ASPECTS OF MANPOWER PLANNING IN A LOCAL LABOUR MARKET WITH PARTICULAR REFERENCE TO THE NURSING PROFESSION

by

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DECLARATION

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or institution of learning.

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A B S T R A C T

The purpose of this study is to look at aspects of manpower planning in a local labour market with special emphasis to female nurses. Its aims are, firstly, to find out the various factors which determine the participation rate of nurses. Secondly it is aimed at providing the authorities with information which would enable them to react in the proper direction when they are facing recruitment problems and if possible to verify and codify certain characteristics of nurses and patterns of the nursing employment.

Also it is aimed to find out the pool of qualified nurses available in the district, the career profiles of the people currently employed in the locality and what has been happening to those who have successfully emerged from the nursing school in order to provide sufficient material for management to see the potential benefit of a manpower planning approach.

Lastly it aims to answer a more general question, and a very contemporary one indeed, i.e. Whether there is an over-production of qualified nurses in the National Health Service and hence waste of resources. This issue has become even more urgent after the financial difficulties the NHS is facing and the recognition that training of nurses is indeed a very costly business and even more important because of the discussion concerning "Project 2000" when more qualified nurses will be needed to work in the wards.

Employment in the National Health Service has suffered from continuing divergence between the demand for and the supply of nursing staff. A similar situation existed in that particular Health District, the location of the local labour market. In Spring 1980, a request came for an investigation into the nursing recruitment in the Health District which was becoming "increasingly difficult". By the autumn of the same year, not only was there perceived to be no shortage problem but, on the contrary, there was a plenitude of application,

enough even to fill the succeeding intakes into the nursing school. Three years later, however, unemployment among qualified nurses had become a real problem.

These, at least, signify a waste of scarce human and financial resources, and a justifiable scepticism is provoked about the way manpower problems are being looked at in the N.H.S., and also regarding the efficiency of personnel forecasting in the Service. Manpower planning problems, however, are so complicated that there are no clear-cut satisfactory answers to these questions. More light could be shed on them by studying the problem from various angles, and adopting different approaches.

In Chapter One an attempt is being made to present the evolution of manpower planning not only as a discipline but at the same time in its application over the years in this country. The three levels of application of manpower planning, national, intermediate and micro, with emphasis on the various techniques used and difficulties faced are presented in the same Chapter.

Chapters Two and Three and the ones which follow, are concerned with the rather more concrete aspects of manpower planning i.e. those which have been dealt with in the course of the project. Nursing as a profession and the necessary background material to the study is presented together with certain information concerning various institutions and procedures as well as the most recent developments in the N.H.S.

Although nursing has been over the last hundred years an overwhelmingly female occupation, it is only in the past few decades that there has been a general expansion of wage labour among women. It is, therefore, necessary that any study of nurses cannot but be an examination of women in the labour process. Chapter Four deals with this historical development

with particular emphasis on the developments of the labour force participation of women and the factors influencing this participation.

Generating contacts with qualified nurses presents, in itself, methodological problems of some magnitude, particularly in the case where no up-to date lists are kept and especially when the aim is to go as far back as twenty years since some nurses have first been qualified. In Chapter Five, the results of these contacts are presented together with the experience gained during this exercise.

Chapter Six focuses on the local labour market, its determinants and its social and economic setting. The available information concerning the Health District and its manpower is also presented here.

In Chapter Seven the analysis of the data gathered from the main survey questionnaire is presented. The aim of the analysis is to provide the authorities with information on the characteristics of qualified nursing staff in order to understand more fully the staffing situation. The purpose of the comparison of the results of the present study with those of other researchers, throughout this chapter, aims firstly to detect certain patterns of movements and behaviour of the qualified nurses and, secondly, to overcome the deficiency in manpower information in order to provide a sound statistical basis for policy decisions.

In Chapter Eight a summary of the main findings of the study is presented together with an attempt to take part in one of the most controversial issues, i.e. whether the N.H.S. produces more qualified nurses than this country needs with a consequent of wasting scarce human as well as material resources.

CHAPTER ONE

MANPOWER PLANNING: THEORY AND APPLICATION

1.1 Introduction

Manpower planning is essentially about work. Any comprehensive manpower policy therefore should have a dual function: to enable the country's manpower resources to be developed in a way contributing fully to economic well-being and to ensure that there is available to each worker the opportunities and services he or she needs in order to lead a satisfying working life. Such a policy views people as a factor of production, a means towards the end of producing goods or providing services. It views them also as individuals, each with needs centred round his or her own working life. In consequence, most manpower measures do not have only an economic objective (to help industry) or a social one (to help people), but both. The employment service helps employers to recruit - but it also helps workers to secure jobs. Training schemes help workers to acquire skills - but they also help to supply industry with these skills.The success of any manpower policy must, therefore, be judged by the extent to which it serves both objectives and thereby contributes to a higher level of employment.

The subject of manpower planning has, in recent years, become a major concern of those responsible for the management of the national economy and industry. It is now a common belief that manpower is the most critical resource upon which the economic future of any country depends. Rapid technological changes are leading to a requirement for manpower which is both more highly skilled and more adaptable. Social changes including changes in the education system and national institutions are not however, always in gear with technological requirements.

1.2 What Manpower Planning is

Manpower planning has been defined in several ways which highlight the complexity and the diverse activity which it embraces. Bryant (1965) defined it as follows:

> "Manpower planning refers to the rather complex task of forecasting and planning for the right numbers and the right kinds of people at the right places and the right times to perform activities that will benefit both the organisation and the individuals in it".

Hughes (1971) simply defined it as the essential matter with which it is concerned, i.e. "the matching of manpower requirements and resources".

Bartholomew (1971), on the other hand, emphasises the advantage of adaptability to changing circumstances:

> "(Manpower) planning may be defined as a defence against the destructive elements of progress; the individuals resist the unexpected and all change which they feel is not personally advantageous. Planning enables change to be accepted gradually and painlessly, in advance of events, and it largely offsets the difficulties which the unexpected development brings to any situation".

Finally, Smith (1971) gives the following definition:

> "Manpower Planning should be regarded as a process of providing a frequently updated framework of information for decision-making, with the object of improving the utilisation of resources".

Viewed in this way then manpower planning is a process in which the likely consequences of the continuation of current policies can be assessed and the necessary actions can then be taken to avoid undesirable consequences. As a consequence then, it can be argued that the organisation with effective planning procedures can adapt more quickly to new circumstances as they arise. By contrast, an organisation which does not plan is likely to flounder when faced with sudden change simply because it lacks the information and

understanding of the way its manpower system works, which would enable it to adapt quickly and effectively. Emphasising this, the general aim of any manpower planning policy in general, and of corporate manpower planning in particular, is to reduce the risk of either a surplus or shortage of particular kinds of manpower, because any imbalance between personnel and other resources or needs is likely to involve waste.

Manpower planning in practice may be visualised as a flow of information. This must be organised to feed a continuously updated picture of future manpower needs and availabilities. If manpower planning is seen in this way, i.e. as a flow, it is necessary to adopt the concept of the labour force as a system. It follows then that when one characteristic is changed (for example, an increased rate of growth) there will be consequential changes in other parts of the system (probably affecting wastage and promotion in the example).

Quantitative aspects of manpower planning attempt to describe the system in numerical terms, both at a point in time - showing the "stock" of people in the system - and over a specified period of time which shows the changes taking place and the flow of people within and through the system. To this quantitative description may be added relevant qualitative information, including for example, any insights provided by behavioural science studies and, where possible, financial or other information providing measures of effectiveness. These various descriptions enable us to form judgements about the system's future behaviour, discover principles to help us in designing improved systems and provide guidelines for control of the system.

In planning manpower supply, an examination of the demographic environment allows conclusions to be drawn about possible threats to, and opportunities in, the source of supply. These commence with a forecast of the quantity and quality of skills which will evolve from the existing labour force, with particular attention to the analysis of wastage, which tends to drive the manpower system and acts as a major determinant of its future size and shape. Finally, manpower planning is concerned with the extent of necessary "importation" from the environment - either of numbers of people with certain skills, or

skills alone, in which the existing labour force requires expertise. This leads to a consideration of relevant policies necessary to encourage change in the existing manpower system which is deemed necessary and to support the importation of the required skills. Data remains the greatest problem in setting up a manpower planning process; difficulty of accuracy, compatibility between different sources and accessibility appear legion in personnel record systems.

1.3 Ingredients of Manpower Planning

It is not easy to give an extensive list of the disciplines connected with the term "manpower planning", firstly, because for each manpower planning exercise which is undertaken in a different level, environment, or occupation, new subject areas have to be looked at, Secondly, because the term "manpower planning" embraces activities so diverse as mathematical work on stochastic models, the ergonomics of job design, the sociology of management development, the computing sciences and problems of an industrial personnel department. But it has to be pointed out that the essential matter with which manpower planning is concerned is the matching of manpower requirements and resources. In order to study this problem the first approach of the manpower planner is the attempt to be comprehensive, and to take into account all the different factors involved; to place all the various concerns of personnel management - recruitment, training, career development, pay and productivity - within the context of a coherent manpower policy which is linked to the broad objectives of the organisation. Furthermore, the planner needs to look at the organisation in its environment, both local and national, and to ensure that, as far as possible, national policies for education, training and manpower development and the policies of individual organisation are mutually consistent.

The second distinctive characteristic of manpower planning is the use, whenever possible, of scientific methods and especially the methods of mathematics as developed within operational research. Here it has been pointed out that manpower planning has often been the subject of some misgiving with its quantitative (statistical) approach

to human affairs on two fronts. It has been portrayed as a soul-less numbers game in which individual identity is submerged in the anonymity of a computer record. The root of this fallacy lies in supposing that the existence of aggregate plans reduces the individual's freedom from choice. On the other hand, some doubts have been expressed about the possibility of doing any rigorous planning which involves forecasting the future, especially where anything as unpredictable as human beings are involved.

This point has been expressed more generally in an article describing the emergence of the science of statistics:

> "The ground was prepared for this change by a major innovation, the resolution of the paradox that chance events follow identifiable patterns. Until the end of the nineteenth century scientists built their pictures of the world almost entirely in terms of deterministic relations; but since human beings did not behave in a deterministic way, they were obviously unsuitable objects for the methods of classical science. It was then discovered however, that nuclear particles behave with the irresponsibility of human beings; and at the same time, it was realised that human beings are predictable in the aggregate if not the individual. ....Thus, reasoning in terms of certainty was replaced by reasoning, equally logical, in terms of probability, and laws governing individuals by laws relating to aggregates. Statistics came into its own. The layman may still think of statistics as the science of numerical information, but this is like thinking of architecture as the science of pouring concrete or of painting as the art of mixing colours. The facts on which statistics work are indeed primarily numerical, but as a subject it is a scientific discipline of extraordinary scope and power, and in one sense the matrix of scientific method itself" (Economist, 1969).

The other characteristic of manpower planning is the use of the techniques and concepts of economics which, like those of statistics, are concerned essentially with quantitative inter-relationships. These include, inter alia, the supply-demand price equilibrium theory in the study of the firm and the theories of labour economics and industrial relations.

Next there are the techniques of other social sciences such as psychology, or at least some branches of it. The work of psychologists with their essential interest in the behaviour of the individual is often held to present a sharp contrast to the statisticians' essential concern with the behaviour of statistical aggregates. Although their concern with the behaviour of individuals remains central, in practice, statistics play a major part in the work of industrial and occupational psychologists whose work depends heavily upon the aggregating of observations. The relevance to manpower planning emerges from their work on the design and relevance to the efficient performance of jobs, together with studies of the efficiency of training.

The role of sociology in manpower planning is also of great importance. Studies of the effects on organisations and their members of the introduction of computers into management and production processes for example, have an obvious and topical relevance. So too do the studies of, and research into, the inefficiencies created by perpetuation of over-rigid hierarchical structures. Other disciplines which have contributed to manpower planning include ergonomics and the medical sciences with their concern for the relationship between man and his work. Of particular interest are those concepts, lying at the boundary between economics and the behavioural sciences, which are concerned with motivation.

1.4 Areas of application

There are different levels within which manpower planning can be carried out:

National (macro) level: These are applications concerned with the national manpower system as a whole, or major sub-systems of it e.g. those concerned with establishing the future demand for social services, health services, educational services, etc.

Intermediate (Industry wide): These applications are concerned with, for example, manpower across whole industries. Such studies were

carried out, in the U.K., by the various Industrial Training Boards and a variety of employer associations or research bodies financed by the employers, such as the Engineering Employers' Federation, the Inter Bank Research Organisation, etc. The regional study of manpower can also be considered within the intermediate area of application.

Corporate (micro) level: These are applications at the level of the firm or other organisation of similar scale or across entire professions or particular geographic regions. A distinct feature of corporate manpower planning is that we are concerned with bodies of manpower who need to be managed both individually and collectively by the one management.

Individual oriented: These are areas of application centred on the individual or comparatively small groups of individuals. These are areas of concern of different specialities when carrying out such functions as selection, succession planning and career development.

International: Studies of labour migration, for example, within the E.E.C., or long term population projections on a world scale.

It has been pointed out that "macro and micro are mutually dependent, and corporate manpower planning should preferably be regarded consciously as the planning of sub-systems of larger systems" (Smith 1976).

1.5 The National (Macro) Level:

It is essential to see the nation's manpower and the enterprises in which men and women work as a system of innumerable interacting parts, rather than simply as units individually affected by events or policies. Since the manpower system is composed of a multitude of individual and corporate decisions about work, there is nothing mechanical about it and development and changes in it are difficult to predict. But it is important to appreciate that what happens in one part of the system will affect other parts, and policy decisions must be taken with this fully in mind. The role and the objectives of the authorities responsible for the manpower planning on national level

"... are to understand the system and its own position in it, and to establish a framework for action in the shape of a network of advice, assistance and encouragement to individuals and employers" (MSC, 1976).

The main objective of manpower planning on a national scale, is recognised commonly as being the changing of employment patterns towards desired goals.

The second objective is widely agreed that macro-scale manpower planning must be linked to economic planning and education planning.

The third objective is a methodological one and is composed of at least five separate but related activities:

a) **The use of demographic accounts:** A balance sheet of manpower stocks, disaggregated into mutually exclusive categories, gives a complete picture of the position at one date. Between two dates, the inflows into and the outflows from each category of the balance sheet give an unambiguous measure of the net change in each labour stock. Stone (1970) developed a conceptual framework of demographic accounts that suggests which additional data would be most useful for the purposes of both manpower and educational planning.

b) **The projections of manpower availabilities:** They are also demographic, being based on population projections and activity rates in terms of both stock and flow. These are sometimes disaggregated into occupational categories for the whole of the active population. There is a need for good national statistics which permit the computation of reliable transition coefficients to describe the movements from infancy to school, from school to employment or higher education, and from higher education to employment; and other transitions involving, for example, migration, mortality and retirement. In most countries there is also a need for separate transition coefficients for movements to and from military service.

c) The monitoring and analysis of labour mobility: The national population is itself made up of a range of sub-systems which are each greater than the micro-systems. There is the infant population sub-system. This will be studied by the demographers and medical experts with a view to monitoring any changes in the transition coefficients from one age to the next, and by the authorities responsible for providing, in due course, the school places. There is the full-time education sub-system which may itself be divided into sub-systems for each level of education. The trends in school-leaving ages, in the proportions seeking higher education, and in the kinds of qualifications being achieved may themselves have important consequences for these further sub-systems. There is, in most countries, a military service manpower sub-system which may take a high proportion of young persons away from other types of employment. There is the gainfully employed civilian population and this in turn can be sub-divided into industry-wide sub-systems. There is the non-employed population of working age, which may itself be divided into sub-systems covering the unemployed in transition between jobs, the housewives, the disabled, etc. And, finally, there is the population of people who have passed the age boundary between work and retirement.

d) The analysis of manpower utilisation: Misutilisation is defined as either employing more labour than the economy needs, or employing less than the number of people who would like to be gainfully employed. Accordingly, employment figures could at one and the same time disregard the well-known phenomena of under-employment and hidden unemployment. If past data embodied a systematic growing misuse of labour, then projecting such data into the future over-states the real needs of the economy. Likewise, if past measures of the active population exclude hidden unemployment, then simply extrapolating them understates the number of people who might want to work in the future. It is clear, however, that there is a further series of sub-problems for particular occupations in specific industrial sectors. Over-manning here, for example, can result from the long-run

effects of restrictive practices and the cyclical attempts of employers to hoard labour. It has been suggested, however, that over-manning can result from labour being under-qualified in the education and training sense.

e) The projection of manpower needs: No problem has attracted greater attention, in the field of manpower planning, than that of forecasting the desired future pattern of employment. It is not surprising, therefore, that one of the central topics of discussion is the techniques of projection. These quantitative techniques may be grouped into four categories:

(i) Statistical trends: This approach merely extrapolates the past into the future. It does not, therefore, consider the effects of technological change, over and above the trend. For example, it does not allow for the effect on both the size and occupational structure of the labour force of a rate of technological change twice as great as that existing in the past. There is also the problem whether equilibrium exists at the time of the forecast between the demand and supply of labour. For the sake of simplicity, we extrapolate from an occupational structure where we assume the demand for an occupation and the supply of the occupation are in equilibrium. We do not consider the case - and it is not, by any means, an isolated one - where occupations are in excess or short supply.

(ii) Gross-sectional comparisons: In this approach the state of a developing economy may be compared with that of an appropriate more developed one; the latter being assumed to indicate the direction which the less advanced economy might take. In practice, however, this approach has not proven to be too fruitful mainly due to difficulties in comparing international data on occupations and education because of the different occupational patterns which exist in different countries even when at the same level of development.

(iii) Survey questionnaires: This approach, which is of the "business intentions" type of survey, is in fact a study in depth of the different sectors of the economy. It is aimed at determining the present occupational and educational mixes. It also tries to obtain expert opinion from operating management on the rate of technological change in progress, the likely occupational mixes in the future and the growth expectations of the industry. Although the method, in essence, consists of obtaining expert opinion, it is difficult to incorporate the information secured into an overall model for the economy. There is also the difficulty that the survey relates to only one particular point in time and must be repeated regularly if the information is to be kept up-to-date. Another objection to this method is that, in the past, there were very few people in industry who were capable of expressing an expert opinion on the manpower requirements of the industry at the forecast date.

(iv) Econometric models: This approach consists of identifying relationships between employment and its various parameters. The method gets away from the simple approach of relying on the assumption that changes in the demand for labour take place consistently and regularly over time. The method has the advantage that a number of the parameters can be influenced by Government and even those which are not readily controllable may be easier to forecast than manpower itself. Econometric models have the added advantage of consistency of assumptions in that they relate manpower demand to the variables affecting such demand. The models can take account of the feedback effects of employment on output and productivity as well as the influence of these parameters on employment itself.

1.5.1 Manpower forecasting at national level.

Although manpower forecasting at the national level is but one element of any manpower policy, it is, sometimes, regarded as being synonymous with manpower planning. This is incorrect as this would, in effect, be equating the part with the whole.

On the other hand, "... the planning and the forecasting of manpower are different activities, but so closely connected that it is not sensible to consider one and not the other". (Laslett 1972). Moreover, forecasting occupies most of the attention and interest not only of the researchers of manpower planning affairs but also, and even more so, of the manpower authorities and personnel managers.

In considering the integration between probable demand for workers and their potential supply, and in regard to labour force projections in general, the following terminological distinctions are given by Johnson (1969):

(a) normative or target projections which serve to describe, at least approximately, the characteristics and requirements of a labour force situation;

(b) "neutral" projections which are derived by extrapolating a specified set of assumptions into the future and serve in offering advance warnings of a possible lack of integration between demand and supply; and

(c) forecasts, which reflect the selection of a single outcome deemed most likely to occur, "all things considered". A forecast serves a somewhat different purpose than either normative or "neutral" projections. It should actually represent a judged choice from among a set of projections of a particular projection whose underlying assumptions correspond most nearly to what the selector believes is most likely to occur in fact. The transformation of a projection into a forecast, according to this terminology, involves a judgement concerning its potential realisation at the specified future time.

The point here which has to be made is that more reliable data about manpower and more intelligent use of statistical methods can enable the forecaster to predict the future behaviour of groups of people with at least reasonable accuracy.

One, however, has to be aware of the fact that, whatever the technique used, forecasting in the mechanistic sense, is a prediction of the future based on observed regularities in the past; and practical forecasting must also make due allowance for foreseeable changes in policy, organization and technology which may break the established trends and relationships. In other words, to think of forecasting in the context of something which lays down what will happen in the future is a misunderstanding of its proper purpose. What manpower forecasting can do is to use the best available information and statistical methods to show what would happen if certain trends continued and certain policies were applied.

The achievement of integrated supply and demand projections, therefore, must recognize:

(a) the limitations of extrapolative techniques as distinct from models which reflect some understanding of the casual processes involved,

(b) the virtue of a plurality of approaches in the construction of projections. "Only limited success can be expected with techniques, however rigorous, which either take account of only those variables which can be quantified, or which impose arbitrary quantification upon qualitative factors ... When individuals and organizations (public and private) are seeking solutions to, and making decisions pertaining to, employment and economic and manpower development, they have to be aware that "pure" noneclectic theories of economics, psychology and sociology used separately alongside each other (or used singly to the neglect of the others) can result in practical failures and in inaccurate predictions" (Johnson 1969).

(c) the need for reasonably accurate estimates of such factors as the changing occupational and industrial mix of the economy, related changes in occupational requirements, the impact of governmental policies and programmes, and on the supply side, the changing educational composition, values, aspirations and life styles of the population of working age.

Having in mind the different approaches to manpower forecasting, a reasonable question one might now raise is, what is the actual methodology which the manpower forecaster uses? At the operating level the manpower forecaster adopts a procedure which is a mixture of expert opinion, extrapolation of recent trends, comparisons with developments elsewhere and known relationships.

1.5.2 Forecasting Techniques

There are three basic kinds of forecasts: judgmental forecasts, extensions of past history and casual forecasting models.

Judgmental Forecast: This kind of forecast is used when "good" data is not readily available and when attempting to change subjective opinion into a quantitative forecast. Such kinds of forecasts are: Delphi technique - group of experts where no majority opinion is disclosed; Pool of experts - where the majority of opinion is disclosed; and "Futurist Organizations" - Where we are relying primarily on human judgement.

Extension of Past History: This kind of forecast is based on the assumption that future patterns tend to be extensions of past ones. Such forecasts are: Moving Averages - weights each period equally; Weighted Moving Average - this method puts emphasis on newer information; Expodiential Smoothing - it uses a single weighting factor; Trend Projections - searching for the trend line that gives the minimum sum of the squares of the errors.

Casual Forecasting Models: This kind of forecast takes into account a great deal of information about the relationship between what we are trying to forecast and a number of other variables, including economic

measures and social indicators. The most common casual forecasting models are: Regression Analysis, Econometric Model - it is a whole system of equations which describe the operation of the economic system or the market within a particular industry; and Input-Output Analysis - which is concerned with the flow of services or goods among branches of a large organization.

1.5.3 Difficulties facing the manpower forecaster

The manpower forecaster, in his efforts to derive reasonably reliable pictures of the future is faced with numerous difficulties. These difficulties arise, to a large extent, from a lack of data and an incomplete understanding of the underlying social and economic processes. The supply projection, for example, which consists of estimating flows into and out of an occupational group during the forecast period has to be estimated by determining these flows and having some knowledge of the present number in the occupational group. The difficulty lies in determining the flows. Flows are caused by deaths, retirements and resignations, mobility between occupations, movements from the "not gainfully employed" into an occupational category, immigration and, finally, there is the largest flow from the educational system. There is even difficulty in measuring how these flows moved in the past and as there is an incomplete understanding of past trends, it is not possible to be overconfident about forecasts of future trends.

The link between manpower forecasting and education is one of the most important and, at the same time, one of the thornless problems in manpower forecasting. Firstly, because the main mechanism to influencing the supply position is through education. Secondly, as far as the exact aims of education are concerned, there have always been differences of opinion. The economists look at education in terms of opportunity cost. They consider education as an investment and wages as a flow of funds over the years. A discounted cash flow analysis can be made to determine the rate of return on the investment. On the other hand, some educationalists have tended to look on the economic approach to educational planning as a coercive restraining influence on a system which, in their view should develop

in a free uninhibited manner, responding only to the demands of the students as indicated by trends in participation rates in the various subjects, etc. Generally they consider that a classical education has more 'value' than a professional or vocational one. If this approach is correct, and if education has no vocational function, manpower forecasting as such is clearly of very limited use in planning the educational system.

It is logical to assume that if no opportunity costs were involved, the economists must, of necessity, opt for the 'more education the better' approach since studies have shown that the more educated a population is the more flexible it is. A highly educated labour force will consequently have less need of manpower forecasting than a poorly educated one. But even if the ultimate were to be achieved in education there would still need to be some forecasting since studies have also shown that labour mobility can be affected more by social and institutional pressures than educational ones. Today most people would accept that there is something in the manpower forecasting approach to education. But even so there is the difficulty of the occupational/educational relationship. What for instance is the ideal educational standard and training for a particular job; Does an ideal in fact exist? The best approach for solving the problem seems to be job analysis followed by job descriptions.

Another problem relates to the definition of employability which may be defined as the physical or mental capacity of an individual to perform work. According to such a definition, all persons within culturally-defined age limits who are not "disabled" comprise a maximum potential supply of manpower. Another definitively more restrictive and realistic estimate of potential manpower supply might be derived by adding the further requirement that an individual must be willing to accept work in order to be considered employable. Finally, employability may be defined in terms of market demand in the sense that an individual may be able and willing to work, but nevertheless fail to be employable because no job exists at the appropriate time, place and level. The changing mix and content of jobs in the modern economy imply constant changes in the physical and mental requirements which must be met by job holders. Long-term

changes in the acceptability of work (as among married women, for example), in the relative value of work versus other pursuits and in the meaning of work as a source of status and social position, have been expressed in the enormous changes in the composition of the labour force during the past few decades. These changes indicate that the desire for work is itself a variable factor. The individual who is capable and willing to work must still overcome certain barriers before he/she is ,in fact, employed. These barriers can involve:

(a) personal characteristics of job applicants such as the skill level of a potential worker; his trainability; his health; his formal education; and the presence of particular handicaps, such as a history of poor on-the-job performance, a criminal record, etc.,

(b) institutional factors such as long-term unemployment which may give rise to significant loss in work skills; involuntary part-time employment; and employment on sub-standard wages.

This list of barriers to employability emphasizes the particular difficulty of the exact definition of "employables" and "unemployables". It is nonetheless obvious that the actual labour force includes some element of subemployment and of underemployment at any given time. Thus it is impossible to utilize the count of persons in the labour force as an adequate measure of labour supply, or the count of the employed as an adequate measure of the employables. An additional barrier to employability is the inadequacy of information concerning available jobs, and the absence of adequate facilities to ensure an optimal matching of available skills with available demand for workers.

Faced with these difficulties, the manpower forecaster has to make the best approximations - "informed guesses" - possible. Finally, it has to be borne in mind that pin-point accuracy in forecasting is rarely essential: the real purpose of looking ahead is to do as much as possible to reduce the area of uncertainty.

1.6 Intermediate (industry-wide) level

These applications are concerned with manpower on an industry-wide basis as well as with regional study of manpower.

The natural point of reference for industry-wide planning is to begin with industrial and occupational classifications and definitions. Official sources should provide the data to cover working manpower, its output, education and training. In this way research is able to move from the general to the particular and to obtain broad information about the Industry and its manpower which is selected for particular attention. If more information is required, then investigations may be made in greater depth of particular industries or occupational groups. Regularly collected statistics are supplemented by special surveys and questionnaires which may be used for comparative studies between and within industries, regions and occupations. Having developed this suitable framework for manpower accounting and having identified through it, the level of each type of stock and the trends therein, more detailed studies of future needs are called for. The necessity arises for manpower forecasting on an industry-wide basis through a comprehensive assessment of the future manpower needs of every industry with a view to establishing the way in which retraining can contribute to an effective redeployment of labour.

In studying the various occupations attached to the particular industry, it is necessary to know what experience and expertise a job requires as distinct from the experience and expertise of the person who is performing the job. Only by completing this exercise in full is it possible to decide which types of people are economically more appropriate for which jobs. Having obtained data, it is necessary to organize them in a meaningful way. Unless the manpower situation is relatively simple, with established manning scales related to variations in production, simple indicators are unlikely to prove useful for forecasting. Rather is it necessary to take into account several factors simultaneously and to evaluate the effect of each. It is unwise to have much faith in a forecast based on a single set of assumptions or a single approach. It is often better to explore a

whole range of different forecasts. In particular, any forecasting system must be flexible, so that specific knowledge or expert opinion regarding some aspect of the forecasts can be readily taken into account. At the same time, it is desirable to build a "model" or mathematical representation of the relationship implied by the forecasts even though some of the figures will be subjective. The availability of a model or set of models enables the forecaster to examine the consequences of alternative assumptions regarding the economic environment, government policy, labour productivity agreements and so on. Also important is the need for a thorough understanding of the nature of an industry's utilisation of its manpower. Historical numbers are not sufficient. The forecaster needs to be acquainted with the particular, often unique, changes which are occurring in the industry with which he is concerned, both in terms of technology and of job-men effectiveness i.e. output, productivity and the contribution made by different quantities and qualities of manpower.

1.7 Corporate (micro) level

Manpower is typically a scarce resource. As such it must be planned and controlled in the same way as are other resources. Manpower planning, therefore, must be integrated with other planning activities of management and the prime objective of manpower planning is to incorporate the planning and control of manpower resources into company planning, so that all resources are used together in the best possible conjunction.

The need to ensure that future labour requirements will be available, and to increase the organization's productivity as well as to coordinate all company manpower policies, are important reasons for undertaking manpower planning. Shortages of certain grades of manpower have given recruitment plans and training plans critical importance in many organizations. On the other hand, pressures to increase productivity have brought about reductions in staff through the equally costly process of redundancy programmes. Furthermore,

decisions affecting manpower are continually being made by line managers and by personnel managers. Recruitment and training programmes, promotion and transfer policies, changes in methods of utilisation or in remuneration, negotiating decisions - all these affect the future needs for manpower and its supply. At present, such decisions, are made in most organizations, in the absence of any clear means of assessing their effects or their relevance to the objectives of the company.

To do all this properly, it is necessary to translate the objectives of the company, into the personnel activities which make them achievable. To make the translation effective, considerable analytical work is required. Without knowing the objectives of the organization, the manpower planner will be operating in a vacuum and will be able neither to produce a meaningful manpower plan, nor to set his own priorities and objectives for carrying out his task in the most efficient way.

Manpower Planning in the organization has two main stages:

(i) The forecast of manpower requirements, the "demand forecast" - how many persons, in terms of the approximate number of posts, will be required, in suitable categories of manpower and at suitable intervals of time in the future.

(ii) Where the persons to fill these posts are to come from, "the supply forecast". This stage is broken into two parts: the Internal supply forecast - how many of the present staff will remain at the date being considered in the future, assuming no other action is taken and the External supply forecast - what the state of the labour market is likely to be.

Finally, there is the constant feedback from the results of the planning stage to earlier stages or even to the objectives of the organization. The manpower supply has to match the manpower requirements. This can be done by changing the supply through

managerial actions, such as increasing the amount of training being done, or by changing the manpower requirements as, for example, by plans to increase the company's productivity. There can also be a feedback to the company objectives, when, for example, the manpower plan shows that they are unattainable through manpower shortage.

It is perhaps worth emphasizing the distinction between a forecast, which is a prediction of what will happen on a certain set of assumptions, and a plan, which is an action programme, resulting from the decisions of management based on the forecasts.

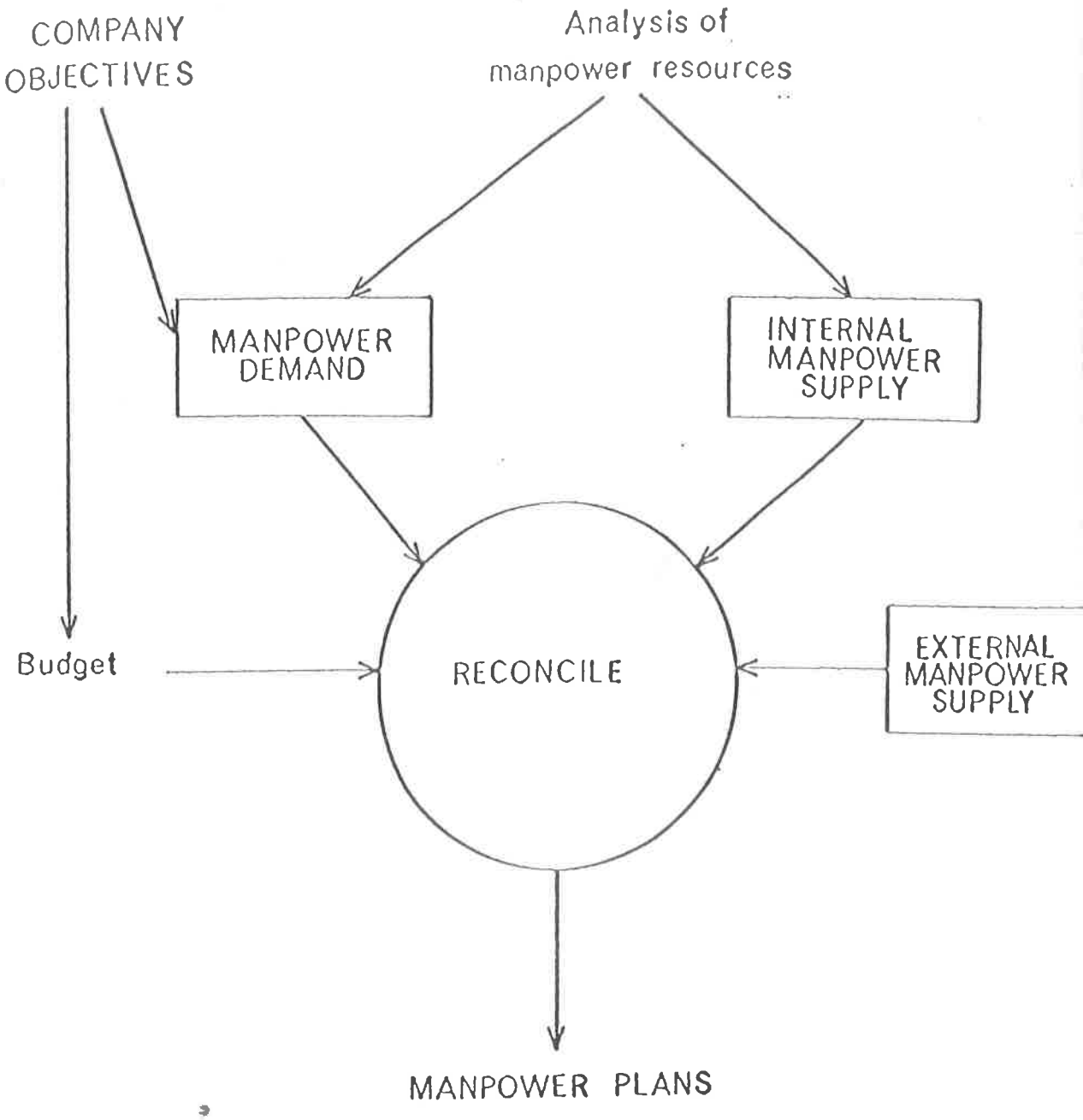
1.7.1 Manpower forecast at company level

Figure 1.1 shows how the manpower planning method works. Bell (1974) describes it as follows: The demand forecast must derive from the objectives of the company, which are set out in the business plan. The analysis of manpower resources provides the means of translating the objectives into manpower terms. To forecast the relationship between the work load of the business plan and the manpower required, analyses of past manpower performance and trends in productivity are needed. If it is to be useful in guiding action, the forecast must also provide information about the types of manpower required: It must be divided into specified manpower categories. The supply of manpower available from within the company, similarly divided into categories, is forecast on the basis of past rates of staff retention and patterns of promotion and transfer.

These two forecasts will match only in the most exceptional circumstances. It is, therefore, necessary to consider what actions are necessary to achieve a reconciliation between demand and supply. Recruitment is the most obvious way of increasing supply. This has to be examined in the light of any constraints which seem likely to be imposed by future labour market conditions. Further information is, therefore, required here, and in some cases, special studies may be required in order that an external supply forecast can be made.

The reconciliation must also be achieved within constraints imposed by the budget. This, like the demand forecast, stems from the business plan. It may be that financial restrictions limit manpower. The cost of manpower and of the plans to supply, develop and retain personnel, is an element within the budget itself. Thus, the manpower planning process provides an input to the budgeting process. In practice this will mean that the costing in the manpower planning programme will modify an assumed cost in the budget.

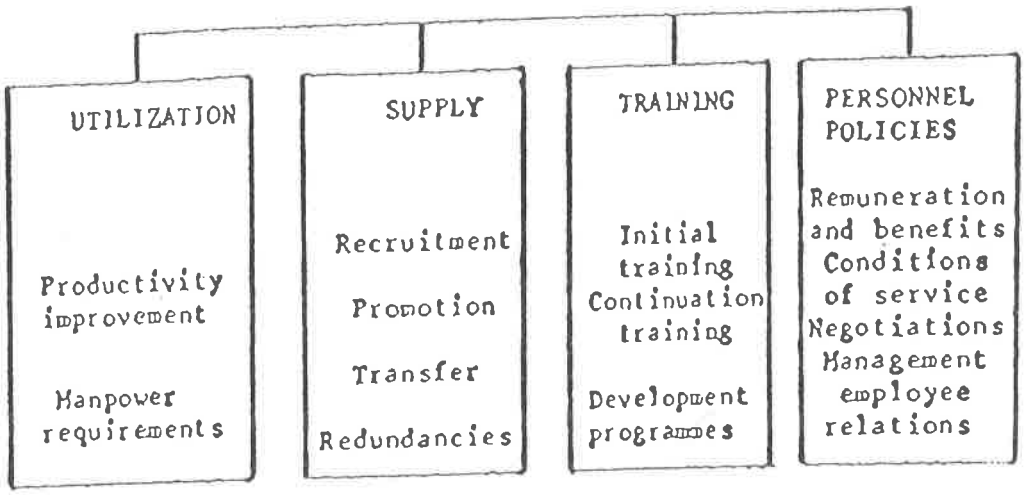
Fig. 1.1 MANPOWER PLANNING PROCESS



Because manpower planning both provides an input to the budget and is constrained by it, it is essential that financial and manpower planning be integrated. When the most suitable means of reconciliation have been decided, the actions entailed form the manpower plan. As shown in Fig. 1.1 the manpower plan achieves a balance between demand and supply. In this way, the planning and control of manpower resources is incorporated into company planning, which is the first objective of the manpower planning programme.

The manpower plan has four major elements as shown in Fig. 2.2.

Fig. 1.2 Manpower Plan



Utilization: Targets for improved productivity cannot be set until it is possible to measure productivity. When it is possible, management can set targets not only in the knowledge that it will be possible to monitor success in achieving them, but also with confidence in their practicability, for past trends and comparisons with other companies will together, give an indication of what can be achieved. The manpower plan must also specify at least in outline, how any improvements are to be achieved. Manpower utilization studies do not in themselves improve productivity. They do, however, provide the basis for management to plan improvements.

Supply: The recruitment programme necessary to supplement the internal manpower supply should be clearly set out. Any expected problems in it, arising perhaps from difficult labour market conditions, should be considered and the steps necessary to overcome them planned. Transfers between departments or divisions also affect the manpower supply situation. Policies designed to enhance the experience of staff by increasing mobility must also be taken into account. On the other hand, the policies themselves should be made against the background of manpower demand. Finally, if a future excess of manpower in any particular category is likely to arise and it cannot be solved by transfer arrangements, any redundancy programme needs to be planned well in advance.

Training: Manpower forecasting is vital to training and retraining programmes. These programmes must be related to the anticipated job requirements at the end of the training period - and beyond. For this purpose, those responsible for training need an estimate, not only of the future members, but also of the future skill and occupational structure of the firm or organization. This is particularly important when the training period is a long one. It is clearly essential, to both the individual and the company, that the skills in which staff are being trained are those which will be needed in the future and conversely, that the form of training takes account of the possibility of skill obsolescence.

Personnel policies: Most other aspects of personnel policy have an influence on manpower supply, affecting both the ability to recruit and to retain staff. Remuneration and benefit policies and conditions of service are clearly relevant. Their major effect is probably on recruitment, but they may also affect retention which, to a large extent, is dependent on the atmosphere in which people work. This atmosphere is created for them by management and is, therefore, to a large extent within management's control. Considerations of manpower are relevant also to negotiations about pay and conditions. The fact that the company is known to think ahead about its manpower could well increase the unions' confidence and lead to a better "understanding".

The term "productivity bargain" which has become very common recently is a means of increasing the efficiency and wages of employees at the same time. "Productivity bargaining" is perhaps best seen as a movement towards better management control of labour costs and towards a more constructive approach to industrial relations at the level of the enterprise. However, the term has come to be used mainly to describe situations in which increased wages, reductions in hours, or other benefits are given to workers in exchange for their agreement to the abandonment of inefficient working methods or practices.

1.7.2 Forecasting Manpower Demand

As already noted, the starting point for a manpower plan must be a statement of the firm's business objectives, and the overall strategy through which it hopes to achieve these. At each stage in preparing its range of business plans, the company must take into account the available resources of workforce, materials and money. The constraints which each of these imposes will set limits on what it can realistically hope to achieve. It is, therefore, misleading to say that management first determines sales and production and then derives manpower requirements. The manpower implications of the business plan have to be examined before final decisions are taken and firm targets and budgets agreed. Thus the process of continuous feedback between one stage of the planning process and others is vital.

In order to derive the manpower demand forecast from the business plan, the relationship between work load and manpower requirements must be estimated. Fundamentally, all methods of analysis of performance derive from an analysis of the past and, as it has already been noted, they all depend on the assumption that developments in the future will exhibit some continuity with the past.

1.7.3 Forecasting Manpower Supply

The purpose of manpower forecasting is, of course, to estimate the size of any future shortages or surpluses in particular occupational or skill groups. An organization's recruitment needs will be the difference between demand at some future date and the number of employees now with the firm who are expected to remain with it until that date. Forecasts of future labour demand alone will, therefore, be of limited value unless the manager is able to relate them to the current and future supply position.

It is thus important that the manpower planner should have as complete and accurate a picture as possible of the organization's existing resources of labour; and that he should be able to estimate how far this "stock" will have been eroded by wastage by the end of the forecast period. He must also assess to what extent changes (e.g. in conditions of work) within the firm, and external influences on the firm will affect the future supply of labour available to the organization.

Internal Manpower Supply: As has already been mentioned, the supply of manpower may be obtained by recruitment, from external or internal sources: the staff may be already employed. Internal manpower supply forecasting is, therefore, concerned primarily with the retention of staff. It is also concerned with forecasting how they will change in the future, for example, by promotion or transfer within the organization. Both these aspects of internal supply forecasting are based on some form of analysis of the past.

1.7.4 Labour turnover

Labour "wastage" is generally defined as a measure of the extent of losses from the labour force; labour "turnover" on the other hand, is taken to refer to the process of movement into and out of the work force, and should, therefore, explicitly take account of both wastage and recruitment. The method of measuring wastage of staff used by most authors is the annual labour turnover index or percentage wastage

rate. An example of estimating the labour turnover is given in Table 1.1 which is reproduced from "Practical Manpower Planning for Nurses" (1974). The annual labour turnover in this example is calculated according to the so-called BIM formula and expresses wastage as a percentage of the staff in post and thus "at risk" of leaving.

Wastage statistics, however, related to crude turnover, i.e. the proportion of those entering who leave, have been widely criticized. It is felt that in view of the differing patterns of wastage that present themselves any attempt to represent wastage by such a simple figure is not only misleading in certain situations, but ignores a mass of information, which, if examined, could provide additional pointers to possible reasons. In view of the inherent difficulties of interpreting this single figure, alternatives have been suggested.

Table 1.1 LABOUR TURNOVER EXAMPLE

STAFF GROUP: State Enrolled Nurses

Month	Entrants	Leavers	In post at Month end
Jan.	17	7	430
Feb.	11	14	427
March	8	10	425
April	10	15	420
May	21	13	428
June	9	14	423
July	9	13	419
Aug.	10	19	410
Sept.	31	10	431
Oct.	8	8	431
Nov.	12	14	429
Dec.	11	15	425
TOTALS	157	152	5098

$$\text{Annual labour turnover} = \frac{\text{Leavers in year}}{\text{Average staff in post in year}} \times 100$$

$$5098 : 12 = 425$$

$$\text{LEAVING RATE} = \frac{152}{425} \times 100 = 36\%$$

$$\text{STAYING RATE} = 100 - 36 = 64\%$$

In the hospital field, Levine (1957) illustrated the inadequacy of the single crude turnover figure by reference to a hospital having a 50% wastage which would be explained in a multitude of ways: it could, for example, result from 50% of the jobs turning over in a year, or, alternatively, 25% of the jobs turning over twice a year, etc. This observation led Levine to suggest the adoption of two complementary measures, namely, the normal one of turnover, and a second, labelled "instability" which is defined as the proportion of personnel employed at the beginning of a year who were no longer employed at the end of a year. A more recent study by Mercer (1979) presents the different definitions and attempts by various authors in order to arrive at a consensus on the nature of labour turnover and its measurement. He presents four main types of measure of labour turnover and recommends the joint use of them because each one illustrates a specific aspect of turnover. The formula suggested for the measurement of the Completed Length of Service which, as most usually calculated, is the measure of average length of service in present post, is presented below:

$$\text{Average length of employment} = \frac{\text{Sum of individual employment lengths}}{\text{Number of employees}}$$

For the Crude Turnover Rates the two formulas below are presented:

$$\text{Recruitment rate (per cent)} = \frac{\text{Number of recruits } (t^1 \text{ to } t^2) \times 100}{\text{Number of workers}}$$

$$\text{Separation rate (per cent)} = \frac{\text{Number of leavers } (t^1 \text{ to } t^2) \times 100}{\text{Number of workers}}$$

For the Cohort Turnover Rates the survival or wastage rate can be calculated as follows:

$$\text{Survival/Wastage rate (per cent)} = \frac{\text{Number in cohort who stay/leave, } t^1 \text{ to } t^2 \times 100}{\text{Number in cohort}}$$

The last measure suggested by Mercer (ibid) is the Force of Separation which is calculated by dividing the number of leavers with a particular length of service in their current post by all employees with that time of employment. It is more strictly an estimation of the probability of leaving (or staying) for those who have already achieved a stated length of service in the ensuing time period.

