

**IMPROVED PERFORMANCE THROUGH EFFECTIVE;
HUMAN RESOURCE TRAINING AND DEVELOPMENT:
A CASE STUDY OF NATIONAL RESEARCH INSTITUTE
FOR CHEMICAL TECHNOLOGY, (NARICT), ZARIA.**

BY

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DECEMBER, 1999

DECLARATION

I hereby declare that this project is a product of my research findings and that I am responsible for any errors committed and/or omissions.

All works consulted have been duly acknowledge in the references.

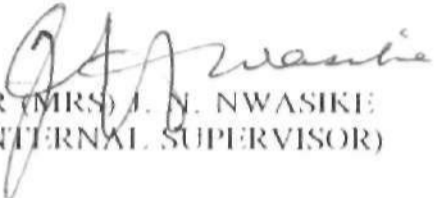
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CERTIFICATION


This project entitled: "IMPROVED PERFORMANCE THROUGH EFFECTIVE HUMAN RESOURCE TRAINING AND DEVELOPMENT: A CASE STUDY OF NATIONAL RESEARCH INSTITUTE FOR CHEMICAL TECHNOLOGY, (NARICT), ZARIA"; written BY NNAJI EDITH JEOMA BONIFACE meets the requirements governing the award of the degree of Masters of Business Administration of Ahmadu Bello University and it is approved for its contribution to knowledge.


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DEDICATION

This project is dedicated to Almighty God for His marvelous grace, to my parents who tirelessly laid the foundation for my education and to my darling husband for his love and encouragement.

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I am obliged to acknowledge some individuals who contributed in one way or the other to make this project work a success.

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ABSTRACT

This project focuses on the problem of improving performance through human resource training and development with particular reference to Production Unit of National Research Institute for Chemical Technology (NARICT), Zaria.

The study is aimed at highlighting the importance of training and development and its effects on the level of performance, that is, the quantity and quality of production output.

Data was collected from both primary and secondary sources. Analysis of data was done by simple descriptive statistics such as mean, percentage, and student t-statistics through the aid of computer.

^ The study revealed that 22 percent of the staff in the Unit were trained in 1998/99 and that production level increased by 202.5 percent over the 1997 figure. A t-value of 2.88 which was significant at 10 percent level showed that there was significant difference in output before and after the training. Thus, the null hypotheses postulated was rejected.

In conclusion, it was observed that training and developing is an effective means of improving the quantity and quality of production thereby achieving corporate objectives. Some recommendations were made based on the results of , this study.

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CHAPTER ONE

1.0

INTRODUCTION

One of the challenges facing modern organizations in the uncertain and dynamic business environment is the problem of training, developing and maintaining effective and efficient workforce. Effective human resource management should therefore ensure a more systematic training and development process as a strategy for achieving improvement in employee performance. The complex nature of modern organizations demands for suitably qualified and analytical employees who will be able to cope with the increasing challenges of business operations. It is therefore necessary for an organization to train and develop its human resources to enhance their effective and efficient performance which is central to achievement of organizational goals.

Employee training and development is therefore an important part of an organizations overall human resource management strategy. This is further buttressed by the fact that of all the three main resources (men, materials and money) available to any organization, men control or handle the other two resources. As a result, Pigors and Myers (1981) maintained that "no organization has a choice whether to develop its employees or not, the only choice is that of methods."¹ All new employees regardless of their previous training, education and experience need to be introduced to their new employers work environment and to be shown how to perform specific tasks. Moreover, specific occasions for retraining and/or development arise when employees are

transferred or promoted or when jobs change and new skills are necessary for effective performance. Also changes due to advancing technology and automation calls for improvement in performance which can be achieved through training and development.

Consequently, human resource unlike money and material resources cannot perform effectively when left for a long time without training and development. This view was emphasized by Rupert Vance (1985) when he stated that "physical resources unused lie inert, coal left alone for a million year is still coal, but human resources left unutilized deteriorate."² Deterioration of human resources is easily manifested in poor performance of tasks by employees which subsequently results in failure to achieve organizational goals. Hence, Clarence Francis (1985) stated that "the greatest asset of a business organization are its human assets and the improvement of their value is a matter of both material advantage and moral obligation."³ Employee training and development is one way of improving the value of human assets in an organization. This implies that improved job performance and job satisfaction are likely to accrue to any organization that adequately trains and develops its human resources.

Some authors use the words 'training' and 'development' interchangeably Hillrop (1999)⁴ described employee training and development as transition in skills, knowledge, attitudes or social behaviors which involves the analysis, design, implementation and evaluation of relevant activities aimed at:

1. Improving current or future employee performance (in relation to set organizations goals) by increasing the ability of individuals and groups to perform, and
2. Planned efforts to facilitate and organise learning experiences and the acquisition of job-related knowledge and skills.

However, some writers restrict employee training to those programmes designed to provide the knowledge, attitude or job skills that will help employees perform their present jobs it implies that training has immediate practical application on the job. While employee development programmes are designed to assist employees in preparing themselves for future responsibilities of a different nature, or a higher degree of proficiency in their present jobs. Whereas training has an early and often visible pay off, development is future oriented.

Generally, employee training and development is a personnel function that should not be neglected at any level of human resource management. From a global viewpoint, Hiltrop 1999 observed that the most obvious reason why European organizations need to train and develop their employees is "to remove current or anticipated deficiencies in performance that result from increased global competition."⁵ Hiltrop further explained that the development of a more transnational approach to organisation has brought about the need to train and develop a more flexible cadre of international managers and has increased the importance of cross-cultural awareness and sensitivity skills.

The importance of employee training and development as highlighted above, is a motivating factor to this study.

1.2 HISTORICAL BACKGROUND OF NATRICT

The Institute which is today known as National Research Institute for Chemical Technology (NARICT) started as a Hides and skins Project of the Food and Agricultural Organization (FAO) of the United Nations in 1964. It was up-graded from Leather Training Institute to a Research Institute called Leather Research Institute of Nigeria (LERIN) in 1976 and was placed under the supervision of the National Science and Technology Development Agency (NSTDA). Prior to this time, it was being supervised by Agricultural Research Council of Nigeria.

As a Leather Research Institute, its mandate (approved area of operation) included research and training in all aspects of leather activities such as hides and skins improvement, tanning agents and mechanism of tannage. Other areas of operation are research and training in footwear leather - goods, quality control and standardisation, slaughter, house and tannery by-products, research extension services, library, publications and documentation.

The technical training aspect of the Institute (ie LERIN) sought to train students at certificate and diploma level in the area of leather, footwear and leather goods technology.

However, in 1988, the Institute's mandate was expanded to include chemical technology and its name was changed to National Research Institute for Chemical Technology to reflect the expanded area of operation. The new mandate of the Institute includes the following:

- i. Research and development work into:
 - (a) Processes for the conversion of agricultural minerals and other raw materials into chemicals:
 - (b) The processing of commercial grade chemicals into laboratory grade, etc
- ii. Establish and operate a quality-control laboratory for hides, skins leather and leather products.
- iii. Establish and operate chemical testing laboratory.
- iv. Provide environmental monitoring and control services, with respect to chemical and leather industry machinery and equipment.
- v. Transfer Chemical and leather machinery production technologies to private sector industries and render consultancy and extension services to such and other industries.
- vi. Collaborate with higher institutions, government agencies, corporate bodies and international organizations in the execution of its own programmes and projects.
- vii. Accept on its own terms, trainees for practical work attachment in its work.
- viii. Undertake any other activities in connection with all or any of its functions.

1.3 PROBLEM STATEMENT

Employee performance is one of the critical factors necessary for the realization of organizational goals. Also the complex and dynamic nature of modern organizations today calls for commensurate improvement in employee performance as a response to the changing needs of their organizations. Hence, there is the problem of how to align employee performance with the prevailing level of technological advancement necessary for the achievement of corporate objectives.

One way of matching employee performance with technological advancement is through training and development. Again, the effectiveness and efficiency of any organization, especially research institutions depend to a large extent on how effectively its human resources are trained, developed and utilized. Unfortunately, many organizations do not seem to fully understand the place of training and development of their human resource. Hence, human resource training and development is not given the priority it deserves.

Therefore this study will examine the effects of training and development on performance of employees with regards to quantity and quality of output.

1.4 HYPOTHESIS

The following hypothesis is postulated for testing in this study:

- Ho: Human resource training and development has not led to significant improvement in level of performance.
- H1: Human resource training and development has led to significant improvement in the level of performance

KASIM

1.5 SIGNIFICANCE OF THE STUDY

Many organizations in Nigeria, especially public enterprise are facing the problem of low performance which in turn leads to none achievement of organizational goals. This situation needs urgent solution. Investigating the importance of training and development on employee performance is a means to attain this noble goal that is, solving the problem of low/none performance.

