



Thesis

By

MEJIUNI, Clara

Olutoyin

**OBAFEMI AWOLOWO
UNIVERSITY, ILE-IFE**

**An Investigation into the Training
and Development Programmes for
Workers in Private Establishments
in Oyo and Lagos States, Nigeria**

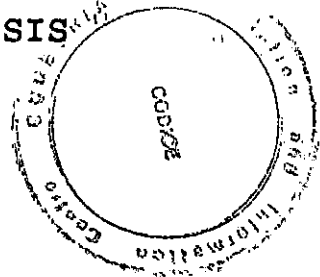
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AN INVESTIGATION INTO THE TRAINING AND DEVELOPMENT
PROGRAMMES FOR WORKERS IN PRIVATE ESTABLISHMENTS IN OYO
AND LAGOS STATES, NIGERIA

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF
PHILOSOPHY, EDUCATION (ADULT EDUCATION)

BY

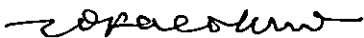
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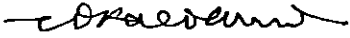
DEPARTMENT OF CONTINUING EDUCATION,
FACULTY OF EDUCATION,
OBAFEMI AWOLowo UNIVERSITY,
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CERTIFICATION

This research project, written by Miss Mejiuni, Clara Olutoyin has been read, approved and adjudged to meet part of the requirements for the award of Ph.D. Degree in Education (Adult Education), of Obafemi Awolowo University, Ile-Ife, Nigeria.


Professor T.O. Fasokun
Supervisor


Professor T.O. Fasokun
Chief Examiner

ABSTRACT

The study critically examined the extent of the involvement in, and commitment of private establishments to the provision of training and development for their workers. The relationships between the measures of commitment of companies to training, the workforce and turnover of the companies were also examined. Attempts were made to find probable explanations for the observed levels of commitment of companies to training, and the relationship between measures of commitment of companies to training and other relevant indicators.

The sample for the study consisted of fourteen companies that were systematically selected from eight manufacturing-service and service industries in and around Lagos. Three research instruments were utilized to collect data from the companies selected for the study. The data collected were analysed using statistical models such as Fisher's Exact Test, Regression Analyses, and Pearson's Product Moment Correlation Coefficient. Data were also analysed by describing the phenomenon observed. All the hypotheses were tested at 0.05 level of significance.

The results of the study indicated that a higher percentage of service companies (80%) expended money that was classified as high on training. When the amount expended on training was adjusted for the total workforce of the

companies, the result showed that the expenditure on training per worker was dependent on whether the company was a manufacturing-service or service company. With an exact probability of larger value of .021, service companies came clear as being more committed to training than their manufacturing-service counterparts. Sixty six percent of large companies had high commitment rating as against 56% for giant companies.

The results also revealed that the companies drew trainers from all the available sources for sourcing trainers - "in - house" and "out - of - house" and the companies had their own, or had access to the basic minimum physical facilities for training.

The results showed that although the percentage of workers trained was not dependent on the nature and size of the companies, a higher percentage of service (60%) and large companies (66%) had high involvement in training.

Finally, the factor that featured most prominently as the plausible explanation of the observed levels of involvement in and commitment of companies to training, and the relationship between the measures of commitment to training and other relevant indicators, was the 'human - capital' theory, which is a strand of the Neo-classical economic theory.

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After I had got the data resulting from many months of scouting, Dr. T. Obilade of the Department of Mathematics expended a lot of human-hours sorting out what statistical analyses to use on what data. Professor Adetugbo of the College of Health Sciences willingly and enthusiastically ran many of the statistical analyses on his computer. They both provided explanations when I needed such. I do really appreciate their efforts.

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MEJIUNI, Olutoyin

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CHAPTER ONE

INTRODUCTION

Background to the Study

Human resources are said to be the most dynamic of an organisation's resources (Cole, 1986). Thus, to achieve the goals of organisations, there is a need to staff them with competent personnel (Beach, 1975). If they are to be effective on the job, such personnel need considerable attention from the organisation's management. Motivation, leadership, communication, wage restructuring, payment systems and training/development are amongst the myriad of issues that management faces when trying to get the best out of its workers.

This study is concerned with the training and development of the employee or worker by the private employer. One issue that needs to be resolved at the beginning of a study like this is the meaning of "training" and "development", and the relationship between training, development and education on the one

hand, and training, development and adult education on the other hand.

Training could be what Darkenwald (1983, P. 232) referred to as "any educational activity or opportunity made available to employees". Training programmes provided by private employers in Nigeria, for example, would include acquisition of new knowledge, skills and attitudes for professionals and specialists, health and safety training, training on new computers/equipment, training in salesmanship, apprenticeship training, vocational-technical training and adult literacy training amongst others.

While some scholars distinguish between training and development, some others do not think that the distinction is necessary because they assume that many training activities may and do result in the development of the worker. Those who distinguish between training and development see development as being concerned more with improving the potentials of the employee than improving knowledge, skills and attitudes for immediate use on the job. Development programmes for employees in Nigeria are what companies refer to as further education, or relevant education and correspondence

courses. In addition, in Nigeria, the word "development" is usually associated with the training of management staff, and this gives the impression that only employees of the management cadre are capable of being developed.

Education, which could be formal (teaching and learning in a formal school system); non-formal (organised teaching and learning out of the formal school system) or informal (incidental and or casual teaching and learning) is broadly based instruction and acquisition of knowledge, skills and attitudes which enable individuals to partake in activities in which such knowledge, skills and attitudes are required.

A number of scholars (example Beach, 1975 and Darkenwald, 1983) do not think that it is necessary to distinguish "education" from "training and development", because they believe that all "training and development" programmes involve the acquisition of new knowledge, skills and attitudes. It would however seem that for those who distinguish between "training and development" and "education" (example Laird, 1985 and Cole, 1986) they see education as formal education in school, college or university, whereas training is seen

as being job-specific and is provided only for workers in a work organisation.

Given the reticence of employers in the matter of having their training programmes referred to as "education" lest it be misconstrued, for the purpose of this study, the terms "training" and "development" will be used.

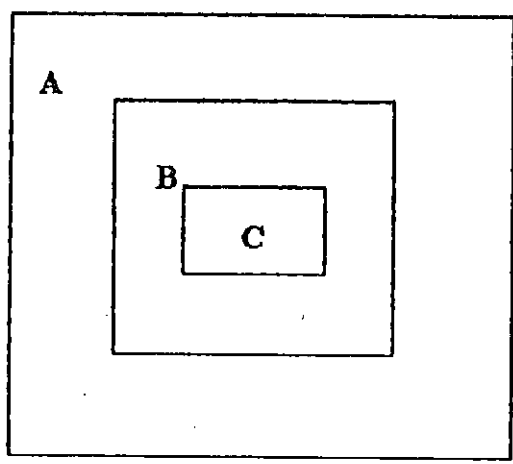
Adult education, which is an important component of the education network, caters for the education needs of those who are regarded as adults in the communities to which they belong. Such adults may have had no formal schooling, and they may or may not have completed the cycle of education commenced in childhood (Bown and Okedara, 1981). This is an indication that adult education has many components. They include adult literary education (or adult basic education), which is teaching of the 3rs to adults; functional literacy education, which tries to make literacy immediately functional by being both selective and intensive; extra-mural education, which comprises all educational programmes outside the range of the staple activities of educational institutions. Adult education also includes continuing education which may be a form of remedial

education for example, for drop-outs to drop into formal schooling; workers' education or labour education is education of adults who are already on the job. It is also conceived of as being in two parts training and development and trade union education. Another important component of adult education is women's education. It is important to state that adult education is said to be a very important component of life-long education. For this reason, lifelong education is given meaning and effect because of and through adult education.

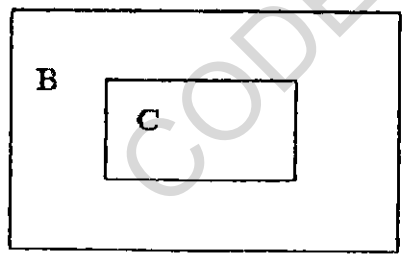
Thus, it can be seen that training and development, our subject of interest, is taken from workers' education (or labour education) which is an important and major component of adult education, because a significant portion of the adult population in Nigeria and around the world constitute the major workforce. This means that training and development form a sub-component of adult education, and cater for a distinct target group among adult learners, whose specific needs they try to meet. Figure 1.1 below best describes the relationship between "adult education", and "training and development".

Figure 1.1

The Relationship Between Training and Development and Adult Education



- A - The Whole Square - Adult Education
- B - The Inner Square - Workers' Education (or Labour Education)
- C - The Innermost Square - Trade Union or Workers' Organisation Education.



- B Training and Development
- C - Trade Union or Workers' Organisation Education

Adapted from Hopkins (1985)

What this means, therefore, is that training and development are also adult education. Nadler (1970), for example, uses "training" and "adult education" interchangeably, even though some of those who are involved in training do not agree that they are functioning in the field of adult education.

It is accepted that enterprises play important roles in the economic, social and political development of every nation. Generally, the primary goals of corporations are the production of certain goods, the provision of certain services and, ultimately, the maximization of profit. Very often, however, they partake in the provision of education. The major type of education activity in which most corporations partake is adult education or training and development. Corporations make use of education in order to enhance the achievement of goals which can be placed along a continuum ranging from money making to the advancement of the economic interest of their workers. In these organisations, therefore, education is more a means to an end rather than an end in itself.

This notwithstanding, there is a widespread awareness in businesses that human resources are a

valuable asset that should be developed on a continuous basis. This is why attention is now being focused, amongst other things, on the need to expand the scope of training and development programmes for workers in businesses, to adapt such programmes to the pace of technological change and corresponding social needs, and to modify them to suit the different needs and degree of the development of each country. This means that training and development efforts in businesses are considered part and parcel of national endeavours of continuous education. Thus, corporations or businesses are considered adult education agencies or institutions.

In the United State of America, for example, businesses and industries were ranked 4th in relative importance among the major adult education institutions using the criteria of the number of adults they reach, in the absence of a better index or criteria for rating important adult education agencies. The table below, which was generated from interviews conducted in 11,957 households in 1961-62 illustrates this better.

The most important facts shown in Table 1.1 are that:

- (1) Out of a total of 3,305 courses which 13,360,000 adults attended, businesses out of 9 sponsoring agencies were responsible for organising 406 courses in which 1,860,000 adults participated, and
- (2) majority of adults learn in institutions that are not primarily educational.

Also in this regard, the U.S. National Centre for Educational Statistics gave the number of adults who participated in educational activities sponsored by businesses in the U.S in 1978 as approximately 3.2 million (Darkenwald and Merriam, 1982). The adult educational activities of businesses are expected to have increased tremendously in the 1980s due to the proliferation of businesses and the consequent training needs, both in the United States and here in Nigeria. In this respect, Goldstein (1980) indicated that 6.3 million employees participate each year in corporate sponsored educational activities in the United States (quoted in Darkenwald, 1983).

Table 1.1

Estimates of Adult Education Courses Attended at Different
Sponsoring Institutions

Sponsoring Institutions	Number of Courses Reported	Estimated Number of persons who Attended Classes, Lectures, Talks or Group Discussions
Church and Synagogues	692	3,260,000
Colleges and Universities	689	2,640,000
Community Organisations	488	2,240,000
Business and Industry	406	1,860,000
Elementary and High School	383	1,740,000
Private Schools	246	1,120,000
Government (all levels)	235	1,050,000
Armed Forces	116	480,000
All Other Sponsors	50	240,000
Total	3,305	13,360,000*

*This is not the total number of persons listed in that column because some persons studied at more than one sponsoring institution.

Source: Griffith (1970, P. 173) in Smith, Aker and Kidd (eds.) (1970).

A number of factors seem to have contributed to the upsurge in the educational activities of businesses. An important factor would seem to be the realisation of the need for workers to develop their mental capabilities in

order to improve their efficiency in the performance of their duties. This means that businesses are breaking away from the tradition that virtually led the worker to mental or intellectual impoverishment by the repetitive or routine demands of a job. Another factor is technological advancement that now affect all sectors of the economy of most nations. This had led to the reviewing and extension of the limited field in which training and development had been operating to take into account, a more comprehensive understanding of technical and conceptual processes, as distinct from purely manual skills (Foucault-Mohammed, 1986). At the same time, there has been the need for workers to update their knowledge and skills in order to avoid obsolescence of knowledge.

Also, for years, trade unions have been clamouring for more widespread opportunities for the mental and intellectual development for workers. Their arguments have been hinged on the fundamental human right of the worker to education as declared by the United Nations (UN) and as agreed in some International Labour Organisation (ILO) conventions to which many nations were signatories. Even if enterprises were not willing to adhere to the declarations and conventions to which their countries are

signatories, advancements in technology dictate that they provide adequate training and development for their employees.

Further, education in the formal school system is not designed to teach specific job skills for positions in particular companies and organisations. Even those who have obtained certificates in a technical or a professional field of work at the University or Polytechnic must receive some initial training in the form of orientation to the policies, practices and ways of their specific employing organisation. At the same time, they have to get acquainted with the machinery on which or with which they will be working.

In recent times, the tendency has been for the government to call attention to the roles that businesses can play in the education of adults, especially in the area of the provision of training and development for the workers in such corporations. For instance, a Nigerian Education Minister, in an address presented at the opening of a conference of the heads of adult education departments in government ministries and universities in the country, said that the country's 'dwindling resources, owing to economic problems, has affected the adequate

funding of adult education programmes' (Daily Times, Dec. 8, 1988). The Minister then proffered a solution to the problem of 'dwindling resources' when he called on the Heads of Departments to 'examine how firms and companies could contribute more to workers' education through sponsored programmes or provision of incentives'. Similarly, he advised that the role of universities and polytechnics in workers' education vis-a-vis industrial firms located in their areas must be examined. The Minister in effect, proposed a closer examination of the role of businesses as an educative agent, especially with regard to workers' education.

In addition, in developing countries generally, the government is the principal provider of education, both formal and non-formal. Due to government's dwindling expenditure on education, alternative sources of funding education, in particular non-formal education have to be sought. The most logical of such alternatives would be the corporations which form the second largest employer of labour. This should be the case since certain corporations in Nigeria have continued to flourish and even declare excess profits in spite of the economic recession in the country.

For instance, the companies below remitted quite a huge amount of money overseas as profits in 1983 alone.

They are:-

Union Bank	-	61.24 million
First Bank	-	5.9 million
Guinness Nig. Ltd	-	54.7 million
SCOA	-	12.25 million

Source: The Guardian, May 1, 1985.

It is felt that some of the profits should be ploughed back into schemes that would improve the welfare and competence of the Nigerian worker. One has therefore found it necessary to examine the extent to which corporations in Oyo and Lagos States have been providing education (or training and development) for adults, most especially their workers, and their commitment in this regard. Such training and development programmes for workers include, amongst others, adult basic education, vocational - technical training, general education, further/relevant education, and health and safety training.

Statement of the Problem

The problem of this study was to find out the extent to which private businesses in Oyo and Lagos States (as

agents of adult education) take part in and are committed to the provision of training programmes for their employees. This means that attempt was made to answer the question - which companies undertake the most training and are more committed to training and why? To this end, the study aimed at discovering the percentage of the total number of workers in the different companies and groups of companies that received training, the nature of the training programmes provided, the amount expended on the training of employees by the companies, and the physical and human resources available for such. In order to find answers to the second part of the question raised above (i.e., why?) the investigator tried to find out those factors that affect the decisions that the management of private businesses take as regard the training and development of their employees.

Justification of the Study

As a result of the examination of relevant literature on adult education and training generally in Nigeria, it was discovered that there is a dearth of information on the extent of the involvement in and the commitment of private employers or enterprises to the provision of adult

education or training for their workers who are not part of management. It would seem that this dearth of information regarding the extent of training and commitment to training by private employers is not peculiar to Nigeria. For instance, Joyce, Woods and Hayes (1985, P. 13) observed that "empirical research on training tends to neglect questions such as: what types of companies undertake the most training activities and why?"

It is important to state that Goldstein (1980) attempted an overview of the extent of training by companies in the U.S.A. He, however, did not adopt a systematic approach to the study and, in addition, the study neglected the question of commitment of companies to training even though the author used some of the measures of commitment of companies to training as indicators of involvement of companies in training. Thus, it is important to provide some systematized information regarding the extent of provision of training and commitment to training by private enterprises. This is with the hope that it would give training managers, adult educators, policy makers and workers' organizations in Nigeria a deeper knowledge and understanding of the roles that private enterprises can play in the training and

development of their employees. This will ultimately provide an overview of the role of private enterprises in the provision of adult education in Nigeria.

Furthermore, in view of the nature of work in businesses, it is necessary that their role in the provision of training in the area of health and safety in the work place be examined. It is known that one worker in ten on average around the world suffers from an industrial accident compelling him to stop work (Le Serve, 1981). In the developing countries where strict safety regulations rarely exist and if they do, are rarely enforced, the average number of workers who suffer from industrial accidents is almost certainly higher. Generally, the figures reported are said to represent only the tip of the iceberg in that most accidents are never reported and many industrial diseases go undiagnosed. In addition, there are problems associated with the "hidden" hazards of work. These are diseases which are not easily detected, produce no obvious immediate effect on the health of the worker, but take a higher toll. The major problem with many of these hazards is that they have a latent period of up to forty years; that is forty years between the time when the worker was exposed to the hazard and the outbreak of the

disease. For example, certain chemicals and lightnings (that produce X-rays) used in industries can act singly or in combination with other chemicals to induce cancer (Le Serve, 1981). In cases like these, the burden of proof lies with the worker, the union and often the worker's dependants to establish grounds for compensation. Although there is no single solution to the problem of health and safety in the work place, the education of workers in the areas of injuries and diseases that are likely to occur in their own specific working environment should help reduce the problem of health hazards. There is also a need to give training to workers on the laws relating to health and safety in industry, on approved methods of prevention and on safety inspection. It has therefore become necessary that one should also find out the extent to which businesses in Oyo and Lagos States provide health and safety education for their workers.

Also, it can be argued that because Nigeria is a member of the United Nations (UN), the world body that made education a fundamental human right, private businesses in Nigeria owe the society to which they belong, which is a signatory to the Universal Declaration of Fundamental Human Rights, the obligation to provide

education for adults as a form of service to human kind. From the same perspective, they should feel morally obliged to provide training for their own workers.

Finally, as practised in countries that have mixed economies, the private sector in Nigeria too should contribute its own quota to national endeavours of the education of adults, most especially their own workers.

The researcher's decision to undertake this study is based on the considerations just stated. Furthermore, the study should help focus attention on a much neglected area. It is expected that the results of this study will give adult educators and policy makers an idea of the roles businesses play in the education of adults in Nigeria. Finally, based on the outcome of the study, certain necessary recommendations are made, to the management of businesses, workers, labour leaders, adult educators and the government. Lastly, areas of further research were pointed out.

Purpose of the Study

This research work examined critically the extent of the involvement and the commitment of private establishments to the provision of adult education,

focusing attention on the provision of training and development programmes for their workers. This means, essentially that the work tried to answer the question - what types of companies undertake the most training and are more committed to training and why?

Specifically, the study

- (1) examined the nature of training and development programmes available to workers in private establishments in Oyo and Lagos States.
- (2) assessed the percentage of workers trained by some selected companies.
- (3) assessed the expenditure of the selected companies on training.
- (4) examined the human and physical resources that are made available for training by the selected companies.
- (5) considered whether the nature of training programmes by the selected companies, the percentage of workers trained by them and the amount expended by them on training have a relationship with one another, and whether one can predict one from the other.
- (6) discussed extensively the factors that are responsible for the extent to which companies are

involved in training and the extent of the commitment or otherwise of companies to training.

- (7) based on conclusions drawn from the results of analyses of data, offered objective recommendations to all those who have interest in adult education and the training and development of workers in general, and training and development of workers in private establishment in particular.

Scope of the Study

This study paid particular attention to the training and development of workers in private enterprises. Such training and development programmes included amongst others, organised vocational - technical training, training for professionals and specialists, further education/relevant education and health and safety training.

For the purpose of this study, all persons who are not part of management are regarded as workers. These include amongst others, professionals/specialists, messengers, clerks, secretaries, production workers and salesmen. This study did not concern itself with the educational activities organised for workers in

enterprises by trade unions. This is because the study is concerned mainly with all the training programmes provided for workers in private enterprises by their employers who are in this case, the management of the private enterprises.

Again, although the title of the study is "Training and Development Programmes for Workers in Private Establishment in Oyo and Lagos States of Nigeria", the study covered large scale industries only. Generally, there is no standard criterion for classifying industries into small, medium or large. In order to get at the classification for this study, a number of criteria used by some institutions were examined. The Central Bank's Credit Guidelines to Commercial and Merchant Banks has been using the annual turnover to classify industries into the small scale category. Any industry that does not exceed 500,000.00 in its annual turnover - sales figure - is small scale. For the purpose of the revolving loan scheme for small scale industries, the Nigerian Bank for Commerce and Industries (NBCI), 1981/82, regarded as small-scale all those enterprises investing not more than 500,000.00 (excluding the cost of land). The bank's official definition since 1985 has covered firms whose

capital cost does not exceed 750,000.00. Meanwhile, the former University of Ife (now Obafemi Awolowo University) Industrial Research Unit defines small-scale industry as one whose total assets are less than 250,000.00 and employing fewer than 50 full-time workers (Sule, 1986).

As regards what a medium-scale enterprise is, Ogbe (1985), after reviewing the prevailing definitions of small-scale enterprises in Nigeria, was of the opinion that a medium-scale enterprise is bigger than one of a small scale, but not large enough to be classified as large (quoted in Sule, 1986). For an enterprise to be eligible for assistance under the Nigerian Bank for Commerce and Industries (NBCI's) World Bank assisted loan scheme for small and medium scale enterprises, its total assets should not exceed 1 million. For the Nigerian Industrial Development Bank (NIDB), a medium scale industry is one whose project costs are above 750,000.00, but not greater than 3.0 million.

From the foregoing, it can be seen that the criteria used for identifying small and medium-scale industries are the turnover, the investment capital and the number of people employed. Inferences can thus be made from these for large-scale industries, because all the definitions

give an upper limit either of the number of workers employed, or turnover, or investment capital above which an enterprise would not be regarded as a small or medium-scale enterprise. For the purpose of this study, a large-scale enterprise is that company which has a capital investment of more than 1 million, whose annual turnover exceeds 3 million, and which employs more than 50 full-time workers.

Finally, a company is considered a private concern if government has no shares in the company at all, or when government's shares are limited to non-voting shares.

Limitation of the Study

Observation was one of the instruments used to gather the data for this study. The investigator had hoped to see for herself some of the facilities that are available for the training of workers. She had also hoped to observe workers who were in training on the premises of the companies. It was anticipated that such observation will provide additional information about the extent of involvement in and commitment of companies to the training and development of their workers. To a large extent, only one objective of observation was achieved, and this is the

assessment of the physical facilities that are available for training in the selected companies.

In addition, the questionnaires and interview guide that were designed and used to collect a lot of the data needed for this study were constructed with a view to covering the period 1978-1990 (13 years). The investigator had hoped that the decision to cover this period would help study and compare the status of training and development programmes provided by private employers before and after the commencement of the structural adjustment programme (SAP). It was expected that the analyses of the data collected for the period chosen (1978-1990) would help highlight the effects of a buoyant economy on the provision of training by enterprises and the effects of economic recession on same.

Due to the very many problems associated with data collection, the investigator was unable to collect data for all the 13 year period for most of the companies, and so comparism for periods could not be made.

Definition of Terms

The meaning of some words and terms as they are used in this study are explained below:

"Business"

This is a trade or a commercial venture. 'Type of business' or 'category of business' in this work means a particular branch of trade, manufacture or commercial venture.

"Education"

Broadly based instruction and acquisition of knowledge, skills and attitudes which enable individuals to partake in activities in which such knowledge, skills and attitudes are required.

"Adult Education"

Connotes the entire body of organised educational processes outside the formal school system. It consists of the provision of functional literacy, remedial, continuing, vocational, workers', aesthetic, cultural and civic education for persons regarded as adults by the society to which they belong, for the development of their abilities, improvement of their knowledge, skills and attitudes, to enhance their full personal development and participation in their communities' development.

"Training and Development"

Any kind of organised educational activity provided for the worker - in his capacity as a worker - that benefits him, his employer and perhaps his organisation in the social, economic, political and cultural spheres of life.

"Management"

This is the governing body of an organisation. It is the board of directors of the company and all persons in management positions.

"Involvement"

Level of participation of companies in training and development.

"Commitment"

The extent to which companies believe that training and development is an issue that has to be taken seriously, and the consequent participation of companies in training through the allocation and application of necessary resources to it.

CHAPTER TWO

LITERATURE REVIEW

This chapter will focus on the review of the following: concepts of "worker's education", "training and development" as an important component of worker's education, the purposes of training and development and the available forms of training and development. The factors determining the involvement and commitment or otherwise of companies to training and development, and the resources available for training and development will also be examined.

The Concept of Workers' Education

The task here is to examine available literature on who can be referred to as a worker, and what workers' education means.

The "Worker"

The term "worker", as Hopkins (1985, P. 9) observes, has different meanings to different people in different national and social contexts. To some people in

contemporary Britain, "workers" still denotes what Adam Smith called "the labouring poor"; that is, 'the great body of the people'. To some, workers are 'all the producers, by hand or by brain'. To some others workers are 'the organised labour movement', and yet according to another view, workers are 'the oppressed toiling masses'.

Here in Nigeria, Anaeme (1982, Pgs. 86-88) observed that the Nigerian Trade Union's Act No. 31 of 1973 defined a "worker" as:

any employee, that is to say any member of the public service of the federation or of a state or any individual (other than a member of any such public service)... who has contract with an employer, whether the contract is for manual labour, clerical work or otherwise, expressed or implied, oral or in writing, and whether it is a contract personally to execute any work or labour of a contract or apprenticeship (section 55).

The Nigerian Labour Act No. 21 of 1974 defined a "worker" as:

any person who has entered into or works under a contract with an employer, whether the contract is for manual labour or clerical work or is expressed or implied or oral or written, and whether it is a contract personally to execute any work or labour, but does not include:-

- (a) any person employed otherwise than for the purposes of the employer's business or

- (b) persons exercising administrative, executive, technical or professional functions as public officers or otherwise or
- (c) members of the employers' family or
- (d) representatives, agents and commercial travellers in so far as their work is carried on outside the permanent workplace of the employer's establishment or
- (e) any person to whom articles or materials are given out to be made up, cleaned, washed, altered, ornamented, finished, repaired, or adapted for sale in his own home or on other premises not under the control of management of the person who gave out the articles or the material, or
- (f) any person employed in a vessel or aircraft to which the laws regulating merchant shipping or civil aviation apply [section 90(i)].

In the Trade Dispute Act No. 7 of 1976, "worker"

means:

any employee, that is to say any public officer or any individual (other than a public officer) who has entered into or works under a contract with an employer, whether the contract is for manual labour, clerical work or otherwise, expressed or implied, oral or in writing, and

whether it is a contract of service or of apprenticeship [section 37 (ii)].

Meanwhile, the recommendations of the 'Report on a National Conference on Workers' Education', 1971, defined a worker as:

anybody who is engaged in wage or salaried employment below the rank of a managing director, general manager, and other identical positions in industrial, governmental and agricultural establishments.

The bottom-line in all the definitions of the worker given above, in Nigeria, is that the worker is a person who offers his labour - either by hand or brain - for sale to an organisation that pays for such, under certain mutually agreed conditions. Thus, a person who is self employed or somebody who owns a company and employs labour, or is part of the management of a company is not a worker.

Although the Labour Act No. 21 of 1974 uses the term "worker" in a restricted sense, it is clear about who is to be regarded as a worker. This is unlike the Trade Union and Trade Disputes Acts of 1973 and 1976 respectively, which define a worker as "any employee..." The first two or three lines of the Trade Union and Trade Dispute Acts are unclear in the use of language employed to define who

a worker is. For example, the Trade Disputes Act defines a worker as follows:

any employee, that is to say any public officer or any individual (other than a public officer)...

Of all the definitions considered, the best one is the one recommended by the National Conference on Workers' Education in 1971. This is because it separates a person who is an employee and who is not a part of management from a person who is an employee, who may be a public servant and may, at the same time be a part of management.

Given these considerations, the following definition of a "worker" will be adopted in the present work:

a person who offers his labour - either by hand or brain or both - for sale to an organisation that pays for such, with certain agreements in view and who is not a part of the management of such industrial, governmental, quasi-governmental and non-governmental establishment.

Workers' Education

UNESCO (1979) referred to Workers' Education as:

the systematic development in working-class adults of the knowledge, attitudes and skills to enable them efficiently to fulfil the social roles they are called upon to play, particularly in trade unions (Quoted in Hopkins, 1985, P. 19).

Barbash saw labour education (workers' education is called labour education in the United States and labour education is the official word used by the Workers' Education Branch of the International Labour Organisation) as:

any planned educational activity which a union undertakes, or an educational activity undertaken by an agency other than a union, where a major objective is to build more effective union citizenship (Quoted in Whitehouse, 1979, P. 2).

Mire defined labour education as:

dealing primarily with the educational needs of workers as they arise out of their participation in the labour movement (Quoted in Whitehouse 1979, P. 2).

Fernau (1984, P. 3) viewed workers' education as:

that type of education which is intended to meet the educational needs of workers and their organisations in the defence of their individual social, economic and cultural aspirations.

As for Hopkins (1985, P. 2) workers' education is:

that sector of adult education which caters for adults in their capacity as workers and especially as members of workers' organisations.

From the definitions above, it is worthy of notice that while Barbash and Mire equated workers' education with trade union education, the UNESCO, Fernau and Hopkins somewhat placed emphasis on the relationship between

education provided for workers and the relevance of such to workers' organisations or trade unions.

It is tempting to simplify the definition of workers' education by equating it with education run by trade unions and for trade unionism. Indeed, trade union education is a major part of workers' education, but trade union education is by no means the whole of workers' education. As Hopkins (1985) himself has observed, a significant portion of workers' education is provided by governments, universities, workers' educational associations, et cetera. It would therefore be highly misleading to use workers' organisation (trade union) sponsorship as the 'touchstone-test' for workers' education. The tendency to equate trade union education with workers education explains why employers are always touchy when the education programmes they provide for their employees are referred to as workers' education. They always insist that what they provide for their employees is "training and development".

The following definition of workers' education is, therefore, considered appropriate:

Any form of organised education activity which is provided for a person in his capacity as a worker no matter the providing agency and the

ideological stance of the body, as long as it can help the individual worker and his or her organisation in the defence of his or her rights, and in the satisfaction of his or her individual and, most importantly collective social, economic, cultural and political aspirations.

This definition has several advantages. Among the advantages are that:

- (1) it makes clear the recipient of workers' education- they are workers.
- (2) it does not insist that trade union education alone is workers' education; neither does it insist that training and development alone is workers' education.
- (3) it thus recognises both trade union education and training and development as important components of workers' education. This is because a worker, literate or illiterate, needs continuous training and development in order to continue to function efficiently and effectively at his or her job. If he or she is unable to function efficiently and effectively at work, he or she may no longer be relevant at work. If a worker remains at work, then he will be able to participate in the activities of his workers' union with the aim of achieving both

individual and collective, social, economic, cultural and political aspirations.

- (4) it therefore presupposes that training and development of workers is an important factor in workers' realisation of their individual and collective aspirations.
- (5) also recognises that trade union education is an important factor in determining whether workers will continue to remain at work for reasons other than the fact of their being 'irrelevant' in their work places. As a matter of fact, the history of trade unionism shows that trade unions were responsible for ensuring that employers provide training and development for workers, Hopkins (1985). And this still obtains today. This means that trade unions, through the education that they provide for their rank and file and through training and development programmes, can ensure that workers remain workers by sustaining the relevance of workers to their work places.
- (6) it further indicates that workers' education is not provided by trade unions or employers alone, and that the ideological stance of the providing agency is

irrelevant, as long as the individual worker and his organisation can achieve their individual but most important, their collective aspirations through such education programmes. One contentious issue which would have to be left to the workers' organisations to decide is the determination of what their collective social, economic, cultural and political aspirations are or should be.

Though it is important, trade union education is not within the scope of the present work. Attention will be directed only at one aspect of workers' education-training and development.

Training and Development

Training according to Beach (1975, P. 372) is the "organised procedure by which people learn knowledge and or skills for a definite purpose".

Goldstein (1980) is of the view that training provided by employers serves the critical role of completing the process of skill acquisition and includes necessary general learning as well as specific vocational preparation.

According to Darkenwald (1983, P. 232), training and development is "any educational activity or opportunity made available to employees".

Bryan (1985, P. 5) regards training as "changing the way people think, act or behave by changing knowledge levels, skills or attitudes".

Training, according to Laird (1985, P. 11) is "an experience, a discipline, or a regime which causes people to acquire new predetermined behaviours". Laird observed that when training departments or organisations provide training, they do more than merely fill the gaps in people's repertoires for doing assigned tasks, because they are involved in developing people for (a) "the next job", (b) for retirement, and (c) for their roles in society outside the employing organisation.

Nadler, quoted in Laird (1985, P. 11), is said to have considered training as meaning those activities which are designed to improve human performance on the job the employee is presently doing or is being hired to do. He also claimed that development is concerned with preparing the employees so they can "move with the organisation as it develops, changes and grows".

Training, according to Cole (1986, P. 436), is "concerned with imparting knowledge, and improving skills, in relation to a job or occupation". Cole further stated that development usually suggests a broader view of knowledge and skills acquisition than training... it is concerned more with employee potential than with immediate skill, it sees employees as adaptable resources.

An overview of all the opinions expressed about what constitutes training indicates that training is the acquisition of new knowledge, new skills and new attitudes by employees in areas relating to the work they do. Goldstein (1980), Darkenwald (1983) and Laird (1985) do not distinguish between training and development. This seems to be because they see training not only in the narrow perspective of acquisition of knowledge and skills for a specific purpose and filling the gap in employees' repertoire for doing assigned tasks, they see training as including necessary general learning, any educational activity or opportunity, and developing people for "the next job", retirement and roles in society outside the employing organisation.

As for Nadler (in Laird, 1985) and Cole (1986), they made a distinction between training and development,

especially emphasising that development is concerned with preparing employees for some future roles in the company and developing their potentials. Whereas training is designed to improve the performance of the employee on the job he or she is presently doing. In practice however, the companies in Nigeria do not really distinguish between training and development. Even when relevant/further education/ correspondence courses are supported and or encouraged, the companies still refer to such as further training. It is important to state that when the word, "development" is used with regards to training in Nigeria, such is usually associated with the training of management, thereby giving the impression that only employees of the management cadre are capable of being developed.

The conclusion ought to be that training and development cannot be compartmentalised. Such compartmentalisation is not necessary except for the purpose of drawing out the objectives of training programmes and activities.