Cohort analysis: Past data is analysed in such a way as to make it possible to estimate the probability that a person in a particular age group will leave before reaching the next age bracket. Thus a "force of separation" is calculated and it becomes possible to predict the number of people in an organization, with any particular length of service or in any age bracket, who will remain with the firm over a given period. Thus, the distribution of wastage over time of a group of new entrants can be plotted taking account primarily of length of service, but also perhaps of age, sex, skill and qualification. It has been suggested that the total wastage process of a group of workers has three identifiable stages:

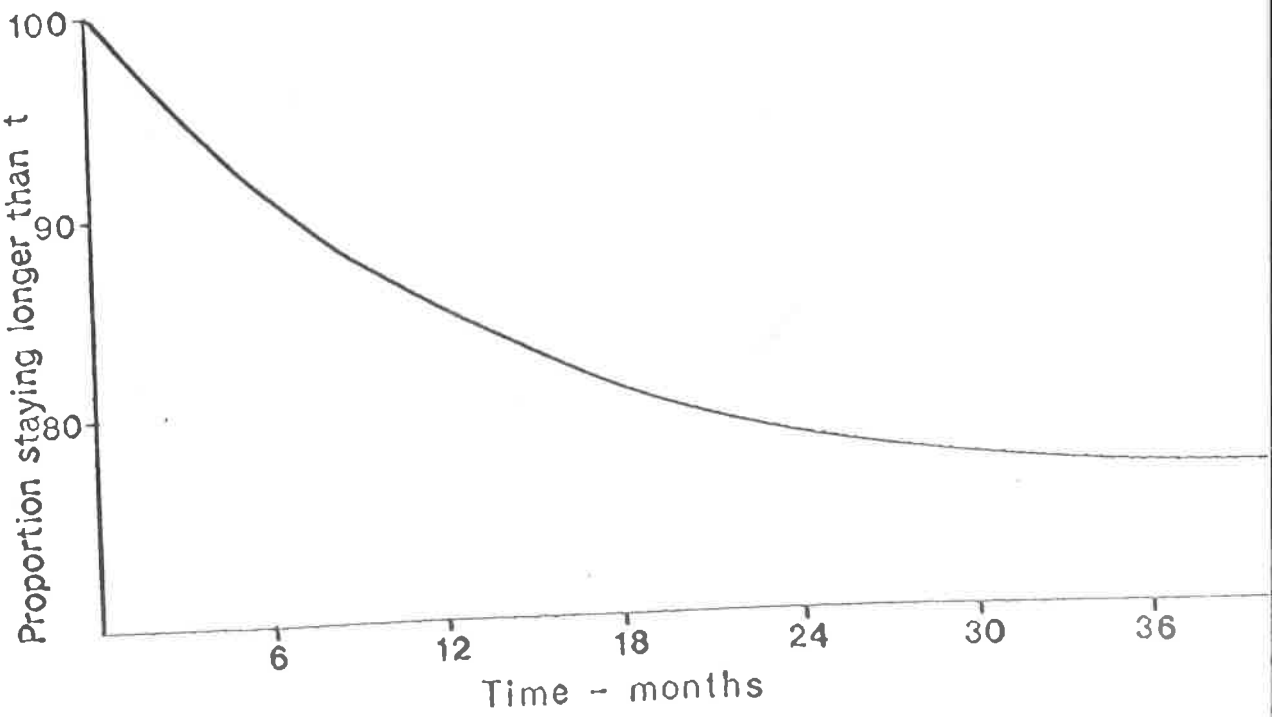
(a) induction crisis in which those persons who rarely stay long in any job, leave;

(b) differential transit when the survivors learn about the institution and discover whether they have a permanent place in it; and

(c) settled connection during which those who remain settle down into becoming permanent members of the company's labour force.

The distribution of losses for each group is shown in the form of a "survival curve" in Fig. 1.3 example.

Fig. 1.3 A typical Survival Curve



The basic form of this survival curve was found to be similar for every situation investigated, even though the groups (or "cohorts" as they are often called) themselves had widely different rates of leaving. It is clear that if the pattern of wastage over time remains constant for succeeding cohorts, then the technique can be useful in analyzing, and forecasting for certain specific groups of staff, who have very similar characteristics, and who possibly join at particular times of the year; for example, trainee/apprentice entrants, graduate recruits from university, etc. It is, nonetheless, obvious that the aim of the manpower planner/personnel officer is to "stretch out" the curve, so that such a large number of losses does not occur early in the life of the cohort.

Some general conclusions about factors governing wastage are supported by several research studies:

(i) Wastage tends to decrease with length of time in a job. This is sometimes generalised to length of service with the company as a whole.

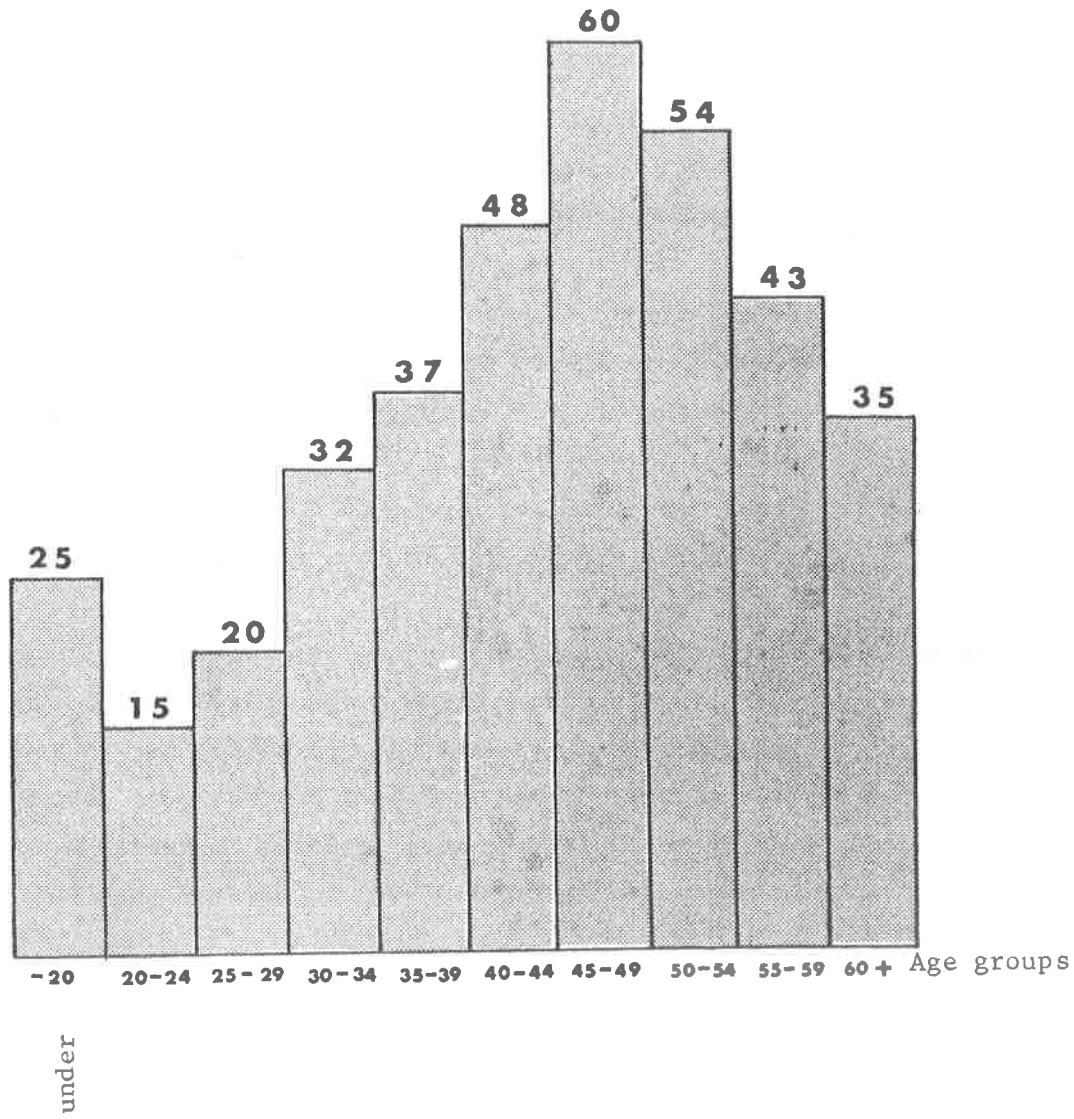
(ii) Wastage tends to be higher amongst unskilled workers

(iii) Wastage tends to be higher among women than men at most skill levels.

(iv) Wastage is related in some way to a number of measures of employment in the economy as a whole, or in particular labour market areas. When, for example, unemployment is high, wastage tends to be low, and vice versa.

Age distribution: The age structure of an organization's employees is of vital importance in manpower planning. Figure 1.4 presents a typical age distribution of an Organisation's employees. Although it is not at all certain whether there is an "ideal age distribution" for the organization or the department which has to be matched, an age analysis will show up some possible future problems. For example, a large cluster of staff nearing retirement could present problems. If promotions tend to be at a certain age, peaks before this age could present difficulties; there may be insufficient jobs for them to go into. To know how serious this is, one must have the facts about promotion patterns, and also about the future vacancies in the higher grades.

Fig. 1.4 Typical Age Distribution of an Organization's Employees

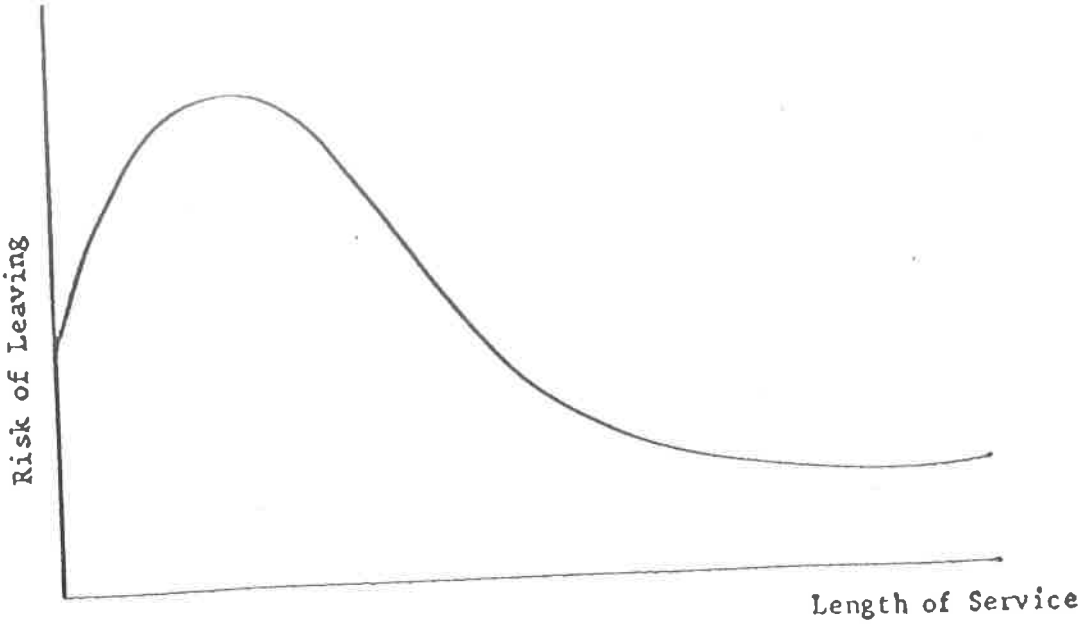


Unless the length of service and/or the age structure of those in the organization is taken into account, the crude wastage index can give the wrong impression. Fig. 1.5 illustrates this problem. The two plants "A" and "B" have been found to have the same wastage behaviour (diagram on top). Most of plant "A" employees have low lengths of service and since the highest risk of leaving occurs with low length of service, the number of leavers from plant "A" will be high. Plant "B" will have a low number of leavers since it has few people with short service and most of its employees have medium and long lengths of service and their chance of leaving is low. Calculating crude wastage indexes for both "A" and "B" plants will produce very different rates, yet the wastage behaviour of the two plants is identical. It is clear that to run an organization down by natural wastage is often disappointing and that prediction of wastage must take into account the length of service structure of the organization.

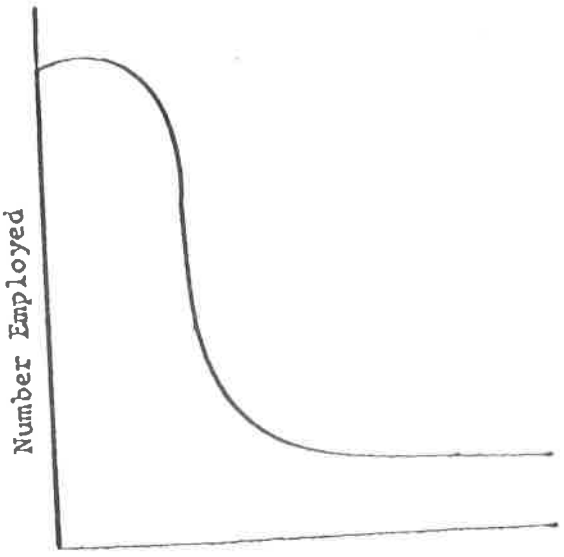
Another measure of wastage is known as the "half life". This is defined as the time taken for a cohort to be reduced to half its original size through the wasting process. Changes in wastage rates over time can be shown by a comparison of the half lives of two broadly similar cohorts which came into being on separate dates or different types of cohort e.g. manual workers and managers.

Promotion movements: One method of analyzing promotion patterns is the use of the Markov Chain model. According to this approach, the employees of an organization are first categorised into different status groups by grade and length of service within the grade. Next, the probabilities of transfer from one status or grade to another are established from details of past career histories and personnel data.

Fig.1.5 Wastage Behaviour



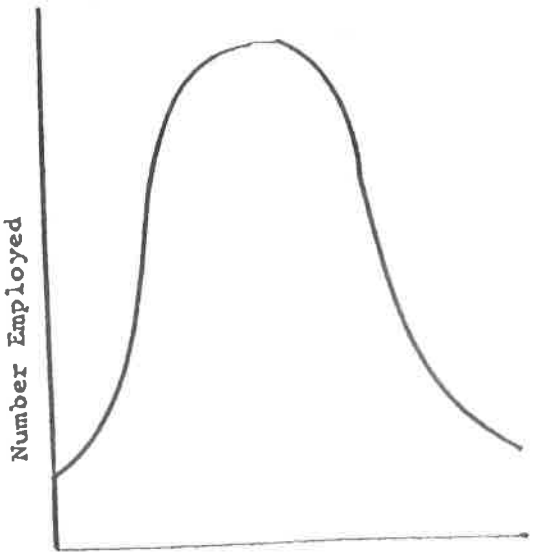
Plant A



Crude Wastage

Index - High

Plant B



Crude Wastage

Index - Low

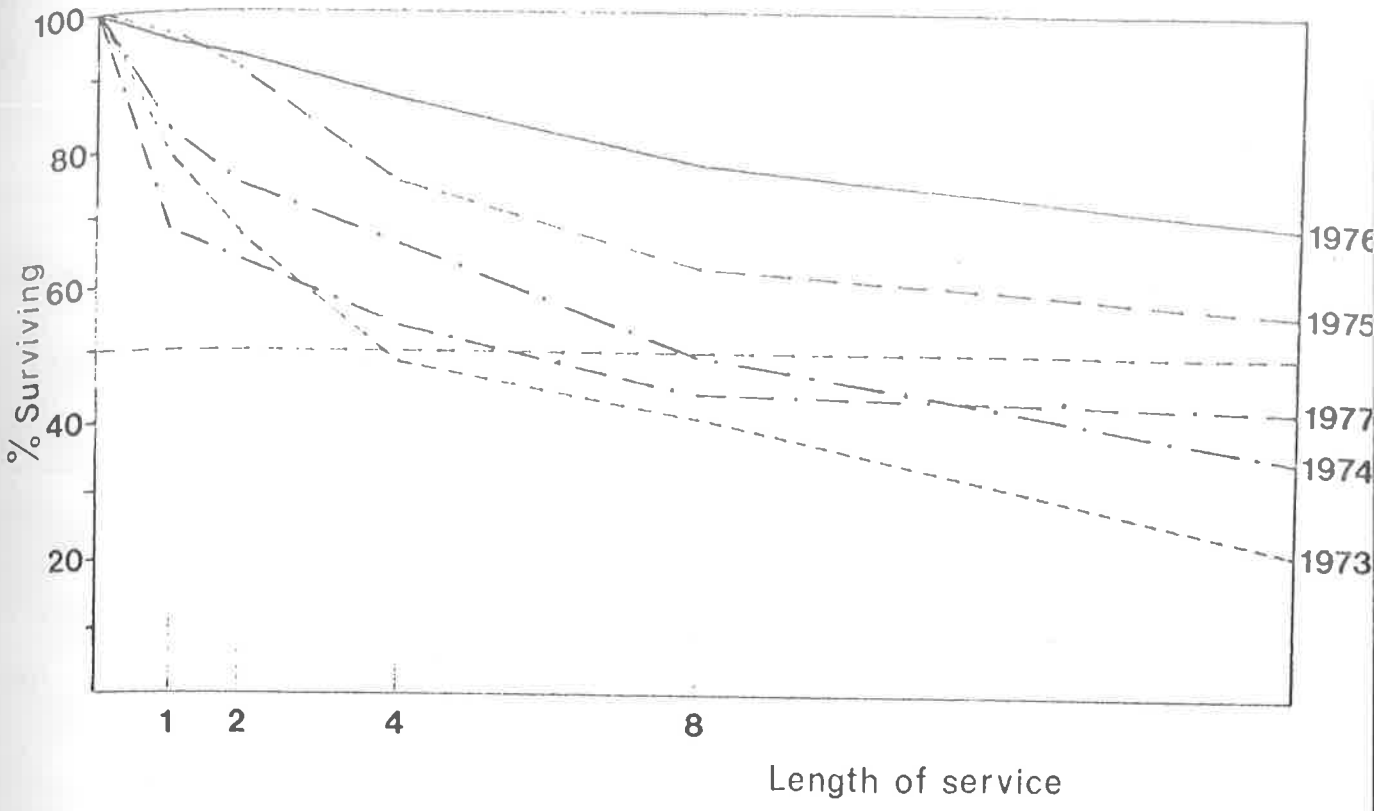
If recruitment, promotion and wastage patterns remain stable over a reasonable number of years, then by using the probabilities established, the likely future status profile of an organization can be predicted. It is claimed that such predictions are quite accurate in the short run and usefully predictive in the long run. The value of this type of analysis is in giving advance warning of undesirable situations, such as promotion blockages, that might develop if present recruitment policies continue. Using this technique, it may be possible to control the grade distribution of entrants so that the required shape or structure of the organization's employee population is achieved.

Working practices: Changes in working conditions may affect both the supply of labour available to an organization, and its requirements in the future. The supply of labour from within the firm will be affected by such factors as:

(i) normal weekly hours of work;
(ii) length and timing of holidays;
(iii) possible changes in retirement policy; and
(iv) change in overtime policies.

External manpower supply: The external labour market has been found to be an extremely important factor in understanding the organization's manpower situation. Comparing patterns of wastage, for example, for the same occupations over a period of time shows that there are considerable variations in the pattern of leaving from one year to the next; it has been found that these variations are strongly linked to the external job market. The survival patterns of accountants show this clearly in Fig. 1.6 taken from the IMS (1981).

Fig.1.6 Wastage Analysis - Accountants 1973-77



If the survival pattern of accountants that was found in 1973 was applied to a group of 100 accountants for the rest of their working life, only 22% would have survived to retirement age and half of them would have gone by 4 years' service. Contrast this with the 1976 survival pattern which shows that nearly 70% would have survived through to retirement.

Other factors which affect wastage levels are the age of employees, whether an employee is in his or her first job, and travel to work patterns. In measuring and predicting the outflow from the organization, an attempt must be made to evaluate the importance of these factors. In general terms the manpower planner cannot regard the organization in isolation from its economic and social environment. A vital part of the manpower planner's work, therefore, is to indicate the constraints on policy imposed by conditions in the local and national labour markets. Some of the factors that can have an important influence on the supply of labour to an organization are given below.

In the local market:

(i) population density at various distances from the plant

(ii) local unemployment levels

(iii) availability of the skills required

(iv) patterns of immigration and emigration within the area, and between it and other parts of the country

(v) output from the local education system

(vi) housing schemes planned

(vii) current competition from other firms for labour, and likely future competition

(viii) local transport facilities, and travel-to-work patterns

At national level:

(i) impact of different kinds of legislation and policies related to manpower planning issues

(ii) trends in the growth of the working population, activity rates, etc.

(iii) the effects of the decreasing young population (18 year-olds) through the 80s

(iv) work and publications of bodies and organizations like the Manpower Services Commission, the CBI, the TUC.

1.8 Flow Analysis

Flow analysis has received widespread attention in manpower studies for a number of reasons, but most important seems to be the effect which it has upon the organization. Dividing the population under investigation into a set of groups according to certain patterns of flow, a "mapping out the manpower system" in the organization, is the necessary first step in setting up any manpower planning system.

After an estimate of the numbers of people needed by the organization to meet its objectives has been made, the rates of outflow measured, and the replacement policy - e.g. recruit direct from school and fill jobs at higher levels by promotion, or internal promotion only, or combination of both - operated by the organization, has been assessed; the remaining task is to bring these factors together in a way that helps decision making.

In practice, three steps are necessary:

(a) The determination of the practical limits of variation for the factors. Each factor is looked at to determine the practical limits within which the factors might vary over the period under consideration. A single forecast of the number of jobs the organization needs in five years' time is not very useful, neither is it to state that the rate of growth expected is 2% and to examine 1% on either side as a sensitivity analysis. In looking for the limits of variation, it is essential to find limits that have a practical meaning.

(b) The use of techniques to quantify the relationship of the factors to the decision. Records of wastage are examined to get a feel for the variation that has taken place over the past five years. The highest and lowest wastage rates found over that period of time are established as the limits of variation.

(c) Assessment of the critical levels for each decision. Attempting to assess the variation in replacement policies, for example, is very difficult. Perhaps the hospital has had a policy in the past of filling 70% of its internal vacancies at senior level by promotion from below and topping up the other 30% by direct external recruitment. In the course of the study the Nursing Personnel Officer estimated that the proportion recruited externally could be expanded from 30% to 50% without causing resentment from amongst current staff before a limit on promotion prospects is reached. Unions are pressing the organization to fill all its senior posts by promotion from within.

A way of quantifying the relationship between the numbers employed, rates of outflow, replacement policy and the decision to that has to be found. The quantitative methods normally used are labelled mathematical manpower planning models. The effect of any set of policies on any manpower system can be calculated over any length of time. The models, however, use sophisticated methods and computer techniques to speed this process up; many alternatives and combination

of factors can therefore, be evaluated in a very short space of time. Models of this type are readily available, having been developed by organizations which are involved in manpower planning activities.

The following chapters are concerned with the rather more concrete aspects of manpower planning i.e. nursing manpower which have been dealt with, in the course of the project by the researcher.

CHAPTER TWO

THE PROJECT

2.1 Background to the study

In April 1980, the supervisor of the author of this thesis, received a request from the District Nursing Officer of a Health District to carry out an investigation into the problems of nursing recruitment which the Health District faced and which were becoming "increasingly difficult". The indications were that they would have great difficulties filling their school of nursing and there was also concern over what was felt to be excessive wastage. The request was accepted and a proposed plan of investigation was submitted to the appropriate Regional Health Authority for approval, while some preparatory work and the less costly tasks were undertaken. The study was intended to be an investigation into the present and anticipated nurse staffing difficulties in the Othello Health District* and it proposed to look at the problems in great detail. Three full-time project workers were expected to be involved and, as stated in the proposal "a project of this magnitude could eventually provide a model for other authorities". While the details of the proposed study were under consideration, the situation in the District, as far as applicants to the nursing school were concerned, changed dramatically. Not only was there perceived to be no shortage problem but, on the contrary, there was a plenitude of applications, enough even to fill the succeeding intakes into the nursing school.

This was put down to:

(a) incorrect calculations in the first place, and

(b) the dramatically changing face of the employment market.

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* Referred to as the Othello Health District throughout.

For the health authorities involved, the need for this study had ceased to exist or at least it was no longer seen as a matter of priority. One consequence of this, combined with the retirement of the initiator of the idea (the District Nursing Officer) was the withdrawal of any financial support for the project. Indeed, at a subsequent meeting with the shop stewards, the view was expressed by one of their number that little potential benefit was likely to occur from the exercise due to this changed situation. It was this particular observation which made us realize that such a study was now probably of more relevance to staff associations than to health service managers, most of whom now seem to believe that all their manpower planning problems have disappeared overnight!

From our point of view, on the other hand, the interest in the project grew and we became more anxious to find out the reasons behind the plenitude of applications to nursing after the severe shortage situation.

In addition to this, several other reasons contributed to the continuance of the research in that particular area. These included inter alia:

(a) the self-containment of Othello's location makes it an ideal place to carry out a local labour market study. Apart from that, it offered a variety of different types of female employment and a relatively low rate of unemployment so that there could be a real possibility of job choice, rather than of simply working or not working.

(b) Othello and its surrounding boroughs played a unique and distinctive role in the industrial revolution in general, and in the textile industry in particular, and as a consequence of that there is a long tradition and high rate of female employment.

(c) Part of the project's finance had been provided by the British Council.

It was ultimately decided that the scope of the project had to be changed, mainly because of financial reasons - the number of researchers involved dropped from 3 to 1 and the time scale reduced from 3 to 2 years. It was agreed that one research student - the author of this thesis - could undertake the project which was concerned with exploring the local labour market situation in that district. It involved studying what had been happening to those who had successfully emerged from the school of nursing, the career profiles of the people currently employed there, and the assessment of the pool of qualified nurses available in the community.

2.2 Subject of the study

The subject of this study are female nurses either qualified from the Othello Nursing School within the period 1959-1979 or currently working as nurses in the hospitals of the Othello Health District, irrespective of where they qualified. The determination of the pool of qualified nurses is dealt with in a separate chapter.

The emphasis of this study is on nursing partly because nurses represent the largest single cost item in a hospital's budget. As a consequence, any positive development from a study of the manpower situation such as establishing recruitment criteria, reduction of the wastage of qualified nurses, availability of the required numbers of specialities, will contribute towards a proportionally higher saving of resources. Nurse manpower planning is not only important in itself, but the knowledge and understanding derived from such a study could be useful in the explanation of the labour force behaviour of women in general, given that nursing is still very much a predominantly female occupation.

2.3 Aims of the project

The purpose of the project is to examine the situation, common within the nursing service at the present time, of a lack of detailed information about the current and potential workforce, and to assist in identifying more clearly the major problem areas. In this investigation an attempt will be made firstly to establish the factors influencing whether a nurse is actively engaged in nursing or not.

In Great Britain a total of 458,392 persons have qualified as SRN's since 1942, but only one in four is currently employed in the N.H.S (Table 2.1). The reasons for this low rate of participation are determined by economic, familiar and sociological factors.

The N.H.S. probably relies far too much on trainee nurses as a source of labour. While students and pupils might well have been such a cheap source of labour in earlier years, this is certainly not the case now.

Table 2.1 Numbers of Nurses: U.K. 1977[1]

	Whole-time equivalents				
	England	Wales	Scotland	N.Ireland	U.K
Hospital Nursing Staff					
Registered Nurses	87,966	5,385	12,217	4,766	110,334
Enrolled Nurses	50,527	3,221	7,186	2,274	63,208
Student Nurses	53,765	2,353	7,006	2,923	66,047
Pupil Nurses	20,288	1,378	3,206	697	25,569
Other Nurses	73,494	5,322	15,859	2,689	97,364
TOTAL	286,040	17,659	45,474	13,349	362,522
Primary Health Care Service Staff					
Health Visitors	8,477	522	1,249	375[2]	10,623
District Nurses	12,649[3]	1,088[3]	1,192	351[2]	15,280
School Nurses	2,330	114	373	78[2]	2,895
Other Nurses	7,482	498	1,193	67[2]	9,240
TOTAL	30,938	2,222	4,007	871[2]	38,038
Midwives					
Certified Midwives					
- Hospital	12,142	775	1,997	783	15,697
- Primary Health Care	3,041	100	92	351[2]	3,584
Pupil Midwives					
- Hospital	4,572	218	1,106	203	6,099
- Primary Health Care	166	-	-	-	166
Other Midwifery Staff	-	705	-	-	705
TOTAL	19,921	1,798	3,195	1,337	26,251
Administrative Nursing and Midwifery Staff	1,863	107	400[4]	396[2]	2,766
Blood Transfusion Service Nurses	896	40[5]	-	33[2]	969[1]
GRAND TOTAL	339,658	21,786	53,076	15,986	430,506

Notes:
1 Figures for N.Ireland are for 1978
2 Numbers, not WTE
3 Includes district nurse trainees
4 Includes staff of Common Services Agency
5 Included under appropriate grade of hospital nursing staff

Source: Report of Royal Commission (1979)

The composition of the nursing workforce, in terms of trained, trainee and unqualified nursing personnel, has been for a number of years, and will continue to be, a central issue in any discussion of nurse manpower planning. Lewis (1979) supports the idea that whatever the composition of the nursing workforce, this mix has typified the pattern of nursing care for many years, and has continued to be historical and to a certain extent a response to supply, demand and other economic factors, i.e. it is influenced largely by local finance and labour availability, rather than the result of some recognisable manpower planning policy. Two issues which are particularly pertinent to the development of an "optimum mix" strategy are those of needs for different types of patient care and the level of personnel (in terms of qualifications and experience) required for such care; and the relative costs of trained, trainee and untrained nursing personnel. The GNC (1976/77) estimate that of all direct patient care by hospital nursing staff, 30% is carried out by registered nurses, 16% by enrolled nurses, 24% by student and pupil nurses, and 30% by unqualified staff, percentages which are similar to the current mix of nurses available, However, a detailed study by Moores and Moult (1978) yielded quite a different set of percentages. They measured the contribution by different grades of nursing staff to the work performed, and their data indicated that 49.1% of available nursing time was spent on direct patient care, of which 18.9% was carried out by registered and enrolled nurses, 75.1% by student and pupil nurses, and 6% by unqualified nursing staff. Their results are summarised in Table 2.2.

Table 2.2 Contribution by Grade of Nursing Staff (Moores and Moult)

Nursing Tasks Performed		Sister, SRN, SEN	Students and Pupils	Nursing Auxiliaries
Basic Nursing	(43.5%)	16.0%	76.5%	7.5%
Technical	(15.4%)	25.2%	71.7%	3.1%
Admin.	(28.8%)	57.7%	39.2%	3.1%
Personnel	(6.1%)	19.5%	73.9%	6.6%
Unskilled	(3.8%)	11.9%	66.5%	21.6%
other	(2.4%)	18.4%	69.4%	12.2%
	(100.0%)	29.5%	64.1%	6.1%

The relative costs of trained and trainee nurses have also been the subject of a number of studies. Early work by York and Dooley (1971) outlined the cost elements of recruitment and training, as did McCann (1972), and a Royal Society for Health Conference Report (1976) which indicated a rise in nurse training costs from 1,500 to 3,000 per annum over a 10 year period. More recently, Tun (1977) provided some calculations which balanced the annual wage, recruitment, training and administration costs for student and for pupil nurses against their opportunity costs, i.e. the annual wages and salaries for the qualified and auxiliary nurses who would be needed as an alternative if the student and pupil labour were not available. His data showed that the cost of students and of pupils was greater than their opportunity costs. Moore's (1978) observations on the cost and effectiveness of nurse education also include consideration of the costs to the Health Service of replacing student nurses with the appropriate mix of qualified and unqualified staff. He takes into account salaries and associated overheads, the service contribution of student nurses, and the total costs of educational support. The resulting evidence again shows that student nurses cost substantially more than alternative nursing personnel. It is possible to conclude, taking into account both direct and implicit cost factors, that a total cost of a trainee nurse exceeds that for employing such alternative nursing labour, both qualified and unqualified, as would be necessary; and furthermore, that the total annual cost of a trainee nurse is in excess of the equivalent salary and related overheads of a trained nurse.

Today some 14,000 SRNs are produced annually. This is a higher figure than that prevailing in earlier years. While the number of nurses employed in the N.H.S. has continually increased since the second World War, the supply and demand situation might change quite dramatically with the result that the future demand for nurses is out of line with their availability. It has, in fact, been argued that a major reason why some hospitals rely so heavily on trainees for the delivery of direct patient care is that they find it more convenient to recruit trainees than to employ qualified nurses who, unlike their predecessors, are very likely to experience the normal life events associated with being female i.e marriage and pregnancy. In 1959, for example, more than 60% of qualified nurses were single and were working full time. These figures are in sharp contrast to the current situation where the majority are married and of the total female registered nurses employed in the hospitals, more than 40% are currently working part-time although this percentage varies from one grade to another as the figures below indicate:

	Full-time		Part-time	
	N	%	N	%
Grades above staff nurse	30.450	78.7	8.252	21.3
Ward Sister	23.514	75.0	7.848	25.0
Staff nurse	19.586	41.8	27.318	58.2
S.E.N	28.785	54.8	23.736	45.2

This, in turn, must be seen in conjunction with quite massive changes in the employment patterns of married women in general. Over the 30 years from 1951, the labour force participation rate of this group has risen from 22% to its current level of 50%.

These figures taken together could suggest that there is a very real likelihood of an increasing proportion of qualified nurses not being able to obtain employment in the profession for which they have been trained. In order to carry out the policy of encouraging inactive nurses to return to employment, the local nurse manager needs information on how many potential recruits of this type are living in the district, what their domestic circumstances are, what changes (e.g. provision of creches) would cause a return to nursing to be

attractive. Moreover, the advantage of carrying out the investigation in a local labour market is to give the researcher the ability of collecting and comparing information related to the social and economic conditions prevailing at a certain period of time, in the geographical location, in addition to that provided by the persons involved in the survey. This global approach to the problem is more appropriate because it is nearer to the real situation than approaches which take into consideration personal and familiar characteristics of the population only.

2.4 Nursing Manpower

2.4.1. What Nursing Is

The definition of nursing which Florence Nightingale* accepted was as idealistic as she herself was, "I use the word nursing for want of a better". She outlined an expanded role in which the nurse was responsible for the control of the patient's environment, but, in her view, nursing was limited to a restricted range of tasks. The Briggs Committee saw nursing and midwifery as "the major caring profession", at least in the mind of the public. They referred to "the unique caring role" of the nurse which involves skills of observation and assessment, planning and taking responsibility for a comprehensive and continuous overview of patient care (Royal Commission 1979).

Henderson (1969) gives the following definition of nursing:

> "The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge, and to do this in such a way as to help him gain independence as rapidly as possible".

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* Nightingale, F. Notes on Nursing - What it is and what it is not, (First published in 1860), Dover Publication Inc.,1969 Edition.

A publication of the World Health Organisation (W.H.O.), describes nursing as:

> "... the primary responsibility (of nursing) is to assist individuals and groups (families/communities) to optimise functions within various states of health... The primary responsibility of the practitioner of nursing (the nurse) is to provide care (of nursing nature) direct to the individual, family or community" (W.H.O.1979).

A working group on the role of nursing in primary health care (W.H.O. 1980) drew up an extensive list of activities within the general framework of nursing. It was considered that the role of the nurse was to provide physical and mental health care in sickness and health, assess an individual's state of health, prevent illness and promote health, provide emotional support for the healthy, the sick and the dying, advise on the establishment and maintenance of a healthful environment, contribute to health education, participate with the physician in the implementation of medical services, advise on and provide rehabilitative care and, finally, coordinate and interpret to the client the health services provided.

As the 1979 Royal Commission pointed out, nurses do not work in isolation. The care of patients requires the skills of many different staff, working together as a team. The nurse's functions overlap, particularly with the doctor's. The Briggs Committee said that "it is essential from the start to dispel the notion... that nursing and midwifery constitute a substitute profession for medicine", but accepted that the roles of doctor and nurse are complementary and may be on occasions interchangeable. The overlap between the roles of nurses and doctors, and indeed, other professionals such as physiotherapists, is an essential element in the continuity of care of patients.

The same report states also that nursing time may be eroded by nurses taking on other duties and proffers the following piece of advice: The tasks of other groups should not, as a matter of course, be handed over to nurses simply because they are always there, and staff shortages whether of domestic or other professional staff should not be made an excuse for persistent misuse of nurses.

Finally, the Commission expressed its concern of any extension in the nurse's role - either as a result of specialisation or of other activities - and states that any extension should not be at the expense of her caring functions.

2.4.2 Historical Perspective

Although caring for the sick and invalid, i.e. nursing, has existed throughout the ages, institutionalised training of nurses began in Britain only in 1848 when the Nightingale training school was established at St. Thomas' Hospital in 1860. Intakes for the one year course were made up of the daughters of the upper classes who paid for their training and the ordinary probationers, who received free training, and subsistence. Other hospitals soon began establishing their own nurse training schools. At the end of the century, nursing as a profession gained in respectability and status and became a popular and acceptable career for women.

In 1906 and in 1919 the setting up of the Royal College of Nursing and the passing of the Nurses Registration Act, respectively, gave the RCN the authority for the supervision of training schools and the registration of qualified staff.

There had been numerous inquiries into the nursing profession over the past fifty years such as the Lancet Commission in 1930 and the Interdepartmental Committee in 1939 which looked at the reasons for the shortage of nurses. The 1947 Working Party, chaired by Sir R. Wood, made a number of important recommendations regarding aspects of nurse training, the most important of which were, perhaps, that the nurse training finances should be separated from hospital budgets, and the register of male nurses was merged into the general register. The 1959 Commission under the chairmanship of Sir Henry Platt, examined nurse education, and particularly the situation which had developed after the replacement of the grade of assistant nurse by enrolled nurse, without having had any significant changes in recruitment. The Platt Committee suggested separate training courses for registered and enrolled nurses and the two types of nurses would be members of a well balanced nursing team, supported by non-nursing staff. In 1963 another Committee was set up to investigate the management structure of the nursing establishment. This Committee, which was chaired by Mr. B. Salmon, is of particular relevance to the reorganisation of the N.H.S. of 1974 and of the existing nursing grades.

The 1970 Committee on Nursing, chaired by Professor Asa Briggs, looked at:

> "... the role of nurse and the midwife in the hospital and community and the education and training required for that role..(for) the best use.. of available manpower to meet present needs..."

It has been considered the most comprehensive review of nursing to date and its recommendations are of fundamental importance for the profession. Some of these recommendations are: The Central Nursing and Midwifery Council should be the single central body responsible for professional standards, education and discipline; encouragement should be given to nurses and midwives whose careers are interrupted to return to the profession, and contact maintained with qualified inactive nurses; manpower and personnel departments should be set up at AHA; a comprehensive information system should be developed by the DHSS; better standards of accommodation should be made available.

The Committee of Inquiry into Pay and Related Conditions of service of Nurses and Midwives in 1974 (The Halsbury Report) was a product of the industrial actions nurses took during the previous year which destroyed the myth of nursing being a completely altruistic profession with little or no concern for pecuniary benefits. The recommendations of the Committee - in addition to proposals for overall grading and pay structures were more or less related to the "fringe benefits" category relevant to the nursing profession, but had been enjoyed by most of the employees in this country working in similar status and conditions - were accepted by the Government and implemented.

2.4.3 Nurses and the N.H.S.

The N.H.S. is heavily labour intensive, within over 70% of current revenue relating to manpower. Nursing (and Midwifery) manpower costs amount to roughly 30% of the overall revenue budget. Almost one million people are employed in the N.H.S. with the nursing staff amounting to more than one third of the labour force (Table 2.3).

Table 2.3 Nursing and Midwifery Staff (1971-1978)

(At 30 September each year)

	1971	1972	1973	1974	1975	1976	1977	1978
Health service staff and practitioners: total	799,873	831,753	843,119	859,468	914,088	945,877	950,498	961,896
Nursing and midwifery staff: total	343,642	364,434	370,595	377,633	405,817	414,961	415,694	424,304
Qualified nurses and midwives	175,839	183,388	185,119	189,567	202,464	213,225	219,900	226,904
Student and pupil nurses and midwives	87,494	92,955	95,321	93,285	95,461	98,961	94,939	92,433
Other nursing and midwifery staff	73,606	81,560	84,246	90,219	103,679	99,822	99,675	104,154
Nursing cadets	6,703	6,532	5,910	4,563	4,212	2,953	1,181	813

Source: Annual Abstract of Statistics, 1981.

2.4.4 A "Career in nursing"

For a 17-19 year old girl who is considering a "career in nursing" the areas within the nursing profession have probably caused her as much concern as her initial decision to join nursing. Like the teaching profession, where a career there could include, teaching at a nursery school, at a primary school or at a secondary school, not mentioning teaching in higher or highest educational establishments; a career in nursing could be in general nursing, mental illness, sick children, geriatric, etc.

The General Nursing Council (G.N.C.) minimum requirements for entering into nursing training are two '0' levels or C.S.E. grade I, plus 5 years' full time education, or 3 '0' levels or C.S.E. grade I, or a sufficiently high score on the G.N.C. 'D' test. There are two alternative professional qualifications for nursing: State Registered Nurse (SRN) and State Enrolled Nurse (SEN), the register and roll being maintained by the General Nursing Council of England and Wales and by the General Nursing Council of Scotland. The Register comprises general nursing, sick children, the nursing of mental illness and nursing of mental subnormality. The Roll covers general nursing, nursing of mental illness and nursing of mental subnormality.

Approximately 75% of those in both the Register and Roll are in general nursing, 12.5% in mental illness, mental subnormality and the rest, 12.5% in sick children.

The Roll of Midwives is kept by the Central Midwives Board for England, Wales and Scotland, and the majority of those who enter midwifery training are qualified nurses.

Recruiting at local level is the responsibility of schools of nursing which recruit and train student and pupil nurses. Recruitment and selection activities involve consideration of objectives in order to reach target markets and to attract "suitable" applicants for nurse training. Beyond training being offered to a trainee or trained nurse, in return for his or her productive service, the rewards may be considered in terms of career structure and associated promotions and financial remuneration. Surveys by Hayes (1974), and the GNC (1975) provided evidence that newly recruited trainee nurses, including some on degree courses, know very little about the nursing hierarchy and career structure beyond ward sister, and so do not think about medium to long term promotion. A survey, reported in Briggs (1972), among a sample of trainee and trained nurses found that 50% of trained nurses would be happy to stay at their present grade, and that only 50% of students and 32% of pupils wanted to be ward sisters.

The attractiveness or otherwise of pay as a stimulant to entering, re-entering or leaving the nursing profession will depend to a certain extent on the supply of alternative employment opportunities and their associated wage or salary scales.

If, however, nurses do not perceive the sole benefits to be training, promotion and pay, one needs to probe more deeply into considerations of what attracts and deters people from the nursing profession. This is achieved primarily through the analysis of the survey results reported in the next paragraphs. For the present, it is perhaps useful to mention and highlight some theoretical considerations.

Herzberg (1968) suggests that there are satisfying elements of a job which attract people and a different, but not opposite, set of dissatisfiers which deter people from, and/or cause them to leave a job. On the one hand, satisfiers or motivating factors which would constitute advantages of and reasons for entering nursing, are related to the work process, i.e. to the job itself, in particular to indices of personal growth and self-actualisation such as achievement,

recognition for achievement, responsibility and advancement. These factors act as incentives in the satisfaction of an individual's growth needs, and can bring about fulfillment, but cannot cause discomfort.

On the other hand, dissatisfiers, or hygiene factors which would cause nurses to leave the profession or prevent inactive nurses from returning, deal with elements which are peripheral to the work process and are labelled work context factors i.e. they are job environment constituents such as company policy, pay, conditions, status, security, and supervision. Herzberg suggests that these hygiene factors cannot cause fulfillment in a job, merely relief, and may well bring about discomfort and dissatisfaction, and, in turn, termination or withdrawal from a job.

A piece of research which is certainly relevant at this point, was commissioned by the DHSS/COI (1971). The objectives of the project were to look at attitudes and motivation with respect to the approach towards an initial application to nurse training i.e. knowledge, sources of information, attitudes and expectations; the experience of the recruitment/application procedure, i.e. action, contacts, attitudes to advertising, and interviews; the experience of training; and the experience of being qualified. The conclusions which have implications for the development and formulation of future strategy for nurse recruitment were, on the one hand, that the need for dependence, security and group affiliation which can be satisfied by nursing was highlighted. It was felt that since dependence needs are present in all people, differing only in degree, recruitment strategy should be to show that a high degree of affiliation and dependence among trainee nurses is possible e.g. by presenting nurses in groups, in advertisements. On the other hand, the project also concluded the need for independence, achievement, promotion and responsibility, and four discussion points emerged.

Firstly, people's achievement orientation appears to be related to their own dependency needs, and so responsibility and increased status should be presented as something that all nurses could take up as much as they wanted, when they wanted to. Secondly,

nursing is about caring for people and so promotion should not be represented as leading away from the bedside unless that is what a particular nurse desires. Thirdly, nursing must be seen as an up-to-date profession, which may be achieved by showing that relationships are not authoritative or restrictive, that work is not ridiculously hard, that nursing gives a person confidence, and that to help a patient is to help oneself. Lastly, the socially recognised concept of nursing as a 'worthwhile' job is important for nurses and potential nurses; they like to know that people in general respect nurses, and that the profession has a certain amount of status or social esteem.

In another study, Marsh and Willcocks (1963) surveyed 1,283 females, aged 16 - 20, some of whom were leaving school and others who were already working. The project took place in Mansfield during 1961/2, at a time when there were plenty of job opportunities and therefore competition for nursing. The girls' attitudes towards various aspects of nursing were measured, and they were found to lack knowledge with regard to pay, hours, discipline and other working conditions. However, their image of nursing was an attractive one, and nurses were perceived to have high personal qualities, and nursing ranked highly with other jobs. McGuire (1969) also reported on the social standing of a nurse and indicated that the profession was rated more highly by older people and by lower social classes.

Lewis (1979) reported an investigation among 32 cadet nurses in a Manchester hospital carried out in the summer of 1973. This was concerned with expectations about nursing, reasons for choosing nursing, the influence of family and friends, and perceived advantages/disadvantages of nursing. The same questionnaire was also distributed to all the women in general training (147) in one Manchester hospital. The respondents included 66 students and 27 pupils and 80% of them were aged between 18 and 21 years. They were questioned about their initial interest in nursing, information received about nursing, reasons for choosing nursing, and media habits including awareness of advertisements for nursing.

In the spring of 1974 the same questionnaire was completed by 216 schoolgirls in the Manchester area again. Various districts of Manchester were sampled, and households with a schoolgirl between 13 and 17 years of age were identified (by door-to-door knocking). 30% of the respondents were aged 13 or 14 years, 30% were 15 years, 30% were 16 years, and 10% were 17 years old. The brief results from these surveys are: Almost two-thirds of the respondents had received some information about nursing at school, with schoolgirls and trainee nurses giving similar answers.

The schoolgirls were asked to consider a number of jobs and indicate how much they would like each of them. The rank order of their preference is presented in Table 2.4. Although the positioning of nursing in this table was perhaps inevitable, given the nature of the survey, there were however, some difference in ranking depending on whether or not the respondents knew a nurse; in total 75% had at least one sister, parent, other relative or friend who was a nurse - mainly friends. For those who did not know a nurse, the images of nursing and of physiotherapy (the most similar job) were lower - they fell several places in the rankings.

Table 2.4 Schoolgirls' (N=207) Rating of a Number of Jobs

	Ranks		
	All Respondents	Know a Nurse (N=154)	Do not know a Nurse (N=53)
Nurse	1	1	5
Air Hostess	2	2	2
Receptionist	3	3	1
Secretary	4	4	3
Physiotherapist	5	5	9
Model	6	7	3
Teacher	7	6	7
Typist	8	9	6
Hairdresser	9	8	8
Bank clerk	10	10	10
Sales Assistant	11	11	11

In a further investigation of the image of nursing, the respondents of the above surveys were asked to mention the advantages and disadvantages of the job. The answers given are similar among schoolgirls and trainee nurses, the main advantages being identified as: meeting a wide variety of people, the range of opportunities and the possibility to leave and return later in life; and disadvantages to be pay and hours. The trainees also gave their reasons for entering nursing by choosing from a list three factors which attracted them and ranking them in order of importance.

Their rank of order is presented in Table 2.5 below:

Table 2.5 Reasons for entering Nurse Training

Reason	Rank
Wanted to work with people	1
Idea of helping the sick	2
Nursing is an interesting job	3
Good career prospects	4
Desire to work in the medical field	5
Wanted a job with responsibility	6
Had been a patient in a hospital	7
Had worked with Red Cross/St. Johns Ambulance, etc	8
Did not like previous job	9
Looking after sick relatives	10
Other	11

Trainee nurses were asked to indicate which of a number of people and information sources had the greatest effect on their decision to apply for nurse training. The responses indicate that nurses were seen to be the most important influence, i.e. both reliable and trustworthy. For those respondents who had received information at school about nursing, careers conventions were judged more important and friends less important as a source of influence. In rating all information sources, the first five are the following in order of importance: Nurses, Family/relatives, talk by somebody from a hospital, friends, career convention.

2.4.5. N.H.S.'s Manpower Problems

Employment in the National Health Service has suffered from continuing divergence between the demand for, and the supply of nursing staff. In 1978, fashionable comments concerning nursing and N.H.S. were like "Lack of recruits, not enough cash threatens the service". "Crises over nurse shortages" (Guardian 1978). Less than two years earlier, fears were being expressed that the N.H.S. was producing trained staff who were surplus to requirements and in reaction, the recruitment of student and pupil nurses was cut back, those finishing their training were warned that they could not be guaranteed employment, and older staff were persuaded into early retirement (Gray 1976).

Two years ago, the Othello Health District, as noted already, sent an S.O.S. for help for the recruitment difficulties they were facing, while today their Nursing School is booked for all the intakes for the next three years!!!