Furthermore, this study will help human resources managers to establish training and development programmes and policies suitable for effective performance in their organizations.

Finally, this research will serve as a contribution to knowledge and a stimulant for further investigation on other factors (such as motivation) that influence employee performance.

1.6 OBJECTIVES OF THE STUDY

This study is designed to achieve the following objectives:

- i. To highlight the importance of human resource training and development on the level of performance.
- ii. To show how human resource training and development can enhance the quality of employee performance.
- iii. To determine the effects of training and development on the level of output (i.e. quantity produced).

1.7 SCOPE OF THE STUDY

Generally, there are many factors that influence employee performance. This study is focused on human resource training and development as a factor that determines the standard of performance. Particular reference is made to National Technology (NARICT), Zaria. The period of study covered is between 1997 to 1999.

1.8 LIMITATIONS OF THE STUDY

There are some obstacles encountered by the researcher in the cause of this study. Firstly, is the problem of limited time which could not warrant a more comprehensive and detailed study.

Secondly, this study is constrained by the paucity of data, some important records are either not available or poorly maintained.

Lastly, the lukewarm attitude of respondents partly based on the belief that projects become public property when they get into the library, also posed some constraints.

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REFERENCES

1. Pigors and Myers (1981) Personal Administration: A Point of View and a Method.
Mc Graw-Hill Book coy .N.Y Pg 280.
2. Rupert Vence (1985); Planning for Human Resource. John Gardner Inc.
London Pg. 37.
3. Clearance Francis (1978): (in kast and Reseniveig) 1985: Organisation and
Management: A system and Coningency Approach: Mc
Graw - Hill Coy. N. Y. Pg. 276
4. Hiltrop, Paul Sparrow (1999): Human Resource Management: Prentice Hall
Europe Pg. 361.
5. Hiltrop, Paul Sparrow, Ibid Pg. 362
6. NARICT Manual

CHAPTER TWO

2.0 REVIEW OF LITERATURE

2.1 INTRODUCTION

In this chapter the concepts of performance, training and development will be examined theoretically. A study of the meaning and factors influencing organizational performance will be undertaken. Likewise, related literature on the meaning and methods of employee training and development and their relevance to this research will be reviewed. The aim is to provide a clear image of existing literature on the subject area as a foundation necessary for the execution of this project.

2.2 THEORETICAL FRAMEWORK

2.2.1 THE CONCEPT OF PERFORMANCE

According to Miner and Luchsinger (1985), "performance is what one does within the limits of a position created by an organization to achieve goals."¹ This implies that performance is good when it is in line with the role prescriptions for the position and performance is bad if it does not align with the role prescriptions. Where there is widespread and large disparities between role prescriptions and performance, the resultant effect is performance failure (ie organizational failure).

Similarly, Inegbenebor and Osaze (1997)² used efficiency and effectiveness to describe the performance of management in any organization. They defined efficiency as a ratio of output to input. It is expressed as follows:

$$\text{efficiency} = \frac{\text{output}}{\text{input}}$$

Output may be goods and services while inputs are the resources (both human and material) used to produce the goods and services. Efficiency measures how well the resources available to the organization have been utilized to produce the desired output.

On the other hand, Inegbenebor and Osaze also defined effectiveness as the extent to which certain objectives or goals have been attained. For example, if an organization's objective is to make sales turnover of ₦2 million by the end of a given year, its effectiveness is determined by the extent such an objective is actually realized at the end of the period. Effectiveness is "doing the right things", the ability to choose or select the right things to do. Hence, management performs well when there is efficient and effective utilization of its resources to achieve the set organizational goals and vice-versa.

Hitrop (1999) noted that "performance is often only considered at the individual level against a set of undefined, generic personal characteristics (eg leadership) or a set of specific yet narrow technical skills (e.g. financial analysis) derived from out dated job descriptions that focus on task execution rather than on outputs."³ Hence he identified four performance criteria for measuring individual contribution on the job.

They are:

- (i) What you achieve
- (ii) How you achieve it

- (iii) The extent to which you have the whole task and
- (iv) The expectations or deliverables for internal and external stakeholders.

Furthermore, Miner and Luchsinger (1985) identified four general dimensions of performance namely:

- (i) "Quality - mistakes, errors, waste, accuracy
- (ii) Quantity - amount, productivity, profit and loss
- (iii) Time at work-absenteeism, long service, overtime, lateness, loss-time accidents, premature turnover etc.
- (iv) Cooperation towards goal attainment, including positive and negative effects on the performance of others and on goal attainment, theft, sabotage....."⁴

These performance dimensions are similar to Hiltrop's performance criteria. For instance, what is achieved could be in terms of quantity of output such as amount of work done, profit or loss made. How it is achieved could be inform of the mistakes, errors, waste or accuracy i.e the quality of output. Also the third criteria of the extent to which the whole task is done relates to time at work in terms of absenteeism, lateness, etc. While cooperation toward goal attainment and influence on performance of others could be likened to the expectations or deliverables for internal and external stakeholders.

Miner and Luchsinger (1985) also noted that in practice, "the four dimensions of performance are interrelated and can occur concurrently."⁵ For example, time at work influences both the quantity and quality of work. Cooperation toward goal attainment can also affect the time at work an example

is when one employee exerts positive influence on another to facilitate productivity. This can in turn affect goals such as profit directly.

There are other factors that can be used to judge individuals such as colour of skin, habits, physical appearance, etc. However, Miner and Luchsinger (1985) opined that, "if such factors are not in any way related to achievement of organizational goals, they are not a legitimate part of the job requirements. Hence they are not a component of the performance concept."⁶

2.2.2 TRAINING AND DEVELOPMENT CONCEPT

As already noted in chapter one, the terms training, development and education are often used interchangeably. Efforts have however been made to define the terms as separate entities.

Reilly (1979) defined training as "the development of a persons knowledge, skills and attitudes for a vocational purpose."⁷ Craig and Bittel (1977) also noted that "staff development unlike training is concerned with the growth of the whole man, the expansion of his ability to utilise his capacities fully and to apply his knowledge and experience to the solution or resolution of new and different situations."⁸

Hacket (1979) more specifically defined the terms as follows:

- a. Education is the process of acquiring background knowledge of a subject. It is person oriented rather than job-oriental.
- b. Training- is the preparation for a particular job. It is concerned with performance and the application of knowledge and skills to present works; and

c. Development is a course of action designed to enable the individuals to realise his potential for growth in the organization. It relates to future rather than present jobs.

Onuoha (1993) agrees with Hacket approach to these concepts. He observed that management education leads to the award of certificate, diploma or degree to the management studies; while management development enables organizations to obtain the best from their managers and makes the managers feel satisfied and self-actualised.¹⁰

Flippo (1980) summarised the three concepts by stating that "Development would include both training to increase skills in performing a specific job and education to increase general knowledge and understanding of out total environment."¹¹

However, a most recent view of human resource development by Hitrop (1990) introduced a forth element, learning. He opined that human resource development "involves integrating the four elements of education, training, development and learning into the wider framework of an employee resourcing policy and strategy."¹² He defined learning as relatively permanent changes in behaviour that occur as a result of practice. Learning therefore provides the mechanism for transferring training and development activities into actual practices or performance.

From the foregoing, it is evident that human resource development involves a complex and continues process through which an employee is made not only to master the intricacies of his present job, but is also being prepared

for a satisfactory and life long career in his chosen profession. As a result, human resource training and development is not only important but also a necessity for achieving organization goals.

Furthermore, Flippo (1980) maintained that "no one is a perfect fit at the time of hiring. Some training and education must take place."¹³ He also noted that where no organized programme exists, development will largely be self-development while learning on the job. Flippo further identified some benefits that will occur to any organization that has planned development programmes. Such benefits include increase productivity, heightened morale, reduced costs, and greater organizational stability and requirements. Such programmes will also help meet the needs of individuals in their search for work assignments that can add up to life long careers.

2.3 OBJECTIVES OF TRAINING AND DEVELOPMENT

Training and development programmes are designed to achieve some objectives which will justify the human and material resources expended on such programmes. Objectives of training and development can be looked at from the individual and organisational view points. That is, the benefits individual trainee and the organisation stand to gain from training/development programmes.

A common objective of any organisation's training programme is the changing of employees' attitude to gain support, loyalty for the achievement of organisational goals.

Also training helps organisations to fill their manpower needs. for instance, if an organisation anticipates future requirements of certain category of workers which cannot be readily available in labour market, they can resort to training of some of its present staff in those skill in order to fill their future manpower need.

Furthermore, by maintaining qualified trainers and carefully controlled learning situation, management can be able to obtain shorter period for high productivity of new employees. Thus, training reduces the time to reach acceptable performance.

On the individual basis, training and development enhances job satisfaction. Since training is expected to lead to improved performance of the job, the employee will enjoy a greater sense of satisfaction and fulfilment.