Reference to drawing up objectives of training programmes presupposes that organisations/employers have well-organised training programmes. Cole (1986) refers to

such training programmes as 'systematic training'. Systematic training is said to be initiated by the company's training policy and sustained by its training organisation.

Figure 2.1 below shows the Basic Cycle of Systematic training.

FIG. 2.1

Basic Cycle of Systematic Training



Source: Cole (1986, P. 424).

There are indications that some organisations distinguish between specific and general training, and make provisions for both kinds. Becker (1962, 1964), quoted in (Goldstein, 1980) was said to have distinguished between specific and general training. It was his view that specific training prepares a worker only for work in some given firm while general training prepares him or her for work in other firms as well. An example of specific training is orientation to the practices of a given firm or training in a technology or process used only by a single firm. An example of general training is opportunity or training in a craft widely employed such as welding. From this consideration, training and development should be viewed as:

any kind of organised education activity provided for the worker - in her capacity as a worker - that benefits her, her employer and perhaps her organisation in the social, economic, political and cultural spheres of life.

Forms of Training and Development Programmes in Private Establishment

In general, enterprises provide varieties of education activities for their workers. The activities

include, among others, adult basic education, job-related skills training, general education, and health and safety education.

Nadler (1970) and Darkenwald and Merriam (1982) have observed that companies offer adult basic education in order to upgrade workers' reading, writing and computational skills, sometimes along with on-site high school completion classes, usually run in collaboration with a local school. This is because enterprises have come to realise that they must know something about adult illiteracy and its implications for adult learners in work situations. This realisation could be a result of increased awareness among leaders in enterprises, of their responsibility toward society.

There are also opportunities for training in the areas of job-related skills in enterprises. Training in job-related skills is provided for workers in the areas of maintenance, machine operation, sales and office procedures, among others. Some of the job-related skills training programmes provided for these groups of workers in some companies in Nigeria include forklift maintenance course, electrical/electronic skills course, basic secretarial course, metal machinery and welding skills

course and volkswagen until repair course (ITF, 1991). At times, these job-related skills training programmes are referred to as "occupational/vocational training". Companies provide these programmes because very often, the personnel department of businesses hires persons who have the minimum skills for entry into a job, but who will require additional training to achieve the desired skill on the particular equipment being used by his/her employer. A typist, for example, may be able to meet the minimum standards for employment but may never have typed on the particular kind of machine on which he will be working; or he may never have used the particular kind of dictating equipment available in his new office.

Also, organisations hire new employees with engineering degrees and then devote considerable time to helping the new employees relate their previous education to the requirements of their new jobs (Nadler, 1970). Darkenwald and Merriam (1982) have observed that education programmes for scientists, engineers, architects and other professionals employed in industries in the United States of America are wide-ranging, sophisticated, and even more advanced than Ph.D. training in the same field in the United States of America's leading universities. Beach

(1975) has observed that in small companies, training is to a great extent of the on-the-job variety, and it is done by line supervision (that is by foremen, general foremen and office supervisors).

There is another form of on-the-job variety of training programmes in industries. It is apprenticeship training and can also be referred to as vocational/technical training. It is a way of developing skilled craftsmen. Nadler (1970) and Beach (1975) have observed that in the U.S., apprenticeship training proved useful in that country's emergence as an industrial nation. According to Beach (1975), the Fitzgerald Act of 1937 reorganised and enlarged the Federal Committee on Apprenticeship. The Federal Committee on Apprenticeship was said to have recommended certain essentials of an effective apprenticeship programme. They are that there should be a minimum starting age of 16, an approved schedule of work experience supplemented by at least 144 hours per year of related classroom instructions in subjects related to the trade, a progressively increasing schedule of wages, proper supervision of on-the-job training, and periodic evaluation of the apprentice's work. Quite frequently, an employer can arrange with the

Local Board of Education in the community to have the related classroom courses taught in a high school or vocational school. The related classroom instruction for a Machinist, for example, would include the following subjects: safety, industrial and labour relations, blue print reading and sketching, mathematics, trade theory and trade science (that is, cutting tools, heat treating, welding theory, etc.).

Another form of education programme available in enterprises is health and safety training. This involves accident prevention, occupational safety and control of health hazards arising from work environment. According to Foucault (1984), health and safety education is expected to be fully integrated into all aspects of vocational training at all levels in enterprises. The fact is that in a number of enterprises, some kind of health and safety training is provided for most of the workers. Policy makers make provisions for periodic refresher courses and seminars for workers about health and safety matters. This is partly as a result of the continuous introduction of new processes and substances into industries.

Beach (1975) has observed that companies usually have some form of induction or orientation programmes for new

employees. Some of the programmes cover one hour lectures, others extend to several months. Orientation is said to be the guided adjustment of the employee to the organisation and his work environment. For the purpose of this work, orientation will be classified under general education. Beach has observed that there is a necessity for well organised and well conducted induction or orientation programmes for workers in enterprises. According to him, orientation programmes can create favourable attitudes toward the company, its policies and its personnel. They can instill a feeling of belonging and acceptance. They can generate enthusiasm and high morale. Thus, a well-run orientation programme may minimize the likelihood of rules violation, discharges, grievances and misunderstanding. Yet according to some opinion on the matter, induction or orientation have been cynically referred to as indoctrination.

Some other forms of training and development programme that can be classified under the rubric of general education are relevant education, further education and correspondence courses. These forms of training are neither job-specific nor are they for the purpose of induction or orientation. Although such forms

of training might not be of immediate utilitarian purpose for workers, workers are expected to be able to make use of the knowledge, skills and attitudes acquired from them when the need arises and also for their own rounded personal development.

The Need for Training and Development Programmes in Private Establishment

The provision of training for workers in enterprises is in many respects important to the employer, the worker and the nation as a whole.

The training of workers in enterprises plays an important role in determining the effectiveness and efficiency of workers, which are in turn reflected in the productivity of the company (Beach, 1975). This is because training helps employees increase their level of performance on their job assignments. It also helps to solve operational problems such as poor customer service, excessive waste and scrap loss, and poor work methods, all of which are associated with ineffectiveness and inefficiency.

In commenting on efficiency and effectiveness, Foucault (1984) and Bryan (1985) observed that modern

technological advancement now affects all sectors of the economy of any nation, including its service sector. This necessitates the review of worker training programmes to expand their scope, taking account of the workers' need for a more comprehensive understanding of technical and conceptual processes, as distinct from purely manual skills.

Foucault-Mohammed (1986, P.1) reported that the Industrial Committee of the International Labour Organisation (ILO) Workers' Education Branch, in the Draft Conclusions of three meetings held between 1983 and 1986, advised that the provision of all aspects of training would allow "the advancement of workers and ensure better work performance". Similarly, Foucault-Mohammed (1986) was of the opinion that through the provision of education, workers in industries can be given adequate mental nourishment that will tax their brains in the efficient performance of their duties. She was of the opinion that the provision of intellectually nourishing education should be a departure from what used to obtain in the past when workers were suffered mental or intellectual impoverishment resulting from the repetitive or routine demands of a job.

The provision of training programmes for workers in industries helps ensure that workers keep up to date with technological progress. Beach (1975) for example, stated that the technology of our productive processes is developing at a rapid pace, and this has generated a need for continual retraining of experienced workers to perform new and changed jobs, in order to avoid obsolescence of knowledge, skills and attitudes.

Again, Abbott (1977) implied that a worker's inability to keep up with rapid technological changes could result in functional incompetence when Abbott observed that a person who is functionally competent at one time in a society and in a profession, may no longer be competent at another time and in another place. In other words, if the requirements of a job change, an individual worker who is not adept through the acquisition of additional or different knowledge and skills, will become functionally incompetent.

Fernau (1983) expressed surprise at the number of times that workers in different professions in their working years need complete retraining as a result of technological advancement. By way of illustration, he gave an example of a plumber who was 60 years old in 1983 and

who learned to use lead pipes during his apprenticeship. Ten years after his apprenticeship, lead had become too expensive and was replaced by iron. New tools were needed, as a result of which the plumber had to learn new work methods. Again, 15 years later, plastic pipes were introduced and once again necessitated a vast retraining process in the craft. Fernau thought that plumbers were rather fortunate as they only had to learn to work with different materials. This is because some professions have completely disappeared as a result of technological advancement, setting adrift thousands of workers who had to learn new professions, except for those who wanted to continue to work as unskilled labourers with reduced income. This state of affairs has created and will continue to create, with further advancement in technology, an enormous need for training and development combined with sound counselling, so that the retraining effort will be worthwhile in view of future prospects.

In this regard, Foucault (1984, P. 8) observed that for quite some time (5 years) a number of tripartite and advisory committees of the Workers' Education Branch of the International Labour Organisation (ILO) had met in Geneva to study the needs of industry in the light of the

implications of technological innovations and economic recessions so as to lay down guidelines for policy makers. According to her, all the committees emphasized one common area of concern; that is,

the need to rationalise education and training if society is to keep pace with technological advances, reduce the contingents of unemployed and move from a state of imbalance to one of equilibrium.

Just as rapid technological changes necessitate training and retraining of workers in their own professions and perhaps in professions other than theirs, it also necessitates the provision of education for workers in the area of occupational health and safety. To ensure that diseases, especially carcinogenous ones, disablement and death are not the inevitable and tragic costs of work, there is the need for employers to make provisions for the education of their workers in the area of occupational safety and health. Workers ought to be taught safe actions and conditions, machine safety checks, fire prevention, simple first aid techniques, and the use of gloves, gas masks etc. The bottom line really is that accidents, constituting one form of occupational hazard, are caused

and only safe actions can protect workers from accidents. There is, therefore a need to prevent the occurrence of accidents through safety training. This will reduce human-hour and financial losses suffered by industries as a result of accidents.

Apart from accidents in work places, many health problems are said to be caused by occupational factors. Fernau (1983) for example, observed that automation and the exigency of modern industry for higher productivity have created working conditions in which workers are exposed to a higher degree of nervous and mental stress. He observed that people working under these conditions may develop an appetite for what might be termed "personal enrichment education" which involves lessons in painting, music and the fine arts generally.

Those groups of workers, whose health problems are a result of the strain and stress of their occupations, are lucky because there are other workers who are saddled with insidious diseases. An example is cancer, which could be caused by chemical carcinogens, many of which are in common use in industries, (Le Serve, 1981). There is thus a need for the training of workers in the area of health and safety. Such training programmes should include

courses in: the dangers of injury and disease in workers' specific working environment; the laws relating to health and safety in their industry, approved methods of prevention and safety inspection.

It is important to note that health and safety training should not stop only at the gates of factories. This is because it will be rather short sighted to concentrate solely on the improvement of the working environment to the detriment of the living environment and the social well-being of the worker. Much concern has been expressed in this respect because in some countries, when 'clean-up' campaigns were launched in industries, some of the industries simply transferred the problem to the surrounding community by dumping their waste, a substantial amount of which is toxic - on their neighbours. This happens most frequently in the underdeveloped countries where there are no adequate facilities for processing and disposing of wastes. This means that the health and safety of workers will not only be guaranteed by the provision of education, but also by closer cooperation between the industries, workers, the community and government, for the improvement of working conditions and living environment.

There is also a necessity for training programmes for workers in enterprises because formal schooling is thought to be inadequate for the personnel needs of enterprises. According to Beach (1975) and Ogunranti (1982), this is because the formal school system is primarily oriented towards teaching broad knowledge and skills to enable people cope successfully with their environment, to support themselves, and to help advance the society as a whole. It is not designed to teach specific job skills for positions in particular companies or organisations. Even those who graduated in technical or professional field of work at universities and polytechnics must receive some initial training in the form of orientation to the policies, practices and ways of their specific employing organisations.

Enterprises also feel a need to provide training for workers in order to mould workers' attitudes. To achieve support for company activities and to obtain better cooperation and greater loyalty from workers, companies provide training often in the form of induction or orientation for their workers. Actually, some training programmes have this as their primary goal, although in

most cases, attitude moulding is simply a by-product of the instruction process.

Yet another reason for training programmes for workers in enterprises is to fill manpower needs. When totally new skills are required by a company, it is often most practical to select and train people from within the organisation rather than seek skilled personnel from outside, in the labour market. For example, if a manufacturing company needs skilled machinists and tool makers, the company might solve this problem by establishing its own apprentice training programmes where such machinists and tool makers can be trained. It would be most beneficial for the company in the long run, especially if there are other companies within that area that are in need of the same kind of skilled labour (Beach, 1975). Others have argued that given the free-rider problem in economics, some companies may not feel obliged to train their employees in skills that can be used by other companies (Tabbush, 1977).

There is no doubt that training programmes provided for workers in enterprises can bring immense benefits to the workers, their employers and the nation as a whole. Beach (1975) has observed that training and development

programmes increase the probability of upward mobility of workers and their market values. This means that the possession of useful skills enhances the value of workers to their employer and thereby increases their job security. Training and development may also qualify workers for promotion to more responsible jobs or positions. This of course, increases their pay, status, self esteem and perhaps generate a desire to want to further put in their best to their jobs.

Still related to the above is the fact that some training programmes provided for workers in enterprises can raise the morale of the workers and lead to the personal growth and development of the worker as an individual. This is because aside from vocational training of the on-the-job variety, companies provide off-the-job, relevant and further education for their workers which fulfils the need to value the worker, not only as a carrier of economic functions, but also as a source of social change (Bryan, 1985; Foucault-Mohammed, 1986).

In line with the above, it is well known that the provision of training at times helps individuals to exercise their rights and to demand for new rights, because it enhances their dignity and frees their minds.

This function of training becomes particularly important when the individuals concerned are workers who belong to workers' organisations.

Also in this regard, Abbott (1977) quoted Wirtz as having dropped his previous position that politics is the moving agent of change and that education is a stabilizing and conservative influence on workers. His new position is that the educational process alone is where seeds of change are planted and grown. This might be the reason why there has been a call that workers' education be considered not exclusively from the point of view of economic gain but also from the educational and human view point (Foucault-Mohammed, 1986).

Malla, quoted in Labour Education (1984) considered that once workers, especially those in developing countries, have acquired adequate training in essential knowledge and skills, they will not only be able to improve their conditions of life; they will also be able to contribute substantially to the development of their country. In this regard, there has been a call for education within and outside enterprises to be considered part and parcel of national endeavours of continuous education.

Factors that may Affect the Extent of Involvement and
Commitment of Private Establishments to the Training and
Development of their Workers

It is assumed that certain factors would dictate the level or degree (high or low) of involvement in and commitment of companies to the training of their employees. In this section, such factors will be examined from an almost interdisciplinary perspective, although this would not mean that the various arguments for and against the degree of involvement in and commitment of enterprises to training are mutually independent. In the following paragraphs, the neo-classical economic theory will be examined. It would seem that the factors of the ITF Decree of 1971 and size and nature of companies go back to the neo-classical economic theory. Also to be examined is the philosophical argument from the point of view of ethics or moral principles. Managerial principles represented by theories X and Y would also be examined as a factor that would dictate whether companies would have high or low involvement in and commitment to training. The factor of social responsibility will also be examined. Although the ITF Decree of 1971 is considered as going back to the neo-classical economic theory especially as it affects involvement in and commitment of enterprises to training, it may be worthwhile to examine the Decree as a government legislation that carries penalties for those who violate its provisions.

Neo-Classical Economic Theory

The basic interest in neo-classical economic theory in this study is to state the basic assumptions of the theory that tie together all the neo-classicist's separate theories (in particular, the theories of cost, production and distribution). These basic assumptions can be found in the theory of utility or the theory of value. The task is to note how the theory of utility would affect commitment to and involvement of companies in training.

First, what is neo-classical theory? Hollis and Nell (1975, P. 226) consider it a theoretical model of economy in which there is a large number of consumers who have property, and a large number of producers who produce and or provide each kind of good or service. According to them,

each consumer's preferences are described by a utility function, with positive first, and negative second derivatives. Each producer's technical possibilities are described by a production function, also normally assumed to have positive first, and (after a point), negative second derivatives.

Hollis and Nell indicated that according to the neo-classical economic theory, consumers, on the one hand, purchase final goods, maximizing their utility, subject to the constraints of their income; they then sell the services of factors, balancing disutility against expected return at the margin. On the other hand, firms purchase factors, balancing expected productivity against cost, they sell final goods by setting quantities and prices, so as to

maximise profits. According to Hollis and Nell, goods and services thus move in a circular flow: producers sell final goods to consumers, and with the proceeds from the sales, they purchase factor services (example labour) from consumers, which they combine into final products. With the proceeds from the sale of factor services, consumers buy final products in accordance with their utilities. They added that according to the neo-classicists, competition ensures that demand and supply are equal in every market, and that while marginal utility and marginal cost determine equilibrium in the final goods market, marginal disutility and marginal productivity determine equilibrium in the factor market.

Certain assumptions can be deduced about the neo-classical economic theory when Hollis and Nell's conception of the theory is closely examined. The first assumption is that the society is divided strictly into consumers and producers (or consumers and firms) (public and business) in an economy.

The second assumption is that individuals have wants or desires, which vary and are endless. When individuals decide to satisfy these wants or desires, they have to buy what will satisfy their wants or desires. According to Robinson (1976, P. 48) the fact that individuals want to buy commodities shows that the commodities have utility. Utility is the quality in commodities that makes individuals want to buy them. Also, Marshall, a neo-classicist, indicated that

desire cannot be measured directly, but only indirectly by the phenomenon to which they give rise; in economics, the measure of desire or want is found in the price which a person is willing to pay for the fulfilment or satisfaction of his desire (Robinson, 1976). Marshall further indicated that if it is assumed that an individual set out consciously to satisfy a desire, it should be assumed that the satisfaction derived corresponds, in general, fairly well to that which was anticipated when the purchase was made.

What this means is that as far as Marshall is concerned, the motive or moving force to action in economics are desires which prompt activities and the satisfactions that result from the activities. Robinson (1976), however, opined that desire, not satisfaction, is measured by price, although it is quite impossible to keep the idea of satisfaction out of payments made for desires.

Schumpeter (1976) and Robinson (1976) identified a familiar and fundamental human tendency, which is that: as one acquires successive increments of each good, the intensity of one's desire for one additional 'unit' declines until it reaches (and then conceivably falls below) zero or marginal utility. Furthermore, the total utility of a thing to anyone (that is, the total pleasure or other benefits it yields her) increases with every increase in her stock of it, but not as fast as her stock increases. If her stock of it increases at a uniform rate, the benefit derived from it increases at a diminishing rate. That is to say, the

additional benefit which a person derives from a given increase of her stock of a thing diminishes with every increase in the stock that she already has. Marshall was said to have referred to this (marginal and total utility) as 'the law of satiable wants' (Schumpeter, 1976, P. 910; Robinson, 1976, P. 49).

- According to Schumpeter, the concept of marginal utility refers to consumers' wants; hence, they carry direct meaning only with reference to goods and services, whose uses satisfies consumers' wants. Schumpeter did say that Menger (another neo-classicist) however went further by saying that means of production (or what he called goods of higher order) come within the concept of economic goods by virtue of the fact that they also yield consumer's satisfaction, though only indirectly, through helping to produce things that do satisfy consumer's wants directly.

Thus, through Menger's analysis, it is possible to treat such things as iron or cement or fertilizers (and also all services of natural agents and labour that are not directly consumed) as incomplete consumable goods and thereby extend the range of the principle of marginal utility over the whole area of production and distribution. The factors of production are therefore assigned use values, such that they acquire their indices of economic significance and hence their exchange values from the same marginal utility principle that explains the exchange values of consumable goods. But, those exchange values or relative

prices of the factors constitute the costs of production for producing firms. Schumpeter considered that this means, first, that the marginal utility principle now covers the cost phenomenon and in consequence also, the logic of the allocation of resources and hence, the supply side of the economic problem; second, that in as much as cost to firms are incomes to households, the same marginal principle, with the same proviso, automatically covers the phenomena of income formation or of 'distribution'.

Schumpeter (1976, P. 914) said that some German critics were of the view that:

marginal utility theory was inapplicable to the evaluation of any goods other than consumer's goods which are present in given quantities, hence, the principle is inapplicable to production.

According to Schumpeter, Menger's response to this was to first accept the impossibility of separating the contributions of 'factors' to the product that results from their cooperation. He then said that in order to remove the difficulty (of separating the contributions of 'factors') it was sufficient to determine their marginal contributions and this can be found by withdrawing successively small quantities of each requisite of production, keeping the others constant each time, and ascertaining the loss of satisfaction this will cause the consumers of the product(s). Schumpeter said this was how marginal productivity was rediscovered with a difference. The

difference is in the meaning of marginal physical productivity and marginal value productivity.

The marginal physical productivity of a factor is the increment of product that results from an infinitesimal increment in the quality of the factor. Marginal value productivity of a 'factor' to a firm is this physical increment multiplied by the corresponding increment in the firm's total revenue or gross receipts. These two are said to be value productivity that did not presuppose the price of the product. So, it is not physical marginal productivity multiplied by any price, but physical marginal productivity multiplied by some consumers' marginal utility.

This leads to the third assumption that is deducible from Hollis and Nell's explanation of the meaning of neo-classical economic theory; the idea of pure or perfect competition. The mechanism of pure competition, according to Schumpeter (1976, P. 973) is supposed to function

through everybody's wish to maximize his net advantage (satisfaction or monetary gain) by means of attempt at optimal adaptation of quantities to be bought or sold.

According to Robinson (1976), the pursuit of profit under conditions of perfect competition leads producers to equate marginal costs to prices, and the maximum possible satisfaction is drawn from available resources.

Having considered the main assumptions that are deducible from the earlier explanation of the meaning of neo-classical economic theory, it may be worthwhile to

consider the two separate branches of the neo-classical system that Robinson (1976) identified. Though the distinction is blurred, the difference in the two branches is said to be in the supply of capital.

Robinson (1976) considered that Walras, Jevons, the Austrians and Wicksell belong to a school which took the supply of factors of production as given. Such that each employer of factors seeks to minimize the cost of the product and to maximize his own return, each particle of a factor seeks the employment that maximizes its income and each consumer plans his consumption to maximize utility. Each individual receives an income governed by the marginal productivity of the type of factor that he provides and marginal productivity is governed by scarcity relative to demand. Thus, for scholars in this school, 'capital' is a factor like all other factors and distinction between work and property has disappeared from view.

Robinson indicates that the second school to which Marshall belongs, does not take factors of production as simply given. They believe that they have a supply price. This is a certain rate of return which it is necessary for a factor to receive, to call a certain quantity of it into use. According to Robinson, the price is not a cost, but it measures cost, the cost of the efforts and sacrifices of the workers and capitalists. The efforts of workers just means work. The sacrifice of the capitalist is waiting. When profit is seen as the supply price of waiting, it leads

itself naturally to the interpretation that a certain rate of profit will induce a certain rate of accumulation. Thus, for any rate of growth of an economy, there is a particular level of profit normally expected on investment, and in competitive conditions, any particular line that promises more than a normal rate will quickly attract more than its share of investment.

This is where the subject of interest in this study (training) comes into the picture. Joyce, Woods and Hayes (1985) observed that through the eyes of the neo-classicists, the business organisation is viewed as a pure economic institution. From this point of view, especially Marshall's line, businesses are believed to be tightly constrained by market forces, and are unwilling to harm their competitive position. Thus, for the company to grow, there is a particular profit that is normally expected on investments. Decisions about expenditure on training are as a result, investment decisions, and training will therefore occur only if there is an expected favourable rate of return.

Also related to this is the 'human capital' theory which Goldstein (1980) identified as an economic theory that will have effect on training. Although Goldstein (1980, P. 18) refers to the 'human capital' theory as an 'innovation in economic theory', the 'human capital' theory seemed to have emerged as part of neo-classical economic theory, apparently because of Menger's (a neo-classicist)

first reference to capital as 'goods of higher order' (Schumpeter, 1976, P. 898). This means that Menger considered capital as including human beings and so sees human beings as assets. Thus, the 'human capital' theory considers training as investment in human beings.

According to Goldstein, the theory examines the return to this investment in the same way as the return to an investment in any other asset is analysed. In applying this to training, Becker (quoted in Goldstein, 1980) made a fundamental distinction between general and specific training. Specific training is that which prepares a worker only for work in the firm, while general training prepares him or her for work in other firms as well. Becker argues that since the worker is free to quit and carry his general skill to another job, the firm will not bear the cost of general training; instead, as a result of the operation of competitive forces, the worker will bear the cost of training, through reduced earnings while in training. The worker who is receiving specific training, will however, receive his full wage and the company will bear the cost of training.

This theory has been accepted and elaborated by many economists. Among them was Mincer (1962) who estimated that the rate of return in the investment in on-the-job training was favourable (in Goldstein, 1980).

Goldstein observed that some employers do act, at least in part, in a manner consistent with this theory. Some

refuse to train workers because of the possibility of losing trained workers, while others express a preference for providing only specific training because they fear losing to other companies, workers who have received general training.

In conclusion, the assumption of the neo-classical economic theory is that it sees human beings as only consumers and producers, as bearers of economic functions, and does not see them as human beings having powers and potentialities that can be developed for all round personalities. This assumption of the neo-classical economic theory and in particular the 'human capital' theory possibly informs the thinking of management of companies with regards to training, and would therefore determine whether they would have high or low involvement in, and commitment to training.

The Industrial Training Fund (ITF) Decree of 1971

The Industrial Training Fund was established by Decree No. 47 of 1971, for

promoting and encouraging the acquisition of skills in industry and commerce with a view to generating a pool of indigenous trained manpower sufficient to meet the needs of the economy (Federal Government Gazette, Oct. 1971, P. A207ff.)

It was the first of the three Manpower Training and Development Agencies created by the Federal Military Government during the Second National Development Plan Period (1970 - 1974). The other two are the Nigerian Council

for Management Development (NCMD) and the Administrative Staff College of Nigeria (ASCON).

The ITF's Governing Council's comprehensive policy on training was formulated in 1973 and it was called "Industrial Training Fund's Policy Statement No. 1". The Policy Statement covers, among others, the following measures by which the Fund actively supports training in the economy:

1. encouraging greater involvement of employers, particularly small employers, in the organisation and development of training programmes and facilities including the establishment of Group Training Schemes and Centres in certain critical areas of economic activity.
2. building of training facilities of its own in identified areas of national needs.
3. organising research and studies into training as support to other activities of the Fund.
4. establishing a uniform National Vocational and Apprenticeship Training Scheme in the country.
5. seeking to harmonise ITF's non-formal training programmes with the curricula of formal educational institutions.
6. bearing a proportion of the direct cost of on-the-job and off-the-job training of Nigerian employees.

It should be pointed out that it is in the first and the sixth functions of the ITF that provisions were made for

the training and development of workers in industries by their employers.

The Decree establishing the ITF stipulated that employers should contribute 3% of their annual payroll or half ($\frac{1}{2}$) of their turnover, whichever is greater, to the ITF as mandatory training levy. An Amendment Decree issued in 1973 reduced the employers' rate of levy to 2%. In 1975, this has been further reduced to 1% of annual pay roll.

The penalty for non-payment of the training levy within the time prescribed - not later than 1st April of every year - is equal to 5% of the amount unpaid each month or part of a month after 1st April of each year, in addition to full payment of the amount of outstanding levy.

This Decree thus ensures that employers pay 1% of their annual payroll to the ITF whether they engage in training or not. Even then, the ITF's system of Reimbursement and Grants Scheme makes it attractive for employers to engage in the training and development of their employees.

The Reimbursement and Grants Scheme of the ITF was first formulated, printed and distributed to all concerned in July, 1973. Under the Scheme, the Fund bears part of the cost of workers/employee training and further education by providing grants for courses undertaken. The Decree which established the Fund gave its Governing Council the power to allow a maximum reimbursement of sixty percent (60%) of an employer's contribution for each year to be paid to the company on account of approved on-the-job and off-the-job

training activities for that year. Once the conditions for paying reimbursement grants have been fulfilled, prompt payments are always effected. The aim of the Grants and Reimbursement Scheme is to encourage employers to train their staff in accordance with the needs of the various industries or group of industries:

Employers are therefore urged to intensify efforts to improve the quality of their manpower through appropriate and approved training programmes (Federal Government of Nigeria, 1991, P. 5).

Recently, the Industrial Training Fund (Amendment Decree 1989) was promulgated to amend the Industrial Training Fund Act of 1971 by, among other things, making it obligatory on the employers who contribute to the Fund to train their staff (ITF, 1991).

The ITF Decree of 1971 is an important factor in the extent of involvement in and commitment of employers to the training and development of their employees. This can be viewed from a two-fold perspective of the ITF Decree, first, as it relates to the neo-classical economic theory and second, as a government legislation that carries penalties for its violation.

From the perspective of neo-classical economics, when companies pay 1% of their annual payroll or turnover, whichever is higher to the fund and they train their employees, they are reimbursed 60% of the 1% paid. The companies are also entitled to having some of their

employees trained in the training programmes organised by the ITF. This way, companies are sure that they gain by what they pay to government because between the company's training programmes and the ITF's training programmes, the companies' employees receive training which, no doubt, are beneficial to the employers and so gives favourable return on the companies' 1% of payroll investment. In addition, companies do not just want to pay 1% of their annual payroll to government, they want to have part of it back. If they would have part of their money back by training, it is rational that many would rather train their workers than lose the whole of 1% of their payroll.

Some companies train their workers provided that the amount expended on training is not greater than what they paid to the ITF, except when there is a very pressing need for the training programme that would require more financial commitment on the part of the company. For some other companies, however, notwithstanding the ITF Decree, they train their employees (even when the cost of training is more than 1% of their payroll) as long as they have a need for such training and they are convinced that such an investment would pay off immediately or in the long run.

Regarding the ITF law as a government legislation, the Decree that established the fund stipulated penalties for its violation. The penalty for non-payment of levy within the time prescribed (not later than 1st April of each year) is 5% of the amount unpaid each month or part of a month

after 1st of April of each year in addition to full payment of the amount of outstanding levy. By the Amendment Decree of 1989, employers are expected to use their annual training levy to provide adequate training for their indigenous staff with a view to improving on the skills related to their jobs and forward the evidence of such training to the fund. Employers in breach of this provision shall be guilty of an offence under the decree and liable on conviction to #5,000 for the first breach and #10,000 for each subsequent breach, if a corporate body, and #1,000 or 2 years imprisonment without option of fine for the chief executive or secretary or principal officers of the company.

With this kind of legislation, it would be a rational expectation that companies in Nigeria would, in obeying this law, be involved in, and committed to training. This is because the Decree stipulates reimbursement for approved training programmes and penalties for non-payment of the levy.

However, the ITF law is said to be defective in its enforcement machinery because there is no provision to ensure compliance. The multinational oil companies while exploiting this loophole interpreted the provisions of the Decree as being optional. McOliver (1985), gave an example of such violations by the Shell Petroleum Development Company of Nigeria. According to McOliver, in a correspondence from the ITF Governing Council to the Shell BP, seeking for compliance with the provisions of the

Decree, Shell management replied by elaborating on the adequacy of the Corporation's training programmes, which it claimed were sufficient to exempt it partially from fulfilling the directives of the council. Shell management, however, consented to admit students from higher institutions for internship, for the purpose of skill acquisition under the industrial training programme, provided that the appropriate authority of the institutions negotiated directly with Shell's Management.

It is important to state that when, in the course of the search for data for this study, this investigator pointed out to ITF staffers that there may be violators of the provisions of the Decree, the staffers insisted (either deliberately or ignorantly) there were no violators because the Decree is law. It is also pertinent to state that an amendment Decree which was promulgated in 1989 to, among other things, make it obligatory on employers who contribute to the funds to train their staff does not seem to have helped much as there were companies that were reported to have paid the mandatory level but did not ask for reimbursement. The papers of the companies in question did not appear in the reimbursement files of the ITF before and after 1989. The plausible explanation is that they did not train.

Ethics or Moral Principles

Yet another factor that may determine the extent of training and commitment of private establishments to the

provision of training and development programmes for their workers is ethics or moral principles. The set of moral principles governing a particular society or group and the personal moral precepts of an individual play a significant role in guiding the conduct of managers and employers in the operation of an enterprise. Ethics is concerned with what is right or wrong, what is good or bad and what is objectionable or approvable in human behaviour.

Although some managers would say that any action that optimizes profit and that conforms to the law of the land is justified, such a standard is clearly insufficient as a moral standard. The idea that an action is morally justified if it optimizes profit is the moral of utilitarianism. Besides, an action that conforms to the law of the land may be morally unjustified if that law is objectionable on moral grounds. So what standards are sufficient? Or, put explicitly, how would one arrive at a sufficient moral standard? It seems that standards are set by the sources from which people derive their moral principles. Beach (1975) asserted that one major source from which people derive their moral principles are the doctrines - primarily religious and political - that have been promulgated over the years since the beginning of recorded history. Significant among these are the Mosaic Ten Commandments, the Athenian principles of democracy and individual excellence, the British conception of individual justice under the law, the United States Declaration of Independence, the Bill of

Rights of the U.S. Constitution, and the United Nations Declaration of Universal Human Rights. Another source of moral principles is the set of values and norms of a given society. These are said to be related to religious teaching, custom and tradition, and they vary from one society to another. A further guide to ethical conduct is the codes, and standards formulated by particular organisations, professions, fraternal groups and business groups.

Some people subscribe to a utilitarian reference in determining what is right and what is wrong. They hold that a proposed course of action should be judged by studying its impact upon all affected persons, taking note that a difference in motivational structure for actions and omissions that are being judged are irrelevant, if the consequences of an act or omission are exactly the same (Thomas, 1982). Specifically, utilitarian morality states that the morality of actions is to be judged by their consequences, namely their effect on aggregate welfare, general happiness or want-satisfaction.

It is important to note that while simple religious and political precepts may be desirable as a foundation for moral principles, they are seldom sufficient to guide human decisions that often require an evaluation of several competing interests. We must also recognise that generally accepted values change over time. In view of the fact that the business community exercises considerable influence on the economic, political and social life of a country like

Nigeria, the general public has a right to expect high standards of moral conduct from the corporation as an entity.

Thus, it is expected that the management of an enterprise should possess a set of moral principles that will govern its relation to its employees. Such relations could be in the areas of good working environment, provision of health facilities, a good wage structure, and prompt payment of salaries. Others will include ensuring very low turnover of employees, ensuring job security and provision of education for the employee, and ensuring the increased probability of the upward mobility of the worker.

Generally, the moral principles that have been adopted over the years by different bodies, peoples and nations can be categorized as follows: Egoism - the morally right actions are the actions which maximize the benefit of the individual agent in the long or short run; relativism - the morally right actions are those actions which are generally accepted in the given society as morally right; intuitionism - the morally right actions are those actions which accord with one's conscience or which one just 'feels' are right; subjectivism - the morally right actions are those which the individual agent approves of, or likes; Natural law - the morally right actions are those which are in harmony with the laws of nature; divine law - morally right actions are those commanded by God; Kantian - moral actions are those for which the rule governing the individual's action could

be willed to become a universal law for all rational beings; the humanist - morally right actions are those that develop the all round capacities and powers of human beings for the sake of their development.