The above examples, at least, signify a waste of scarce human and financial resources, and a justifiable scepticism is provoked about the efficiency of personnel forecasting in the Service. However, any critic has to have in mind that

> "... the problems confronting the N.H.S. are complex and not easily overcome. Manpower has long been accepted as a costly ingredient that needed to be controlled, and misalignments in the supply and demand for staff have been deprecated". (Long 1981)

The 1979 Royal Commission in paragraph 12.57 summarised the haphazard estimation of demand for labour - indispensable element of information for any substantial manpower planning exercise - as follows:

> "It is impossible with our present state of knowledge to say how many workers the N.H.S. needs and of what type: roles are not always clearly defined... This lack also makes it difficult to monitor effectively over and under manning even locally".

It is also pointed out in the same Report that in order to have the capacity for an effective manpower planning policy, the required data "Should be available locally".

2.4.6 Development of Manpower Information Systems in the N.H.S.

With the reorganisation of the NHS and of the Department of Health and Social Security (DHSS) in 1974, manpower planning was seen as an integral feature of the new personnel function which among other things, was established in order to "ensure that all groups of staff have the benefit of the advice, support and procedures provided by specialist personnel staff, and that to the maximum possible extent common policies and procedures apply to all". (Long (ibid)).

In order to promote the development of the NHS personnel function, a branch (P4C) was created within the DHSS.

The main developments since the 1974 reorganisation, from the manpower planning point of view, are, according to Long (ibid), the following:

The first is the reconstitution in 1976 of the Joint Manpower Planning and Information Working Group (MARLIN) aiming at continuing dialogue between DHSS and manpower planners at Regional level.

The second is the creation in 1978 of the Manpower Intelligence Branch (NIB) within DHSS, "to perform the DHSS Manpower Intelligence Function for the NHS".

The third is the extension of the DHSS planning system to the NHS, and in particular the 1978-79 round of strategic plans within which health authorities were specifically asked to give manpower considerations their due weight.

The sine qua non of any effective manpower planning is an adequate base of data about manpower stocks and flows. MIB, in order to provide such a base, is currently concerned with:

- promoting standardisation of terminology and occupational coding;

- collection of statistical information about NHS personnel covering both analyses of stocks and measurement of flows;

- maintaining, at national level, a data base showing quantitative and qualitative characteristics of staff in post by reference to staff group, geographical location (down to at least Regional level), and health programme.

Each year the DHSS requires health authorities to provide a census of all employees. In the past, information has been submitted by the manual completion of forms listing numbers and whole-time equivalents of each type of staff employed at a particular point each year (30th September each year). The results were regarded by authorities as a prime source of manpower information. The difficulty with these annual censuses was that they only related to one point in a year, and as the year progressed, the data became increasingly obsolete.

The prime source of regular information about N.H.S. employees has been and in many cases still is, the data held on Regional computers through SPS, for pay purposes. By using different systems, one could extract certain personal details on employees from each month's payroll and provide standard outputs on numbers employed by different grades, location, sex, crude turnover for different staff groups, etc. but as Long (ibid) states "(the SPS)... provides no more than an annual stocktaking of numbers employed and, as such, has a limited role to play in the field of manpower information needs, and the inadequacy of SPS has been felt strongly, especially by local managers. In 1975 a manpower and personnel information system was proposed as the basis for a standard N.H.S. package. This system became known as STAMP. The first two modules of STAMP were made available to the N.H.S. in July 1980, together with the standard schedules, while the third module was made available in January 1981.

In the STAMP'S standard printouts the information given includes among other things:

- A list of staff employed on a particular date with name, age, sex, marital status, grade, occupation, date appointed, and whole-time equivalent (wte).
- Turnover and stability indices and reasons of leaving by a specified period, employing authority, occupation, grade, sex.
- Hours worked per employee.
- Retirement schedule (a nominal roll of staff due to retire in the following five years).
- Cost analysis by week and by type of cost.

2.5 The Economic Cost

2.5.1 The Cost of Health

In all the industrialised countries, a baby's life expectancy is now about 72 -76 years, whether its parents pay 6% of national income (United Kingdom) or nearly twice as much (United States, Sweden) for the privilege. In almost all, health spending is increasing further and further its share of the national income.* In the U.K. it has greatly increased over the last thirty years as Table 2.6 shows.

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* The Economist, November 22, 1980.

Table 2.6 N.H.S. Expenditure and Gross Domestic Product: U.K. 1949-1977

Calendar year	NHS current	NHS capital	NHS other	NHS total	GDP at factor cost	NHS total as % of GDP at factor cost
1949	414	15	4	433	10969	3.95
1950	458	16	4	478	11346	4.21
1951	476	17	6	499	12617	3.95
1952	476	15	6	497	13889	3.58
1953	500	16	5	521	14881	3.50
1954	515	18	4	537	15730	3.41
1955	555	20	4	579	16873	3.43
1956	609	20	4	633	18270	3.46
1957	655	26	4	685	19377	3.54
1958	694	29	5	728	20206	3.60
1959	750	34	4	788	21260	3.71
1960	819	37	5	861	22642	3.80
1961	879	44	5	928	24233	3.83
1962	909	55	7	971	25294	3.84
1963	968	60	7	1035	26894	3.85
1964	1047	76	7	1130	29255	3.86
1965	1176	91	8	1275	31237	4.08
1966	1290	102	9	1401	33139	4.23
1967	1423	125	10	1558	34925	4.46
1968	1540	143	10	1693	37411	4.53
1969	1626	137	10	1773	39450	4.49
1970	1860	151	13	2024	43445	4.66
1971	2104	181	14	2299	49264	4.67
1972	2413	223	14	2650	54963	4.82
1973	2706	277	30	3013	63946	4.71
1974	3622	296	16	3934	73722	5.34
1975	4903	366	30	5299	92507	5.73
1976	5788	425	23	6236	109499	5.70
1977	6477	393	27	6897	123353	5.59

Source: Royal Commission (1979).

Table 2.7 Expectation of life: from birth and from specific ages

United Kingdom — Years

	Males						Females					
	1901	1931	1951	1961	1971	1978	1901	1931	1951	1961	1971	1978
Expectation of life From birth	48·0	58·4	66·2	67·9	68·8	70·0	51·6	62·4	71·2	73·8	75·0	76·1
From age 1 year	55·0	62·1	67·5	68·6	69·2	70·1	57·4	65·1	72·1	74·2	75·2	76·0
10 years	51·4	55·6	59·1	60·0	60·5	61·3	53·9	58·6	63·6	65·6	66·5	67·2
15 years	46·9	51·1	54·3	55·1	55·6	56·4	49·5	54·0	58·7	60·6	61·6	62·3
20 years	42·7	46·7	49·5	50·4	50·9	51·6	45·2	49·6	53·9	55·7	56·7	57·4
30 years	34·6	38·1	40·2	40·9	41·3	42·1	36·9	41·0	44·4	46·0	47·0	47·6
40 years	26·8	29·5	30·9	31·5	31·9	32·6	29·1	32·4	35·1	36·5	37·3	38·0
45 years	23·2	25·5	26·4	26·9	27·3	28·0	25·3	28·2	30·6	31·9	32·7	33·3
50 years	19·7	21·6	22·2	22·6	23·0	23·6	21·6	24·1	26·2	27·4	28·3	28·8
60 years	13·4	14·4	14·8	15·0	15·3	15·8	14·9	16·4	17·9	19·0	19·8	20·4
65 years	10·8	11·3	11·7	11·9	12·1	12·5	11·9	13·0	14·2	15·1	16·0	16·5
70 years	8·4	8·6	9·0	9·3	9·5	9·7	9·2	10·0	10·9	11·7	12·5	12·9
75 years	6·4	6·4	6·7	7·0	7·3	7·4	7·1	7·4	8·0	8 7	9·4	9·8
80 years	4·9	4·8	4·8	5·2	5·5	5·6	5·4	5·4	5·8	6·3	6·9	7·1

Source: Social Trends 12

There is no doubt, however, that the standard of health has increased and this undeniable fact is shown in Table 2.7. This table shows the further number of years that a man or woman might have expected, on average, to live when he or she reached a certain age, if the death rates prevalent at that time continued unchanged into the future. For example, a man born in 1901 could then expect to live until 1949 if 1901 death rates had remained unchanged between 1901 and 1949. However, if he survived beyond the average expectancy of 48 years, he could then expect to live until 1976. The improving health of the population has mainly had the effect of increasing young people's chances of reaching the older age group.

In 1978, a new-born baby boy could expect to live to 70 and a girl to 76; whereas in 1901 it was 48 and 52, respectively. For those people who do survive to old age, the expectation of further life has increased relatively little. In 1901, for example, an 80 year old man could expect to live for a further 4.9 years. But by 1978, the further life expectancy of an 80 year old man had only increased to 5.6 years.

And here comes the health paradox where health services are the victims of their own success. The old people whose lives have been extended require more routine medical care than the young, so that a small increase in their number means a large increase in health bills. In Table 2.8 this argument is presented very clearly.

Table 2.8 National Health Service - annual costs per person by age and sex, 1979

Grait Britain per person

Age	Males	Females
Under 1	311	254
1 - 4	117	103
5 - 15	73	66
16 - 24	75	74
25 - 44	82	86
45 - 64	127	121
65 - 74	268	244
75 +	507	623
All Ages	126	146

Source: Social Trends 12.

According to the Economist (1980), in the decade ahead, all advanced countries will be struggling to restrain demand, and to meet it at reasonable cost. There are two ways of controlling demand, by committee (administrative decision), or by price. In practice all countries use a bit of both. In Britain, where the state collects the money and runs the hospitals, the committee predominates. When, for example, shortage is defined in terms of needs, the result is that more services and manpower are needed than can be provided by society, since needs for health care are open-ended. Economists, however, provide a more specific definition of shortages. They estimate shortages not on the basis of needs but on demand, i.e. willingness to pay. Thus, a shortage situation exists when society is unable to purchase the services at present prices and income.

2.5.2 Financing the N.H.S

The N.H.S. is almost exclusively financed by taxes, the way it was originally intended to be. As Table 2.9 shows, only around 10% of the total costs of the N.H.S. is funded by charges and contributions. In Fig. 2.1 the influence of charges on prescribing frequency is illustrated. The number of prescriptions dispensed has increased considerably from 239 million in 1964 to 374 million in 1980. Over two-thirds of all prescriptions dispensed are now for people who are exempt from charges compared with 52% in 1969. This is in line with the Royal's Commission on the N.H.S. (1979) recommendation for "... a gradual but complete phasing out of all charges".

2.5.3 Public Expenditure

Total public expenditure in the United Kingdom in 1980-81 was 94,334 million, which 13,674 million (14.5%) was spent on the Health and Personal Social Services (Table 2.10). Some of the other sectors which compete for resources also contribute to keeping the population healthy. Their contribution, however, is extremely difficult to measure or to isolate. In 1980-81, 47,221 million was spent on social services and housing. Over a thirty year period, public expenditure on social services, health and housing has been as a percentage of the total public expenditure, doubled. The largest increase has been in the social security area. These increases are displayed graphically in Fig. 2.2. Expenditure on Defence has shown the greatest drop in volume terms between 1951-81, having been almost halved. But as can be seen from Fig. 2.3, this sector has had a fairly mixed share of the total public expenditure for the past ten years and, anyway, it is not worse off than Education or Health, although the trend of the latter is upwards.

Table 2.9 NHS[1] Sources of Finance: Percentage of Total by Year: Great Britain 1949/50-1978/79

Percentages

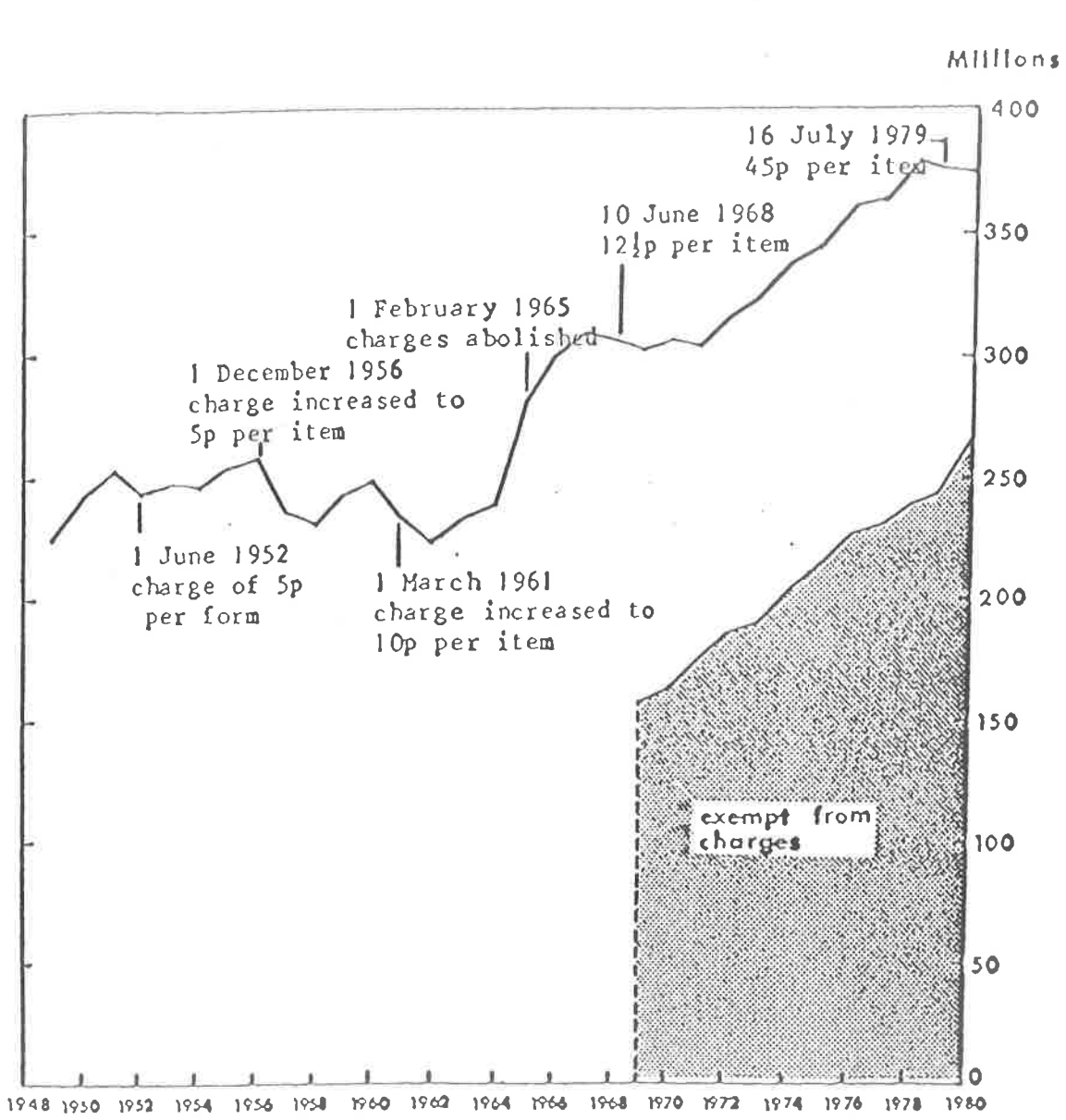
Financial Year	*Consolidated Fund*	*NHS Contributions*	*Charges*	*Miscellaneous*[2]
1949–50	87.8	9.8	0.7	1.7
1950–51	87.6	9.4	0.7	2.3
1951–52	88.3	9.2	1.8	0.7
1952–53	87.6	8.0	4.0	0.4
1953–54	86.5	8.3	5.0	0.2
1954–55	86.9	7.9	5.0	0.2
1955–56	87.6	7.1	5.0	0.4
1956–57	88.7	6.4	4.7	0.2
1957–58	85.0	9.5	5.3	0.3
1958–59	80.3	14.4	5.0	0.3
1959–60	80.4	14.5	4.9	0.3
1960–61	81.9	13.3	4.5	0.2
1961–62	77.7	16.5	5.6	0.2
1962–63	77.1	17.2	5.5	0.2
1963–64	77.9	16.4	5.4	0.3
1964–65	79.6	15.0	5.1	0.4
1965–66	83.8	13.3	2.6	0.2
1966–67	84.8	12.4	2.4	0.3
1967–68	86.5	10.9	2.3	0.3
1968–69	84.8	11.8	3.1	0.3
1969–70	85.9	10.3	3.5	0.3
1970–71	85.8	10.8	3.2	0.3
1971–72	85.7	10.3	3.6	0.5
1972–73	87.0	9.0	3.6	0.4
1973–74	88.1	7.9	3.5	0.5
1974–75	91.3	5.7	2.6	0.4
1975–76	89.2	8.5	2.0	0.3
1976–77	88.0	9.7	2.1	0.2
1977–78	88.0	9.6	2.1	0.3
1978–79	88.2	9.5	2.0	0.3

Notes: [1]Excludes local authority health expenditure before 1974.

[2]Includes sales of land and buildings, charges to practitioners for use of health centres, port health charges.

Source : Royal Commission 1979.

Fig. 2.1 Number of NHS Prescriptions Dispensed



Source: Social Trends 12

Table 2.11 gives a breakdown of public expenditure on the Health and Personal Social Services in terms of current and capital expenditure for Great Britain. Over the 1975/76 - 1980/81 period, total public expenditure on Health and Personal Social Services increased by 8.5%. While current expenditure on the N.H.S. increased by 8.5%, capital expenditure dropped by 12.6%. Hospital and Community Health Services continued to absorb the largest share of both current and capital expenditure, (75% and 97%, respectively in 1980-81).

Another interesting feature of Table 2.11 is that it shows that more than 95% of the total public expenditure on Health and Personal Social Services is current.

Finally, Fig. 2.4 shows that in 1980 two-thirds of general government revenue was raised from taxes (68 billion), with a further 13% coming from national insurance contributions. The borrowing requirements was nearly 13 billion, about 13% of total revenue. Nearly three-quarters of general government expenditure in 1980 was by central government and the rest - 28 billion - by local authorities.

Table 2.10 Public Expenditure summary by programme: actual and planned

	Indices (1979-80=100) at constant prices					£ million at current prices	
	1975-76	1978-79	1979-80	1980-81	1981-82	1979-80	1980-81
Programme							
Social Security	82	98	100	104	111	19,106	23,106
Health and personal social services	95	100	100	101	103	10,671	13,674
Education	103	100	100	96	93	10,061	12,199
Housing	122	96	100	87	66	5,883	5,977
Environmental services	116	103	100	95	92	3,900	4,464
Libraries, museums, and the arts	93	97	100	94	89	462	511
Law, order, and protective services	96	96	100	105	107	2,818	3,523
Employment services	61	101	100	143	147	1,241	1,965
Transport	128	99	100	95	92	3,513	4,002
Defence, overseas aid, and other overseas services	93	97	100	100	100	11,318	13,019
Northern Ireland	94	101	100	101	100	2,450	2,912
Other expenditure on programmes	147	92	100	112	103	7,372	8,982
Total public expenditure on program programmes	102	98	100	101	100	78,696	94,334

Source: Social Trends 12.

Fig. 2.2 Total U.K. Public Expenditure

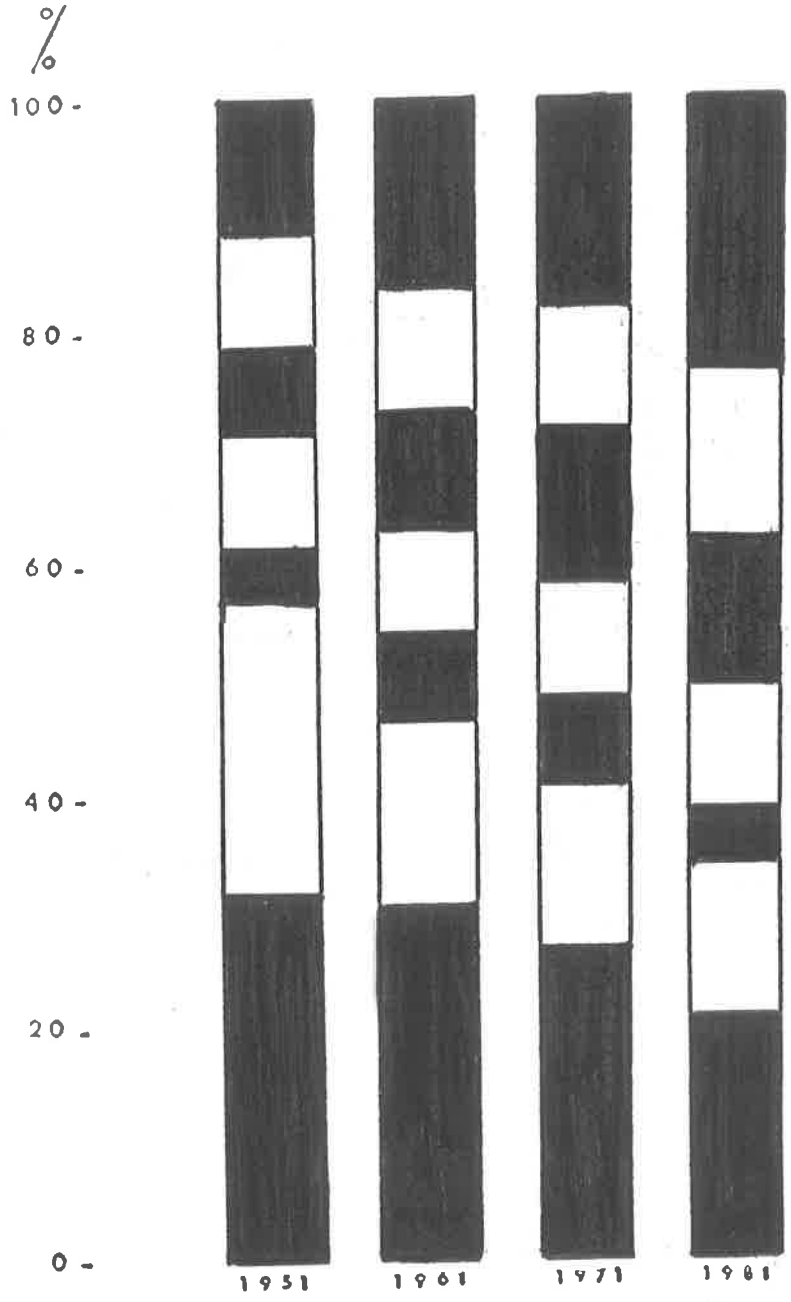


Fig. 2.3 Comparison of expenditure on Health with Defence and Education

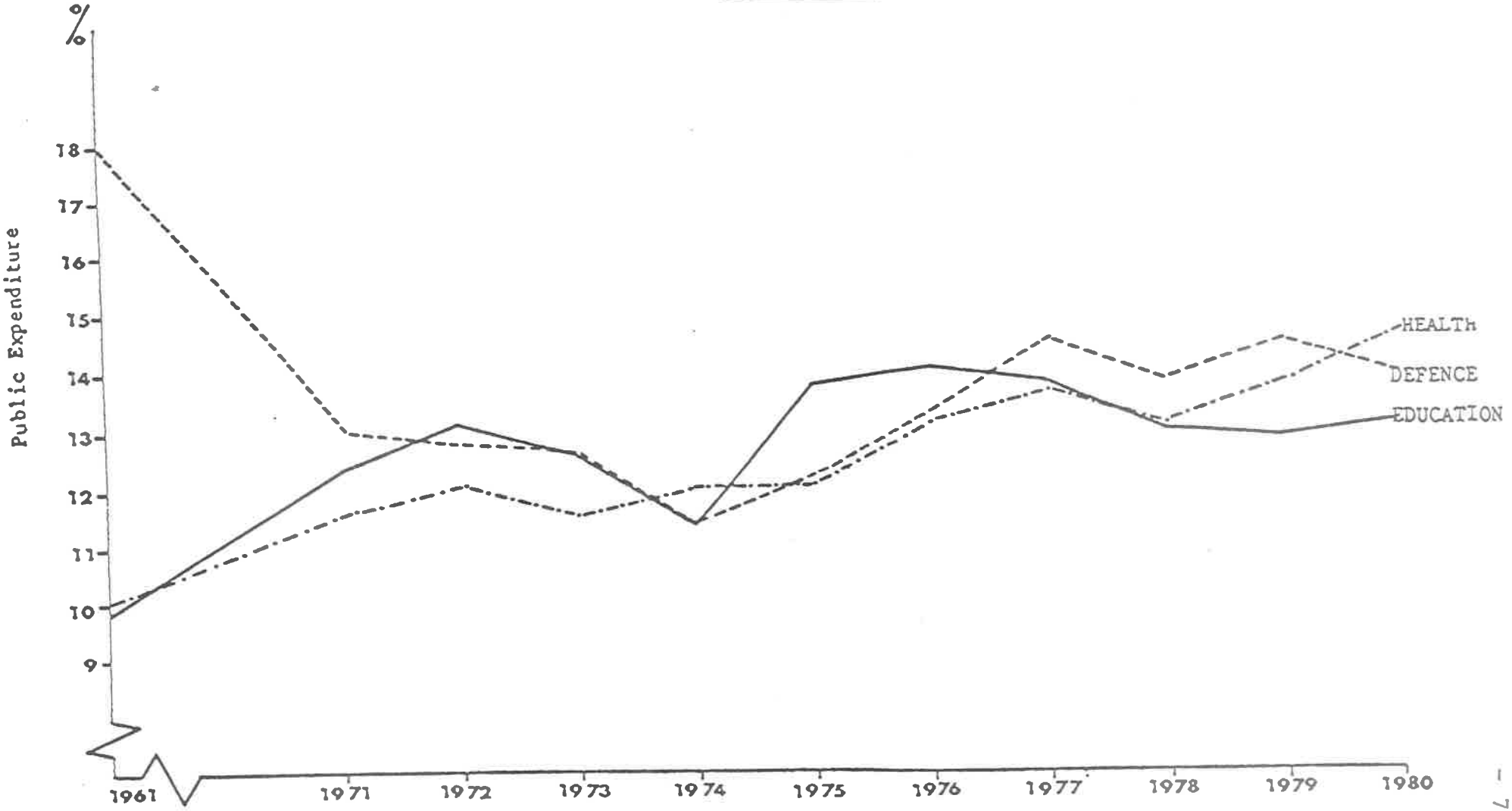


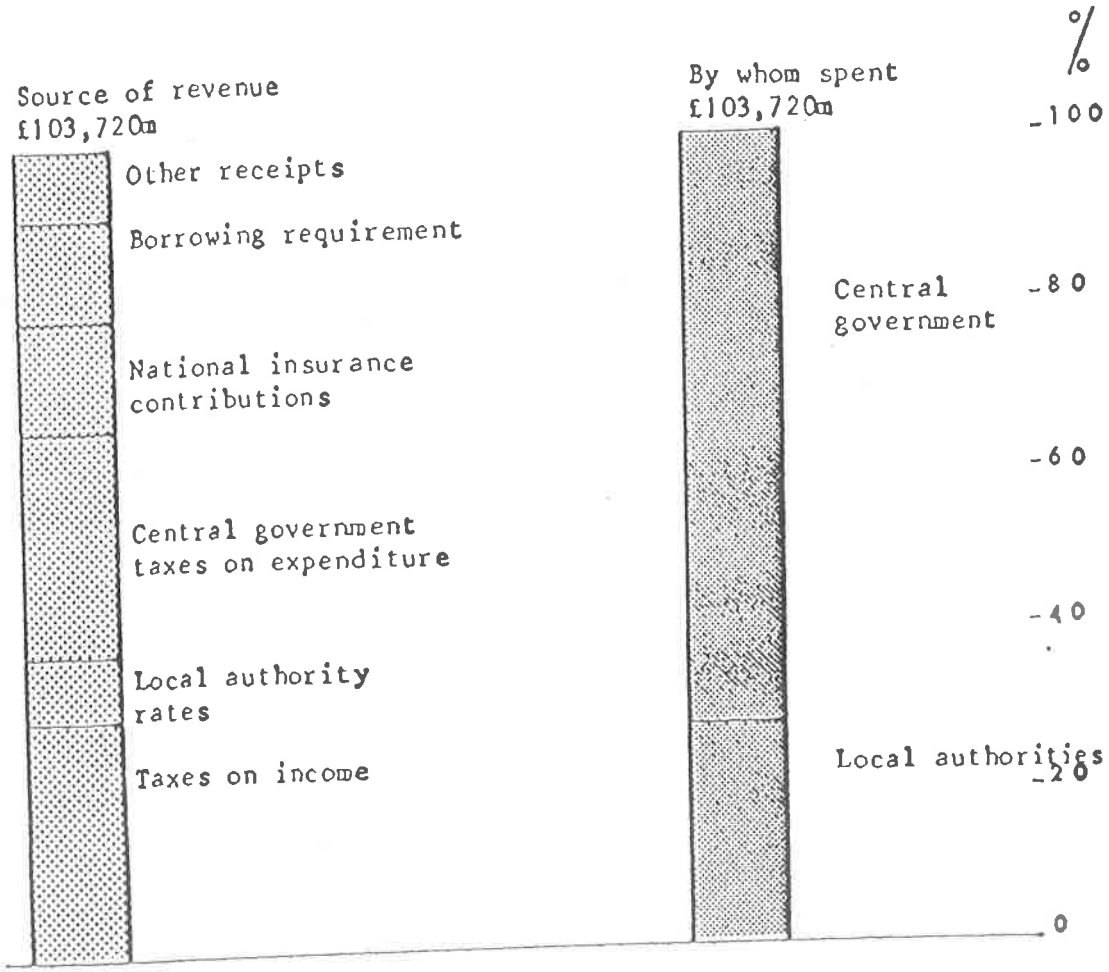
Table 2.11 Public expenditure on health and personal social services: actual and planned

England, Scotland, and Wales — Index numbers and £ million

	Indices (1979–80 = 100) at constant prices					£ million at current prices	
	1975–76	1978–79	1979–80	1980–81	1981–82	1979–80	1980–81
England							
National Health Service							
Current expenditure							
Hospitals and community health services	94	100	100	102	104	5,291	6,929
Family practitioner services	91	100	100	100	101	1,548	1,948
Central and miscellaneous and other health services	97	96	100	111	106	282	359
Capital expenditure							
Hospitals and community health services	143	110	100	106	115	395	525
Family practitioner services	100	100	100	100	100	1	1
Central and miscellaneous and other health services	62	54	100	131	162	13	14
Total	96	100	100	102	104	7,530	9,776
Personal social services							
Current expenditure							
Central government	86	100	100	100	100	7	8
Local authorities	88	96	100	92	91	1,302	1,568
Capital expenditure							
Central government	100	—	100	200	200	1	1
Local authorities	212	97	100	119	117	57	72
Total	93	96	100	93	92	1,367	1,649
Total health and personal social services	96	100	100	101	103	8,897	11,425
Scotland	93	100	100	101	104	1,232	1,550
Wales	95	101	100	101	103	542	699
Great Britain: total public expenditure on health and personal social services	95	100	100	101	103	10,671	13,674

Source: Social Trends 12.

Fig. 2.4 Source and pattern of general government (1) expenditure, 1980 United Kingdom



(1) Combined central government and local authority sector.

Source: Social Trends 12.

CHAPTER THREE

INSTITUTIONS AND PROCEDURES

3.1 Introduction

A great part of any manpower planning exercise consists of information about various institutions and procedures through which the labour force is nurtured and trained, deployed between occupations and industries, and organised and directed at the place of work; and those through which its rates of pay are administered and negotiated. "This information is not merely factual. It has life: it is physiology, so to speak, and pathology as well as anatomy. It suggests what can or cannot be done about them" (Phelps Brown 1968). It is, therefore, obvious that a manpower planning situation cannot be studied by simply looking at labour as a factor of production and pay as a price. A more fundamental type of analysis which is of major importance to the manpower planner is to expend the labour variable into a sector with components for skill, age, sex, occupation, mobility, training and education. It is believed that the search for a single theory to cover all types of workers, irrespective of their skill or social and family characteristics, or all types of firms from large multinational corporations to individual entrepreneurs, would inevitably result in such generalisations as to render the theory useless both for policy makers and researchers alike. It is, therefore, far from being the purpose of this study to answer the question - and a very contemporary one indeed - whether this or that economic theory, or this or that organisational structure, or this or that procedure is, or should be, capable of application in the real world. What is argued is that they produce the framework and the ideas which are of some relevance to policy makers and to researchers, and it is by this criterion they have to be judged.

3.2 Trade Unions

The British working people are the pioneers of trade unionism, and the social significance of the formation of trade unions, and their struggles against the low wages, long hours and abominable conditions which marked the early years of the factory system, have had a universal impact. The development of the British Trade Union Movement is a key factor in understanding the attitudes of workers and employers towards work; the level and extent of their relationship; contemporary, social, political and economic debates in British society and the possible future patterns of work and employment; in other words, to understand the work situation.

3.2.1 The Roots

By the end of the eighteenth century, trade unions had begun to take root, on a local basis, among the artisan aristocracy, the skilled handicraftsmen whose methods of work and conditions the industrial revolution had left substantially untouched. The original purpose for the organization of the working people was to abolish competition among themselves. This potential threat to the rising capitalist employers, according to Hutt (1975), coupled with the panic induced among the aristocrats by the French Revolution, set the stage for the passage through Parliament in 1799-1800 of the Combination Acts. These acts, although outlawing the organisational formation of "masters or workers", gave the masters "unlimited power to reduce wages and make conditions more severe. They established the new industry on a basis of... serf labour and low wages" (Hutt (ibid)).

The trade union movement had been driven underground, the unions perforce became conspiratorial bodies, binding their members by oath, employing initiation ceremonies and the garment of rituals associated with secret societies. These illegal unions organised the first series of widespread strikes, or "turnouts" as they were called. Despite the existence of the Combination Acts, attempts were made to establish a wider organisation and to centralise the power of organised labour

"delegates" of fourteen trades in Manchester. These, then agreed to form a General Union of Trades, or Philanthropic Society, counting amongst its aims: no trade to strike without informing and obtaining consent from other trades". (ibid). These original economic claims became progressively coupled with wider political ones and by any account very revolutionary indeed, "... an entire change in society - a change amounting to a complete subversion of the existing "order of the world" - is contemplated by the working classes. They aspire to be at the top instead of at the bottom of society - or rather that there should be no bottom or top at all!"*

Another trade union weekly of the time wrote "the crisis of our condition is at hand - close upon us. The contest affects all alike; and woe unto the man who deserts his post. The question to be decided is, Shall Labour or Capital be uppermost?"** Not unnaturally, claims such as those, coupled with widespread strike actions, gave rise to considerable concern among members of the existing order. Arrests of trade union organisers and clashes with the police and army became commonplace. It was the first example of what later became known as Syndicalism, the belief that trade union action alone could overthrow capitalism.

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* The Poor Man's Guardian, October 19th, 1833, quoted by Hutt (ibid)

** Quoted by Hutt (ibid)

3.2.2 First Successes

During the mid-Victorian period British capitalism had been able to break down all barriers to its full growth. Britain had become the workshop of the world and in its privileged position of industrial monopoly, it was both possible and necessary for substantial concessions to be made to the two main groups on whom this prosperity depended, the textile factory workers and the skilled artisans in the metal-working and building trades. During that period the Ten Hour Act of 1847 had been passed.

"Defence not defiance" became the union motto of the mid-Victorian period to defend the vested interests of the craftsman, not to defy the employing class with the organised might of the whole working class; similarly "a fair day's wage for a fair day's work" implied the full acceptance of the existing order, subject to specific and limited reform, to getting the best that could be secured within its framework.

The consolidation in this way was fully reflected in the new character of trade unionism. The typical picture of this transformation is reflected in the accounts of the Amalgamated Society of Engineers from 1851-1890.

"While the union's expenditure on the various friendly benefits (sick, funeral, out-of-work, superannuation, etc.) was 2,987,993, on strikes it was only 86,664" (Hutt (ibid)). The claims and efforts for better working conditions continued despite the consolidation mood and many rights had been granted to workers. A strong movement for a nine-hour day developed and secured the compromise of a 56 1/2-hour week. Unions still had no legal protection for their funds and strikers could still be gaoled for "conspiracy" and "intimidation". The Reform Act of 1867 afforded to the workers in the towns; the vote, and the Trade Union Acts of 1871 and 1876, gave legal status to the unions. In 1868 the Manchester and Salford Trades Council convened a national conference of trade unions and trades councils; this was the first regular Trade Union Congress (TUC).

3.2.3 Entering Politics

The end of the nineteenth century saw the end of Britain's industrial monopoly and the crisis of trade unionism was a reflection according to Hutt, of that situation, "unbroken stagnation in the major branches of industry, poverty so widespread and grinding that... brought a breaking of the ties that had bound the working class to their masters". Socialism was born in Britain during that period and the working-class movement as we know it took shape. Engels, in his series, The British Labour Movement, stated that the unions could not maintain their organised strength "unless they really march in the van of the working class"; and this meant breaking the "Vicious circle out of which there is no issue" (of movements limited to wages and hours), ceasing to be the "tail" of the "Great Liberal Party", building out of the unions a working-men's party, "a political organisation of the working class as a whole", which would win power for the workers and build a new social order. This party which trade unionists established in 1893 was in the shape of the Independent Labour Party, which a few years later took the form of the Labour Party as it was soon to be called.

In the aftermath of the General Election of 1906 when the biggest Liberal landslide of all time "thrust the Tories into the wilderness", legal redress was afforded to the unions with the passage of the Trades Disputes Act (1906). This absolved unions of any legal responsibility for civil damages in respect of actions by their members or officials in furtherance of a trade dispute, and also "expressly ensured the legality of picketing".

The opening Edwardian decade of the century saw the emergence of the two major contemporary social and economic problems which were to become the centre of the political and economic thoughts and actions of the British Government since then, i.e. inflation and unemployment. In the decade ending 1910 wages expressed in terms of food prices dropped by about 10%. Five out of every eight adult male manual workers earned less than the absolute minimum living wage (then generally accepted as 30 shillings a week).

In Fig. 3.1. the index of retail prices of food and wage rates from 1900 to 1914 is shown.

Unemployment became a pressing problem. Trade Union concern over unemployment and demands that the Parliamentary Labour Party use more drastic methods to compel the Government to act were common.

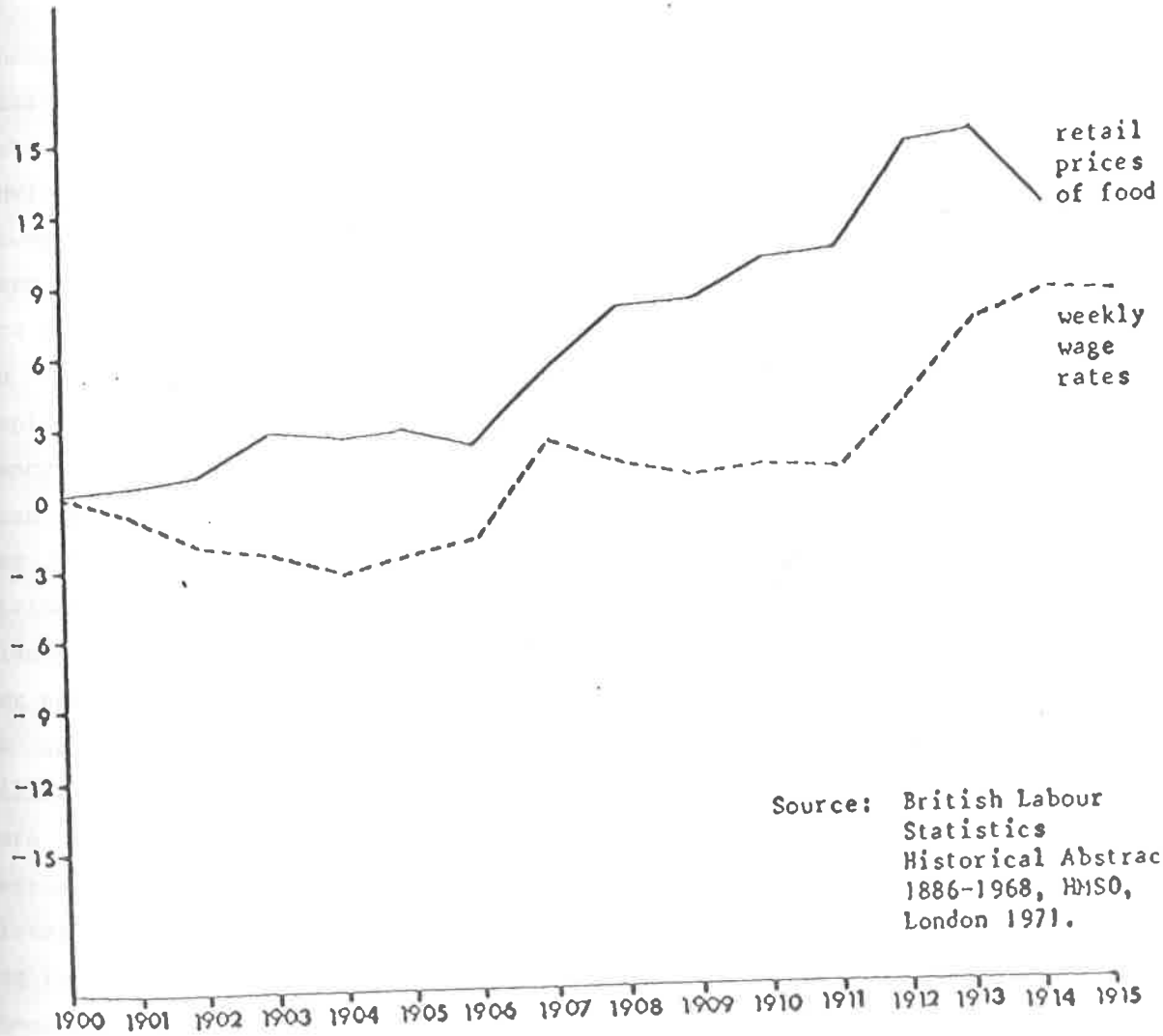
The four years before the outbreak of the First World War were the years of Labour unrest, more widespread than the country had ever known. These were constantly headlined in the media and they were the staple theme of all brands of publication. A newspaper of the time comments: "Perhaps the most salient feature of this turmoil at the moment is the general spirit of revolt not only against employers of all kinds, but also against leaders and majorities, and Parliamentary or any kind of constitutional and orderly action" (quoted by Hutt (ibid)).

3.2.4 The General Strike and after

The First World War marked a decisive break for the trade union movement and heralded an entirely new era. It brought, what has been called a revolutionary transformation of the social and political standing of the official representatives of the trade union world; this being an essential element in the "recognition" of the union apparatus as "part of the social machinery of the state". The reason for this was that the Government, in order to cope with the several problems during the war, required the fullest collaboration of the union leaders and the machine they controlled. That collaboration could not be secured by the old-fashioned cooperation of the unions with the employers; it required a direct and organised relationship between the unions and the central organ, the State; a relation which it was hoped to consolidate by drawing the union leaders into the State machine.

After the war industrial disputes escalated. They were carried out in a more militant manner but industrial problems and policy were far from being the only concern of the trade unions during this period.

Fig. 3.1 Index of retail prices of food and wage rates (1900-1914)



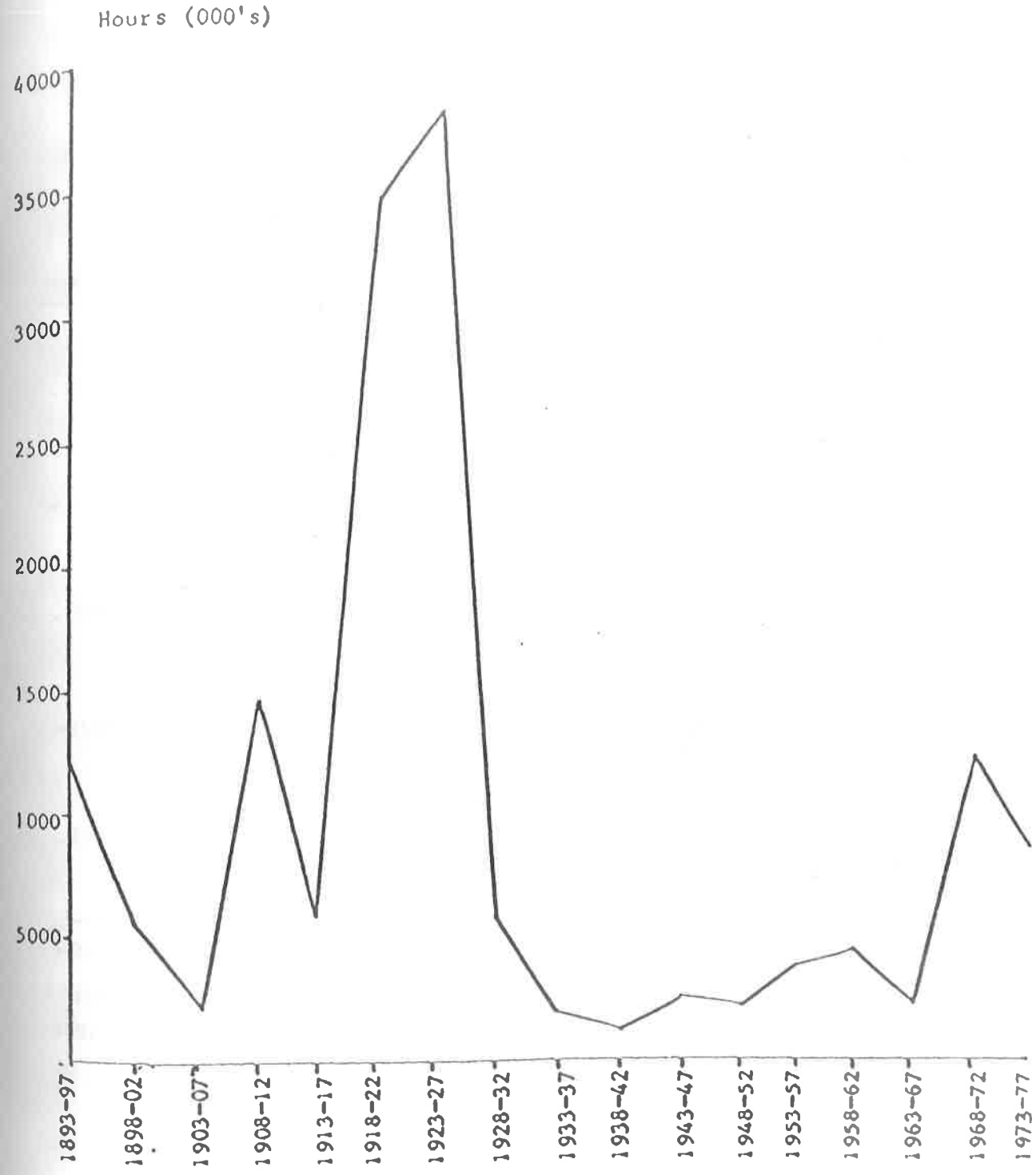
Source: British Labour Statistics Historical Abstract 1886-1968, HMSO, London 1971.

In Fig. 3.2 the working hours lost, due to industrial disputes over the period 1893 - 1973 are shown.

On the political front, the labour Party had, in 1918, for the first time, assumed the aspect of a definite party, with stated Socialist aims and programme, opening its ranks to individual membership and multiplying its local organisations from under 150 in 1914 to over 2,000 in 1920. As Fig. 3.3 shows, the membership of the trade unions doubled over the six years, from 1914 to 1920.