Training ensures employees development because as trained employees acquire new knowledge and skill, they become more mobile in terms of job opportunities as their improved skills become more marketable.

Also, training is expected to enhance job security. As efficiency of workers on their job improves, it enhances employees' value within the organisation.

Training helps employees to acquire new skills that are needed to take up more challenging positions thereby enhancing promotion and advancement. Again, the emphasis of management training is the ability to learn and apply management techniques in achieving organisational goals.

Generally, training and development can contribute to fewer mistakes, greater job satisfaction, lower turnover, higher production and the ability to cope with environmental changes.

2.4 NEED FOR TRAINING AND DEVELOPMENT

Important as it is, employee training and development should only be embarked upon when it is necessary, otherwise, it will only amount to wastage of time, money and labour. As a result, organizations must endeavour to identify training and development needs of its staff as well as the most appropriate means of meeting such needs.

According to Gilbert (1967), "the need for training and development is determined by performance deficiency which is arrived at by comparing standard of desired performance with actual (present or potential) performance."¹⁴ Employee performance deficiency is computed by subtracting actual performance (AP) from Standard Performance (SP) the result equals training need (TN). That is; $SP - AP = TN$. This formula seems to be simple but practically, it may be difficult for an organization to determine the standard or desired performance of employees especially in the future and what level of performance employees are currently exhibiting or are likely to exhibit in the future. Nevertheless, organizations that engage in staff training and development attempt to make these estimates in order to increase the potential effectiveness of their training and development programme.

In the same vein, Miner and Luchsinger (1985) observed that training needs analysis attempts to first "identify where performance deficiencies exist or can be anticipated, then determine whether training and development would correct the deficiencies, and finally, specify the type of approach to be used if training does appear to provide the need remedy."¹⁵

They further stated that analysis of training needs, can be done through the use of achievement tests and job samples to determine whether employees know what they should know. Other approaches involve spotting problem areas in the organisation through examination of production records, turnover statistics, performance evaluation, etc. After identifying problem areas and jobs, training needs can be gradually narrowed to determine specific types of training required and who should receive it. Job analysis data can be of considerable value in this process.

2.5 FACTORS AFFECTING INDIVIDUAL PERFORMANCE

Odumosu (1995) speaking on the role of managerial leadership in Nigeria's economic development argued that "it is often maintained that the root of performance problem is not organisational structure nor even finance, but personnel, particularly at the top and upper middle levels of management."¹⁶ He further noted that, in the past, developmental projects could not be carried out, not because the government could not raise the finance required but because there is lack of executive capacity. Many institutions, companies and corporations in the country today are tottering because the quality of those who manage them is poor.

In the same vein, Miner and Luchsinger (1975) identified "two main factors that affect individual performance namely; individual influences and environmental influences outside the individual."¹⁷

2.5.1 INDIVIDUAL INFLUENCES ON PERFORMANCE

The aspects of the individual that account for differences in performance include intellectual, motivational, emotional and physical factors.

The general intelligence (usually measured by verbal abilities) of an individual greatly influences the occupational level at which he or she can function effectively. Some jobs require some specific abilities (e.g. numerical or mechanical abilities) more than others. Therefore, having the requisite abilities for a particular job makes it easier for an individual not only to learn what the job requires but also to continue to perform in the job as well.

According to Miner and Luchsinger "motivation energizes or activates the human structure called organisations just as electricity provides the energy that makes a machine run."¹⁸ This implies that for performance to be at its best, the motivation of the individual and the role prescriptions of the organization should be perfectly fitted together. Hence, performance will suffer if a person's strong needs are constantly frustrated by the requirements of his/her job, or the job demands certain motives which the individual lacks considerably.

Feelings or emotions can be either positive (such as joy, happiness, love) or negative (e.g. anger, hatred, jealousy). Miner and Luchsinger further observed that emotions have changing impact on performance because they are transitory in healthy people, while motives and values are more stable and exert

greater influence on performance.

Physical factors that influence performance range from illness to various motor and sensory skills and dexterities. Individual performance is affected by physical well-being with or without associated motivational factors. For instance, a sick person cannot perform irrespective of how motivated or otherwise he or she is. The major effects of physical factors are on absenteeism but quantity and quality can suffer as well.

2.5.2 ENVIRONMENTAL INFLUENCES ON PERFORMANCE

As already noted in this study, performance partly depends on the way job positions are defined and structured within an organization. However, there are other forces both within and outside the organization which can boost or weaken performance.

Miner and Luchsigner explained this process using the framework of an open systems model (See appendix 2.1).

The open systems approach focuses on two major aspects of organizational behaviour via:

- (i) its system character, that is, movements or actions in one part of the organization lead in predictable ways to movements or actions in other parts.
- (ii) its openness to environmental forces which results in behaviour being in a state of continuous change.

Thus, the intellectual, motivational, emotional and physical factors of an individual do not have independent relationship with performance, rather they are

conditioned by forces within the organisation that may enhance or hinder performance.

Furthermore, Miner and Luchsinger observed that "organizations influence performance implicitly in how they create positions and establish role prescriptions - how they structure the work in relationship to organizational goals."¹⁹ This implies that if individuals are rightly placed and other job requirements are met, performance will be enhanced. For example, if a particular job involves extensive numerical calculations with the aid of computer programs, and the person placed on the job has both high numerical ability and the relevant computer knowledge, performance will be enhanced. Conversely, performance will suffer if an individual without the requisite capabilities is placed on the job.

Another factor in internal environment that influences performance is the effects of work groups. Most people in the business world perform at least part of the time in a group environment and many are members of several groups. These groups can condition performance in numerous ways. Groups can operate to enforce their own norms restricting output.

As observed by Miner and Luchsinger the effect of workgroup cohesiveness on performance is a "mixed blessing."²⁰ This is because it can help in solving certain kinds of problems, while increasing others. By their nature cohesive groups reduce separations and absenteeism, members want to be with the group. Cohesive groups support their members, thus reducing stress and enhancing performance. However, the quantity and quality of output depend on how group norms and values relate to organisational goals. Also when a work

group consists entirely of experienced employees who know their jobs well, supervisory effects on performance are greatly reduced.

Again, communication flow within the organization influences performance. When certain information is necessary for a person to perform effectively and a communication breakdown occurs, i.e. the information does not get where it is needed when it should, performance suffers. Similarly, effective communication processes which ensure that the sender sends, the transmission process transmits, and the receiver receives, contributes to improved performance.

There are other environmental factors beyond the organization's boundaries that can influence performance. Miner and Luchsinger noted that such factors are largely from family events and physical, economic and cultural work content.

Family influences can exert strong positive or negative pressures on work performance. Such influences could be through:

- i. Family crises such as divorce, death, severe illness and other emotional stress that disrupt work performance. For instance, an individual responds to the death of a parent or spouse with intense grief and is so depressed that he/she is unable to work. Alternatively, the lack of such crises in an individual's life may provide the conditions for productive work.
- ii. Separation from some family members and the support they provide produces separation anxiety or home sickness that disrupts work performance.

iii Demands and competing pressure stemming from a family may reduce the time and individual spends at work or otherwise may interfere with performance.

On the other hand, aspects of the climate and topography of a region can combine with either emotional or physical factors to influence performance. Certain individuals react to prevailing weather conditions to the extent that it affects their level of performance.

Noise, lighting, temperature, and other conditions in the workplace influence performance. Likewise, health and accident hazards can result in excessive absenteeism and can produce enough anxiety to disrupt the quantity and quality of output.

Also, the economic environment according to Miner and Luchsinger can provide both positive and negative influences on performance. Economic competition within an industry can stimulate the efforts and performance of certain people, and union actions can contribute to a more secure and productive work environment.

Lastly, cultural environment and its values can stimulate or depress performance generally within a society. Individuals may selectively uphold certain strong values of their culture or sub-culture, and the effect on performance can be either positive or negative.

Although Miner and Luchsinger are silent on the effects of training and development on individual performance, it is evident that the individual aspects - intellectual, motivational, emotional and physical factors (such as motor and

sensory skills and dexterities) can be enhanced through training and development.

Likewise, the environmental factors, particularly those within the organization can be positively influenced through training and development as it creates awareness of such factors to different categories of workers in an organization.

2.5.3 FACTORS INFLUENCING PERFORMANCE IN PUBLIC SECTORS IN NIGERIA

According to Chief Philip Asiodu - the Presidential Adviser on the Economy. "Nigeria has to face up to the international theme of globalisation, and technology. The world has left us behind but we must resolve to be internationally competitive training would be given priority attention by the Federal Government in order to ensure that the workforce is modernized to meet the challenges of the future."²¹

In the same vein, the Head of Federal Civil Service, Mr. Abu Obe noted that, "the globalisation of democratic governance with emphasis on private sector-led economic system, had underscored the need for the public service to be more performance - oriented, more responsive to the public, cost-efficient, transparent, accountable and professional customer friendly."²² According to Mr. Abu, the civil service would pursue and attain these goals through training and retraining of officials at all levels.