For the purpose of this study, to see the extent to which moral principles influence the degree or level of involvement and commitment of private employers to the provision of training and development programmes for their workers, the United Nations Declaration of Universal Human Rights could serve as a basic for the moral assessment of the actions and omissions of enterprises. Even then, we will like to hinge most of our evaluations on the principles of Common Sense Morality, or morality of common sense as put forth by Sidgwick (quoted in Thomas, 1982).

The chief concern of this study is the training and development of the worker. This includes (1) training in the narrow, intensive and selective sense in certain skills, knowledge for some specific work and attitudinal changes; (2) in addition to the kinds of training in (1) necessary general training and any educational activity or opportunity that can make the employee realise his full potentials as a human being.

Because education or training and development are taken to be (1) a fundamental human right as declared by the United Nations and (2) an instrument for making the worker a real human being, any employer who fails to provide a certain degree of training programmes ought to be considered

as having done a wrong; an employer who fails to provide that kind of training and development programme that will make the worker realise his full potentials as a real human being should be deemed to have done a moral wrong too, as long as both stem from the same motivational structure. This means essentially that the basis for the moral assessment of the actions and omissions of enterprises with regards to training will be to a large extent the humanist view of morality.

The issue then really is whether the kind of moral principles adopted by enterprises (in the areas being studied) will determine their practice in relation to training and development - whether they will omit training and development, the degree to which they will provide for training and development, and the type of training and development programmes they will provide.

Perhaps a cursory look at what is meant by common sense morality would help shed more light on the process of determining whether moral principles are determinants of the provision of training and development programmes for workers.

According to Thomas (1982, Pgs. 37 - 38) common sense morality

condemns us for being indifferent to the suffering of others. Even so, it sharply distinguishes between this and our knowingly and needlessly contributing to the suffering of others. (That we are talking about voluntary behaviour throughout is to be understood). And it holds that the latter constitutes the greater moral wrong. It would seem that common sense morality is not without a point.

From the premise that a person knowingly and needlessly takes steps to cause others to suffer, it would certainly be correct for us to conclude that he desires to see others suffer and is sufficiently motivated by this desire that he brings about the suffering of others. For it is clear that such a person intentionally brings about this or anything else because he desires it. By contrast, from the premise that a person knowingly and needlessly lets others suffer, we cannot thereby conclude that he desires to see others suffer. For a person who is indifferent to the suffering of others might knowingly and needlessly let others suffer, though it follows from his being just this sort of a person. That he does not desire their suffering and therefore that the desire for their suffering cannot figure into an explanation of his knowingly and needlessly letting them suffer.

In this case, suffering is deprivation of the worker of a particular enterprise of training and development, resulting from the denial of training and development to the worker. The provision of a kind of training that will not promote the total or rounded development of the worker will also be considered as causing a kind of suffering. The absence of all relevant and necessary training and development programmes for workers in a corporation should be regarded as an omission, while the provision of such, whether adequate or inadequate, should be regarded as an action. According to the morality of common sense, we would want to know whether such action and or omission stem from the same motivational structure.

In this regard, we would want to know

- (1) whether the forms of training programmes provided for workers are necessary, relevant and adequate, such that

the worker can have a rounded development and become a real human being through such provisions.

- (2) whether the private establishments studied are committed to providing such training.
- (3) whether the forms of training provided by private establishments in the areas being studied have a motivational structure; that is, whether the corporations studied actually desire that their employees have those forms of training.
- (4) whether the omissions of training are intended; that is, whether there is a motive behind the omission of the training of workers. and
- (5) whether such omissions occur, not because they are desired, but perhaps because the primary roles of private enterprises - which are definitely non-educational - make them indifferent to the provision of training for their workers.

Thus, according to common sense morality, the desire to see workers remain ignorant and the desire to make them better workers alone are both morally objectionable as motivation of the private employer either in omitting training or in providing certain types of training respectively. If, however, the omission of training or the act of providing a particular form of training has no motivational structure, it may not be said that this is morally right, but whichever organisation has a motive for such action and omission would have done the greater moral wrong.

The point being established is that in the moral evaluation of acts and omissions as they relate to the provision of necessary, relevant and adequate training for the worker, common sense morality makes motivation relevant. In particular, acts and omission must not stem from certain motivations. Thus, an act and an omission - of provision of training for workers of an enterprise by the employer - which are known to have the same consequences are morally equivalent if and only if they stem from the same motivational structure.

It is important to note that acts, omissions and common sense morality as used above, and as was espoused by Sidgwick (quoted in Thomas, 1982) is different from the Moral Equivalence of Action and Omission (MEAO) as explained by Lichtenberg (1982) for example. The MEAO reads thus:

Every act and omission which are known by the moral agent in question to have the same consequences are morally equivalent (Thomas, 1982, P. 39).

In the MEAO, no reference is made to motivational structure, and this makes the difference between it and its common sense morality counterpart.

This means then that when the acts of providing inadequate training or omission of training have no motivational structure, although they have the same effect on the worker, we will not say it is morally right, but whichever organisation has a motive for such, will be considered as having done the greater moral wrong. This

means that whichever organisation provides the type of training that can make the worker thrive as a human being, training that can lead to his total development and to the realisation of his full potentials - will be considered to have done what is morally right.

The claim is that the extent and type of training and development programmes provided by private employers for their workers, their commitment to such programmes, might both stem from a desire to be morally upright or to be seen as being morally upright.

Some cynics might choose to ask - but why should private employers be moral? This question arises especially because the main goal of private employers is profit. To this, there is an array of answers as provided by Hospers (1970) for example. We ought to be moral because it is in our self-interest to be moral. That is, if a corporation provides adequate training and development programmes for its workers, it will continue to exist and fulfil the goals for which it was established. Another reason for being moral is divine command. That is, (1) we ought to be moral because God will reward a person for good deeds. This is compatible with the 'self-interest' view; (2) we ought to be moral because this follows from the love of the divine (in this case, a corporation) should obey him; (3) that the deed itself (training and development) is good. God commands that it be done, and a person decides to do it because God commands it; (4) that because God is our creator, and He is

entitled to our unquestioned obedience, when He commands that we be moral , we must obey him. A third reason for being moral is the appeal to common interest. In this case, a corporation may believe that the training of the worker could contribute to the development of the corporation and consequently to the total development of the nation, and on these grounds the corporation may accept the need to provide training for its workers. And lastly, a corporation may actually feel impelled to provide training and be committed to such provisions because it feels that it is right. That is, if the corporation is honestly convinced that it is the right thing to do, then it will want to provide adequate education for its employees.

There are still some who will not be convinced by the four reasons given above for being moral especially with regards to an enterprise. They believe strongly that business does not have any need for morality. As far as Friedman (1987, P. 1) for instance is concerned, the social responsibility of a business is

to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engage in open and free competition without deception or fraud.

Poff and Waluchow (1987) have, however, observed that for some others, there can be only one kind of morality, it is universal and applies to business. According to this view,

businessman and women must be judged morally responsible or irresponsible. There is no third option.

For the purpose of the present work, the correct position is that the corporation should be morally responsible because a corporation is also a moral agent: a moral agent is an agent which is capable of weighing reasons for alternative courses of action and has a sense of right and wrong which informs his or her socially significant actions. This is not in the sense of attributing intentions to the biological persons who comprise the board of directors, because in that case there will be no way of distinguishing a corporation from a mob. Our argument for believing that corporation is a moral agent is as put forth by French (1987) - that a Corporation's Internal Decision Structure (CID structure) determines corporate internationality. As we have earlier observed, corporate intentions and decisions which, of course, are expected to be implemented, and which are almost always implemented, can always be judged as morally wrong, right, good, bad, approvable, or objectionable.

In conclusion, enterprises should be moral, from the humanist view point, not the utilitarian view point.

Managerial Philosophy

The way in which managers treat and deal with their subordinates in order to accomplish the multiple objectives of the organisation is determined primarily by managements'

system of beliefs about human nature and about the determinants of cooperation in an organised endeavour. Beach (1975) has observed that the fundamental assumptions that leaders hold about human beings condition their actions. For instance, how would leaders go about ensuring performance from their subordinates? Will they trust their subordinates? Will they exert tight control over them? or, will, they create the conditions in which people can create, achieve and assume responsibility?

There are two schools of thought in managerial philosophy. Each of them portray a different frame of reference. The first is the "traditional" philosophy, certain principal components of which have been referred to, as 'Theory X', which is said to be the autocratic and pessimistic view of man. The other school of thought is the "modern" philosophy, called "Theory Y" which is said to be supportive management, management by integration and self-control, and the optimistic view of man.

The classic spokesman for 'theory X' is said to be the Florentine Nobleman and political philosopher - Niccolo Machiavelli. Others are Thomas Hobbes, Herbert Spencer and Adam Smith. According to Douglas McGregor, the traditional managerial view regarding people in a work organisation is that the average worker has an inherent dislike of work, avoid responsibility, lacks ambition and wants to be closely directed. Faced with this fundamental "fact", the only option open to the manager is to exercise close control and

to coerce and threaten workers in order to get them to exert sufficient effort to attain organisational objectives (Beach, 1975).

If this is considered in connection with the extent of provision of training by private employers and their commitment to such, it can be inferred that if the management of a company believes that workers have an inherent dislike of work and they avoid responsibility, then the management of such a company will not bother to provide training and development programmes for its workers. They will have the believe that if workers are to go for such programmes, aside from the fact that such a 'liberty' will disturb productivity, it might just be an excuse for workers who - are thought to be inherently lazy anyway - to stay away from work. If management holds the 'theory X' to be true, they will in all probability not be bothered about providing training and development programmes for workers, unless some other important factors (perhaps economic) influence their decision positively in this regard.

The modern philosophy of management considers human beings to be potentially creative, trustworthy, and cooperative. They are not inherently predatory. Human beings are not predisposed by inheritance or instinct to be either mean or good. Rather, their behaviour reflects the character of their life experiences as they mature. Human beings are said to have the potential for growth, achievement and constructive action with others. Consequently, it is the job

of management to nurture and tap man's productive drives (Beach, 1975). The writings of such behavioural scientists as Douglas McGregor, Rensis Likert, Chris Argyris, Frederick Herzberg, Blake and Mouton are richly illustrative of this modern school of thought about management.

If management considers human beings as having the potentiality for growth, achievement and constructive action with others, and believes that it is the job of management to nurture and tap human's productive drive, then, management ought to be conscious of the fact that a very good way of nurturing and tapping human productive drive is through training. Managers who hold these views will most probably be willing to train and develop their workers and be committed to providing training for them.

Although this philosophy is said to be ahead of actual practice in industry, some executives in progressive organisations are said to be generally familiar with these ideas on the intellectual level and some apply them in their day to day activities.

Social Responsibilities

Increasingly in recent years, it has been emphasised that private establishments must bear substantial responsibilities, because we live in a very interdependent world. Beach (1975) and Child quoted in Joyce, Woods and Hayes (1985), for example, have claimed that urban crisis, air and water pollution, strikes, plant shutdowns and

expansions of employment all have significant impact upon both business and the general public. For this reason, private establishments have a stake in the welfare of the people and the nation. In the United States of America, for example, the enthusiasm with which big businesses across the country were said to have contributed to the National Alliance of Businessman which was launched may back in 1960 to help solve the problem of the hard core unemployed, attests to the recognition of their real social responsibilities.

Ten major areas in which companies, on the average, function in the public and social sphere have been identified. These are economic growth and efficiency, education, employment and training, civil rights and equal opportunity, urban renewal and development, pollution abatement, conservation and recreation, culture and arts, medical care and government. Under employment and training, the following areas were identified: active recruitment of the disadvantaged, functional training and remedial education, provision of day-care centres for children of working mothers, improvement of work/career opportunities and retraining of workers affected by automation or other causes of joblessness.

It can be deduced from the foregoing that if private establishments recognise that they have a responsibility for the welfare of the society, they may feel impelled to provide and be committed to the provision of training for

their workers and also for others who are not their workers, customers or consumers.

Although most of the arguments for social responsibility as a factor in the degree (or level) of participation and commitment of companies to training seems derived from ethics or moral principles, there are theorists who have linked the development of socially responsible business practice with the divorce of ownership and control in large joint stock companies. This indicates an increase in socially responsible behaviour with increases in the size of the shareholders. It is also often assumed that larger companies have more financial strength and are thus less exposed to the vicissitudes of market forces. It is therefore taken for granted that there is a link between corporate size and socially responsible business behaviour (Joyce et al., 1985).

Size and Nature

Other factors that may affect the extent of involvement in and commitment of companies to training their workers are the size and nature of the companies.

The size and the nature of a company may determine whether the company provides training and the extent of such provision, and whether the company is committed to training. It is plausible to expect that a company having a large number of employees or that has a high turnover and investment capital will be involved in and committed to a

great extent in the provision of training. By way of example, it is expected that large companies which make use of computers, complex equipment and machinery and those that render services to communities will be willing to fund and provide facilities for the training of their workers.

In this regard, Tabbush (1977) observed that the volume of a firm's training activities will vary with its absolute size. Consequently, in comparing extent of training activities, it is necessary to adjust for this volume effect in order to isolate the pertinent differences arising purely from differences in relative sizes.

Joyce, Woods and Hayes (1985, P. 13ff) confirmed the view that the size of a company is a factor in the extent of the provision of training when they observed that "... for the small firms, the decision not to invest in general training can be highly rational". It should be noted that their view regarding the size of a company and the provision of training stems from the fact that they distinguished between specific and general training and came to the conclusion that a firm that undertakes general training may be of such a small size that it adds an insignificant amount to the stock of trained workers in the economy. It should be pointed out that the fact that the contribution of small sized companies to the pool of trained workers in the economy is insignificant should not stop such companies from providing general training.

In considering how size will affect the commitment of a company to training, Nadler (1970) argued that the size of a company may be no indication of the company's commitment to training, especially when commitment is viewed from the point of view of the available physical facilities for training. He argued that since a large amount of training is conducted away from the place of work, companies may not need specific physical facilities that are designated only for training.

Darkenwald and Merriam (1982, P. 171) have, however, observed that there has been a trend in recent years for larger companies to conduct at least a portion of their education programme in residential education centres that are in some way like small Universities. They gave the example of the Xerox's Industrial Center for Training and Management Development which was described by its Director thus:

The center... has accommodations to handle 1,014 students in residence at one time. The actual square footage is 1,200,000. We have very complete audiovisual capabilities and closed circuit TV in all the classrooms The center is pretty much self contained. We have a barber and beauty shop, medical facilities, gift shop, newsstand, small resource center, library, cocktail lounge, snack bar and dining room that will accommodate 750 people at one time.

Darkenwald and Merriam (1982) observed that the Xerox Center, like most others, operates year long at full capacity and provides an extensive array of courses in

managerial and technical subjects. At the heart of the center is its Education Services Group, which the center's Director describes as "a small cadre of professional educators, Ph.D's who have responsibility for making sure that everything we do is educationally sound ... in terms of design, content and teaching methodology". The actual instructors are described as the company's best performers in sales and service. They are given intensive training in teaching methods in preparation for a three-year tour of duty at the center. The instructors are characterized as highly motivated, for if they perform well at the center, they are guaranteed promotion to a first line management position. Darkenwald and Merriam (1982) concluded, and quite rightly too, judging by the evidence, that "Xerox and similar corporations take education very seriously".

Concluding Remarks

It is necessary to make some specific remarks about the factors reviewed above, because this would help answer the second part of the main question of this study. That is, what kinds of companies provide the most training and are most committed to training and WHY?

Although the neo-classical economic theory sounds rather cold and calculating, it would seem to be a major factor or determinant in the degree of involvement in and the commitment of companies to training, given that many companies still hold the view that expenditure on training

of personnel can be justified only in so far as there is a resulting net contribution to the basic goals of the organisation, the accumulation of profits (Heinecke, 1981).

The ITF Decree of 1971, when viewed in relation to the economics of training, looks more plausible as an explanation of the level or degree of involvement of companies in training and commitment to same than when it is viewed as a government legislation that carries penalties for its violation.

There is every reason to believe that ethics or moral principles are also part of the reasons (although they may not be the main reason) why enterprises are involved in and perhaps committed to training and development of workers. This is because corporate intentions, decisions and actions or omissions can always be judged morally wrong, right, good, bad, approvable or objectionable.

It seems that managers of companies who believe the theory X rather than theory Y would have a low level of involvement or participation in training and commitment to training of workers.

When arguments in favour of socially responsible behaviour by companies are derived mainly from ethics or moral principles, it would seem that the companies would probably have high involvement and commitment to the provision of training. If, however, socially responsible behaviour is dependent on increases in the size of the body of shareholders, involvement in training and commitment of

companies to training may swing either way (either high or low).

Concerning the nature and size of companies, there seems to be general agreement regarding the size of companies and their level of participation in training and their commitment to training. It appears that the larger the company, the larger the volume of its training activities and commitment to training. As for the nature of the company vis-a-vis involvement in training and commitment to training, there does not seem to be much in the literature to show differences in involvement and commitment arising from whether the companies are manufacturing - service companies or purely service companies, or whether the companies fabricate steel, manufacture textile, or are conglomerates, a chemical/pharmaceutical company or a company which belongs to the banking and finance sector.

The Resources Available for Training and Development

Programmes in Private Establishments

The resources available for the training of workers in enterprises are human, financial and physical resources. The human resources consist mainly of trainers of workers and the training manager while the physical resources comprise buildings and equipment.

Trainers in enterprises are often drawn from the organisation itself and they are called "in-house" people (Nadler, 1970). These people are said to be the company's

best performers in its different departments. They are salesman/managers, foremen, supervisors etc. who are given intensive training in teaching methods in preparation for their work as instructors. Such instructors are said to be highly motivated because if they perform well as instructors, they are guaranteed promotion. Darkenwald and Merriam (1982) gave the example of the Xerox's International Centre for Training and Management development. They quoted the Center's director as having described the educational services group as:

a small cadre of professional educators, Ph.D's who have responsibility for making sure that everything we do ... is educationally sound ... in terms of design, content and teaching methodology. The actual instructors are the company's best performers in sales and service, who are given intensive training in teaching methods in preparation for a 3 year tour of duty at the center.

At times, the training department may choose to use trainers who are not members of that particular work organisation. These trainers are referred to as "out-of-house" people. In this case, a company may decide to use university lecturers as trainers and, at times, they employ the services of some consultancy firms that consist of both academics and non-academics for the training of their workers.

Nadler (1970) has identified budgetary allocation as the most common method by which companies finance the education of their workers. This may take either of two

forms. One form of budgetary allocation is the provision of funds for the training unit, and the allocated fund will be used for training and development purposes. An alternative approach is to give the central training unit a small budget and have other units of the company include training expenditures in their departmental budgets. Thus, as each unit trains its workers, it pays for the training. This means, in essence, that the training unit charges for its services.

Aside from financing the training of workers within the company, many companies pay the cost of the education of their workers in a School or College (Darkenwald and Merriam, 1982).

On the issue of financing training activities of employees, Goldstein (1980) quoted in Darkenwald (1983), pointed out that 6.3 million employees participate each year (in the U.S) in corporate sponsored education activities and that corporate education expenditures amount to approximately 10 billion (US) annually.

In the area of buildings and equipment for the training of workers, Nadler (1970) observed that companies rarely have physical facilities designated for training and development and that trainers often use conference rooms and other multipurpose facilities for the training of workers. He added that companies with large turnover or those requiring special entry level may make special provision for a training facility. In the same breath, he pointed out that

the size of a company may be no indication of the company's commitment to training "since the vast amount of training is conducted away from the place of work".

Twelve years later, Darkenwald and Merriam were less ambiguous in their views regarding physical resources for the training of workers in enterprises, especially the large ones. They observed that although education in most companies is highly decentralised and classroom can be found in virtually every plant or office building, there has been a trend in recent years for larger companies to conduct at least a portion of their education programme in residential education centers that in some ways are like universities.

Apart from operating their own training programmes, companies also collaborate with colleges, universities and other educational institutions to provide certain types of educational experiences for their employees, using the institution's own facilities on their campuses.

Also in the U.S. and Canada, a few courses, and at times, entire degree programmes are offered by colleges and universities on-site for employees of companies. The training trailer, which is a mobile unit, ranging from a mini-bus to a large tractor-trailer which has been equipped with appropriate learning aids are used to provide on-site education programmes for workers. The training trailers are useful in situations where the employee is in constant contact with the public and where it would be too expensive to take him away for training.

Other Forms of Adult Education Programmes that
Private Enterprises Provide

One form of adult education programme that companies provide apart from training their workers, is customer/consumer education.

Nadler (1970), Tabbush (1977) and Darkenwald and Merriam (1982) have observed that training for customers is one of the major changes resulting from the impact of technological advancement. According to them, products are becoming more and more complicated, requiring manufacturers to provide training for their customers on installation, operation, and maintenance of the product so that their customers can make effective use of the products or services that they have purchased. Nadler (1970) observed, for example, that since World War II in the U.S., purchase contracts awarded by the defence establishment have usually included provisions for the supplier to provide training to the government that will be making use of the equipment. It can be seen then, that the educational role of enterprises is not confined to employee training and development alone.

From another perspective, certain companies provide training programmes for "good will" or for the purpose of promoting their product. According to Darkenwald and Merriam (1982), many retail establishments such as supermarket chains and companies that sell sewing machines, home

computers, building supplies and the like offer short courses for customers and potential customers.

Although the sales personnel of some of the companies that provide customer/consumer education have the responsibility for training customers, many companies maintain special customer education departments for this purpose, while others operate residential training centers where courses range in duration from a few days to several weeks. By way of example, telephone companies throughout the U.S.A. are said to have packaged programmes that they take to the office of a subscriber to train the subscriber's personnel in telephone manners and telephone usage. Firms in the field of electronic technology are said to have customer schools in strategic cities throughout the U.S. The IBM, Honeywell and RCA are said to be among the leaders in the area of provision of various kinds of permanent installations that serve the training needs of customers. The Digital Equipment Corporation, also in the U.S., offers about 100 different courses a year at its residential education centre (Nadler, 1970 and Darkenwald and Merriam, 1982).

On the practice of provision of training for customers, Tabbush (1977) indicated that in 1968, IBM spent 60-70 million dollars for customer training programmes, an amount only slightly less than that expended by IBM for the training of its own employees. Also, automobile manufacturers were estimated to have spent over 20 million

dollars in 1971 to train mechanics for their franchised dealers.

Some companies have begun to train persons who are not their employees, customers or representatives of their organisations. In this case, the expertise of companies in training their own employees is brought to bear on the needs of individuals who are not yet in the labour market and who will not be able to enter the market without some skills and or knowledge, and who need special assistance.

Yet another form of adult education programme provided by companies - other than training their workers - is the education of the general public. In the U.S. for example, utility companies offer short courses on energy conservation, banks and brokerage firms offer courses on how to invest money, insurance companies on health and physical fitness and so on.

Theoretical Framework

The Neo-Classical economic theory especially the branch represented by Marshall's views and a strand of it, the 'human capital' theory as can be found in Menger's meaning of 'capital' and as was explained by Goldstein (1980) and Joyce, Woods and Hayes (1985) forms the framework for this study. According to them, business organisations are regarded as pure economic institutions, with the consequence that they are highly constrained by market forces. They do not want to harm their competitive position in the market,

and consequently most of their investments (material, human and physical) are viewed in terms of whether they will yield favourable returns. Given that all investments are viewed in terms of returns on them, investment in human beings is also viewed in terms of the returns on such investment, just exactly the same way that the proponents of the theory view investment in other assets. Decision on training are therefore investment decisions, such that training will occur if there is a guarantee of a favourable rate of return on it.

The 'human capital' theory is considered a suitable basis for this work because some employers are said to act, at least in part, in a manner that is consistent with the above theory. Added to this reason is the fact that some of the identified possible factors for employers' low or high participation in and commitment to training actually go back or are traceable to the 'human capital' theory. An example is the ITF Decree of 1971, when it is viewed, not as a government legislation by the companies but as an economic tool. This is because companies can pay the stipulated levy to ITF, train their workers or let ITF train them, get reimbursed 60% of levy for training, and then reap the gains from training in terms of improved efficiency of workers, better work methods, and attitudes, more confident workers and so on. This is an indication of a favourable rate of return on the 1% of payroll 'invested'.

In addition, if management conceives of employees as possessing the potentiality for growth and achievement (as espoused in Theory Y), and considers that this can be nurtured by training, such conceptions are not mainly a product of management's 'love' for its employees. The first thing that comes to the manager's mind is how nurturing such potentialities can help to achieve organisational goals. With such considerations in view, the manager is again viewing nurturing employee potential in terms of what the benefits of such action would be for the company. This is not to underestimate the genuineness and efforts of certain managers and indeed organisations who see their companies as places where individual employees can have well rounded development through training.

Although the 'human capital' theory, which is a strand of neo-classical economic theory sounds rather cold and calculating, attempts will be made to find out how far this theory explains the high or low involvement in and commitment of companies to training.

Research Hypotheses

As a result of the review of relevant literature, the stated purposes of this study, and the theoretical framework of this study, the following hypotheses were formulated:-

A(i) 1 There is no significant difference in the commitment rating of manufacturing-service companies and service companies to training.

- A(i) 2 There is no significant difference in the commitment rating of companies that are giants in their own sectors (industries) and the other (large) companies to training.
- A(ii)1 There is no significant difference in the amount expended on the training and development of workers in the manufacturing-service companies and in the service companies.
- A(ii)2 There is no significant difference in the amount expended on the training and development of workers in the companies that are giants in their own sectors and the other (large) companies.
- A(ii)3 There is no significant difference in the amount expended on training and development per worker in the manufacturing-service companies and in the service companies.
- A(ii)4 There is no significant difference in the amount expended on training and development per worker in the companies that are giants in their own sectors and the other (large) companies.
- B1 There is no significant difference in the percentage of workers that received training in the manufacturing-service and service companies.
- B2 There is no significant difference in the percentage of workers that received training in the sector-giant and sector-large companies.

- C(i) 1 There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, giant and large companies and the size of the workforce of the companies.
- C(i) 2 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, giant and large companies on training and the size of the workforce of the companies.
- C(i) 3 There is no linear relationship between the percentage of workers that received training in manufacturing-service companies, in service companies, in all companies, in sector-giant and sector-large companies and the size of the workforce of the companies.
- C(i) 4 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training and the commitment rating of the companies.
- C(i) 5 There is no linear relationship between the percentage of workers trained by manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies and the expenditure of the companies on training.

- C(i) 6 There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, sector-giant, sector-large companies and the percentage of workers that received training provided by the companies.
- C(i) 7 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant, sector-large companies on training per worker and the workforce of the companies.
- C(i) 8 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant, sector-large companies on training per worker and the commitment rating of the companies.
- C(i) 9 There is no linear relationship between the expenditure of manufacturing-service companies, all companies, sector-giant and sector-large companies, service companies on training per worker and the percentage of workers trained.
- C(ii)1 There is no relationship between the percentage of workers trained by companies, the commitment rating of companies, the expenditure of companies on training, the expenditure of companies on training per worker on the one hand, and the turnover of the companies on the other hand.

- D(i) 1 There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training per worker trained in professional/specialist and occupational vocational training.
- D(i) 2 There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training per worker trained in safety training.
- D(ii) 1 There is no significant difference in the percentage of total expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on professional/specialist and occupational /vocational training.
- D(ii) 2 There is no significant difference in the percentage of total expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on safety training.
- D(iii)1 There is no significant difference in the percentage of total number of workers in (a) manufacturing-service and service; (b) sector-giant and sector-large companies that received

professional/specialist and occupational/vocational training.

D(iii)2 There is no significant difference in the percentage of total number of workers in (a) manufacturing-service and service; (b) sector-giant and sector-large companies that received safety training.

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CHAPTER THREE

RESEARCH METHOD

This chapter gives the details of the procedures and strategies that were adopted in this study. It describes the construction, validation and reliability determination of the research instruments; the sampling procedures and the collection and treatment of the data collected.

Research Instruments

The instruments that were used to gather the data for this study are:

1) Archival Research and Desk Work

This involved checking on the policy statements of companies for information regarding specific policy statements on the training and development of workers, dissemination of information regarding health and safety regulations, and the demand for, and payment of compensations amongst others.

The desk work also involved the search through various documents of the companies studied to get at the turnover, the capital invested and the number of workers in each company between 1978 and 1990. In addition, the documents of the companies were checked to get at the commitment of companies

to the training and development of their workers as reflected in the nature of training and development programmes that are available to the workers and the resources-human, financial and physical - that are available for such.

These and other vital information needed for this study were made available by the companies studied, either directly at the companies, or indirectly (at the ITF Lagos Area Office and through the companies' annual reports).

2) Observation

In almost all the companies visited, the investigator was able to look at the physical facilities that are available for training. The investigator also watched one training session at one of the companies selected for this study.

3) Questionnaires and Interview Guide

Three questionnaires and an interview guide were designed and used to gather a lot of the data needed for this study. They are:-

The General Data Questionnaire (GDQ) - Appendix I

Interview Guide for Personnel Managers (IGPM) -

Appendix II

Personal Benefits Questionnaire I (PBQI) - Appendix III

Personal Benefits Questionnaire II (PBQII) - Appendix IV

The GDQ was completed by personnel managers, training managers, finance managers and at times, officers who were designated to do so. The investigator used the IGPM to elicit information from the personnel/training managers of the companies studied. The PBQ I and PBQ II were completed by sales managers or supervisors or heads of units and workers respectively.

The decision to design the GDQ, IGPM, PBQ I and PBQ II for this study was necessitated by the non-availability of a suitable instrument for assessing the extent of involvement and commitment of private enterprises to the training of their workers and the factors that influence the decisions that the management of such enterprises take regarding the provision of training programmes. For instance, an earlier write-up that is related to this study, by Goldstein (1980), looks like a general critique of the available works in the area of what he called "training and education in industry". He focused attention on the extent or prevalence of training in industry. He was, however, not systematic in his approach. The methodology adopted by Goldstein would therefore, not fulfil the purposes of this work.

Also, in the questionnaires earlier used for studies on education of workers in private establishments, the attention was not on training and development. As a matter of fact, such questionnaires were used to elicit information from workers in

the area of trade union consciousness. Whereas the focus of this study is the private establishment/employer as the providing agency, or the training programmes provided for the worker by the private employer, the trade union was the providing agency of the education programmes studied in the past, and for which questionnaires are available.

Description of Instruments

The first instrument of the study - desk work - looked through the policy statements of enterprises, their annual reports, health and safety regulations and or posters on health and safety. Some of the other vital information available through desk work also helped complete some sections of the GDQ which some officials were unwilling to complete for various reasons. Such information included the turnover of companies, expenditure on training and capital invested by the companies.

What observation sought to achieve was to see the training centres or room(s) (if any) that are available for training, their capacity or size, and the equipment in them. It also sought to know who the instructors were and the group of adults in training. The other relevant questions for observation are: does the companies have libraries? and what other facilities are available for training workers?

The GDQ, which is a questionnaire and in tabular form, asks about the type of industry, the name of the company, whether the company is a manufacturing and or service company and the designation of the officer filling the form. The first column of the table requires information about the year of training (1978 - 1990). This is followed by the columns for the investment capital of the company for each year, the turnover, the capital invested in training and development, number of workers that received training and development programmes sponsored and or organised by the company, specific forms of training (such as apprenticeship training, health and safety training, training in salesmanship et cetera, as indicated below the table on the main page of the GDQ) that workers received and the workers' designations (e.g. salesmen, production workers, clerks). The other forms of training programmes that companies provide for others who are (a) their customers/consumers and (b) who are neither their employees, nor customers/consumers, were also to be indicated on the data format (GDQ). The amount that the companies expended on such provisions was also expected to be indicated. The last column is for the total number of workers in each of the companies.

The IGPM sought answers to questions concerning the determinants of the policy that the company adopts towards the training and development of workers, the forms of training

programmes that are made available to workers, the forms that are emphasized and favoured, and the resources - human, financial and physical - that are available for training. This instrument also sought to know whether the company liaises with some educational institutions or the training schools/centres of other companies for training, whether the company has specific forms of health and safety regulations and whether the companies train persons other than their workers and why?

It would be realised that the questions used as guide for interviews with personnel/training managers are not altogether different from the data provided in the GDQ. The advantage of having the same questions asked in an interview is that first, it helped to double check or corroborate some of the data provided in the GDQ. Second, during interviews the researcher was able to get more responses, details, explanations and depth of feelings of management on training, how it is done and why it is done the way it is done.

The PBQ I which was completed by Heads of Units/Departments, sales managers, supervisors, foremen and persons who are in a position to supervise, direct, motivate and train workers, asks general questions regarding the type of industry, the name of the company, whether it is a manufacturing and or service company, the designation of the officer who completed the questionnaire, the number of years she/he has spent in the company and the number of years spent in the

present position. The PBQ I asks questions regarding whether supervisors/heads of units insist that their workers adhere to safety regulations, whether they are always happy to see their workmen go on training, the number of reported cases of accidents since his or her assumption of duty. Nine other questions to which the heads/supervisors were to respond on a likert scale were indicated. The questions cover the areas of efficiency of worker after training, the worker's feeling about him/her self, his/her occupational, salary, living conditions after training and adherence to safety regulations.

The PBQ II, which was completed by the workers, asks the same set of preliminary questions as in PBQ I. The main body of the questionnaire asks the worker to complete the table on the first page. The table has a column for years of training (1978-1990), followed by the column that asks about the number of times the worker participated in training programmes provided and/or sponsored by the companies in each year. Next to this column is the one that asks about the providing institution or agency of the training programme; how long the programme lasted is expected to be indicated on the last column. Like the IGPM, the PBQ II also helped double-check some of the information provided in the GDQ. At the same time, it helped provide answers to the question of whether some sets of workers may, by the nature of their work and other reasons, enjoy more training than others.

This questionnaire also sought to know whether the worker has had accident(s) as a result of his/her present job, and the ways by which s/he was compensated by the employer. In the PBQ II, workers were also requested to respond to a set of statements on a likert scale. The statements in the PBQ II are exactly the same as in the PBQ I. The only difference is that the individual worker assesses his own feelings, output, occupational, salary levels etc. after training.

Validation of Instruments

It is expected that a valid instrument would reflect reality. An instrument is said to be valid (content wise) when it measures subject matter (contents) and the contents are seen to be adequate to meet the objectives of the research (Wright, 1976).

In order to ascertain the content validity of the GDQ, IGPM, PBQ I and PBQ II, this investigator carefully examined each of these instruments and the purposes that they were to serve, in relation to the overall purpose of this study and the hypotheses that were formulated. In addition, an adult education expert who examined the purposes of this study and all the items in the instruments came to the conclusion that their contents will help to achieve the purpose of this study.