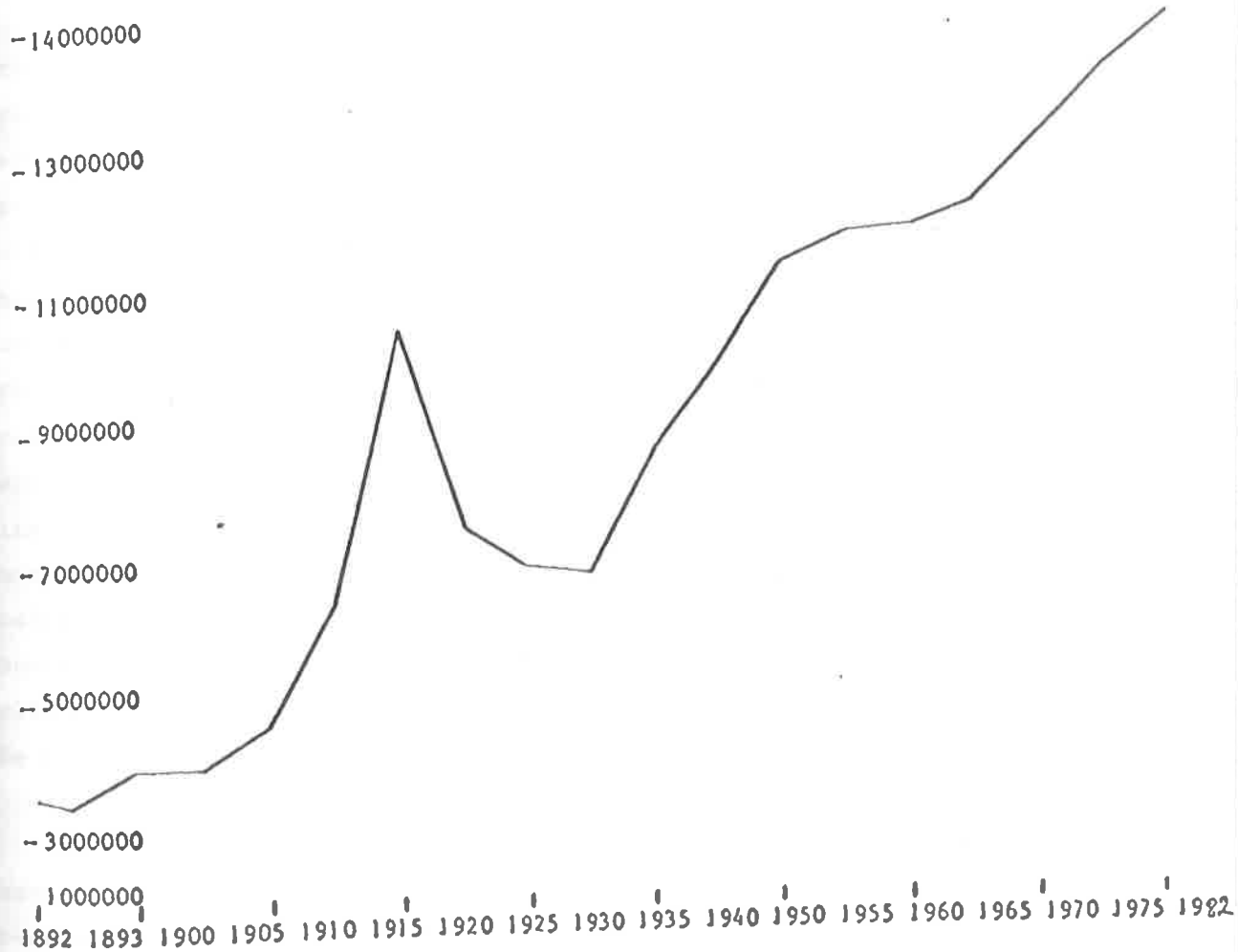
On the economic front, the post-war boom was coming to an end. Unemployment passed the million mark in February 1921 and the two million mark in June. "All the workers of this country have got to take reductions in wages to help put industry on its feet" was the advice proffered by many politicians. The reaction to the worsening unemployment and economic situation by the trade unions was to become more and more militant. The T.U.C. proclaimed in 1925 that "a militant and progressive policy, consistently and steadily pursued... in conjunction with the Party of the Workers... for the overthrow of capitalism". The General Strike of 1926 was a reflection of that militancy and of the economic and social situation which the country was then facing. The outcome of the General Strike was a major set-back for the Trade Unions. Not only general strikes but sympathetic strikes, even when purely industrial in aim, were made illegal. A clause in the 1927 Act suggested that it might be a criminal offence for persons not actually in employment to refuse to accept employment on an employer's terms. Anyone leading or participating in an "illegal" strike was liable to fine or imprisonment while union funds were made liable for civil damages, thus removing the immunity conferred by the Act of 1906. Mass picketing was forbidden and ordinary picketing could be defined as "intimidation". The T.U.C. reaction during its annual meeting was a declaration of cooperation with the management side "in a common endeavour to improve efficiency of industry and to raise the workers standard of life".

Fig. 3.2 Working Hours Lost due to Industrial Disputes (Five Year Average)



Source:
- British Labour Statistics Historical Abstract 1886-1968
- Annual Abstract of Statistics 1981 Edition

Fig. 3.3 Membership of trade unions 1892-1982



Source: British Labour Statistics Historial Abstract 1886-1968
Department of Employment and Productivity London: HMSO 1971,
Annual Abstract of Statistics No. 88 1968-1981, DEG, February 1982

3.2.5 The consensus approach

In its annual meeting in 1928, the T.U.C. General Council outlined three possible policies for trade unionism. The policy of militant actions which was dismissed as "futile, certain to fail and sure to lead to bloodshed and misery". The orthodox policy of letting the employers run industry while the unions fought for their members' rights and interests was disposed of as "inconsistent with the modern demand for a completely altered status of the workers in industry".

The third policy which was in fact approved was "for the trade union movement to say boldly that not only is it concerned with the prosperity of industry, but that it is going to have a voice in the way industry is carried on... the unions can use their power to promote and guide the scientific reorganisation of industry". The policy now became the promotion of the workers' interest through increased production "... as to provide a rising standard of life and continuously improving conditions of employment" and the way of achieving this was by an effective relationship which would ensure greater stability and harmony in industry. However the Great Depression was on its way. Unemployment reached its highest level ever with 2 3/4 million out of work in 1932. With the outbreak of the Second World War and the participation of the Labour Party in the Coalition Government, the "consensus" approach was established. This consensus lasted for almost three decades during which time the welfare estate was established and the British worker enjoyed one of the highest standards of living among his counterparts in Europe.

In the 1970s the confrontation of the Trade Union Movement reemerged not only against the "traditional enemy", the Conservative Government but, as it has been shown a few years later with the "Winter of Discontent", against their own party. The old story of legislations against Trade Unions and their rights and privileges, is but one manifestation of this confrontation.

3.3. The Development of manpower policy at national level

The development of manpower policies paralleled the development and evolution of economic theories of employment/unemployment. Although there are disagreements among the various schools of economic thought, as far as the extent and direction of government interference in the economic system, there is agreement among classical economists and monetarists with regard to the consequences of interventions towards the labour market in order to increase the mobility of the workforce. Both schools believe that the economic system is basically self-regulating and there are forces which guarantee the return of the equilibrium position (wage price flexibility) and there is no need for any form of intervention by the authorities (lassie fair approach). Government policy with respect to the labour market should be aimed at influencing the "natural rate" of unemployment. Such "manpower policy" as it develops should have, as its sole function, the checking of any attempts to restrict the adjustment of labour supply to demand. The curbing of trade union activity, through for example the Combination Acts of the early nineteenth century, might, in this light, be interpreted as manpower policy. Here then is one conception of the role of "manpower policy" in which "government merely has a role to ensure that "irrational" men do not interfere with the working of the "national economy" (Showler 1981).

In the early years of this century, government, either under the pressure of organized labour or because they felt that they were interpreting correctly the social conscience of the time, or maybe both, began to provide social services to remove, or at least alleviate the insecurity experienced by workers and their families due to the operation of the industrial system. In particular, the problems of adjustments, in the short term, began to be regarded as sufficiently serious to justify interventions. One such problem concerned the linking of "sellers" of labour with the "buyers". To this end, systems of Labour Exchanges were created. Primary emphasis was focused on aiding victims of unemployment and underemployment through public employment exchanges, providing out-of-work payments during periods between jobs and providing employment through public works in times of general depression.

Nineteenth-century economic theory had seen labour as one essentially flexible factor of production, while in the twentieth century, economic theory began to recognize the complexity of markets and that labour was also a complex phenomenon. Attention began to be directed at the problems of securing, training and maintaining a stock of "human capital". This implied that manpower policy should be concerned with training, occupational guidance and assistance with occupational mobility. The vital influence of economic theories in the developing of manpower policy came with the Keynesian theory, which in short recognized that there were "imbalances" in the economic system that governments might seek to control, and that "active" approaches to the deployment of manpower might play a part in this activity.

The evolution of political views might have influenced the development of manpower policies as well. The concern about unemployment, especially after the Second World War, has been an important element in the socialist critique of capitalist economies. A major political challenge to Western democracies has been how to achieve the goal of full employment whilst maintaining flexibility for both buyers and sellers of labour. This has involved considerations in an economy in which labour demand is kept high and accompanied by a social security system which while protecting the workless, preserves a measure of freedom for the, temporary, casualties of the economic system. The evaluation of manpower policy, however, could be in terms of its contribution, either to economic efficiency or to full employment but it may well be evaluated in terms of its contribution to the relief of the suffering experienced by the casualties of the economic system. It is not surprising, therefore, that one of the major debating points about contemporary manpower policy concerns the extent to which goals of this kind can be achieved even in the absence of full employment.

3.3.1 Early developments at national level

In 1909, Great Britain pioneered a national Employment Service. The Exchanges were required to run, and therefore police, the unemployment insurance scheme introduced two years later. A few very limited job-creation and training schemes were developed, but economic orthodoxy was against the heavy public expenditure necessitated by the creation of work. With the termination of the first world war the belligerent countries had to confront national manpower problems; the basis for their solution was found in new greatly extended systems of public employment offices, which provided the machinery for mobilizing and redistributing labour resources. Some experiments were made to rehabilitate and retrain the unemployed for those jobs where workers were in short supply. Attempts were also made to encourage industrial investment in areas of chronic unemployment and a little progress was made towards making vocational and technical training conform with the changing character of the occupational structure.

Such efforts at manpower planning, were encouraged by the adoption at its first session of the International Labour Conference of the Unemployment Convention of which article 2 provides for the establishment of a system of free public employment agencies under the control of a central authority. (I.C.O. 1946). The laissiez faire dogma was slightly amended, since the guiding philosophy was one of insignificant intervention by the Government in the affairs of the market place, i.e. a passive manpower policy.

It has been argued that although the Liberals were not in power after the Second World War, both Conservative and Labour Governments were pursuing economic and social policies propounded by two Liberals, namely John Mayard Keynes and William H. Beveridge. The publication in 1936 of "The General Theory of Employment, Interest and Money" by Keynes, and Beveridge's Report during the war, "Social Insurance and Allied Services", brought to the fore the concept of full employment and the "cure" of unemployment (or at least cyclical unemployment which is caused by deficient demand) to increase aggregate demand by monetary and fiscal policies.

It has also been accepted, since Keynes, that there is no global cure for unemployment. It is necessary to identify the cause and to provide the treatment necessary to meet the situation. Unemployment may be cyclical, seasonal, technological, structural or frictional. Each of these "types" of unemployment are attributable to different causes. The type that has received the most attention, until recently, at least, is cyclical unemployment and was the one noted by Keynes. Keynes, to a large extent, dealt with aggregates. He did not concern himself with a breakdown of total unemployment on an occupational basis. The other types of unemployment mentioned relate to the occupations or elements of total unemployment and can exist in periods of buoyant demand. Seasonal unemployment is probably experienced most in the tourist industry. Technological unemployment - the one creating many debates today - is caused by the demand for certain types of skills being reduced due to technological change. Structural and frictional unemployment for their part are caused by adjustment lags and market imperfections.

Having experience of the hardships and deprivation caused by large scale unemployment of the people of their countries in the pre-war years, the representatives of the I.L.O. conference in Philadelphia in 1945 put forward "full employment" as the primary objective of government. It is undeniable that postwar governments have accepted a responsibility for the level of economic activity and employment and a degree of intervention that was unthinkable in the pre-war context. It is also the case that the Keynesian doctrine led to a considerable optimism about the ability of the system to maintain full employment. Steward (1967), for example, claims: "the basic fact is that with the acceptance of the General Theory, the days of uncontrollable mass unemployment in advanced industrial countries are over. Other economic problems may threaten, this one, at least, has passed into history".

3.3.2 Active Manpower Policy

In the late 1950s, however, concern developed about the imperfections of Keynesian economic policies as they were held by some to be a major source of inflationary pressures. In Britain, rising inflation at the high point of the trade cycle brought with it balance of payments problems. Policies were sought that would help to smooth out the trade cycle and its effects. One such group of policies were those relating to manpower. The tendency of the economy to "overheat" and for inflation to accelerate was, so it was held, partly attributed to skilled manpower shortages. The argument was along the following lines: Full employment was accompanied by a labour shortage in some occupations. Labour shortage in occupations meant:

(a) under-utilisation of productive capacity in some industries and consequent threats to economic expansion

(b) these occupations commanded a higher price than they would in a period of normal or excess supply and

(c) excess demand for products was reflected in excess demand for certain types of labour and the resulting pressure on wages levels led to inflationary tendencies.

It was further argued that an "active" manpower policy could involve the use of "contra-cyclical" policies. One form of public spending to get the economy out of the trough in the trade cycle could be to train the unemployed and boost public employment. This would then increase the supply of trained manpower and improve the public services infrastructure to ensure really effective growth once industry revived.

The older passive "special cases" type of policy, therefore, which was essentially concerned with relief for the unemployed has been replaced by a new approach. This new approach has been called "active manpower policy" and its objectives briefly are:

(a) to reduce to a minimum the quantitative and qualitative labour market imbalances caused by the inadequacy and unsuitability of both the labour force and employment opportunities.

(b) to provide the environment necessary for bringing supply and demand together in such a way that the objectives of economic growth with stability in prices and self-realisation in work for the individual are promoted in any optimum manner.

(c) to participate in the formulation and execution of all aspects of general economic planning so that matters which impinge upon manpower and employment aspects are given adequate consideration.

The above aims of the active manpower policy are incorporated in a resolution adopted by the I.L.O. conference in Geneva in 1961 which calls on all nations to develop economies providing "full, productive and freely chosen employment".

Given the objectives of an active manpower policy, it is necessary to consider the measures available to the authorities to implement such a policy. The measures may be grouped under four headings as follows:

(a) legislation, inspection and advisory services aimed at ensuring the welfare, safety and health of workers;

(b) creating and maintaining an atmosphere and institutional environment conducive to good relations;

(c) arrangements to reduce the impact of unemployment;

(d) arrangements for training the workforce; financial inducements towards desirable occupational and geographical mobility; insurance arrangements to cover redundancy situations; placement, guidance and manpower information activities, and manpower forecasting.

The measures listed in (a), (b) and (c) might be considered the traditional ones adopted by the manpower authorities - they have been in use by governments for some time now. Those listed in (d) are of more recent origin and can be regarded as being more particularly associated with the active element in manpower policy.

3.3.3 British Manpower Policy

The British conversion to an "active" manpower policy started in 1970 when the newly elected Conservative government decided to restructure the public employment service as part of their efforts to make public administration more dynamic. A consultative document "People and Jobs" (D.E, 1971) declared that the employment service needed to be modernized. The Employment Exchanges were too readily identified with a limited service to the unemployed. A new active service needed to be created that would seek to have a real impact upon the working of the labour market. The responsibility for manpower policy was given, in 1973, to the specially created Manpower Services Commission (MSC), comprising representatives of both sides of industry. The implementation of policy was taken out of the hands of the Department of Employment and given to two agencies, the Employment Services Agency and the Training Services Agency, each of which were to be separate accounting bodies, required to operate, as far as possible, on similar lines to private enterprise organizations. The structure created in 1973 was modified a little in 1978, with the creation of a new administrative structure within MSC, consisting of three divisions: Employment Services, Training Services and Special Programmes.

At the heart of the work of the employment services are the "Job-Centres", which seek to link potential employees with employers. These are the modern heirs of the older Employment Exchanges. The

service decided to move away from what it sees as "the dole queue image". Job-centres are now located in commercial and shopping centres with "shop fronts" containing displays of job information. There is an emphasis upon self-service, in which individuals select suitable jobs from open display. All they have to do then is to ask a member of the Job-Centre staff to provide further details and put them in touch with the employer. There is also what has been described as a second-tier service of employment advisors available to people who want some advice in addition to access to the self-service system. These advisors will interview people who register at a Job Centre because they are unemployed, and will re-interview them if they remain unemployed for some time. By this means the Job-Centres can continue to monitor the operation of the unemployment benefit scheme, and to initiate the process by which sanctions are applied against unemployed people who are deemed to be "voluntarily unemployed".

Another important employment service, developed long before the modernization of the main service is that for disabled people. There is a special employment service staff, the Disablement Resettlement officers (DROs), working from Job-Centres, employment offices and some hospital. DROs are informed of all new vacancies notified and may keep a job back from the normal display system if they know of a disabled person for whom it is suitable. The main device, however, to assist with the employment problems of the disabled is the "quota system" whereby firms, with over 20 employees are required to ensure that 3% of their workforce are "registered disabled" people. There has been a general preference for seeking compliance with the quota rule by voluntary means.

Another important function of the employment agencies is the service they provide for young people. Before 1974, the provision of employment services to those under 18 was the responsibility of a separate "youth employment service". Later the service was renamed "careers service" and as such it continues to operate as a source of vocational and employment assistance within the schools; it is available to help school leavers if they prefer to keep in touch with it for a time. Although the limitation of the system to help for the under-18s has been abandoned, the new system requires close liaison

between the local staff of the MSC and the careers service, which is run by the local education authorities. Careers officers have been closely involved in the planning of new policies for unemployed teenagers.

The origin of manpower/regional policy goes back to the end of the 1930s when efforts had begun to deal with the decline of work opportunities in the regions of Britain where major sources of employment were in decline. The 1945 Distribution of Industry Act called for coordinated economic and planning policies to regenerate the depressed areas of the country. The same Act designated Development Areas where special aid to industry should be given. Hence, in recent years, it has been recognized that, even within prosperous cities, there may exist inner-areas that are declining economically. Today, regional policy is considerably complicated by the development of special programmes for inner-city areas. There are, in fact, three kinds of measures: control over the location of industry to help to force new enterprises to go to depressed areas; a variety of subsidies to assist developments in many different kinds of areas; and various attempts to focus other manpower policies upon those parts of the country where they appear to be most needed.

3.4 The Welfare State

Before World War II, British income maintenance schemes were, like those in Europe, oriented towards the social insurance principle. This meant linking eligibility with participation in the labour market, and using a fund, preferably contributory, to finance claims. The use of a fund was considered "sound" among policy-makers who harboured fears about any system with an unlimited claim on general tax revenues. By 1939, four funds were in existence in Britain: health insurance, unemployment insurance, agricultural unemployment insurance, and pensions for the aged, widows and orphans. Although these funds had been developed over time, coverage was far from comprehensive, benefits were limited, and administration was complex and costly.

The backstop programme to these funds was public assistance, which was the old Poor Law in its final stage. Public assistance was primarily a local matter and persons who were not eligible for aid by the funds, and who could not get other aid, were the potential clients of the Poor Law. However, the high levels of unemployment that began in the mid-1920s exhausted the unemployment insurance fund and put strains on public assistance. The Poor Law was not, in any event, designed to help able-bodied workers. The crisis that developed from this situation led to the enactment of a second type of public assistance, called Unemployment Assistance. This was funded out of general revenues and administered by a national board.

Coverage under Employment Assistance was quite broad, and gave a far greater proportion of the population some experience with the means test which was developed under the Poor Law. The means test was particularly unpopular, the unpopularity being a factor that undoubtedly played a role in the post-war reform of British social services.

Throughout the second World War, as in the first, the rhetoric of wartime propaganda encouraged the idea of "fighting for a new Britain" based mainly on the economic precepts of John Mayard Keynes and the complementary social policies recommended by William Beveridge. The creation of a welfare state, as conceived by Beveridge in his famous plan of 1942, was a central part of this strategy. The ineffectiveness of health and welfare policies during the inter-war years had made their extension and rationalisation a matter of immediate concern. Beveridge described his scheme as follows:

> "The plan for social security is put forward as part of a general programme of social policy. It is one part only of an attack upon five giant evils: upon the physical Want with which it is directly concerned, upon Disease which often causes that Want and brings many other troubles in its train, upon Ignorance which no democracy can afford among its citizens, upon the Squalor which arises mainly through haphazard distribution of industry and population and upon the Idleness which destroys wealth and corrupts men, whether they are well fed or not when they are idle".

One aspect of the reforms which flowed from the Beveridge Report was that the various patchwork programmes were consolidated into one comprehensive system. The backbone of the Beveridge plan for income maintenance was a contributory form of social insurance. Heavy emphasis was placed on the prevention of poverty by the use of family allowances, a comprehensive health and rehabilitation service, and by a Keynesian full employment policy. The contributory social insurance benefits were set at a subsistence level on the grounds that this was all that the state owed the citizen. Since the social insurance system was contributory, the benefits were clearly a matter or right, earned by the recipient. The stigma of public charity, and the indignity of the means test, were thus to be done away with. In order to make the system comprehensive, there was still a need to provide for those who might be in need but did not qualify by virtue of direct or indirect attachment to the labour market. National Assistance, which was the nationalised form of the locally administered Poor Law, was introduced to meet this need. It was believed that public assistance would be a minor part of British social security. This did not turn out to be the case, and today the number of persons receiving Supplementary Benefits (the present name for National Assistance) as their primary form of income maintenance, is one-third as great as those in receipt of National Insurance.

The actual welfare state that emerged from the post-war reforms differed from the Beveridge blueprint in a number of respects. According to many, of the policies to prevent poverty that were enacted, only the National Health Service emerged in full form (Stein, 1976).

3.4.1 The National Health Service (N.H.S.)

The origins of the N.H.S. can be traced back to the early nineteenth century where the Poor Law amendment act of 1834 contained provisions for the improvement of the health facilities in the country. Before that, and during the middle ages, institutionalised care for the poor was provided by monks. The dissolution of the monasteries by Henry VIII resulted in the decline of such institutions and under the Poor Law acts of Elizabeth I, care

of the poor was taken over by parishes. Several institutions which were set up subsequently were designed as provisions of charity for the poor. Under the National Health Insurance Act of 1911, insurance protection to meet the costs of medical care and wage loss during sickness for all manual workers, (below a certain wage level), was required. Employers and employees both contributed and the Government provided subsidies for the low paid workers. Most of the benefits were in the form of General Practitioner Services and prescribed drugs.

The Dawson Report of 1920 made recommendations concerning preventive and curative medicine and the development of health centres, but the Report was set aside due to the rapidly increasing costs of providing health care. The recommendation of the Beveridge Report states:

> "Medical treatment covering all requirements will be provided for all citizens by a national health service organised under the Health Departments (of England & Wales, Scotland and Northern Ireland) and post-medical rehabilitation treatment will be provided for all persons capable of profiting by it. A comprehensive National Health Service, will insure that for every citizen, there is available whatever medical treatment he requires in whatever form he requires it, domiciliary or institutional, general specialist or consultant and will ensure also the provision of dental, ophthalmic and surgical appliances, nursing and midwifery and rehabilitation after accidents".

The National Health Service Act was passed in 1946 and took effect in July 1948. The Ministry of Health* took over 2,700 hospitals containing around 480,000 beds.

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* In 1969 the Ministry of Health, which had existed as a separate government department since 1919 was amalgamated with the Ministry of National Insurance to form a much larger Department. The Department of Health and Social Security (DHSS). These enhanced responsibilities made the new Secretary of State in charge, a member of the Cabinet, thus enabling him to be much more influential in decision making and especially on matters regarding the N.H.S.

The administrative structure of the N.H.S. was a tripartite one: The general practitioners; the community and teaching hospitals; and the local public and health authorities. The representation of the public, the medical profession and the former hospital owners and nurses had been succeeded by 15 Regional Hospital Boards (R.H.B.). Each R.H.B. covered about 2,000,000 to 3,000,000 population and the day-to-day administration was carried out by the Hospital Management committees (H.M.C.) who were in charge of 1,000 to 2,000 beds. The control of finance, which was in the hands of the Hospital Management committees, was provided by the Central Government via the Regional Hospital Boards.

The thirty-six teaching hospitals retained an independent status each with their own board of governors. The third component of the N.H.S. - the local health authorities - were responsible for preventative and public health services (internal and child health care, control of ambulance transport, school health services, inspection of water supply and sewage disposal system).

In April 1974, the reorganisation of the N.H.S. took effect and a number of fundamental changes occurred. Fourteen Regional Health Authorities (R.H.A.) were established to replace the Regional Hospital Boards and 90 Area Health Authorities (A.H.A.) were also set up. The A.H.A.s were concerned with 250,000 to 1,500,00 population size and were congruent with but independent of, the local government authorities. The R.H.A.s are concerned with 1,000,000 to 5,000,000 population. The larger A.H.A.s were subdivided into health districts having populations of about 250,000 - the catchment area of a district general hospital.

In the reorganisation, the teaching hospitals were absorbed into the system and School Health Services, previously controlled by educational authorities, taken over. Non-medical representation on the A.H.A. boards was increased and people with managerial experience brought in. Community Health Councils (C.H.C.) were set up for patient representation and the channelling of patient complaints to the

District Management Team (D.M.T.) composed of a Community Physician, District Nurse, District Administrator, District Finance Officer and two physicians.

Figures 3.4 and 3.5 show the N.H.S. structure after reorganisation and the management structure of a health district, respectively.

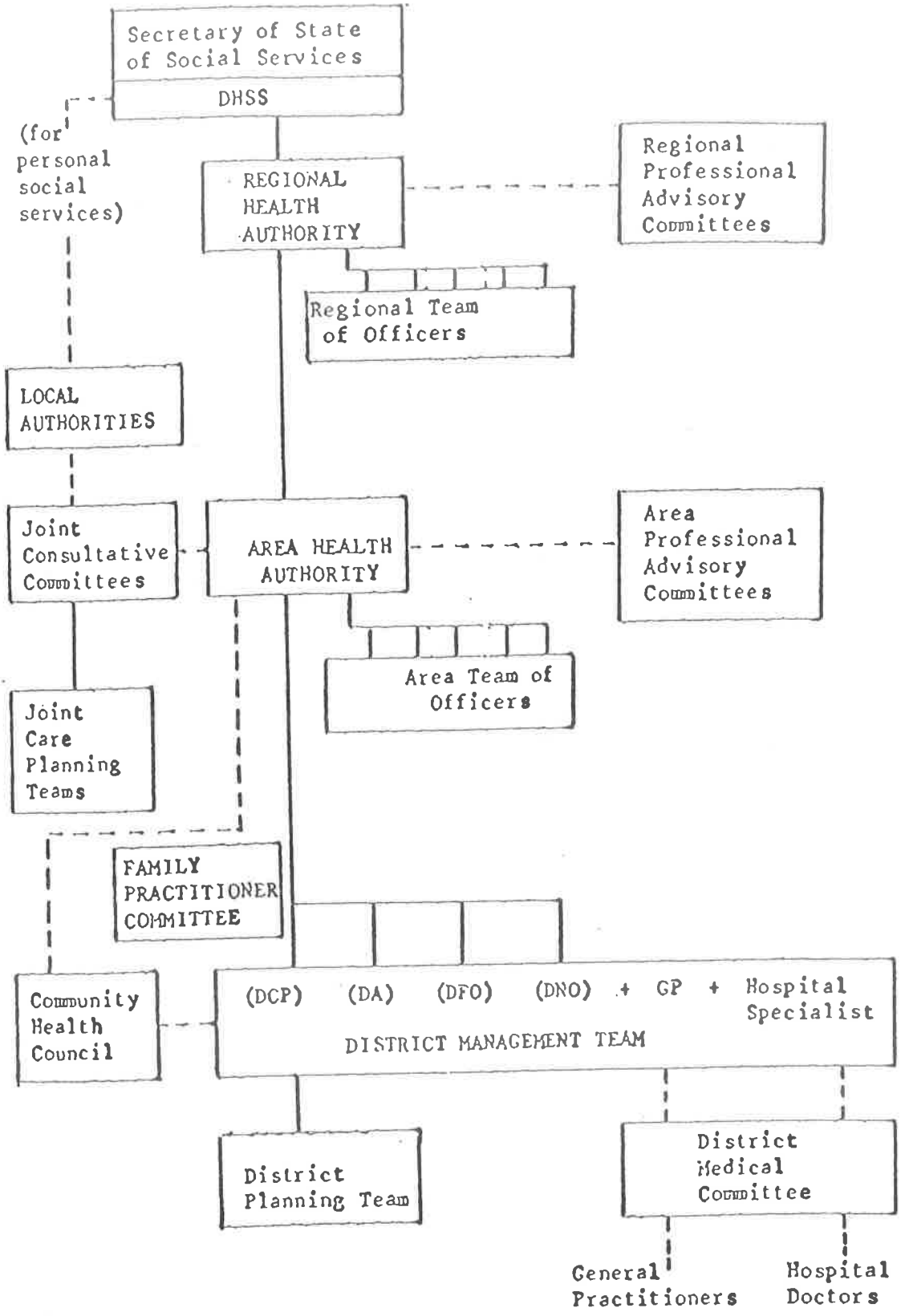
3.4.2 Recent Developments

The most outstanding developments over the past few years as far as the N.H.S. is concerned are: the question of the allocation of resources; the 1979 Royal Commission on the N.H.S.; and the consultative paper of the Government "Patients First".

The question of the reallocation of resources to where they seemed most required had been dealt with first with the 1962 Hospital Plan and the "Crossman" Formula in 1970. In 1975, a Resource Allocation Working Party (R.A.W.P.) was set up to examine this question in detail.

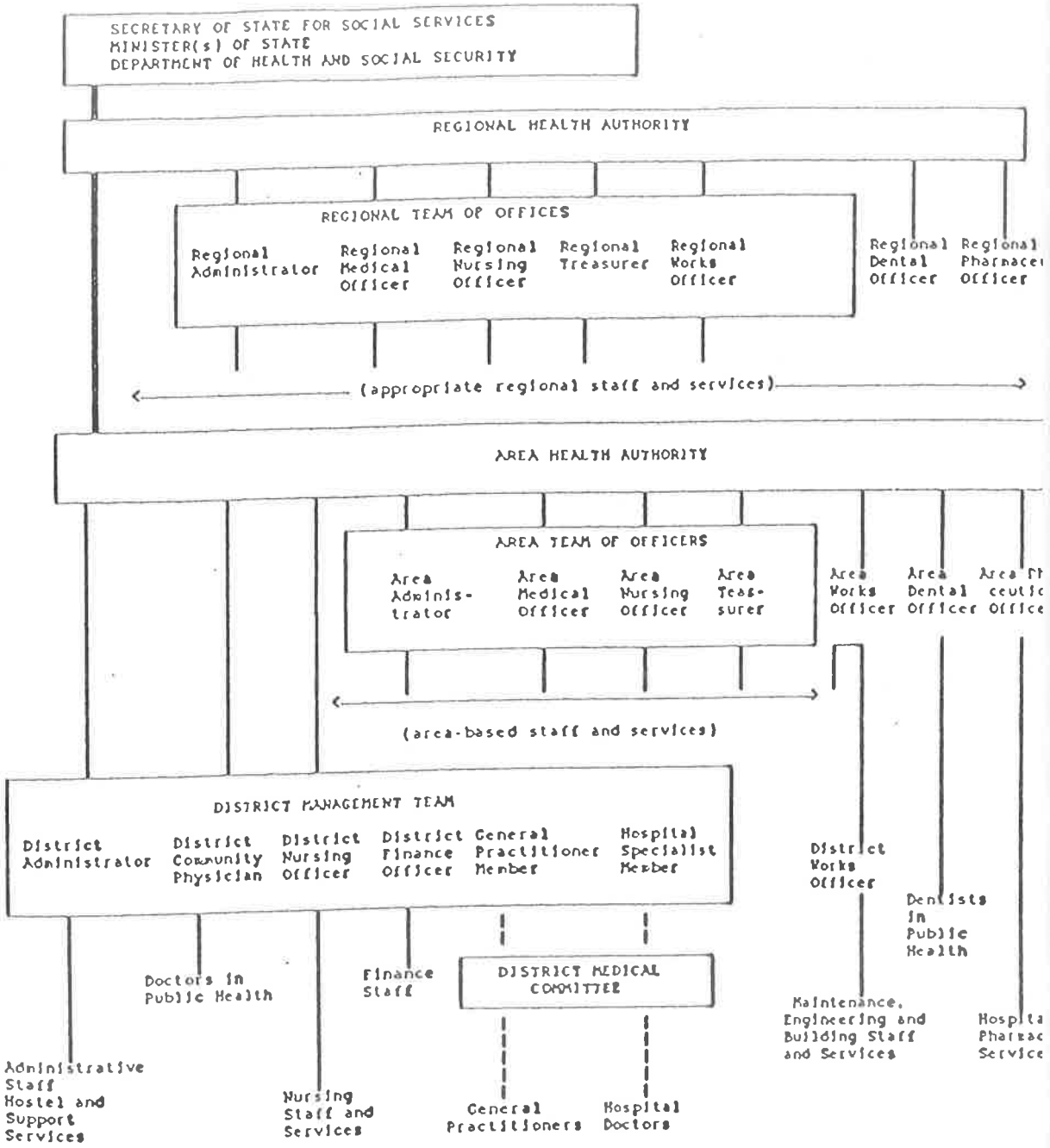
This working party reported a year later and produced a formula, based partly on the age structure of the population served, and partly on indicators of its state of health, from which the "ideal" distribution of the national health budget could be calculated. They also reported that some regions were enjoying considerably more resources than this target allocation and others considerably less; differences between areas were even greater. In Tables 3.1 and 3.2 the regional distribution of health expenditure and manpower, respectively, is shown.

Fig. 3.4 NHS Structure after 1974 Reorganisation



Source: Brown, R.G.S. 'Reorganising the National Health Service'

Fig. 3.5 NHS Management Structure, Formal Accountability in a a Multi-District Area (only one district shown)



‖ Corporate accountability

| Managerial accountability

| Elected representatives

Source: Brown, R.G.S. "Reorganising the National Health Service

3.4.3 The 1979 Royal Commission on the N.H.S.

The Royal Commission on the National Health Service, under the Chairmanship of Sir Alec Merrison, was set up in May 1976, with the following terms of reference:-

> "To consider in the interests of the patients and of those who work in the National Health Service the best use and management of the financial and manpower resources of the National Health Service".

The Committee, which reported three years later, gathered evidence and suggestions from a wide cross section of people, both in the U.K. and abroad, and had also commissioned several pieces of research on different aspects of the N.H.S.

Table 3.1 Distribution of Health Expenditure: UK 1976/77 and 1977/78

£ Per Capita

	Hospital Services Expenditure		Community Health and Family Practitioner Services Expenditure		Total Expenditure (1)	
	1976/77	1977/78	1976/77	1977/78	1976/77	1977/78
England	61.76	69.34	28.31	31.82	104.88	116.36
Northern	56.19	63.03	28.42	31.93	100.13	110.33
Yorkshire	56.86	64.20	27.42	31.02	97.44	108.85
Trent	50.49	57.64	26.67	29.87	93.80	105.50
E. Anglia	53.83	60.23	26.94	30.32	95.22	105.94
NW Thames	74.91	82.40	33.21	36.22	122.38	133.27
NE Thames	76.35	84.15	25.95	28.68	117.00	127.20
SE Thames	73.61	82.38	29.28	33.12	118.17	130.21
SW Thames	67.00	74.46	28.67	32.49	112.73	123.89
Wessex	52.44	59.37	28.15	31.54	94.00	105.28
Oxford	53.18	57.66	28.23	31.34	96.09	103.71
S.Western	57.87	65.14	30.50	34.10	103.33	114.01
W.Midlands	52.65	59.87	29.96	30.56	91.52	101.90
Mersey	62.16	70.65	27.92	31.79	107.16	120.21
N.Western	57.63	66.17	28.88	33.11	100.46	115.37
Wales	61.50	70.52	31.21	36.12	107.39	122.93
Scotland	78.10	88.98	30.00	33.61	127.10	143.01
N. Ireland	83.07	89.83	33.67	37.34	138.67	150.78
United Kingdom	63.84	71.79	28.76	32.35	107.98	120.11

(1) Including "headquarters administration," "other services," and capital expenditure not shown separately.

Source: Compiled from Central Statistical Office, Regional Statistics 14, 1979 and 15, 1980, (H.M.S.O.)

Table 3.2 Distribution of Health Manpower : UK 1978

Whole Time Equivalent Per 10,000 Populatics

	General Medical Practitioners (1)	General Dental Practitioners	Nursing and Midwifery	All Staff and Practitioners
England	4.9	2.6	75.0	172.1
Northern	4.7	1.9	74.2	166.2
Yorkshire	4.7	2.2	74.7	167.0
Trent	4.6	1.9	67.6	153.5
E. Anglia	5.0	2.3	66.2	151.4
NW Thames	5.5	4.1	75.1	174.4
NE Thames	5.2	2.7	78.6	188.8
SE Thames	5.0	2.9	81.8	195.8
SW Thames	5.2	3.6	74.8	172.3
Wessex	5.0	2.8	67.6	151.8
Oxford	4.8	2.5	63.4	147.7
S. Western	5.3	3.0	77.9	186.4
W. Midlands	4.6	2.1	68.3	155.6
Mersey	4.8	2.4	89.6	189.4
N. Western	4.7	2.2	77.3	171.4
Wales	5.1	2.1	80.9	186.2
Scotland	6.1	2.4	104.8	228.2
N. Ireland	5.0	2.3	102.5	229.1
United Kingdom	5.0	2.5	78.8	179.6

(1) Includes restricted and unrestricted principals, assistants and trainees.

Source: DHSS, Regional Staitstics, 15, 1980 (H.M.S.O.)

Some of the major recommendations deal with the Authorities and their organisation and were recommended to be completed within two years of the end of the period of consultation. Some of these recommendations are:

1. Health Departments to give further guidance about the role of members of consensus management teams.

2. The Health Department to urgently consider with the professions concerned the best way of simplifying the professional advisory structure.

3. The role of the hospital administrator as a unit or sector level to be expanded.

4. R.H.A.s in England should continue to be principally responsible for planning and for the major functions they carry out at present.

5. Below region in England, and elsewhere in the U.K. below Health Department, except in a minority of cases, one management level only should carry operational responsibility for services and for effective collaboration with local government.

6. Each R.H.A. in England and the Health Departments in Scotland, Wales and Northern Ireland should institute a review of structure for which it is responsible. The D.H.S.S. should monitor this review in England.

The Commission received, and they themselves made, some critical comments on the N.H.S but the overall conclusion and assessment was:

> "We need not feel ashamed of our Health Service and there are many aspects of it of which we can be justly proud".

3.4.4. "Patients first"

The consultative paper "Patients First" on the structure and management of the N.H.S. carries, characteristically, the conservative concern with managerialism and efficiency. It suggest that the service can be improved by changes which will make it more responsive to patient needs and a better service to work for.

> "The N.H.S. exists to serve patients. The Government's main objective is, therefore, to establish a structure for the service which will enable health services to be planned and managed most efficiently and with which decisions can be taken quickly by those who are close to and responsive to the needs of patients. Changes in the structure alone will not be sufficient; the Service must be managed in a way that enables those with prime responsibility for providing services to patients to get on with the job".

The main objective of the 1974 reorganisation, the integration of services for patients in the hospital and in the community, had been substantially achieved. This achievement was accepted by all sectors. But there had been widespread criticism, however, of the 1974 changes which the 1979 Royal Commission summed up as:

- too many tiers;
- too many administrators, in all disciplines;
- failure to take quick decisions;
- money wasted.

The 1979 Conservative government's approach has four main elements:

1. (a) The strengthening of management arrangements at the local level with greater delegation of responsibility to those in the hospital and in the community services. For each major hospital, or group of hospitals, and associated community services, there should be an administrator and nurse of appropriate seniority to discharge an individual responsibility in conjunction with the medical staff.

(b) There should not be a managerial tier between hospital and community services level and district headquarters; the senior administrator and nurse in the hospital and the community services should, wherever possible, be directly responsible to the district administrator and nursing officer respectively.

(c) Staff working within hospitals in non-clinical support functions should be accountable to the hospital administrator rather than to district level managers. In general, there should be no line management hierarchy above hospital level.

2. The simplification of the structure of the Service in England was achieved by the removal of the area tier in most of the country and the establishment of district health authorities. According to the consultative paper the situation in multi-district areas in England with two sets of chief officers - at area and at district - with complementary and arguably overlapping functions, both directly accountable to area authority members, has all too often proved unsatisfactory. It is doubtful, however, whether a "team" can be accountable to a "team". It would seem better in these circumstances to establish personal accountability. Many of the multi-district areas are, moreover, too large to be effectively managed, and authority members are necessarily remote from the patient in the hospital and in the community. In contrast, most of the existing single-district area authorities are responsible for smaller areas, their members can be more closely in touch with those who provide services to patients, and indeed with the patients themselves, and the management arrangements are simpler and potentially more effective. An ideal district health authority, according to the same consultative paper, would be responsible for a locality which is "natural" in terms of social geography and health care, large enough to justify the range of specialties normally found in a district general hospital, but not so large as to make members of the authority remote from the services for which they are responsible and from the staff who provide them. Some existing areas and districts come near to the "ideal", but in many cases a balance must be struck between the various criteria. Such criteria are:

(i) Social geography,

(ii) The Catchment areas of major hospitals,

(iii) Size and range of facilities and

(iv) Links with local government.

3. The simplification of the professional advisory machinery so that the views of clinical doctors, nurses and of the other professionals will be better heard by the health authorities. The 1979 Royal Commission recommended that the health departments should consider with the professions concerned, the best way of simplifying the present professional advisory committee structure. The government agreed that this was necessary in respect of the medical advisory machinery, in particular to ensure that the doctor's voice was fully heard by the health authority, and it had established a working party under the chairmanship of the Chief Medical Officer, with the following terms of reference:

> "In the light of possible changes in the NHS structure, to consider the current arrangements for the involvement of the medical profession in the strategic planning and operational management of the NHS with particular reference to the role of medical advisory and representative committees, and to make recommendations".

The same need exists for nurses and midwives. Professional advisory machinery for nurses and midwives is set up under a model constitution agreed by the established steering committee representative of nurses and midwives professional organisations. The chief Nursing Officer will remain in close contact with this steering committee in their consideration of changes to improve the existing machinery, and to make the necessary adjustments to the constitution in the light of proposed changes in NHS management arrangements.

4. The simplification of the planning system in a way which would ensure that regional plans are fully sensitive to district needs and also enable health authorities to appraise systematically their own services and to influence the Government.

CHAPTER FOUR

FEMALE EMPLOYMENT

4.1 Introduction

The predominancy of women in nursing in the United Kingdom means that any study of nurses cannot but be an examination of women in the labour process. Nonetheless, as many researchers have pointed out, it is very easy to confuse properties of jobs with characteristics of job holders, because individuals who are confined to a particular sector of the labour market will acquire histories and attitudes which reflect their jobs and which mark them off from workers who do not share the same experiences. (Barron 1976).

But whatever the importance of this reservation - and it is important as we are dealing with quite a distinctive and specialised profession - it seems more appropriate to considers at this stage at least, the characteristics of female employment in today's British society, both from the sociological and the economic theory point of analysis.

This will help, undoubtedly, in evaluating the general climate in which these characteristics and properties are being developed.

4.2 The Sociological Approach

4.2.1 Women's Work in Pre-Industrial Britain

In traditional, non-industrialised societies, work and family structures tend, according to Rapport and Rapport (1971), to be linked as parts of an "integrated cultural whole". The unit of production is the unit of kin relationships, and life is not divided into what one does to earn a living - called work - and what one does the rest of the time. The location of work does not entail separation from family

life, and the values relating to performance in the work role and the family role do not prescribe different and conflicting goals in each. All adults work, and status in the community for adults of both sexes, derives as much from identification with a family as from identification with a particular kind of work.

Roles in traditional non-industrialised societies are often defined to some extent by sex status. Social rules for the division of labour by sex are common, though these rules vary a great deal between societies.

Even where division of labour by sex exists, it is not an invariable rule that women's tasks are domestic and men's are not: the economic and social structure of traditional societies permits no clear distinction between labour which is publicly productive and labour which is domestic, performed in the home.

The differentiation of home and productive work worlds which occurs with economic development, has consequences not only for women's work, but for the work and family roles of both sexes, and for the relationship between the family and the economy.

Before industrialisation, agriculture and textiles were the chief occupations of the British people. Both occupations were engaged in by women and in both, the work of women was indispensable. The role women played as agriculturalists in pre-industrial British society may, to some extent, be counted as part of their domestic role. As Alice Clark points out in her account of "The Working Life of Women in the Seventeenth Century"

> "Under modern conditions, the ordinary domestic occupations of English women consist in tending babies and young children... in preparing household meals, and in keeping the house clean... In the seventeenth century, it (the domestic role) embraced a much wider range of production; for brewing, dairy-work, the care of poultry and pigs, the production of vegetables and fruit, spinning flax and wool, nursing and doctoring, all formed part of domestic industry".

Contemporary accounts of the duties of women make it clear that production for sale or exchange was usually integrated with production for the family's own use. The "family" consisted of father, mother, children, household servants and apprentices - servants and apprentices being children and young people of both sexes.

The two basic characteristics of family industry were the unity of capital and labour: the family both owned the stock and tools and contributed the labour (receiving the monetary return for labour as a "family" wage); and the location of the workplace within the precincts of the home. From the point of view of the economic position of women, observes Alice Clark,"... a system can be classed as family industry while the father works at home but when he leaves home to work... family industry disappears and industrialism takes its place".

4.2.2 Women and Industrialisation

The "industrial revolution" began about 1750 and was substantially completed by 1850, at which time about half the population lived in urban centres. In the period between 1760 and 1830, the basic structure of industrialism was established. The population grew and became more mobile, work became more specialised, communications expanded and improved: "A civilisation based on the plough and the pasture perished - in its place stood a new order..." (Beales 1958).

In the new order, work was separate from family life: an activity performed away from the home for its monetary return and not for itself: a labour, not of love or family affection, but of impersonal efficiency. Separation from family relationships, values and considerations was entailed by the rationality of the modern industrial enterprise. Or, as one modern sociology textbook describes it, "Industrial society is characterised by the existence of specific institutions set up to perform economic activities. From this it follows that in such societies the family cannot... be a productive economic unit..."(Harris 1969).

The differentiation of the family from the economy, necessitated by the changeover to industrial production, was followed eventually by a differentiation of roles within the family. The woman became the non-employed, economically dependent housewife, and the man became the sole wage or salary-earner, supporting by his labour, his wife -the housewife - and her children. This division of gender roles was incorporated into the ideals of the middle class in the first decades of the nineteenth century, and was increasingly put into practice among middle-class families until after the Second World War.

From the viewpoint of the changes in women's situation, the two centuries between the beginnings of industrialisation and the present time are divided into three rough periods

From 1750 to 1841

The first impact of the industrial revolution was felt in textile production, since it was in textiles that the first inventions made the factory, not the home, the more appropriate place of work. Women's work was important to the domestic system of textile production: Ann Oakley (1980), referring to the woollen industry in 1714, put the figure at about eight women and children to every man employed. Although they worked at home, the majority were already working as wage-earners, being given material by middlemen who subsequently marketed the thread. From the start of industrialisation, therefore, the position of women workers was directly affected.

The effect of the first mechanisation of textile production was, paradoxically, an increase in the amount of employment available to women, and a rise in their wages. Hargreaves' Spinning Jenny, invented in 1764, multiplied the number of spindles that could be worked by one spinner - a sixteen-spindle model was patented in 1770 and an eight-spindle model in 1784. The first small Jennies were used by women and children in their cottages, enormously increasing their productivity. (One Jenny produced as much as twenty or thirty people working on the wheel). They were thus able to command higher wages.

Increased production meant that more raw material had to be prepared, so that opportunities for female employment were expanded in this area too.

The other two important inventions, Arkwright's water frame and Crompton's mule, initially provided more opportunities for female employment. The former established the method of spinning by rollers and was driven by water power, but the earliest models left the preliminary operations of carding and roving to be done by women at home. Crompton's mule, which combined features of the Jenny and the frame, was also at first a domestic machine.

Until about 1775, women's work in cotton production increased and improved. Contemporary observers did not emphasise the benefit to women of these changes, but the benefit to the whole family:

> "What a prodigious difference have our machines made in the gains of the females in a family. Formerly, the chief support of a poor family arose from the loom. A wife could get comparatively little on her single spindle. But, for some years, a good spinner has been able to get as much, or more, than a weaver... If it were true that the weaver gets less, yet, as his wife gets more, his family does not suffer. But the fact is that the gains of an industrious family have been, upon an average, much greater than they were before these inventions. (Pinchbeck 1969).

This situation was shortlived. The early machines were improved, enlarged and adapted to water, and later, to steam power. Cottages could no longer house them. By 1788, Jenny spinning at home was over: "Thus", says Ivy Pinchbeck in her study of "Women Workers and the Industrial Revolution", "within the space of one generation, what had been women's hereditary occupation was radically changed, and the only class of women spinners left were the unskilled workers in the new factories..."

