn and achieve. It is also likely that those individuals develop a hostile attitude towards learning and change because of the risks involved. Consequently, when faced with the challenges of learning, they may feel antagonized, the relative comfort and security they experience can be disturbed, and in order to reduce the risks of failure, they will be ready to do only the strict minimum necessary and learn very little. When they operate in a traditional learning environment (Goldstein, 1986), they know that such tactics would secure them the pass grade. But is this what those demotivated learners really deserve and need?

Explicit in the statements of trainers are some claims that are admitted by administrators and managers, and cannot, therefore, be disputed. The most prominent of these is that some trainees lack the necessary knowledge and motivation and are not committed to learning or to their organizations. Also, most work organizations lack the means and expertise to identify training needs, select trainees and prepare them for training (Q10).

However, some questions remain: in case members of these organizations receive training, why blame them and not training itself for failure? In case they do not, why not blame trainers for their failure to motivate them and provide training? After all, what are trainers for? Are they there solely to identify problems, or should they equally try to solve them?

In fact, both trainers and training are to blame. After so many years of dealing with trainees, the identification of training needs is still an illusion. This takes us back to the question of what trainees need and what they receive. In the light of the description given of our trainees in the opening paragraph of this section, it is to be expected that they will be resistant to change and hesitant to engage in learning activities that demand energy and active involvement. It is also not surprising that when they arrive at the training department, they will have established their own learning patterns which are based on past experience and are influenced by early learning beliefs.

In the main, the majority of those trainees are used to teacher-centred and competitive learning popularised by teachers of the old school days. This is precisely why some of these trainees find it difficult to take part in discussions and, at the same time, expect trainers to 'do all the talking' as reported by some trainers (Q24). In such a situation, logic suggests that adults gain benefit from learning carried out openly in a spirit of enquiry that equips them with the intellectual perspectives and analytical tools necessary to help and guide them through present and future exigencies. Rather than being told what they must learn and receive information in a standard classroom situation, analytical learning would certainly enable those trainees to organise and retain

information. For this to materialise, they should be encouraged to interact with each other and exercise their abilities to make personal choices as constructively as possible. It is through sharing their feelings of doubts and anxiety that they can overcome stress and resistance to learn (Kahn et al., 1964). As such, the role of the trainer becomes that of creating a successful experience by encouraging and supporting them to take control of their own learning. But, the findings show that not much effort is made to turn those people round and channel their negative attitude, low self-esteem and conceived limited abilities in a more positive direction.

The information provided by respondents depicts a clear picture of the training scenario. During their first day of training, trainees find themselves in an artificial environment where they are expected to spend the following days, weeks or months. The trainer usually begins the first session by explaining the general objectives of the training programme and reminding trainees of their duties and responsibilities (Table 6.10). Of particular importance in that session is that trainees are informed of the value of regular attendance that earns them ten marks and of the test procedures which involve a constant monitoring of their behaviour (Q10, Q24). The marks and the test are determined by the trainers who were, at the time of designing training activities, concerned only with delivering a particular message and giving particular knowledge and skills without much consideration to what trainees need. Thus, rather than maintain a secure and assuring learning climate whereby trainees recognize a need for learning to cope with change and complexity, (Brethower, 1972), some of these trainers (Table 6.12) stick to traditional teaching patterns. These tend to rely on the power of authority which knowledge and experience supposedly endow, thinking that their formal training techniques can have a positive impact on the trainees' behaviour. What they achieve in fact is to control trainees' learning and restrict their potentials to take responsibility for themselves.

Exceptions apart, lectures emerge as the dominant training method (Table 6.15). By their nature, these do not usually build on the knowledge and experience trainees bring to the task and give them only little chance to engage in activities. Further, because lectures minimize interaction between the trainer and the trainee, the former may miss the opportunity of checking the latter's accomplishment level and needs. More important is to remember that trainees' attention tends to decline when they listen and watch passively. According to two administrators, before they are able to rehearse the desired behaviour or assimilate a new idea, new ones arise. According to another, some trainers are racing against time (Q 5.8). Undoubtedly, this gives trainees little time to make valid enquiries or receive feedback on their performance. In fact, there is good reason to believe that when training activities are carried out, trainers are less interested in providing feedback than in testing trainees' knowledge to assign them a training mark (Q 24). The situation is made worse by the fact that, since many of these activities are not related to the trainees' jobs or needs, these are tested on something they should not have been forced to learn, in the first place.

# 7.2.6 Evaluation Plan

The analysis reveals that the evaluation plan is significantly related to effectiveness of training (*Beta*= .107, P=.036). A logical stage in the training process is to establish whether training objectives have been achieved and whether trainees are

applying what they have learnt to the job context and performing to the expected level. The data obtained here should, in theory, enable trainers and work organizations to improve the quality of programmes and plan training interventions more effectively (section 3.4.6). However, there is good reason to suspect that the current practices at SDO require further consideration and immediate attention.

Under section 3.8.4, an integrated approach for evaluating training was proposed. Kirkpatrick (1967) indicated Kirkpatrick's learning and training evaluation theory – the four levels of learning evaluation which was introduced in 1959. The approach consists of four stages. The first is reaction, or gauging the trainees' attitudes and feelings towards the training event in terms of content, delivery and structure. The second is learning, which aims at measuring the principles, facts and techniques learned by the trainees. The third is behaviour, or establishing the changes in the job behaviour. Finally, organization tests the impact of training on organizational improvements and change (3.8). For the evaluation operation to be effective it has to be carried out at the four levels and understandably requires close coordination between managers, trainees and training professionals. Nonetheless, one of the finding of this study is that the activity is conducted only at the first levels, and even then, not all stakeholders are involved in the process.