Reliability Determination of Instruments

To test for the reliability of the GDQ, IGPM, PBQ I and PBQ II, this investigator carried out a pilot study of the International Breweries Ltd. (IBL) Ilesha, Osun State. The personnel manager, the training manager and finance manager and 12 employees were involved in the pilot study.

After the GDQ, IGPM, PBQ I and PBQ II had been administered, the responses to those items (3 and 4) in the PBQ II for which this investigator could not envisage the responses of the workers (because they are open ended questions) which were the same, similar or totally different, were grouped together. The percentages of the workers that responded to each group within each item were noted.

When a re-test of the PBQ II was carried out 7 days later, the same treatment as in the first test was given to the second set of responses. The percentage of the two sets of responses were then compared.

For the GDQ, IGPM and the PBQ I, the first set of responses were simply compared with the second set of responses from the re-test.

There was a difference of 5% (95% agreement) in the responses of the population sample to most (97%) of the items in the GDQ, IGPM, PBQ I and PBQ II. This percentage was judged high enough to use the instruments.

The Study Population and Sample

The population for this study is made up of privately owned companies. It is important to state that since the defence of the proposal for this work in 1991, many of the private companies have gone public, thereby becoming public limited companies (plcs). Their new status as PLCs did not affect the choice of companies because for this study, the important factor in the ownership of a company is that it should not belong to the government. That is, government should not have the controlling shares (50% and above) in the company.

The sample of the population for this study comprises 14 companies that were systematically selected from different categories of business in the private sector of the economy. They are auditing, banking, brewing, computer and the mixed business (conglomerates). Also sampled were the petrochemical, chemical/pharmaceutical and textile businesses. Except for the brewing and computer businesses (where data collection for a second company proved very difficult), this investigator sampled 2 companies from each category of business. One of the companies for each category was regarded as small, not as in a small scale industry, but small in relation to the size of the other (or second) company that has been selected for study in a particular type of business. The 'small' company was thus regarded as small in terms of its turnover, its investment capital and the number of its employees, between 1978 and

1990, when compared with the second company in the same category. Hence, the Societe General Bank, for example, will be considered a small company when compared with the Union Bank of Nigeria. For the purposes of this study, the 14 companies studied will be referred to from time to time as "sector large" for the 'small' companies and 'sector giants' for the 'large' ones. The word 'sector' here refers to the category from which the company was chosen. The use of the word was necessitated by a desire to ensure that in the course of reading this work, the words 'large' and 'giant' in relation to the size of the company do not get the reader confused.

In addition, in selecting the companies to be studied, the investigator considered whether they are manufacturing and service companies or purely service companies. In this regard, three of the categories selected, comprising 5 companies, were purely service companies (S) while the rest, 9 companies, from 5 categories are both manufacturing and service companies (MS).

Table 3.1 shows the companies that were used for the study by the type of business activity, size and whether they are MS companies or S companies.

It is important to state that although the 14 companies above formed the core of the analyses and discussions for this work, additional information was obtained from some other

Table 3.1

Companies by Type of Business Activity, Manufacturing-Service/Service (MS/S) and Size

Group	Type of Business Activity	Names of Company	(For analyses and discussions)	MS/S	Sector Size
A	Auditing	(1) Akintola Williams & Co. (2) Peat Marwick Anl Ogunde & Co	(S2) (S1)	S S	Large Galnt
B	Banking (Commercial)	(1) Societe Generale Bank (Nig.) Ltd. (2) Union Bank of Nig. Plc.	(S4) (S3)	S S	Large Galnt
C	Brewing	Guinness Nig. Plc.	(MS1)	MS	Galnt
D	Computer	NCR (Nig.) Plc.	(S5)	S	Galnt
E	Mixed Business	(1) Paterson Zochonis Industries Ltd. (2) United African Company Plc.	(MS2) (MS3)	MS MS	Large Galnt
F	Chemical/Pharmaceutical	(1) Hagemeyer (Nig.) Ltd (2) Nigerian Hoechst Plc.	(MS6) (MS7)	MS MS	Large Galnt
G	Petrochemical	(1) National Oil and Chemical Marketing Coy. (2) African Petroleum	(MS4) (MS5)	MS MS	Large Galnt
H	Textiles	(1) Sunflag (Nig.) Ltd. (2) Five Star Industries	(MS8) (MS9)	MS MS	Large Galnt

companies. The companies are: Arthur Andersen & Co., AI1, (Auditing); International Breweries Limited, AI2, (Brewing); Chemical and Allied Products Plc, AI3, (Chemical/ Pharmaceutical); GDM Textiles, AI4, (Textile Manufacturing); The Concord Press, AI5 and The Punch Newspapers, AI6 (publishing).

The information obtained from these companies helped shed some more light on training practices of companies generally. In the analyses and discussions in this work, these companies are referred to as "Additional Information" (AI) 1, 2, 3-6.

All the 14 companies that formed the core of the analyses and discussions of this study either responded to all the questions in the GDQ or responded to at least half of the questions directly or indirectly. Only 3 personnel/ training managers representing three (3) companies (MS7, MS6, and S1) out of the 14 companies responded to the IGPM. It is pertinent to state that 6 other personnel/training managers representing all the 6 companies that provided additional information responded to the IGPM.

Concerning the PBQ I, altogether, 8 heads of units/ departments from 3 companies out of the 14 companies selected for this study responded to the questionnaires. The companies are those that responded to the IGPM above. The distribution is as follows: MS7, 5; MS6, 1; S1, 2. It is important to state that the numbers indicated were returned. Six PBQ I were

expected to have been completed in each company. In company MS7 for example, those that responded are the plant director, warehouse manager, accounts manager, commercial manager and the production manager.

As in the PBQ I, 28 PBQ IIs were returned out of the 72 administered in the 3 companies mentioned in PBQ I above. An examination of the questionnaires showed that only 26 of the 28 returned were useful. The distribution is as follows MS7, 13; MS6, 10; S1, 3. At company MS7, those who responded are among others, laboratory technologists, marketing personnel, medical representatives (pharmacists), drivers and secretaries/receptionists. Again regarding companies that provided additional information, company AI 2 provided useful information through the 22 PBQ IIs that the company turned in. Out of the 22, 12 were found to be useful.

Administration of Instruments

Attempts were made to administer the instruments in the companies selected as the sample for the study. The degree of response, however, varied from company to company, and this would explain the variation in the source of the data collected from the companies.

As indicated earlier, fourteen companies formed the core of this study, and the investigator collected the necessary data from three sources. For some of the companies, the data

were collected from source (that is from the companies) because the companies made the information required available. However, in all those companies where the data needed were not made available after several futile attempts, the investigator turned to consulting the Industrial Training Fund (ITF) records, as well as the published annual reports of the companies concerned.

The reasons for the non-cooperation in the supply of information were numerous. They ranged from changes in the personnel occupying the contact posts, reticence and wariness of management about providing the types of information sought, to logistic problems of coordinating the collection of the questionnaires from the different branches of the company by the contact official.

The investigator also administered the instruments of the study in companies that provided additional information. The data collected were used as illustrative evidences of issues related to the study.

Treatment of Data

Data collected from the 14 selected companies provide estimates of the following variables (or quantities)

- i) number of workers in a company as one measure of the size of the company.

- ii) investment capital of a company as one measure of the size of the company.
- iii) turnover of the company as another measure of the size of the company.
- iv) percentage of workers in the company that received training and development as a measure of extent of involvement in training and development activities.
- v) commitment rating of the company as a measure of the commitment of the company to training and development of workers.
- vi) expenditure on training and development activities provided for workers of the company as a measure of the commitment of the company to training.
- vii) human and physical resources available for training and development of workers as a measure of commitment of companies to training and development.
- viii) personal benefits of training to workers as a measure of both involvement and commitment of companies to training.

The bulk of these data were extracted from the GDQ, IGPM, PBQ I and PBQ II. Table 3.2 gives average measures of the variables that will be required for statistical analyses. Statistical analyses of data have been conveniently divided into those related to the following response variables.

Table 3.2

Average Measure (over 13 years) of Variables for Statistical Analyses for the 14 Selected Companies

Company	Total No of Workers	No. of Workers Trained	Percentage of Workers Trained (%tage)	Commitment Rating (%tage)	Expenditure (#) on Training and Development of Workers	Expenditure on (#) Training per worker	Turnover of Company	Investment Capital of Company
S1	410	350	85.37	50.00	250,00.00	609.76	-	-
S2	132	109	82.58	58.33	32,448.85	245.82	-	-
S3	11,680	1,776	15.21	88.89	10,161,539.54	869.99	1,084,641,333	-
S4	830	343	41.33	80.00	457,219.11	550.87	-	-
S5	189	39	20.63	66.67	438,989.79	2322.70	39,819,000.00	-
MS 1	4,003	1,203	30.06	78.13	533,424.02	133.26	-	-
MS 2	3,084	556	18.03	86.25	249,353.16	80.85	736,613,200	331,818,200
MS 3	2,326	341	14.66	60.31	875,415.76	376.36	1,365,654,500	957,903,250
MS 4	1,310	339	25.88	81.25	556,742.38	424.99	-	-
MS 5	1,014	148	14.60	75.00	91,887.74	90.62	-	-
MS 6	380	153	40.26	65.63	69,009.57	181.60	-	-
MS 7	582	241	41.41	82.21	112,750.00	193.73	68,010,461.54	2,297,153.85
MS 8	648	166	25.62	78.12	43,644.47	67.35	-	-
MS 9	1,228	255	20.77	75.00	100,406.04	81.76	-	-

- A) commitment of companies to training
 - (i) (measured by commitment rating)
- A) commitment of companies to training
 - (ii) (measured by expenditure on training)
- B) extent of involvement of companies in training
(measured by proportion of workers trained).

Also to be involved are

- C) pairwise correlation of response variables A(i), (ii) and B.
- D) Involvement in and commitment of companies to the different types of training provided by the companies
Measured by
 - (i) expenditure on training per worker trained for specific kinds of training
 - (ii) percentage of total expenditure on specific kinds of training
 - (iii) percentage of total workers trained in specific kinds of training.

The rest of the available data that were not subjected to statistical analyses were used descriptively for analyses of the issues that they touch and the discussions that followed.

As for the 6 companies that were said to have provided additional information, some of the data from the companies

were used to reinforce, corroborate or show deviation from observations concerning the 14 companies studied.

A. Commitment of Companies to Training

(i) (Measured by Commitment Rating)

It has been indicated that the commitment of companies to training can be measured by their commitment rating. The commitment rating of a company is the sum of the scores associated with the types or forms of training and development programmes provided by the company. The highest possible score of commitment rating for a service company in a year is 60 and 80 for a manufacturing - service (MS) company. The layout of the forms of training programmes that the two different types of companies (S and MS) being considered in this study are expected to have for their workers are given below in Tables 3.3 and 3.4. The scores associated with each form of training programme are also given. In the absence of a model for rating the commitment of companies to training in the literature, the scores used in this study are based on the importance of the form of training programmes being considered to both the employer and the employee; that is, the forms of training that will make the employer get the very best out of his employee and that will make the employee attain his full potentials as a human being, were scored high and equally.

An examination of tables 3.3 and 3.4 shows that while health and safety training was scored low (5) for service companies, it was scored high (10) for manufacturing-service companies. This is because both the employers and the employees of manufacturing-service companies have a great need for health and safety training, while the absence of safety training in service companies is not likely to result in dire consequences for both employers and employees.

In addition, professional/specialist training in both service and manufacturing-service companies attracts a high score (10); training in customer/public relations in service companies attracts a high score (10); vocational-technical training in manufacturing-service companies attract a high score (10); while relevant education/further education also attracts a high score (10). This is because both employers and employees (but in particular, employers) stand to gain a lot from training employees in professional/specialist training, training in customer/public relations, and vocational technical training. As far as relevant education/ further education are concerned, both employers and employees in particular stand to gain more from this kind of training, because relevant education/further education can help them attain their full potentials as human beings.

Table 3.3

Forms of Training Programmes in Service Companies
and their Scores

	Forms of Training	Scores
1)	Professionals/specialists training	10
2)	Training in customer/public relations (including training on new computers/ equipments)	10
3)	Training in salesmanship (including training on new computers/equipments)	10
4)	Health and safety training	5
5)	Relevant education/further education	10
6)	Adult Literacy Education	5
7)	Others (e.g. training of auxiliary staff such as secretaries, receptionists, drivers)	10
	Total	60

Table 3.4

Forms of Training Programmes in Manufacturing-
Service Companies

	Forms of Training	Scores
1)	Training for professionals/specialists/ senior technologists	10
2)	Vocational - Technical Training	10
3)	Apprenticeship Training	5
4)	Training in customer/public relations (including training on new computers/ equipments)	10
5)	Training in salesmanship	10
6)	Health and safety training	10
7)	Relevant Education/Further Education	10
8)	Adult Literacy Education	5
9)	Others (e.g.training of auxiliary staff)	10
	Total	80

The hypotheses that are relevant to this particular response variable (commitment of companies to training) are the hypotheses numbered A(i) 1 and A(i) 2.

In order to test these two hypotheses, the t-test, the chi-square and Fisher's Exact test statistics were used.

A Commitment of Companies to Training

(ii) (Measured by Expenditure on Training)

The hypotheses that are relevant to this particular response variable (expenditure of companies on training) are the hypotheses numbered A(ii) 1-4.

The Fisher's exact test statistic was employed to test the relevant null hypotheses.

A Commitment of Companies to Training

(iii) (Measured by Human and Physical Resources Available for Training)

The details of the human and physical resources available for training workers in the companies for which data are available were indicated. These were discussed under further discussions of results of commitment to, and involvement of companies in training.

B. Extent of Involvement of Companies in Training

(Measured by the Percentage of Workers Trained)

The relevant null hypotheses for the percentage of workers trained are the hypotheses numbered B_1 and B_2 . Fisher's Exact test statistic was employed to test the relevant hypotheses.

Comments on Measures of Commitment of Companies to Training and Their Involvement in Training

It is pertinent to state that the three measures of commitment of companies to training that were used in this study are not quite exhaustive of the measures that could have been used to judge the commitment of companies to training. Another measure that may probably have been used is the

proportion of workers trained. This is legitimate, given the fact that one might want to judge a company's commitment to training by whether the proportion of its workers that received training is high or low. The problem is that a company may train as much as 85% of its workers but in only one form of training and to a particular group of workers consistently. Some workers have been in the employment of certain companies for as long as 10 years but because they do not belong to the group favoured for training, they have not attended any form of organised training even once. Companies S1 and S2 of our sample give credence to this assertion.

The question, then is, are companies convinced that training is something that all workers in their employment should partake in, and that the companies should provide? It is a different matter altogether if companies emphasize some kinds of training for certain kinds of workers, and or train some group more than the other. There is however a problem with the total neglect of the training needs of a whole group of workers by a company even if they are in the minority. The proportion of workers that a company trains can therefore not be a convincing measure of commitment of companies to training.

Following from this, the investigator decided to use the proportion of workers trained to indicate the extent of involvement of companies in training, that is, the extent to

which companies participate in the training of their workers. For someone who is interested in whether or not a company participates in training, her question will be, does company S2 and MS2 train her workers? If the answer is yes, to determine the extent of their participation in training, the next question will be, what proportion of their workers do they train? If the answer is that company S2 trains 82% and MS2 trains 14%, the conclusion will be that company S2 is more involved in training than company MS2. This is in order, as far as the extent of involvement or participation in training is concerned.

Again, there may be arguments for the use of commitment rating as a measure of extent of involvement (participation) in training. This is in fact valid, but the question is, would the commitment rating of a company measure the extent of participation in training better than it measures the commitment to training? There is an inclination to say it measures commitment better than it does extent of participation. This example may suffice. Suppose that Company S2 has a commitment rating of 58% while MS2 has a commitment rating of 82%. If commitment rating were to be the measure of extent of involvement, Company S2 will be said to have a low level of participation in training, while Company MS2's participation will be considered high, amongst the 14 companies involved in the study at hand, but then Company S2 trains a higher

proportion of workers (82%) than MS2 (18%). The fact is that commitment rating takes into consideration the probability that all categories of workers will have the opportunity to partake in organised training at one time or the other, and or that all workers may have that opportunity at least once in a decade.

Given the fact that it is quite possible that a person participates in a project (trains workers) without being committed to it (provide different types of training for different types of workers and commit resources to same), it is better to stand by the use of percentage of workers trained by companies as the measure of extent of involvement of companies in training; commitment rating, expenditure on training and human/physical resources available for training as measure of commitment to training.

In the same vein, because it is possible to confuse involvement in training with commitment to training, it will be better to use percentage of workers trained as the measure of involvement and the commitment rating, expenditure on training and resources made available for training as measures of commitment to training. This kind of mix-up was observed in Goldstein's (1980, P. 29) policy research paper. The author attempted to sketch the extent or prevalence of training provided by employers by considering (a) proportion of firms that give certain kinds of training and (b) the number and

percentage of workers that received training and their occupations. While still sketching the prevalence of training by employers however, he considers expenditure by companies on specific training but refers to expenditure this way: "... another measure of relative emphasis among programmes is the distribution of expenditure". This indicates that Goldstein assumed that prevalence (general occurrence/existence or common practice) is the same as emphasis (greater attention or importance). It is not correct to assume that so long as something is commonly practiced by a person, its practitioner would consider it worthy enough to commit resources to it.

Another measure of commitment of companies to training that could have been used is the number of human-hours invested in training by companies. Due to the problems of collecting data however, one could not get the necessary data relating to this measure.

C) Relationships Between the Measures of Commitment of Companies to Training, the Measure of Extent of Involvement of Companies in Training and Other Relevant Indicators

The measures of commitment of companies to training and extent of involvement in training have been explicitly stated. It is reasonable to expect that these measures have some bearing on each other as well as some other indicators such as the number of workers in a company, and the turnover of the

company. It is also possible that some of these measures can be predicted on the basis of or determined by others. A useful tool for determining the extent to which one variable - dependent variable - can be predicted on the basis of another variable - independent variable - is provided in the regression model. The null hypotheses on regression of interest in this study are the hypotheses numbered C(i)1 to 9.

Another pairwise response variable that was considered is the relationship between the turnover of companies and the measures of commitment of companies to, and measures of involvement of companies in training. The relevant null hypotheses is numbered C(ii)1. The test statistic used to test hypothesis C(ii)1 is the Pearson's Product Moment Correlational Analysis.

D. Involvement in and Commitment of Companies to the Different Types of Training by the Companies

The variables of interest in this section are: the expenditure of companies on training per worker trained for each type of training; the percentage of total expenditure on specific types of training, and the percentage of total trained in specific kinds of training. The estimates of the variables that are of interest in this section are given in table 3.5.

The hypotheses that are relevant to the three variables are those numbered D(i)1 and 2, D(ii)1 and 2 and D(iii)1 and

2. In order to test the relevant null hypotheses, the Fisher's Exact test statistic was employed.

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Table 3.5

Estimates of the Measures of Commitment to and Involvement of Companies In Professional/Specialist, Occupational/Vocational Training and Relevant Education/Correspondence Courses

GL	MS/S	Measures	Profession als/ Specialists	Occupationa l/ Vocational	Safety	Relevant Education Correspondence
G	S1	(a) Exp. on Training per worker Trained (b) Percentage of Total Exp. on Specifics (c) Percentage of Total Trained For Specifics	862.07 100 100	- - -	- - -	- - -
L	S2	a b c	390.80 36.13 27.52	211.22 50.77 71.56	- - -	- - -
G	S3	a b c	5,762.50 26.65 26.46	5,706.86 73.35 73.54	- - -	- - -
L	S4	a b c	2,637.18 25.96 13.12	1,176.23 67.97 76.97	565.20 4.08 9.62	9,368.60 2.05 0.29
G	S5	a b c	18,629.99 97.61 58.97	626.25 2.39 41.03	- - -	- - -
G	MS1	a b c	1,072.24 16.68 6.90	559.28 75.91 60.18	56.20 7.41 58.54	- - -
L	MS2	a b c	900.83 41.18 20.50	356.35 51.45 64.75	212.33 6.72 14.21	532.59 0.64 0.54

Table 3.5 (Continued)

GL	MS/S	Measures	Profession als/ Specialists	Occupationa l/ Vocational	Safety	Relevant Education Correspondence
G	MS3	a	4,948	1,850.86	457.71	-
		b	52.57	45.67	1.52	-
		c	27.27	63.34	8.50	-
L	MS4	a	2,619	318.32	449.60	-
		b	91.27	7.03	1.70	-
		c	57.23	36.28	6.19	0.29
G	MS5	a	849.57	508.55	283.07	-
		b	53.63	42.06	4.31	-
		c	39.19	51.35	9.46	-
L	MS6	a	584.85	1,562.89	13.30	-
		b	21.19	77	1.81	-
		c	16.34	22.22	61.44	-
G	MS7	a	351.51	525.46	1,679.97	676.5
		b	38.97	49.4	10.43	1.2
		c	51.87	43.98	2.90	1
L	MS8	a	1,661.25	227.28	230.34	-
		b	15.23	53.64	31.14	-
		c	2.41	62.05	35.54	-
G	MS9	a	2,576.79	418.11	-	-
		b	17.96	82.04	-	-
		c	2.75	77.25	19.61	-

- Key:-
- (a) Expenditure on training per worker trained for each kind/type of training.
 - (b) Percentage of total expenditure on specific types of training
 - (c) Percentage of total trained in specific kinds of training

CHAPTER FOUR

ANALYSES OF DATA, RESULTS AND DISCUSSIONS

In this chapter, the types of workers employed in the companies studied are presented. Also presented are details of the analyses of data, the results obtained from the analyses and the discussions of the results.

The Types of Workers Employed in the Companies Studied

Companies S1 and S2 are auditing firms. As their descriptions suggest, the companies audit the accounts of governmental and non-governmental organisations, institutions, firms etc. The categories of workers employed are accountants, auditors, auditors-in-training, personnel in general administration and training, receptionists, drivers and security men.

Companies S3 and S4 are commercial banks. They take deposits from customers and give short and long term credit facilities to customers. Such customers include individuals, industrial, agricultural,

commercial and other business concerns. The companies provide regular banking services such as issuance of bank drafts, transfer of money et cetera. Workers employed in these companies include accountants, economists, professional bankers, computer scientists, cashiers, computer operators, personnel in general administration and training, receptionists, clerks, security men and drivers.

One of the companies selected for this study is a brewery. The company (MS 1), brews alcoholic and non-alcoholic drinks. The workers in the company include food technologists, quality control officials, production workers, maintenance workers (electrical/mechanical), salesmen and marketing officers. Others are accountants, store officers, public relations officers, training and administrative officers, secretaries, drivers, security men and receptionists.

The computer company (S5) that was selected for this study develops, markets, installs and services business information processing systems. Workers employed in the company include computer engineers, computer scientists, sales/marketing officers,

accountants, personnel in general administration and training, receptionists, drivers and security men.

The two companies, with mixed business activities, that were selected for this study are companies MS2 and MS3. Company MS2 is a holding company for a subsidiary that manufacture and markets toiletries, and an associated company that manufactures and markets fridges, freezers, air-conditioners et cetera. Company MS3 is a holding company for a group of companies. Among the companies is one that develops, manufactures, and markets toiletries, products for skin, hair, body care, and a range of products for baby care. Another manufactures light commercial vehicles and buses, and also specializes in building bodies for vehicles. One of the companies is a wholesaler of locally manufactured and imported merchandise, and provides warehousing services. One of the companies in the group designs and sells (wholesale) Nigerian textiles. Another of the companies assembles, sells, installs and services office and security equipment. One other company, produces corrugated paperboard cases, and engages in the manufacture, and conversion of printed papers and paperboards, packaging

materials, including folding boxes, labels and wrappers. Another company, which is in the group (MS3), is a mechanical and electrical engineering business, concerned with the assembly, sale and service of engines and plants used widely in industry and agriculture. Lastly, there is also a company that is a food chain, an outlet for fast foods.

In these two companies (MS2 and MS3), there is a whole range of workers. They include electronic/electrical and mechanical engineers, quality controllers, textile designers, textile technologists, mechanics, machinists, refrigeration technicians, fork-lift operators and accountants. Others are sales/marketing officers, production workers, personnel in training, industrial relations, general administration, caterers, receptionists, secretaries, drivers and security men.

The two companies that were sampled from the group of companies in the chemical/pharmaceutical category of business are companies MS6 and MS7. The companies manufacture and sell chemical, pharmaceutical and agro-vetting products such as paints, drugs, for human and animals, textile auxiliaries et cetera. The workers employed in these

companies include pharmacists, laboratory supervisors, maintenance personnel, production workers sales/marketing personnel, accountants, personnel in training, industrial relations and general administration, secretaries, receptionists, security officers and drivers.

Companies MS4 and MS5 were selected from the petrochemical business category. They refine and market petrochemical products. The workers employed in these companies include maintenance engineers (mechanical/ electrical), chemical engineers, sales/marketing officers, accountants, personnel in training, industrial relations and general administration, secretaries, drivers and security officers.

Companies MS8 and MS9 were selected from the category of textile business. The companies design, manufacture and sell textile materials. Workers that can be found in these companies include textile designers, textile technologists, machine operators, maintenance personnel, sales/marketing officers, accountants, personnel in general administration, drivers, security men and secretaries.

Common to all the companies, their category of business notwithstanding, are the auxiliary staff (secretaries, security-men, drivers) who help in the day to day running of the organisation in the areas of paper work, movement of staff and goods, and protection of staff and premises of the organisations.

Also common to all the companies are accountants who see to the finances of the organisation and workers in general administration who take care of appointments, promotions, leaves et cetera. Many have workers that see to training and industrial relations in the organisation, although not all companies have separate departments for these.

Maintenance workers (electrical/mechanical) are common to all organisations, but the strength of their duties in the different companies vary. In the companies that fall within the service sector of the economy, maintenance workers see to maintaining facilities in the premises, such as electrical problems and running the generators. The fact is that, their work, make working easier for the other workers. In the manufacturing - service sector however, they often form the core of the personnel

that help in the achievement of the goals of the organisation. This is because, in the manufacturing sector, human operation of machines, even if they are automated, is critical to the production of goods.

Also common to all the companies that fall in the manufacturing-service sector is that they have sales/marketing officers who have to see to the sale of the goods produced.

One main distinguishing feature of the companies studied in the different business categories is the type of product or service, that they produce and sell, or provide. This accounts for the difference that can be observed in the categories of at least $\frac{1}{3}$ of the workers employed in the different companies. For example, textile designers and textile technologists are peculiar to the category of textile business. Pharmacists and laboratory supervisors are peculiar to chemical-pharmaceutical companies and companies that produce toiletries, hair and body care products. Professional bankers, and cashiers can be found only in banks, while mechanics and machinists are to be found in companies that manufacture and assemble vehicles, engines and plants that are used in industry and agriculture.

The implication of these observations for the training of workers is that there will be a need for different types of training programmes for the different categories of workers in the companies studied. Nevertheless, there are similarities of training needs for workers whose job descriptions are the same in the different companies, and in the companies that belong either to the service or manufacturing-service sector of the economy.

The fact that workers are first, human beings, before being workers is also relevant. Given this fact, workers have their own need for certain types of training which may not necessarily be the type of training that the organisation thinks the worker needs.

It is for this reason, that the types of training programmes that companies provide were broadly categorised into professional/specialists training, training in customer/public relations, training in salesmanship, health and safety training, relevant education/further education, adult literacy education, and training of others such as secretaries, receptionists, drivers etc., for

companies in the service sector of the economy. These have been spelt out in Table 3.3.

As for manufacturing-service companies, the broad categories into which their training programmes can be divided include training for professionals, specialists, senior technologists, vocational-technical training, apprenticeship training, training in customer/public relations, training in salesmanship, health and safety training, relevant education/further education, adult literacy education and training for others including secretaries, drivers etc. These can be found in Table 3.4.

A. Commitment of Companies to Training

(i) (Measured by Commitment Rating)

It has been indicated that the commitment of companies to training can be measured by their commitment rating. The commitment rating of a company has been pointed out as the sum of the scores associated with the types or forms of training and development programmes provided by the company. Such scores have been expressed in percentages as given in Table 3.2.

The hypotheses that are relevant to the response variable (commitment rating) are given as follows:-

Hypothesis A(i)1

There is no significant difference in the commitment rating of manufacturing-service companies and service companies to training.

Hypothesis A(i)2

There is no significant difference in the commitment rating of companies that are giants in their own sectors (industries) and the other (large) companies to training.

Testing Hypothesis A(i)1

Applied in the test of Hypothesis A(i)1 is the t-test statistic given for two samples as:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$\text{Where } S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

$$df = n_1 + n_2 - 2$$

$$(1) = ms$$

$$(2) = s$$

(Snedecor and Cochran, 1974).

The relevant data (commitment rating) for testing the hypothesis of interest is given in Table 3.2.

The details of the t-test statistic on the relevant data are given in Table 4.1

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Table 4.1

Details of t-test on Commitment Rating of Manufacturing

-Service Companies and Service Companies

Nature	n	\bar{X}	Sample Standard Deviation	Pooled S	df	t_{cal}	t_{table}	Comment
MS	9	75.77	8.1811	11.2993	12	1.1091	1.782	NS
S	5	68.78	15.78					

It can be observed from the results in Table 4.1 that the test statistic gave a not significant result at .05 level of significance. The table value of $t = 1.782$ is higher than the calculated t value which is 1.1091. This means that there is no significant difference in the commitment rating of manufacturing-service (MS) and service (S) companies. This means that the MS and S companies have the same level of commitment to the training and development of their employees. It may therefore be tempting to accept the null hypothesis. A second look at the details of the t -test, however, indicates that the data on which the analyses was carried out may not have met the assumptions that are necessary for the use of the t -test statistic in the first place.

The relevant assumptions are that the commitment rating (CR) as a measure should have normal distribution, and that the variation in the values of CR as measured by variance is the same for MS and S companies.

The results in Table 4.1 show that the sample standard deviation of MS and S companies are quite different (not homogenous) with 8.1811 and 15.78 respectively. This is an indication that the variation in the CR is not the same for both groups of companies. It is

an indication that the t-test may not be the appropriate test statistic to use on the data of interest.

As a result of this observed anomaly in the test statistic used, the chi-square was used to test the hypothesis of interest, because it is free from the assumption of normality of distribution and equality of variance. In addition, in view of the fact that the sample size for both MS and S companies is small, the chi-square and a variation of it, the Fisher's exact test, were employed to test hypothesis A(i)1.

The Case for Chi-Square (χ^2) and Fisher's Exact Test

Suppose the frequency obtained for a 2 x 2 classification is given as follows:

	High Value	Low Value	Total
Group I	A	B	A+B
Group II	C	D	C+D
Total	A+C	B+D	N

This represents a classification of N companies by groups (e.g. MS and S or giant and large) and by high or low value of measure of performance (e.g. CR). $A+B$ out of N belong to Group I while the remaining $C+D$ belong to Group II.

The exact probability of observing a particular set of frequencies in a 2×2 when the marginal totals are regarded as fixed is given by the hyper-geometric distribution:

$$P = \frac{\binom{A+C}{A} \binom{B+D}{B}}{\binom{N}{A+B}} = \frac{(A+B)!(C+D)!(A+C)!(B+D)!}{N!A!B!C!D!}$$

(Siegal, 1956)

The χ^2 test of comparing expected frequencies with observed frequencies is carried out by obtaining the statistic χ^2 and comparing with the χ^2 distribution table value

$$\chi^2 = \frac{\sum(e_{ij} - O_{ij})^2}{e_{ij}}$$

where e_{ij} = expected in cell i, j

O_{ij} = observed in cell i, j

For a 2×2 and with Yates correction, (Siegal, 1956) this is equivalent to

$$\chi^2 = \frac{N(AD - BC - \frac{N}{2})^2}{(A+B)(C+D)(A+C)(B+D)}$$

The χ^2 test however, is only an approximate procedure. It requires that the expected frequencies in each cell be not too small. In practice, the minimum comfortable frequency is 5. In a situation where $N < 20$, the literature (Cochran, 1954) recommends the use of Fisher's Exact test.

When N is between 20 and 40, the χ^2 test may only be used if all expected frequencies are 5 or more. For $N > 40$, χ^2 test may be used with the correction for continuity.

Basically, the Fisher's Exact test sums up the exact probabilities of occurrence of the particular frequency allocation or one even more extreme for fixed marginal totals. Tables of such probabilities are available in the statistical literature for small N . Examples are Dixon and Massey (1969) and Siegal (1956).

It is not particularly difficult to calculate for N values not available in tables by repeated use of the exact formula

$$P = \frac{(A+B)! (C+D)! (A+C)! (B+D)!}{N! A! B! C! D!}$$

Given the fact that to use the Fisher's Exact test, a measure of central tendency has to be used to classify measures (e.g. CR and expenditure on training) into high or low, (e.g. high CR or low CR), it is pertinent to state that the median and not the mean was used in this regard. This is because of the extreme skewness of the distribution of scores of the measures being considered. By way of example, while the average number of workers as given in Table 3.2 in company S3 is 11,680, that of MS 3 is 2,326 and S5 is as low as 189. This results in an acceptable measure of central tendency of 922 workers for median, compared with 1,986 workers for the mean for all the 14 companies involved in the study. A similar result was obtained for proportion of workers trained. For the proportion of workers trained, the score for company S1 is 85.37%, the next score to this is 82.80% for S2 and the

next to that is 41.52% for MS 7. This results in a median of 25.8% as against the mean of 34.03%.

To reach a decision regarding the acceptability (retention) or otherwise of a Null hypothesis, the investigator checked whether the results of the test-statistics are significant or not. To do this, the values of the calculated t or χ^2 (t_{cal} and χ^2_{cal}) were compared with their tabulated values (t_{table} and χ^2_{table}) at the degree of freedoms given by

$$df = n_1 + n_2 - 2 \text{ for } t\text{-tests and}$$

$$df = 1 \text{ for } \chi^2 \text{ } 2 \times 2 \text{ contingency table}$$

and at .05 level of significance.

For the Fisher's test, the exact probability of a particular configuration, resulting in specific larger value of grand total, the smallest totals and their intersection on the contingency table was checked from standard tables to see whether such is less than .05. By way of example, if the exact probability of a larger value is .343, it means that the result obtained can be expected in 34% of the cases, and it means the result obtained is not significant. If, however, an exact probability of a larger value is .043, it means the result obtained can be expected only in 4.3% of the cases. It is significant

because it is less than the 5% level above which it will not be significant for this kind of a test.

Table 4.2 gives the high or low commitment rating amongst manufacturing-service and service companies.

Table 4.2

High or Low Commitment Rating Amongst Manufacturing-
Service Companies and Service Companies

NATURE	HIGH	LOW	TOTAL	PERCENTAGE HIGH
MS	5	4	9	56%
S	2	3	5	40%
TOTAL	7	7	14	50%

Table 4.2 shows that 56% of the MS companies have high commitment ratings while 40% of the service companies have high commitment ratings. Obviously the number of MS companies with high commitment ratings is higher than the number of S companies with high commitment ratings. The

issue now is whether differences that have been observed can be said to be significant. The results of the chi-square and Fisher's Exact tests should help us come to a conclusion regarding the significance or otherwise of the difference in high commitment ratings.