An efficient management is indispensable to the success of any public sector organization. It is sometimes believed that the inefficiency of public enterprises is a result of improper performance by management of such enterprises.

Dr. M. S. O. Olisa (1988) identified "four major factors responsible for the poor performance of public enterprises in Nigeria such as, economic factors, socio-political factors, administrative factors and operational - technical factors".²³ To him, these factors represent the internal and external factors militating against effective performance of Nigerian Electric Power Authority (NEPA).

Olisa highlighted the following as economic factors:-

Problems of overstaffing, high labour turnover, high cost of equipment, uncompetitive or low quality products and services, the problem of capital and world economic forces. The socio-political factors include the problems of political intervention and control, tribalism and ethnicity, bribery and corruption, positive and negative work attitudes, industrial relations, trade unionism, board members, ability to make decisions and policies. His administrative factors centre on management efficiency, personnel administration, training and intrusion of government bureaucracy. While the operational - technical actors deal with problems of quality of equipment and methods, professional expertise and experience and the problem of infrastructure.

All the above factors, as further asserted by Olisa make it impossible for Nigerian Public enterprises to be efficient and effective in attaining its goals. he also reiterated that fact that performance measurement in the public sector should not be akin to that of the private sector, since both of them have different frames of reference against which their level of performance have to be measured. For instance, while the private company might be measured against their level of

profit per year, that of a public corporation may not. A good measure might be the level at which the corporation attained the given objectives and at what cost? Thus, owners of a private company might be interested in both cost reduction and profit maximization. On the other hand, the government may be very much interested in a public corporation achieving its objectives of providing public services at reasonable costs. These different bases of measuring performance make it uneasy for a good comparison between the level of performance attained by private and public companies.

To Macauley, S.A. (1988), "the major factor militating against high performance by public enterprises is the problem of politics."²⁴ He stressed that although statutory corporations are primarily intended to be isolated from politics, they are in practice linked with politics. The resultant effects as experienced have shown is incessant government interference through the Ministers with the operations of the corporations to the extent that initiatives are stifled and performance suffers.

For public enterprises to be efficient and effective, Macauley also identified three conditions that must exist, via:

- i. a competent and knowledgeable Board of Directors and Management Team;
- ii. an effective organisational structure, and
- iii. qualified and experienced managerial personnel.

But looking at public enterprises in Nigeria, he noted that the selection of Board members and management team are based on political considerations.

Thus, most of the appointed board members are ignorant of the role they are to play in the organisation and policy formulation function of the corporation becomes an illusion. The question then is, when the policy formulation stage is defective, how will the implementation stage be effective?

Organization structure, according to Macauley, should vary from one corporation to the other if effective performance is to be achieved. This is because the activities to be performed defer from one corporation to the other. Unfortunately, he observed that public enterprises, particularly in Nigeria have the same organisation structure designed by the government for all the corporations.

As regards qualified and experienced management personnel, politics have made near impossible among public corporations particularly, in Nigeria. The problem of applying quota system to fill positions, appointing party loyalists, tribal men and the 'who you know' syndrome have made it clearly impossible to have the right man in the right position.

The above problems are the unintended consequences of political interference in the management of public enterprises. Other problems that hinder performance according to Macauley include finance, pricing policy and the attitude of employees.

Nwosu, E.J. (1988) concluded that "what has generally emerged from the rich and growing literature on the organisational problems and operational performance of public enterprises in Nigeria can be characterized as a story of disillusionment."²⁵ To him whatever the laudable aims and high hopes, Nigerian

public enterprises have performed in a way that can be described as disappointing.

Nwosus' (1988) position can be buttressed by the series of Tribunals and Commissions of Enquiry set up at both Federal and State levels to investigate the difficulties and inefficiencies of public enterprises in Nigeria. Evidences abound that almost all these tribunals and commissions have reported on the negative and poor level of performance of the public organizations.

However, it must be noted that public enterprises do not exist and operate in a social vacuum. The social and interpersonal relationships of the various structures within the economy sometimes constitute major problems of public corporations. Existing literature point to the lack of disciplined and honest leaders at both political and bureaucratic levels, leaders who are dedicated to economic and social advancement, whose life styles are challenging and capable of inculcating new and progressive values to the populace. These social vacuum greatly affects individual and organisational performance in both private and public sectors.

KASHIM IBRAHIM L.L.B

2.6 METHODS OF TRAINING AND DEVELOPMENT

Wexley and Latham (1981)²⁶ outlined a number of training and development methods. They classified the methods by their intended goals and strategies. Some of the training methods seek to improve the level of self-understanding. Some to increase job skills and knowledge and some to change job-related motives. The strategies for training and development show various

focuses of the training process such as cognitive changes in thoughts and ideas, behavioural changes, and changes in the work environment (See appendix 2).

2.6.1 TRAINING TO DEVELOP SELF-UNDERSTANDING

According to Wexley & Lathan, training aimed at improving self-understanding can be done through any of the following methods.

i Career Development:

This represent vocational guidance inside the company. This occurred originally as a result of legal pressure to improve opportunities for minorities and women, but it has spread well beyond that initial focus.

ii Managerial work role training involves an intensive self-study of one's own managerial job and one's performance in it. The objective is to gain a solid understanding of what a particular position requires of a manager; questions for self-study are provided to this end.

iii Sensitivity Training:

As the name implies, sensitivity training focuses on the development of awareness and sensitivity to behavioural patterns of oneself and others.

This training approach utilizes learning within a group, with the assistance of a group leader, to increase understanding of oneself, of the nature of group processes, and of interpersonal skills in general. The usual benefits according to Miner and Luchsinger include "a better understanding of others, greater self-awareness, increased competence in handling conflicts."²⁷

In the same vein, Flippo (1980), opined that "specific goals of sensitivity training include:

- (a) increased openness with others,
- (b) greater concern for others,
- (c) increased tolerance for individual differences,
- (d) less ethnic prejudice,
- (e) understanding of group processes,
- (f) enhanced listening skills, and
- (h) increased trust and support."²⁸

While the general goal is to open up the organisation through increased managerial sensitivity and trust, as well as increasing respect for the contributions of others, whether peers, subordinates, or superiors.

However, sensitivity training has not received majority approval by business managers. Group organisation development rather than individual sensitivity training is emphasized in most companies.

iv. Leader-Match Training:

This form of training is based on contingency view of leadership. Its focus is on trainee leaders' understanding their primary leadership style and the situations in which that style can be expected to produce the best results.

2.6.2 TRAINING TO DEVELOP JOB SKILLS AND KNOWLEDGE

When the objective of training and development programme is to increase job skills and knowledge, Wexley and Latham (1981)²⁹ recommend the following methods:

i. Orientation Training:

This method is intended to prepare the new employee to function effectively in the organization. Typically, it involves some formal presentation by members of the training staff, study of company handbooks and other materials, and more specifically job-related training by an immediate supervisor. The objective is to provide knowledge of the work and company environment in a condensed form.

ii. Lectures and Discussion:

Some companies use the traditional classroom lecture format combined with varying amounts of discussion to develop job skills and knowledge. Audio-visual aids such as slides, films, video tapes are often used.

Flippo (1980) referred to this as vestibula school. That is, "a form of staff school where a specialist trains employees to perform a particular tasks."³⁰ Vestibule schools are used when the amount of training needed exceeds the capacity of the line supervisor. Also the instructor, a specialist, should be more skilled at teaching than the line supervisor.

iii. Case Analysis:

The case method of development deals with the study of actual problems faced on the job, not those in hypothetical case. Actual case examples are collected from various organizations for diagnostic purposes. The trainees are required to:

- (a) identify the major and minor problems in the case;
- (b) filter out the significant facts from the insignificant;

- (c) analyze the issues and use logic to fill the gaps in the facts; and
- (d) arrive at some means of solving the identifiable problems.

However, Miner and Luchsinger noted that some managers feel that "this approach lacks the emotional realism of "real world" decision making."³¹ On the other hand, case study seems most appropriate for those preparing for or just starting out in management.

iv. On-the-Job Training:

This is the most widely used of all the methods. The training is given by a line supervisor or an experienced employee who is assumed to be willing and able to train effectively. But this is not always the case as some supervisors are not willing to teach new employees and may not actually know what to teach. Hence, on-the-job training can leave many training needs unfulfilled. However, it is the least costly of the available methods of training and development.

v. Apprenticeship Programmes:

These form of training are designed for a higher level of knowledge and skill in performing a craft or a series of related jobs. In developed countries, apprenticeship programme combines on-the-job training and experience with classroom instruction in particular subjects. Apprenticeship programmes are available in a number of crafts such as machinists, electricians, welders, carpenters, etc.

vi. Programmed Instruction:

This method involves the presentation of materials to be learned in logical sequence in a machine. It requires the individual to actively respond at each step of the learning process and then receive feedback on the effectiveness of this response before progressing. It is highly standardized and permits learning at the person's own pace.