When presented with the question as to how trainees' reactions to training are assessed, all respondents reported that the activity is left until the end of the training. Then, participants are issued with a standard questionnaire consisting of a few structured questions with boxes in which they are requested to tick their level of satisfaction with the training content, delivery methods, timing and facilities. The timing of the questionnaire was justified on the grounds that trainees may need assistance in filling it and that if left until a later date, the employees' work pressure and other distractions may delay the completion and return of the forms (Q.29). This may reflect the deep interest of some trainers in the data obtained from the respondents (MSC, 1981). But, the worry is that generalisations cannot be made. For, according to two trainers, participants provide the same (usually positive) responses all the time, and open-ended questions are rarely answered. Also, little regard for the value of evaluation is shown in the responses of a sizeable number of trainers, who questioned the credibility of the evaluation process or branded it as ineffective (Q31).

Being unaware of the real purpose for the evaluation activity and with their identity exposed, it is natural that some participants will be reluctant to be honest and open in the presence of the trainer who (they believe) will analyse their responses and compile their achievement report (Reid and Barrington, 1997:28).

Again, it is worthwhile reminding ourselves that we are concerned with a culture in which criticism and disagreement may not be tolerated. No wonder that an administrator commented that the reaction questionnaire at the end of training was "unnecessary and confusing" (Table 6.16).

Confidentiality concerns, ambiguity of purpose and questionnaire format are not the only factors that inhibit honest responses or affect participants' perceptions of whatever is being investigated. By delaying the course evaluation process until the last minute when trainees are tired and anxious to leave, it is also unlikely that they will be able to look back over the entire course, especially when it is a long one, and provide forthright and comprehensive responses or comments. One solution to this problem could be to give out the questionnaire at the beginning of the training course and ask trainees to complete it in steps. Further, if participants are requested to answer open questions on a different date and not in conjunction with structured questions, they may feel obliged to provide more detailed responses. Nevertheless, those alternatives have not been considered, nor have trainers considered more effective course evaluation techniques such as group review, discussion and the learning journal (3.8).

Collecting data is only one part of the evaluation process, and acting on it is yet another (Brethower and Rummler, 1979; Hamblin, 1974; Hamblin, 1974; Warr et al., 1970). According to interviewed trainers, completed questionnaires are usually reviewed and analysed by the training department and necessary action is taken. In the words of one respondent, complaints against trainers are often brought to the attention of the concerned individuals. Unfortunately, it appears that action does not go far beyond blame and criticism.

The overall responses to the questionnaire and interview questions show that a convincing majority of respondents are not satisfied with the way training is planned and conducted. Some of the major problems have been mentioned earlier in the discussion and others will be highlighted. For example, trainers complain that the heavy workload leaves them with little time to design effective programmes. They also admit that large class size can jeopardise the quality and outcomes of training (Q9). Further, in

agreement with others, they acknowledge that training needs are not properly assessed (Tables 6.10, Q2, Q10), that the selection process is deficient (Table 6.10, Q3), and that coordination with client organizations is lacking (Table 6.10, Q1). With this in mind, one is entitled to argue that if the aim of evaluation is to improve training in terms of planning, design, delivery, quality and outcomes, it must be admitted that the current practices have failed and betrayed that purpose. Lest this statement be misinterpreted, it must be emphasised that the resources of the training department are indeed stretched to the very limit.

Apart from measuring trainees' reactions towards the training experience, training is also evaluated at the learning level, i.e. the trainee's performance in terms of knowledge, skills and attitudes against pre-defined criteria. Here, it is important to note that standards expected of trainees upon the completion of training are set by the trainer following his/her perceptions of the programme's objectives and the demands of the related job. The absence of an accepted job description scheme means that training objectives can be perceived differently by trainers and managers. Further, these objectives are not necessarily known to trainees prior to the training programme (Table 6.11, Q7, Q10).

Given the deficient selection process and the unhealthy and unsupportive training environment (Table 6.12), many trainees are most likely to underestimate the value of training. It is also likely that some candidates need only minimal assistance or no training at all. The irony is that sometimes these trainees achieve the distinction grade, and are rewarded and presented with certificates of distinction and letters of praise for what they already know. Here again, damage is inevitable and the consequences are far reaching.

What was stated above can be summarized in only one phrase: it is difficult to gauge what trainees learn as a result of training because no pre-tests (3.3.3) are conducted and training needs are not identified in advance. Nonetheless, the statement above aims at stressing one important point: without assessing training needs, all resources and efforts are wasted and training is only of partial benefit, at best.

### 7.2.7 Post-Training Job Performance

In an ideal situation, contact and consultations between trainers and the client organization are started before the training event and continued throughout and after it (Bee and Bee, 1994; Bramley, 1996; Harrison, 1992; Reid and Barrington, 1997). But, as seen in our discussion, trainers cease to be responsible actors upon the completion of the "trainee's performance report". Determining what trainees have learned and how or whether they apply it to the job becomes the responsibility of the trainees and their direct managers.

Ideally, one would expect the manager to first consult the training report for information on met or unmet training needs, suggestions for action, and guidelines to change the status quo. As a second step, the manager would meet trainees to discuss what they have learned/not learned, how and when they are going to apply it, and what help they expect from him/her and from their colleagues. Action follows, and with the support and feedback they receive, trainees should be able to apply what they have learnt and enhance their learning and work behaviour. But, the findings of this study point to a different form of action.