Table 4.3

Details of the Chi-Square and Fisher's Exact Tests on High or Low Commitment Rating Amongst Manufacturing-Service and Service Companies

df	χ^2_{cal}	χ^2_{table}	Exact Probability of Larger Value	Comment
1	2.19	3.84	1.000	NS

Table 4.3 indicates that for both the χ^2 and Fisher's Exact tests, the difference noticed in the high commitment ratings of MS and S companies in Table 4.2 is not significant. This shows that there is no significant

difference in the commitment of MS and S companies to the training of their employees. Therefore the null hypothesis which states that:

There is no significant difference in the commitment rating of manufacturing-service companies and service companies to training is retained.

Discussions

With the retention of the null hypothesis of no significant difference in the commitment of MS and S companies to the provision of training for their employees, one is in essence saying that the commitment of companies to training is independent of the nature of the companies. This means that a company is not more committed to training because it combines the manufacturing of goods and provision of services that will help sell the goods or because it sells certain kinds of services alone.

Another level of the argument that flows from and connects with the above regarding the nature of a company and its commitment to training is the nature of the goods it manufactures and or the nature of the services that it sells. One would have expected that companies that belong

to businesses that make use of computers, complex machineries and equipment, those whose employees are exposed to the risk of accidents and other health hazards, and who, at the same time make use of an array of professionals in specialized skills, all in one company, will partake more in training than others who, although have specialists, professionals, in their employment, such are limited to a few areas of concern.

The following example should show clearly, the logic of the point being made. In a pharmaceutical company e.g. MS 7 (which is both a manufacturing and service company), there are pharmacists, laboratory supervisors, maintenance personnel (electrical/mechanical), marketing personnel, accountants, the auxiliary staff - secretarial staff, drivers, security, etc. The plethora of staff mentioned contrasts sharply with the employees in an accounting or auditing firm e.g. S1 (a service firm). In the accounting firm, there are accountants, accountants and auditors in training on the one hand and the auxiliary staff on the other hand.

What the result obtained means, therefore, is that the accounting/auditing firm, for example, is no less committed to training its employees just because it audits

accounts and provides consultancy services to clients (a service company) than the chemical/pharmaceutical company because it manufactures drugs for humans, manufactures paints and textile auxiliaries, dye stuff, acetates, and sells them (an MS company). The commitment of a bank (service company, banking business) can as well be compared with that of an auditing firm (service company, auditing business). Just the same way, a chemical/pharmaceutical company (MS; chemical/pharmaceutical business) can be compared with a conglomerate (MS, mixed business).

In addition to the results of the test statistics discussed above, Bar Charts were also used to depict the commitment rating of companies to training by the type of business, as indicated on Table 3.1. This is to ascertain the possibility that certain kinds of businesses/firms may be more committed to training workers than others. Although the Bar Charts will not show whether there are significant differences in the commitment rating of companies in a particular type of business and others, it still remains a visual way of depicting differences in the commitment of the industries involved in the study to training. It is important to note, however, that because

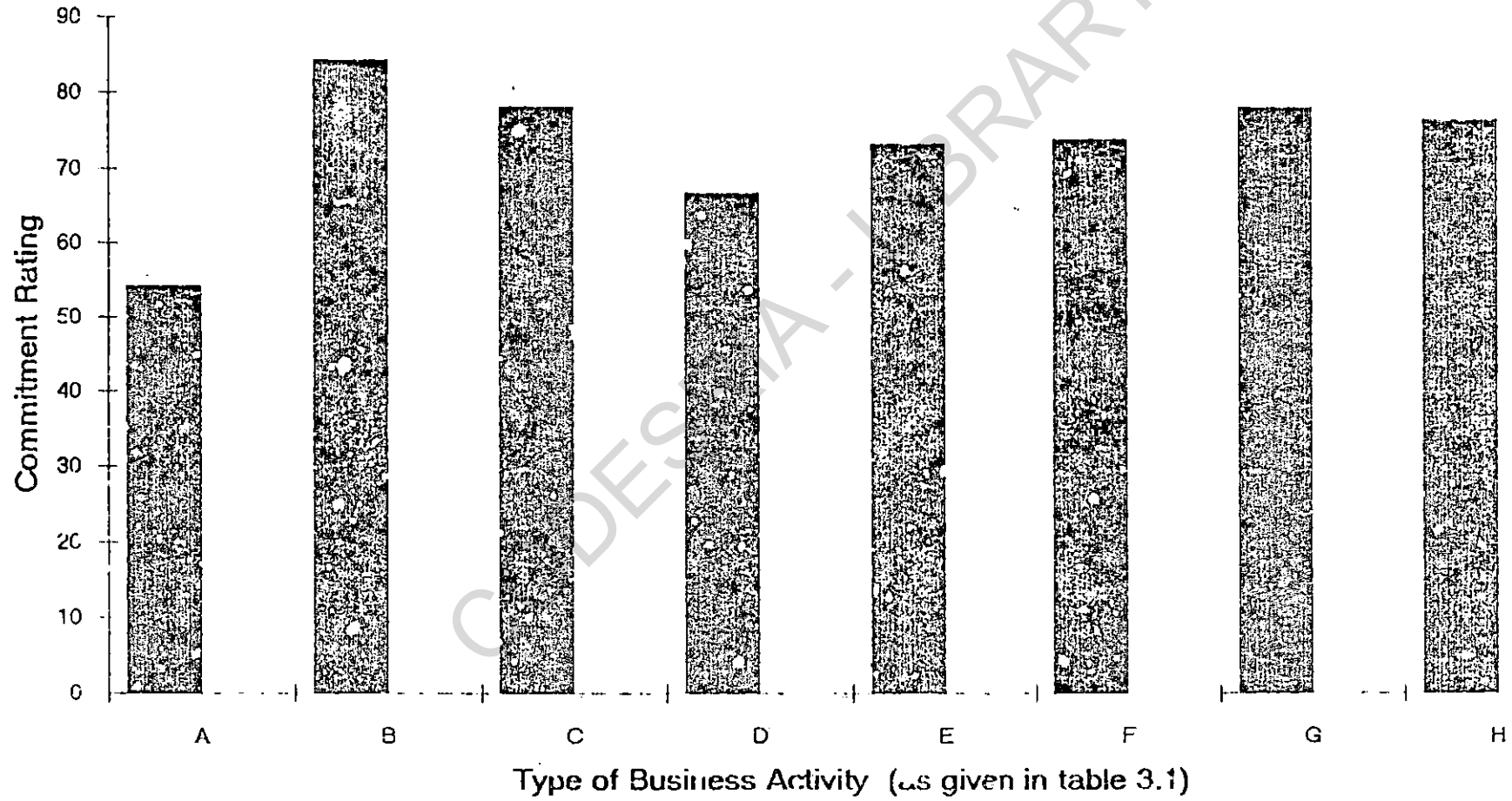
the sample sizes for each of the categories of businesses are rather small (mainly 2 and at times 1) observations made from this kind of comparison cannot be conclusive.

Figure 4.1 shows the commitment rating of the different categories of businesses.

Figure 4.1 shows lack of real difference in respect of the commitment of the different kinds of industries to training. Although the banking category (B) has the highest average commitment rating of 84.45, it would seem that is not markedly different from the average for the brewing category (C) with 78.13 or the chemical/pharmaceutical category (F) with an average also of 78.13. The only category of business that can be said to be markedly different is the auditing category (A). With a mean of 73.16 for all the 8 categories, it is clear that the auditing (A) and computer (D) categories can be said to have low commitment rating, while the rest (75%) of the industries can be said to have high commitment to training. This means there is no difference in the commitment rating of most of the industries to training.

With the kind of result obtained in respect of hypothesis A(i)1, the question that agitates one's mind is, why would a higher, although not significant

FIG. 4.1 Average Commitment Rating By Type of Business Activity



percentage of MS companies rather than service companies have a high commitment to training. Or, why would the commitment rating of MS 2, for example, be only slightly different from that of S1.

Possible answers to this question will be attempted when general discussions on commitment of companies to training are being made.

Testing Hypothesis A(i)2

The result of the t-test statistic for this hypothesis is given below in Table 4.4

Table 4.4

Details of the t-test on Commitment Rating of Giant and Large Companies

Size	n	\bar{x}	Sample standard deviation	Pooled S	df	t_{cal}	t_{table}	Comment
Giant	8	72.0263	12.5023	11.7621	12	.4571	1.782	NS
Large	6	74.93	10.6397					

Table 4.4 shows that the result of the t-test is not significant. This means that there is no difference

between the commitment rating of Giant and Large companies; or that the giant and large companies have the same level of commitment to the training and development of their employees. This result may lead to the conclusion that the null hypothesis be accepted. A look at the results of the chi-square and Fisher's Exact test statistics may generate more confidence in the conclusions reached regarding the acceptability/retention or otherwise of the hypothesis in question. Especially in the light of the doubts that were earlier raised concerning the appropriateness of the use of the t-test, for analysing the data in this study.

Table 4.5

High or Low Commitment Rating Amongst Giant and Large Companies

Size	High	Low	Total	Percentage High
Giant	3	5	8	37.5%
Large	4	2	6	66.67%
Total	7	7	14	50%

Table 4.5 shows that giant companies have a lower percentage high commitment rating (37.5%) than the large companies' 66.67%. Although it seems apparent that the number of large companies with high commitment rating is higher than that of giant companies, it is reasonable to check whether such observed differences are significant. Table 4.6 gives details of the Chi-square and Fisher's Exact test statistics on the High or Low commitment rating of giant and large companies.

Table 4.6

Details of Chi-square and Fisher's Exact Tests on High or Low Commitment Rating Amongst Giant and Large Companies

df	χ^2_{cal}	χ^2_{table}	Exact Probability of Larger Value	Comment
1	.0249	3.84	.592	NS

From the result of the chi-square and Fisher's exact tests in Table 4.6 above, it could be observed that the commitment of giant and large companies to the training of their employees is the same. This is so, given the fact that the results show that the differences observed in high (and low) commitment rating in Table 4.5 above is not significant. Hence, the null hypothesis which states that:

There is no significant difference in the commitment rating of companies that are giants in their own sectors (industries) and the other (large) companies to training

is retained.

Discussions

Following from the retention of the null hypothesis which states that there is no significant difference in the commitment rating of companies that are giants in their own sectors (industries) and the other (large) companies to training, is the fact that the commitment of companies to training cannot be said to be dependent on the size of the companies. The results in table 4.6 and the retention of the null hypothesis also indicates that companies that are giants in their own sectors are not any more committed to training than their counterparts that are smaller in size. Thus, S1 for example is not more

committed to training than S2, just the same way as MS3 is not more committed to training than MS2. As a matter of fact, if one were to go by the raw scores of commitment rating of these four (4) companies as indicated in Table 3.2, the reverse would seem to be the case. That is to say, the large companies could be said to be more committed to training than the giant companies. This is because the commitment rating for S1 is 50.00% while that of S2 is 58.33%. The commitment rating of MS3 is 60.31% while that of MS2 is 86.25%. Again, a look at Table 4.5 shows a higher percentage of high commitment rating for large companies 66.67% than that of giant companies (37.5%), although the chi-square and Fisher's exact test results indicate that the differences observed in the percentage high of commitment rating of both sets of companies to training are not significant.

The results obtained for hypothesis A(i)2, as indicated in tables 4.4, 4.5 and 4.6 would seem to be in conflict with the observations made earlier (Tabbush, 1977; Joyce, Woods and Hayes, 1985) regarding how the size of companies affect the training programmes of such companies. Tabbush (1977, P. 254) for example observed

that "The volume of a firm's training activities will vary with its absolute size ..."

Given the result for hypothesis A(i)2, it is pertinent again, to find out why there is no significant difference in high commitment rating of giant and large companies to training. This is especially important because earlier observations seem to point otherwise. It is important to state, however, that such earlier observations were not specific on whether the differences pointed out were significant.

A. Commitment of Companies to Training

(Measured by Expenditure on Training)

The material (financial) resources committed to an activity is to a great extent, an indication of interest and conviction in the need for such an activity. Thus, the material resources that a company commits to training depicts the interest and the conviction that the company has about the uses of training, especially in the situation where there are competing demands on the material resources of the company. The relevant null hypotheses for the measure of commitment of companies to training through expenditure on training are stated thus:-

Hypotheses A(ii)1

There is no significant difference in the amount expended on the training and development of workers in the manufacturing - service companies and in the service companies.

Hypotheses A(ii)2

There is no significant difference in the amount expended on the training and development of workers in the companies that are giants in their own sectors and the other (large) companies.

Hypotheses A(ii)3

There is no significant difference in the amount expended on training and development per worker in the manufacturing - service companies and in the service companies.

Hypotheses A(ii)4

There is no significant difference in the amount expended on training and development per worker in the companies that are giants in their own sectors and the other (large) companies.

The rationale for hypothesis A(ii)3 and 4 is to adjust for the size of the workforce of each company.

In order to arrive at the amount expended by a company on training per person, the amount expended on training by each company was divided by the total number of workers in the company. This has been indicated in Table 3.2.

Essentially, the Fisher's Exact test statistic was employed to test hypotheses A(ii)1-4 above. The reasons for the steps taken for this purpose are as indicated for commitment measured by commitment rating in hypotheses A(i)1 and 2 above. The measure in this particular instance is expenditure on training [A(ii)1 and 2] and expenditure on training per person [A(ii)3 and 4].

Testing Hypothesis A(i) 1

Table 4.7 gives the details of high or low expenditure on training amongst MS and S companies.

Table 4.7

High or Low Expenditure on Training Amongst Manufacturing-
Service and Service Companies

Nature	High	Low	Total	Percentage High
MS	3	6	9	33%
S	4	1	5	80%
Total	7	7	14	

Table 4.7 indicates that 33% of MS companies had high expenditure on training compared to 80% for S companies. It would seem that because 80% of service companies' expenditure on training is high, one should conclude that the S companies' expenditure on training is generally higher than that of MS companies. Nevertheless, it is important to check whether the differences observed in the percentage high of both MS and S companies' expenditure on training are indicative of a systematic difference or just by chance. The result of the Fisher's Exact Test, given in Table 4.8, would help in arriving at a conclusion.

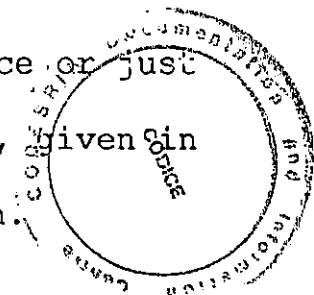


Table 4.8

Details of Fisher's Exact Test on High or Low Expenditure on Training Amongst Manufacturing-Service and Service Companies

Configuration		Exact Probability of Larger Value	Comment
3	6	.266	NS
4	1		

Table 4.8 shows that the difference observed in the percentage high expenditure on training of MS and S companies in Table 4.7 is not significant. This is an indication that although there is a difference in the percentage high of amount expended on training by both MS and S companies, the difference is not significant. Therefore, the null hypothesis, which states that:

There is no significant difference in the amount expended on the training and development of workers by the manufacturing service and by the service companies

is accepted.

Discussions

With the acceptance of the null hypothesis, one is essentially saying that the amount expended on the training of workers is not dependent on the nature of the companies. This means that a company is no less or no more committed to training in terms of expenditure on training because it combines the manufacturing of goods with the provision of some services or because it provides certain kinds of services alone.

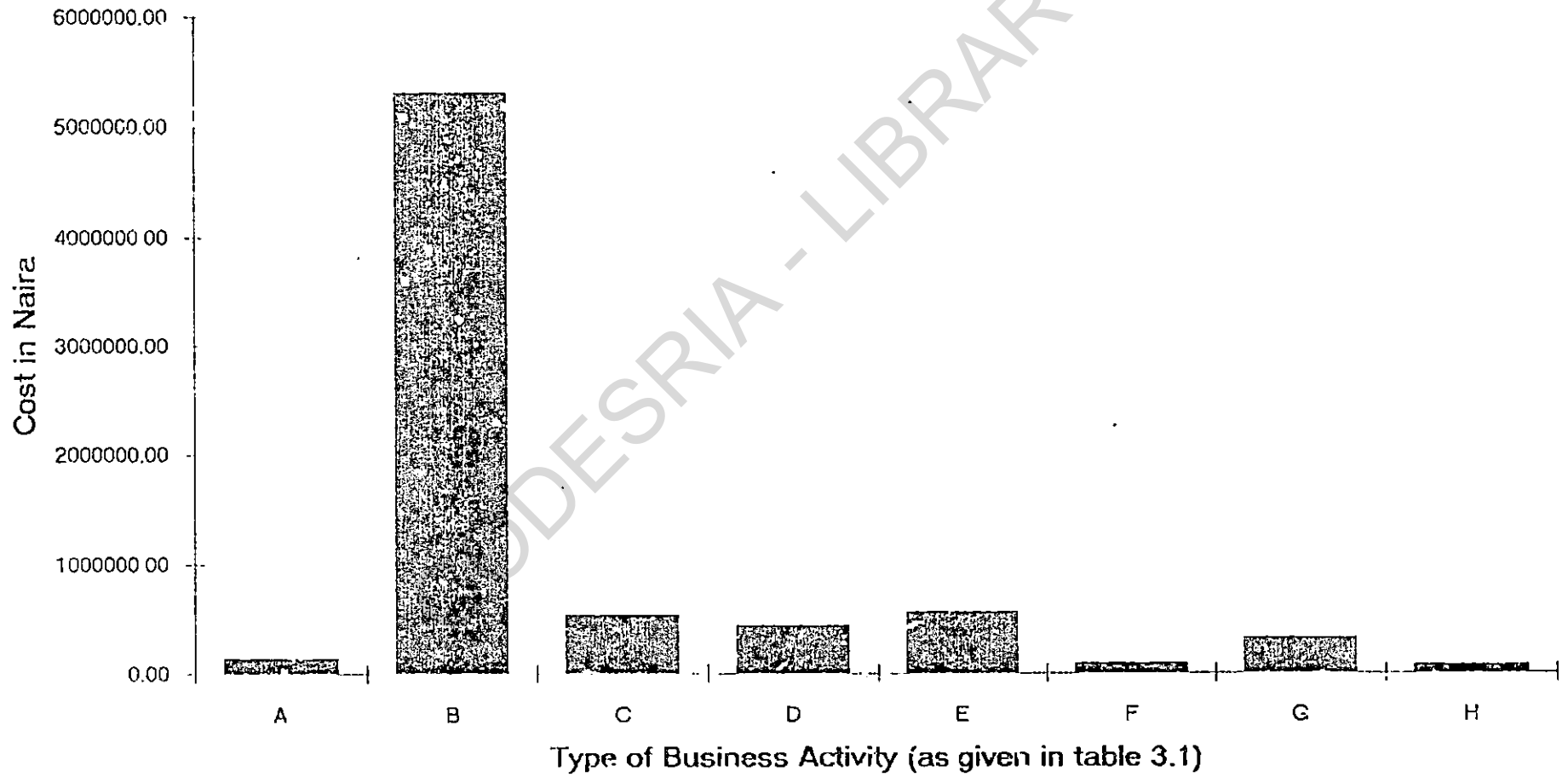
Just as was observed earlier in hypothesis A(i)1, it should be possible to consider expenditure on training by companies according to the nature of goods that they produce and or the nature of the services that they provide. One's inclination would be to believe that companies that have workers who work on computers, complex machineries and equipments, who are exposed to the risk of accidents and health hazards and who at the same time make use of an array of professionals, and workers with special skills all in one company would expend more on training than others who although have specialists and professionals in their employment, the kinds of training that they can provide for such workers are limited.

What the result obtained shows is that the accounting/auditing firm for example would not expend more money on training than does the chemical/pharmaceutical company. Although if one is less stringent about the statistical result, a higher percentage of service companies seem to expend money that can be classified as high on training than MS companies.

Figure 4.2 indicates average expenditure on training for each category of business.

A close look at Figure 4.2 indicates lack of difference in the expenditure on training of majority of the categories of businesses. One of the service business (the banking business), however, records the highest average expenditure on training (5,080,769.77), which seems markedly different from the average of all the others which is between 52,384.46 for the mixed business (conglomerates) and 72,025.26 for the textile business. With a mean of 905,501.50 for all the 8 categories, it seems clear that the amount expended on training by the companies in the petrochemical and textile business is rather low. Given that the Bar Chart of average expenditure on training by business activity reflects a lack of homogeneity in the averages, it is tempting to

FIG. 4.2 Average Expenditure On Training By Type of Business Activity



conclude that when commitment of companies is viewed from the perspective of the amount expended on training for each industry, the banking business is more committed to training than all the others, and the petrochemical and textile industries are less committed to training than the others. However, as was pointed out earlier, these conclusions cannot be objectively made with the available data.

The questions that need be answered following this result are (a) why would the commitment of MS and S companies to training be the same when the expenditure on training is being considered? and (b) why is it that a large percentage of S companies' expenditure on training is high?

Testing Hypothesis A(ii)2

Table 4.9

High or Low Expenditure on Training Amongst Giant and Large Companies

Size	High	Low	Total	Percentage High
G	5	3	8	62.5%
L	2	4	6	33.3%
Total	7	7	14	

Table 4.9 shows that more giant companies have a higher percentage of high expenditure on training than large companies. Although it seems obvious that more giant companies expend more money on training than large companies, it is important to check whether the observed difference is significant. Table 4.10 gives details of the Fisher's Exact test statistic on the high or low expenditure on training for giant and large companies.

Table 4.10

Details of Fisher's Exact Test on High or Low
Expenditure on Training Amongst Giant and Large Companies

Configuration		Exact Probability of Larger Value	Comment
5	3	.592	NS
2	4		

The result of the Fisher's Exact Test in Table 4.10 shows that going by the companies' expenditure on training, the commitment of giant and large companies to training is the same. This follows from the fact that the results show that the difference observed in High expenditure on training in table 4.9 above is not significant. Hence, the null hypothesis which states that:

There is no significant difference in the amount expended on the training and development of workers in the companies that are giants in their own sectors and the other (large) companies

is accepted.

Discussions

Given that the null hypothesis that giant and large companies are the same in their commitment to training has been accepted, when the amount expended on training is the measure being considered, this means that the amount expended on training is independent of the size of the company. The result obtained in Table 4.10 indicates that companies that are giants in their own sectors are not anymore committed to training than their smaller counterparts. It is important to state that although the difference observed in the proportion of giant companies that expend highly on training is not statistically significant, more giant companies seem more inclined to spend more money on training than large companies.

As before, it is important to know why the commitment of giant and large companies to training should be statistically the same, and why a higher percentage of giant companies seem to spend money that can be classified as high on training than large companies.

Testing Hypothesis A(ii)3

Table 4.11

High or Low Expenditure on Training Per Worker Amongst
Manufacturing-Service and Service Companies

Nature	High	Low	Total	Percentage High
MS	2	7	9	22%
S	5	0	5	100%
Total	7	7	14	

A close look at Table 4.11 shows that 22% of MS companies' expenditure on training per worker can be considered high, while the expenditure of all (100%) S companies on training per worker is high. It is tempting to conclude in favour of higher expenditure on training per worker for service companies, but caution dictates that one should check whether the differences observed in the percentage high of both MS and S companies' expenditure on training per worker are statistically significant. Table 4.12 gives details of the Fisher's Exact Test on High or Low expenditure on training per worker amongst manufacturing-service and service companies.

Table 4.12

Details of Fisher's Exact Test on High or Low
Expenditure on Training Per Worker Amongst
Manufacturing-Service and Service Companies

Configuration		Exact Probability of Larger Value	Comment
2	7	0.21	S
5	0		

With an exact probability of larger value of .021 and at .05 level of significance, there is a significant difference in the percentage high of expenditure on training per worker of MS and S companies. This means that the difference observed in the percentage highs in table 4.11 is statistically significant. Hence, the null hypothesis which states that:

There is no significant difference in the amount expended on training and development per worker in the manufacturing-service and service companies

is rejected.

Discussions

Having rejected the null hypothesis, one accepts the alternative hypothesis that 'there is a significant difference in the amount expended on training and development per worker in the manufacturing-service and service companies. The acceptance of the alternative hypothesis means that if the total amount expended on training by each of the companies studied were to have been expended on all workers in each of the companies, the expenditure of all the service companies on training for each worker would be higher than the expenditure of most (77.7%) of the MS companies on training per worker. The rationale for taking a look at expenditure on training per worker is to adjust for the size of the workforce of each of the companies. This result is particularly illuminating because when the expenditure on training was considered without reference to the total workforce of each company, the result obtained (for hypothesis A(ii)1) indicated that there is no significant difference in the amount expended on training by both MS and S companies, although a higher percentage (80%) of S companies than MS companies' 33% spend more on training.

In addition, the result shows that the amount that could possibly have been expended on training of each of the workers in the companies is not independent of whether the companies are MS or S companies. This means that S companies are more committed to training their workers than MS companies when commitment is being measured by expenditure on training per worker.

One would therefore like to find answer(s) to the question: Are service companies more committed to training by virtue of the fact of being just S companies or are there other factors that could be held responsible for the observed difference in the commitment of MS and S companies?

Testing Hypothesis A(ii)4

The high or low expenditure of companies on training per worker in giant and large companies is given below in table 4.13.

Table 4.13

High or Low Expenditure on Training Per Worker Amongst
Giant and Large Companies

Size	High	Low	Total	Percentage High
Giant	4	4	8	50%
Large	3	3	6	50%
Total	7	7	14	

Table 4.13 indicates that giant and large companies have the same percentage high of expenditure on training per worker, with giants having $4/8 = 50\%$ and large's $3/6 = 50\%$. There seems to be no doubt, regarding the possibility of a difference existing between the two percentage highs that are the same. To give the benefit of a doubt however, results of the Fisher's Exact test statistic on high or low expenditure on training per worker for giant and large companies are given below in table 4.14

Table 4.14

Details of Fisher's Exact Test on High or Low
Expenditure on Training Per Worker Amongst
Giant and Large Companies

Configuration		Exact Probability of Larger Value	Comment
4	4	1.000	NS
3	3		

With an exact probability of larger value as 1.000, the Fisher's Exact Test in table 4.14 shows that the giant and large companies have exactly the same percentage of high expenditure on training per worker. This means that the giant and large companies are the same in the amount that is likely to be expended on the training of each worker. Given this result, the null hypothesis which states that:

There is no significant difference in the amount expended on training and development per worker by the giant and large companies

is accepted.

Discussions

Having accepted the null hypothesis that giant and large companies are the same in the amount expended on training per worker, it follows that the amount expended on training per worker is totally independent of the size of the company. This result would seem to confirm the result of an earlier hypothesis (Hypothesis A(ii) 2) that there is no difference in the amount expended on training by giant and large companies, although a higher percentage (62.5%) of giant companies expend more money on training than large companies' 33.3% in A(ii) 2.

Also, the result obtained indicates that when the amount that could have been expended on the training of each worker in the companies is considered, giant companies would be no more or no less committed to training than large companies.

The question then is, why do giant and large companies have exactly the same level of commitment to training?

A. Commitment of Companies to Training

- (iii) (Measured by Human and Physical Resources Available for Training)

Information about human and physical resources available for training could only be obtained for three (3) of the fourteen (14) companies that formed the core of this study. However, two out of six companies that provided additional information had this information. The information provided by these two companies are being taken together with those of the three main companies. The details of the human and physical resources available in the five companies have been outlined in table 4.15 below.

Given the fact of the problems associated with the determination of what constitutes 'reasonable' or 'adequate' standards of facilities for training to warrant conclusions regarding whether or not the companies are committed to training, the investigator highlighted the details of the facilities available, falling short of indicating the adequacy or otherwise of such facilities. The judgements on the adequacy of human and physical resources that are available for training will be made when discussions about the commitment or otherwise of companies to training (using the three measures -

commitment rating, expenditure and human and physical resources) are being considered.

Table 4.15

Human and Physical Resources Available for Training in Companies

Resources	Companies				
	S1	MS6	MS7	AI2	AI3
Human 1) Lecturers of, (or provided by) either or more of the following organisations: Industrial Training Fund (ITF), Nigerian Institute of Personnel Management (NIPM), Centre for Management Development (CMD), University Consultants, Private Consultants, and other Companies' training schools	x	x	x	x	x
2) Resource persons amongst members of staff of companies	x			x	x
3) Training managers or coordinators and assistants	x	x		x	x
Physical (Buildings and Equipments)	x				x
1) Training centre or school					
2) Training/Lecture rooms		x	x	x	
3) Library	x				
4) Overhead/film projectors	x	x	x	x	x
5) Video recording cameras	x				
6) Chalk-board	x	x	x	x	x
7) Books/Pamphlets/hand-outs/modules	x		x	x	x

All the five companies above draw instructors for the different training programmes that they sponsor and or provide from the providers of the training programmes. Thus, private consultants provide instructors for the training programmes that are made available to workers in the training centres, or training rooms of the companies. Lecturers of the centre for management development give instructions to workers sent to the centre. Just the same way, the Industrial Training Fund provide instructions for the training programmes that the Fund provides and to which companies send their staff.

At least half (3) of the companies draw resource persons from among their staff and most (80%) of the companies have the position of training manager or coordinator and staff that assisted him.

Concerning physical resources which include buildings and equipment, two of the companies have training centres while the rest have training/lecture rooms. One of the companies has a reading room which it refers to as a library. All the companies have chalk-boards, an overhead and or film projectors, one company has in addition to this audiovisual aids, a video recording camera. Most 80%

of the companies give out pamphlets, hand-outs or modules during training.

Summary of Results of Commitment of Companies to Training

Concerning the commitment rating of companies, although the results of the analyses show that the commitment of companies to training is independent of the nature and size of the companies, it was observed that a higher percentage of manufacturing-service and large companies have high commitment rating. This is an indication that a higher although not significant percentage of MS and large companies have high commitment (measured by commitment rating) to training.

This implies that companies (MS) that provide professionals/specialists training, vocational-technical training, apprentice training, training in customer/public relations, training in salesmanship, health and safety training, relevant education/further education differ only slightly from companies (S) that provide only about 75% of the types of training programmes that MS companies provide. Also, companies with mostly lower workforce and perhaps turnover and investment capital (large companies)

have a higher percentage of types of training provided than their counterparts (giant companies).

With regards to the expenditure of companies on training, the results of the analyses show that the expenditure of manufacturing-service/service and giant/large companies on training are independent of the nature and size of the companies. Because a higher percentage of service and giant companies have high expenditure on training, the conclusion could be reached that a higher but not significant percentage of service and giant companies expend money that can be classified as high on training than does MS and large companies.

Regarding expenditure on training per worker, it has been shown to be dependent on the nature of the companies, with service companies' percentage high actually being significant. As for giant and large companies however, the expenditure of the companies on training per worker is completely independent of the size of the companies, as the percentage high of both companies are the same.

Following these observations, it is possible and plausible to conclude that in terms of expenditure on training or expenditure on training per worker, more service companies showed a consistent tendency to expend

money that can be classified as high on training than MS companies. As for giant and large companies however, it could be said that their expenditure on training or training per worker are almost the same.

B. Extent of Involvement of Companies in Training

(Measured by Percentage of Workers Trained)

A measure of the extent of involvement (participation) of a company in the provision of training for her workers is the percentage of workers that received training. The estimates of this variable, percentage of workers trained, for all the companies selected are given in Table 3.2.

The null hypotheses that are relevant to this response variable are given below:

Hypothesis B1

There is no significant difference in the percentage of workers that received training in the manufacturing-service and the service companies.

Hypothesis B2

There is no significant difference in the percentage of workers that received training in the sector giant and sector large companies.

Testing Hypothesis B1

Table 4.16 below shows the details of high or low percentage of workers trained for MS and S companies.

Table 4.16

High or Low Percentage of Workers Trained Amongst
Manufacturing-Service and Service Companies

Nature	High	Low	Total	Percentage High
MS	4	5	9	44.4%
S	3	2	5	60%
Total	7	7	14	

Table 4.16 shows that MS companies have a lower percentage high of percentage of workers trained (44.4%) when compared with the 60% percentage high for the service

companies. Although it seems clear that the percentage of workers trained by S companies is higher than those trained by MS companies, it is important that the observed difference be subjected to statistical analyses to know whether they are statistically significant. The result of the Fisher's Exact Test on high or low percentage of workers trained is given in Table 4.17 below:

Table 4.17

Details of Fisher's Exact Test on High or Low Percentage of Workers Trained Amongst Manufacturing-Service and Service Companies

Configuration		Exact Probability of Larger Value	Comment
4	5	1.000	NS
3	2		

The value of the exact probability of a higher value for MS and S companies is 1.000. This shows that the difference in the percentage of workers trained by MS and

S companies is not significant. Hence, Hypothesis B1 which states that:

There is no significant difference in the percentage of workers that received training in the manufacturing-service and service companies

is accepted.