From 1780 on, wages fell noticeably as the growth of the new machines created unemployment. The first textile workers' riots occurred. Much of the protest was focused on the changed situation of women workers as contributors to the family wage. From the viewpoint of the men, it is striking that even their own increased wages did not reconcile them to the economic dependence of their women and children

who remained unemployed at home. So accustomed were they to the idea of a family wage, and the financial contribution of women and children, that the substitution of an individual wage and the responsibility of the father for the entire support of his family were changes which, at first, were neither welcome nor understood.

During the last decades of the eighteenth century, many factories employed outworkers to clean and wind cotton. Some women were still able to get work, though their wages were much lower than they had been before the introduction of the factory system. By 1830, virtually, all the processes involved in cotton production had been removed to the factory. In the early decades of the nineteenth century, the wives of skilled spinners who commanded high wages in the factory, were able to retire from industrial work. But the mass of women workers who still had to earn their own living had no alternative but the factory.

At the beginning of the factory system, the majority of the workers were children. As steam power developed, the superior strength of adult labour was increasingly needed, and in the early years of the nineteenth century, more and more women were employed. The earlier female factory workers came from agriculture, from domestic service and the unskilled trades. Women textile workers made redundant by the collapse of the domestic system, at first shunned the factories, expressing their antipathy to the new machines. But the factories needed workers with some experience of textile production, and manufacturers began to advertise for "healthy strong girls". In the 1830s and 1840s the typical female factory worker was the wife or daughter of a handloom weaver, himself forced to enter the factory. Under the government scheme for the migration of those dependent on the Poor Law, the majority of those migrating to the textile areas were women and children. The first figures available for the factory employment of women date from 1835. They show that, out of a total of 288,700 workers occupied in textile production, 46% were women, and a further 15% were children of both sexes under the age of thirteen.

The conditions of women's employment in the early factories did not necessarily disrupt the unity of the family. In the first textile mills, the tradition of family labour was honoured; whole families would be hired, with the husband-father allocated to one job, and the women and children to another. Parental authority could still be exercised, and children could be trained by, and apprenticed to, their parents, as under the old domestic system. Indeed, this was the main reason why workers themselves approved of child labour in the factories. The failure "to bring his children up under his own eye" was said to be the "one great grievance of a moral man". (Hammond and Hammond 1919).

Factory work was not the only, or even chief, occupation of women in the early nineteenth century. The 1841 Census Returns for England and Wales give the main occupations followed by women as domestic service (712,493), cotton manufacture (115,425), dressmaking and millinery (89,079), agriculture (50,654), laundry work (45,019), and teaching (29,253).

From 1841 to 1914:

Until the early 1940s, the ideology of married women's economic dependence on men, and their restriction to household work and childcare, existed only in embryonic form. The daughters and wives of upper - and middle-class men had not been expected to work for some time. Productive work was denied them, as were the duties of household work and childcare. "The practice of female idleness spread through the middle class until work for women became a misfortune and a disgrace" (Neft 1966). Working-class women were not restricted in this way. Although opportunities for women's productive work had diminished, there was, as yet, no generally accepted ideology of women's situation to justify the contraction of their roles as productive workers on moral, social, economic or political grounds.

emerged in 1841, when factory reformers enlarged their frame of reference to include not only the work of children, but the work of women as well. In 1841, committees of male factory workers called for the "gradual withdrawal of all female labour from the factory", an appeal which apparently gained some political support. In 1842, the Report of the Royal Commission on the Mines, with its description of the working conditions of women and children, "shocked and horrified the whole of England". "Chained, belted, harnessed, like dogs in a go-cart", said one Commissioner about women colliery workers, "black, saturated with wet, and more than half-naked, crawling upon their hands and feet, and dragging their heavy loads behind them - they present an appearance indescribably disgusting and unnatural" (Pinchbeck (ibid)). This dramatic report - coloured by the existing idea that women's proper place was in the home - made it appear that the employment of women outside the home was an evil in itself.

The 1842 Mines Act - the first Act of protective labour legislation for women - excluded women from colliery employment. Two years later, the 1844 Factory Act took the radical and unprecedented step of classing women of all ages with children as "protected persons". Their hours of labour were restricted to twelve a day in the textile trades.

Over the period from 1841 to 1914 the greatest change in women's occupations was the rising incidence of housewifery as the sole occupation for married women. In 1851, one in four married women (with husbands alive) was employed. By 1911, the figure was one in ten.

The increase in the proportion of women occupied solely as housewives is associated with the rise of the belief that women's place is, or should be, exclusively in the home. As one historian has remarked, "The doctrine that women's place is in the home is peculiarly the product of a period in which man had been lately displaced from the home as his workplace" (Hamilton 1965). Victorian attempts to get women out of the factories and mills and into the home were motivated largely by the anxiety of men whose own situation had been radically transformed by the change to factory production. The

loss of traditional work roles and the new restrictions on the labour of children caused a major crisis in the life and unity of the family. The child's increasing dependence upon adults and the continuing limitations imposed by women's reproductive role came to entail a division of labour between husband and wife, whereby the husband became the main breadwinner, and the wife the main childrearer, living off, and providing for her children out of, the earnings of the man. In this situation the woman factory worker posed the threat of competition. The fear of this threat seems to have been the force behind the early legislation affecting women's employment. At this time, the case for restricting women to unpaid work within the home first began to be argued publicly.

Four main reasons appear in contemporary documents as grounds for restricting or preventing the employment of women outside the home (and encouraging them to busy themselves solely with housewifery). Female employment was condemned on moral grounds, on grounds of damage to physical health, on grounds of neglect of home and family, and, lastly, simply on the grounds that it contravened the "natural" division of labour between the sexes.

> "In the male" said Lord Shaftesbury, taking up the issue of moral damage, "the moral effects of the (factory) system are very bad; but in the female they are infinitely worse, not alone upon themselves, but upon their families, upon society; and I may add, upon the country itself. It is bad enough if you corrupt the man, but if you corrupt the woman, you poison the waters of life at the very fountain". (Quoted in Oakley (ibid)).

In the period 1841 to 1914 the roles of working-class and middle-class women were, on the whole, increasingly differentiated. For the middle-class woman, the doctrine of feminine domesticity was well-established by the mid-nineteenth century: marriage had become a fulltime occupation. It was, moreover, an occupation in which women could play the role of "leisured lady". Though evident among the aristocracy in the eighteenth century, the idle dependence of the married woman became a practicable ideal for the rising middle classes with industrialisation. The idleness of a man's female dependents at home became a mark of prosperity for the Victorian middle-class male.

In the second half of the nineteenth century according to Oakley (ibid) the doctrine of feminine domesticity began to permeate downwards to the working classes. For working-class women, this doctrine challenged the economic factors of life: one parent's income could not cover the costs of childrearing, and many women had to work. One survey, carried out in 1904, uncovered the following reasons for the employment of married women: death or unemployment of the husband, or insufficiency of the husband's wage; desertion by the husband, preference for factory work as opposed to housework. This survey found that four out of five married women worked because of financial necessity. A similar study carried out in the United States in 1908 showed that less than 5% of employed married women had husbands alive whose wages could be expected to keep the whole family.

The idea that work outside the home for married women was a "misfortune and a disgrace" became acceptable to the working classes only in the last decades of the nineteenth century. In the early years of the twentieth century, working-class married women were increasingly likely to follow the middle-class pattern, choosing the role of non-employed housewife even in cases where their employment would have improved the family's standard of living. From the perspective of women's situation, this change to housewifery among working-class women is the most dramatic result of the industrial revolution.

Professional work for women at the beginning of this century remained as restricted as it had been throughout the Victorian period. Three hundred and forty seven thousand professional women were returned in the 1911 Census, 75% of whom were teachers or nurses. Medicine officially opened its doors to women in 1878, but in 1911 there were only 477 women doctors.

From 1914 to 1950:

In this third period, the changes in women's situation brought about by industrialisation were consolidated. With the notable exception of the war years, woman's role as housewife had been continuously affirmed as the proper use for female energy. Her dependence on men was an accepted fact.

One fact of women's situation had seen some improvement: the area of their legal and political rights. Another distinctly modern trend had been the growing tendency for women to combine the roles of housewife and productive worker. The experience of the First World War activated both these changes.

At the outbreak of war in 1914, about three and a quarter million women were employed as wage - or salary-earners. Women made up just under a third of the total labour force: about one in four females in the population were employed: one in ten of all married women. The sudden rise in the demand for female labour occasioned by the war, drew an additional 1.7 million women into the labour force. At the peak of this demand between January 1916 and July 1918, the percentage of females employed rose to 22.5%.

The women were recruited into many fields. Nearly 200,000 women entered government departments; 500,000 took over clerical work in private offices; 250,000 returned to the land; 800,000 women were recruited into the engineering industry, one of the most strongly masculine occupations. Women became munitions workers, car drivers, tram conductors, bakers: "In fact everything except miners and builders" (Cole, G.D. and Postgate, R. 1961).

Middle-class women were particularly affected by this sudden rise in the valuation of female labour. They threw off the restraints of accepted respectability with legitimate patriotic relish.

> "Women who had been quiet mothers of families were suddenly transformed into efficient plumbers, chimney sweeps or gravediggers; flighty and giggling young girls turned into housepainters and electricians; ladies whose lives had been spent in the hunting-field turned into canal boatmen and ploughmen, and through their steady work and toil the life of the country was carried on" (Quoted in Oakley (ibid)).

These radical changed in women's employment receded in the years following the end of the war. By 1921, the proportion of women in paid employment was actually smaller than before the war.

The return to the home was not entirely voluntary, since, by the Pre-War Practices Act, men had a legal right to claim back their former jobs. But women had 'earned' one prize - and that was the vote, promised them in 1918, and obtained a decade later. In 1919, an Act was passed allowing women to be elected to Parliament, and by the Sex Disqualification Removal Act of the same year, many legal barriers to women's participation in educational and occupational life were theoretically removed. The era of legislation towards sex-equality, begun in the last decades of the nineteenth century, had truly arrived.

From the early 1920s on, the combination of the two roles - housewife and paid worker - was a developing feature of women's situation. The Second World War, like the first, called for more female labour. Every kind of pressure and appeal was brought to bear on women, and especially on married women, to take work of some kind. Employers introduced special measures to facilitate the employment of married women with domestic responsibilities, and in January 1945, at the height of the war effort, there were 1,535 day nurseries for two-to-five years-olds. Between 1939 and 1943, the percentage of women employed in industry and the services doubled.

In the First War, many women brought into employment - both married and unmarried - had exchanged idleness for productive work. By the time the Second War began, employment for the unmarried female in all class groups was established as the normal practice. In the Second War, therefore, married women constituted the chief reservoir of labour. During the six years of the war, an additional two million married women learned to combine the role of housewife with the role of productive worker.

From 27% in 1939, the percentage of the labour force made up of female workers rose to 39% in 1945.

4.3 The Situation of Women Today

4.3.1 Mother - Wife - Lover

Gender differentiation between the roles of female and male is the axis of the modern family's structure. A number of social developments this century have amplified the importance of gender in the family, and thus the importance of domesticity in women. One of these is the increased emotional investment of society in the family, and therefore of people in the family. The family has become increasingly the focus of all meaningful personal life.

If society has grown more "family-oriented" the family itself has identified more and more squarely with its physical location, the home. "Home" and "family" are now virtually synonymous. A central value of the modern family is dedication to the goal of a steadily rising standard of living.

The cost of the home has enlarged to absorb an increasing proportion of every family's income.

Before the First World War, the working-class home typically consisted of one or two rooms, crammed together with other homes sharing grossly inadequate sanitary arrangements. Since then, improvements in sanitation, in water supply, in other amenities, and

also in the general standard of home building, have led to a visible improvement in the physical aspects of family life.

Women's roles as mothers have also been subject to amplification. Childhood is not what it used to be - and still is in many societies - a short, rather little-valued prelude to the all-important business of adulthood. Modern industrial society is demonstrably child-oriented.

This view of the child accords with the high value ostensibly placed on individuality in Western society. It also owes much to the development of child psychology as a separate scientific discipline. By 1900 the study of children was established as an independent discipline. The emergence of psycho-analysis in the first decades of this century gave to childhood a lasting importance.

These developments have two main implications for women as childrearers. Firstly, knowledge about childhood as a critical period in the formation of adult character makes "successful" performance of the maternal role crucial. "Parenthood", said the anthropologist Margaret Mead of American Society in 1952, "is a responsible anxious matter... Within the family, children are given an extraordinary amount of attention, when judged by the standards of most other societies. Their needs, their wishes and their performance are regarded as central and worthy of adult attention". The consequence of this for the mother, given modern family structure, is that she becomes the principal disciplining and character-moulding parent.

The second important implication is the need for women as childrearers to be in touch with the standards of childcare - and the needs of children - specified by the experts. Until late in Western history, the only experts in childcare and child behaviour outside the family were the midwife and the teacher. Now the world is full of experts. The basic structure for the dissemination to women of knowledge about childcare includes antenatal, postnatal and child-welfare clinics and classes, health visitors, maternity hospitals, and child-health specialists. This structure began to emerge at the turn of the century. In Britain, the prototype of the modern infant-welfare clinic was opened in 1899. But information about

childcare standards has also spread in more popular form by the media, which hold up, for women's imitation rather than inspection, the image of the ideal mother, beautiful, patient, coping and utterly bound up with the world of her small child's needs.

The discovery of the child's importance has affected women more than it has men. Child psychology insisted that children needed their mothers rather than their fathers. A second source of the modern stress on maternity is a more diffuse one, what Kate Millett has called "the reaction in ideology" of the post-war years: a general reaction against the move towards sex equality in favour of a reaffirmation of traditional gender roles. In the modern family, the terms "mother" and "father " denote roles which are qualitatively different. A child's two parents are not interchangeable: the mother is the caretaker of the child, and the father its breadwinner.

A study of Motherless Families in Britain, carried out by Victor George and Paul Wilding, illustrates the popularity of the belief that mothers and fathers cannot (and should not) care for children in the same way. Despite the generally poorer economic situation of women in modern society, more people interviewed for this study believed that single mothers, as opposed to single fathers, could provide adequately for their children. "The two main reasons", comment the authors, "given for the father's inability to provide adequately for his children was a general belief that he cannot replace the mother and that he cannot provide for the emotional needs of children".

The sharp distinction between mother and father roles is given by the replies to the question asked in this study, "Should a father or mother (in single-parent family) with children below school age go to work?" While the vast majority of responses indicated that a father in this situation would be expected to go out to work, opinions were reversed in the case of mothers: mothers, it was felt, should stay at home.

In the family-role of women "mothering" is thus seen as an essential ingredient, its absence pathogenic, threatening the whole purpose of the family - the production of healthy children.

4.3.2 Outside the Family

The bulk of women's work has been, and still is, concentrated in the domestic sector. Teaching, nursing, factory work producing domestic products, and retail sales work are the occupations of most employed women in most industrialised countries. The rise of "white-collar" occupations has added low-grade clerical and secretarial work to this list of feminine occupations (and the growth of feminine clerical work is the main change in women's employment in recent years). Although office work is not domestic, it has other qualities which account for its easy assimilation to the feminine employment role: "Today's secretary", says Mary Kathleen Benet in "Secretary: An Enquiry into the Female Ghetto" "also acts as wife, mother, mistress and maid... Office work is...the business equivalent of housekeeping... Both jobs are custodial, concerned with tidying up, putting away, and restoring order rather than with producing anything... Filing is like washing the dishes, and induces the same sense of frustration. Typing a perfect letter is as transient an achievement as cooking an egg..."

Most professional women are either teachers or nurses. In 1980, women made up 52% of all school-teachers in England and Wales, but 75% of all primary school-teachers. Similar figures hold for the United States and other countries. Nursing is a 90% feminine occupation in virtually all Western countries. The role of the nurse is especially congruent with the traditional role of the female in Western culture.

> "In the United States, the nurse is referred to as "she"; in England, a nurse is referred to as "sister", be the individual male or female... The announcement of a man's status as a nurse will come as a revelation and a surprise... They (the patients) want to call us "Doctor". We say we are a nurse. They say "you are a Doctor as far as we're concerned".

Moreover, for the male nurse, "it is more than his professional role that is questioned. It is his entire sexual identity. There is a set of mental equations which go: Female + Nursing Role = Nurse, Male + Nursing Role = Homosexual". (Etzkowitz 1971).

In the United States, Britain, Belgium, Denmark, Germany, Italy, the Netherlands, Norway and Sweden, employed women are concentrated in the same five occupations of nursing, teaching, unskilled or semi-skilled factory work, domestic work and clerical work. Women are relatively scarce in "masculine" occupations:: dentistry, engineering, medicine and the law. There is a pronounced tendency for women entering "masculine" occupations to take up traditional feminine interests within these occupations. Women lawyers take up matrimonial work: women doctors take up obstetrics, gynaecology and pediatrics. One 1971 study of a group of female medical students showed the popularity of these specializations, and it also demonstrated the acceptance of the conventional stereotype of woman's role in society by these "intelligent and highly selected" women. They believed, for example, that women make more sympathetic doctors than men, are better at working with women and children, and are less good at science than men. The latter belief "is not borne out by examination results" comment the researchers who carried out the study, (Timbury and Timbury, 1971).

One computation of sex segregation in occupations over the period from 1900 to 1960 in the United States shows almost no change in the degree to which occupations are sex-differentiated, and there is no suggestion of change since 1960. Today in Britain, just over half the female work force is concentrated in three industries (out of a possible twenty-four in the Standard Industrial Classification): distributive trades, miscellaneous services (laundries, dry cleaning and so on), and professional/scientific services - which, so far are concerned, means teaching and nursing. This was a heavier concentration than in 1959. The popular impression of gender interchangeability in occupational role may be due to the fast growth of employed women in some sectors: but these sectors - for instance white-collar work - are those in which the tendency to discriminate by gender has always been strong. What has been happening is that the rapid growth in women's employment has "feminised" low-skill occupations.

The constancy of gender-differentiation patterns in occupations within Western culture is demonstrated by a comparison between the United States in 1950 and Sweden in 1962. In the former, seven tenths of all women in the labour force were found in a mere twenty different occupations. In the latter - Sweden being a country with a very different history - the proportion was exactly the same. Furthermore, in these occupations in the United States, only 12% of working men were found, and in Sweden, twelve years later, only 11.7%. In both countries two fifths of all working women were in the five basic occupations already mentioned.

Higher education does not make as much difference to the jobs women take as it does in the case of men. The majority of all women university graduates take up teaching as a career.

The domesticity of women's jobs is reinforced by the omission of one job from the employment statistics: that of housewife. One in two housewives still does not hold a job outside the home. Even in the Soviet Union, where employment work is, in terms of official ideology, a component of the femine role, eleven million women are neither studying nor out at work. Some of these women are mothers. According to a national survey of women's employment in Britain, only one in three of all adult women who have responsibility for children are employed - two out of three are not. The proportion of women with children who are not employed is highest when the children are small: 85% of those with children aged 0 - 2 years are not working outside the home. But as children become less dependent, the proportion of women employed to not-employed becomes more equal, so that 44% of those with children between five and fifteen years are employed outside the home.

The discrepancy between the situations of men and women here is not due to women's biological role in childbearing, but to their cultural role in childrearing. Maternity in this sense is, like domesticity, an essential component of femininity, and it is the interaction of the two which distinguishes the situation of the female (housewife-wife-mother) from that of the male (husband-father).

4.4 The Economic Approach

4.4.1 The supply of labour

In very general terms, the supply of labour is defined as the amount of labour, measured in person-hours, offered for hire during a given time period. Taking population as given, the quantity of labour supplied depends on two main factors. First, there are the numbers engaged in, or seeking, paid employment, which together make up the labour force or the supply of workers. This amount can conveniently be expressed as a fraction of percentage of the total population, to give an activity or labour-force participation rate. Secondly, there is the number of hours that each person is willing to supply once he is in the labour force - the supply of hours. The determinants of these two dimensions of labour supply are discussed in this section. In the U.K. official statistics, the working population is defined as the sum of the numbers of employees in employment, employers and self-employed and HM forces (which together comprise the employed labour force) plus the number of registered unemployed, excluding adult students.

Criteria for choice of jobs among alternatives in the labour market have been the centre of discussion among the economists from as early as the publication of the first text book in economics, "An Inquiry into the Nature and Causes of the Wealth of Nations", by Adam Smith. Those who followed Smith, according to Rottenberg (1956), developed the subject by interpreting Smith here, revising him there, and describing more up-to-date versions of labour market in this way:

> "The whole of the advantages and disadvantages of the different employment of labour and stock must, in the same neighbourhood, be either perfectly equal or continually tending to equality. If, in the same neighbourhood, there was any employment, evidently either more or less advantageous than the rest, so many people would crowd into it in the one case, and so many would desert it in the other, that its advantages would soon return to the level of the other employments. This at least would be the case in a society where things were left to follow their natural course, where there was perfect liberty, and where every man was perfectly free both to choose what occupation he thought proper, and to change it as often as he thought proper. Every man's interest would prompt him to seek the advantageous and to shun the disadvantageous employment".

The theory has two parts. One relates to the nature of occupational choice, and the other relates to the consequences of this behavioural choice system. Occupations equal in other respects tend to be equal in price, but occupations unequal in other respects would be unequal in price. Just as price differentials compensate for differentials in other qualities, so differentials in other qualities compensate for differentials in price. It is very important to note that the early economists said that it was "the whole of the advantages and disadvantages" in all employments that would be equal. Thus occupational choice was understood by the economists to be made with reference to the total complex of attributes which attach to jobs. But since the real markets are not always free, the classical economists dealt with three types of circumstances in the labour markets in which, during their time, men were distributed among occupations by criteria other than relative net advantage. First, some persons who were disposed to enter a trade were prevented from entering it. Second, some were encouraged to enter a trade that they would otherwise not be disposed to enter. Third, some were obstructed from moving from one employment to another. Criticism of the classical theory (Lester 1954) supports that structure of wages plays a very small role in the choice process and argues that if people were asked why they had chosen to enter their crafts or why they have (or have not) made job changes, it would be found that most workers make choice decisions with reference to the "human relations" factors which attach to jobs or for "personal reasons". Another view expressed mainly by Myers and Maclaurin (Rottenberg (ibid)) is that workers value security highly. They prefer present employment at lower prices to other employment at higher, because moving will diminish their security. Therefore, workers are unresponsive to differentials in prices in alternative employments. Workers, according to these authors, are especially insecure in periods of less than full employment, and especially in these periods, price differentials will not move them to change jobs. Therefore, the classical doctrine is especially deficient for any understanding of behaviour at times of cyclical troughs. The same authors, in another of their studies, argue that workers do not act rationally in labour markets. They do not make comparisons of net advantage in alternative employments, they do not even examine the

evidence which is available to them. Their decisions stem more from habit than from rational calculation. Myers and Maclaurin believe that unless workers have reasonably accurate and complete knowledge of the extent and nature of employment opportunities, there is no basis for assuming a purposeful movement of workers among jobs.

4.4.2 Households and participation decisions

Recent studies have sought to improve on the traditional analysis by explicitly recognising (1) that decisions about who enters the labour force, and the relevant question of how many hours to work, are made in the context of the family or household as part of its decision about the optimum allocation of its member's time between alternative uses (Ashenfelter and Hackman, 1974; Gronau, 1973) and (2) that non-market activity is composed not only of leisure in the everyday sense, but also of household work which is one input in the production of a variety of home-produced goods and services, such as home cooking, child care and a tidy house (Mincer, 1962).

Considering the household as their unit of analysis, Bowen and Finegan (1969) argued that the allocation of a member's time between work in the market and all other non-market uses of time such as working in the household, eating, sleeping, pursuing education and leisure, is determined by four classes of variables:

(a) A household's allocation of time is held to reflect its tastes for market goods relative to leisure and to home goods (e.g. its valuation of the services of a paid childminder relative to a mother's care) and its preferences about the performance of particular tasks by particular family members (e.g. its attitudes to the wife's performing heavy manual work during night shifts in a factory, and to the customary social role in the particular country or even part of the same country of the male as a breadwinner).

(b) The household's time allocation decision will also reflect the expected market earnings of its members (net of tax, other stoppages and travelling expenses).

(c) The household's members productivities or, more precisely, other comparative advantages in various non-market activities, and

(d) The allocation decision of the household will also reflect its total available resources, which are made up of the total time at its disposal (i.e. 24 hours per member per day), its income from sources other than market work and the monetary value of its assets.

The income effect: The example which is usually given, in order to see how the above factors interact to determine the labour force status of each family member, is the case of a household that experiences a large increase in its resources (e.g. the inheritance of a large annuity). This situation represents the familiar case of an income effect which says that the labour supplied by the household is expected to decrease because the increase in non-labour income enables family members to "purchase" more of their preferred activity. It can consequently be seen as a decrease in the household's members labour force participation, as either an elderly member takes early retirement, or a working wife becomes a full-time housewife or resumes her education, or children stay on longer in, or return to, full-time education. Table 4.1 shows when employment starts by marital status sex and age in Britain.

Table 4.1 Job starts: by marital status, sex, and age 1977

Great Britain

(Percentages)

	16-24	25-34	35-44	45-54	55+	Total (=100%)	Example size[2] (numbers)
Men[1]							
Married	19	13	10	6	5	8	6,474
Non-married	38	16	6	6	5	25	2,145
Total	34	13	9	6	5	13	8,619
Women[1]							
Married	32	26	17	8	5	16	4,052
Non-married	41	18	13	7	6	25	1,796
Total	38	25	16	8	5	19	5,848

1 Working people who have started working for a new employer during the last 12 months (including people starting work for the first time ever).

2 Sample includes all people who were working in the reference week, that is, both employees and self-employed people, including full-time students who also had a job.

Source: Social Trends 12, 1982.

4.4.3 Effect of Changes in Market Earnings

In order to illustrate the effect of a change in market earnings open to a household member, the example of the wage rate of nurses' increases, will be assumed. In households that already include a working nurse, this increase results provided that her hours of work remain unchanged, in an income increase for the family, which may result in decreased participation by other family members for reasons mentioned in the previous paragraph, or alternatively, it may lead to other members working shorter hours in their market activity. In households where wives have left work to raise their families, some may be tempted to return to work as nurses by the prospect of the increased earnings. In this case, the increase in market earnings results in an increase in the price of non-market activities, since

each hour spent in non-market activities now involves a greater opportunity cost in the form of foregone earnings. (The earnings foregone by using hours in non-market rather than market activity). A substitution effect arises from the changed price of non-market relative to market activity, and this encourages the wife (traditionally) to substitute market activity for the now more expensive non-market activities. The wife's resumption of employment can be expected to bring about various changes to the household's non-market production and consumption activities. In its production of home goods, there can be expected to be some reallocation of housework to husbands and children, together with some adjustments in the household's production methods. There may be, for example, increased use of hired labour and the employment of more capital-intensive production methods, with the increased use of various labour-saving devices. In its consumption activities, the household may also decide to substitute market for home goods, with convenience meals replacing home cooking, or it may simply decide to consume less goods (e.g. by tolerating a less tidy house).

Table 4.2 and Fig. 4.1 present the activity rate, by sex, in the EEC countries.

4.4.4 Primary and secondary workers

In the analysis of labour supply, it is usual to subdivide the total potential supply of workers into two groups according to their degree of attachment to the labour force. Those who have a high degree of attachment, principally married men as the main breadwinners of the family, are likely to be permanently attached to the labour force until they reach retirement age and are referred to as primary workers.

Table 4.2 Economic activity rates[1]: by sex, - EEC Comparison, 1979

Millions and percentages

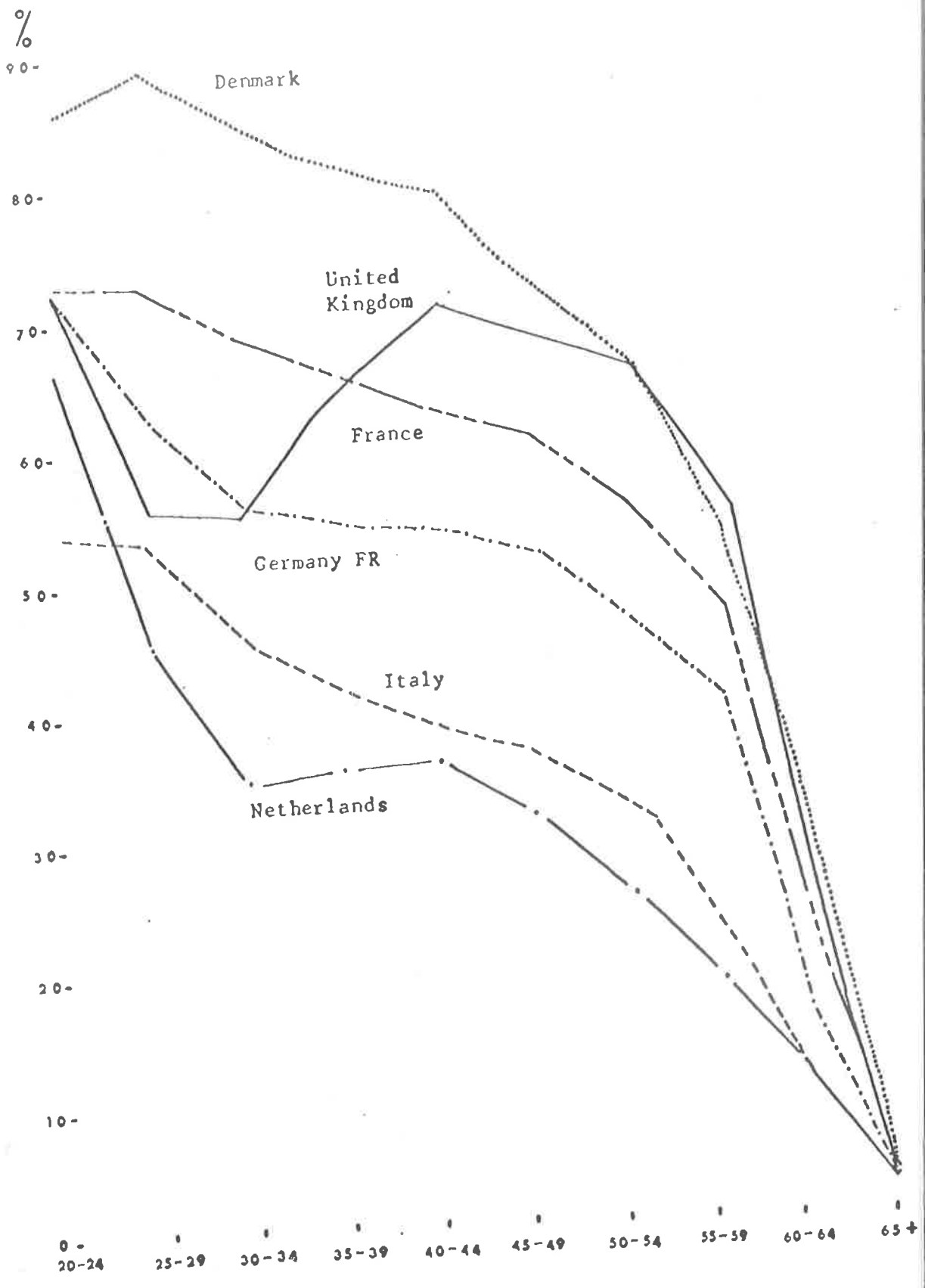
	Males		Females		All persons	
	Population age 14 or over (millions)	Percentage economically active	Population aged 14 or over (millions)	Percentage economically active	Population aged 14 or over (millions)	Percentage economically active
United Kingdom	21.4	73.7	23.2	44.3	44.6	58.4
Belgium	3.9	65.5	4.0	33.2	7.9	48.9
Denmark	2.0	73.7	2.1	55.2	4.1	64.2
France	19.3	70.6	21.3	44.8	40.6	67.1
Germany (Fed.Rep.)	23.6	69.5	27.0	37.6	50.5	52.5
Irish Republic	1.2	76.0	1.2	31.6	2.4	53.9
Italy	21.3	68.2	23.1	30.3	44.4	48.5
Luxembourg	0.1	69.1	0.2	28.3	0.3	48.0
Netherlands	5.4	67.6	5.5	29.0	10.8	48.1
All EEC Countries[2]	98.2	70.3	107.4	38.6	205.6	53.7

1. Labour force (including those available for work whether employed or unemployed) as a proportion of the population aged 14 or over.

2. Excluding Greece which was not a member of the EEC in 1979.

Source: Social Trends 12, 1982.

Fig. 4.1 Female economic activity rates: by age groups, EEC Comparison, 1979.



Source: Social Trends 12, 1982.

others - such as married women who move into and out of the labour force in response to various family and other circumstances, and students who join the labour force at various times while completing their education - have a lower degree of labour force attachment and are termed secondary workers. This classification of workers as primary or secondary corresponds to a partition of the total labour force into its permanent and transitory components.

Primary Workers:

It is clear that the labour-force participation rates of primary workers are higher than those of secondary workers and, not surprisingly, their variability is generally more easily explained. In a detailed study of US experience, Bowen and Finegan (ibid) considered the determinants of the labour-force participation rates of men in their prime working lives or prime age males (defined as those between 25 and 54 years of age). These authors pointed out that in 1967 the participation rate of this group as a whole was to the order of 97%, and they divided the factors that determine the labour force status of prime age males into personal characteristics and variables reflecting market conditions. From their analysis of 1960 US census data, Bowen and Finegan concluded that the most important factor in determining the labour force status of prime age males, is marital status. In the census week of 1960, the participation rate of men of this age group (living with their wives) was 97.6% compared to 79.1% for the separated, 81.3% for those who had never married, 83.1% for widowers and 84.3% for the divorced. Other personal characteristics that were found to exert a significant influence on the labour force participation of prime age males include race, number of years of schooling and the size of non-labour income. Rates were found to be higher for whites than for similar blacks and to rise with the number of years of education. Participation rates were also found to be negatively related to the size of non-labour income.

In their analysis of the influence of labour market conditions, Bowen and Finegan found the participation rates of prime age males to be positively related to their expected market earnings. They also

found participation rates to be negatively related to unemployment and positively related to the "maleness" of the job mix. In addition, the wage variable was found to exert the expected positive influence on participation rates.

Secondary Workers:

Married women are the most important group of secondary workers, and their labour supply has attracted considerable research interest. Studies in the US (e.g. Mincer 1962; Cain, 1966; Bowen and Finegan, 1969) have shown that participation rates of married women are inversely related to their husband's incomes and positively related to female earnings. Similar findings have emerged from recent studies by Greenhalgh (1977)and McNabb (1977) of British data derived from the Population Census of 1971. Husband's income, according to these studies, affects his wife's labour force participation in much the same way as non-labour income does. The observed positive influence of female earning indicates that improvements in prospective market earnings, which increase the opportunity cost of non-participation, increase married women's participation rates by encouraging some wives to begin and others to resume market work.

Other factors that have been shown to exert a significant influence on the participation rates of married women include the number and age of their children; their level of educational attainment and their colour. Not surprisingly, the presence of children, particularly those of pre-school age, has been found to inhibit married women's participation, and rates have been found to rise with educational attainments and to be higher among non-whites. As far as education is concerned, it can be argued that because education increases a married woman's potential market earnings, it increases the value of her time in market activity and, therefore, it increases, ceteris paribus, the probability of her being in the labour force. In addition, it is probably also true that education influences participation via tastes, in that education increases a married woman's preference for the challenges and social interactions offered by the sorts of market work now open to her.

As far as the differences in participation by ethnic group, Bowen and Finegan showed that in the USA the participation rates of black married women are higher than those of otherwise similar white women. Likewise, Greenhalgh's results suggest that in Britain, participation rates are higher among foreign-born married women than among those born in the U.K. While cultural differences in attitudes towards wives' roles are important in explaining this finding, various further explanations were put forward by Cain (1966). In particular, he suggested that in the USA, the lower degree of job discrimination faced by black women than by men is one factor that results in a tendency for black households to substitute wives' market work for that of husbands.

It is, finally, very important to stress the obvious conflict that exist between the labour-force participation behaviour of married women in time series and cross-section data. While cross-section analyses have shown that wives' participation rates are negatively related to their husband's incomes, the evidence from time series studies shows that married women's participation rates have risen dramatically over time as Table 4.3 shows (e.g. from 29.7% in Britain in 1961 to 49.9% in 1979) despite the increasing real incomes of their husbands. This apparent contradiction attracted considerable attention in the early literature and was eventually resolved by Mincer (1962) explicitly recognising the distinction between permanent and transitory income (Friedman, 1957). Mincer, in effect, showed that over time the upward influence of rising female earnings on wives' participation rates was of such a magnitude that it outweighed the downward influence of rising husbands' (permanent) income on their wives participation rates and hence gave rise to the observed upward trend.

Analysis of the participation rates of various age-sex subgroups reveals that females as a whole, and in particular married ones, are more sensitive to changes in employment opportunities than men are and that in both sexes sensitivity is higher among extreme age groups than among middle ones (Bowen and Finegan (ibid)). In other words, the responsiveness of participation to employment opportunities is greater among secondary (mainly married women) than among primary workers.

Table 4.3 Economic activity rates[1]: by age and sex

Great Britain Percentages

		15-19[2]	20-24	25-44	45-59/64[3]	60/65+[4]	All ages
Married females							
Estimates[5]	1961	41.0	41.3	33.1	32.6	7.3	29.7
	1966	43.6	43.5	41.8	46.3	12.1	38.1
	1971	41.6	45.7	46.4	53.4	14.2	42.2
	1977	54.7	59.0	59.1	61.9	12.3	50.4
	1979	50.9	57.8	58.7	61.0	10.1	49.6
Projections[6]	1980	51.1	57.7	58.6	61.4	9.8	49.3
	1981	50.7	57.6	58.0	61.8	9.3	48.8
	1984	50.5	57.6	58.8	64.1	8.9	49.5
	1986	50.9	57.7	59.3	65.0	8.0	49.9
Non-Married females							
Estimates[5]	1961	73.2	89.4	84.8	70.5	12.1	50.6
	1966	68.4	86.7	84.2	72.8	12.9	49.2
	1971	57.2	81.2	80.4	73.4	11.0	43.7
	1977	62.7	78.0	78.9	71.8	7.3	42.1
	1979	65.9	78.1	78.4	70.9	5.3	42.8
Projections[6]	1980	65.6	78.9	78.2	70.8	4.8	42.9
	1981	65.4	79.4	78.1	70.7	4.4	43.1
	1984	65.1	80.2	77.8	70.7	4.0	43.6
	1986	64.8	80.1	77.7	70.5	3.6	43.6
All females							
Estimates[5]	1961	71.1	61.8	40.3	41.4	10.0	37.3
	1966	66.5	61.6	47.3	52.0	12.6	42.2
	1971	55.9	60.1	50.6	57.4	12.4	42.7
	1977	62.0	67.7	61.9	63.8	9.5	47.4
	1979	64.8	67.9	61.8	62.9	7.4	47.0
Projections[6]	1980	64.5	68.5	61.7	63.2	6.9	46.9
	1981	64.2	68.9	61.4	63.6	6.5	46.6
	1984	63.8	69.2	62.3	65.4	6.1	47.2
	1986	63.6	69.1	62.8	66.1	5.5	47.4
All males							
Estimates[5]	1961	74.6	91.9	98.5	96.8	25.0	86.0
	1966	70.6	92.6	98.2	95.1	23.5	84.0
	1971	60.9	89.9	97.9	94.5	19.4	81.4
	1977	67.9	89.0	97.8	92.7	13.4	79.8
	1979	70.7	88.3	97.4	91.2	10.2	78.6
Projections[6]	1980	70.7	88.4	97.2	89.8	8.9	77.8
	1981	70.9	88.9	97.0	88.4	8.0	77.3
	1984	71.2	89.7	96.9	86.1	7.1	77.2
	1986	71.3	90.0	97.2	85.9	7.2	77.1

Table 4.3 /Ctd...

1. Excluding students in full-time education
2. From 1975, 15 years olds are excluded as a result of the raising of the school-leaving age. Figures from 1977 therefore relate to 16-19 year olds.
3. 45-59 for females, 45-65 for males.
4. 60+ for females, 65+ for males.
5. Estimates for 1961-71 are taken directly form the Census of Population. Estimates for 1977-79 are based on the EEC Labour Force Surveys.
6. Projections are based on estimates from the 1979 EEC Labour Force Survey.

4.5 Legal Status

The first important piece of legislation affecting women in employment was The Factories Act 1961 which laid down statutory controls on working hours, limiting their working day to 9 hours or 48 hours per week in any establishment which fit the definition of a factory as laid down by the Act. The first rights women received came in the Employment Protection Act (1975) which gave all women, irrespective of how long they had worked, three rights:

(a) A dismissal because of pregnancy is unfair;

(b) She is entitled to maternity pay for up to 6 weeks;

(c) She is entitled to return to work within 29 weeks of confinement - should the employer refuse to re-engage the employee, she shall be treated as unfairly dismissed.

The Equal Pay Act which came into force in December 1975 aims to eliminate discrimination between men and women with regards to pay and other terms and conditions of employment. The Act applied to men and women of all ages, establishing the right of a female employee to equal treatment in respect of pay and terms of employment. This Act

has managed to reduce the gap between the earnings of males and females but has done nothing to create equal job opportunities. This was attempted by the Sex Discrimination Act which was brought into operation at the same time as the Equal Pay Act. Its two main purposes were to outlaw discrimination between men and women based on sex, or being married, in employment, and to eliminate existing discrimination between sexes and to promote equality of opportunity through the Equal opportunities Commission.

Although it is difficult to measure the effectiveness of these Acts, one can say with almost a certainty that the Equal Pay Act has had a greater impact, while with the Sex Discrimination Act, a distinction has to be made between direct and indirect discrimination.

4.5.1 More than legal equality

It might not be the most convincing of arguments in favour of equality in employment between men and women, but it is a fact that legislation against racial discrimination in Britain was in existence some years before the introduction of the Sex Discrimination and Equal Pay Act. In fact, the broad rule of the Race Relations Act in 1968 is not to treat one person less favourably than another by reason of his colour, race, ethnic or national origin. In employment situations this rule is applied to the application for employment; the consideration of terms and conditions of employment, and to opportunities for training and promotion, and also for dismissal.

The existent inequality between men and women in employment is not just a legal matter, but more widely, it is firstly a problem of attitudes of the members of the society towards women's "weak nature", and secondly, a problem of women's attitudes towards employment and their willingness towards going out to work. For the latter, the results of a recent survey among women are presented in the next paragraph, while for the former, the well documented ideas of Lesley Doyal (1979) are relevant. Doyal maintains that the Victorian belief in the physical weakness of women, and their subordination to the functioning of their reproductive systems, has been gradually

transformed during the twentieth century into an emphasis on the psychological inadequacies and weaknesses of women. Some others have pointed out the significance of the work of Freud in this transition from physical to psychological justifications of female inferiority (Ehreureich 1976).

4.6 Women's Attitudes About Their Role

A survey among 536 readers of "Townswomen", the journal of the National Union of Townswomen Guilds (Study Commission on the Family, December 1980) showed that two thirds of the sample thought the idea of mothers going out to work was good for women, but three quarters thought it was bad for children. Almost as many thought it was bad for families. The fact that women work more often outside the home was mentioned in 25% of the replies as contributing to higher divorce rates. Almost all the respondents place happily married parents among the most important factors contributing to a happy childhood.

The report of the survey says that the responses reveal a considerable conflict of interests about the role of women in the workforce.

More than 70% of the respondents gave money as the main reason why women go out to work, although the need for outside interests and social-economic independence were also mentioned.

Paid work, the report says, was seen by many as a positive element in women's lives, offering a chance to overcome family difficulties, both financial and marital. But there were "a striking number of responses", which cited disparaging reasons for women working with frequent suggestions that such women were greedy, selfish, irresponsible or brain-washed. The number of women who thought that women worked to make ends meet, almost equalled those who thought they did it to provide them with an independent source of money. Less than 25% thought the money was used for extra luxuries.

CHAPTER FIVE

DETERMINATION OF POOL OF QUALIFIED NURSES

5.1 The Problem

It was felt very strongly by the team organising the present study that the sample of nurses under investigation should be not only representative, but it should also be studied over a long period of time because most of the research which has been conducted into careers of qualified nurses has been limited to the first few years after they qualify, or upon what nurses are currently doing. Few have embarked on longer follow-up studies which identify the whole pattern of the nurses' careers over a number of years. In the case of nurses, a substantial proportion of whom are females, this is particularly important. A long term observation can decide whether she has a "career" at all - i.e. whether a break which often occurs only a short time after qualifying (marriage and childbirth) - is no more than a temporary interruption of the end of a professional career. The scarcity of studies of this nature can be attributed to several factors but it seems that the most important one is the difficulty of generating contacts with individuals who qualified some years ago.

Generating contacts with qualified nurses in itself presents a methodological problem of some magnitude particularly when no up-to-date lists are kept. Such is the case in England and Wales. The nurses who successfully complete their training programmes become eligible for the Register or the Roll kept by the General Nursing Council (GNC) for England and Wales and since 1950 there has been a "once and for all" fee payable on registration or enrollment. As a consequence, the records became out of date as nurses omit to notify changes of names on marriage, or addresses. In the absence of a "live" register of qualified nurses, securing the names, addresses and characteristics of nurses can be a time consuming and costly exercise. The DHSS recently authorised a study to be conducted by the Institute

of Manpower Studies (IMS), which will cost 34,000 simply to secure the names and addresses of 10,000 10,000 registered sick children's nurses.

It is not, therefore, too surprising that several researchers are dealing with the various methodologies and approaches in connection with collection of data on the status of nurses. United Kingdom based studies of this nature are well documented by McGurire (1960). A more recent study reviewing the different methodologies is that of B.B. Singh (1981).One approach which has been tried here at UMIST is that of "Leafleting and Snowballing". This approach was developed as a consequence of a request by a multi-district AHA, who wanted to know the whereabouts of qualified nurses. It was felt that this information should have a bearing upon the decision then being taken on the location of a new District General Hospital. It can be described as follows: Leaflets, which could be folded into a business reply format, were simply inserted through all the letter boxes in the particular community (Attached I). The delivery was performed by an agency specialising in such a service which, at the time was associated with the distribution of advertising material for particular products ("soap coupons"). This proved to be a surprisingly cheap form of distribution. When a leaflet was returned, a questionnaire was immediately sent to the respondent along with a business reply envelope. The final question requests the names of other nurses whose whereabouts are known to the respondent and they in turn were sent a questionnaire. Naturally, in the case of these "secondary" contacts, a covering letter explained how it came about that they were being contacted. Each questionnaire produced, on average, one further name but as the snowballing continued so these additional names related to people who already appeared on the updated file. of the 3790 questionnaires sent out in this manner, 48% were returned completed. The approach is a most cost-effective means of establishing contact with the bulk of the nurses residing in the community. Further details of the methodology are to be found in Tun (1977). Given that the completion of the questionnaire is a time consuming process, it is very probably the case that the percentage success would have been higher had only names, addresses and qualifications been sought.

In the present study, the methodology applied is quite different and is described in the following paragraphs together with the associated problems of distributing the especially prepared questionnaire. It is a combination of the Nursing School Records approach adopted by Everest et. al. (1979) and Bergman's (1975) school-classmate method in which she obtained data on work-life of Israel registered nurses using two methods (a) through school and classmate and (b) through contact with the graduate herself using a questionnaire.

5.2 The Sample

The subject of this study is all female nurses who qualified from the Othello Nursing Schools over the period 1959 - 1980. Male nurses and those recorded outside the United Kingdom were excluded. As has already been noted prior to the 1974 reorganisation, the position of the nursing schools was different. There were, then 432 schools in England and Wales each of which accommodated an average of 200 learners. Now there are around 200 schools of nursing in the N.H.S. with an average of almost 500 learners in each. A large majority of schools are organised on a district basis within a multi-district area. Midwives, district nurses, and health visitors are trained in other centres and numerous institutions provide post-basic courses (a course of training after the basic qualification leading to a further qualification).

Othello Nursing Schools, however, are not typical ones. Although the "Central" Nursing School is very much so and serves the needs in SRNs and SENs for the District, the two others are "accidentally" located within the Health District's jurisdiction. One is located in a large hospital for the Mentally Handicapped which is, in effect, geographically outside the District. This hospital serves the needs of the Region and produces RNMS (Registered Nurse in Mental Subnormality) and SEN (MS). The third - which used to belong to another Health Authority until 1974 and is going back again under the

latest reorganisation - is located in a small hospital 8 miles away from the Othello General Hospital, where the Central School is located. Nonetheless, in this chapter, no differentiation has been made in the analysis as far as the school of graduation of the traced nurses is concerned.