To begin with trainees, the majority do not lack the desire to implement change and put what they have learned to the test (Table 6.17). In fact, despite the deficient selection process and lack of preparedness, many have shown readiness to learn and improve (Table 6.10). However, upon the completion of training, and because of the work waiting for them, some may be forced to forget about implementing what they learnt for a while (Table 6.17), thus jeopardising motivation. Moreover, not all trainees are required to brief their supervisors on what they learnt or what they are going to do about it. Even when meetings take place, not all managers are able to establish what trainees learnt or what action is required. Understandably, those managers cannot rely on the uninformative training report for guidance or assistance. At the same time, not much is known to them about the training programme and its objectives or the standards against which training can be judged or performance demonstrated. Although this problem could be solved by training the managers themselves to the new methods or conducting pre-training awareness raising sessions, senior managers and trainers still complain that supervisors are not in a position to assist trainees or follow up training (Q17, 24).

Indeed, lack of professionalism on the part of some managers is evident when they declare that their assessment of trainees' acquired knowledge and post training job performance rests on the training report (Q17). Other managers use observation as the most readily available tool for measuring trainees' achievement and performance levels. Yet, from the responses of administrators, it can be deduced that their behaviour is observed and judged against standards set by their managers (and unknown to trainers themselves) not in order to enhance performance and give feedback, but to determine another numerical mark that appears on the annual confidential report. For trainers and managers alike, assessment seems to be just an obsession with exams.

### 7.2.8 Transfer of Training

Analysis results (Section 6.6.1, Table 6.17, Table 6.18) and (Section 6.6.2, Table 6.19, Table 6.20, Figure 6.1) does not reveal a significant relation to effective training process (Beta=.073, P=.133). In fact, motivation theories (section 3.3) agree on at least one basic principle: when individuals do not know how well they are going to perform and how their achievement will be appreciated, it is likely that they will be hesitant or reluctant to learn or view training as a feasible and a valued option (Baldwin et al., 1991; Campbell, 1988; Carlson et al., 2000; Goldstein, 1986; Harrison, 2000; Mathieu et al., 1992; Noe, 1986; Noe and Wilk, 1993; Tannenbaum and Yulk, 1992). Conversely, training will be taken more seriously when these individuals feel that it is rewarding. But, how do our trainees fit within this description?

In Section 7.2.2, reference was made to groups of senior managers who view training as part and parcel of the job. In their judgment, training itself is a reward, and since it is usually conducted during work hours, no other incentives are necessary. Against this extreme view is more than one line of argument.

First, in order for training to be effective, its objectives and the required changes in behaviour must be specified and known to the trainees, (Arnold et al., 1991; Harrison, 1992; Rae, 1991). However, as seen in Section 7.2.2, this precondition is not always met. As a matter of fact, rather than encourage employees to be innovative and work in a blame-free environment, rules are often set by the management (not according to established or agreed criteria), and the trainees' personal circumstances, attitude and abilities are often ignored. Second, it would be unrealistic to expect trainees to be motivated and keen on training when they see that those who are primarily concerned, particularly managers and supervisors, are not involved in planning and designing training (Q1) and do not even follow it up (Q18, Table 6.12). Third, although it is possible that partial and temporary results are achieved through forcing employees to attend training and reprimanding them over non-compliance and unacceptable achievement (Q2), there are no scientific bases for the assumption that punishment will encourage better training and performance (section 3.3.2). Fourth, because their work responsibilities are not covered during their absence (Table 6.12), it is likely that employees, who are usually overworked, will panic at the prospect of being asked to attend training. Fifth, when training is provided outside the duty hours, as is sometimes the case, unless trainees receive compensation in return and know that they have sufficient time for work, class, study and social commitments, they will be unwilling to attend training and learn.

Apart from some supervisors and managers who attach little importance to trainees' motivation, others view promotion and pay rise as motivating elements that would provide trainees with the incentives to learn and change. Although it is difficult to argue against such a view (though it must be emphasised that, on their own, promotion and/or pay increase are not enough), we are still left with a major problem: when performance rating is fair and clear and consistent links between performance ratings and reward are seen by the individuals, we expect them to have faith in their committed organization and be motivated. However, decisions about pay increase and promotion are not always consistent.

Further, these are usually dependent on the seniority element, i.e. length of time in service, and they are rarely tied to achievement at work or training. Hence, when rewards are left to the judgement and discretion of the individual manager, there is always the danger of bias and misjudgement, (Wiley, 1997). This should not be interpreted to mean that the process of rewarding trainees through promotion and pay increase should be halted. Rather, in a culture where personal connections and relationship can often determine the outcomes, the process should be regulated and a standard procedure established. It can also be argued that unless handled with infinite care and caution, pay rewards could erode intrinsic motivation (Section 3.4.1) and lower trainees' feelings of competence, self-confidence and determination. This case is more than likely in Oman where pay increase and promotion, instead of being tied to achievement at work or training, tend rather to dependent on seniority and are subject to bias and misjudgement. Hence, in a culture where personal connections and relationships are often decisive, the process of rewarding through promotion and pay increase should be regulated.