Flippo (1980) described this type of training as "a form of special course that involves programmed learning through a teaching machine."³² According to him, this device enables the trainee to learn at his/her pace, go over materials when desired and use the machine when it is convenient. Programmed instruction is usually used when a large number of people must be taught the same subject matter. However, developing programmed material is a time-consuming and costly process.

vii. Role Playing:

This method is typically used along with other management development techniques. Trainees are to manage themselves in a particular role and then act out that role while being observed by others. The role-playing is rotated within the group and the reactions of observers provide feedback on performance. If recorded, playback of the tape provides opportunities for the trainee to examine his or her performance with the additional insight of participants and experienced observers. Videotapes can be used to provide models of behaviour for the trainee. Scorchner and Goldstein (1975) noted that, "the use of behaviour models has been effective for interpersonal problem areas such as giving recognition to an

employee, stimulating acceptance of proposed changes, conducting a subordinate performance appraisal, persuading an employee to improve performance levels, and inducting a newly hired employee into the organization."³³

2.6.3 TRAINING TO DEVELOP MOTIVATION

According to Wexley and Latham (1981), "managerial role motivation training is conducted using conventional lecture and discussion methods, sometimes supplemented by cases, video-taped role scenes, and readings."³⁴ The objective is to develop the kind of motives needed to perform effectively in managerial roles in bureaucratic organizations. To be more specific, it is to increase motivation to manage. The content of the training focuses on methods of dealing with ineffective performance in a subordinate. That is, how to diagnose the causes of performance problems and take appropriate corrective actions.

However, Miner and Luchsinger (1985) observed that "organizational behaviour modification theory rejects the idea of motivation as a cause of performance. The theory according to them, holds that behaviour is a function of its consequences and performance results from learning, not motivation. Learning here is defined as a change in behaviour of some performance resulting from experience.³⁵ In the learning process, initial behaviour occur randomly, then reinforcers are selectively applied to desired behaviours. Behaviours are learned as consequences accrue in the forms of rewards or punishments (to undesirable behaviours). Hence the role of the supervisor in organisational behaviour modification is to arrange or plan re-inforcements to yield desired behaviour of

a high frequency, thus improving performance.

Behaviour modification theory as expressed by Miner and Lucsinger seems to be short sighted of the complex nature of modern business activities which calls for intensive and systematic training rather than random behaviour .

2.6.4 OTHER METHODS OF TRAINING AND DEVELOPMENT

Flippo (1980) differentiated the methods of training and development for non managers from executive development programmes. Specifically, he outlined "three main types of training and development programmes namely.

- (i) Training programmes for non managers to develop skill to perform a job (operative training)
- (ii) Training and educational programmes for executives to develop the ability to manage and
- (iii) Programmes designated to develop organisational units as entities."³⁶

Flippos methods of operative training are on-the job training, vestibule school, apprenticeship and special courses. These methods have been discussed in this study.

Executive development programmes are designed to achieve improvement in decision making skills, interpersonal skills, knowledge of the job and knowledge of the organisation. According to Flippo, decision making skills can be enhanced through in - basket technique, business games and case analysis, interpersonal skills can be promoted through role playing, sensitivity training, transactional analysis and structured insight. Knowledge of the job can be improved through on the job experience and watching. Organisational knowledge

can be obtained through position rotation and multiple management.

- (a) In- basket Technique:- An in-basket is a set of memoranda, request, and data which the trainees are expected to handle along with background information on a simulated company and its products, organisation and key personnel. The trainees are expected to make sense out of the mass of paper work and prepare memos, make minutes, and delegate tasks within a limited time period.

In- basket training can develop abilities such as

- (i) Situational judgement in being able to recall details and establish priorities.
 - (ii) Social sensitivity in exhibiting courtesy in written notes, scheduling meetings and explaining reasons for actions
 - (iii) Willingness to make a decision and take action.
- (b) Business Games:- A business game is a competitive simulation where teams of trainees are required to make decisions concerning production, marketing, purchasing and finance in competition with each other. Games can be relatively simple, permitting rapid decision making to be effected, or extremely complicated, entailing long and detailed analysis of trends in cost, inventories and sales. The requirement that decisions be made as a team provides trainees experience in cooperative group processes.
- (c) Transactional Analysis:- According to Flipppo, this system of executive development was introduced by Eric Berne and Thomas Harris. Transactional analysis focuses on understanding the three ego states

possessed by all and analysing interpersonal transactions in terms of these states. Flippo further explained that the three ego states are:

- (i) "The parent which tends to be judgmental, condescending and punishing
- (ii) The child is of two types, a free spirited one of creativity and spontaneity, and an adaptive and inhibited one that can be either overly rebellions or overly submissive and
- (iii) The adult-within us deals with here and now reality."³⁶

Trainees are taught to analyze their interaction with others in terms of the ego state being expressed. It has been suggested that the one who generally is low in parent high in adult and high in fric child is likely to be most effective dealing with others.

- (d) Structured insight:- This can be described as a systematic devices which facilitates understanding of ones actual behaviours in comparison with preferred behaviour. It requires trainees to write out descriptions of the theories of leadership they prefer most particularly with reference to how they relate with people. Then a tape recording is made of an actual meeting conducted by the executive, after which all the executries involved in the development programme diagnose and describe the actual theory in use as revealed by his or her own tape, the same treatment is given to the tape of one other executive in the group with the aim of comparing the stated preferred theory with the theory actually in use as revealed by the two separate tape diagnoses. The goal of this development

process is to pin-point inherent differences between stated beliefs and actual behaviour so as to reduce areas of disagreements by either the preferred theory or the actual theory in use.

2.7 CONTROLLING PERFORMANCE

A key consideration in maintaining an effective human resource management is the determination of the degree to which performance is effective or ineffective. Therefore, human resource managers must have an understanding of the process of controlling performance so as to enhance effectiveness.

The numerous factors that interact in open systems model (See Appendix 2.1) to produce individual performance or total failure. Hence, there is need for indepth knowledge of how the control process operates.

According to Miner and Luchsinger(1975), "controlling performance involves comparing actual performance against previously established standards with a view to introducing corrective action when there is unacceptable deviation."³⁷ They further explained performance control using an Open-Loop Control Model (See Appendix 2.3). The model involves firstly the establishment of position requirements through organizational planning, followed by setting acceptable standards of behaviour and the measurement of performance using the set standards. As long as performance is within acceptable range, even when there is considerable room for improvement, the control model prescribes no action. Thus, controlling focuses on what are or what might become the worst cases.

Flippo(1990) agrees with this view by observing that, "performance appraisal (a third step in the control model) may focus only on the minimum acceptable performance standards needed for control purposes."³⁸ However, where there are unacceptable deviations the model recommends diagnosis of the causal factors contributing to unacceptable deviations. Then appropriate corrective actions are taken.

Furthermore, the model is described as open-loop because it contains a diagnostic, decision-making step between the identification of a problem and action taken to correct it. In contrast, closed-loop control system according to Bedford (1974),³⁹ does not require diagnosis. Rather the discovery of an unacceptable deviation automatically triggers a predetermined corrective action which feeds back to performance.

Miner and Brewer (1976) identified some appropriate corrective actions to be taken where there is unacceptable deviations from standard performance.

"Such actions include the following:

- job redesign and changed role prescriptions
- promotion, transfer, or demotion
- management development training
- changes in supervision (either the style or person)
- changes in compensation
- personnel policy modification (or making exception)
- threat and disciplinary action
- counselling and psychotherapy

- medical treatment, etc."40

In the same vein, Flippo(1980) noted that "training and development can serve to maintain effectiveness in performance and effective performance is inherent in performance control procedures such as discipline, reassignments, and various types of counselling."41

The timing of control after identifying unacceptable deviations from standard performance is very important. Ideally, corrective actions would be introduced to prevent unacceptable deviations from happening at all. Sometimes controls may be initiated early, but in the case of performance, Miner and Luchsinger (1985) opined that, it is usually necessary to wait until departures from standards are clearly established. Their reason is that without waiting for these final results to come in, a manager may not be able to legitimize corrective action. Also the manager may face overwhelming resistance from either the employee or others who are affected.

However, this may not be the case with management development and training as a means of improving performance. If organization prolong training and development of its human resource more than necessary, labour obsolescence may set in and the organization is bound to fail.

2.8 EVALUATION OF TRAINING AND DEVELOPMENT

The essence of any training or development procedure is that it is intended to transform people in some way so that they are different afterwards. Also the change or transformation must be enduring if it is to have any real

influence on performance, and it must be a kind that has some relevance for the goals of the organization.