Discussions

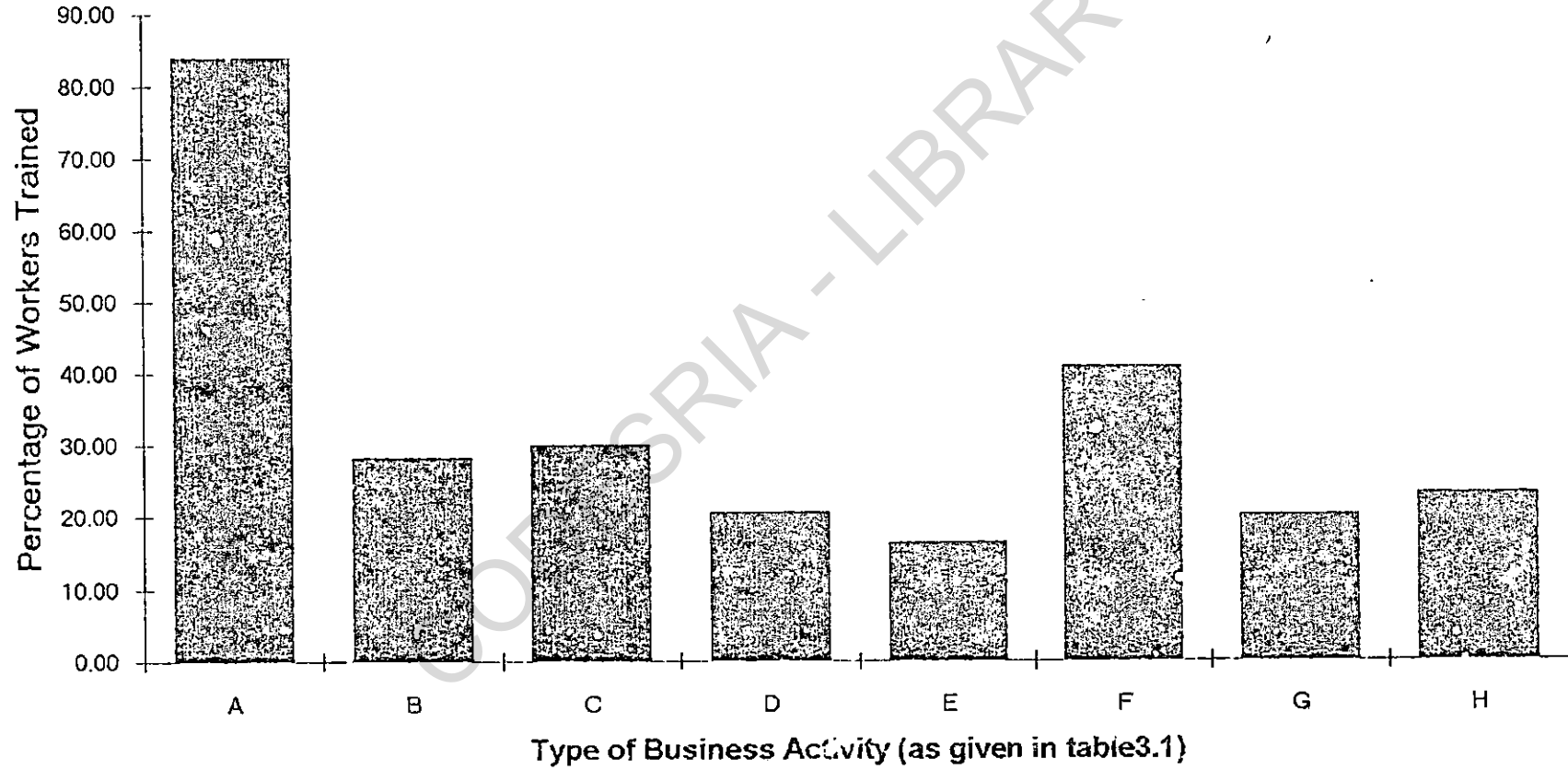
Following the acceptance of the null hypothesis, it could be said that the percentage of workers trained by MS and S companies is generally the same. This means that MS companies are no less or no more involved in training than their S counterparts just because they are MS companies. Put differently, the percentage of workers trained or the prevalence of training in companies is not dependent on the nature of the companies. It is important to emphasize that although the result of the Fisher's Exact Test on high or low percentage trained is not significant, the S companies trained a higher but not significant percentage of their total number of workers.

A cursory look at the percentage of workers trained by the different types of businesses involved in the study

may prove useful. Figure 4.3 indicates the average percentage of workers trained for each type of business.

Figure 4.3 indicates a general lack of difference in the percentage of workers trained by all the businesses except the accounting/auditing business that records the highest and markedly different average percentage of workers trained (84.09%). With a mean of 32.96% for all the companies, it seems obvious that the average percentage of workers trained by the accounting/auditing business (84.09%) is far higher than those of the other businesses. Following from this observation, there is a temptation to conclude that the accounting/auditing business is more involved in training than the other businesses.

This would seem to confirm the earlier observation that S companies train a higher although not significant percentage (60%) of their total number of workers as against the MS companies' 44.4%. From another perspective, it would seem incorrect to assume that because one out of the three businesses that make up the service companies for this study trains a higher percentage of its workers than do the others, then the service companies should be taken as being more involved in training than the

FIG.4.3 Average Percentage of Workers Trained By Type of Business Activity

manufacturing-service companies. That notwithstanding, it is correct to say that the category of business that trains the highest percentage of workers is part of the service companies.

Again, one has to exercise a lot of caution when making this kind of a conclusion because the available data do not give the impression that such conclusions are safe.

Why do a higher (although not significant) percentage of service companies rather than manufacturing-service companies have high involvement in training?

Testing Hypothesis B2

Table 4.18

High or Low Percentage of Workers Trained Amongst
Giant and Large Companies

Size	High	Low	Total	Percentage High
Giant	3	5	8	37.5%
Large	4	2	6	66.7%
Total	7	7	14	

Table 4.18 indicates that giant companies have a lower percentage high of percentage of workers trained (37.5%) than large companies, (66.7%). The result of the Fisher's Exact Test on high or low percentage of workers trained is given in Table 4.19 below.

Table 4.19

Details of Fisher's Exact Test on High or Low Percentage of Workers Trained Amongst Giant and Large Companies

Configuration		Exact Probability of Larger Value	Comment
3	5	.592	NS
4	2		

From the results of the Fisher's Exact Test given in table 4.19 above, it could be seen that the percentage of workers trained by giant and large companies are the same. This is because the results of the Fisher's Exact Test gives the value of an exact probability of larger value as .592 which is larger than .05. Given this result, Hypothesis B2 which states that:

There is no significant difference in the percentage of workers that received training in the giant and large companies

is accepted.

Discussions

Having accepted the null hypothesis, one is in essence saying that the involvement of companies in training cannot be said to be dependent on the size of the companies. If one were to go back to Table 4.18, one would observe that more large companies train a higher percentage of workers than giant companies. Although the difference has been proven not statistically significant, it is impossible to ignore the difference noticed in the percentage highs of both sets of companies, especially because large and not giant companies have the larger percentage highs. If one were to go by the high and low percentage of workers trained as shown in table 4.18, the percentage highs or low contrasts sharply with the widely held view that larger companies partake more in training than their smaller counterparts (Tabbush, 1977; Joyce et al., 1985).

It becomes imperative then, to find out why a higher but not significant percentage of large companies train a higher percentage of their workers than the giant companies. Or why should the extent of involvement of large companies in training seem slightly higher than those of giant companies.

Summary of Results of Extent of Involvement of Companies in Training

The results of analyses regarding the percentage of workers trained by nature and size of the companies indicate that the percentage of workers trained is not dependent on the size and nature of the companies. Thus, a higher but not significant percentage of (or more) service and large companies train a high percentage of their workforce than do the manufacturing-service and giant companies.

Further Discussions of Results of Commitment to and Involvement of Companies in Training

It is not surprising that in terms of commitment rating of companies, a higher but not significant percentage of manufacturing-service companies seem

slightly more committed to training than service companies. This is because by the nature of MS companies, the training programmes that they can provide would be a combination of training programmes mainly to fulfil the goals of producing certain kinds of goods and providing certain kinds of services that will help to sell the goods produced. This means that MS companies would also provide certain kinds of training that are needed by service companies. There is thus an indication that the slight difference observed in the commitment rating of MS and S companies may be inherent in the nature of MS companies and the way of estimating the commitment rating of companies to training. Although there does not seem to be any evidence in support of this observation in the literature, it would seem correct from the result of this study to state that a higher percentage of MS companies, perhaps because of their nature, are more committed to providing more programme types or more types of training than the service companies.

The large companies however, constitute the surprise in terms of commitment rating. The result of analysis in this respect indicates that a higher percentage of large companies are slightly more committed to providing more

programme types or more types of training than the giant companies. This may be because large companies generally want to grow, have a larger share of the market, and also hold their own in the market, they may feel a need to train workers in different training programmes so as to aid the company's expansion, attract more workers and make more profit.

The results of the expenditure of companies on training would not seem to tally with that of commitment rating of companies. What obtains is that a higher, although not significant percentage of service companies, who were initially observed to have lesser types of training than MS companies, expend money that can be classified high, on training than do the MS companies. More giant companies also expend high amounts of money training workers in the limited types of training that they provide, than do the large companies that have more programme types.

When the expenditure on training by each company is adjusted for the total workforce in the company, service companies come clear as being more committed to training than MS companies, while giant and large companies have the same level of commitment to training. The result of

the adjustment of expenditure on training for workforce does not come as a surprise given the earlier results of expenditure on training.

The probable explanation of why more service companies in particular and giant companies to a lesser extent would expend more money on providing training in limited types of training than their MS and large counterparts could be economic. This is because in responding to the question of why certain programme types are favoured and emphasised, most of the training managers/coordinators or staffers indicated that they favour and emphasize the training types observed because such are "most crucial to operational dynamics and constitute serious areas of need for operational efficiency and effectiveness", "the programmes meet organisational need", "they make workers better auditors". All these point to the fact that companies favour many or limited kinds of training in order to meet the main goals of the companies. If the limited training types would meet organisational goals, then the companies (service and giant) would spend more money (or highly) on such.

The following example may suffice. An accounting/auditing firm provides only

professional/specialist training for its employees, but it claims that there is no limit to the amount of money that it expends on training. This company claims that it takes training seriously because the firm gets a fresh supply of accountants/auditors from those trained, since there is a high turnover of accountants from the firm. So the company has to train those who will replace those who leave. Three accountants are said to resign from the firm every month.

As for giant companies, the probable reason they spend a little more money on limited types of training is perhaps that they already have a large share of the market, and perhaps already have budgets for training that can be classified as high, which does not change no matter the training need that arises.

These explanations, especially for commitment of service companies to training fits perfectly well into the 'human capital' theory which is derived from the neo-classical economic theory and which believes that decisions about expenditure on training are investment decisions, and training would occur if there is a favourable rate of return, (Goldstein, 1980; Joyce et al. 1985). Thus, service and giant companies would invest more

money on limited training programmes, so long as such would provide favourable returns.

As earlier observed, more service companies, and to a lesser extent, giant companies spend money that could be classified as high on training and on training per worker. More service and large companies train a higher percentage of workers than MS and giant companies. This means that (1) more service companies expend more money on training of a lot more workers than MS companies but in lesser training types than MS companies, (2) more giant companies expend more money although to a lesser extent than service companies on training a low percentage of workers in lesser programme types and (3) large companies expend money that could be classified as low on high percentage of workers in high programme types. These observations are indications that more service and large companies have high involvement in training and high commitment to training.

A probable explanation of the observed high expenditure on high percentage trained in limited training types for service companies in particular is as follows: if spending much money on a high percentage of workers, in a lot fewer kinds of training is what brings the most

favourable rate of returns, for and during the realisation of the company's goals, then the company would provide funds for such limited training programmes.

Pertaining to the human resources that are available for training in companies, the human resources available for training in most companies appear generally adequate, as they all seem to draw trainers from all the available sources, for example "in-house" people as Nadler (1970) would like to call resource persons among the staff of companies, and lecturers in different institutions including higher institutions and consultants who Darkenwald and Merriam (1982) referred to as "out of house" people. In addition, most of the companies have training managers or coordinators and assistants. These people see to the training needs of the companies, generally determine who goes on what training, organise training within the premises of the company or generally run the training school or centre. The existence of the office of a training manager/coordinator would seem to portray the companies as being serious about the business of training.

Physical facilities and equipment for all the companies in view seem adequate. It has to be pointed out

that the presence or absence of a training 'school' or 'centre' (not training room or lecture room) cannot be a determinant of whether or not companies take training seriously. Nadler (1970), for example, observed that certain companies use conference rooms or multipurpose facilities for training, although he pointed out that companies with large turnover and which require special entry level qualifications may make special provision for training facilities. He did state however, that the size of the company may be no indication of commitment to training 'since a vast amount of training is conducted away from the workplace'. Darkenwald and Merriam also considered that larger companies conduct at least a portion of their training in residential education centres that are similar to universities. It would thus seem as if large companies are expected to have training schools or centres.

It is not out of place to report the observation of the training session that this investigator watched on 21/8/91, at company MS7 at about 4.00 p.m.

The workers (15 No) were comfortably seated in horseshoe formation. The training room was air-conditioned and well lit. The learners were production workers who

have been on the job for a few years, with the basic minimum qualification of WASC, trade centre certificate or their equivalents. The topic of the day was 'large Scale Manufacture of Inorganic Chemicals'. The course was to last a year.

The instructor, who was closely watched by one of the partners in the consulting firm running the training programme, made good use of the chalk-board and the module that all the participants had. The instructor/learner relationship was cordial and the learners participated actively in the learning process. They asked questions to clarify issues.

Going by this observation, it would seem that the human and physical facilities available for training this group of workers was adequate to facilitate learning. Given that most of the human and physical resources used for the training session just described are also recorded as being used in the other companies for which this information is available, one can conclude that the human and physical resources for training in companies are generally adequate.

Another plausible explanation of the observed levels of commitment to and involvement of most service and large

companies in training is a combination of the factors of managerial principles, in particular theory Y as explained by Beach (1975) and the ITF Decree of 1971 as an economic tool. Almost all the training managers/coordinators stated their belief that human beings have the potentiality for growth and achievement and this has to be nurtured by training. All, except one also claimed that the ITF Decree is an important factor in their training efforts. Given that they have to pay 1% of their payroll to the ITF, they would rather make the best out of the money paid by training their workers, since such workers cannot be less useful to the company as a result of training, except if the "free rider" effect in economics takes workers away from them. It is worthy of note that for these companies, the ITF Decree as an economic factor in training fits into the neo-classical economic theory. The result is that as long as obeying the ITF Decree can bring favourable rates of return on the 1% they pay, the companies will obey.

The only company that would not accept the ITF Decree as an important factor in training claims that for the company, training cannot be said to be financially rewarding in the same breath as it claims that it has to train 'to get fresh supply of accountants' and 'make

workers better auditors'. The company again claims that the home-international office of the company expects certain standards of performance and that could only be met by training. This company claims that theory Y and social responsibility are the main determining factors in its training efforts. It is important to state though that 'getting fresh supply of accountants' and 'making workers better auditors' do not seem to fit perfectly well into the explanation of social responsibility as a factor in training. Incidentally, the company in question trained only professionals/specialists and not a single auxiliary/support staff in all the years that this study covered, even when such staff had spent close to 7 years in the company. Another useful information provided regarding the company in question is that while workers are being trained, many are also being prepared for their professional examinations (ICAN) and so they are generally useful to the firm as a cheap source of labour, as they do most of the auditing work for the company but are not well paid for the jobs.

The tendency of the manager in question to want to claim social responsibility for training does seem understandable though. It appears to be a recognition on

the part of management that they need to be socially responsible, especially because they have refused to train all those whose usefulness to the firm they cannot readily quantify or assess.

Even then, intellectual honesty demands that one should state that the papers of the company in question did not appear at all in the reimbursement files of the ITF. This could be an indication that they either don't pay at all, or they pay and do not ask for reimbursement. The second option does not really appear possible for a company that can not spend money on the training of staffers who are not considered very useful to the organisation.

On a far wider level, it has to be observed that service companies enjoyed a lot of boom during the period when the nation's economy was being 'structurally adjusted'. This study covered many (5 years) of those years.

The reports from the different companies (from annual reports but especially during discussions with training managers) show that many manufacturing-service companies were operating below capacity because of the problems associated with the depreciation of the Naira against

major currencies, and consequently the increase in the prices of raw materials, which is coupled with high interest rates on short term loans and overdrafts which most depend on for their operations. Because of these, many manufacturing-service companies had to lay off workers, some were shut and a lot more survived by passing on the burden of high cost of production to consumers who although already had depressed purchasing power brought about by inflation, could not resist the effect of the aggressive marketing strategies adopted by the companies especially for essential goods. Most of the service companies however, enjoyed a lot of boom, as financial houses multiplied, banks sprang up from all over the country, such banks and financial houses needed computers for their operation and needed to get their accounts audited. An auditor/accountant once remarked that auditors/accountants are always relevant when the economy is enjoying a boom and companies are thriving, and when the companies need to fold up, they help them fold up.

By way of example, in its 1991 annual report, the management of company S3 claimed that although there was 'further thinning out of the market shares of the older banks' with the licensing of 11 new commercial and

merchant banks in 1991 alone, bringing all the banks in the two categories to a total of 118, the company still recorded 28% growth in gross income, as against 34.1% in the previous year. Note that the gross income of this company was 611,276,000.00 in 1987; 1,059,418,000.00 in 1989 and 1,824,117,000.00 in 1990. Most of the overall growth was said to have come from a phenomenal 84% increase (compared to 40% for 1990) in earnings from off balance sheet commissions and exchange, while the company's expenses grew by almost 25% (it has to be noted that training is part of expenses) much lower than the 43% growth of the previous year (Company S3, 1991 Annual Reports, P. 7).

The implication of these observations for training is that in order to meet up with the increasing demands on the services of the service companies, the companies get more involved in training and commit more funds to training, (than their manufacturing-service counterparts) but only in the types of training that will meet their immediate needs and so bring favourable returns on their investment in training.

C. Relationships Between the Measures of Commitment of Companies to Training, the Measures of Extent of Involvement in Training and Other Relevant Indicators.

The measures of commitment of companies to training and extent of involvement in training have been clearly stated. It is expected that these measures will have some bearing on each other as well as some other indicators such as the number of workers in a company, and the turnover of the company.

It is also possible that some of these measures can be predicted on the basis of or determined by others. A useful tool for determining the extent to which one variable-dependent variable - can be predicted on the basis of another variable -independent variable - is provided in the regression model.

The null hypotheses on regression of interest in this study are stated as follows:

C(i)1

There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, giant and large

companies and the size of the workforce of the companies.

C(i)2

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, giant and large companies on training and the size of the workforce of the companies.

C(i)3

There is no linear relationship between percentage of workers that received training in manufacturing-service companies, in service companies, in all companies, in sector-giant and large companies and the size of the workforce of the companies.

C(i)4

There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, sector-giant and sector-

large companies and the expenditure of the companies on training.

C(i)5

There is no linear relationship between the percentage of workers trained by manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies and the expenditure of the companies on training.

C(i)6

There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, sector-giant companies and sector-large companies and the percentage of workers that received training provided by the companies.

C(i)7

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-

large companies on training per worker and the workforce of the companies.

C(i)8

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training per worker and the commitment rating of the companies.

C(i)9

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training per worker and the percentage of workers trained.

To test hypotheses C(i)1 to 9,

Let Y_i be the values of a variable Y for company i , $i = 1, 2, 3, \dots, 12, 13, 14$.

Let X_i be the corresponding values of another variable X for company i .

A mathematical model for regression of Y on X is given by

$$Y = \alpha + \beta X + \varepsilon$$

Where ε is a random variable $N(0, \sigma^2)$

α is a parameter

β is a parameter and

σ^2 is error variance

The model assumes a linear (straight line) relationship between Y and X. Such an assumption is often suggested by a scatter plot of Y values against X values. The purpose of the linear regression analysis is to estimate a straight line that 'best' fits the data. This is equivalent to mathematically estimating the values of α and β .

The parameters are given from the data by

$$\beta = \frac{\sum_{i=1}^{14} (X_i - \bar{X})(Y_i - \bar{Y})}{\sum_{i=1}^{14} (X_i - \bar{X})^2} = \frac{n \sum_{i=1}^{14} X_i Y_i - (\sum X_i)(\sum Y_i)}{n \sum_{i=1}^{14} X_i^2 - (\sum X_i)^2}$$

$$\alpha = \bar{Y} - \bar{X}\beta$$

$$\text{where } \bar{Y} = \frac{\sum Y_i}{n}, \bar{X} = \frac{\sum X_i}{n}$$

For the purpose of hypotheses C(i)1-9, the concern will be the determination of β alone.

The parameter β can be interpreted as the increase in the value of dependent variable Y as a result of a unit increase in the value of independent variable X. A value of β that is close to zero thus indicates little or no effect in Y by a change in X. Also, two values of β for two different X's can be compared to know which of them has more effect on the value of Y. Null hypothesis of no correlation between any two variables Y and X corresponds to testing of $\beta = 0$ against $\beta > 0$ or $\beta < 0$. The appropriate test statistic for this is the t statistic, given by

$$t = \frac{\beta}{S(\beta)}$$

$$\text{Where } S^2(\beta) = \frac{nMSE}{n \sum X_i^2 - (\sum X_i)^2}$$

and MSE (Mean Square Error)

$$= \frac{SSE}{n-2} = \frac{(\sum \text{ of square error})}{n-2}$$

$$\text{and } SSE = \sum Y_i^2 - \frac{(\sum Y_i)^2}{n} - \frac{(n \sum X_i Y_i - \sum X_i \sum Y_i)^2}{n(n \sum X_i^2 - (\sum X_i)^2)}$$

The decision rule is to compare t_{cal} with tabulated values of t at degree of freedom $n-2$.

Testing Hypothesis C(i)1

The results of linear regression for this hypothesis are given on Table 4.20.

Table 4.20

Linear Relationship Between Commitment Rating and Total Number of Workers in Companies

Compa nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remark s on β
MS	9	.00094295 44	.002426	.389	2.365	NS
S	5	.002305	.001229	1.876	3.182	NS
ALL	14	.001903	.000941355	2.021	2.179	NS
Giant	8	.001905	.001077	1.770	2.447	NS
Large	6	.007586	.003192	2.376	2.776	NS

Y = Commitment Rating; X = Total Number of Workers

The results on table 4.20 show that the effect of an increase in the size of the workforce of the companies on commitment rating is slightly positive for all categories of companies even if not significant. This is to imply that the management of companies is more likely to respond more positively than negatively on commitment rating or types of training provided with a larger workforce. The companies in the large category are likely to respond more positively than the others, while MS are least likely to respond positively. A decreasing order of response to size of workforce is large, service, giant and MS. Given these results, Hypothesis C(1)1 which states that:

There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, giant and large companies and the size of the workforce of the companies

is accepted.

Discussions

That the relationship is not significant can be seen from the calculated t and tabled t values for the 5 sets of companies: MS - t_{cal} .389, t_{tab} 2.365; S - t_{cal} 1.876, t_{tab} 3.182; All - t_{cal} 2.021, t_{tab} 2.179; Giant - t_{cal} 1.770, t_{tab} 2.447; Large - t_{cal} 2.376, t_{tab} 2.776. These explain why the null hypothesis was accepted.

Although the null hypothesis has been accepted, one cannot ignore the linear relationship, even if slight, between the commitment rating of the five groups of companies and their workforce.

From table 4.20, it could be observed that for both MS and S companies, an increase in the number of workers (workforce) in the companies would result in a slightly positive increase in the commitment rating of the companies. Service companies are more likely to respond positively to such an increase than manufacturing-service companies.

As far as giant and large companies are concerned, it appears that when the number of workers (workforce) in the companies increases, there is a slightly positive increase in the commitment rating of the companies and this is

particularly so for large companies rather than for the giant companies.

Testing Hypothesis C(i)2

Table 4.21 gives the details of the linear regression of the variables in the hypothesis being considered.

Table 4.21

Linear Relationship Between Expenditure of Companies on Training and Total Number of Workers in Companies

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	139.47446	71.541520	1.950	2.365	NS
*S	5	872.46403 7	22.596564	38.61 0	3.182	S
*ALL	14	825.10839 4	87.226984	9.459	2.179	S
*Giant	8	866.17649 4	107.627314	8.048	2.447	S
Large	6	76.782786	99.220897	.774	2.776	NS

Y - Expenditure on training X - Total Number of Workers

The effect of an increase in the number of workers on the expenditure of the companies on training for all categories of companies is positive and significant. The service companies respond most positively by increasing expenditure on training by 872.46, when the number of workers increase. Almost the same can be said for the companies that are giants in their own sectors. However, although the expenditure of MS and large companies on training respond positively to increases in the number of workers, such increases are not significant. Again, although the expenditure of large and MS companies on training respond positively but not significantly to increases in the total number of workers, the expenditure of MS companies on training appears to respond more positively than large companies. With these results in view, the hypothesis (Hypotheses C(i)2) which states that:

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, giant and large companies and the size of the workforce of the companies

is rejected

for service companies, all companies and giant companies, but

is accepted

for manufacturing-service and large companies.

Discussions

With the rejection of this null hypothesis, especially as it relates to service, all and giant companies, the alternative hypothesis that there is a linear relationship between the expenditure of companies on training and the total number of workers in the companies should be accepted. This is because the linear relationship has been seen to be significant for giant companies, for all companies and for service companies. The null hypothesis was accepted for large and service companies because a positive but not significant linear relationship was observed between the expenditure of the companies on training and the total number of workers in the companies.

The results on table 4.21 show that the expenditure of MS and S companies on training increases when the number of workers in the companies increases. The S companies do respond more positively (with β of 872.46)

and significantly to increasing expenditure when the number of workers increases than do MS companies (with β of 139.47).

Giant and large companies respond positively to increases in the number of workers by increasing their expenditure on training. However, it would seem that giant companies rather than large companies respond more positively (with β of 866.18) and significantly with t_{cal} of 8.048 and t_{tab} of 2.447, at .05 level of probability.

Testing Hypotheses C(i)3

The results in table 4.22 are the linear regression results for hypothesis C(i)3.

Table 4.22

Linear Relationship Between Percentage of Workers
Trained and Total Number of Workers in Companies

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	-.002718	.002852	-.963	2.365	NS
S	5	-.003788	.003121	-1.214	3.182	NS
ALL	14	-.002916	.002058	-1.417	2.179	NS
Giant	8	-.002075	.002412	-.860	2.547	NS
Large	6	-.014381	.008154	-1.764	2.776	NS

Y = Percentage of Workers Trained; X = Total number of Workers.

An overview of all companies shows that an increase in the workforce in the companies results in a decrease in the percentage trained although the decrease is rather negligible. Such decreasing response in the percentage of workers trained to increases in the number of workers in

the companies is more noticeable in large and service companies than in giant and MS companies. Hence, hypothesis C(i)3 which states that:

There is no linear relationship between the percentage of workers that received training in manufacturing-service companies, in service companies, in all companies, in sector giant and in sector-large companies and the size of the workforce of the companies

is accepted.

Discussions

The basis of the acceptance of the null hypotheses C(i)3 is the fact of the not significant linear relationship obtained in table 4.22 between percentage of workers trained and the size of the workforce of the companies. There is however, a slight inverse linear relationship between the percentage of workers trained by the companies, and the size of the workforce of the companies.

The percentage of workers trained decreases by $-.002748$ and $-.003788$ once there is an increase in the

workforce for both MS and S companies although S companies seem to respond more like this than do MS companies.

Giant and large companies also respond negatively, but also not significantly, to increases in the workforce by reducing the percentage trained. Large companies respond more like this than do giant companies.

Testing Hypothesis C(i)4

Table 4.23 gives the details of the linear regression of expenditure of companies on training on commitment rating of companies for the hypothesis in question.

Table 4.23
Linear Relationship Between Expenditure of Companies on Training and Commitment Rating of Companies

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	-.00000999288	.00000972125	-1.028	2.365	NS
S	5	.000002622277	.00000141786	1.849	3.182	NS
ALL	14	.000001688310	.00000114057	1.480	2.179	NS
Giant	8	.000001978965	.00000125065	1.502	2.447	NS
Large	6	.00002927	.00000181251	1.615	2.776	NS
		7				

Y = Expenditure of Companies on Training;

X = Commitment Rating of Companies.

The results on table 4.23 show that the effect of an increase in the commitment rating of companies to training on the expenditure on training for all categories of companies although positive, is not close to being significant. This is especially so for service, large and giant companies. MS companies, however, show a decrease in expenditure on training when commitment rating increases, although the decrease is not significant. Given these results, hypothesis C(i)4 which states that:

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training and the commitment rating of the companies

is accepted.

Discussions

The null hypothesis was accepted because of the fact that the linear relationship obtained in table 4.23

between the expenditure of companies on training and the commitment rating of the companies is not significant.

However, a close examination of table 4.23 shows that when the commitment rating of MS companies increase, the expenditure on training by these companies decreases, although not significantly.

With a unit increase in the commitment rating of giant and large companies, they increase their expenditure on training and this is more so for large companies more than giant companies.

Testing Hypothesis C(i)5

Table 4.24

Linear Relationship Between Expenditure of Companies on Training and the Percentage of Workers Trained

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	-.0000114251	.0000121622	-.939	2.365	NS
S	5	-.00000447948	.00000351467	-1.275	3.182	NS
ALL	14	-.00000229274	.00000244241	-.939	2.179	NS
Giant	8	-.00000187669	.00000271763	-.691	2.447	NS
Large	6	-.0000405748	.0000468919	-.865	2.776	NS

Y = Percentage of Workers Trained; X = Expenditure of Companies on Training

For all the companies, when the expenditure on training increases, the percentage of workers trained decreases, although the responses are rather low. The decreasing response in percentage trained to increase in expenditure on training is more pronounced for large and MS companies than for giant and S companies. Therefore the null hypothesis, C(i)5 which states that:

There is no linear relationship between the percentage of workers trained by manufacturing-service companies, service companies, all companies, sector-giant and sector large companies and the expenditure of the companies on training

is accepted.

Discussions

Hypothesis C(i)5 was accepted because there is no significant linear relationship between the expenditure of

companies on training and the percentage of workers trained. Nonetheless, it will not be correct to ignore the inverse linear relationship, however minute, that exists between the expenditure of companies on training and the percentage of workers trained, even if the relationship is not significant.

The percentage of workers trained by MS and S companies decreases when the expenditure of companies on training increase. The MS companies reflect this decrease in percentage trained (with β of $-.0000114251$) more than the S companies (with β of $- - 00000447948$).

For both the giant and large companies, when the expenditure of companies on training increases, the percentage of workers trained decreases. There seems to be a slight difference in the ways the percentage of workers trained by companies reacts to an increase in expenditure on training, as the percentage of workers trained by large companies seems to decrease more than those of giant companies.

Testing Hypothesis C(i)6Table 4.25

Linear Relationship Between Commitment Rating of Companies
and the Percentage of Workers Trained

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	.140805	.464829	.303	2.365	NS
S	5	-1.751903	.672453	-2.605	3.182	NS
*ALL	14	-1.308865	.451770	-2.897	2.179	S
Giant	8	-1.093184	.646621	-1.691	2.447	NS
*Larg e	9	-1.943768	.507664	-3.829	2.776	S

Y = Percentage of Workers Trained; X = Commitment Rating

An overview of all the companies indicates that an increase in the types of training (commitment rating)

provided by the companies results in a significant decrease in the percentage of workers trained. This is much more the case with large companies than with giant and service companies. Although there is a decrease in the percentage of workers trained when commitment rating increases for giant and S companies, such decreases are not significant. In the case of the MS companies, however, an increase in the commitment rating of the companies results in a positive but not significant increase in the percentage of workers trained. As a result of these observations, the null hypotheses (C(i)6) which states that:

There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies and the percentage of workers that received training provided by the companies

is rejected.

for all companies and large companies, but is accepted

for manufacturing-service, service, and giant companies.

Discussions

The rejection of the null hypothesis for all and large companies is based on the fact that there is a significant linear relationship between the commitment rating of the companies and the percentage of workers that they trained. The null hypothesis was accepted for manufacturing-service, service and giant companies because, although a linear relationship exists between the commitment rating of the companies and the percentage of workers that they trained, the relationship is not significant.

Table 4.25 shows that when the commitment rating of MS companies increases, this results in a positive, but not significant increase in the percentage of workers trained. For service companies, when there is an increase in their commitment rating, there is a decrease in the percentage of workers trained. When the commitment rating of both giant and large companies increases, the percentage of workers trained decreases. Large companies

however exhibit this tendency more than giant companies. As a matter of fact, the decrease for large companies is statistically significant.

Testing Hypothesis C(i)7

Table 4.26

Linear Relationship Between Expenditure on Training
Per Worker and Total Number of Workers

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	-.000633219	.040161	-.016	2.365	NS
S	5	-.008207	.092942	-.088	3.182	NS
ALL	14	.013501	.056524	.239	2.179	NS
Giant	8	.0003045317	.080248	.004	2.447	NS
Large	6	-.042483	.088087	-.482	2.776	NS

Y = Expenditure on Training per Worker; X = Total
Number of Workers

The effect of an increase in the workforce of a company on the expenditure on training per worker for all categories of companies is positive, even if not significant. In connection with this, giant companies respond this way than the others. However, an increase in the total number of workers results in a decrease in the expenditure on training per worker for large, MS and S companies. This is very much noticeable in the large companies. A decreasing order of response for the effect of the total number of workers on expenditure on training per person is large, S and MS companies. Therefore the null hypothesis $(C(i)7)$ which states that:

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector giant companies and sector-large companies on training per worker and the workforce of the companies

is accepted.

Discussions

The acceptance of the null hypothesis (C(i)7) should, however, not obscure the observed positive and negative linear relationship, even though low, between the expenditure of companies on training per worker and total number of workers in the companies.

Both MS and S companies seem to respond negatively to increases in the number of workers in companies by decreasing expenditure on training per worker and S companies appear to respond this way than MS companies.

As for giant and large companies, when there is an increase in the total workforce, the expenditure on training per worker increases positively for giant companies. For large companies however, they seem to respond with decreasing expenditure on training per worker when the workforce increases.

Testing Hypothesis C(i)8

Table 4.27 gives the details of the linear regression of expenditure on training per worker on commitment rating of companies.

Table 4.27

Linear Relationship Between Expenditure on Training
Per Worker and Commitment Rating

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	-.021046	.021663	-.972	2.365	NS
S	5	.002049	.011176	.183	3.182	NS
ALL	14	-.003038	.005483	-.554	2.179	NS
Giant	8	-.002875	.006655	-.432	2.447	NS
Large	6	.004488	.027263	.165	2.776	NS

Y = Commitment Rating; X = Expenditure on Training per Worker.

Taking the companies as a whole, it is clear that an increase in the expenditure on training per worker mildly results in a decrease in the commitment rating of the companies. This is more the case for giant and MS

companies than for large and service companies. Given this result, hypotheses C(i)8 which states that:

There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training per worker and the commitment rating of the companies

is accepted.

Discussions

Although the null hypothesis C(i)8 has been accepted, the presence of a slight linear relationship between the expenditure of companies on training per worker and the commitment rating of the companies, is worthy of note.

The types of training (commitment rating) provided by MS companies decrease with an increase in their expenditure on training per worker while, with an increase in expenditure on training per worker, the commitment rating of service companies increases.

The commitment rating of giant companies decreases by $-.002875$ when there is a unit increase in their

expenditure on training per worker. Whereas, with a unit increase in expenditure on training per worker, the commitment rating of large companies increase by .004488.

Testing Hypothesis C(i)9

Table 4.28

Linear Relationship Between Expenditure on Training per Worker and Percentage of Workers Trained

Compa - nies	n	β	$s(\beta)$	t_{cal}	t_{tab}	Remarks on β
MS	9	.001119	.028563	.039	2.365	NS
S	5	-.026012	.018246	-1.427	3.182	NS
ALL	14	-.003000	.011296	-.266	2.179	NS
Giant	8	-.002039	.012979	-.157	2.447	NS
Large	6	.022043	.058967	.374	2.776	NS

Y = Percentage of Workers Trained; X = Expenditure on Training per Worker.

When all the companies are taken together, an increase in the expenditure of companies on training per worker results in a decrease in the percentage of workers trained, although the decrease is not significant. This is particularly so for giant and service companies. Large and MS companies, however, show a positive response of percentage of workers trained when there is an increase in the expenditure of companies on training per worker, although the response is also not significant. Hence, hypotheses C(i)9 which states that:

There is no linear relationship between the expenditure of manufacturing-service, service, all companies, sector-giant and sector-large companies on training per worker and percentage of workers trained

is accepted.