As evidenced in other responses, recognition, support, and encouragement are thought to be more potent in shaping the motivation and behaviour of subordinates (Q8, Table 6.11). Some highly motivated employees feel a need to learn and regard achievement and development as the ultimate goals and incentive. Undoubtedly, when provided with the necessary organizational support that encourages involvement, autonomy and responsibility, and with fulfilling and satisfying training activities, these individuals will focus on the challenge of the training task rather than on extrinsic motivation, feel in control of their learning, react positively to new circumstances, change, and apply learned behaviour and skills to the job. The power of encouragement and approval is recognized by the training programme organizers who present distinguished trainees with certificates and letters of praise and recognition (Q24), but it is quite neglected by organizations.

Focus on rewards such as recognition and approval is a step in the right direction, indeed. But when employees are not sure about their abilities and needs (Table 6.10), lack support and guidance (Table 6.11), and attend training only because compliance is congruent with their culture (Table 6.12), it is natural that those trainees who are not intrinsically motivated would expect material rewards in return for their wasted time and effort (Table 6.10). Unless something is done to motivate those individuals and address their concerns, it is felt that the culture of financial reward will become prominent.

To describe training as successful, its objectives should be met and trainees should be able and even encouraged to apply what they learn to the job (Bee and Bee, 1994). But available data shows that the training under scrutiny fails to fit within this description. As seen above, one factor that hampers transfer of learning is lack of attention to training methods which enhance learning and encourage transfer (reference to this point was made in section 7.7, and further elaboration here is not necessary). Another factor pertains to the nature of training programmes on offer. As noted in 3.3.1, (Reid and Barrington, 1997) generic training programmes do not necessarily fit within the organizational needs and objectives, making some of the skills, knowledge and behaviours acquired superfluous for the job. Added to these are other problems that can be attributed to trainees and their work environment.

In principle, trainees and managers meet after the training to discuss what has been learnt, what to do about it, and formulate an action plan. But, according to the findings, this rarely takes place (Table 6.17). Obviously, reluctance on the part of managers to show interest is a demotivating element the result of which could be forgetting about the purpose of training altogether. Further, in order to provide trainees with the necessary positive feedback and encourage them to apply what they have learnt, one would expect effective forms of assessment to be in place, including questionnaires, interviews, self-assessment, or assessment by colleagues or external experts. No references were made to such methods. Rather, the most dominant technique reported is that of passive observation, whereby the direct supervisor watches trainees while they perform tasks he/she assumes training addressed. As was argued earlier, the supervisor's perception may not coincide with the role drawn for trainees by the trainers, thus generating conflicting and ambiguous messages that further confuse trainees, and contribute to stress and tension (3.3.3), (Bee and Bee, 1994; Marchington and Wilkinson, 1996; Reid and Barrington, 1997; Walters, 1983).

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Based on his experience, the present writer would argue that some managers resist change because of the implications it might have on their sectional position, because of suspicion of those who initiate it, or because they are not entirely convinced that change would be effective. The trainees' complaints that they lack managerial encouragement and support to apply what they have learnt (Table 6.17) can be explained within this context. Trainees have also pointed to the lack of training-related incentives as a barrier to transfer of training. Recognising their achievements and giving the trainees more challenging assignments can provide a viable solution.

#### 7.3 CORRELATION AND REGRESSION ANALYSIS

In this study, the existing condition is the training in SDO. The researcher asked questions through questionnaires and interviews to a number of participants to find out the way pairs of variables are related. As is shown in Table 6.18, the correlation relationship between the independent variables and dependent variable varies from one variable to another. It can be said that no discussion would be complete without an investigation of causation. It is possible for the two "independent variables and dependent variables and dependent variables" to be related (correlated), without one variable causing another.

From Table 6.20 and Section "6.6.1" it can be seen that the correlation relationship between these variables does not reach the stronger side of the significance. This means that there is an indication of some causes that affect the existing training programmes at SDO and its outcome. These causes are relative to learning environment, transfer of training, and monitoring of evaluation. This is corroborated by findings from

the questionnaires (Section "6.5.2.3" and Table 6.12) which show that 24.3% of administrators think that the training environment is usually stressful and that consequently one cannot expect a good outcome from the training. Also, over 26% were uncertain, which suggest that they had mixed feelings. In Section 6.5.2.4, a majority of trainees, 55.8%, indicated that they are not informed about the demands of the training event and its objectives. This is equally supported by findings from the interviews (Sections 5.2.3). Supervisors think that the training environment is usually stressful. But according to one third of the managers, the learning environment is stressful (Section 5.2.4). Almost all managers mentioned that trainees are usually informed about the demands of the training event and its objectives. By contrast, only few trainers think that trainees are usually told what to expect, whereas supervisors have a different opinions: according to them trainees are left in the dark (Section 5.2.7). This implies that something must be done to improve the existing procedures.

In regression analysis, a single dependent variable is considered to be a function of one or more independent variables and so on. Using SPSS version 16, a standard least square multiple regression was performed, with needs assessment, readiness for training, learning environment, transfer of training, evaluation plan, training method and monitoring and evaluating the programme all representing the independent variables, while effect on the training programme "effective training process" represented the dependent variable.

For the regression assumptions, first, there was no specification error, second, no nonlinear effect was found, third, there was no measurement error. The coefficient of determination R square describes what proportion of the variation in the dependent variable is associated with the regression of an independent variable. The value of the coefficient of determination ranges from 1.00 to 0.00. Analysis of variance is used to test the significance of the variation in the dependent variable that can be attributed to the regression of one or more independent variables. Employment of this statistical procedure produces a calculated F-value that is compared to a critical probability. Obtaining a significant calculated F-value indicates that the results of regression are true and not the consequence of chance (Table 6.20, Table 6.21, Appendix 9 and Appendix10).