5.3 The Aims

This tracing exercise through the Nursing Schools has been undertaken with three objectives in mind. Firstly, to find out what proportion of the graduating class from 1959 and each subsequent year up to 1980 can be traced. This will enable us to ascertain just how effective it is as a method of establishing contact with nurses for any future studies of this nature. Secondly, having traced a sufficient number of nurses, to have a detailed study of their careers using a specially designed questionnaire (Appendix A). Thirdly, to determine the pool of qualified nurses living in the district and establishing contacts with the health authority-especially with those not working - in order to bring them back to nursing.

The health authority and the nurse managers, promised "every possible help" with the exercise, as the purpose and the different stages of it were explained. The importance of their co-operation was stressed. Data gathered and analysed from the questionnaire is the subject of the following chapters. Results of the tracing exercise in terms of numbers and proportions traced after each phase as well as the difficulties and reactions to the study are presented here.

5.4 The First Phase

Based on the above criteria regarding the inclusion of qualified nurses in the study, the names and addresses of all members of the sample were secured from the records of the Nursing Schools. A total of 1826 names and addresses were collected, of whom 143 were overseas nurses (table 5.1). Most of these addresses were parental addresses supplied by students on entering training and were,

therefore, up to 25 years old. A very small number of these were the local addresses of the students during training. A code number was allocated to each of them and two letters and a prepaid postcard were mailed. One of the two letters was explanatory (see Attached II) and the other was a short letter addressed to the "Opener of letter" (Attached III). All addresses were typewritten and after the name of each nurse, the words "Or the Occupant" were inserted. The postcards were used to ascertain whether the addresses we had used were correct or not (Attached IV).

Table 5.1 Names and Addresses Collected by Year of Graduation

Year of Graduation	Home Nurses	Overseas Nurses	Total
1959	23	4	27
1960	26	2	28
1961	38	4	42
1962	34	6	40
1963	39	2	41
1964	40	5	45
1965	52	7	59
1966	42	2	44
1967	57	11	68
1968	68	7	75
1969	74	11	85
1970	82	21	103
1971	68	13	81
1972	89	8	97
1973	94	6	100
1974	108	11	119
1975	102	9	111
1976	154	7	161
1977	154	3	157
1978	159	1	160
1979	142	2	144
1980	38	1	39
Total	1683	143	1826

A total of 1683 letters - to the home nurses only - were sent out. Within a month, 787 postcards had been received representing a response rate of 47%. In this number a total of 142 letters are included which were returned by the Post Office marked "gone away", "demolished", "not known" or "not occupied". In addition to that, 17 cards indicated that the nurses had gone abroad and 2 were deceased.

Table 5.2 gives the number and the percentage of the postcards returned by year of graduation, while in Fig. 5.1 the "true" numbers traced - excluding from the total those for whom their whereabouts are not known - are shown.

In Fig. 5.1 a comparison is made with Singh's (1981) result who used almost the same approach in a multi-district A.H.A. with four Nursing Schools. The pattern of the traced numbers is quite similar for both exercises.

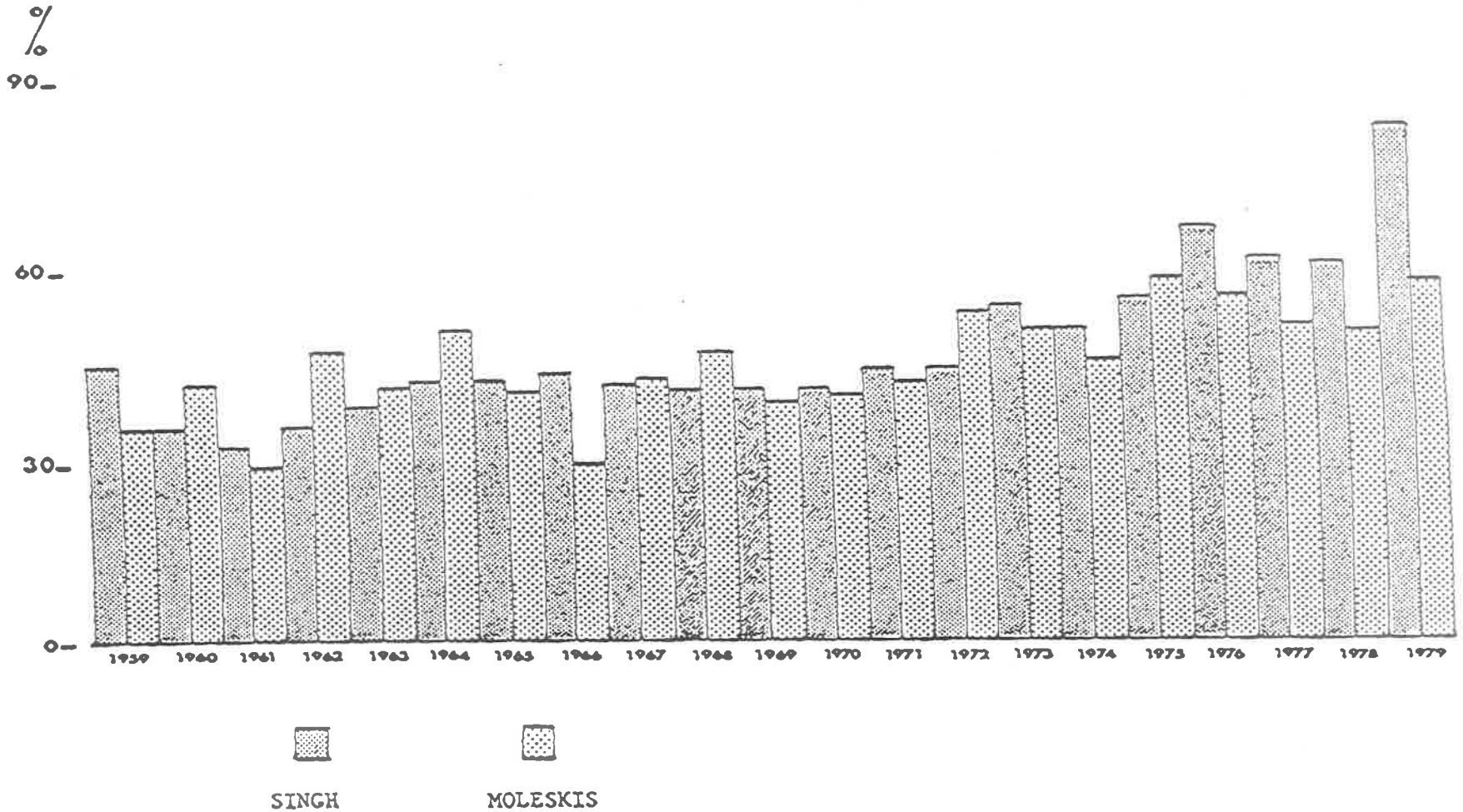
5.5 The Second Phase

This phase was designed to contact the nurses who had been traced during the first phase by sending them a questionnaire and, at the same time, asking them to supply the addresses of members of their class so far uncontacted. These were listed on a separate sheet of paper sent with the questionnaire. The names which had not been traced so far were stored on a PDP11/34 computer and were generated according to the name we were asking for. The other obvious and necessary step was to have the questionnaire ready (more about the questionnaire in Chapter 7). A cross-checking through the nurses Pay-Roll employed by the Health District with the names already traced was performed for those not found on the Pay-Roll and the letters with the questionnaire and the list of class-mates were sent to their own addresses; while for those on the Pay-Roll (whether traced during the Phase 1 or not) the District Personnel Officer (Nursing) promised to distribute them through the administrative channels. A promise was also made by the same officer that a letter soliciting the co-operation of

Table 5.2 Postcards returned by the Year of Graduation (Phase 1)

Year of graduation	Total	% of original Sample
1959	8	35
1960	11	42
1961	11	29
1962	16	47
1963	16	41
1964	20	50
1965	21	40
1966	12	29
1967	24	42
1968	31	46
1969	28	38
1970	32	39
1971	28	41
1972	46	52
1973	46	49
1974	47	44
1975	58	57
1976	83	54
1977	76	49
1978	76	48
1979	79	56
1980	18	47
Total	787	47

Fig. 5.1 Comparison of the results for Phase 1



nurses in the completion of the questionnaire would be, and the addresses of their class-mates were going to be, displayed on the wardboards. This nursing officer had been designated by the Health Authority as the liaison officer for the purpose of this study. In addition to that, a considerable amount of time was spent explaining and justifying the questions included in the questionnaire. This was done in order to make the Personnel Officer aware of the answers to such inquiries since the name and telephone number of that officer was going to be included in the covering letter in case any nurse wanted any advice on the completion of the questionnaire and the aims of the study. When the letters were ready and addressed to the individual nurse in the hospital she worked in, they were delivered to the Personnel Officer for the next step i.e. circulating them through the system. We naturally presumed that there had been some preparation. Unfortunately, the first we knew of the absence of any work in that direction was when the supervisor of this study was approached by a reporter from the local newspaper indicating that several nurses had been in contact with him complaining about some of the questions. We spent a long time on the telephone explaining that we were not prying into people's private affairs and the reporter produced an article bearing a negative headline but which did provide both sides of the argument.

The Nursing Times ran a part of that article but simply reported the negative side of it i.e. "Nurses up in Arms". Clearly a lot of bad feeling had been engendered. However, as we discovered later by speaking to nurses in the District, the questionnaire had "come out of the blue" and nobody knew anything about it in the wards, not even the trade union representatives. It is not, therefore, surprising that while the response rate of those questionnaires sent to the nurses' home addresses was 40.1%, only 19.8% responded from those distributed through the hospital's system. (Table 5.3).

Whatever the underlying reasons for such a reaction of the nurses, there was an obvious impact on the data collection exercise. Nonetheless, our request for addresses was, relatively, quite satisfactory. In all, 265 "lists" with more than 600 names and addresses were returned. These names were checked against the "master list" and if they had not been already traced, their names and addresses were noted. This process generated 116 such new cases as Table 5.4 shows. In Table 5.5 the number of nurses traced during the first two phases and the "true" number traced i.e. those whose whereabouts are known, are shown. In Tables 5.6 and 5.7 the nurses traced by the year of graduation and the "true" proportion of each year of graduation traced for both phases are shown respectively. Fig. 5.2 shows that the similar pattern of numbers traced with that of Singh (ibid) is continued for both phases taken together. It has to be noted, however, that the comparison of the Phases 1 & 2 is done for the "true" numbers traced only i.e. those of whom their whereabouts are not known are excluded.

Table 5.3 Response rate of the Nursing Survey of the Othello Health District

	Questionnaires Sent Out	Questionnaires Returned	Per Cent
Through Administrative Channels			
District General Hospital	416	85	20.4
Community	201	33	16.4
Hospital One	75	20	26.6
Hospital Two	41	4	9.8
Hospital Three	36	10	27.8
Hospital Four	30	5	16.7
Hospital Five	11	3	27.3
ALL HOSPITALS	810	160	19.8
DIRECTLY TO THE NURSES' HOME ADDRESSES	297	119	40.1
TOTAL	1107	279	25.2

Table 5.4. Addresses Supplied by Friends (Phase 2)

Year of Graduation	Total	Year of Graduation	Total
1959	2	1970	9
1960	-	1971	8
1961	-	1972	4
1962	4	1973	5
1963	8	1974	3
1964	4	1975	14
1965	9	1976	7
1966	2	1977	10
1967	9	1978	6
1968	4	1979	1
1969	7	1980	-
		TOTAL	116

Table 5.5 Number of Nurses Traced (Phases 1 & 2)

Year of Graduation	Nurses Traced	"True" Nos Traced
1959	10	6
1960	11	8
1961	11	6
1962	20	16
1963	24	20
1964	24	17
1965	30	20
1966	14	12
1967	33	22
1968	35	21
1969	35	29
1970	41	34
1971	36	27
1972	50	37
1973	51	47
1974	50	46
1975	72	61
1976	90	77
1977	86	82
1978	82	77
1979	80	78
1980	18	18
TOTAL	903	761*

* Includes those abroad (34) and dead (6)

Table 5.6 Nurses traced by the Year of Graduation (Phases 1 & 2)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	10	43	1971	36	53
1960	11	42	1972	50	56
1961	11	29	1973	51	54
1962	20	59	1974	50	46
1963	24	62	1975	72	71
1964	24	60	1976	90	58
1965	30	58	1977	86	56
1966	14	33	1978	82	52
1967	33	58	1979	80	56
1968	35	51	1980	18	47
1969	35	47			
1970	41	50	TOTAL	903	54

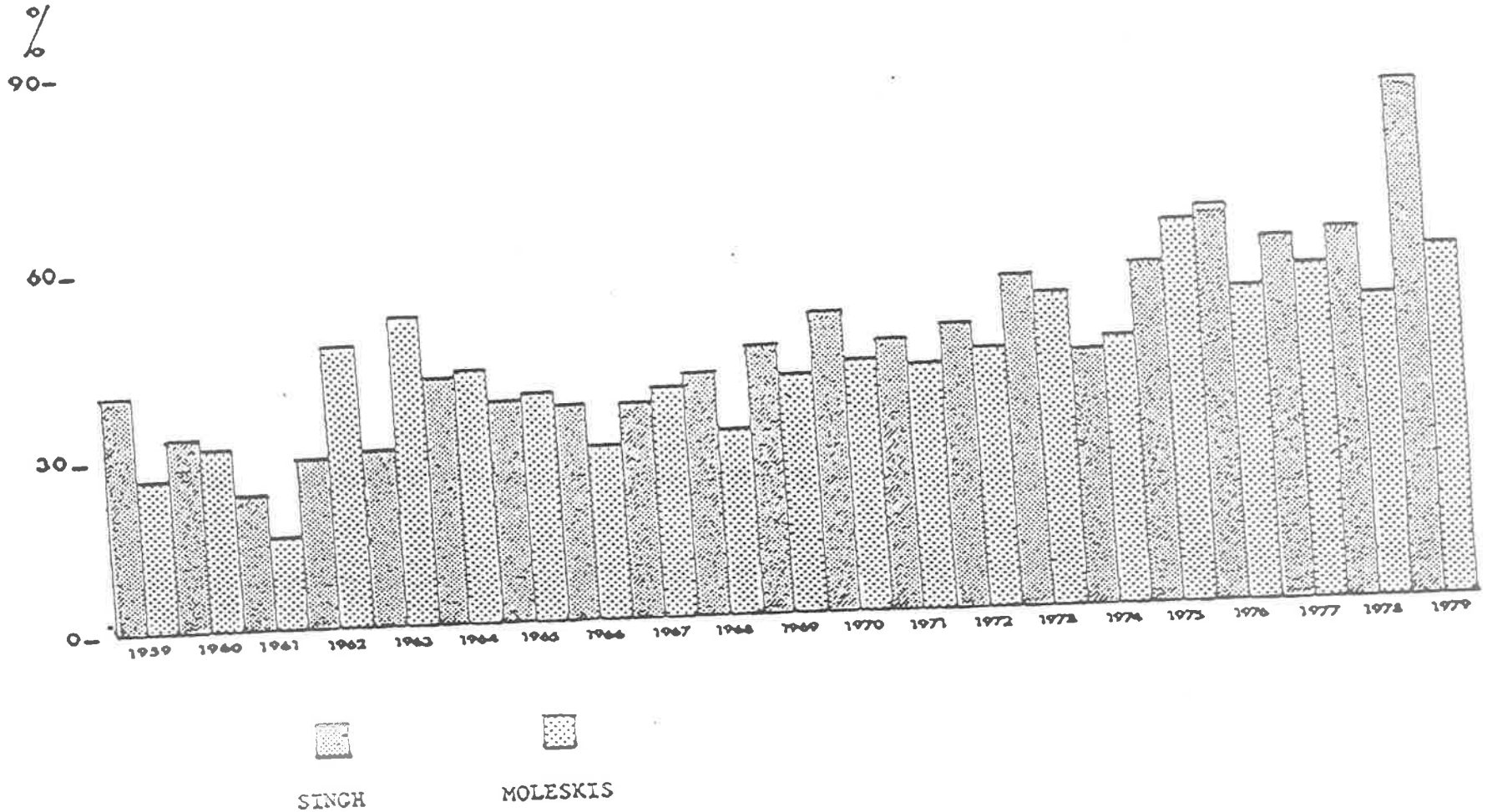
Table 5.7 "True" Proportion of Each Year of Graduation Traced

(Phases 1 & 2)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	6	26	1971	27	40
1960	8	31	1972	37	42
1961	6	16	1973	47	50
1962	16	47	1974	46	43
1963	20	51	1975	61	60
1964	17	42	1976	77	50
1965	20	38	1977	82	53
1966	12	29	1978	77	48
1967	22	39	1979	78	55
1968	21	31	1980	18	47
1969	29	39			
1970	34	41	TOTAL	761	45

Fig. 5.2 Comparison of the results for Phases 1 + 2

("true" numbers traced)



5.6 The Third Phase

During this phase, 120 nurses were traced through the District's Pay-Roll (Table 5.8).

The methodological necessity for a separated treatment, irrespective of chronological order, is aiming to emphasise that distinctive and laborious task which raised the percentage traced together by the three phases to 52%. Tables 5.9, 5.10 and 5.11 show in detail the analysis of those traced until this stage, following the approach adopted during the two previous phases.

Table 5.8 Nurses Traced through the Hospital's Pay-Roll (Phase 3)

Year of Graduation	Total	Year of Graduation	Total
1959	2	1970	6
1960	1	1971	8
1961	4	1972	3
1962	1	1973	10
1963	2	1974	7
1964	1	1975	3
1965	1	1976	16
1966	3	1977	8
1967	8	1978	11
1968	5	1979	5
1969	8	1980	7
			120

Table 5.9 Number of Nurses Traced (Phases 1 & 2 & 3)

Year of Graduation	Nurses Traced	"True" Nos. Traced
1959	12	8
1960	12	9
1961	15	10
1962	21	17
1963	26	22
1964	25	18
1965	31	21
1966	17	15
1967	41	30
1968	40	26
1969	43	37
1970	47	40
1971	44	35
1972	53	40
1973	61	57
1974	57	53
1975	75	64
1976	106	93
1977	94	90
1978	93	88
1979	85	83
1980	25	25
TOTAL	1023	881*

* Includes those abroad (34) and dead (6)

Table 5.10 Nurses traced by the Year of Graduation (Phases 1 & 2 & 3)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	12	52	1971	44	65
1960	12	46	1972	53	60
1961	15	39	1973	61	65
1962	21	62	1974	57	53
1963	26	67	1975	75	74
1964	25	62	1976	106	69
1965	31	60	1977	94	61
1966	17	40	1978	93	58
1967	41	72	1979	85	60
1968	40	59	1980	25	66
1969	43	58			
1970	47	57	TOTAL	1023	61

Table 5.11 "True" Proportion of Each Year of Graduation Traced (Phases 1 & 2 & 3)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	8	35	1971	35	51
1960	9	35	1972	40	45
1961	10	26	1973	57	61
1962	17	50	1974	53	49
1963	22	56	1975	64	63
1964	18	45	1976	93	60
1965	21	40	1977	90	58
1966	15	36	1978	88	55
1967	30	53	1979	83	58
1968	26	38	1980	25	66
1969	37	50			
1970	40	49	TOTAL	881	52

5.7 The Fourth Phase

The set-backs consequent upon the lack of communication which had culminated in the low response rate to the questionnaires sent and consequently to the tracing exercise, demanded a new approach.

Firstly, the "appearance" of the questionnaire itself had to change. While during the Second Phase a typed questionnaire was used, now it was felt that a printed version was preferable.

Secondly, the covering letter had to stress that the nurses were free to answer any question. This was done in order to accommodate the feeling that if any question was thought to be too personal they simply had to ignore it. Incidentally, the questions which sought details of family income and expenditure were preceded by a long preamble stressing once again the importance of such information to the research and, at the same time, their freedom to answer the questions or not.

Thirdly, the local press had been approached through the public relations officer of the District and they expressed their willingness to publish an appeal for the co-operation of nurses with the study.

Fourthly, contacts with the local trade union representatives (shop stewards) had been established. In fact, in two consecutive Management and Union meetings, (which are held once a month), the aims of the project and the importance of the information required were explained. A copy of the questionnaire and of the covering letter was sent to each individual trade union representative present at those meetings.

The written answers of two trade union representatives from different unions were "I cannot see any problem with the explanatory letter and the questionnaire. I will distribute them to my members when they are ready". "As branch secretary, I have had a meeting both with my executive and the branch. At these meetings, I discussed with my members the material (letter, questionnaire) you sent to me. I can

more or less quarantee that they will fill the forms (questionnaire) and they should be given to members as planned".

Those trade union representatives who didn't send their comments, expressed more or less the same opinion as the above after being contacted by telephone.

It should be stressed that the shop stewards at that meeting initially had difficulty in seeing the point of the exercise given the authority could not offer posts to those qualifying. They were, however, convinced by the strength of the argument that under such changed circumstances, the trade unions had a stronger vested interest in the implication of the results than the employing authority, this latter organization believing that no manpower planning problem exists!

Finally, after the completion of a whole series of preparations, the press release was given to the newspapers and to the internal bulletin of the hospitals and 225 questionnaires were sent out to the home addresses of nurses. The bulk of the questionnaires which were addressed to the nurses working in the hospitals were ready to be delivered when the local BBC radio broadcast an interview with the Regional Trade Union Representative of one of the three unions representing the nurses.

> "... Because there has been no consultation with full-time officers, ostensibly, they have approached some people locally at the hospital, saying that this information would be of use to them for further recruitment which was a complete nonsense. We have already had discussions with the regional health authority about a similar exercise asking for much less data in which all staff organizations have refused to cooperate until we get some meaningful reasons as to why they want this information. And, incidentally, we have had advice from the National Council for Civil Liberties some time ago, that the data asked for was far too much and far too personal and yet we are getting questions asking nurses in ..... for example, "What is your husband's net income? What is your other family income? What is your house or monthly outlays or mortgages, rents or rates"? Now can anybody tell me what that has to do with recruitment? Interviewer: What reason has the district given for wanting this information from nursing staff? Interviewee: The district is saying that

this information will help forecast the supply of nurses and future recruitment problems. Well, you know, without being rude, this is just a lot of whitewash. In the first place, it is not going to help anybody, in respect to nurse recruitment, that type of information can't, it goes far further than what we would normally expect and most of the information that they have, in respect of nurses or ex-nurses, people on maternity leave or not married and who want to come back to nursing, they have on supply anyway. And furthermore, who is going to house this information? What computer centre is going to take it? Interviewer Now these questionnaires are being given out what are you instructing your staff to do with them? Interviewee: We are instructing our staff and advising and instructing them to have nothing to do with this and a spirit of non-cooperation throughout. Quite honestly, until we resolve this at regional level, then we are saying to them, for goodness sake send it back without even putting your name and address on it. It can be of no use and of no value to nurses in....."

Radio Broadcasting B.B.C. (N.W.)

Naturally the sending out of the questionnaire was postponed and a meeting with the trade union official was arranged in the presence of the District Nursing Officer. During that meeting, we stated to him that we did realize at the outset that the question pertaining to household income and expenditure touched on a sensitive area hence the long preamble, its location at the end of the questionnaire and the suggestion that, if it did prove too personal, the respondent could leave that question unanswered. There were, it was explained, two other options open to the person receiving the questionnaire. She could, of course, throw the document away. Alternatively, she could complete the questionnaire but opt not to provide her name and address. Less than 10% chose to adopt this anonymous position. Of those completing the document, around a half chose not to provide an answer to this particular question. One could well ask, the explanation continued, why we put such a project at risk by including it? The answer is at the cornerstone of all this research. We are attempting to find out why qualified nurses are not employed in the labour force to the extent that one might have anticipated. On the one hand, they might have had such a disagreeable time during their training that hospital is a place that they only want to go back to in the event of their own illness. They might not be working because they are in the process of bringing up a young

family and feel that a mother should be at home during these formative years. They might not be engaged professionally because they are in the fortunate position of not needing a second income. Conversely, the absolute necessity for such income might be the overriding reason for them being in employment. Obviously all three factors: familiar, economic and sociological have a bearing on any one individual's decision, always assuming that work opportunities exist. Our ultimate intention is to measure the relative influences of these different factors. It is, however, a fact of life that the presence or absence of a young child so dominates the results that measuring secondary effects is very difficult. It goes without saying, we finally argued, that the contents of the questionnaire are only ever seen by the supervisor of the research student, and the research student involved on any one exercise. At the end of our meeting, the Regional Trade Unionist agreed to reconsider his decision. He asked for the explanatory remarks to be given in writing in order to present our arguments to the governing body and the research unit of his union. It was agreed that that document should reach him in two days' time and his answer was promised for the week after that. The document was given to him on the day agreed. No reply had been received after two weeks and when contacted, he claimed that the document, together with his briefcase was lost, during a train journey from Manchester to London! This had later been recovered and an "early reply as soon as possible" was promised. Numerous attempts were made to contact him over the next few weeks and finally, a policy decision was taken and the sending of the questionnaires was cancelled.

As far as the response to the questionnaire is concerned, at the end of this fourth and final phase, its rate increased to 30.4% mainly through the initial despatch of 225 questionnaires to the home addresses. From the same despatch, 32 new addresses were supplied by friends (Table 5.12) bringing the total number of nurses traced to 1055- "true" numbers traced 913- or 63% (Tables 5.13 and 5.14). In Table 5.15 the "true" proportion of each year of graduation traced for all four phases is shown to have reached 54%, exactly 10 percentage points higher than Singh's exercise. The comparison of the final results between the two studies are shown graphically in Fig. 5.3 which illustrates the

fact that, not surprisingly, more graduates from the recent years were traced.

In Table 5.16, the summary of responses from the 1055 cases traced are presented for those ''abroad'', ''dead'' or ''whereabouts not known'' by year of graduation.

Finally, the summary of results of responses at the end of each phase of the tracing operation are displayed pictorially in Fig. 5.4.

Table 5.12 Addresses Supplied by Friends (Phase 4)

Year of Graduation	Total	Year of Graduation	Total
1959	2	1970	-
1960	8	1971	1
1961	1	1972	-
1962	-	1973	-
1963	-	1974	-
1964	-	1975	-
1965	-	1976	7
1966	-	1977	2
1967	-	1978	3
1968	7	1979	1
1969	-	1980	-
		TOTAL	32

Table 5.13 Number of Nurses Traced (Phases 1,2,3 and 4)

Year of Graduation	Nurses Traced	''True'' Nos. Traced	Year of Graduation	Nurses Traced	''True Nos Traced
1959	14	10	1971	45	36
1960	20	17	1972	53	40
1961	16	11	1973	61	57
1962	21	17	1974	57	53
1963	26	22	1975	75	64
1964	25	18	1976	113	100
1965	31	21	1977	96	92
1966	17	15	1978	96	91
1967	41	30	1979	86	84
1968	47	33	1980	25	25
1969	43	37			
1970	47	40	TOTAL	1055	913*

*Includes those abroad (40) and dead (6)

Table 5.14 Nurses Traced by the Year of Graduation (Phases 1,2,3 and 4)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	14	61	1971	45	66
1960	20	77	1972	53	60
1961	16	42	1973	61	65
1962	21	62	1974	57	53
1963	26	67	1975	75	74
1964	25	62	1976	113	73
1965	31	60	1977	96	62
1966	17	40	1978	96	60
1967	41	72	1979	86	61
1968	47	69	1980	25	66
1969	43	58			
1970	47	57	TOTAL	1055	63

Table 5.15 "True" Proportion of Each Year of Graduation Traced (Phases 1,2,3 and 4)

Year of Graduation	Number	%	Year of Graduation	Number	%
1959	10	43	1971	36	53
1960	17	65	1972	40	45
1961	11	29	1973	57	61
1962	17	50	1974	53	49
1963	22	56	1975	64	63
1964	18	45	1976	100	65
1965	21	40	1977	92	60
1966	15	36	1978	91	57
1967	30	53	1979	84	59
1968	33	49	1980	25	66
1969	37	50		—	—
1970	40	49	TOTAL	913	54
				—	—

Fig. 5.3 Comparison of final results by year of graduation

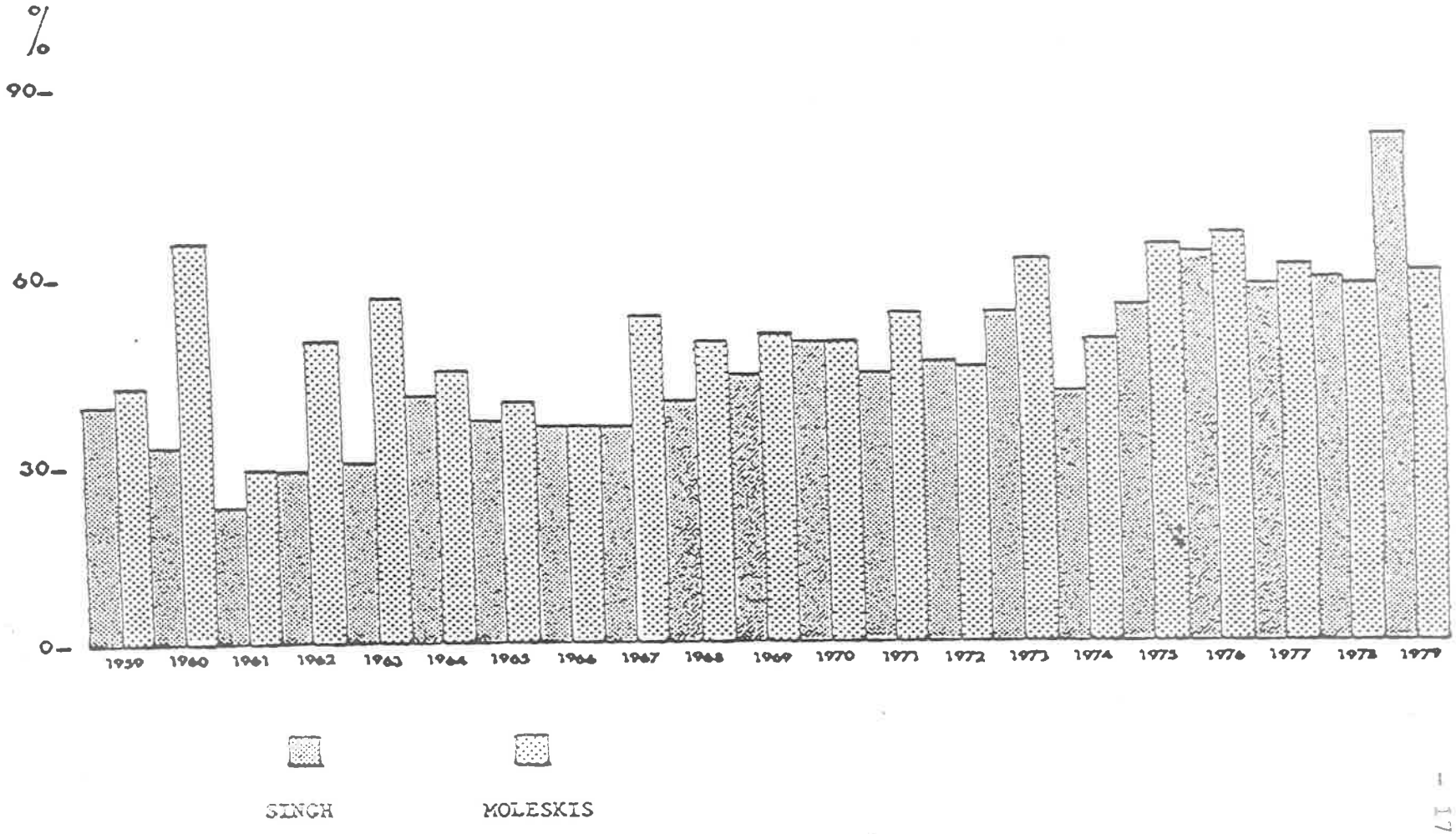
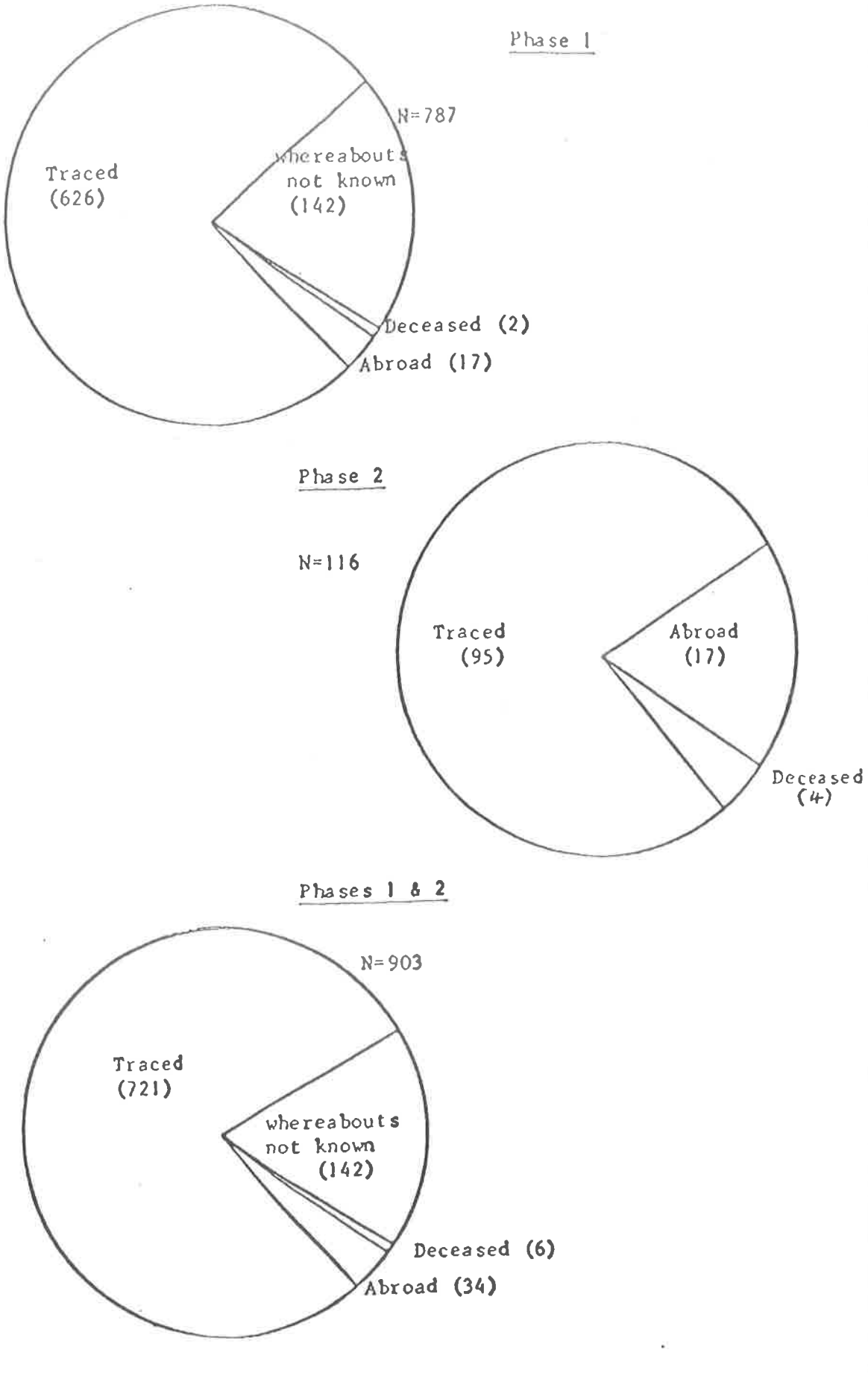


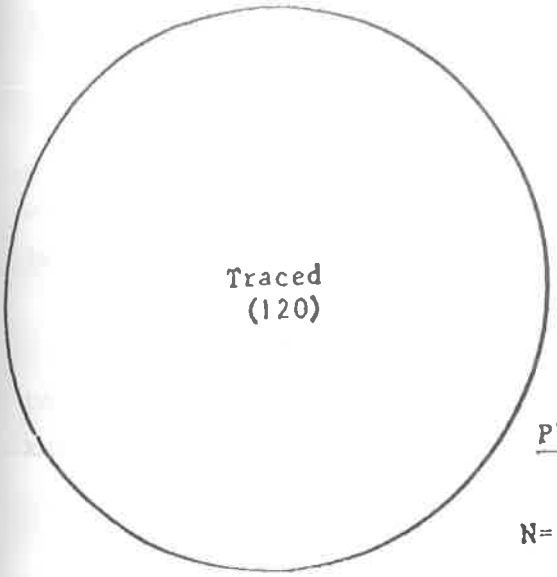
Table 5.16 Summary of Responses from 1055 Cases

Year of Graduation	Dead	Abroad	Whereabouts not known
1959	1	1	4
1960	-	5	3
1961	-	-	5
1962	-	1	4
1963	1	1	4
1964	-	4	7
1965	-	5	10
1966	1	-	2
1967	1	1	11
1968	-	2	14
1969	-	-	6
1970	-	4	7
1971	-	1	9
1972	-	1	13
1973	-	3	4
1974	1	1	4
1975	-	3	11
1976	1	3	13
1977	-	4	4
1978	-	-	5
1979	-	-	2
1980	-	-	-
TOTAL	6	40	142

Fig. 5.4 Summary of Results by Phase

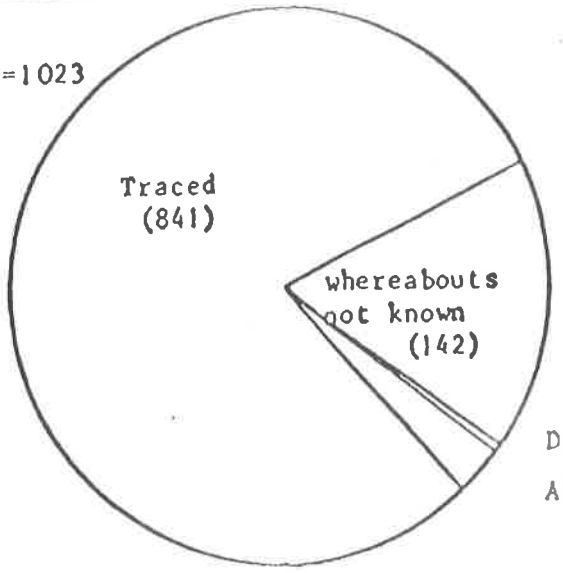


Phase 3



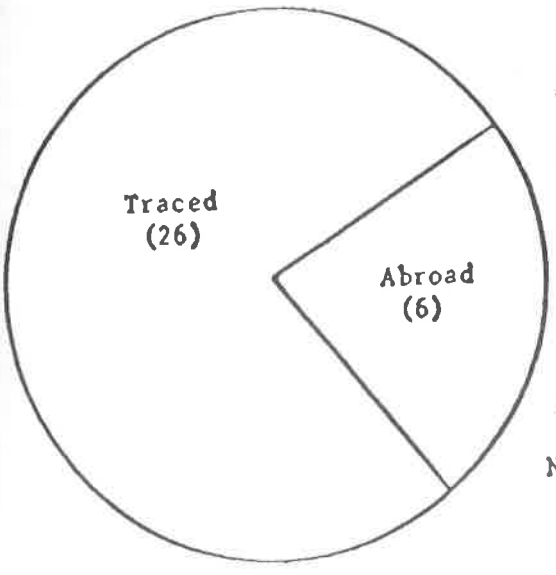
Phases 1, 2, & 3

N=1023



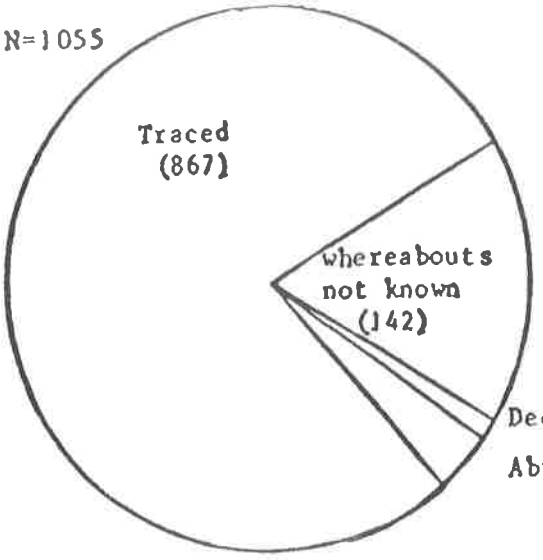
Phase 4

N=32



Phases 1, 2, 3 & 4

N=1055



5.8 An important point

As a result of their experience dealing with the authorities of the Health District, the researchers make a last point which may well have been an important one at this stage of the research at least.

In answering the question, what would we have done if we had to do the same thing again, the important point emerges: Full knowledge of the local ''institution ''.

The "situation" at the Othello Health District consisted, among other things, when the study was going on, of the following divergent factors which, in the end, proved to be relevant:

(a) Because of reorganization, the District Nursing Officer was "acting-up"; his policy was not to have any unpleasant event during that period and not the least with the Trade Unions.

(b) The previous District Nursing Officer, who had given her blessing for the project, had a rather unfortunate style of management and her relationship with the Trade Union representatives was very bad indeed.

(c) The most militant employees' union in the N.H.S. (COHSE) has a rather high percentage of membership at the Othello Health District.

(d) We trusted the Nursing Personnel Officer who had undertaken to carry out crucial steps but who didn't.

IF NOBODY IN YOUR HOUSEHOLD HAS BEEN TRAINED AS A

NURSE

YOU MIGHT AS WELL THROW THIS DOCUMENT AWAY

SECOND FOLD

Do not affix Postage Stamps if posted in
Gt. Britain, Channel Islands or N. Ireland

BUSINESS REPLY SERVICE
Licence No. MR 4557

12

Dr Brian Moores,
Department of Management Sciences,
UMIST,
PO Box 88,
Sackville Street,
MANCHESTER,
M1 8DR

THIRD FOLD AND TUCK IN AT SIDE

FIRST FOLD

IF YOU HAVE GOT AS FAR AS READING THIS and you are a nurse there is less than an evens chance that you will be practising your profession for a variety of reasons, the most frequent one being marriage and the bringing up of a family. Whatever the reasons the end result of this loss of trained nurses is that in many hospitals only a small proportion of the nursing care is given by qualified staff. It is this situation which has prompted a team at Manchester University into studying the careers of qualified nurses.

To this end we are circulating all households in a representative area to discover how many qualified nurses live within it. If you have at some point in your life trained as a nurse, perhaps you could spare a moment to complete the questions at the bottom of this page and return the folded sheet to me. We would eventually wish to interview a small sample of the respondents but obviously, should your name come out of the hat, we would write asking whether such a meeting would be possible or welcome.

Name .....

Address .....

.....

.....

Which of the following nursing qualifications do you possess? (tick whichever are appropriate).

☐ S.R.N. ☐ S.E.N. ☐ S.C.M. ☐ R.M.N. ☐ Q.D.N. ☐ R.S.C.N.

Specify any other .....

At which hospital and in which year did you secure your first nursing qualification?

Hospital .....

Year .....

Are you employed as a nurse now? ☐ Yes
☐ No

If No, in which year did you stop nursing? .....

ATTACHED II

UMIST

The University of Manchester Institute of Science and Technology
PO Box 88, Manchester M60 1QD
Telephone 061-236 3311

Dear

Over the past few years staff in this department have undertaken a number of studies related to the theme of nurse manpower planning. As you are probably aware there is a good deal of concern currently being expressed about the fact that a substantial proportion of qualified nurses find it impossible to work for one reason or another. We have, in fact, examined this issue through contacting some 2000 nurses some of whom were working and some of whom were not. We have recently been asked to investigate the topic a little further. On the last occasion we generated our list of contacts through the relatively cheap method of dropping leaflets through letter boxes. We were forced into that approach because the list of nurses maintained by the General Nursing Council is not up to date.

The Department of Health are keen to ascertain just how effective a method of generating contacts is an approach based upon the nurse's original training school. Several schools of nursing have agreed to co-operate in this project and yours was one of the many hundreds of names produced in this way. In order to determine how effective is this form of contact we would appreciate you returning the enclosed pre-paid postcard.

There is a possibility that you might then be selected for a smaller sample who will be approached with a questionnaire but as you would be perfectly free to throw that away I trust that the expectation of such a possibility does not stop you returning the postcard. At this stage we are primarily interested in simply ascertaining the response rate to this original contact.

Yours sincerely,

Dr. B. Moores.
Senior Lecturer in
Management Sciences.

ATTACHED III

UMIST

The University of Manchester Institute of Science and Technology
PO Box 88, Manchester M60 1QD
Telephone 061-236 3311

Dear Opener of Letter

If you are the person named on the envelope then the enclosed letter is obviously for you. If not then I am sure you will be sufficiently intrigued by the form of address to glance at the contents of that letter. From it you will see that we are attempting to make contact with the named nurse. If you have any idea of the last known address of that person I would appreciate you inserting it on the enclosed pre-paid postcard. If you have no idea at all as to the whereabouts of the person named we would appreciate the return of the postcard with a cross in the last box.

Yours sincerely,

Dr. B. Moores.
Senior Lecturer in
Management Sciences.

ATTACHED III

UMIST

The University of Manchester Institute of Science and Technology
PO Box 88, Manchester M60 1QD
Telephone 061-236 3311

Dear Opener of Letter

If you are the person named on the envelope then the enclosed letter is obviously for you. If not then I am sure you will be sufficiently intrigued by the form of address to glance at the contents of that letter. From it you will see that we are attempting to make contact with the named nurse. If you have any idea of the last known address of that person I would appreciate you inserting it on the enclosed pre-paid postcard. If you have no idea at all as to the whereabouts of the person named we would appreciate the return of the postcard with a cross in the last box.

Yours sincerely,

Dr. B. Moores.
Senior Lecturer in
Management Sciences.

CHAPTER SIX

THE LOCAL LABOUR MARKET

6.1 The Labour Market

There are many ways of defining a labour market. A distinction can be drawn between internal and external markets. Doeringer and Piore (1971) define an internal market as an administrative unit such as a plant or firm within which the pricing and allocation of labour takes place and is largely governed by administered rules and procedures. An external labour market has been defined in terms of geographical locations, occupation and industry.

Local labour markets are defined in terms of the generally acceptable commuting distance and the extent of the information network, both of which vary considerably between occupations.

The geographical basis forms a necessary, but not sufficient condition for delimiting a market for it would be absurd to suppose that individuals or firms were in the same market solely because of geographical proximity. Though it is often statistically convenient to define labour markets industrially, this dimension provides neither a necessary nor sufficient conditions for a market boundary.

None of the three bases mentioned - geographical area, occupation, and industry - form a sufficient basis by itself for defining a market. In some studies (Robinson 1968), the market frontiers are virtually treated as an endogenous variable. In the last resort, it is in practice usually agreed that the definition is a matter of arbitrary convenience based on such factors as data availability (Goodman 1970).

In economic theory there is a supplementary approach to define a labour market. The "labour market", according to this approach is a formal abstraction and it comprises all those institutions, attitudes, value systems and processes relating to the sale, purchasing and pricing of labour services.

(a) The individual worker with his or her pattern of abilities and skills, preferences for various kinds of work and various kinds of rewards.

(b) The individual employer with his patterns of manpower demands, hiring preferences and management policies.

(c) The formal and informal collective bargaining groups, organisations and institutions and Government, which combined function as a regulator of employment conditions, formulate law on labour relations and manage the economy (Corina 1972).

6.2 The Catchment Area

It is widely acceptable that "in a market economy the economically active population is a function of the socio-economic structure of society", (Corina (ibid)), and research has invariably demonstrated a strong connection between economic conditions and the participation rate in the labour force. It has also been noted that there are marked variations, for example, between industries, between different occupational groups in the same industry and between different parts of the country. (Mackay et al 1971).

The industrial scene in the Othello area has probably witnessed more radical changes than perhaps any other area in the country during the last forty years.

With a long history of textiles and textile components, coal mining, and to a lesser extent, brewing, the town has been transformed into a place for new industries.

Before the Second World War the local councils, in their attempt to remedy the rapid decline in the area's basic textile and mining industries, pioneered industrial development by devoting the ratepayer's money to building the first local authority advance factory.