Discussions

Null hypothesis C(i)9 was accepted because there is no significant linear relationship between the expenditure of companies on training per worker and the percentage of workers trained. Table 4.28 however shows that there is a slight linear relationship, both inverse and positive,

between the expenditure of companies on training per worker and the percentage of workers trained.

Manufacturing-service companies show an increase in the percentage of workers trained when there is an increase in their expenditure on training per worker. Service companies, however, respond to increases in expenditure on training per worker by decreasing the percentage of workers trained. Both positive and negative responses for MS and S companies respectively are not significant.

While large companies respond positively in terms of .022043 increase in percentage of workers trained with a unit increase in expenditure on training per worker, giant companies respond negatively by decreasing the percentage trained when expenditure on training per worker increases.

Another pairwise response variable that was considered is the relationship between the turnover of companies and the measures of commitment of companies to, and their involvement in training.

The relevant null hypothesis is given as Hypothesis

C(ii)1

There is no relationship between the percentage of workers trained by companies, the commitment rating of companies, the expenditure of companies on training, the expenditure of companies on training per worker on the one hand, and the turnover of the companies on the other hand.

Testing Hypothesis C(ii)1

It is important to state that the data that are relevant for testing this hypothesis could only be obtained for 5 companies, as shown on Table 3.2. The implication of this is that analysis could not be separated into testing hypothesis by nature and size of companies. The Pearson's Product Moment Correlation test statistic was used to analyse the available data.

The model for the Pearson's Product Moment Correlational test statistic is given as:

$$r = \frac{n \sum X_i Y_i - (\sum X_i) (\sum Y_i)}{\sqrt{(n \sum X_i^2 - (\sum X_i)^2) (n \sum Y_i^2 - (\sum Y_i)^2)}}$$

(Snedecor & Cochran, 1974)

Table 4.29 below gives details of the results of Pearson's Correlation statistic on the relationship between the measures of involvement and commitment of companies to training and the turnover of the companies.

Table 4.29

Relationship Between Percentage of Workers Trained (A)
Commitment Rating of Companies (B), Expenditure of
Companies on Training (C), Expenditure of Companies on
Training Per Worker (D) and the Turnover of the Companies
(E)

Vairables	r_{cal}	$r_{tab} (.05)$	Remarks
AvsE	-.7176	.811	NS
BvsE	-.0896	.811	NS
CvsE	.4446	.811	NS
DvsE	-.4153	.811	NS

The results in table 4.29 above show that there is a substantial inverse relationship between percentage of workers trained by companies and the turnover of companies with a value of $-.7176$. That is to say, the percentage of workers trained decreases when there is an increase in the turnover of the companies. The same inverse relationship can be observed between the commitment rating of companies and their turnover, and between the expenditure of companies on training per worker and the turnover of the companies. It would seem that the variable that has the least and very negligible relationship with the turnover of the companies is the commitment rating of the companies with r of $-.0896$.

The only variable that has positive moderate relationship with the turnover of the companies is the expenditure of the companies on training.

The r_{cal} obtained for variables $AvsE$, $BvsE$, $CvsE$, and $DvsE$ is not significant at .05 level of probability.

Given this result, hypothesis C(ii)1 which states that:

There is no relationship between the percentage of workers trained by companies, the commitment rating of

companies, the expenditure of companies on training, the expenditure of companies on training per worker on the one hand, and the turnover of the companies on the other hand

is accepted.

Discussions

Although the null hypothesis has been accepted, it may be worthwhile to note the degree of relationship between the variables involved in the analysis. The results on table 4.29 show that when the turnover of the companies increases, the percentage of the workers trained decreases. And the prediction that can be made for the percentage trained on turnover of companies is close to perfect. Also, when the turnover of the companies increases, the commitment rating of the companies increases. The prediction that can be made on turnover for commitment rating is very much less than perfect. As for expenditure of companies on training, it increases as turnover increases, and the relationship observed is moderate. The expenditure of companies on training per worker decreases as the turnover of the companies increases. The relationship observed, although negative,

is moderate, such that its predictive value is only just imperfect.

Summary of Results of Relationships Between the Measures of Commitment of Companies to Training, the Measures of Involvement of Companies in Training and other Relevant Indicators.

This summary has been divided into four parts in order to answer four questions.

The first question to be answered is: Is the involvement in and commitment of companies to training dependent on the workforce?

Considering the companies by their nature, service companies more than manufacturing-service companies show increases in most of the measures of commitment (commitment rating and expenditure on training) when there is an increase in the workforce. From the point of view of the size of the companies, large companies and not their giant counterparts responded more positively towards increases in most of the measures of commitment (commitment rating and expenditure on training).

It would thus be most appropriate to conclude that service and large companies are more committed to training than their manufacturing-service and giant counterparts as a result of increases in their workforce.

Again, service companies rather than the manufacturing-service companies responded more negatively to increases in their workforce by decreasing the percentage trained. Just the same way, large companies react more negatively to increases in the number of workers by decreasing percentage trained. This shows that service and large companies seem less involved in training when there are increases in the workforce than their manufacturing-service and giant counterparts.

When all of these observations are taken together, service and large companies seem less involved in training than manufacturing-service and giant companies when there is an increase in the workforce just as they seem more committed to training than the manufacturing-service and giant companies when there is an increase in the workforce.

The second question is: What relationship exists between the involvement and commitment of companies to training and the turnover of the companies?

It would seem that the companies studied responded negatively by decreasing the percentage of workers trained when the turnover of the company increases. This shows that they do not exactly favour being more involved in training when the turnover of their companies increase.

Furthermore, the companies react negatively to a higher turnover by decreasing the commitment rating and the expenditure on training per worker. The expenditure on training, however increases with increases in turnover of companies. On the strength of evidence for judging commitment, the companies do not seem more committed to training when the turnover of the companies increase. However, given that the amount expended on a programme is evidence of interest in and conviction in the need for the programme, companies could be said to be committed to training when their turnover increase.

This suggests that companies are actually less involved in training and are only just committed to training when their turnover increase.

The third question is: Is the commitment of companies dependent on other measures of commitment?

When companies are examined from the point of view of their nature, manufacturing-service companies and not

service companies seem consistent in their negative response to two measures of commitment (commitment rating and expenditure on training per worker) to training. A closer look at tables 4.23 and 4.27 shows that when the commitment rating of companies or expenditure on training per worker increases, the service companies respond with an increase (although not significant) in expenditure on training or commitment rating, unlike their manufacturing-service counterparts.

Large companies could be said to have a more positive response than giant companies to increases in expenditure on training as a result of increases in the commitment rating of the companies. Again, giant companies and not large companies respond negatively with decreases in commitment rating as a result of increases in the expenditure on training per worker.

This shows that service companies and large companies seem more committed to training than the manufacturing-service and giant companies.

The last question is: How would involvement of companies in training react to the commitment of the companies to training?

Considering the companies by their nature, the service companies exhibited a consistent tendency to have decreasing percentage of workers that received training with increases in almost all measures of commitment (that is, commitment rating and expenditure on training per worker) than their manufacturing-service counterparts. As a matter of fact, the percentage of workers trained by manufacturing-service companies actually responded positively to at least two measures of commitment (commitment rating and expenditure on training per worker), although the responses are not statistically significant.

Given these results, it is possible to conclude that service companies rather than MS companies react more negatively in the percentage of workers they train, even when they have increased the types of training that they provide and the amount expended on training per worker.

When the companies are considered by their size, large companies exhibited an almost consistent tendency to decrease the percentage of workers trained when there is an increase in expenditure on training and commitment rating. It is important to note that the decreasing response of the percentage of workers trained by companies

to increases in commitment rating was significant for the large companies. It is interesting to note that large companies responded positively by increasing the percentage of workers trained when expenditure on training per worker increases.

Further Discussions of Pairwise Relationships

Service and large companies seem more committed to training than manufacturing-service and giant companies, and service and large companies seem less involved in training than MS and giant companies when their workforce increase. Also, service and large companies rather than MS and giant companies appear to have low involvement in training when they have increased commitment to training. In particular, the large companies' response of decreasing involvement or percentage trained when commitment rating increases was statistically significant. It is interesting that large companies responded positively by increasing involvement when expenditure on training per worker increases. These results could become more meaningful if the observations on involvement, commitment and turnover are taken into consideration.

When the turnover of companies increases, the involvement of companies decreases and when turnover increases, the commitment of companies just barely increases or put differently better performance of companies in the market barely has a positive effect on involvement and commitment to training. For involvement, it is negative and for commitment, it is barely positive.

When this is taken together with the observations on the relationship between involvement, commitment and workforce, it would seem that when the turnover of companies increases, their workforce increases and expenditure on training increase, the companies react by being less involved in training or by training a lesser percentage of their workforce.

This seems strange. But two possible explanations of the phenomenon will be attempted. The first explanation is this: It could be that the increase observed in expenditure on training when turnover increases is not so high as to make any difference in the bill on training, so that more workers could be accommodated in the training programmes. A look at table 4.29 could prove useful, as the relationship between expenditure on training per worker and turnover of companies has been shown to be a

moderate but an inverse one. That is, when the turnover increases, the expenditure on training per worker decreases. This indicates that when turnover increases and budget on expenditure is being considered, no adjustments in the budget are made for an increasing total workforce.

The second explanation could be that when the turnover increases and expenditure on training increases, the cost of training is such that service and large companies, especially large companies, have problems financing the training of more workers or they actually have to reduce the number of workers they train. This is more so at a period when all goods and services cost lots more than in the previous year. This is, however, being quite liberal, at least on the service companies, in view of the fact that most of the service companies studied benefitted immensely from the 'Structural Adjustment Programme' that was put in place in 1986 and is still operating. What this means is that the service companies at least, are committed only to training those of their employees whom they considered useful to the realization of the goals of the companies.

From the point of view of the commitment of companies to training when another measure of commitment has been

increased, results show that when a measure of commitment to training increases, service and large companies seem to respond by being more committed to training than MS and giant companies. For service and large companies, this seem consistent with their observed commitment to training. For MS and giant companies, it could be observed that although they both have a high commitment rating and expenditure on training respectively, they respond to expenditure on training per worker trained by decreasing commitment rating and when their commitment rating increases, expenditure on training decreases, at least for MS companies. For MS companies, this seems understandable because more of their type have low expenditure on training.

The surprise are the giant companies, because they reacted to increased workforce by increasing expenditure on training significantly. When the expenditure on training is adjusted for the total workforce however, they respond by decreasing the types of training that they provide. This may be because giant companies spend money that could be regarded as high on training because they have the financial capacity to do so. Given that the percentage of workers that giant companies train is low,

and considering that many of them have low commitment rating, when all these are added to the fact that when the observed commitment (in terms of high expenditure) is adjusted for the total workforce, the already low commitment rating decreases, giant companies come clear as being low in commitment to and involvement in training.

This appears to lend credence to an earlier warning by Tabbush (1977) that 'in comparing extent of training activities, it is pertinent to adjust for the volume effect in order to isolate the pertinent differences arising purely from differences in relative size'.

When the discussions of results of commitment to, and involvement in training are taken together with those of pairwise relationships, one is inclined to point out that although it may make economic sense (from the neo-classical economic viewpoint) for (1) service companies, for example, to be highly committed to and involved in training workers in limited training types and (2) companies (especially service and large companies) to decrease the percentage trained or be less involved in training when the turnover of the companies increase, when the workforce increases and the expenditure on training increases, this is morally objectionable, according to the

morality of common sense as put forth by Sidgwick (quoted in Thomas, 1982). This is because the reasons given by companies for emphasising certain kinds of training (for example 'making workers better auditors' and 'most crucial to operational efficiency and effectiveness') would seem to indicate that:

- 1) certain groups of workers are being denied training (an omission);
- 2) the forms of training programmes provided are not likely to make workers have a rounded development, such that their full potentials as human beings can be realised (an action); and
- 3) workers are treated only as instruments for improved efficiency.

These actions and omissions are both morally objectionable because they involve denying certain workers training and denying workers those kinds of training that may make for their rounded development.

In addition to the action and omission above, both can be said to have a motivational structure. That is, the omission of training of certain workers and the provision of certain limited kinds of training stems from the fact

that companies desire that training should be carried on exactly like that.

It could be argued though, that the omission and action observed above may not stem from the desire of the companies to see training handled as observed. This is because the primary roles of private enterprises (which are definitely non-educational) may make them indifferent to the provision of certain kinds of training (action) and omit the training of some workers (omission).

Either way, the actions and omissions of training by companies observed above are morally objectionable. However, the companies could be said to have done a greater moral wrong if they desire that training be carried on as observed.

D. Involvement in and Commitment of Companies to the Different Types of Training

Although the result of earlier analyses indicated that the commitment rating (or types of programmes provided by companies) of companies is independent of the nature and size of the companies, it was observed then, that a higher percentage of manufacturing-service and

large companies have higher commitment rating than service and giant companies.

The task in this section is to find out whether certain kinds of companies have high and or significant involvement in and commitment to certain kinds of training.

The hypotheses that will be tested in this section are given as follows:

Hypothesis D(i)1

There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training per worker trained in professional/specialist and occupational/vocational training.

Hypothesis D(i)2

There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training per worker trained in safety training.

Hypothesis D(ii)1

There is no significant difference in the percentage of total expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on professional /specialist and occupational/vocational training.

Hypothesis D(ii)2

There is no significant difference in the percentage of total expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on safety training.

Hypothesis D(iii)1

There is no significant difference in the percentage of total number of workers in (a) manufacturing-service and service; (b) sector-giant and sector-large companies that received professional/specialist and occupational/vocational training.

Hypothesis D(iii)2

There is no significant difference in the percentage of total number of workers in

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies that received safety training.

These hypotheses were divided into three sections [D(i), D(ii) and D(iii)] so that each section can take care of the analyses of the estimates of each of the three relevant variables or measures of interest. The variables or measures of interest are expenditure on training per worker trained for each type of training; percentage of total expenditure on specific types of training and percentage of total trained in specific types of training. The estimates are given in table 3.5.

In order to test the null hypotheses stated above, the details of the Fisher's Exact test statistic as used in Hypotheses A(i)1 and 2 earlier, were followed, with an addition. Where two kinds of training (professional/specialist and occupational/vocational training) were involved, the difference between the two

was what was subjected to the Fisher's Exact test statistic.

Testing Hypotheses D(i)1

Table 4.30

High or Low Difference Between Expenditure on Training per Worker Trained in Professional/Specialist and Occupational/Vocational Groups in Manufacturing/Service and Giant/Large Companies

Companies	High	Low	Total	Percentage High
MS	4	5	9	44.4%
S	3	2	5	60.0%
Total MS/S	7	7	14	
G	4	4	8	50.0%
L	3	3	6	50.0%
Total G/L	7	7	14	

Total 4.30 gives details of high and low difference between expenditure on training per worker trained in the professional/specialist and occupational/vocational groups for manufacturing-service/service and giant/large companies. The table shows that more service companies have a high difference between professional/specialists training and occupational /vocational training, whereas

the giant and large companies have the same percentage high of expenditure per worker trained in the two training groups.

The difference observed in the percentage high between MS and S companies is in favour of professional/specialist training, (with the percentage high of the S companies being 60%). As for the giant and large companies, the percentage of both companies that have high difference between the two training groups is exactly the same in favour of both professional /specialist training and occupational/vocational training.

To know whether the differences observed in the percentage highs and lows of both manufacturing-service/service companies and giant/large companies in respect of professionals/specialist training and occupational/vocational training are significant, the Fisher's Exact test was applied. Table 4.31 gives details of the Fisher's Exact test on the differences observed.

Table 4.31

Details of Fisher's Exact Test on High or Low Difference Between Expenditure on Training per Worker Trained in Professional/Specialist Group and Occupational/Vocational Group in Manufacturing-Service/Service Companies and in Giant/Large Companies

Companies	Configuratio n		Exact Probability of Larger Value	Comment
MS/S	4	5	1.000	NS
	3	2		
G/L	4	4	1.000	NS
	3	3		

With exact probabilities of larger values for MS/S and G/L companies as 1.000, the Fisher's Exact Tests in Table 4.31 show that the MS/S and the G/L companies do not differ in their expenditure on training per worker or amount expended on training each worker trained in the professional/specialist group and the occupational/vocational group. This implies that the amount of money expended on training each worker trained in the two groups is not a function of the nature and size of the companies. With this result, Hypothesis D(i)1 which states that:

There is no significant difference in
the expenditure of (a) manufacturing-

service and service; (b) sector-giant
and sector-large companies on training
per worker trained in
professional/specialist and
occupational/vocational training

is accepted.

Discussions

The acceptance that the manufacturing-service/service and the giant/large companies are the same in the amount expended on training per worker trained in each group means that the expenditure on training per worker trained in each category is not dependent on the nature or size of the company. That is to say, both MS/S and G/L companies do not differ markedly in the amount they expend on training each worker in the two different kinds of training.

It is, however, important that the slight difference in percentage high in favour of the professional/specialist group for service companies should not be ignored.

The question then is: why is it that a higher but not significant percentage of service companies favour the provision of professional/specialist training?

Testing Hypotheses D(i)2

Table 4.32

High or Low Expenditure Per Worker Trained by

Manufacturing-Service/Service and Giant/Large
Companies on Safety Training

Companies	High	Low	Total	Percentage High
MS	4	4	8	50.00%
S	1	0	1	100%
Total MS/S	5	4	9	
G	3	1	4	75%
L	2	3	5	40%
Total G/L	5	4	9	

The high and low percentages for expenditure per worker trained in MS/S and G/L companies on safety training indicates that although only one service company provides safety training, the company's expenditure on safety training per worker trained is high, whereas the percentage high and low for MS companies is the same. As for giant and large companies, more giant companies (75%) would seem to expend more money on training each worker than the large companies. It is important to check whether the observed difference especially in the amount expended on training each worker in giant and large companies is significant. Table 4.33 below gives the details of the

Fisher's Exact test on the variable of interest for both sets of companies.

Table 4.33

Details of Fisher's Exact Test on High or Low Expenditure Per Worker Trained by Manufacturing-Service/Service and Giant/Large Companies on Safety Training

Companies	Configuratio n	Exact Probability of Larger Value	Comment
MS/S	4 4	1.000	NS
	1 0		
G/L	3 1	.526	NS
	2 3		

The Fisher's Exact Tests indicate that there is no significant difference in the high or low expenditure on each worker trained in safety by the manufacturing-service/service and giant/large companies, with exact probabilities of larger values given as 1.000 and .526 respectively. Hence Hypothesis D(i)2 which states that:

There is no significant difference in the expenditure of (a) manufacturing-

service and service; (b) sector-giant and sector-large companies on training per worker trained in safety training is accepted.

Discussions

The acceptance of this null hypothesis means that the differences observed in the high and low expenditure on training of each worker in MS/S and giant/large companies in safety are not dependent on the nature and size of the companies. That is to say that more manufacturing-service companies, do not expend more money on training each worker that received safety training than does service companies just because they are manufacturing-service companies. Incidentally, the only S company that provided safety training was recorded as expending highly on training each worker. Although a higher percentage of giant companies expend more money on training, the difference in the high or low percentage of expenditure on training each worker in safety is not statistically significant.

Nevertheless, this should not reduce the import of the observed differences in the percentage high or low of

expendi-ture per worker trained in safety, for both sets of companies. The percentage high of the variable of interest is the same as the percentage low for manufacturing-service companies, while the only service company that expended money on safety training had high expenditure on each worker trained. Most of the Giant Companies (75%) have high expenditure on the training of each worker. It would thus seem as if a higher percentage of giant companies and not large companies expend more money per worker on safety training, while conclusions for MS and S companies cannot be objectively reached with the available data, although MS companies have as much high of the variable of interest as the low.

The question is, why should a higher, although not significant percentage of giant companies expand more money on each worker trained in safety? Is it just the question of the size of the company?

Testing Hypothesis D(ii)1

Table 4.34

High or Low Difference Between Percentage of Total Expenditure of Manufacturing-Service/Service and Giant/Large Companies on Professionals/Specialists

and Occupational/Vocational Training

Companies	High	Low	Total	Percentage High
MS	5	4	9	56%
S	2	3	5	40%
Total MS/S	7	7	14	
G	5	3	8	63%
L	2	4	6	33.3%
Total G/L	7	7	14	

More (56%) manufacturing-service companies have a high difference between percentage of total expenditure on professionals/specialists and occupational/vocational training, than their service counterparts, while more (63%) giant companies have more of the variable of interest than the large companies. The Fisher's Exact Test results in Table 4.35 should indicate whether the differences observed are statistically significant.

Table 4.35

Details of Fisher's Exact Test Results on High or Low Difference Between Percentage of Total Expenditure of Manufacturing-Service/Service and Giant/Large Companies on Professionals/Specialists and Occupational/Vocational Training

Companies	Configuration		Exact Probability of Larger Value	Comment
MS/S	5	4	1.000	NS
	2	3		
G/L	5	3	.286	NS
	2	4		

The results of the Fisher's Exact Tests in Table 4.35 show that the differences observed in the variable of interest on the two types of training is independent of the size and nature of the companies. Therefore Hypotheses D(ii)1, which states that:

There is no significant difference in the percentage of total expenditure of

(a) manufacturing-service and service;

(b) sector-giant and sector-large

companies on professional/specialist
and occupational/vocational training
is accepted.

Discussions

These results show that the percentage of high or low difference between the percentage of total expenditure of the two sets of companies on the two kinds of training of interest is not dependent on whether the companies are giants or large or whether they combine the business of manufacturing with that of providing services or they just provide services alone. This should not however take anything away from the usefulness of the differences earlier observed in table 4.34. Table 4.34 shows that a higher percentage of giant and MS companies have a high value of the variable of interest, which means that more giant and MS companies spend a higher percentage of their expenditure on training on one of the two types of training, and that is professionals/specialists training.

Testing Hypothesis D(ii)2

Table 4.36

High or Low Percentage of Total Expenditure of Manufacturing-Service/Service and Giant/Large Companies on Safety Training

Companies	High	Low	Total	Percentage High
MS	5	3	8	62.5%
S	0	1	1	0.00%
Total MS/S	5	4	9	
G	3	1	4	75%
L	2	3	5	40%
Total G/L	5	4	9	

More MS (62.5%) and G (75%) companies seem to have high rather than low percentage of total expenditure on safety training.

The Fisher's Exact Test on high or low percentage of total expenditure on safety training is given in table 4.37.

Table 4.37

Fisher's Exact Tests on High or Low Percentage of Total
Expenditure on Safety Training

Companies	Configuration		Exact Probability of Larger Value	Comment
MS/S	5	3	.444	NS
	0	1		
G/L	3	1	1.000	NS
	2	3		

The results in table 4.37 indicate that the differences observed in the high percentage of total expenditure of manufacturing service/service and giant/large companies, on safety training are not statistically significant. This means that the high or low percentage of total expenditure earmarked for safety training is not dependent on whether a company is an MS/S

or a giant/large company. The null hypothesis which states that:

There is no significant difference in the percentage of total expenditure of

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies

on safety training

is accepted.

Discussions

Although the null hypothesis has been accepted, there remains the issue of explaining the noticeable though not statistically significant difference in the percentage of total money expended on safety training by more MS and giant companies than S and large companies. Although the fact of the presence of only one service company in the analyses has not been forgotten, more MS companies still have a percentage of total expenditure on safety training that could be said to be high. These results seem to conform with the earlier observed differences in the high or low expenditure on training per worker trained in safety training. The only difference is that while the only service company involved in the analyses was considered to have a high expenditure on training per worker trained in safety. It is now being considered as having a low percentage of total expenditure on safety training.

Testing Hypotheses D(iii)1Table 4.38

High or Low Difference Between Percentage of Total Workers Trained by Manufacturing-Service/Service and Giant/Large Companies in Professional/Specialists or Occupational/Vocational Training

Companies	High	Low	Total	Percentage High
MS	4	5	9	44.4%
S	3	2	5	60%
Total MS/S	7	7	14	
G	5	3	8	62.5%
L	3	3	6	50%
Total G/L	8	6	14	

More service and giant companies seem to have higher percentages of the variable of interest than MS and large companies. As usual, the Fisher's Exact Test was carried out on the observed high or low percentage of total workers trained.

Table 4.39

Details of Results of Fisher's Exact Tests on High or Low Difference Between Percentage of Total Workers Trained by Manufacturing-Service/Service and Giant/Large Companies

in Professionals/Specialists and Occupational/Vocational
Training

Companies	Configuration	Exact Probability of Larger Value	Comment
MS/S	4 5	1.000	NS
	3 2		
G/L	5 3	1.000	NS
	3 3		

The results in table 4.39 indicate that the differences observed in table 4.38 for MS/S and G/L companies regarding high or low percentage of total workers trained in the two types of training is not statistically significant. This means that the percentage of total workers trained in the two types of training is not dependent on the nature or the size of the companies. Given these results, hypothesis D(iii)1, which states that:

There is no significant difference in the percentage of total number of workers in (a) manufacturing-service and service; (b) sector-giant and sector-large companies that received professional/specialist and occupational/vocational training is accepted.

Discussions

The acceptance of this null hypothesis does not preclude the discussion of the observed differences in table 4.47. A higher percentage of giant and service companies have high difference in percentage of total workers trained in the two groups of interest in this work, given their percentage high of 62.5% and 60% respectively. The percentage high is in favour of professional/specialist training.

Testing Hypothesis D(iii)2Table 4.40

High or Low Percentage of Total Worker Trained by
Manufacturing-Service/Service and Giant/Large
Companies in Safety Training

Companies	High	Low	Total	Percentage High
MS	5	4	9	55.6%
S	0	1	1	0.00%
Total MS/S	5	5	10	
G	2	3	5	40%
L	3	2	5	60%
Total G/L	5	5	10	

Again, a high percentage of MS companies recorded a high level of percentage of total trained in safety. Although only one service company provided safety training, the company recorded a low level of percentage of total workers trained. A higher percentage of large companies have high percentage of total workers trained in safety.

Table 4.41

Details of Results of Fisher's Exact Tests on High or Low Percentage of Total Workers Trained by Manufacturing-Service/Service and Giant/Large Companies in Safety Training

Companies	Configuration	Exact Probability of Larger Value	Comment
MS/S	5 4	1.000	NS
	0 1		
G/L	2 3	.524	NS
	3 2		

The results in Table 4.41 show that the differences observed in high or low percentage of total number of workers trained in the two groups of companies in safety training is not statistically significant. Therefore Hypothesis D(iii)2, which states that:

There is no significant difference in the percentage of total number of workers in

(a) manufacturing-service and service;

(b) sector-giant and sector-large companies that received safety training

is accepted.

Discussions

Although the results of analyses on table 4.41 show that the variable of interest is independent of size and nature of the company, it would not be out of place to take a second look at the reasons that may account for the differences observed in high or low percentage of total trained in safety training in table 4.40.

Summary of Results of Involvement and Commitment of Companies to Different Types of Training.

On Professional/Specialist and Occupational/vocational Training

The variable of relevance in Hypothesis D(i)1 is the expenditure on training per worker trained in each training category. This was obtained by a division of the

total amount expended on specific types of training by the total number of workers trained in each type of training.

The results obtained show that a higher but not significant percentage of service companies expend money that was classified high on each worker trained in professional/ specialist training than in occupational/vocational training and that there is no difference at all in the amount of money expended by giant and large companies on each worker trained in the two types of training.

The relevant variable in Hypothesis D(ii)1 is the percentage of total expenditure of companies spent on specific types of training. This was obtained by dividing the total expenditure of each company on training by the expenditure on each form of training.

The results obtained show that a higher but not significant percentage of manufacturing-service companies and giant companies record high expenditure on specific forms of training than the large and service companies. The high expenditure is again in favour of professional/specialist training.

The variable that is relevant to testing Hypothesis D(ii)1 is the percentage of total workers trained in

specific types of training. To obtain this percentage, the total number of workers trained in each company was divided by the total trained in specific kinds of training.

The results show that a higher but not significant percentage of service and giant companies trained a high percentage of total trained in professional/specialist training.

On Safety Training

As regards safety training and the three variables above, the results show that MS companies cannot be said to have high or low expenditure on training per worker trained in safety training since their percentage high and low are exactly the same. The only service company that provided safety training had high expenditure on training per worker trained in safety. A higher but not significant percentage of giant companies and not the large companies recorded high expenditure on training per worker trained in safety training.

Pertaining to the second variable, more MS and a higher but not significant percentage of giant companies recorded high expenditure on safety training.

As for the third variable, more MS and a higher but not significant percentage of large companies have high percentage trained in safety. The percentage trained in safety for the only S company is low.

It is important to state that none of the observed differences in professional/specialist and occupational/vocational training and safety training is statistically significant.

Also of relevance is the fact that the types of training for which estimates of different measures were provided in table 3.5 are the broad categories into which the training programmes outlined in tables 3.3 and 3.4 can be compressed.

In addition, it was observed that only three companies provided relevant education/correspondence courses. Their expenditure on training per worker trained in relevant education/correspondence courses ranged between 9,308.60 through 676.50 to 532.89. The percentage of their total expenditure on this type of training was between 2.05% through 1.20% to 0.64%, and the percentage of total trained in this type of training for the three companies is 0.29%, 1.00% and 0.54%.

On Involvement in and Commitment to
Professionals/Specialist and Vocational/Occupational
Training

Service and giant companies seem to have high estimates of a variable each for determining commitment and involvement. It would therefore not be wrong to state that more of service and giant companies seem to be more committed to and involved in professional/specialist training even though giant, MS and S companies all seem to have more high estimates of the different variables for determining commitment to and involvement in different types of training. The reason more service and giant companies are thought to be more committed to professional/ specialist training is that both have high estimates of two variables of interest, one each for variables for determining commitment to and involvement in training.

On Involvement in and Commitment to Safety Training

Giant, manufacturing-service and large companies seem to have had high estimates each, of the different variables or measures of commitment to and involvement in training. It is worth noting that more giant companies

seem to have high estimates of two of the measures of commitment to and involvement in safety training, and both are for commitment.

Thus, it would not be out of place to say that giant companies seem more committed to safety training, but have low involvement in safety training.

Although MS companies have high estimates of two measures, one each, for commitment and involvement, one can only conclude that they have high commitment to safety training and are highly involved in safety training, because they cannot be compared with their service counterparts. It would appear though that service companies are generally unconcerned about safety training.

Also important is the fact that the types of training programmes (in this section) for which one can measure involvement and commitment are professionals/specialists, occupational/vocational and safety training. Most of the companies are definitely unconcerned with relevant education/correspondence courses.

Further Discussions of Commitment to and Involvement in Different Types of Training

A higher, although not significant percentage of service and giant companies have been observed to have

high commitment to and involvement in providing professional/specialist training and not occupational/vocational training. As far as service companies are concerned, it would seem that earlier observation regarding the reasons for emphasising and favouring certain types of training are relevant. For giant companies, it could be a question of being more involved and committed to training the professional/specialist group so that they can serve as resource persons for the training programmes of the companies. This is in line with Darlenwald and Merriam's (1982) observation that some companies draw trainers from within the companies and such are said to be the companies' best performers and are given intensive training, both professionally and in teaching methods.

In respect of safety training, a higher but not significant percentage of giant companies have high commitment to, but low involvement in training. Also, more manufacturing service companies have a high involvement in and a high commitment to safety training. The probable reason why a higher percentage of giant companies would have a high commitment to safety training may be just that they have the financial strength to do so. One could have

said that they are safety conscious, but this would be incorrect because the percentage of total workers trained in safety is low for giant companies. Another probable explanation of high commitment to and low involvement of giant companies in safety training is the same as the argument earlier made about training a few resource persons who will then train others.

As for manufacturing-service companies, it would seem normal that a higher percentage of their type should have high involvement in and high commitment to safety training. This is because by their nature, MS companies need to be more safety conscious. They deal with heavy plants and machinery, make use of chemicals, and their workers are usually more exposed to the dangers of injuries that are likely to occur in their specific work environments. The details of the reported injuries, (summary, 1986-90) provided by the safety unit of company MS 7 has been reproduced below in table 4.42, to show the enormity of the problem of health and safety, especially in manufacturing-service companies, so there is a need to take safety training seriously.

Table 4.42

5 Year Summary of Details of Reported Injuries in a
Manufacturing-Service Company

Parts of the Body Affected								
Years	Hand	Leg	Eyes	Feet	Head	Arm	Trunk	Total
1986	17	9	6	2	2	-	2	38
1987	28	11	2	1	1	3	2	48
1988	25	5	1	2	2 (EAR.1)	-	5	40
1989	21	3	4	1	-	-	1	30
1990	12	7	4	3	2	1	1	30
Total	103	35	17	9	7	4	11	186

It is important to state that the reported injuries listed in table 4.42 are injuries that are immediately noticeable. There are diseases that are insidious such that it takes years for such to manifest themselves in individuals. Company A16 for example, gave an example of a lithographer who went blind in one eye towards his retirement from the company after being a lithographer in the company almost at the company's inception.

It was observed that in many of the manufacturing-service companies, there are safety alarms, posters on safety and in particular the MS company that gave the details in table 4.42 also gave the investigator the company's safety handbook which is made available to all workers. The handbook focused on a whole range of health and safety instructions ranging from chemical handling, health and welfare, materials handling, fire fighting and prevention, good housekeeping to electrical equipment handling, traffic, pressure system and the need for all staff to demand for safety training.

Although high commitment to and involvement in safety training also fit into the economic arguments for providing training, training in good house keeping and traffic would not seem to fit into the economic arguments for training. It rather fits more into the argument of social responsibility which the personnel/training manager in the company in question identified earlier as part of factors that influence the company's decision regarding training.

Other Findings

1) Training Policies

Not one of the companies visited by the investigator and which provided information (among the 14 companies

that were selected for use and among those that provided additional information) had a whole range of written information about the training opportunities available for employees, or who gets what training at what time. That is to say, the companies have no written training policies. For many of the companies, the Chairman's report in the annual report is the only document in which practices about training appear in writing, and it is usually about the 'achievements' recorded in this respect.

It is important that training policies be put in writing. When training policies are written and are communicated to employees, all workers know just what training programmes they can expect to attend, and there is consistency in the treatment of staffers on the issue of training. The result is that employees who are not so much the boss' friends can expect to be trained too.

2) Personal Benefits from Training

Information about personal benefits that accrue to workers from training was extracted largely from the PBQ II. 38 employees from four companies were involved. Three companies (26 employees) from the fourteen (14) selected

for the study and one company (12 employees) from those that provided additional information.