Usman (1994) opined that "a company has to evaluate its training programmes in terms of:

- (a) the needs which were expected to be met by training and
- (b) the cost involved."⁴²

Emphasizing the above points, Usman noted that it is from critical and careful evaluation that one can ascertain:

- (i) "whether the money spent on training is producing results needed by the company.
- (ii) what improvements can be made to training procedures in order to reduce costs and improved efficiency.
- (iii) whether the type of training given is necessary to improve organizational effectiveness or whether the money if spent on another activity will contribute more effectively to the attainment of organizational goals.

Agreeing with Usman, Miner and Luchsinger (1985) stated that "the logic of training and development requires that people be trained in situations where they are needed or where major benefits are likely to be realized, and that anticipated changes actually occur."⁴³ They developed a model for training evaluation using two comparable study groups (See Appendix 2.4).

The comparable groups of individuals in the model initially take a pre-test (time 1) which may be a measure of performance on the job or a measure related to any of the goals of training. Then one of the groups, undergoes whatever

training that is being evaluated, and the other group does not. After the training is completed, both groups take a post-test (time 2), which is either identical or directly comparable to the pre-test. If the average change in performance of the trained group is appreciably greater than any change in performance of the untrained group, then there is an initial positive evaluation of the training. The follow-up at time 3 is intended to determine whether the change is enduring. Also the pre-test-post-test comparison is repeated at an appropriate later date. If there is a clear pre-test follow-up superiority for the trained group, then the positive evaluation of training is confirmed.

In the same vein, Usman (1994) observed that "what evaluation is concerned with is to determine whether changes in skills, knowledge and attitudes have taken place as a result of training."⁴⁴ He further noted that one method of achieving this purpose is to test and rate the trainees after the training. In addition informal follow-up techniques include conferences, discussions and work shops where trained employees are required to give talk or present paper on their areas of training.

Stressing the above points, Cassioc(1978) suggested the following framework for evaluating training and development programmes:

- (i) "Is the change occur?
- (ii) Is the change due to training?
- (iii) Is the change positively related to the achievement of organizational goals?
- (iv) Will similar changes occur with new participants in the same training programme?"⁴⁵

Cassio believes that answers to these questions, whether positive or negative, are a valid measurement of the outcome of any training or development programme.

From the foregoing, one can deduce that the huge resources expended on training/development programmes will only be justified if there is adequate evaluation of such programmes to ensure that the objectives of the training/development are actually achieved.

CHAPTER TWO

REFERENCES

1. Miner and Luchsigner (1985): Introduction to Management. Charles E. Merrill
Pub. coy Columbus, Ohio, Pg. 92
2. Inegbenebor and Osaza (1997): Introduction to Business. Pg. 160
3. Hiltrop, Paul Sparrow (1999): Human resource Management Prentice Hall
Europe. Pg. 575.
4. Miner and Lushsinger, Op cit Pg. 93
5. Miner and Lushsinger, Ib.
6. Miner and Lushsinger, Op cit Pg. 95
7. Reilly, E. (1997); New Patterns of Management . Robert Pub. coy
U.K Pg. 231
8. Craig and Bittle (19977): Development of Human Resource: A Personel
Function John Wiley and Sons Ltd. Britian Pg. 346
9. Hacket, O. (1979): Training in Industry and Commcerce. Prentice
Hall N.Y. Pg. 178
10. Onuoha, C. (1993): A Handbook for successful Management of
Organisations. Ben rose Pub. P - H & Avan
Global Pub. Okgiwe Nigeria Pg. 144 - 150
11. Flippo, B. Edwin (1980); Personel Management Mc Gran - Hall
Kogakusha Ltd Tokyo. Pg. 190.
12. Hiltrop, Paul Sparrow, Op cit Pg. 363
13. Flippo, B. Edwin, Op cit Pg 196
14. Gilbert, T. F. (1967); " A systematic Approach to Identifying Training Needs:
Management of Personel. Quarterly Fall N.Y. Pg. 20 33.
15. Miner and Luchsigner, Op cit Pg. 432

16. Odumosu 9195);l "The Role of Managerial Leadership" 99 In Nigeria's Economic Development' in Nigerian Institue of Management Journal Vol. 33 Nos. 384 Pg.
17. Miner and Luchsinger, Op cit Pg. 95
18. Miner and Luchsinger, Op cit Pg. 96
19. Miner and Luchsinger, Op cit Pg. 102
20. Miner and Luchsinger, Op cit Pg. 103 - 108
21. Asidu, Philip; New Nigerian Newspaper
September 14, 1999 Pg. 24
22. Abu, Obe, Ib
23. Olisa, M.S. in Opatola (1988), National Electric Power Authority: Its management and Performance. Unpublished Master of Public Administration Thesis, Department of Public Admin, ABU, Zaria, Pg. 19.
24. Macauley, S.A. Op cit Pg. 21
25. Nwosu, E.J. Op cit Pg. 23.
26. Wexley and Lathan (1981); Developing and Training Human Resources in Organisations. Glenview Scoft, Foresman - Pg 7.
27. Miner and Luchsinger, Op cit Pg. 435
28. Flippo B. Edwin, Op cit Pg. 104
29. Wexley and Lathan, Ib.
30. Flippo B. Edwin, Ib
31. Miner and Luchsinger Op cit Pg. 436
32. Flippo B. Edwin, Op cit Pg. 188.
33. Sorcher and Goldstein; 'A Behaviour modeling Approach in Training: Personnel Administration. vol 35, No. 2, March - April 1975 Pg. 35 - 40
34. Wexley and Lathan, Ib
35. Miner and Luchsinger, Op cit Pg. 129
36. Flippo B. Edwin, op cit Pg. 108.

37. Miner and Luchsinger Op cit Pg. 109
38. Flippo, B Edwin Op cit Pg. 444
39. Bedford N. M. (1974), 'Management Control' in Contemporary Management:
Issues and viewpoints. ed. Joseph W. Mc Guire Prentice
Hall N.J. Pg. 28
40. Miner and Bower (1976), "The management of ineffective performance" in Hand
book of Industrial and Organisational Psychology. Ed.
Marvin Dunnette Chicago. Pg. 48.
41. Flippo B. Edwin, Ib.
42. Usman, H.E. (1994) ; "Manpower Training and Development in Textile Industry: A
case study of Arewa Textiles Plc." Unpublished MBA Project of Business Admin,
ABU, Zaria Pg. 32
43. Miner and Luchsinger, Op cit Pg. 432
44. Usman, H.E., Ib
45. Cassio, W.F. (1978): Applied Psychology in Personnel Management. reston
Pub. coy. Inc. Prentice hall Virgrina Pg. 299.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methods used in conducting the research on improved performance through human resource training and development. The research design is defined, sources of data and methods of data collection are outlined as well as the study population, sample size and techniques for data analysis.

3.2 RESEARCH DESIGN AND SOURCES OF DATA

The researcher employs survey research method in investigating the relationship between performance and training/development. Survey research design is adopted because the researcher does not intend to manipulate or control the sample subjects. Rather, a comparative study of the variables (performance and training/development) is undertaken in an attempt to explain the nature of their relationship.

Information needed for this study was gathered primarily through personal interviews with the management and supervising staff of the sample drawn from the study population.

Secondary sources of data such as existing literature and other publications were also used and duly referenced.

3.3 POPULATION OF STUDY

The entire staff of National Research Institute for Chemical Technology (NARICT) Zaria forms the population of study for this project work.

NARICT was chosen as population study based on the researcher's believe that human resource training and development must have been a contributing factor to the growth of the Institute as evidenced in their historical background. Also as a research institute, standard performance is expected from NARICT.

3.4 SAMPLE OF THE STUDY

The study population of approximately 350 staff has six units. This study is based on the Production Unit which has approximately 56 staff representing 16% of the population.

The choice of production unit as sample of this study is justified by the researcher's judgement that production output can be easily quantified, thus providing the requisite data for comparative study.

3.5 METHODS OF DATA COLLECTION

The researcher gathered required information through personal interview with the Director-General/Head of Department of Production Unit, and the Chief Leather Technologist - Supervisor in the unit.

Instrument used in gathering information was an interview schedule through which the researcher asks questions to the respondents and completes the interview schedule by herself. However, questions beyond the interview schedule were asked for more clarifications.

The main focus of the interview questions was on the number of staff who were trained in 1998, their performance before the training (i.e. in 1997) and their performance after the training (i.e. in 1999).

3.6 TECHNIQUES FOR DATA ANALYSIS

Analysis and interpretation of data for this study was done using simple descriptive statistics such as mean, percentages, frequency and student t-statistics. T-statistics was used to test for significance between production levels before and after the training.