During the war, new industries were brought to Othello for strategic reasons. By the very nature of the work involved, highly technical and skilled opportunities arose and so began the change from the traditional textile industries.

6.2.1 A short history

The town of Othello grew out of a village founded in the Middle Ages. During this period, Othello was beginning to develop into a small town and farming was the livelihood of the majority of its inhabitants. The greatest changes to take place during the 16th century were probably those connected with religion. During the Tudor period, the Roman Catholic Church was replaced by the Protestant Church of England and all its priests took the oath of allegiance to Henry VIII as "Supreme Head of the Church".

The 17th century saw Othello developing into a small market town. The population continued to increase and manufacture and trade began to compete with farming as the main way of earning a living. The weaving trade had been established and at first it was carried out by farmers to help eke out their living, but later some weavers were working full time either for themselves or for an employer known as a clothier.

The 18th century saw the beginning of the changes which were to turn Othello into an industrial town. In 1700, the woollen trade was already well established, and two new developments were taking place. The first was the introduction into the area of worsted manufacture. This involved the careful combing of the raw wool, and by the end of the century, Othello had become an important centre of the wool-combing industry. The second development was the

introduction of fustian weaving. Fustian was a cloth with a warp of linen or wool and a cotton weft, and its manufacture provided the first use of cotton in Othello.

Textile manufacture was mainly carried out under the "domestic system" in which the cloth was made in the worker's own home. Occasionally the weaver worked for himself, buying the raw material and selling the finished product. More frequently, he was employed by a "clothier" who provided the raw material and paid him a wage for his work. As it took several spinners to keep a weaver supplied with yarn, the whole family was usually involved in the work.

During the second half of the 18th century, further changes took place in the textile industry. The manufacture of cotton, began to replace that of wool, and the introduction of machinery brought about the decline of the "domestic system". The invention of spinning machines - the "jenny", "water-frame" and "mule" - led to the building of water-driven factories.

Although a power-loom was invented in 1785, its adoption was slow, and weaving continued to be done largely by hand. Indeed, the last decade of the 18th century was regarded by handloom weavers as a "golden age" when even an ordinary weaver could earn at least £1 a week. It was at this time that many stone-built weavers' cottages were erected in the area. It has been estimated that as late as 1830, there were three times as many cottage weavers as factory weavers. Where weaving sheds were built, they were almost always attached to spinning mills.

The 18th century also saw the development of coal mines in Othello. The earliest coal mining in the area was recorded in 1450, and over the centuries, a number of drift mines and shallow bellpits were opened. After 1700, deeper shafts were sunk. As the century progressed, demands for coal, both for domestic and industrial use, led to more and more mines being opened.

As industry developed, a number of small iron-foundries and loom-making shops were opened, and in the second half of the 19th century these were to become an important part of Othello's industrial life.

With the development of industry, the population of Othello increased rapidly. Attracted by the growing number of factories, families moved into the town, not only from nearby villages, but also from more distant places such as the West Riding of Yorkshire, Ressendale and even Ireland. It was necessary to provide homes near the mills for those workers, and during the first part of the 19th century, the appearance of Othello was changed dramatically.

6.2.2 Living and working conditions

The last years of the 18th century saw the building of many handloom weaver's cottages which were relatively comfortable, but after 1800 land was quickly covered with back-to-back houses, tenements and cellar-dwellings, either in terraces or grouped around "courts". Conditions in these homes were indescribably bad. Often a family lived in only one room which was dark, airless and damp. There was no adequate water supply, and sanitation, where it existed at all, consisted of one or two privies shared by a group of houses. It is hardly surprising that there were frequent outbreaks of diseases such as smallpox and cholera.

If living conditions were bad, working conditions in the factories were often no better. The mills were frequently dark, badly ventilated and crowded with unguarded machinery. Hours were long. Between twelve and eighteen hours a day were common, with only one hour for lunch. Young children were often employed, and there is a record of one Othello seven year old working twelve hours a day, and sometimes from 4.00 a.m to 10.00 p.m. Various acts of Parliament were passed limiting the hours of work of women and children, but these were usually opposed by the manufacturers and sometimes even by the workers who feared that shorter hours would mean lower pay.

In the period 1800 to 1850, wages fluctuated a great deal. In 1800, a handloom weaver could earn (£1.50) a week, but by 1815 his wages had sunk to around (30p) and even as low as (12 1/2p).

Under such conditions it is not surprising that there was much unrest among the workers, which sometimes erupted into strikes or other disturbances. These usually occurred when either wages fell or food prices rose, causing starvation and hardship.

In 1818, attempts to fix a minimum wage for textile workers failed and there was a strike of handloom weavers. In Othello, this resulted in a riot during which the prison was attacked and the prisoners released.

Discontent among the workers continued and during the following years, there were more strikes and meetings to demand reform.

By 1826, wages were so low and unemployment so common, that the "Times" reported that people in Othello were digging up carcasses of diseased animals for food. Throughout Lancashire, mobs attacked and destroyed power-loom factories. Othello escaped the worst violence although there are reports of a crowd breaking up looms in the town.

The failure of the 1832 Parliamentary Reform Act to give the right to vote to the working classes led to the growth of support for the "People Charter" which demanded political rights for all men. There was considerable Chartist activity in the Othello area. Chartist activity reached its peak in 1842. Mills were stopped all over Lancashire by workers removing the plugs from the boilers. There were the so-called "Plug Riots", and there were several such disturbances in Othello. The trouble subsided when the leaders were arrested.

After about 1845, the cotton trade began to expand. This led to a rise in wages and a general improvement in the workers' conditions. Othello was entering its period of greatest prosperity.

6.2.3 The peak of the glory

The second half of the 19th century saw Othello's development into the most important cotton-weaving town in the world. In 1850 there were 9,000 looms in the town, all belonging to firms whose main business was spinning. By 1900, Othello boasted 79,000 looms, the majority owned by firms engaged solely in weaving. One of the main reasons for this change was the introduction of ring-spinning during the 1880s. This made it cheaper for Othello manufacturers to buy yarn rather that spin their own. After this, weaving increased at the expense of spinning so quickly that by 1886 it was claimed that Othello produced more cloth than any other town in the world.

In the years following 1850, not only did an increasing number of spinning mills change over to weaving, but many new factories were built. Many cotton manufacturers hired "room and power" from the owner of a factory rather than buying or building their own mill. This system enabled anyone with a minimum of capital to become a manufacturer. However, it also led to frequent bankruptcies, and during the later years of the century, several limited liability companies were formed to take over the mills.

The development of Othello's weaving industry was not without its setbacks. The most serious of these was the "cotton famine" of 1862-4. This was caused by the American Civil War which led to a blockade of the cotton growing areas of the U.S.A by the Northern States. The ensuing shortage of cotton led to many mills working short-time, or even closing down altogether. Although "Relief Committees" were set up to distribute food and clothing, distress among the workers was widespread, reaching its height in 1863, when over 9,000 weavers were out of work in Othello alone.

The cotton industry was also affected by a number of disputes, particularly over wages. In 1878, the Masters' Association decided on a 10% cut in wages and this led to a serious strike in the town and was accompanied by several riots.

In spite of this and other strikes, the cotton industry continued to flourish in Othello, reaching its peak in the early years of the 20th century.

During this period, a number of new mills with up-to-date machinery were built and by 1919, there were in the region of 99,000 looms in the town. Prosperity seemed assured, when the First World War broke out.

The growth of Othello's textile industry was accompanied by the development of the engineering industry, particularly the manufacture of steam engines and looms. By the 1880's Othello was manufacturing more looms than any other place in the country.

Coal-mining also expanded considerably between 1850 and 1900, and the number of underground workers increased from 1,600 in 1850 to 2,400 in 1900. During this period, there were several miners' strikes. The most serious was in 1873, when the local colliery owners agreed to employ only non-union labour. The strike lasted for over a year and the owners brought miners from Devon and Cornwall to work the pits. The early years of the 20th century saw increasing difficulties for coal-mining, as costs of production rose and new machinery became necessary. These were the first of the problems which were to beset the whole of Othello's industrial life in the years following the First World War.

6.2.4 The decline

The early years of this century saw Othello's textile industry at the height of its prosperity. The First World War, however, had disastrous effects on cotton manufacture. Raw material was difficult to obtain and there was a shortage of manpower. Many important markets were lost. The war was followed by a short period of prosperity, but then came the slump of the 1920s and 30s. This led to short-time working, unemployment and the collapse of many firms. Attempts were made to reorganise the industry by the introduction of the six-loom system, the weaving of new types of cloth, and eventually

the use of automatic looms and the shift system. This led to some recovery, but since the Second World War, competition from abroad and the use of man-made fibres has brought further decline, and cotton is no longer Othello's main industry.

Coal mining has suffered a similar decline in importance. Under the "rationalisation" of the 1930s, the uneconomic mines were closed. In 1947, the coal mines were nationalised and modern methods and machinery introduced. By 1950, there were only six local mines left. Over the succeeding years, others were closed, leaving only one still working today.

The decline of Othello's traditional industries obviously led to great upheavals in the area. During the depression of the 1920s and 30s, it became clear that new industries would have to be attracted to the town if a mass exodus of workers was to be avoided. In 1935, the Town Council set up a "Development Committee" to encourage firms to come to Othello. They decided to build the first local authority factory financed out of the rates, although at the time it was not legal to do this. In addition, some of the empty cotton mills were taken over by other new industries, manufacturing a variety of goods.

Since the Second World War, the diversification of industry has continued. Large industrial estates have been set up and many nationally known companies have established factories in the area. They include Lucas, Mullard, Michelin and Belling.

During the 1950s, the town was designated a Development Area resulting in several large companies developing manufacturing units which gradually changed the employment structure of the town, although quite a few of the area's traditional industries remained.

Many of the advantages gained during those years were, however, lost in later years when the area lost its Development Area Status. However, during the late 1960s, the special problems of the area were once more recognised by the Government and in 1970, it was designated an Intermediate Development Area. These developments undoubtedly have

helped to stem the outward flow of population from the area and hence the age structure of the population has also been affected.

As Table 6.1 shows, Othello is a mature city in the sense that its population has not only been growing in the recent decades less rapidly than that of the United Kingdom as a whole or even Lancashire, but has shown a considerable decline over the last twenty years.

Table 6.1 Intercensal change of population (1961-81)

	1961-71 %	1971-81 %
England and Wales	5.7	0.5
Lancashire	6.6	2.0
Othello	-5.0	-8.7

Source: Census 1981 Preliminary Report.

Following the reorganization of the N.H.S., the newly formed Lancashire Area Health Authority became responsible for administration of the full range of health services in several health districts of the new Lancashire County. In the Othello Health District, the services are provided for the Local Authority districts of Othello and the surrounding boroughs.

The following hospitals are within the Othello Health District:

Hospital	Beds	Type
District General Hospital	735	Mostly acute
Hospital One	180	Acute
Hospital Two	78	Acute
Hospital Three	62	Acute
Hospital Four	43	Geriatrics
Hospital Five	44	Acute
Second General Hospital	276	Mostly acute
Regional Psychiatric Hospital	1176	Mental Handicap

In Table 6.2 the numbers of in-patients, out-patients and day cases for years 1971-81 for the Othello Health District is presented, while Table 6.3 shows the average duration of hospital stay for all specialties for the same period.

Table 6.2 Numbers of in-patients, out-patients and day cases for years 1971-1981

Year	No.In-patients	No.Out-patients	No.Day cases	Totals
1971	30328	131435	-	161763
1972	30895	130988	1486	163369
1973	30768	133767	1322	166280
1974	30784	133020	2983	166787
1975	25644	119140	3428	148212
1976	27053	129028	2617	158698
1977	28363	142323	2677	173363
1978	28808	153281	3090	185179
1979	28985	149604	3621	182210
1980	30078	155599	3676	189353
1981	29083	152743	3761	185587

Table 6.3 Average duration of hospital stay (in days) - all specialties for the years 1971-1981

Othello Health District

SPECIALITY	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Gen.Medicine	14.3	14.2	13.1	14.2	13.5	13.2	12.3	11.0	11.9	11.0	11.8
Paediatrics	9.7	8.8	7.7	7.2	7.0	6.8	6.2	6.2	6.4	5.3	5.2
Infectious Diseases	9.8	9.3	7.4	6.2	7.3	9.0	10.4	17.1	8.5	8.3	10.3
Chest Diseas.	34.3	40.6	35.0	32.0	26.7	21.7	31.6	18.0	18.0	17.9	17.0
Dermatology	23.7	26.6	25.4	24.1	22.9	25.1	22.3	15.1	18.0	18.1	20.0
Rheumatology	-	-	-	-	-	-	-	17.0	22.8	23.7	19.7
Geriatrics	61.9	54.6	56.8	49.5	53.9	52.2	56.3	42.0	39.2	40.8	38.6
Gen.Surgery	8.3	7.5	7.8	7.3	8.4	7.9	8.3	7.9	7.6	7.4	8.0
Ear, Nose & Throat	3.3	3.1	2.9	2.7	2.8	2.4	2.2	2.4	3.2	3.0	3.2
Trau.& Ortho.	10.9	9.8	10.9	10.1	13.1	13.5	13.5	12.7	12.6	12.9	11.2
Ophthalmol.	10.1	8.3	8.5	8.0	8.9	8.1	9.6	8.3	6.9	6.7	6.8
Radiotherapy	14.8	14.3	23.1	14.0	13.6	14.5	9.9	14.8	14.8	12.5	14.7
Urology	-	-	-	-	9.8	10.0	11.4	10.3	7.0	7.0	8.5
Dent.Surgery	4.0	3.4	3.4	3.7	3.4	3.5	3.4	3.3	3.2	2.8	2.3
Gynaecology	5.1	4.2	4.0	3.8	4.8	5.4	4.0	4.2	3.8	3.7	2.6
Obstetrics	7.9	7.2	6.9	6.7	7.0	7.3	7.4	7.2	6.7	6.7	6.4
Special Care Baby	6.6	7.5	7.9	9.8	10.0	9.6	9.9	10.8	11.0	10.3	12.5
G.P.Maternity	5.4	-	-	5.8	5.4	5.1	5.5	5.5	5.2	5.2	4.8
G.P.Other	24.6	21.7	25.9	19.8	23.9	32.6	28.2	29.0	33.7	26.9	18.3
I.C.U	-	-	-	-	-	-	-	-	2.0	5.2	5.7
Pain Relief	-	-	-	-	-	-	-	-	16.9	3.7	-
Pre-Convalesc.	7.3	7.4	7.2	7.6	10.9	-	-	-	-	-	-
Anaesthetics	-	-	-	-	-	-	-	-	-	-	7.1
Accident & Emergency	-	-	-	-	-	-	-	-	-	-	2.3

6.2.5 Determination of the Catchment Area

Having considered a series of criteria for the determination of the catchment area which would suit the aims of our study more, we decided to exclude the Regional Psychiatric hospital and the Second General Hospital in a neighbouring area. The former for the reason of it being outside the geographical boundaries of the health district altogether - the administrative control of this hospital was given to the district in order to decentralise the administration of this type of hospital - and the latter because that area's population traditionally and historically has never had close economic, administrative and employment relations with the Othello area.

The other criterion which has been applied is the study of home addresses of the pupils and students in the Nursing School. Almost 90% of them (female trainees) are within the boundaries of the catchment area.

Last, but not least, is the criterion of data availability. The boundaries of the catchment area, are coterminous with those of 4 job centres.

The Othello H.D. includes approximately 100 square miles and the resident population 200,000. The location of the hospitals and hence the location of nurses'employment is in the south east of the geographical area, but almost in the centre of the inhabited areas.

The District General Hospital is located between the two major towns of the district and at a distance of about two miles from the city-centres of both.

The importance of the locality factor is shown in Table 6.4. It can be seen that approximately 110,000 people live within a perimeter of 2 1/2 miles from the District General Hospital, 57.3% of the respondents of a sample of 871 nurses qualifying for the years 1967 until 1981, have their home addresses, within that same 2 1/2 mile range.

Within a perimeter of 5 miles and in a population of approximately 170,000, 63.6% of the respondents reside. Within 10 miles from the D.G.H., the percentage of the respondents living reaches 89.9%. A further 2.4% have home addresses within the boundaries of the county and the remaining 7.7% are living in other parts of the United Kingdom or overseas.

Table 6.4 Home address of 871 Student Nurses (Trainees) from 1967-81
(Distance from the District General Hospital-Nursing School)

	N	%
Within 2 1/2 miles	499	57.3
Within 5 miles	55	6.3
Within 10 miles	229	26.3
Within Lancashire	21	2.4
Within U.K.	17	2.0
Overseas	50	5.7
Total	871	100.0

6.3. The Nursing School

The importance of the Nursing School in terms of supplying the necessary manpower in order to satisfy the needs of the local population is the corner-stone of any manpower planning exercise.

Considering the SRN training first, it has to be recognised that all midwives, health visitors, district nurses, geriatric nurses, those working in specialist units and a very large proportion of those

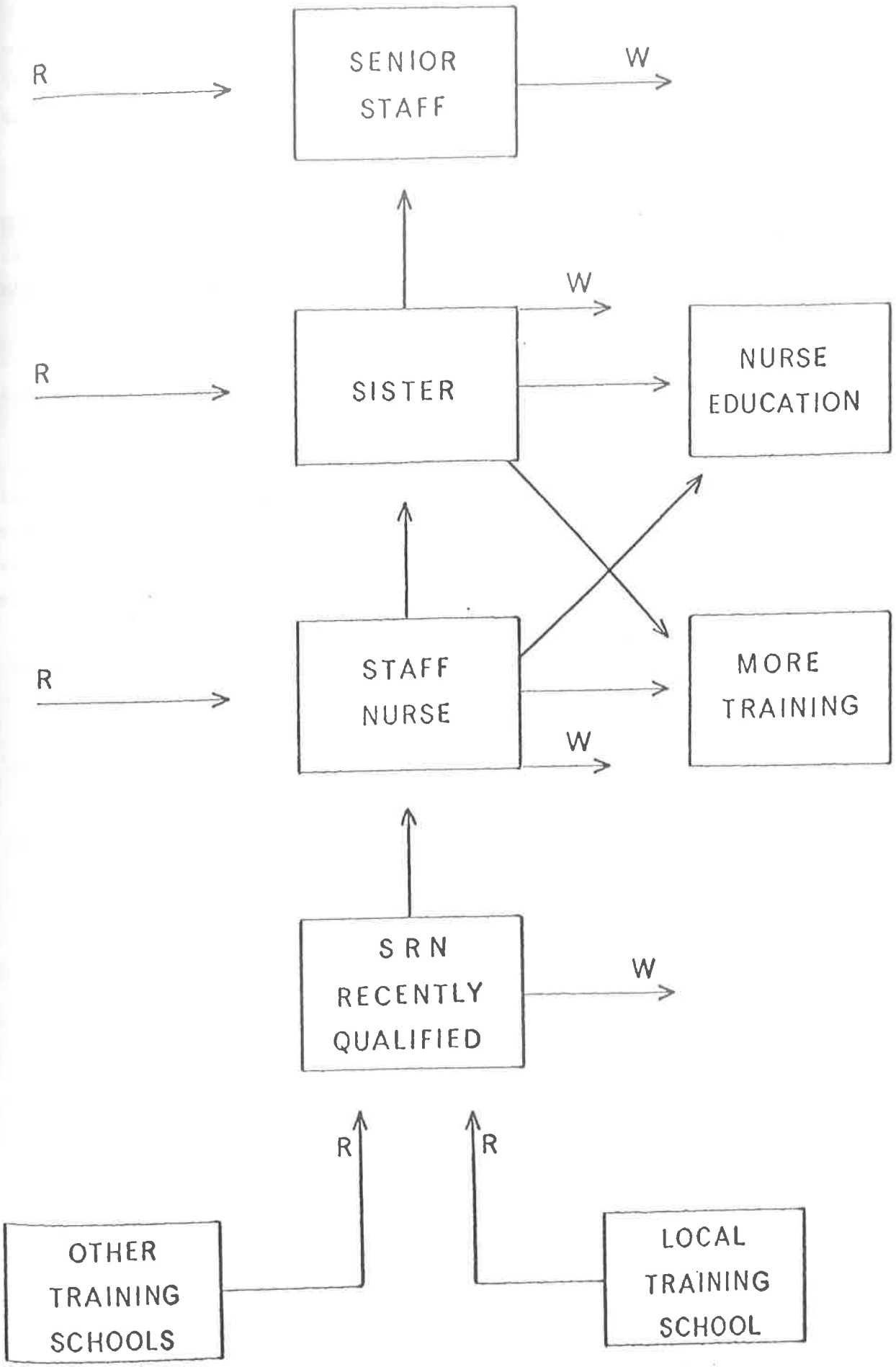
in nurse education were first employed as trained nurses on general wards. These two groups are therefore pivotal to a very large proportion of the N.H.S. in general nursing activity. In a self-contained District situation like the one under investigation in the present study, SRN training is simply vital.

In Fig. 6.1 the basic manpower system at District level for State Registered Nurses is presented. The number of students to be taken into SRN training must be sufficient to provide for future requirements of this large sector of the Health Authority. Any reduction in the intake of Student nurses or increased wastage of Staff Nurses in general nursing divisions, is bound to affect not only general nursing immediately, but midwives, community nurses and nurse tutors subsequently. Attempts by these divisions to maintain their own staffing levels in the face of difficulties by influencing internal flows of staff, will, if successful, have the inevitable effect of putting other divisions under increased pressure. The only way of counteracting the effects of a reduction in student intake or increased wastage in general divisions, apart from policies designed specifically to reverse these changes, would be to increase the recruitment to all the nurse divisions affected, of trained staff from the pool of ex-nurses currently not in employment, the "inactive" nurses, in the local labour market.

On the 3-year student course, there are three intakes a year with 24 places per intake. From 1967 until 1979 (until when the analysis of records of the School of Nursing had been made), the average number of trainees per intake was 21; this figure has reached the maximum capacity of 24 during the past three years.

The vast majority of newly qualified staff take up staff nurse posts in the District and spend, at least, their first six months of service in the hospital in which they have trained. Then they may move around the District unless they have already moved for further training.

Fig. 6.1 Basic Manpower System for State Registered Nurse (SRN)



Key: R = Recruitment
W = Wastage

Source: Shipp (1980)

On the 2-year pupil nurse course, there are two intakes per year with an optimum number of 20 places per intake; before 1973 there were three intakes per year. From 1969 until 1980, the average number of trainees per intake was 15.

Fig. 6.2 presents the basic manpower system for State Enrolled Nurses. Newly qualified SEN's tend to start work in the District General Hospital and then move to the smaller hospitals in the District.

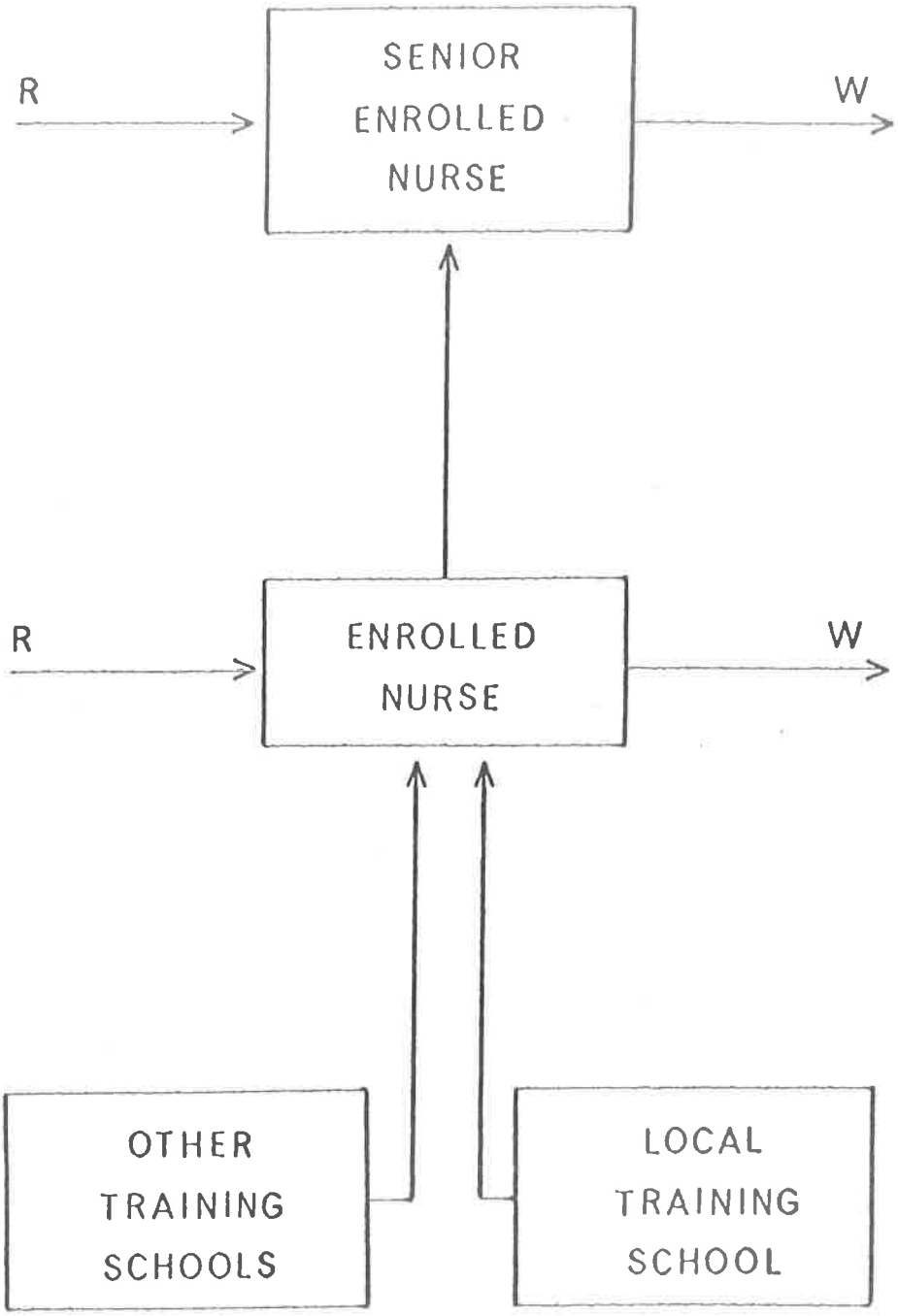
6.4 Trainee Nurse Wastage

Trainee nurse wastage, which currently (G.N.C. 1980) results in approximately 37% of students and 13% of pupils leaving before completion of training, has been the subject of numerous studies which are summarised in Moores (1971). Two of the major factors which are mentioned in these studies are:

(a) Wastage is strongly correlated to educational attainment. i.e. the better qualified a trainee nurse is at the time of commencing her training, the higher is the probability of her successfully completing the course;

(b) "Institutional Effect". Moores (ibid) demonstrated both of these factors and showed that the better hospitals (nursing schools) achieve a higher pass rate with even the worst qualified girls, than the poorer hospitals manage with those who are particularly well qualified. He also examined the patterns of wastage (i.e. when nurses left their training). It has been found that wastage is more pronounced during the early stages of training than later, as in fact was found in previous studies.

Fig. 6.2 Basic Manpower System for State Enrolled Nurse (SEN)



Key: R = Recruitment
W = Wastage

Source: Shipp (1980)

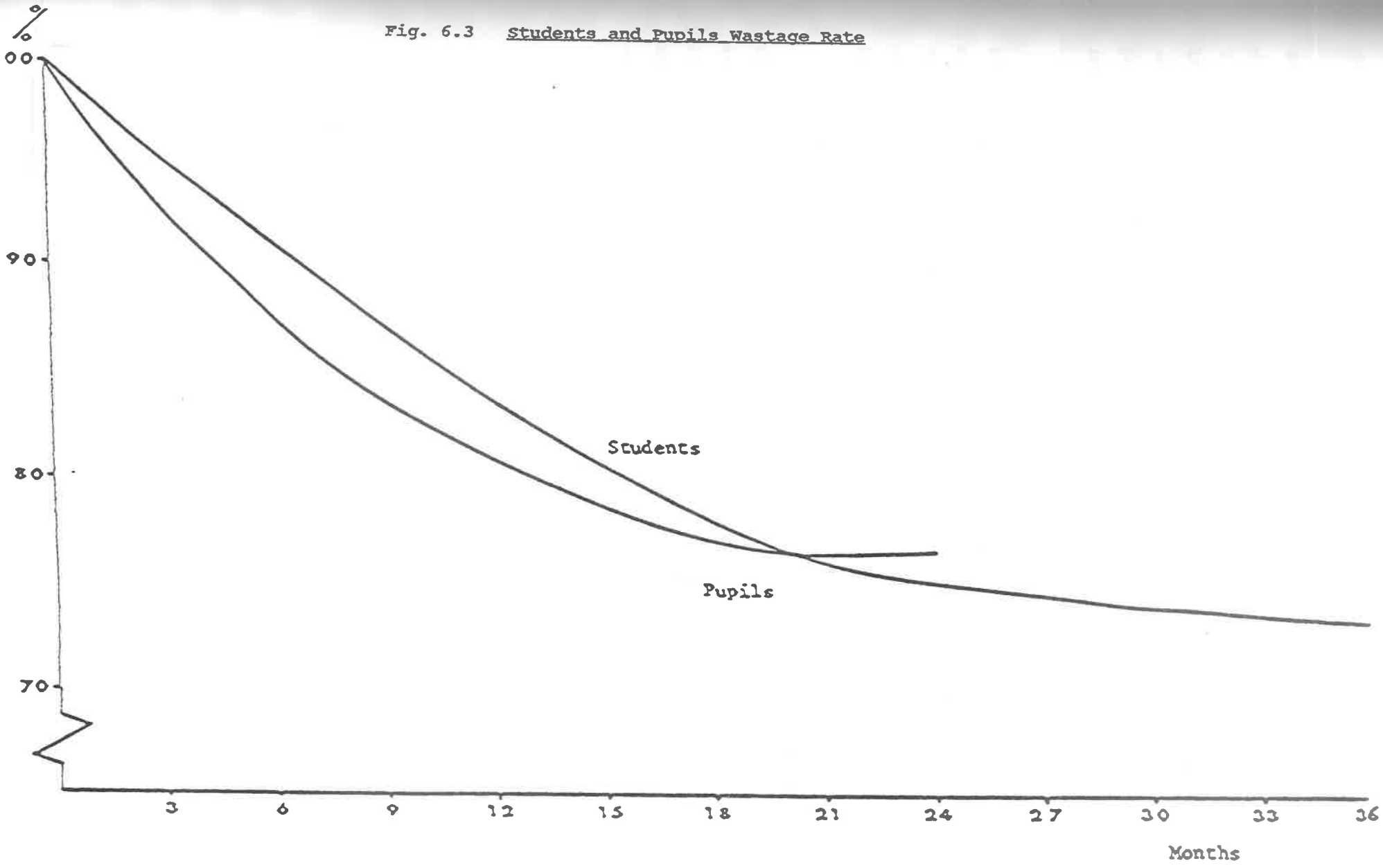
Tables 6.5 and 6.6 present the survival rates for student and pupil training respectively. In the case of the student training 827 trainee nurses were examined from the records of the nursing school.

It should not be necessary to stress the importance of labour turnover in general and of the trainee survival rate in particular. Where students and pupils constitute a large proportion of the nursing personnel, it is of the utmost importance to know for staffing purposes just how many of the trainees will be in first, second, and third year. The second and equally important element relates to the effect of the compositions on staff effectiveness.

Figure 6.3 relates to 827 students in 39 intakes to general nurse training between the years 1967 and 1979. A total of 611 SRN's qualified over this period while 216 failed to do so. This represents a wastage rate of 26.1% which is well below the national average of more than 37%.

The pupil training case presents a rather different picture. In the 29 intakes from 1969 to 1980, 415 pupils commenced SEN training, but only 319 qualified. The wastage rate of 23.1%, is 10 percentage points higher than the national average.

Fig. 6.3 Students and Pupils Wastage Rate



A more detailed examination of the survival characteristics of the two groups of nurses, by using a cohort analysis, presents a different picture. Table 6.5 shows the comparable figures for student nurse training. In this table, 15 intakes over the same period are analysed. It is clear from the above table that the crude turnover does not show the whole picture. For the District nursing education authorities, there must be a high degree of satisfaction because since 1976, at least, the wastage rate is quite small. Similar patterns are emerging for pupil training where again the value of the Aggregate (crude) wastage is distorted by the high wastage of the pupil training intakes before 1976. Table 6.6 shows these patterns.

Another outcome of the study of the trainee survival rates is that it confirms the pattern that the vast majority of dropouts leave nurse training during the first months. Almost 57% of students and 79% of pupils leave during the first 12 months of their training. For students, this wastage reaches 94.4% the end of the second year of training.

In an attempt to gain more insight into the factors influencing the wastage rate, a cross tabulation of occupations before starting nursing training by successful training has been produced. The predominance of the trainees who attended Cadet nursing schemes or nursing studies at the College of Further Education, is worth mentioning.

Table 6.5 Survival Characteristics of Student Nurses in 15 intakes*

Date Training Started	MONTHS 3	6	9	12	15	18	21	24	27	30	33	36
1969 1	87.0	87.0	82.6	78.3	78.3	69.6	62.2	60.8	60.8	56.5	56.5	56.5
2	100.0	90.0	90.0	90.0	85.0	70.0	65.0	60.0	60.0	60.0	60.0	60.0
3	95.2	81.0	76.2	71.4	57.1	47.6	47.6	47.6	47.6	47.6	47.6	47.6
1972 1	95.0	85.0	80.0	80.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
2	96.7	82.6	79.3	79.3	65.2	65.2	65.2	65.2	65.2	60.9	60.9	60.9
3	92.3	88.5	84.6	80.8	77.0	61.5	57.7	53.8	50.0	50.0	50.0	50.0
1974 1	83.3	79.2	75.0	75.0	75.0	70.8	70.8	70.8	70.8	70.8	70.8	70.8
2	95.0	70.0	70.0	70.0	70.0	70.0	65.0	65.0	65.0	65.0	65.0	65.0
3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
1976 1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.8	95.8	95.8	95.8	95.8
2	100.0	95.8	95.8	95.8	91.7	91.7	91.7	91.7	91.7	91.7	91.7	87.5
3	100.0	88.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
1978 1	100.0	94.7	94.7	89.5	84.2	84.2	79.0	79.0	79.0	79.0	79.0	79.0
2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.8	85.8	85.8	85.8	85.8
ALL	95.8	89.1	87.0	85.8	82.4	78.8	77.3	75.8	75.5	75.2	75.2	74.8

* Showing percentage of intake staying as long as 3, 6-36 months.

Note: The numbers 1,2,3 after the date represent the quarter of the corresponding year during which the training started.

Table 6.6 Survival Characteristics of Pupil Nurses in 14 Intakes

Date Training Started	MONTHS 6	9	12	24
1969 1	92.3	92.3	77.0	61.5
2	92.3	84.6	84.6	77.0
3	83.3	77.8	72.2	72.2
1972 1	80.0	80.0	80.8	60.0
2	91.0	81.8	81.8	72.7
3	85.7	85.7	85.7	71.4
1974 1	84.6	69.2	29.2	69.2
3	81.2	81.2	81.2	75.0
1976 1	81.2	75.0	75.0	75.0
3	88.9	88.9	83.3	77.8
1978 1	83.3	83.3	83.3	83.3
3	87.5	87.5	87.5	87.5
1980 1	100.0	100.0	100.0	84.2
3	95.9	91.7	91.7	87.5
ALL	89.2	84.6	81.7	76.9

* Showing percentage of intake staying as long as 6,9,12 and 24 months.

Note: The numbers 1,2,3 after the date represent the quarter of the corresponding year during which the training started.

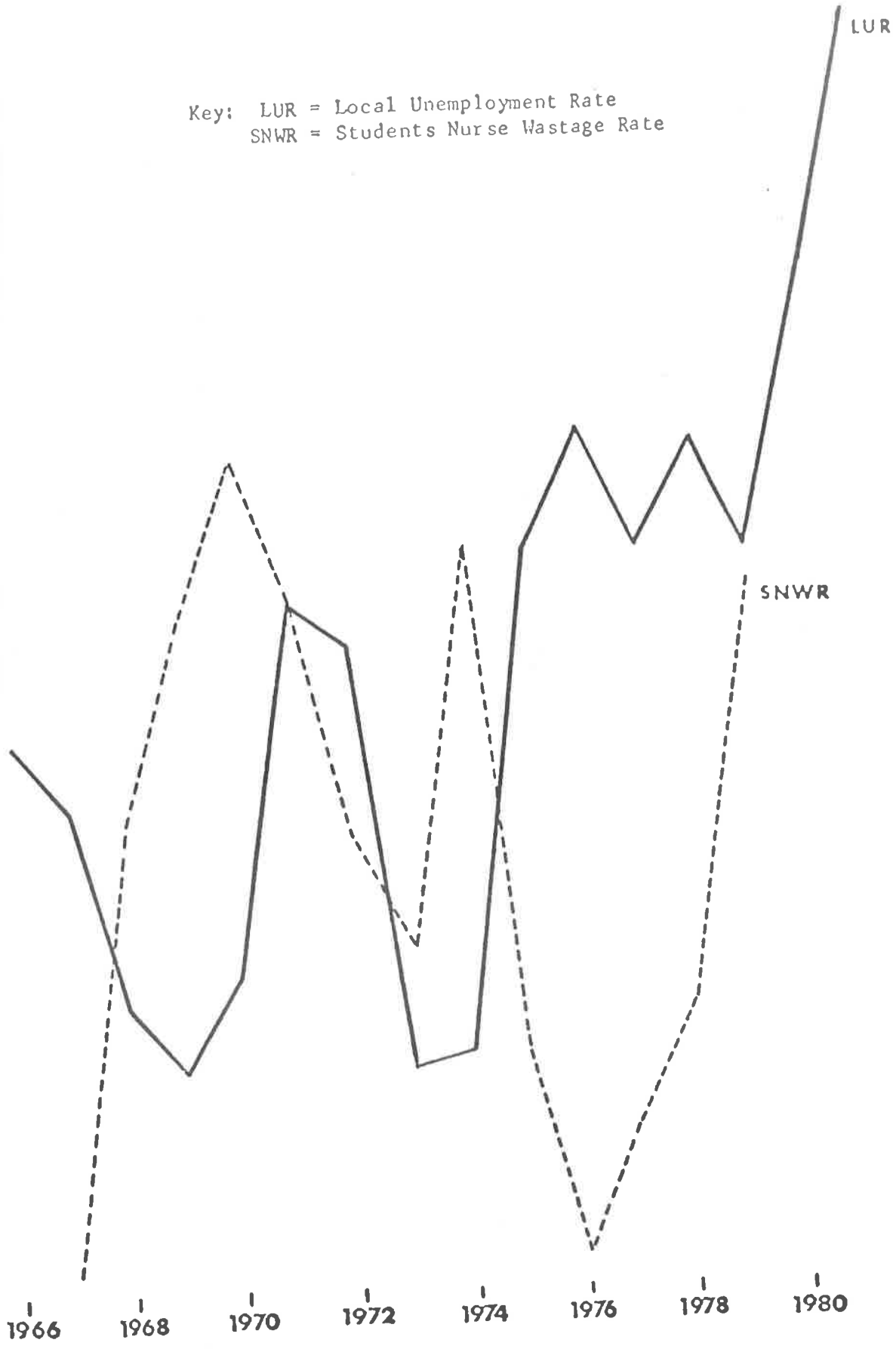
It has to be stressed however, that correlation analyses can in no way determine cause and effect and in estimating the correlation coefficient of the independent variable (local rate of unemployment) with the dependent variable (rates of wastage from student nurse training) we were trying to explain how well one variable describes another. The correlation coefficient is found to be r = -.57.

Table 6.7 Successful Training in SRN by Occupation before starting Nursing

	Starting Training		Training Completed	
	N	%	N	%
Cadet Nurse	498	60.5	377	75.7
Clerical	128	15.6	82	64.1
Industrial	57	6.9	38	66.7
Commercial	50	6.1	36	72.0
College of Further Education	80	9.7	61	76.3
Unemployed	10	1.2	8	80.0
TOTAL	823	100.0	602	73.1

Further analysis of the wastage pattern among student nurses is presented in Fig. 6.4 where the Local Unemployment Rate and the Student Nurse Wastage Rate is compared.

Fig. 6.4 Relationship between Local Unemployment Rate and Students Nurse Wastage Rate (1968 - 1979)



CHAPTER SEVEN

DATA ANALYSIS

7.1 Introduction

This chapter is concerned with the analysis of the data collected from the main survey questionnaires. Details of the methodology followed and the difficulties encountered collecting data for the study were presented in Chapter 4.[5] It is perhaps worth repeating that because of those unfortunate circumstances, the response rate is below what would have been expected on the basis of earlier UMIST projects in related areas. Altogether, 1066 questionnaires were sent out and 336 were returned completed, representing a response rate of 31.5%. Section 7.2 relates the results of this study to a series of UMIST studies which have been conducted here over the past few years. In Section 7.3, the characteristics of the sample population are discussed, taking into consideration factors such as age, education, family circumstances, etc.

Section 7.4 deals with the future options of the "Active" (full-time and part-time) nurses, while in Section 7.5, the reasons for the present inactivity of the "Inactive" nurses are analysed.

Finally, in Section 7.6 there are presented the various socio-psychological factors which help explain the attitudes of nurses towards work in general and nursing in particular.

7.2 Framework to the Analysis

In the original project proposal agreed with the Othello Health District, the two main areas of concern had been identified as:

(a) the very high rate of turnover of the qualified nurses and the difficulties the authority was facing in recruiting trainees into the nursing school, and

(b) the lack of any manpower plan in order to overcome these difficulties.

Based on the above points it was felt that the necessary first step was to collect and analyse data about nursing staff in posts joiners and leavers, and to use this data to carry out some analyses for nurse staffing in the District. In the event, it turned out that some situations at the Othello Health District were rather more difficult than had been originally supposed, and in order to keep within the resource limits set, the coverage of the study has been somewhat less complete than was originally intended. Nonetheless, it is felt that the work which has been accomplished covers the most important aspects of the supply side and provides sufficient material for management to see the potential benefit of a manpower planning approach.

It is true, of course, that the first priority of any manpower planning exercise is not forecasting supply, but the establishment of what the requirements are likely to be. Without staffing targets of some sort, it is impossible even to begin to evaluate the results of manpower forecasts. In the present particular case, however, the reality suggests a future so catastrophic that the major conclusion was obvious.

In any large group of employees, however, whether this be found to be a manufacturing plant, a university or a hospital, there will be consistent patterns of staff movement - entry grades or posts into which staff of a particular type are normally recruited from outside the organisation; well-recognised promotion ladders which normally follow a hierarchical grade structure, a certain sequence of posts or

functions, commonly-used opportunities to transfer from one part of the organisation to another either with or without further training, and so on. Each of these patterns (sub-groups) contains persons who can be considered as indistinguishable from a manpower planning viewpoint - that is they have similar patterns of leaving, transfer, promotion, etc. Between these sub-groups the patterns of people movement are maintained, and, if the numbers are large enough, these patterns will, in normal times, be found to be consistent from year to year, in spite of the fact that they are the results of many individual choices and selection panels.

The purpose of comparing the results of the present study with those of Tun and Singh has been based precisely on the above assumption. In all of these studies which have been conducted over the years here in the Department of Management Sciences on the general theme of nurse manpower planning, a systematic effort has been made to identify such patterns. The questionnaire used was designed originally by Moores and Tun and has been used throughout these studies with some alterations and modifications which reflect the breakdown of answers given or comments made during the two previous studies.

Tun's survey was conducted in two areas, a suburb of a large city in the North of England, and in a fairly large city in the Midlands during the Spring of 1974 and 1975. Altogether, 1,805 questionnaires were received back which represented a response rate of 47.6%.

Singh's study, on the other hand, was conducted in two Area Health Authorities controlling, in total, four schools of nursing and within commuting distance of UMIST. The collection of data started in the Spring of 1980, and the number of questionnaires completed was 520, representing an overall response rate of 60%.

According to the Institute of Manpower Studies (IMS) (1979) "... from both practical and technical considerations, it is normally thought desirable to implement the monitoring system first and to allow a period of time for the managers concerned to learn what monitoring information is or can be available, what of this is useful

to them and how best to use it". The manpower planner needs to know what the patterns of flows are between different staff groups in order to be able to specify what movements actually occur to a significant extent as opposed to what is theoretically possible or "what the book says". Although manpower models have been widely used for many years in industry, commerce, the public corporations, the armed forces and the Civil Service, it is as yet in its infancy in the N.H.S. The principles have been well established elsewhere, but their application to the specific staffing structures of the N.H.S., particularly in the detail required for practical use at District level, are not, to our knowledge, available anywhere.

Lack of information on the characteristics of qualified nursing staff and on the recruitment and wastage of such staff, is a fact of life, not only for the N.H.S. and hence its offspring, Othello Health District, but internationally. At a meeting on nursing services (WHO 1980) the following conclusion was reached.

> "From the discussion it emerged clearly that there is a need for more and better information about nursing personnel, which is currently lacking in most of the countries. For this purpose it is essential that rational nursing personnel systems be developed. Accurate information about nursing personnel would include details of training, movement within the profession, and breaks in service for marriage, pregnancy or transfer to other occupations. A registration system for all levels of nursing personnel, in which facts about the registrants are constantly updated, would provide accurate information with which to make manpower predictions. It is difficult to forecast long-term requirements with any degree of accuracy".

To understand more fully the staffing situation and to make forecasts about its future size and composition, it is important to have full information about the movement into and out of the nursing profession and, in particular, to obtain some knowledge of the rates of movement for different groups of staff - for example, loss of young full-time married nurses and the return of part-time married staff. In order to overcome the deficiency in manpower information, the overall aim is <u>to provide a sound statistical base for policy decisions</u>.

Forecasting manpower supply requires some knowledge of the current situation with regard to both staff in posts (stocks) and recruitment, and leaving rates (flows). Many useful forecasts, particularly those which provide a general picture of the future, can be obtained using aggregate stock figures and estimates of flow rates. However, further consideration, particularly of their financial aspects are normally required to a rather greater degree of accuracy. In order to perform the calculations, as well as present knowledge will allow, it is important to allow for the effects of age, length of service, sex, FT/PT, etc. on the staff flow rates and patterns - particularly as they affect the propensity to leave.

The information on stocks and flows must, therefore, include at least this level of detail. In addition, a manpower forecasting capability involves setting up a personnel data base containing up-to-date information about current staff stocks and flows, on the basis of individual members of staff, which can be aggregated and retrieved fairly quickly and cheaply.

From the organisation's point of view, such a data base has many potentially important uses in encouraging managers to monitor a whole range of different aspects of the current staffing situation using staffing lists and summaries, wastage and absence rates, actual costs and budget variances, retirement schedules, productivity rates, age distributions, promotion rates, etc. Manpower forecasting is but one possible use of such a data base and since it is more complicated and more expensive than straight analysis of historical data for monitoring purposes, forecasting exercises might not be reckoned as an immediate priority.

The practical businessman, according to Rothman (1980), must be ever mindful of two questions: will the potential product be profitable, and can the organisation achieve the desired results at an acceptable cost in time to exploit the potential market? In the human services, one need only substitute the phrase "improved or more efficient services" for the business term, "profit". In other words, research and development must have practical value in terms of utilisation purpose and content. Manpower planning is an essential

tool of the personnel officer developing personnel policies for his or her employing authority and the application of manpower planning is one of the skills by which he will be judged.

An essential early stage in manpower planning is the investigation of the numbers of leavers. A high turnover of staff in an organisation can be expensive in terms of reduced efficiency, higher recruitment and training costs for an excessive number of new staff, and may result in poor staff morale which, of itself, can generate further wastage. Another important consideration for the manager is the recruitment of "suitable" people for doing the job. In the case of nurses, the recruitment of students or pupils are pivotal to the health authority activity.

The level of staff turnover and the extent to which hospitals are dependent on recruiting staff from one another indicates the importance of precise knowledge about the career patterns of employees, including experience gained outside hospitals. In the questionnaire, we were asking for the fullest possible details of the respondents' employment experience, both inside and outside the hospital service.

Details of breaks in employment and the reasons for these were also obtained. It was hoped that this part of the survey would shed light on such questions as whether any particular form of employment outside hospitals provided especially favourable areas of recruitment; whether breaks in employment, e.g. through maternity, had disadvantages on resuming hospital work; whether present career opportunities offer inadequate incentives - or disincentives - for any grade; whether the patterns of mobility indicated areas of hospital employment in which different, especially more flexible, approaches to personnel policy would appear to be required.