Often in regression analysis the independent variables and dependent variables data are plotted on a graph. This is done to graphically visualize the relationship between the two variables. If there is a simple relationship, the plotted points will have a tendency to form a recognizable pattern (a straight line or curve). If the relationship is strong, the pattern will be very obvious. If the relationship is weak, the points will be more spread out and the pattern less distinct. If the points appear to fall at random, there may be no relationship between the two variables. In this study it can be seen from Appendix 9 and Appendix 10 that the distribution of the data points indicates a positive linear relationship between the dependent and independent variables.

Equally from the SPSS regression analysis output (Appendix 9 and Appendix 10), the summary of results from regression Table 6.22 of the output shows that the capital R is the multiple correlation coefficient. That tells us how strongly the multiple independent variables are related to the dependent variable. Also Appendix 9 shows that

r square varies from one example to another but is equal to more than 0. For example the dependent variables "effective training process" Vs the independent variable "needs assessment" is equal to 0.045, which means 4.5% of the variation in quality of training is explained by conducting needs assessment. Another example is that of the dependent variables "effective training process" Vs the independent variable "employees' readiness for training", which is equal to 0.057, meaning 5.7% of the variation in quality of training is explained by ensuring employees' readiness for training. Also from Table 6.11 and Appendix 9, it can be seen that the weakest R square in learning environment, "transfer of training and monitoring and evaluating programme" Vs "effective training process", which means that if the trainees are unhappy with the learning environment, they will not get proper training, which represents a waste of money and time for training. Also if the monitoring and programme evaluation are not performed correctly, the training programmes will never be improved. Again these findings are supported by what was found from questionnaires in Section "6.5.2.3", Section "6.5.2.4" and Section "6.5.2.7" as well as from the interview findings Section "5.2.4", and Section "5.2.7" also the correlation findings in Section "6.4".

The ANOVA part of the output basically tells us whether the regression equation is explaining a statistically significant portion of the variability in the dependent variable from variability in the independent variables (Appendix 9 and Appendix 10). The Coefficient part of the output gives us the values that we need in order to write the regression equation from which we know the shape of the slope. It also shows the value of t, which considers the quality of individual independent variables and it shows as well the value of Sig., which considers whether the model is of statistical significance or not. If so the model is good and there is a relationship between the dependent variable and the independent variables. As it can be seen, as value of significant is getting smaller the value of t getting bigger (Appendix 9, Appendix 10, Table 6.19).

From this section it can be concluded that there is a correlation between the variables as well as the regression. This helps us argue that the theoretical framework (Figure 1.1) can be used to improve the training programmes at SDO.

# 7.4 CONCLUSION

This study provides an overarching picture and empirical evidence on the designing of an effective training process at Sohar Development Office. The results from both qualitative and quantitative findings provided support for the key theoretical propositions. Serious problems have been detected in the training operation, beginning with planning and design, through implementation and beyond. In the pre-planning stage, training needs are not identified, and the trainees' loss of direction and feeling of unfairness translate into demotivation and lack of interest. During training, there is often rigid adherence to one way of training/learning, the locus of control rarely shifts from trainer to trainee, and the evaluation report does not provide figures, facts, or plans for action to determine the value of training or where improvements can be made. After training, achievement is not assessed, and trainees are rarely encouraged to put what they have learnt to the test. The implications of these findings have been considered in the present chapter. A summary of those together with the necessary recommendations will be given next.

### **CHAPTER EIGHT**

### CONCLUSION AND RECOMMENDATIONS

### **8.1 INTRODUCTION**

In view of the discussion in the previous chapter, the questions to ask are where and why have we failed? To this effect, the comment made by an experienced trainer that only a small minority of managers, supervisors and training officers are able to coach and mentor employees or provide them with the on-the-job assistance they need is quite revealing. However, comprehensive answers to this question would not be possible without seeking the opinions and exploring the perceptions of those involved in training. To this end, an attempt was made to establish what goes on before, during and after training through data collected from a carefully selected sample of trainers, senior managers, supervisors and administrators. To cross-validate the data thus obtained, the questionnaire and unstructured interview techniques were employed. As a result, it was possible to answer the first two questions of this research, i.e. how effective is administrative training at SDO and what are critical factors that contribute towards the effectiveness of training.

Answering the third question, i.e. what can be done to improve it, was, admittedly, an uneasy undertaking. For, as we all know, there is no single theory to guide training practitioners. Rather, training practice is informed by theories of human behaviour developed in social sciences, particularly theories of learning advanced in social psychology. The most popular and widely accepted theories and views here were

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reviewed, compared and synthesized in chapter 3 and used as the instrument with which training practices at SDO could be gauged and assessed in view of answering the third question on the level of training effectiveness and what could be done to remedy the situation. The findings were presented in chapter 5, subjected to critical analysis, and, where appropriate, the necessary course of action was directly or indirectly suggested. In this concluding chapter, the findings will be briefly summarized and recommendations made.