The general formula for a t-statistics can be expressed as follows:

$$t = \frac{Y_1 - Y_2}{S.E}$$

where Y_1 is production level before the training, Y_2 is the production level after training, S.E. is the Standard Error. This was arrived at with the aid of Computer using the Statistical Package for Social Science (SPSS).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

In this section, the data collected through personal interview with the respondents is presented. Issues relating to improved performance through human resources training and development are discussed. Data analysis and the findings of this study are as presented below.

4.2 DATA PRESENTATION

The data collected from the respondents showed that there are 56 members of staff in the production unit produces three type of goods namely:

- i. Footwears for all type of shoes;
- ii. Leather goods for articles such as bags, key holders and dolls; and
- iii. Pure leather.

Table one below shows the types of training held in 1998/1999 production season

Table I: Distribution of Training Held for Staff in 1998/1999.

| Type of Training | No. of Staff | Percentage | Duration. |
|---------------------|--------------|------------|-----------|
| In-house training | 9 | 16 | 1 week |
| Refresher Course | 2 | 4 | 6 months |
| Certificate/Diploma | 1 | 2 | 1 year |
| | 12 | 22 | |

Source: Survey Data, 2000

Table two show the production figures of pairs shoes in the footwear section form 1997 to 1999.

Table II. Distribution of production figures from 1997 to 1999.

| Year | Output | Percentage Increase |
|------|--------|---------------------|
| 1997 | 79 | - |
| 1998 | 239 | 202.5 |
| 1999 | 341 | 42.6 |

Source: Survey Data, 2000

Table three below shows the general rating of the products before and after the 1998 training as perceived by the respondents.

Table III. Rating of the Products

| Parameter | Rating Before Training | Rating After Training | Indicator |
|-----------|------------------------|-----------------------|--|
| Quality | Average | very high | more attractive neater finishing better machine work |
| Quantity | Low | Very high | Increase in Product quantity |

Source: Survey Data, 2000

4.3 DATA ANALYSIS AND FINDINGS

The data analysis (from Table I) shows that only 22 percent of the sample were trained in 1998. Most of those trained were given a one week In-house Training on Skills Improvement in the Footwear Production. However, two percent of the sample had a one year certificate/diploma course. This is understandable because few of the workforce can only be released for such a duration if production is not to be disrupted. In addition, the cost implication of such a training may be too much for Management to handle if too many people are given such opportunity.

Financing of the training programme is an important aspect that needs close attention. This is because some of the training may not have taken place if the grants from some donor agencies such as United Nations Industrial Development Organization (UNIDO) were not obtained.

The implication of this is that the Institute has to put more efforts at sourcing for fund from other donor agencies so as to be able to provide more training for its staff.

Table I showed that the production level has been on the increase since after the training in 1998. This is evidenced by a 202.5 percent increase over 1997 figure of 79 pairs of shoe. This figure further increased to 341 pairs in 1999 representing a 42.6 percent increase over 1998 figure and 331.6 percent increase over 1997 production figure.

When these figures were statistically tested in the computer, a t-value of 2.88 was obtained. This is significant at 10 percent level showing that there is a significant difference between the output before and after training. Thus, the null hypothesis is rejected. This implies that human resource training has contributed to increase in level of performance of the study sample.

Table III shows the rating of the products by the respondents. From the table, the quality of output after the training greatly improved with a rating of 'very high' given by the respondents. The indicator of this rating are, neater finishing, better machine work leading to a more attractive output. The higher price attracted by these same output (according to respondents) further confirms this assertion.

On the quality of output, the respondents rated the quality as 'very high' after the training, this is evidenced by a rapid increase in number of produce from 79 to 239 in 1998 just after the series of training that were given to staff of the unit.

The marketing strategy adopted by the Institute in selling its products consists of sales through show room and direct sales to staff. The money is deducted from staff salary in two installations. Due to stiff competition from the open market, prices are generally made to be competitive with that of the open market. The price are however, marginally higher than those of the open market because of the high quality of the raw material (leather) used.

From the above, it was observed that human resource development/training has had positive impact on the output level of the unit under study.

4.4 PROBLEMS AND CHALLENGES

The personal interview held with some management and supervisory staff revealed a number of problems relating to training. These include; inadequate funding in that the funds available for training in the annual subversions from the

Federal Government is always grossly inadequate to take care of the training needs of staff. Funds are not constantly released as and when needed.

Mode of Operation: The institute produces public goods that is, they are not run for profit. This has thus hindered the mode of production in terms of goals and objectives. For in-stance, reward is not strictly based on performance and decision making take a long process.

Another constraints on the performance of Production Unit of NARICT is poor supply of utilities such as electricity. Power failure from NEPA coupled with fuel scarcity have negative influence on the level of production.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

Although human resource development and training has been widely acclaimed to be an effective channel or means of improving performance in any establishment, the extent to which this has positively or otherwise affected production differs from one organization to another.

Again the effectiveness and efficiency of any organization, especially research institutes depend to a large extent on how effectively its human resources are trained, developed and utilized. Unfortunately, many organizations do not give priority to the training and development of their human resources.

This study was conducted to assess the impact of training on level of performance in the Production Unit of NARICT. The other objectives of the study include:

- (i) highlighting the importance of human resource training and development on the level of performance;
- (ii) showing how human resource training and development can enhance the quality of employee performance; and
- (iii) determining the effects of training and development on the level of output (i.e. quantity produced).

The results of study showed that the total staff strength of NARICT is approximately 350. The Production Unit among others has a staff strength of 56 representing 16 percent of the study population.

The unit produces three types of output namely:

- (i) Footwear (all type of shoes)
- (ii) Leather goods e.g. bags, key-holders, etc.
- (iii) Pure leather.

Twenty-two percent of the staff in the unit under study were trained in 1998/99. The staff were involved in three major types of training namely:

- Short-term - One week,
- Medium-term - Six months, and
- Long-term - One year.

This includes in-house training, certificate and diploma training. A few of the training (held abroad) were partly sponsored by donor agencies such as UNIDO.

After the training, in 1998, it was observed that production increased by 160 pairs of shoes over the 1997 figure of 79 pairs. This represents an increase of 202.5 percent. A t-value of 2.88 which was significant at 10 percent level showed that there was a significant difference in output before and after the training. Thus, the null hypothesis postulated was rejected.

5.2 CONCLUSION

For any human resources development effort or initiative to succeed, it must be focused, continuous, purposeful and oriented. The process must address the following critical factors:

5.3 RECOMMENDATIONS

Based on the identified problems relating to human resource training/development in the Unit studied, the following recommendations are made:

- (i) There is need for a proper skill-gap analysis of the training needs of staff in the unit. This is to ascertain the types of training that individual staff of the unit needs and when needed.
- (ii) The Institute should be encouraged to source for training funds from donor agencies.
- (iii) The Institute should organize more In-House training programmes for all staff so as to take advantage of increase in output accruing from such training.
- (iv) Staff should be encouraged to engage in self-development through membership of some professional bodies.
- (v) Management of NARICT should increase the budgetary allocation to human resource training/development.
- (vi) The management should endeavour to use different types of training/development such as apprenticeship, seminars and conferences on a more regular basis.

Lastly, I recommend for further studies on the impact of motivation, workgroup effects, family influence etc on level of performance.

BIBLIOGRAPHY

1. Bedford N.M. (1974), 'Managerial Control', In Contemporary Management: Issues and View points. Ed. Joseph W. Mc Guire Prentice - Hall N. J. Pg. 28.
2. Cassio, W.F. (1978), Applied Psychology in Personnel Management. Reston Pub. Coy. Inc. Prentice - Hall Virginia Pg. 299.
3. Clearance, Francis (1978) in Kast and Rosenweight (1985); Organisation and Management: A system and Contingency Approach. Mc Giraw - Hall coy .N.Y. Pg 276.
4. Craig, O. and Bittle, V. (1977); Developing Human Resources: A Management Function. John Wiley & Sons Ltd. Britian Pg. 346.
5. Flippo, B. Edwin (1980); Personnel Management. Mc Graw - Hill Koyakusha Ltd. Tokyo Pg. 95 - 444
6. Hacket, o. (1979); Training in Industry and Commerce. Prentice - hall N.Y. Pg. 178.
7. Hiltrop, P. Sparrow (1999); Human Resource Management Prentice - Hall Europe Pg 361 - 575
8. Inegbenebor, E and Osace, Bob (1997); Introduction to Business. Edo pub. coy Beine City Nigeria. Pg. 160.
9. Miner, John B, and Brewer, frank J. (1976);
"The Managment of ineffective Performance" in Handbook of Industrial and Organizational Psychology, e.d. Marvin Dunnette Chicago Pg. 48.
10. Miner, John B. and Luchsinger, Vincent P, (1985); Introduction to Management. Charles E. Merrill Pub. coy Columbus, Ohio Pg 90 - 436.
11. Onuoha, C. (1993); A Handbook for successful Management of Orgaisations Benrose Pub. P - H and Avan Global Pub. Okgiwe Nigeria. Pg 14 - 150.
12. Pigors and Myers (181); Personnel Administration: A Point of View and a Method.