Table 4.43

Mean Scores of Personal Benefits from Training by Items and Ranks

Personal Benefits	Mean Score of items	Ranks of Means	Companies Below Mean	Companies Above Mean
Efficiency at work	4.26	1	1	3
Increase in Company's output	3.85	3	1	3
Satisfaction with self	3.97	2	1	3
Demand more for right as worker	2.80	6	2	2
More critical appraisal of social, political economic issues	2.84	5	2	2
Changes in occupational status	2.54	7	3	1
Changes in salary level	2.27	8	3	1
Improvement in standard of living	2.15	9	2	2
Adherence to safety regulations	3.67	4	1	3

For workers in three of the companies studied, efficiency at work ranked highest as personal benefits

resulting from training. Again for workers in three of the four companies, changes in their salary level ranked almost last as a benefit of training. Also worthy of note is that satisfaction with self (which is known to give human beings more confidence in themselves) was ranked 2nd as benefit of training by workers in three out of the four companies. Adherence to safety regulations, critical appraisal of social economic situation and demand more for rights as workers did not do badly as benefits of training with 4th, 5th and 6th positions. Changes in salary level, occupational status and improvement in standard of living performed badly as benefits of training.

What these scores indicate is that efficiency at work is the best benefit that accrues to the workers involved in this study from training, while improvement in standard of living is the last thing that most of the workers experience after training. Also, satisfaction with self, which is a very important factor in employee performance, also ranked high for most workers in the four companies.

Although these scores are quite illuminating, however, because only thirty-eight workers were involved, these scores and results cannot be conclusive. A sample size of 38, in relation to the number of workers in companies generally is rather negligible.

3) Other Forms of Training Provided by Companies

All the companies (both selected, and additional information) that responded to the IGPM provide mainly customer/consumer training and only one train persons who are neither employees, customers nor representatives of the company.

They all claim to train customers/consumers/clients (1) to use products well, (2) explain government technical policies affecting financial statements and (3) provide extension services to farmers. The only company that trains people who are neither employees, customers nor representative helps train trainee nurses in industrial health and safety. The reasons they gave for engaging in these training activities range from product promotion to good will and to social responsibility. When, however, they were told that they may be engaging in these activities only to increase the company's turnover, about half of them agreed, while another half stated that it had to do with turnover and another factor.

It would have been useful to have the expenditure of these companies on these 'other' training activities, but this proved rather difficult, because of the problem of availability of data.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the hypotheses, methodology and findings of this study are summarised and major conclusions drawn from them. The chapter also offers recommendations relating to how the commitment to and involvement of companies in training can be improved. Finally, suggestions are made to guide further researches in the area studied.

Summary of Research Method

This study was designed to examine critically the extent of the involvement in and commitment of private establishments to the provision of adult education, but with particular attention on the training and development of their own employees. The decision to investigate this problem was taken after the discovery of a dearth of systematized information on the extent of involvement in and commitment of private employers to the provision of education or training and development for their employees. The need to carry out this study was further heightened by the fact of the Nigerian economy being a mixed one, all agencies or institutions that employ human resources need

to be concerned about their employees' constant rounded development, continued relevance to their jobs, efficient performance of their jobs, and so need to contribute their own quota to national endeavours of the education of adults. Of particular interest too, was the need to assess the level of commitment to and involvement of private employers in the provision of safety training, given the health hazards that employees are exposed to, in and out of their work-places.

Specifically, this study assessed the percentage of workers trained by companies. This was taken as a measure of involvement in training. The types of training provided by companies or commitment rating, the expenditure of companies on training and the human and physical resources available for training were also assessed and were taken as measures of commitment of companies to training. The relationship between the measures of involvement, commitment and the workforce and turnover of companies was also examined. Another area of focus was the extent of involvement in and commitment of private employers to the different types of training programmes that are available in the companies. The probable explanations of the

observed levels of involvement, commitment and relationships between them were attempted.

The review of literature that was undertaken attempted a conceptual understanding of who a worker is, what worker's education means and of training and development as an aspect of workers' education. It also examined the forms or types of training programmes that are available in companies, the need for training and development from the perspective of the employer, the employee and the nation as a whole. In view of the fact that certain factors would dictate the level or degree (low or high) of involvement in and commitment of companies to training, and certain kinds of training, an interdisciplinary examination of such factors was attempted. The factors include, the neo-classical economic theory, ITF Decree of 1971, Managerial philosophy, moral principles, social responsibility and size and nature of the companies. The human and physical resources that are available for training in enterprises were thereafter examined. Also examined were the 'other' types of training programmes that companies are likely to provide, apart from the training of their own employees.

Following from the review of literature, a theoretical framework was put in place for this study. The framework adopted was the 'human capital' theory which is a strand of neo-classical economics, which views expenditure on training as an investment. Against this background, the hypotheses for the study were formulated. The hypotheses which were divided into four main sections are given as follows:

A(i)1 There is no significant difference in the commitment rating of manufacturing-service companies and service companies to training.

A(i)2 There is no significant difference in the commitment rating of companies that are giants in their own sectors (industries) and the other (large) companies to training.

A(ii)1 There is no significant difference in the amount expended on the training and development of workers in the manufacturing-service companies and in the service companies.

A(ii)2 There is no significant difference in the amount expended on the training and development of workers in the companies that are giants in

their own sectors and the other (large) companies.

A(ii)3 There is no significant difference in the amount expended on training and development per worker in the manufacturing-service companies and in the service companies.

A(ii)4 There is no significant difference in the amount expended on training and development per worker in the companies that are giants in their own sectors and the other (large) companies.

B1 There is no significant difference in the percentage of workers that received training in the manufacturing-service and service companies.

B2 There is no significant difference in the percentage of workers that received training in the sector-giant and sector-large companies.

C(i)1 There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, giant and large companies and the size of the workforce of the companies.

- C(i)2 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, giant and large companies on training and the size of the workforce of the companies.
- C(i)3 There is no linear relationship between the percentage of workers that received training in manufacturing-service companies, in service companies, in all companies, in sector-giant and sector-large companies and the size of the workforce of the companies.
- C(i)4 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training and the commitment rating of the companies.
- C(i)5 There is no linear relationship between the percentage of workers trained by manufacturing-service companies, service companies, all companies, sector-giant and sector-large

companies and the expenditure of the companies on training.

C(i)6 There is no linear relationship between the commitment rating of manufacturing-service companies, service companies, all companies, sector-giant, sector-large companies and the percentage of workers that received training provided by the companies.

C(i)7 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant, sector-large companies on training per worker and the workforce of the companies.

C(i)8 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, all companies, sector-giant and sector-large companies on training per worker and the commitment rating of the companies.

C(i)9 There is no linear relationship between the expenditure of manufacturing-service companies, service companies, sector-giant and sector-large

companies on training per worker and the percentage of workers trained.

C(ii)1 There is no relationship between the percentage of workers trained by companies, the commitment rating of companies, the expenditure of companies on training, the expenditure of companies on training per worker on the one hand, and the turnover of the companies on the other hand.

D(i)1 There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training per worker trained in professional/specialist and occupational/vocational training.

D(i)2 There is no significant difference in the expenditure of (a) manufacturing-service and service; (b) sector-giant and sector-large companies on training, per worker trained in safety training.

D(ii)1 There is no significant difference in the percentage of total expenditure of

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies on professional/specialist and occupational/vocational training.

D(ii)2 There is no significant difference in the percentage of total expenditure of

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies on safety training.

D(iii)1 There is no significant difference in the percentage of total number of workers in

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies that received professional/specialist and occupational/vocational training.

D(iii)2 There is no significant difference in the percentage of total number of workers in

- (a) manufacturing-service and service;
- (b) sector-giant and sector-large companies that received safety training.

To aid the collection of data for this study, three research instruments were used. They are (1) archival research and desk work, to check the policy statements of

companies on training, health and safety regulations, turnover, nature of training programmes, total number of workers in companies, the number trained, expenditure on training and so on. (2) observation of physical facilities and training sessions (3) three questionnaires and an interview guide were designed and used to collect needed data. They are the General Data Questionnaire (GDQ) which was completed by personnel/ training/finance managers and the investigator, following archival research. The GDQ asked questions regarding the type of industry that the company is, the name of the company, turnover of company, investment capital, total number of workers, the number trained, in what types of training, expenditure on training, and the other forms of training provided by the companies between the years 1978 and 1990. The Interview Guide for Personnel/Training Managers (IGPM) sought answers to questions of determinants of policy of companies on training, the forms of training that are favoured and emphasised, the resources available for training and whether the company liaises with other educational institutions. The IGPM also asked questions about health and safety training and the forms of training

provided for 'others'. The Personal Benefits Questionnaire I (PBQ) and II (PBQ II) are the second and third questionnaires used. Although essentially the same in content, PBQ I sought responses from heads of units/departments while PBQ II sought responses from workers. They asked questions about the number of years that the respondent has spent at his/her present workplace, the number of years in present position, number of times of attendance of training programmes per year and the personal benefits that heads of units think accrue to workers from training and those that the worker think accrue to her from training.

In all, fourteen (14) companies from the Lagos Area were selected from eight industries in the private sector of the Nigerian economy. An additional six companies provided additional information for this study. One of the six from the former Oyo State (present day Osun State) was used for the pilot study for this work.

The T-test, Chi-square, Fisher's Exact Test, the Regression Analyses and the Pearson's Product Moment Correlation were the test statistics used to analyse the data relevant to testing all the hypotheses formulated.

Summary of Research Results

Having used the statistical models above to test each of the hypotheses, the results of the study are as follows:

- 1) The commitment rating of companies is statistically independent of the nature and size of the companies, but a higher percentage of manufacturing-service and large companies have high commitment rating of 56% and 66% respectively.
- 2) The expenditure of companies on training is not dependent on the nature and size of the companies, but a higher percentage of service (80%) and giant (62.5%) companies have high expenditure on training.
- 3) The expenditure of companies on training per worker is not independent of the nature of the company, but is independent of the size of the company. Manufacturing- service and service companies had an exact probability of larger value of .021 at .05 level of significance whereas giant and large companies' exact probability of larger value was 1.000 also at .05 level of significance. The

percentage highs obtained for both giant and large companies was 50%.

- 4) All the companies drew trainers from all the available sources for sourcing trainers and had the basic minimum physical facilities for training.
- 5) The percentage of workers trained is not dependent on nature and size of the company although a higher percentage of service and large companies trained a high percentage of their workers, obtaining 60% and 66.7% high respectively.
- 6) Service and large companies show increases in most of the measures of commitment when there is an increase in their workforce.
- 7) Service and large companies responded to increase in their workforce by decreasing the percentage of workers trained.
- 8) Companies respond to increases in their turnover by decreasing percentage of workers trained.
- 9) Companies respond to increases in turnover by decreasing the commitment rating and expenditure on training per worker. The expenditure on training, however, increases with turnover.

- 10) Manufacturing-service companies, more than service companies respond to increases in one measure of commitment (example commitment rating) by decreasing another measure of commitment (expenditure on training). Large companies respond a little more positively than giant companies (which have a negative response) to increases in a measure of commitment (commitment rating) by increasing expenditure on training.
- 11) Service and in particular large companies responded consistently to increases in almost all measures of commitment to training by decreasing percentage of workers trained. Large companies' decreasing response to a measure of commitment (commitment rating) was significant, with β as -1.943768 ; t_{cal} as -3.829 and t_{tab} as 2.776 at $.05$ level of significance. Large companies, however, responded positively to another measure of commitment (expenditure on training per worker) that has been adjusted for total workforce.
- 12) More service and giant companies seem to have high estimates of a variable each for determining commitment and involvement in training in favour of

professional/ specialist training, not occupational/vocational training.

- 13) More giant companies seem to have high estimates of two of the variables of commitment to and involvement in safety training and both are for commitment to training. More manufacturing-service companies have high estimates of two measures, one each for commitment to and involvement in safety training.

Conclusions

Following the above findings, the following conclusions are plausible:

- 1) More service and large companies have high commitment to training of workers because they each have high estimates of at least one of the two measures of commitment to training.
- 2) More service and large companies are highly involved in training because both of them have high estimates of the measure of involvement in training.
- 3) More service companies in particular are committed to training a high percentage of their workforce in limited training types.

- 4) The human and physical resources available for training in companies are generally adequate and thus show some commitment to training.
- 5) Service and large companies are less involved in training (reduce percentage of workers trained) than manufacturing-service companies when there is an increase in the workforce.
- 6) Service and large companies are more committed to training than manufacturing-service and giant companies when there is an increase in the workforce.
- 7) Companies actually have low involvement in training and only just committed to training when their turnover increases.
- 8) Service and large companies are more committed to training than manufacturing-service and giant companies.

- 9) Service and large companies seem less involved in training than manufacturing-service and giant companies when their commitment to training increases.
- 10) More service and giant companies are more committed to and involved in professionals/specialists training than in occupational/vocational training.
- 11) More giant companies have high commitment to safety training but low involvement in safety training. While manufacturing-service companies have high commitment to and high involvement in safety training, service companies appear generally unconcerned about safety training.
- 12) The factor that featured most prominently as a plausible explanation of conclusions made above is the 'human capital' theory, with the ITF Decree and theory Y following on its heels, especially, as 'going back' to the 'human capital' theory. Nature and size too featured as explanations of the above phenomena. Moral principles did not feature at all in any of the explanations except perhaps as part of social responsibility whose role is really low.

- 13) Notwithstanding the above 'explanations' of the commitment to and involvement of companies in training, the levels of involvement in and commitment of companies to training and in particular the pairwise relationships, especially for service and large companies are morally objectionable.
- 14) The companies have no written training policies.
- 15) From the point of view of the worker, efficiency at work and satisfaction with self are the most prominent personal benefits resulting from training.
- 16) Many companies provide customer/consumer training and to a lesser extent, training of persons who are neither employees, customers/consumers nor representatives of companies, for product promotion, good will and at times, social responsibility.

Implications and Recommendations

Based on the findings of this study, a number of implications have been identified and recommendations made for the use of training managers, the management of companies, government policy makers and workers' organisations.

First, it was clear from the results obtained that companies that had high commitment to and involvement in training turned out to be committed and less involved in training when their workforce increased or when their turnover increased. The companies were also less involved in training when certain measures of commitment (commitment rating and expenditure on training per worker) increased. This implies that many workers do not benefit from the training programmes provided by their employers. In view of the fact that many adults spend at least two thirds of their active years working, and because there is no job in which training and retraining are unnecessary, apart from training in those areas that companies consider most crucial to the realisation of the companies' goals, workers who have been at a job for 3 years should be trained not only so as to continue to be relevant in their workplace, but also so that they can have full personal development. This means that there is a need for companies to increase their expenditure on training substantially, and correspondingly with prevailing cost of training, so that more workers can benefit from training, rather than fewer and fewer workers.

Second, a close look at the ITF Decree No. 47 of 1971 (Federal Government Gazette, Oct. 1971) and the Amendment Decree of 1989 (ITF, 1991) shows that whereas the Decree specified the percentage of payroll or turnover to be paid by companies to the ITF as levy and the percentage of the levy that companies should be reimbursed, the Decree and the Amendment Decree did not specify the percentage of workers to be trained before companies can be reimbursed the 60% of the levy that they pay. During the collection of data, it was discovered that the ITF reimbursed companies 60% of their training levy if they have trained a maximum of 10% of their workforce. The ITF grouped companies' training programmes into 6 training types. They are: A - professional/specialists/ Senior Technologists; B - Supervisory, Foremen, charge hands; C - Occupational skills; D - safety; E - relevant education/correspondence course and F - Training managers.

When asking for reimbursement from the ITF, the companies are expected to point out their training priorities by ranking their training programmes, 1st, 2nd,

3rd and 4th. The ITF calls the ranks emphasis number. According to the officials of the ITF, when employers train in the 1st area of emphasis, they get reimbursed 18% of their training levy. For the 2nd, they get 15%, for the 3rd area, they get 12%, for the 4th they get 16%, for safety, they get 3% and for training managers they get 6%.

The implications of these observations are two-fold. First, by being silent on the percentage of workers to be trained, the Decree leaves an escape route for employers to have low or high involvement (participation) in training. It could be argued that the power of determining the percentage to be trained may have been vested in the governing council. A response to that would be that since the Decree did not leave the percentage to be contributed to the fund and amount to be reimbursed the companies to the governing council, it is only fair, especially on workers, that government should specify the lower limit of percentage of workers to be trained before companies can be reimbursed 60% of their levy.

Second, from the method of reimbursement pointed out above, when the percentages of levies that companies can be reimbursed for particular areas of emphasis are added up, they add up to 70% and not 60% of training levy that

the Decree specified. This means that a company can take a conscious decision, for example, to provide four types of training programmes for just one group of workers and still get reimbursed money that is as high as two thirds of the 60% of its training levy. The following example may suffice. A company decides that professional/specialist training is its first area of emphasis, the second is safety, the third relevant education and the fourth training manager. The company would then have $18 + 3 + 12 + 6 = 39\%$ about 40% of its training levy back, as long as the total trained in the four types of training add up to 10% of the company's workforce, even when the 10% are professionals/specialists.

In the light of these observations, it is being suggested that government should amend the ITF Decree to include the minimum percentage of workers that should be trained before companies can be reimbursed 60% of their training levy. Although the companies should be granted their right to certain areas of emphasis in training, the Decree should also be amended to specify the minimum percentage of workers that should be trained in the two major types of training professional/specialist and occupational/vocational.

Also related to the above, is the necessity for the Decree to specify a minimum percentage of workers to be provided with safety training, especially in manufacturing-service companies. Some would argue that the Factories Act 1956 (quoted in Emiola, 1982, P. 536) and Factories Decree No. 16 of 1987 (Federal Government Gazette, June 1987 P. A85ff) take care of the provision of safety training, Emiola (1982, P. 276) has observed that the laws do not go far enough. Although the factories Decree of 1987 purports to extend the application of the 1956 Act to a 'wider spectrum of workers and other professionals exposed to occupational hazards, but for whom provision were not made under the said Act before these Amendments' (P. A85ff), there is nothing in the Decree to show this. The relevant section (Section 28) in the 1956 Act is titled "Training and Supervision of Inexperienced Workers". Decree No. 16 of 1987, section 23 has the same title and the same content as the Factories Act of 1956.

It is being suggested therefore that the Federal government should state the specific lower limit of percentage of workers especially in the manufacturing-service companies that should be provided with safety

training in the ITF Decree and or amend the Factories Decree of 1987 to reflect specifically, provisions for the continuous training and retraining of both experienced and inexperienced workers and the minimum percentage to be trained.

Third, it was observed that the terms and conditions of work of workers as stated in the Labour Act of 1974, section 12, 13, 14, 15 and 17 (Emiola, 1982) make provisions for hours of work and overtime, provision of transport, periodicity of payment of wages, sick leave and annual holidays with pay. Also, the health and safety provisions of the Factories Act 1956 and Factories Decree 1987 stipulate conditions of work relating to ventilation, lightening, drainage of floors, cleanliness, food for certain groups of workers and overcrowding. It doesn't seem to have occurred to government and employers that training is and should be part and parcel of the terms and conditions of service of workers. Added to this is the fact that the results of this study show that companies train workers if there will be a favourable rate of returns on such training. This means that a lot of workers will not benefit from training because (1) training them

is not considered profitable to the company and (2) training is not considered part of their terms of employment. private employers should therefore be more conscious of the need to generally improve human resources, not only as economic tools but as human beings who require lifelong education. If training is undertaken from this perspective, more of those companies who supposedly have high commitment to and involvement in training will train more of their employees in more training types, and commit sufficient funds to same and those who have low commitment to and involvement in training will improve on their commitment to and involvement in training. Thus, the utilitarian principle which is implicit in the neo-classical economic theory (which has featured most prominently as the plausible explanation of involvement in and commitment of companies to training) is being rejected, and one is proposing the humanist principle as a basis for decisions about training in enterprises. Or at worst, a reasonable balancing of both principles.

Fourth, although training falls within the precincts of the subject matter of trade disputes (as relating to workers' continued employment and or terms and conditions of employment) it is not clear that both employers and workers' unions see it as such. Trade unions should therefore insist that government should tighten all relevant laws to include and enforce training. This will ensure that the option of making training a subject of trade dispute will be available to them. This is in essence saying that there is a need for the workers' unions in the different industries or individual companies to focus attention (in addition to bread and butter issues), on the issue of training more workers, so as to ensure that their members will continue to be relevant to the workplace and reach their full potentials as human beings.

A written training policy is also useful in this respect, as workers will know what to expect from their employers regarding training. Their work organisations can help push the implementation of written training policies while employers too will have the policy as guide. It

does not seem productive that employers should feel that a written training policy would 'force their hands'. Constant negotiations, discussions and communication regarding problems and progress in implementation of the policy should ensure minimum friction as a result of implementation or lack of implementation of written policies.

Finally, what appears to have emerged from this study is that some companies actually do not pay the stipulated ITF levy. This is because it does not make economic sense for a company to pay 1% of its payroll and not ask for reimbursement, but in order to ask for reimbursement, they have to show receipted expenses on training. Some companies may be reluctant to produce such receipted expenses because of bad training practices. The non-payment of the stipulated levy is a violation of the ITF Decree. The problem is that the government and the ITF appear constrained to take appropriate action against these companies, partly because of the problem of corruption and favouritism. One is convinced that with a patriotic, responsible and responsive leadership both at the level of the Federal government and the ITF, the enforcement machinery for ensuring compliance with the

Decree (and the amendments that have been suggested above) will be improved.

Suggestions for Further Research

Following from this study, the following recommendations are made for further research:

- 1) It is being suggested that the level of commitment and involvement of each industry to training as in Figure 4.1, 4.2 and 4.3 but especially in Figure 4.2 and 4.3 should be examined. This is because in the present study, the number of companies in each industry (2 and at times 1) was rather too small to allow for useful conclusions to be drawn from the observations made.
- 2) Although the data for this study was drawn from the period 1978 to 1990, the inconsistency of available data throughout the period made it impossible for the investigator to assess involvement in and commitment of companies to training before and during the introduction of the structural adjustment programme. Whenever it is practicable, it is being suggested that a comparison be made between involvement and

commitment of companies to training during the period of structural adjustment and after.

- 3) It is also being suggested that as part of (2) above, expenditure of companies on training 'others' be compared with their expenditure on training their employees.
- 4) Finally, a lot more workers from many companies should be involved in a study of personal benefits that accrue to workers especially as a result of different types of training.

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REFERENCES

- Abott, W. (1977), "The Future of Education and Work" in Labour Education, Vol. 2, No. 34.
- Anaeme, E.A. (1982), "The Role of Employers in Workers' Education" in Workers' Education in a Dynamic Society, Proceeding of the National Conference on Industrial Relations, Department of Adult Education, Ibadan; University of Ibadan.
- Beach, D.S. (1975), Personnel: The Management of People at Work, New York: Macmillan Publishing Co. Inc.
- Boone, E.J. Shearon, R.W. and White, E.E. (Eds) (1980), Serving Personal and Community Needs through Adult Education, London: Jossey-Bass Publishers.
- Bown, L. and Okedara, J.T. (1981), An Introduction to the Study of Adult Education, Ibadan: University Press Limited.
- Bryan, L.A. (1985), "Better Performance through Better Training" Journal of European Industrial Training, Vol. 9, No.1.
- Craig, R.L. (1976), Training and Development Handbook, NEW-YORK: McGraw-Hill Book Company.
- Cochran, W.G. (1954), "Some Methods for Strengthening the Common χ^2 Test", Biometrics, Vol. 10.
- Cole, G.A. (1986), Management - Theory and Practice Harts: Dp Publications Ltd.
- Darkenwald, G.G. and Merriam, S.B. (1982), Adult Education: Foundations of Practice, New York: Harper and Row Publishers.
- Darkenwald, G.G. (1983), "Perspectives of Business and Industry on Cooperative Programming with Educational Institutions" Adult Education Quarterly - A Journal of Research and Theory, Vol. 33, No.4.
- Daily Times, (1988), "Illiteracy on the increase", Dec. 8.

- Dixen, W.J. and Massay, F.J. (1959), Introduction to Statistical Analysis, Tokyo: McGraw-Hill, Kogakusha Ltd.
- Emiola, A. (1982), Nigerian Labour Law, Ibadan: University Press Limited.
- Fasokun, T.O. and Mejiuni, C.O. (1991), "Politics in Adult Education" in Ehiamentalor, E.T. and Oduaran, A.B. (Eds.) Fundamentals of Adult Education, Benin City: Nigerian Educational Research Association.
- Federal Government of Nigeria (1991), Industrial Training Fund: Manpower Training and Development Programmes, Jos: Owe Press Ltd.
- Federal Government of Nigeria (1971), Official Gazette 14th Oct., Vol. 58, No. 51, Part A.
- Federal Government of Nigeria (1987), Official Gazette 12 June, Vol. 74, No. 34, A.85.
- Ferguson, G.A. (1976), Statistical Analysis in Psychology and Education, London: McGraw-Hill Kogakusha Ltd.
- Fernau, C.N. (1984), "What is Workers' Education? - An Attempt at Clarification" Labour Education Vol.4, No. 57.
- French, P.A. (1987), "The Corporation as a Moral Person" in Poff, D. and Waluchow, W. (Eds), Business Ethics in Canada, Ontario: Prentice-Hall Inc.
- Friedman, M. (1987), "The Social Responsibility of Business is to Increase its Profits" in Poff, D. and Waluchow, W. (Eds), Business Ethics in Canada Ontario: Prentice - Hall Inc.
- Foucault, C. (1984), "Education and Training -- An Industrial perspective" in Labour Education Vol.2, No.55.
- Foucault - Mohammed, C. (1986), "Education and Training: An Industrial Perspective" Labour Education, Vol.4, No.65.

Goldstain, H. (1980), Training and Education by Industry, Washington, D.C.: National Institute for Work and Learning.

Griffith, W.S. (1970), "Adult Education Institutions" in Smith, R.M., Aker, G.F. and Kidd, J.R. (Eds) Handbook of Adult Education, New York: Macmillan Publishing Coy. Inc.

Heinecke, P. (1981), "Personnel Management in Nigeria: ReAppraisal of Training Needs" in Zahradeen, U.A. (Ed) Management Training and Development in Nigeria, Zaria: Centre for Management Development (CMD) and Nigeria Association of Schools of Management Education (NASMET).

Hollis, M. and Nell, E.J. (1975), Rational Economic Man, London: Cambridge University Press.

Hookins, P.C.H. (1985), Workers' Education: An International Perspective, Story Straford: Open University Press.

Hospers, J. (1970), "Why be Moral?" in Sellers, W. and Hospers, J. (Eds), Reading in Ethical Theory, New York: Meredith Corporation.

Industrial Training Fund (1991), ITF News, Vol.2, No.3.

Joyce, P., Woods, A and Hayes, M. (1985), "The Corporate Response to YTS - Part I: Investment or Social Responsibility" in Journal of European Industrial Training, Vol.9, No.3.

Labour Education (1978), "Workers' Education Requirements for Workers' Participation" in Labour Education, Vol.2, No.37.

Laird, D. (1985), Approaches to Training and Development, Reading: Addison-Wesley Publishing Company, Inc.

- Le Serve, A. (1981), "Health and Safety in the Work Place. A Need for Workers' Education" Labour Education, Vol. 1, No. 45.
- Lichtenberg, J. (1982), "The Moral Equivalence of Action and Omission" In Nielsen, K. and Patten, S.C. (Eds), New Essays in Ethics and Public Policy, Ontario: Canadian Association for Publishing in Philosophy.
- McOliver, F.O. (1985), "Human Resource Development and Management: A Case Study of Shell Petroleum Development Company of Nigeria" in Nigerian Management Review, Vol.1, No.2.
- Nadler, L. (1970), "Business and Industry" in Smith, R.M. Aker, G.F. and Kidd, J.R. (Eds), Handbook of Adult Education, New York: Macmillian Publishing Coy. Inc.
- Ogunranti, A. (1982), "Learning, Teaching and Communication in Workers' Education" in Workers' Education in A Dynamic Society, Proceedings of the National Conference on Industrial Relations, Department of Adult Education, Ibadan: University of Ibadan.
- Poff, D. and Waluchow, W. (1987), "What Business does Business have in Ethics" in Poff, D. and Waluchow, W., (Eds). Business Ethics in Canada, Ontario: Prentice-Hall, Canada Inc.
- Robinson, J. (1976), Economic Philosophy, Middlesex: Penguin Books Ltd.
- Schumpeter, J.A. (Rpt, 1976), History of Economic Analyses, New York: Oxford University Press.
- Siegal, S. (1956), Non-Parametric Statistic for the Behavioural Sciences, New York: McGraw-Hill.
- Snedecor, G.W. and Cochran, W.G. (1974), Statistical Methods, Iowa: The Iowa State University Press.
- Sule, E.I.K. (1986), "Concepts of Small and Medium - Scale Enterprises and the Expected Roles of These Enterprises in Promoting Industrial Development in

Nigeria" in Central Bank of Nigeria, Economic and Financial Review, Vol.24 No.4.

Tabbush, V.C. (1977), "Investment in Training: A Broader Approach" in The Journal of Human Resources, Vol. 12, No.2.

The Guardian(1985), "Reflections of Alluta Betrayed", May 1.

Thomas, L. (1982), "Acts, Omissions and Common Sense Morality" in Nielsen, K. and Patten, S.C. (Eds) New Essays in Ethics, Ontario: Canadian Association for Publishing in Philosophy.

Titmus, C. and Hely, C.G. (1976), "Collective and Individual Dimension in the Adult Education of Working people" Studies in Adult Education, Vol.8, No.1.

Union Bank of Nigeria (1991), Annual Reports and Account, Lagos: Academy Press Ltd.

Whitehouse, J.R.W. (1978), "Workers' Participation for Development" in Hall, B.L. and Kidd, J.R. (Eds) Adult Learning: A Design for Action, London: Pergamon Press Ltd.

Whitehouse, J.R.W. (1979), "What is Workers' Education?" Labour Education, Vol.1, No.39.

Wright, R.L.D. (1976), Understanding Statistics: An Informal Introduction for the Behavioural Sciences, New York: Harcourt Brace Jovanovich Inc.

- E₁ - Examples of Forms of Training and Development Programme in Service Industries
- 1) Training in public relations.
 - 2) On-the-job training on computers, typewriters, and new equipment.
 - 3) training in salesmanship.
 - 4) further education, relevant education
 - 5) Adult literacy education
 - 6) Others (please specify)

- E₂ - Examples of Forms of Training and Development Programmes in Manufacturing Industries.
- 1) Vocational-technical training,
 - 2) Apprenticeship training,
 - 3) Health and Safety training
 - 4) Further education, relevant education
 - 5) Adult Literacy education
 - 6) Others (please Specify)

- E₃ - Examples of Other Forms of Training or Education
- 1) Customer/Consumer training
 - 2) Training of Adults who are neither customers nor employees.

Please note that:

"Workers" here will exclude all your employees who occupy management positions, heads of departments/units, and those who serve as instructors in training and development programmes organised by your company.

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APPENDIX II
INTERVIEW GUIDE FOR PERSONNEL MANAGERS (IGPM)

- (1) Which of the following factors is the major determinant of the policy that your company adopts towards the training and development of her workers.
- (a) Managerial philosophy - theory x or y?
 - (b) Moral principles
 - (c) the Industrial Training Fund (ITF) Decree
 - (d) Social responsibility
 - (e) A combination of two or more of the factors listed above.

Please give reasons for your answer.

- (2) What forms of training and development programmes are available for your workers? (Please be Specific)

- (3) What forms are emphasised and favoured?

- (4) Why do you favour and emphasise the training and development programmes listed in item 3.

- (5) What resources - human, financial and physical - are available for the training and development of your workers?

- (6) Do you liaise with some educational institutions or the training schools of some other corporations for the training and development of your workers?
If your answer is yes, please mention the institutions.

- (7) Do you have specific sets of health and safety regulations that you expect your workers to adhere to?
If your answer is yes, how do you ensure that they adhere to such regulations?

- (8) Do you engage in other education activities such as customer/consumer education and the training of persons who are neither your employees, customers, nor representatives of your company?

- (9) Do you engage in the activities mentioned in item 8 only if they will directly increase the turnover (salesfigure) of your company?

- (10) If your company's participation in the activities stated in item 8 are not dependent solely on their profitability, what other reasons would you advance for your company's involvement in such?

APPENDIX III

PERSONAL BENEFITS QUESTIONNAIRE I (PBQ I)

(To be completed by supervisors/ Foremen/ Heads-of-Units or Departments and Salesmenagers)

Type of Industry _____
 Name of Company _____
 Manufacturing and or Service _____
 Designation of Officer _____
 Number of years spent
 in this Company _____
 Number of Years Spent in Present Position: _____

- (1) Do you insist that your workmen should adhere to certain health and safety regulations?
 Yes _____ No _____ Not Applicable _____
- (2) How many accidents have been reported to you since you assumed duty as supervisor/ foreman or head of unit/department? _____
- (3) Are you always happy to see your workmen go on training?
 Yes _____ No _____ Undecided _____

Please give reasons for your answer

- (4) Please indicate (x) whether you agree, disagree e.t.c with the following statements.
 Most often, after a worker has undergone training,

SA A U D SD

- (a) S / he becomes more efficient at work
-
- b) S / he increases the output of this company
-
- c) S / he feels good about himself or he generally wears a look of satisfaction.
-
- d) S/he begins to demand more for his rights as a Worker.
-
- e) S / he appraises social, political and economic issues more critically than he used to do.
-
- f) His or Her Occupational status improves
-
- g) His or her salary level improves
-
- h) His or her standard of living improves
-
- i) S /he adheres strictly to safety regulations
-

Key: Strongly Agree - SA
 Agree -A
 Undecided -U
 Disagree -D
 Strongly Disagree -SD

APPENDIX IV
PERSONAL BENEFITS QUESTIONNAIRE II (PBQ II)
(To be completed by workers)

Type of Industry _____
 Name of Company _____
 Manufacturing and or Service _____
 Designation of worker _____
 Number of years spent
 in this Company _____
 Number of year spent
 in present position _____

1) Please complete the table below.

Years	Indicate the number of times that you have participated in training and development programmes provided or sponsored by your company in the last 13 years.	Indicate the specific forms of training programmes in which you participated.	The providing Institution (e.g a consultancy firm, your own company etc)	For how long did the training last.
1978				
1979				
1980				
1981				
1982				
1983				
1984				
1985				
1986				
1987				
1988				
1989				
1990				

2) Have you ever had an accident as a result of your present job?
 Yes _____, No _____ Not Applicable _____

3) If the answer to question 2 is Yes, in what ways did your employers come to your rescue?

4) If the answer to question 2 is yes, did you ask for any compensations from your employers?
 Yes _____, No _____
 Please give reasons for your answer

- 5) Please indicate (x) whether you agree, disagree e.t.c with the following statements.
Most often, after participating in a training programme,

SA A U D SD

- (a) I become more efficient at work
-
- b) The output of my company increases
-
- c) I feel satisfied with myself
-
- d) I begin to demand more for my rights as a
Worker.
-
- e) I appraise social, political and economic
issues more critically than I usually do.
-
- f) My occupational status improves
-
- g) My salary level improves
-
- b) My standard of living improves
-
- i) I adhere strictly to safety regulations
-

Key: Strongly Agree - SA
 Agree - A
 Undecided - U
 Disagree - D
 Strongly Disagree - SD