### 8.2 SUMMARY

As evidenced in the data analysis results from both quantitative and qualitative sources, this study has contributions to theory, methodology and the field of public administration. Before training, the different departments are required by law to draft their own annual training and budgetary plans and submit them to a joint committee comprising representatives from the training department for further revision. In the light of the committee's deliberations, a training plan is then devised and implemented by the training department. Following the publication of the plan, organizations willing to participate in training become responsible for the process of identifying their training needs and selecting trainees from its very beginning until the end. As it stands, the planning stage has serious flaws. The major problems detected are stated below. During training, the deficiencies have been detected in two main areas, training delivery methods and training evaluation techniques. Another finding of this study is the complete lack of attention to the post-training stage by managers, supervisors, trainers and trainees. Trainers suspend any relationship or contact with trainees and their organisations immediately after training. Regarding managers and supervisors, because the training report does not provide any guidelines or suggest a specific form of action, passive observation becomes their major technique to establish what trainees have learnt and its relevance to the job. Some managers even resist change and do not provide support, positive feedback or coaching. Support from colleagues and peers to apply what has been learnt is also out of the question. As for trainees, they are not usually required to brief their managers about what has been learnt and how they are going to apply it. In most cases, even when they try to apply whatever they have learnt to the job, benefits are not to be expected.

#### 8.2.1 Training Plan and Objectives

The figures and estimates appearing in the plan are based on guesswork, and do not necessarily stem from a genuine training need simply because no organizational reviews and job or task analysis systems are in place. Moreover, because it does not state training objectives in specific terms, the plan fails to provide a framework for training content or function as a reliable measure for assessing achievement.

The annual training plan is meant to address the general and collective needs of all departments. However, due to its limited resources and the time and work load pressures under which it operates, the training department often reintroduces previously run programmes with little or no modifications. In other cases, individuals who need training are denied this opportunity because the existing programme is cancelled and designing a new one is not considered, the reason being that sufficient numbers of attendants are not expected.

### 8.2.2 Needs Assessment

This operation is difficult to implement, first because there are no agreed guidelines or rules for the needs assessment process and second because most managers are not qualified for, or capable of, carrying out such an uneasy task.

Assessment methods reported by managers were found to be inconsistent, impractical and unreliable. In some cases, it was reported that assessment was based on the employee's record and annual performance report, both of which are neither comprehensive nor organized or consistent. In other cases, the educational background and previous training experience were used. The more educated the individuals are and the more courses they have attended, the less chances they have to be nominated. But, in most cases, it was reported that observation conducted by supervisor, usually immediately before the training event, was the common practice.

Here, it is important to note that observation neither culminates in a needs assessment report nor does it systematically involve providing candidates with the feedback necessary to enable them to identify gaps in their performance. Some are simply told they have been nominated, and others are consulted as to whether or not they wish to attend. Equally important to remember is that there is no formally accepted or legally binding description for different jobs or the tasks and competencies they require. This leaves the door open to disagreement between the perception employees' and managers have of the job.

## 8.2.3 Training Design

Designing training programmes seems to be a 'trainer only' territory where trainees and their supervisors and managers have no say. As stated earlier, a trainer's decision as to the design of training programmes is dictated by information derived from piles of training plans hastily and unprofessionally arranged and presented by different departments. As these plans provide only figures and lists of names and positions without specifying training objectives and the desired behavioural goals, trainers have no choice but to devise a comprehensive training programme that would apply to different departments either in its entirety or in part. If an individual needs only certain aspects of the programme, he cannot but take it as a wholesale package. The contents of the programme are determined by the trainer, and the activities involved are sequenced in the manner he sees fit, without necessarily taking the participants' individual differences or learning abilities and styles into account.

## 8.2.4 Readiness for Training

Trainees are usually given scant information about the training programme, often not more than the timing and the venue, and only a few days before it starts. This is insufficient for them to prepare for training or free themselves from their regular commitments. To make things worse, they are rarely offered help or recommended any reading material. Even more, they are required to attend to their work duties after the morning training sessions. As a result, they arrive at the training unprepared, without knowing what to expect or which action plan to follow. Further, knowing that no training rewards or incentives are in place, they are not expected to have the necessary level of motivation.

### 8.2.5 Training Methods

Trainees were concerned that (a) some training activities were not related to their needs, (b) some important aspects of the programme were not emphasized, (c) training activities were not always properly sequenced or paced, (d) theoretical teaching was predominant at the expense of practical activities and action learning, and (e) some trainers displayed impatience and intolerance when trainees did not understand what was taught or were slow to learn. In this respect, trainers themselves reported that some trainees lacked the necessary level of knowledge to undertake training. However, knowing that the programme, either as a whole or in part, may not correspond to the wishes and needs of trainees, these complaints become no longer tenable.

# 8.2.6 Evaluation

Trainees' reaction to the training programme is evaluated immediately after training by asking them to answer a set of structured and unstructured questions. Trainers report that they tend to receive positive feedback and that unstructured questions often remain unanswered. However, given the complaints made by trainees and managers about training outcomes, it can be concluded that evaluating training this way is neither accurate nor effective. Favourable but inaccurate information is also to be expected because confidentiality is not maintained and the purpose of the exercise is unknown to trainees.