McGraw - Hill Bk coy N.Y. Pg. 280.

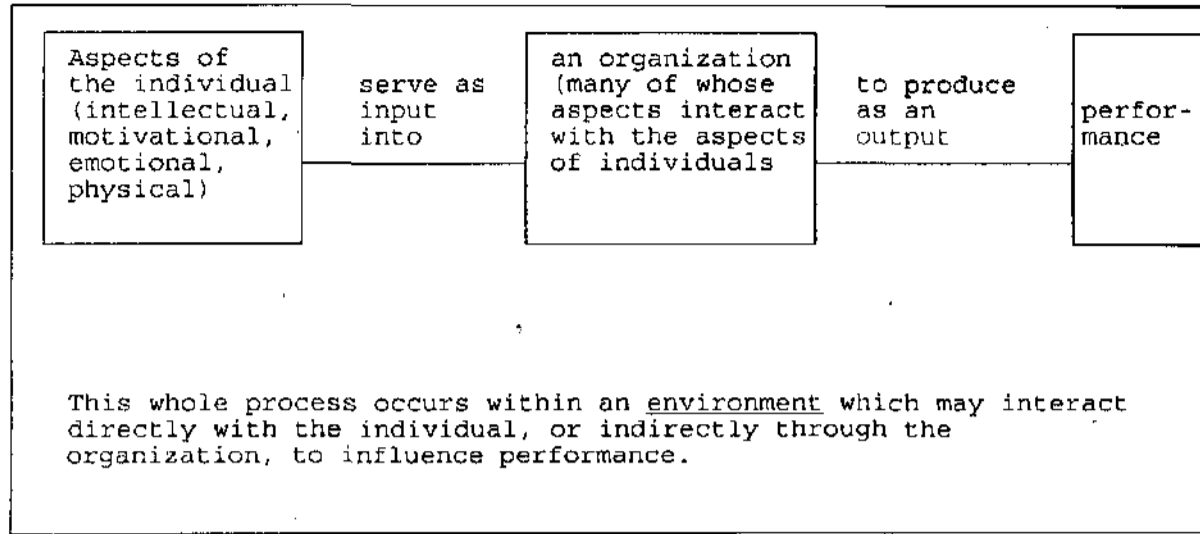
13. Beilly, E (1979); New Patterns in Management. Roberts pub. coy U.K. Pg.
231.
14. Ruper Vance (1985); Planning for Human Resources. John Gardner Inc. London
Pg. 37.
15. Wexley, Kenneth. N. and Lathan, Gary. P. (1981); Devcloping and Training
Human Resourcee in Organiations. Glenview Scott Foresman Pg. 7

INTERVIEW SCHEDULE

1. Department:
2. Unit:
3. Rank:
4. Number of staff in the Unit.....
5. Type of goods produced:
6. Level of production in 1997.....
7. Quality of products in 1997 (in terms of waste, mistakes, accuracy, errors etc):
Very high
High
Average
Low
8. Number of staff trained in 1998
9. Nature of training/development
10. Any other type of training in use
11. Level of production in 1998:
12. Level of Production in 1999:
13. Quality of products in 1998:
14. Quality of product in 1999
15. Financing of the training programs

APPENDIX 2.1

The Role of Environment in an Open Systems View of Performance



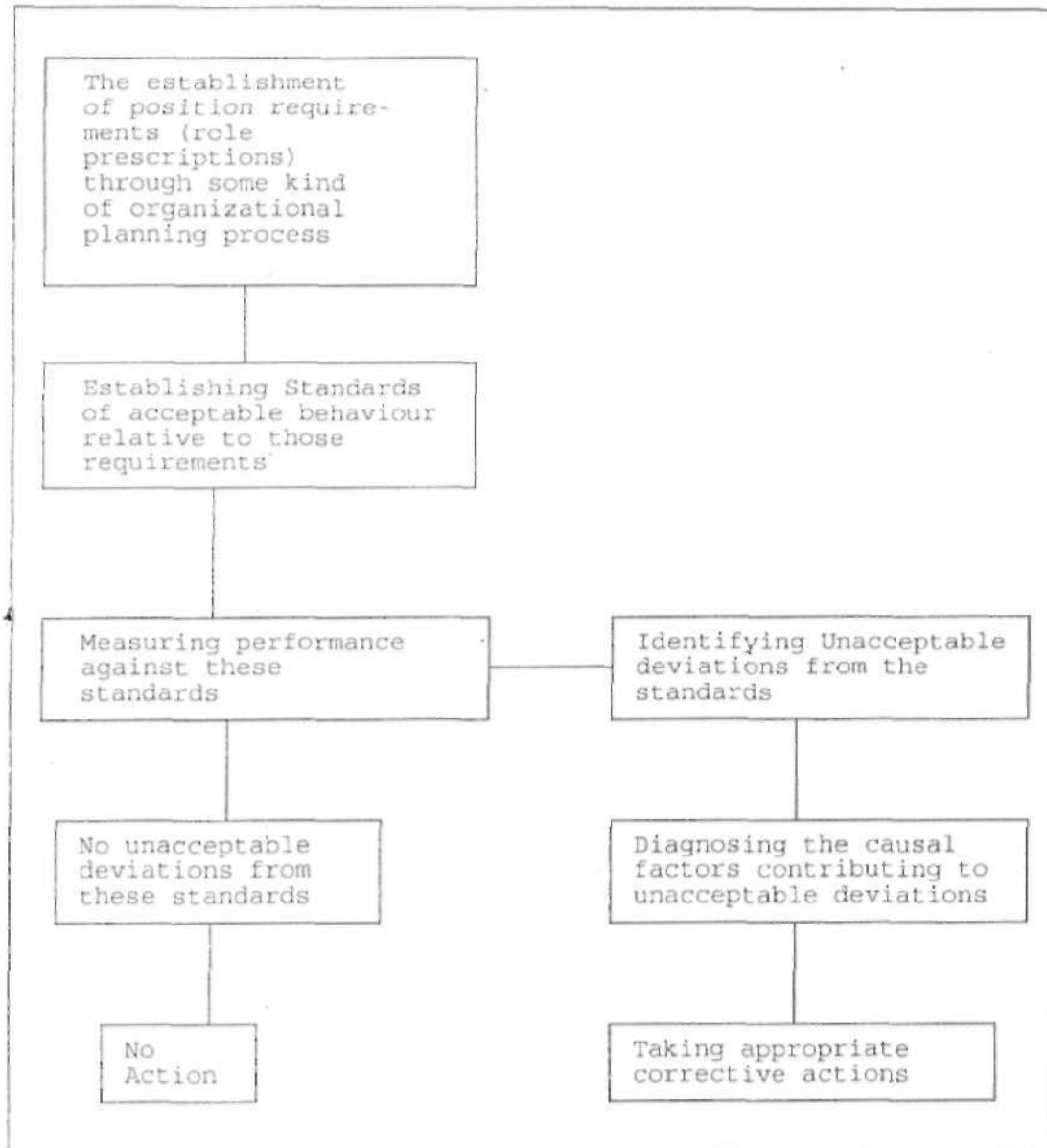
Source: Miner and Luchsinger (1975): Introduction to Management. Charles Merril Pub. Company Columbus, Ohio, Pg.103.

Training and Development Methods Classified by Goals and Strategies

| Primary Strategy | Intended Goals | | |
|---|--|--|---|
| | Improved Self-Understanding | Better Job Skills and Knowledge | Increased Motivation |
| Cognitive changes in thoughts and ideas | Career Development | Orientation Training | Role Motivation Training |
| Changed Behaviour | Managerial work roles training sensitivity or T-group training | Lectures and Discussion Case Study | Achievement & Power Motivation training |
| | | On-the-job Training Apprenticeships Programmed Instruction Role Playing | Goals and Performance Coaching |
| Changed Environment | Leader Match Training | | Job Rotation Behaviour Modification |

Source: Wexley & Latham (1981): Developing and Training Human Resources in Organizations. Glenview, Scott, Foresman, Pg.7.

AN OPEN-LOOP CONTROL MODEL



Source: Miner & Luchsinger (1975): Introduction to Management
 Charles E. Merrill Pub. Company, Columbus, Ohio, Pg.109.

BASIC MODEL FOR TRAINING EVALUATION

| | Time 1 | Intervening period | Time 2 | Intervening period | Time 3 |
|--------------------|-----------|-----------------------|-----------|-----------------------|-----------|
| Trained Group | Pre-Test | Training | Post-Test | | Follow-up |
| Untrained Group | Pre-Test | | Post-Test | | Follow-up |

Source: Miner & Luchsinger (1975): Introduction to Management.
 Charles Merrill Pub. Coy. Columbus, Ohio, Pg. 433.