Training is also evaluated at the learning level. But with no pre-tests conducted or training needs assessed, the exercise does not answer the question as to whether the trainee's needs were met, (Campbell, 1988; Goldstein and Ford, 2002). Rather, it aims only at determining how much has been learnt and assigning test marks. Trainees' knowledge and skills are usually assessed during training through observation and immediately after the event through written exams and group projects. Evaluation at this level results in a brief report that contains the mark achieved by the participant and some general comments. It makes no reference to the skills and knowledge learnt during training or the trainee's areas of strength or weakness. As such, it fails to function as a basis for action, (section 3.4.6). So we found it appropriate to integrate a Theoretical Framework as one of the basic theories in this study. One of the contributions of this study is the usage of the Theoretical Framework to conceptualize, develop and empirically test Needs Assessment (NA), Readiness for Training (RT), Learning Environment (LE), Transfer of Training (TT), Evaluation Plan (EP), Training Method (TM) and Monitoring and Evaluation of Training (ME) as independent variables, with Effective Training Process (ETP) as a dependent variable.

Based on the research questions, and due to the controversy surrounding using one specific method, this study uses both quantitative and qualitative methods to analyze the data collected from different sources. Combining the two approaches closes gaps and becomes one of the methodological contributions of this study. Equally important is the large number of respondents (400) relied upon on the quantitative side.

## **8.3 RECOMMENDATION**

Trainers usually preach that the genuine quest for better achievement is the most noble and effective form of motivation. They also claim that they show people the way and are proud to be described as 'motivators'. Yet, they do not admit that they have failed to motivate themselves. Since they agree that poorly planned training is doomed to failure, they should take the initiative, admit that effective training is not the monopoly of trainers, and involve trainees, supervisors and managers. No matter how minimal their effort is, it will certainly produce more positive results.

Admitting that assessing training needs is indispensable for training to be successful (Leat and Lovell, 1997; Reid and Barrington, 1997) entails the use of a yardstick against which any performance gaps can be detected. In other words, an agreement must be met on a job description that defines the job in terms of its purposes, key functions, and the required tasks and competences to carry them out, (section 3.2.3.2.1. Robinson, 1981:39; Schuler and Huber, 1993). In the absence of such document, trainers, trainees and managers develop their own perceptions of jobs and their requirements. Still, because of a breakdown in communication between the four parties, there is no way of knowing where they agree or disagree.

To ensure a certain consensus, managers and trainers must agree to meet as equals to discuss and define the tasks, competencies and behaviours required for a specific job. This need not be an arduous, lengthy or costly process. For example, managers in a certain job area can be invited to what could be called a 'job description session' where trainers play the ideal role of the jobholder and follow that with discussions. Managers should not be asked to take part in practical activities unless they volunteer to do so, and formalities and tests must be eliminated. By the end of these sessions, managers will be able to establish the type of behaviour the job requires and use the acquired knowledge as a guideline for identifying training needs and selecting trainees. Even better, some managers should be able to coach their employees and train them, themselves, on the job. In turn, it is also important that managers and their staff agree on certain job standards.

On its own, learning about the tasks, competencies and knowledge required for the job is not enough. Managers must also learn how to conduct a proper, or at least acceptable, training needs analysis and reduce the subjectivity that denotes their current practices. For example, rather than rely on the passive observation method, they must know how to use questionnaires and interviews, (section 3.2.4 and 3.2.5. Siddons, 2001:8). They can also learn how to encourage trainees to assess themselves and welcome assessment by colleagues and peers.

What has been said about managers is also applicable to training officers who are currently relegated to the most inferior positions. When trainers show respect and prove to managers that they listen and care and that they are committed to training, mangers will be encouraged and motivated. For example, when designing the training programme, it would be a good idea to invite managers for a rehearsal session to explore their views on the content of the programme, methods of instruction, training facilities and programme schedule. And before the training event, managers, supervisors and trainees have the right to receive detailed information about the programme, including training methods, assessment instruments, reading lists, and behavioural objectives. On their part, managers and supervisors have a duty towards trainees. To heighten their awareness of the need for learning, they must point to and discuss gaps in their performance and explain the reason for attending training. Further, they must inform them that skilled performance will be rewarded and encourage them to prepare for training and draft an action plan (section 3.4.4).

The issue of the training budget necessitates more attention and requires managers to rethink their roles. Instead of SDO seeking ever bigger funds for training, no training budget, no matter how small, can be taken for granted any longer. To deserve their budget, managers must carve out a positive role in organizational plans, demonstrate the links between those plans and organizational objectives, and establish their value once implemented. All managers should ask themselves why, over long years, they have failed to develop their own resources and mobilise them to provide the less costly and more effective on-the-job training.

Trainers complain about working under pressure and the insufficient knowledge trainees bring to the task. On the other hand, managers and trainees argue that only parts of the training programmes on offer are relevant to their needs. When training needs are identified in the manner described above, and the training programme is broken into modules, departments will be able to choose only what is relevant to their needs and save time and resources without paying for what they do not need. On their part, trainers will have no reason to complain.

Poor training results are to be expected from poorly designed programmes and insufficiently motivated trainers. In order for training to be effective it is a requirement that training needs are identified and objectives spelled out in clear terms. It is also vital that trainees feel a need for training, are prepared for it, and have faith in their abilities to cope and benefit. Once this is established, delivering effective training and assisting trainees to learn becomes the responsibility of the trainer. To achieve more effective results, the following is recommended:

- Using the first training session to heighten trainees' awareness of the need to learn, restate training objectives, set a favourable learning climate, and define the responsibilities and duties of the two parties, trainers and trainees
- 2. Encouraging trainees to formulate their own action plans, take the existing knowledge, skills and attitudes into account and set new goals
- 3. Rather than concentrate on directive teaching methods, e.g. lectures that do not allow trainees to participate or confirm that learning has taken place, more attention should be given to practical work and group activities (Baldwin and Williams, 1990:4; Hardingham, 1998; Schuller and Huber, 1993). Trainees from similar professional backgrounds gain assurance from sharing experience. Further,

trainees are usually used to teacher-centred learning. It is necessary to make them take control over the learning strategies compatible with the content.

- 4. Training, environment and activities must be as similar to the work environment as possible.
- 5. Providing timely and specific feedback in a positive fashion through encouraging trainees to make enquiries and conducting formal and informal interviews and discussions
- 6. Presenting important content in more than one way and sequencing activities to meet trainees' learning styles and address individual differences
- 7. Encouraging trainees to immediately apply learnt skills and knowledge to the job
- 8. By showing commitment towards training through supporting trainees and monitoring their progress during the course of training, managers can expect positive learning and better achievement from those they nominated for training, (Sims, 1993).

On the training evaluation front, and in view of the strategies trainers currently employ and the values they hold, it is natural that unreliable results are obtained. By obscuring the purposes of training evaluation at the reaction level, leaving the exercise until the end of training, and requesting trainees to answer difficult questions or declare very personal views, it would be surprising if those trainees provided accurate, complete and useful information. At the learning assessment level, there is no point in teaching what trainees already know and claim that what has been learnt was the result of training. Unless we determine what trainees need to learn and adapt our teaching accordingly, there is no point in training in the first place. To address the problem, the following steps need to be taken:

- Trainees must be assessed in terms of their skills, knowledge and attitudes before training and areas where improvement is required must be identified (Siddons, 2001).
- 2. The purpose for gauging the trainees' reactions to the training programme must be explained and the format of the questionnaire and test strategy reconsidered. Rather than leaving the activity until the end, assessment should begin when trainees start training and continue throughout the course. For example, they can be asked to record their observations on a daily or session basis. Formal and informal interviews and discussions, as well as questionnaires, are also useful.
- 3. Training activities should not be concerned with testing for its own sake. Rather, measurement of competencies should be a continuous process aimed at enabling trainees to receive feedback and trainers to introduce remedial strategies.
- 4. In addition to what emerges from counselling and feedback activities, trainers can use information obtained through interviews, questionnaires, projects and written tests during the last days of training to establish whether trainees have reached the required levels of competence and the gains in learning they made. However, it is rather important that results of post-training tests are compared with the predetermined training objectives and pre-training assessment.
- 5. The evaluation exercise should result in a comprehensive report that shows how and why the activity was conducted, the trainee's areas of weakness and strength, and the

resulting outputs of training expressed in terms of increased organisational and individual benefits. It should also state what necessary actions are to be taken.

To ensure transfer of training to the workplace and enhance learning, there is a pressing need for the following action to be taken:

- 1. Meetings and discussions between trainers and managers should be conducted to evaluate what has been learnt and determine how it is going to be applied. These meetings and discussions should result in action plans.
- 2. The training report should provide useful information and form a basis for action. Trainers should also follow up training with managers and indicate what support trainees need to apply their new skills and knowledge. It would be useful to provide managers with step-by-step checklists to use when they evaluate the participant's skilled job performance.
- 3. Peers and colleagues should be encouraged to take part in assessing the trainee's performance and provide positive feedback.
- 4. Providing trainees with texts, handouts, notes and checklists to enable them to remember what has been taught and enhance their learning.
- 5. The trainees' improved performance on the job should be rewarded by formally appraising and documenting that performance, presenting employees with certificates and letters of recognition, and offering them more challenging and more desirable assignments, (section 3.3.3.5).

### **8.4 SUGGESTIONS FOR FURTHER RESEARCH**

Apart from a few subjective and descriptive studies and articles, administrative training in the Sultanate of Oman remains a poorly researched areas that requires immediate attention. In particular, we need to examine the issue from angles we have not considered such as social and culture aspects. One issue of interest would be training on-the-job, as this is undoubtedly less costly and more effective than off-the job training. Other topics that would enrich our standing and yield benefit include: technical training, e-training to mach advanced electronic technology information such as modelling, instructions, repairs, etc, in the world, self training, job satisfaction at SDO, and organisational culture.

## **8.5 CONCLUSION**

It is part of our human nature, it must be said, that we tend to feel disappointed, if not resentful, when we believe that our hard work is not appreciated or rewarded. By depicting a gloomy picture of the current administrative training practices at the Sohar Development Office, it is feared that the present study might generate the kind of feeling just described among some planners, trainers and training officials who might feel cheated and the contributions they made forgotten or belittled. Lest we be misunderstood, this is not the type of reaction the present writer intended to create. In fact, he humbly admits great personal indebtedness to the training department: without the initial training he received at this pioneering department, he would never have been able to achieve what he has achieved. Indeed, throughout the system in general and the Training Department at Sohar Development Office in particular, we have always found dedicated individuals who, together with our great reformer, H.M. the Sultan, have made determined attempts to lift the country from ages of depravity and darkness. Yet, as far as administrative training is concerned, it appears that we are rigidly holding to the successes of the past.

The static character of the current training system is perhaps most vividly illustrated in the fact that the training unit at the SDO is still paralysed and lacking qualified staff. It is also an indisputable fact that managers are still incapable of drawing sound training policies or even identifying their organisational training needs. Unless we are hard on ourselves, maximise our role, and stand by our professional values, we cannot expect managers and trainers to agree that accepting change breeds progress and that rejecting it produces chaos. Until change can be wrought in our own thinking, it would be unrealistic to claim that our job is done and the transformation of our organisation complete.

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