In order to carry out the policy of encouraging inactive nurses to return to employment at the local level, the local nurse manager needs information on how many potential recruits of each type are living in the district, what their domestic circumstances are, what changes would make a return to nursing more attractive, and how best

to contact them. In the case both of inactive nurses and of wastage rates, the specific aim is obvious. If 100 qualified nurses leave the profession each year, a reduction or a return to nursing of 23% is equivalent to the intake of a whole year of new trainees who are expected to qualify in three years' time assuming a 30% non-completion rate.

The data collected was coded and analysed using the SPSS package (Nie et. al. 1975) on the University of Manchester Regional Computer Centre (UMRCC) CDC 7600 machine. Most of the questions that were asked are reproduced before the results, which are given for the three economic activity status groups, full-time and part-time nursing and inactive (including those who are in non-nursing occupations). Because of a lack of space in the presentation of a number of tables, full-time, part-time and inactive are abbreviated to F.T., P.T. and I.A. respectively. Not all respondents answered all the questions and consequently the data base varies from question to question. Male nurses and nursing auxiliaries were discarded from the sample.

Throughout this chapter *** implies that any difference is significant at a level $p<.001$. Likewise ** corresponds to $p<.01$ and * to $p<.05$.

7.3 Characteristics of the Sample Population

As can be seen from Table 7.1, a majority of the respondents (50.9%) were working full-time which is twenty-one and seven percentage points above the two previous studies respectively, while the reverse is the case for the proportion of inactive nurses (including 3% who were in non-nursing jobs).

Table 7.1 Economic Activity Status of all Respondents

MOLESKIS

Nursing	Working	Not Working	Total	%
Full-time	171	-	171	50.9
Part-time	94	-	94	28.0
Inactive	10	61	71	21.1
Total	275	61	336	
	(8 1 . 8 %)		(1 8 . 2 %)	

SINGH

Full-time	231	-	231	44.4
Part-time	136	-	136	26.2
Inactive	30	123	153	29.4
Total	397	123	520	
	(76.3%)	(23.7%)		

TUN

Full-time	610	-	610	33.8
Part-time	542	-	542	30.0
Inactive	142	511	653	36.2
Total	1294	511	1805	
	(71.7%)	(28.3%)		

TABLE 7.2 CURRENT OCCUPATION OF ALL RESPONDENTS BY MATERNITY UNIT

	MOLESKIS						SINGH			TUR		
	Full-time		Part-time		Total		Full-time	Part-time	Total	Full-time	Part-time	Total
	N	%	N	%	N	%	%	%	%	%	%	%
Staff Nurse/Midwife	39	22.9	44	46.8	83	30.3	26.0	54.8	33.8	16.9	62.5	33.9
Ward Sister/Midwifery Sister	59	34.7	15	16.0	74	27.0	26.4	20.7	22.4	24.5	17.3	18.9
Health Visitor	9	5.3	1	1.1	10	3.6	8.2	1.5	5.3	11.9	2.6	6.7
District Nurse/Midwife	6	3.5	3	3.2	9	3.3	7.4	5.2	6.0	10.7	3.3	6.4
Administrators (Above Ward Sister Gr)	5	2.9	-	-	5	1.8	3.0	0.7	2.0	11.9	0.4	5.7
Training	8	4.7	-	-	8	2.9	7.4	-	4.3	9.6	0.6	4.7
Community Nurses	2	1.2	2	2.1	4	1.4	10.0	3.7	7.1	5.8	3.3	4.1
Tutors	2	1.2	3	3.2	5	1.8	4.3	-	2.5	4.5	1.2	2.6
S.E.N.	36	21.2	20	21.3	58	20.4	-	-	-	-	-	-
School/Nursery Nurse	1	0.6	3	3.2	4	1.4	1.3	5.2	2.5	2.2	3.9	2.6
Private/Agency	1	0.6	1	1.1	2	0.7	1.7	4.4	2.5	1.2	2.2	1.5
Industrial Nurse	1	0.6	-	-	1	0.4	1.7	-	1.0	1.7	1.5	1.4
Others	1	0.6	2	2.1	3	1.1	2.6	4.4	3.0	0.3	1.1	0.5
Non-Nursing	-	-	-	-	10	3.6	-	-	7.6	-	-	11.0

Table 7.2 shows the distribution of the respondents by occupation, at the time of the survey. There is a high degree of similarity in the composition of the three samples.

In Table 7.3 the proportion of the three major nursing grades appearing in the sample are compared with that at National and local level, i.e. Othello Health District, respectively.

Table 7.3 Comparison of the Three major Nursing Grades at National and Local Level with the Sample

	National*		Local**		Sample	
	F.T. %	P.T. %	F.T. %	P.T. %	F.T. %	P.T. %
Staff Nurse/ Midwife	41.8	58.2	47.3	52.7	47.0	53.0
Ward Sister/ Midwifery Sister	74.5	25.5	91.2	8.8	79.7	20.3
S.E.N.	53.7	46.3	55.3	44.7	64.3	35.7

7.3.1 Age of the respondents

Table 7.4 gives the age distribution of the nurses in the three samples. As is the case in the other two studies, there is a significant difference between the three economic activity status groups (χ^2 = 37.83*** with 16 degrees of freedom). Inactive nurses appear to be the youngest in the sample with a mean age of 31.5 years and part-time nurses with 35.1 years mean age. The average young age of the sample marks the difference from the other two studies where the youngest group appears to be that of full-time nurses.

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* Regional, Area, District and Hospital Nursing and Midwifery Staff DHSS (1979)

** Form SBH 2 (30 Sept. 1979)

Table 7.4 Age of Respondents by Activity Status

	TUN				SINGH				MOLESKIS			
	Total %	Full-time %	Part-time %	Inactive %	Total %	Full-time %	Part-time %	Inactive %	Total %	Full-time %	Part-time %	Inactive %
Below 25	12.2	20.7	6.7	8.8	16.1	26.7	10.4	5.3	18.2	23.7	5.9	22.6
26 - 30	24.1	18.9	22.4	30.3	29.5	31.4	23.0	32.5	28.6	26.0	25.7	40.3
31 - 35	17.0	11.9	20.5	18.4	29.5	19.7	34.1	40.4	19.9	14.5	31.7	16.1
36 - 40	15.1	13.2	18.3	14.3	15.7	10.0	23.7	17.2	11.3	11.6	12.9	8.1
41 - 45	11.5	13.2	14.7	8.6	7.2	8.7	7.4	4.6	8.9	8.1	11.9	6.5
46 - 50	7.0	8.0	7.3	5.7	1.4	2.6	0.7	-	7.4	10.4	6.9	-
51 - 55	7.0	9.0	6.5	5.4	0.5	0.8	0.7	-	2.4	2.3	3.0	1.6
56 - 60	3.6	4.4	3.5	3.1	-	-	-	-	1.8	1.7	2.0	1.6
Over 60	2.5	0.7	0.1	5.3	-	-	-	-	1.5	1.7	-	3.2

However, by examining the age distribution with the three zones formula suggested by Donald et. al (1971) for the Essex Region, the age distribution of economic activity of the sample follows that of the well established pattern. Zone A of Fig. 7.1 includes nurses up to 30 years of age and relates to the period of maximum occupational and geographical mobility. For the majority of married women, this period is seen as the first exit from employment for family reasons.

Fig. 7.1 shows that the number of full-time nurses have increased from 23.7% in the below 25 age group to 26% in the 26-30 age group. At the same time, for inactive nurses, the proportion has increased from 22.6% to 40.3% and for part-time nurses from 5.9% to 25.7% in the corresponding age groups. In the early phase, women continue to withdraw from employment for domestic reasons, but later a rising proportion return to full- or part-time work. This is observed in the sample data for both full-time and part-time nurses (Zone B). The approach of retirement and failing health or capacity leading increasing immobility occurs in Zone C (over 50 years).

The age structure of the respondents from all the three samples is presented in Fig. 7.2 where it will be seen that there is a striking similarity between the full-time and part-time groups among the three samples. It also clearly reveals the relatively young age of the whole population.

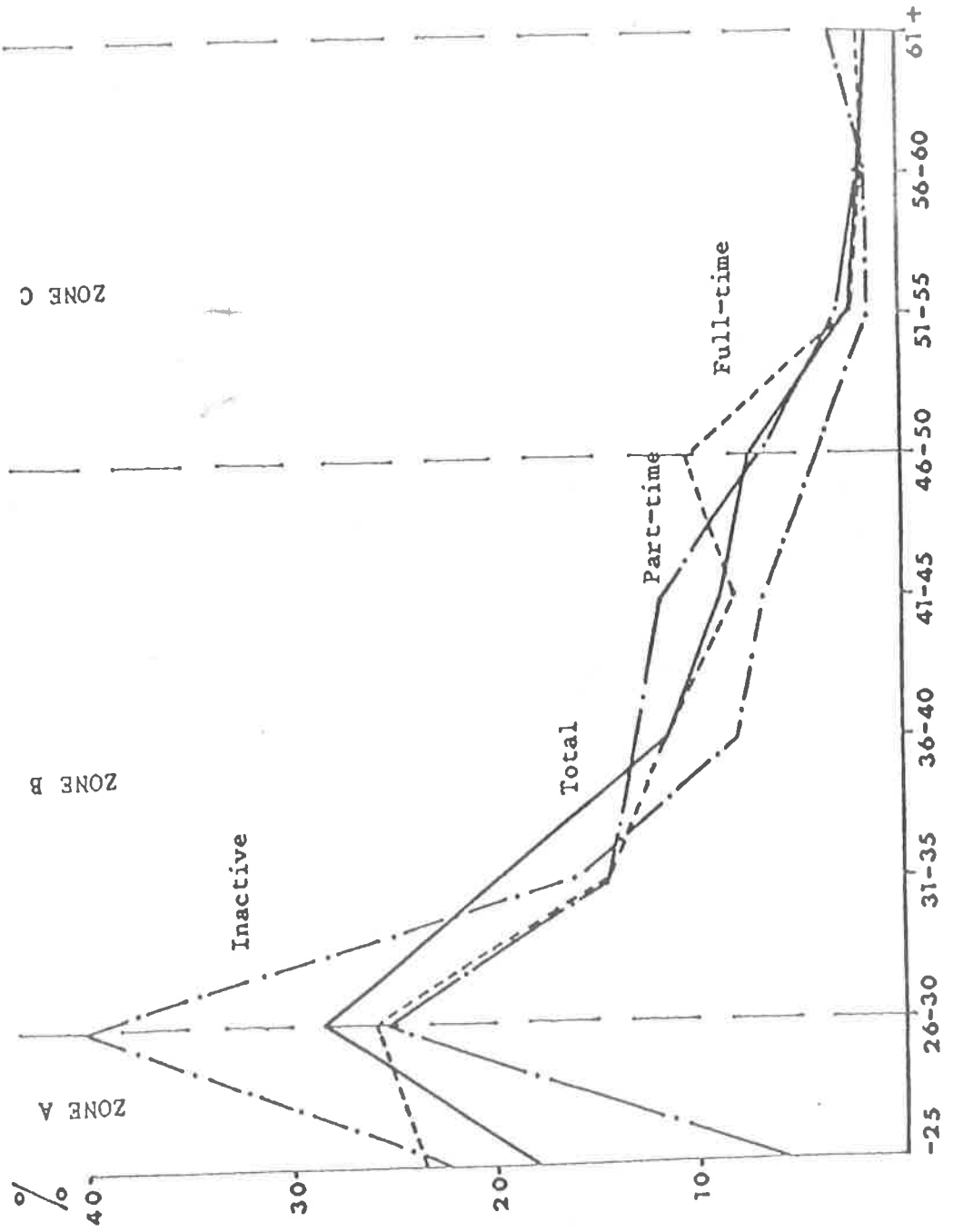
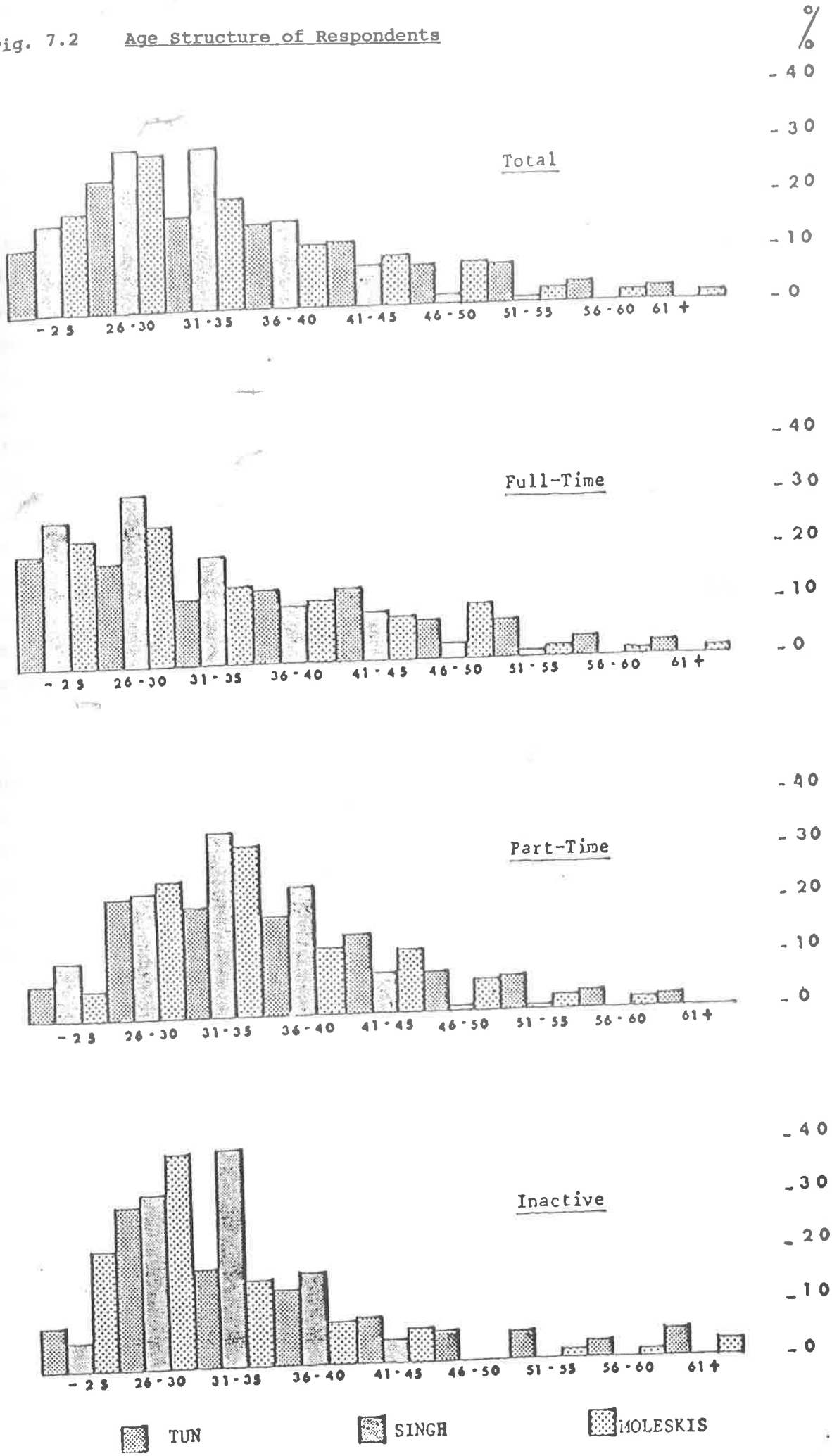


Fig. 7.1 Age Distribution of Respondents

Fig. 7.2 Age Structure of Respondents

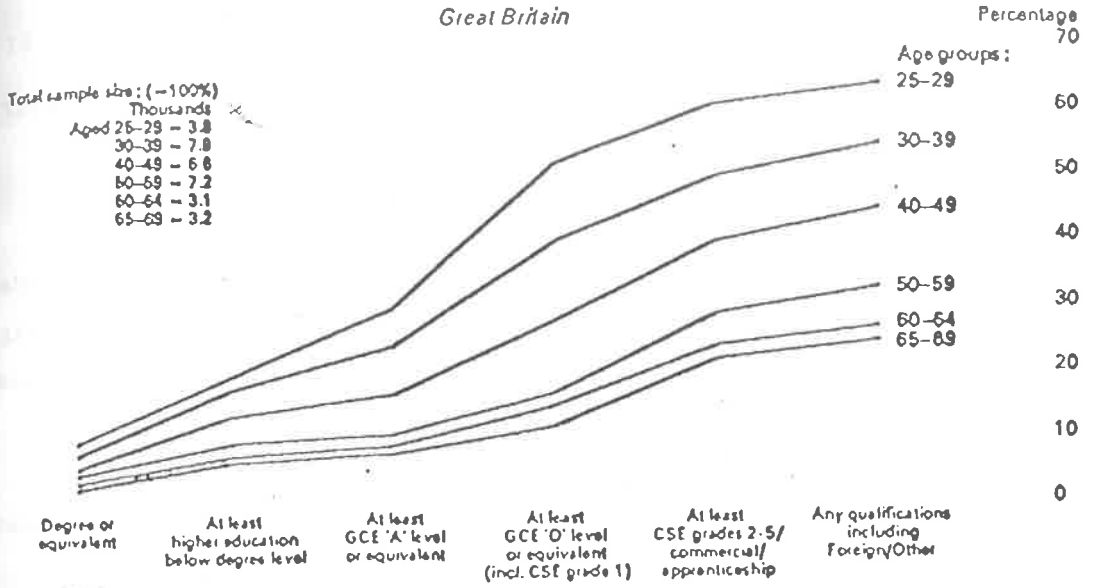


7.3.2 Educational qualifications

The effect of previous educational/academic attainment of trainee nurses on success in, and wastage from, nurse training has been discussed by several researchers (Lewis 1979). The GNC survey of those learners commencing during 1957-59 found that success in nurse training examinations correlated with the number of GCE O Levels, i.e. learners with more 'O' levels were more likely to pass their nursing examinations at the first attempt. The more recent GNC report of 1977 showed that for students on general, mental illness, and mental subnormality courses, (and also for students on experimental courses), the proportion of leavers drops as the number of O level passes rises. An American study by Owen (1970) also provides additional evidence that previous academic attainment (i.e. high school grade average) was the best predictor of future academic performance (college grades) in nursing education. However, the predictive ability declined as training progressed hence the need to use the latest possible achievement data for predicting future success. Lewis (1979) argues that tests of academic achievement are related to criteria of success in nurse training, especially when the criteria are based on academic rather than clinical performances.

Fig. 7.3 illustrates the marked rise in the level of qualifications over the past 30 years. Not only has the level of qualifications obtained risen, but also the number of young people who obtain some sort of qualification has shown a significant increase. More than 63% of people in the 25 to 29 age group held an educational qualification during the period 1979 to 1980, whereas only 24% of those aged 65 to 69 did so.

Fig. 7.3 Highest Qualification Level of the Population: by age, 1979 - 1980



Source: Social Trends 12

Table 7.5 shows the ages at which the respondents left school. Less than a third of the sample left school before the age of 16 while 40.7% did so before their 17th birthday. There is a significant difference between the school leaving ages of the three groups (χ^2 = 12.91 ***)

Table 7.5 Age of Leaving Full-Time Education by Activity Status

6. How old were you when you left full-time education?

..... years.

years	Total	%	Full-time	%	Part-time	%	Inactive	%
15 or below	88	26.3	46	26.9	33	32.7	9	14.5
16	136	40.7	63	36.8	42	41.6	31	50.0
17	58	17.4	28	16.4	18	17.8	12	19.4
18 or over	52	15.6	34	19.9	8	7.9	10	16.1
Total	334		171		101		62	

A number of questions were asked in order to elicit information about the general education of the sample. Based on the responses given to question 15 below, the YES and NO Table is presented, according to the activity status.

Table 7.6 Examinations Passed at School

15. Which examinations did you pass at school?

Where appropriate, as in the case of G.C.E. please specify the subjects passed

Examinations passed .....

Subjects passed .....

	Total	%	Full-time	%	Part-time	%	Inactive	%
Yes	257	78.4	131	77.1	74	76.3	52	85.2
No	71	21.6	39	22.9	23	23.7	9	14.8
Total	328		170		97		61	

In Tun's study, the proportion responding Yes to the question was 68.2%. The corresponding figure in Singh's survey was 86.7%.

Responding to the question about the type of examinations passed, 86.8% of the sample have taken the G.C.E., 10.9% the C.S.E., and 2.3% some other form of examination (Table 7.7).

Additional information was gathered on the type of G.C.E. examinations ('O' and 'A' levels) and number of subjects taken, the results gathered for both type of examinations passed being summarised in Tables 7.8 and 7.9.

Table 7.7 Type of Examinations Passed at School

	Total	%	Full-time	%	Part-time	%	Inactive	%
G.C.E.	223	86.8	111	84.7	66	89.2	46	88.5
C.S.E.	28	10.9	16	12.2	6	8.1	6	11.5
Others	6	2.3	4	3.1	2	2.7	-	-
Total	257		131		74		52	

Table 7.8 Number of G.C.E. 'O' Levels Passed

Number	Total	%	Full-time	%	Part-time	%	Inactive	%
1	20	8.9	8	7.2	8	12.1	4	8.5
2	29	12.9	11	9.9	13	19.7	5	10.6
3	37	16.5	17	15.3	10	15.2	10	21.3
4	48	21.4	24	21.6	11	16.7	13	27.7
5	32	14.3	18	16.2	6	9.1	8	17.0
6	16	7.1	10	9.0	3	4.5	3	6.4
7	21	9.4	9	8.1	11	16.7	1	2.1
More than 8	21	9.4	14	12.6	4	6.1	3	6.4
Total	224		111		66		47	

Table 7.9 Number of G.C.E. 'A' Levels Passed

Number	Total	Full-time	Part-time	Inactive
1	9	5	3	1
2	9	4	1	4
3	5	2	1	2
4	2	1	1	-
5	1	1	-	-
Total	26	13	6	7

Information supplied by the Equal Opportunities Commission (1979) indicates a clear pattern of girls qualifying at "O" and "A" level in predominantly arts subjects. They are under-represented in the physical sciences and are unlikely to have GCE passes in the more strictly "masculine" subjects such as Technical Drawing or Woodwork.

Thus at "O" level, girls achieved 50.3% of the total passes, 59% of the passes in modern languages were secured by females, 58% of those in art, and 58% in social sciences and vocational subjects, but only 37% of the passes in mathematics and 36% of the passes in science and technical subjects. Within the sciences, girls achieved 60% of all passes in biology compared with only 32% of those in chemistry and 21% in physics. Then again, 99.9% of passes in needlework and 78.6% of passes in cookery went to girls, as against 0.3% in metalwork, 0.4% in woodwork and 1.5% in technical drawing.

At "A" level, girls achieved 42.4% of the total passes. By "A" level the subject pattern had become even more marked. Only 26% of passes in science and technical subjects, and 21% of those in mathematics, were awarded to girls.

7.3.3 Influences on joining nursing as a career

Occupational choice has been found to be related to the family circumstances of the individual due to the father or mother transmitting the values, attitudes and behaviour of a particular economic role to the child. The parents are seen as a bridge between the family and the economy since they perform roles within both systems. It is also possible for other groups or institutions to exert influence, as an alternative to the values of the family. In this context, persons whose friends have started work can be influenced to act in similar fashion. This influence can be exerted both from within and without the educational establishment, although the importance of education as a socialisation process is generally recognised.

As might have been anticipated, there were no statistically significant differences between the three activity groups. The striking similarities of patterns between the three surveys, however, clearly indicates that family influence on the decision to enter nursing is a major determinant.

Table 7.10 Family Trained as a Nurse

20. Had anyone in your immediate family trained as a nurse, before you?

YES NO

If YES, who? .....

	TUN		SINGH		MOLESKIS	
	N	%	N	%	N	%
Yes	434	24.2	114	21.9	67	20.1
No	1362	75.8	406	78.1	266	79.9

Table 7.11 Family Relation Trained as a Nurse

	TUN		SINGH		MOLESKIS	
	N	%	N	%	N	%
Mother	148	34.1	48	42.1	22	32.8
Sisters	114	26.3	33	28.9	18	26.9
Aunt/Uncle	98	22.6	18	15.8	16	23.9
Brothers	4	0.9	-	-	1	1.5
Father	15	3.5	1	0.9	-	-
Cousins	36	8.3	8	7.0	7	10.4
Grandmother	19	4.3	6	5.3	3	4.5
Total	434		114		67	

The next questions the respondents were then asked was whether any of their close friends were working as nurses when they commenced their training. The tabulated results for the three studies are presented below from which it is clear that the peer group was unlikely to have a strong influence on the decision to enter nurse training.

21. Likewise, were any of your close friends working as nurses or training to be nurses when you started training?

	YES		NO			
	TUN		SINGH		MOLESKIS	
	N	%	N	%	N	%
Yes	225	14.3	44	8.5	54	16.6
No	1527	85.7	474	91.5	271	83.4
Total	1782		518		325	

The way in which decisions relating to occupational choice are made has been discussed by Ginzberg (1966) by reference to the age of deciding to go into a job and the complementary, emotional and intellectual development. He suggests that children move from a fantasy stage when they are not able to assess their capabilities or opportunities or the limitations of real life situations, and so think about jobs in relation to their wishes to participate in adult life; through a tentative stage during which they have some awareness of their own capacities and thus engage in self-evaluation; and to a realistic stage where they take account of prevailing constraints in their job or career choice.

It would appear from the figures set out in Table 7.12, that the majority of the respondents (42.2%) had decided to become a nurse after their fifteenth birthday, i.e. in the stage of "realistic choice". The smallest proportion (24.4%) were of the opinion that they had decided before the age of eleven, i.e. during the "fantasy choice" period, and 33.4% between the age of eleven and fifteen.

Table 7.12 Age of Decision for Joining Nursing

16. How old were you when you felt that you wished to become a nurse?

	Total	%	Full-time	%	Part-time	%	Inactive	%
Less than 11 years	81	24.4	43	24.9	20	20.2	18	30.0
Between 11 & 15 years	111	33.4	53	30.6	41	41.4	17	28.3
More than 15 years	140	42.2	77	44.5	38	38.4	25	41.7
Total	332		173		99		60	

From the results of Table 7.13, it is shown that almost two-thirds of the respondents from the three studies had decided to become nurses before reaching 15 years of age. The activities of the vocational guidance authorities tend to be focussed at final year pupils, but it is clear that their efforts could, perhaps, usefully start at an earlier stage.

Table 7.13 Age of Decision for Joining Nursing *

(comparison with other studies)

	TUN		SINGH		MOLESKIS	
	N	%	N	%	N	%
Less than 11 years	483	26.9	139	26.7	81	24.4
Between 11 & 15 years	575	32.1	167	32.2	111	33.4
Older than 15 years	735	41.0	214	41.1	140	42.2
Total	1793		520		332	

The N.H.S., its Regional Health Authorities, Health Districts, and individual schools of nursing are involved in attracting, to a greater or lesser extent, young people to nurse training. Traditionally, the potential nurse is reached by specific activities usually initiated by the health authority, and offered to local schools. Such activities include visits to hospitals, talks at schools, etc. It is, therefore, important to consider the influence of schools in the efforts to recruit nurses.

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* The striking similarity of the results obtained from these three studies provides some reassurance about the value of the questionnaire

Table 7.14 Help from School in Securing Information about Nursing

23. Did you receive any information about nursing at school? YES NO

	Total	%	Full-time	%	Part-time	%	Inactive	%
Yes	152	45.5	77	44.8	37	37.0	38	61.
No	182	54.5	95	55.2	63	63.0	24	38.
Total	334		172		100		62	

$\chi^2 = 9.18^{**}$

Table 7.14 shows that less than half of the respondents received any information at school about the profession they finally decided to follow. A similar proportion of respondents stated that they had received some help from schools about nursing in the two previous studies, but the responses from each activity status group are not similar. From those who received help at school, the question was asked as to the source of the information they received about nursing. and the results are shown in Table 7.15.

Table 7.15 From where Information about Nursing Received

	Total	%	Full-time	%	Part-time	%	Inactive	
From Careers Teachers	59	36.6	26	31.3	19	48.7	14	35
From a hospital employee	29	18.0	12	14.5	6	15.4	11	28
At a careers convention	25	15.5	15	18.1	4	10.3	6	15
A visit to a hospital	34	21.1	21	25.3	8	20.5	5	12
Other	14	8.7	9	10.8	2	5.1	3	7
Total	161		83		39		39	

From the results, it is obvious that young people with career problems would generally seek (and consequently receive) advice from relatives and subject teachers rather than from a formal approach. yet the informal sources (parents, peer groups, teachers) may be ill-informed and the information provided and advice given will be based, in all probability, on their own experiences. Professionals, on the other hand, should be in a position to give advice by examining the individual's personal growth and development against a background of the widest range of employment opportunities.

In attempting to gain further insight into the feelings of the nurses themselves about their decision to enter nursing and about the nursing profession itself, the following question was then asked:

Table 7.16 Advise a Friend or Relative Going Into Nursing

30. If a niece of 18 came to you asking your advice, do you feel that as long as she had appropriate qualifications and attitude, you would encourage or discourage her from entering nursing?

	Total	%	Full-time	%	Part-time	%	Inactive	%
Encourage	295	90.2	149	88.8	85	87.6	61	98.4
Discourage	32	9.8	19	11.3	12	12.4	1	1.6
Total	327		168		97		62	

$\chi^2 = 5.87***$

It is perhaps worth stressing that an overwhelming majority would advise a close relative to go into nursing. Results from other studies show the same prevalence of positive feeling about nursing.

7.3.4 Destination of school leavers

Over 80% of boys and over 70% of girls do not go on to any form of further or higher education at all. But of those who do, a far greater proportion of boys than girls join degree courses. The same is true of HND, HNC, OND and ONC courses. Females outnumber males on catering, nursing and secretarial courses. They also constitute almost 80% of all students joining teacher-training courses and, as a consequence, have been particularly hard-hit by the cut-backs in this sector. (Table 7.17).

Trends in the destination of pupils in England and Wales in the academic year following their sixteenth birthday are shown in Table 7.18. The proportion of 16 year olds staying on at school in the first-year sixth form rose from 26% in 1973/74 (the first year after the raising of the school-leaving age) to nearly 28% in 1979/80. The proportion entering full-time or sandwich non-advanced further education rose even more sharply from just under 10% to over 14% during this same period. Girls are more likely to continue their education by staying on at school or entering colleges of further education than are boys.

England & Wales

	Boys					Girls				
	1966 /67	1970 /71	1975 /76	1978 /79	1979 /80	1966 /67	1970 /71	1975 /76	1978 /79	1979 /80
Pupils entering full-time further education as a percentage of all school leavers - by type of course										
Degree	8.9	9.0	8.8	8.7	8.6	4.3	5.3	5.4	6.0	6.5
Teacher training	1.5	1.3	0.5	0.2	0.1	5.1	5.2	2.2	0.9	0.6
HND/HNC	0.7	0.7	0.4	0.4	0.4	0.2	0.3	0.3	0.3	0.3
OND/ONC	0.5	0.6	0.9	0.5	0.4	0.3	0.4	0.5	0.3	0.2
GCE A level	1.2	1.6	1.8	1.9	2.0	1.0	1.1	2.1	2.3	2.6
GCE O level	1.6	1.7	1.5	1.3	1.4	1.3	1.1	1.5	1.7	1.7
Catering			0.5	0.4	0.5			1.0	1.2	1.5
Nursing			-	-	-			1.6	1.5	1.7
Secretarial			-	-	-			4.8	4.9	5.1
Other full-time	3.6	4.7	4.5	3.7	4.5	8.9	10.8	6.0	6.8	7.0
Total pupils entering full-time education (percentages)	18.0	19.5	18.9	17.2	17.9	21.1	24.1	25.4	25.9	27.3
(thousands)	55.0	61.6	68.7	68.5	73.8	61.0	72.0	87.1	98.6	106.1
Total school leavers seeking employment on leaving school (percentages)	82.0	80.5	81.1	82.8	82.1	78.9	75.9	74.6	74.1	72.7
(thousands)	251.0	253.8	295.1	331.1	334.2	227.9	226.1	256.4	283.0	282.4
Total school leavers (=100%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(thousands)	305.9	315.3	363.9	399.6	407.3	288.8	298.1	343.6	381.6	388.6

Source: Social Trends 12

Destination of pupils attaining the statutory school leaving age

England & Wales

Percentages & Thousands

	1973 /74	1974 /75	1975 /76	1976 /77	1977 /78	1978 /79	Boys	Girls	Total
Destination (percentages)									
Staying on at school in full-time or sandwich	25.9	26.1	27.5	28.3	27.6	27.4	26.5	29.1	27.8
Non-advanced further education	9.7	11.5	13.6	13.6	14.1	14.3	11.3	17.0	14.1
In employment									
- with part-time day study	17.4	16.4	12.1	10.2	14.1	12.1	18.5	5.6	12.2
- with no day study	44.1	41.7	38.0	37.7	34.4	38.7	37.1	40.3	38.7
Unemployed	3.0	4.2	8.8	10.1	10.0	7.5	6.6	7.9	7.2
Total pupils (=100%) (thousands)	701	723	744	746	773	801	417	397	814

Source: Social Trends 12

There has always been a strong competition for potential nurses (school-leavers, mainly girls) from almost all sectors of industry, both public and private, and from the educational sector. For the past few years this competition has not been so severe because of the limited employment opportunities available, especially for young people. The educational system, however, seems to attract a great proportion of young people who would otherwise have gone into paid employment. Pupils throughout the United Kingdom have the option to leave school at sixteen*. In England and Wales, G.C.E. courses in further education colleges provide a popular alternative to further study at school. The trends in female pupils staying on at school for at least one, and at least two, years beyond 16 are shown below.

	1967	1969	1971	1973	1975	1977	1979
At least one year	20.5	24.0	26.0	27.0	26.5	29.0	28.0
At least two years	12.5	15.0	16.5	18.0	17.0	18.0	18.0

Source: Social Trends 12

In Table 7.19, the information about the schooling and employment background of the respondents since the age of 15 years, is presented. No significant difference was detected between the place of job/school and the activity status groups. On the other hand, there is a highly significant difference (χ^2 = 100.33*) for the first year of their schooling and employment background between the different activity status groups, but again a note of caution must be sounded due to the small numbers involved.

* The statutory leaving age was raised by 1 year to 16 in the educational year 1972/73.

Table 7.19 Schools/Jobs Followed before Nursing

17. *We would like to know a little about your schooling and employment background. Would you please list the schools attended since the age of 15 years and the jobs, period of unemployment, courses or apprenticeships followed (including Nursing Cadet), between leaving school and starting your nurse training.*

School/ Job	Secondary Modern		Grammar		College of further Education		Nursing Cadet		Clerical		Commercial		Industrial		Other		Uenmployed	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
FULL-TIME																		
1st	93	55.4	29	17.3	10	6.0	8	4.8	6	3.6	6	3.6	15	8.9	1	0.6	-	-
2nd	1	0.7	2	1.5	20	14.7	52	38.2	18	13.2	22	16.2	10	7.4	3	2.2	8	5.9
3rd	-	-	-	-	4	6.5	22	35.5	10	16.1	14	22.6	8	12.9	-	-	4	6.5
4th	-	-	-	-	1	4.8	1	4.8	5	23.8	4	19.0	8	38.1	-	-	2	9.5
5th	-	-	-	-	-	-	4	40.0	3	30.0	-	-	1	10.0	-	-	2	20.0
Total	94		31		35		87		42		46		42		4		16	
PART-TIME																		
1st	47	48.0	19	19.4	5	5.1	1	1.0	7	7.1	7	7.1	12	12.2	-	-	-	-
2nd	1	1.2	-	-	17	20.5	36	43.4	10	12.0	6	7.2	11	13.3	-	-	2	2.4
3rd	-	-	-	-	3	9.7	13	41.9	6	19.4	4	12.9	2	6.5	-	-	3	9.7
4th	-	-	-	-	-	-	1	14.3	3	42.9	1	14.3	2	28.6	-	-	-	-
5th	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	-	-	-	-
Total	48		19		25		51		26		19		27				5	
INACTIVE																		
1st	39	63.9	11	18.0	1	1.6	3	4.9	-	-	1	1.6	6	9.8	-	-	-	-
2nd	1	1.9	-	-	10	19.2	27	51.9	3	5.8	4	7.7	6	11.5	-	-	1	1.9
3rd	-	-	-	-	3	17.6	6	35.3	-	-	1	5.9	4	23.5	2	11.8	1	5.9
4th	-	-	-	-	-	-	1	20.0	-	-	-	-	2	40.0	-	-	2	40.0
5th	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	-	-	-	-
Total	40		11		14		37		3		6		19		2		4	

The prevalence of recruiting standards is so widespread, according to the job-choice theory, as to make it difficult to find situations from which they are absent. Such situations can only be in jobs:

(a) without hiring requirements and by definition jobs for which selection is non-existent (i.e. all applicants are taken)

(b) where there is no guarantee of minimum earnings and no capital to "injure" or destroy e.g. selling on a "straight commission" basis; and

(c) in jobs done by piece-work practice with no guarantee of minimal earnings and no equipment to damage.

Any variations, according to the same theory, in relative scarcity of job applicants can be met by varying either or both of two determinants of hiring policy; i.e. employers may adjust either wage rates or hiring standards; or some combination of the two. There are a number of factors that affect the relative emphasis that a given employer will place upon these two determinants. (i) An employer will be particularly concerned with maintaining hiring standards when there is a danger of property loss from incompetent workmen, and the prospective amount of such loss is considerable, relative to the difference in wage costs between a superior and inferior worker; (ii) If an employer attempts to secure more workers in a "tight" labour market by raising wages, competing employers are likely to match his increases, and, as knowledge of the wage increase is likely to reach rival employers before it reaches many prospective job applicants, it is unlikely to give the aggressive firm even a temporary advantage. So where agreements among employers against "labour piracy" exist, expansion of the firm's labour force will tend to be accomplished more by "quality deterioration" and less by wage increase than otherwise. (iii) The quality of workers can be improved by training. The costs and yields of such training, relative to existing wage differentials between different grades of labour are the important factors in determining an employer's choice as between raising wage rates and altering hiring standards.

As far as the job-seeker is concerned, a fair proportion of job-acceptances are made, according to a number of studies conducted by OECD (1968) in various countries, in the absence of information about alternatives, or even without a great deal of information about the job which was actually taken. Individual local market studies in the U.S.A. point to a similar conclusion. Summarising the results of a number of enquiries, Myers (ibid) suggests that the process of job-taking by voluntary job changers does not resemble a classical model of fully informed decisions based on considerations of maximum advantage.

The prevailing economic and employment situation throughout the post-war period and until the mid-1970s, is one of a high standard of living and full-employment. The importance of the above is obvious; the choice of a job in a context of less uncertainty is more successful than choice in a context of more uncertainty where the choice is between working somewhere or not working at all. Lewis (1979) who studies the patterns of trainee nurses (students, pupils) in considerable detail, found that 78% had had at least one full-time job, mainly of an unskilled nature, and 41% had worked for more than two years before commencing nurse training. Her analysis showed that both students and pupils with more than one year's previous employment experience were more likely than other trainees to drop out from training. One possible explanation may be that they found the nurse training situation (i.e. working and studying) more demanding, both physically and mentally, than their previous occupation(s), and were not able to meet the standards expected of them in nursing. Also, those who did drop out were older, having had a longer break from the discipline of school, teaching and examinations. 52% of all respondents had had some previous experience of nursing, perhaps as a cadet or nursing auxiliary/assistant, on a pre-nursing course or through voluntary work. The proportion was higher for both students and pupils who completed their training than for those who left.

This would seem to indicate the importance of previous contact with hospitals, which enables the potential trainee nurse to gain a detailed insight of the working environment and the nature of nursing and the nurse training programme. This contact with hospitals may well, of course, deter a potential trainee nurse from pursuing an application for nurse training, but it is preferable that a young person's realisation that he or she is not suited to nursing occur at this stage rather than after starting on a nurse training programme.

7.3.5 Nursing qualifications

The respondents were next asked to state the nursing qualifications possessed, up to a maximum of five, in order to ascertain their type and nature. The summary information obtained is presented below in Table 7.20.

Table 7.20 Number of Nursing Qualifications by Activity Status

19. Please indicate below which nursing qualifications you possess and when and where these were obtained, in chronological order starting with the first.

Number of Qualifications	Number of Respondents with that number of Qualifications		
	Full-time	Part-time	Inactive
1	88	62	41
2	59	28	15
3	19	97	3
4	3	2	2
5	3	1	-

Table 7.21 Place of Qualifications Obtained

	Number of Qualifications									
	First		Second		Third		Fourth		Fifth	
	N	%	N	%	N	%	N	%	N	%
District Nursing School	291	87.4	80	56.3	10	25.0	3	27.3	1	25.0
Within Lancashire	21	6.3	28	19.8	21	52.5	6	54.5	2	50.0
Other part of the U.K.	21	6.3	34	23.9	7	22.5	2	18.2	1	25.0
Total	333		142		40		11		4	

Concerning the year of the first nursing qualification obtained, a statistical difference is observed among the three groups ($\chi^2 = 57.6^{***}$). Particularly interesting is the fact that only 18% of the nurses working part-time had obtained their first nursing qualification after 1975 while the corresponding figures for full-time and inactive nurses are 48% and 42% respectively.

By studying Table 7.21 the familiar feature of many nurses having to go out of their district in order to obtain further qualifications emerges.

7.3.6 Familial characteristics

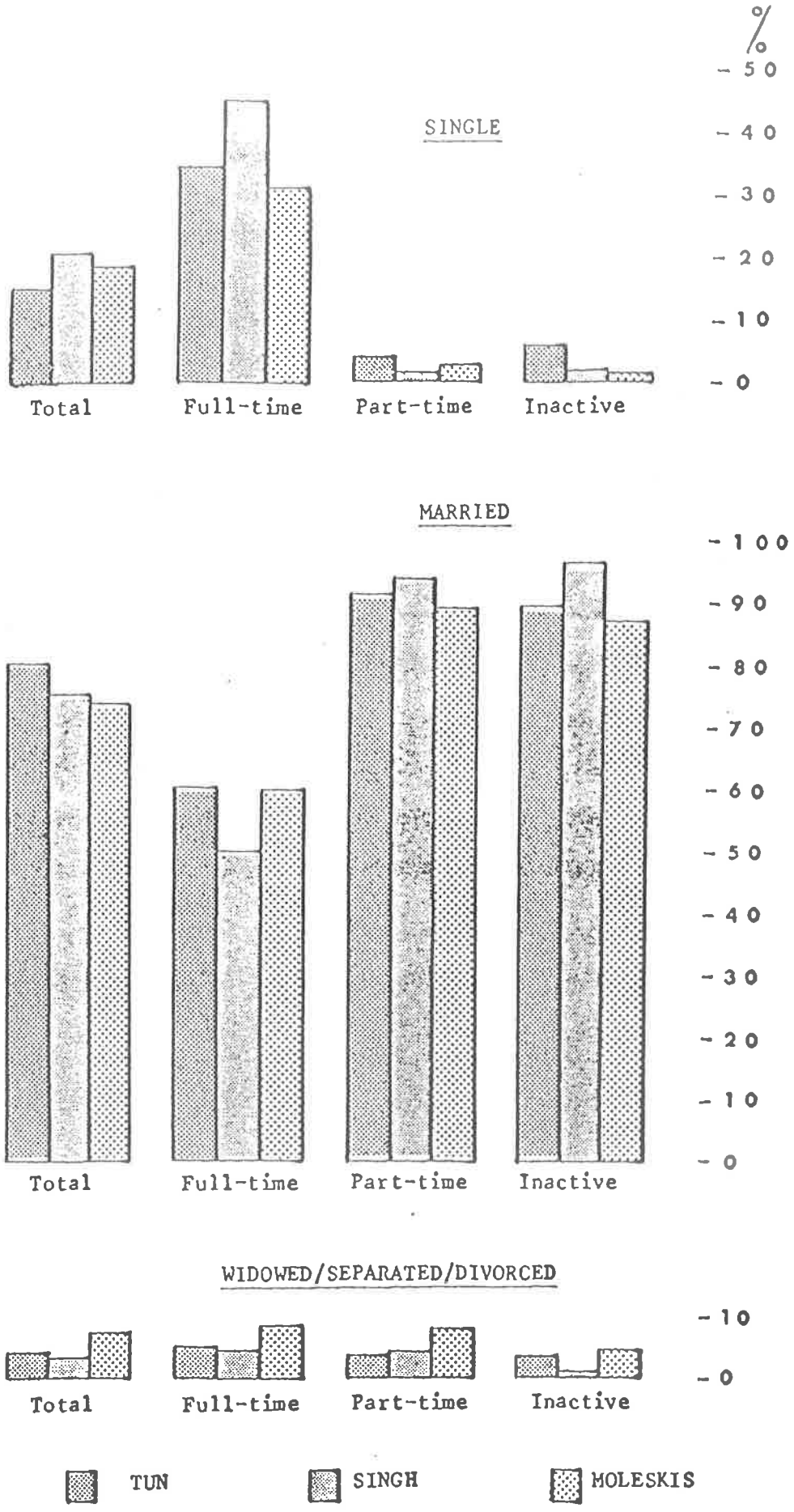
The decision-making unit as far as the activity status of nurses is concerned, is the individual single nurse or the nurse-family unit in the case of a married nurse. In order to gain some insight into this unit, the familial and domestic responsibilities of the nurses were examined. The majority of nurses (73.7%) were married, 18.5% were single and the remaining 7.8% were widowed/separated/divorced. Among the three economic activity status groups, 31.2% of those working full-time were single, as against 3.0% of the part-timers and 1.5% of the inactive nurses. Part-time nurses feature the largest proportion (89%) who were married in comparison with 60.1% of full-time nurses and 87.1% of those who were inactive. The results suggest that part-time nursing has almost been monopolised by married nurses and that a large proportion of married nurses are also in the inactive group. The results also indicate that some married nurses have managed to cope with their familial, or probably more specifically, maternal responsibilities and are nursing either full-time or part-time. There is a striking similarity between the patterns of activity in the three studies and there is a significant difference between the economic activity status and marital status groups (χ^2 = 268.8*** from Tun's analysis, χ^2 = 41.62*** from the present study). Table 7.22 and Fig. 7.4 present the results of all three studies for comparison.

Table 7.22 Marital Status of Respondents

Marital Status: Single
Married
Widowed, Separated or Divorce

	Total	%	Full-time	%	Part-time	%	Inactive	%
TUN								
Single	276	15.3	210	34.4	34	4.4	42	6.4
Married	1456	80.5	369	60.5	497	91.7	586	89.9
Widowed Divorced Separated	76	4.2	31	5.1	21	3.9	24	3.7
Total	1804		610		542		652	
SINGH								
Single	109	21.0	104	45.0	2	1.5	3	2.0
Married	392	75.4	116	50.2	128	94.1	148	96.7
Widowed Divorced Separated	19	3.7	11	4.7	6	4.4	2	1.3
Total	520		231		136		153	
MOLESKIS								
Single	62	18.5	54	31.2	3	3.0	5	1.5
Married	247	73.7	104	60.1	89	89.0	54	87.1
Widowed Divorced Separated	26	7.8	15	8.7	8	8.0	3	4.8
Total	335		173		100		62	

Fig. 7.4 Economic Activity by Marital Status



The presence of children can be expected to influence the labour force participation of married women in three ways: (i) by increasing the amount of work to be done in the home; (ii) by increasing the family's need for income; and (iii) in the case of older children, by providing a source of assistance with home tasks. These considerations pull in different directions, consideration (i) serving to reduce the probability that the wife will seek market work, whereas considerations (ii) and (iii) increase the likelihood that she will participate in the labour force.

The quantitative impact of each of these considerations, and thus the overall net effect of children, should be expected to vary according to both the age and number of children, and also as a result of interactions with other variables.

The impact that the presence of children has on the labour force behaviour of nurses is shown in Table 7.23, where the similarity of patterns of responses between the previous studies and the present one is noticeable. The predominance of a positive response to this question from inactive and part-time nurses is clear, suggesting, therefore, that the presence of children has a major impact on the activity status.

Table 7.23 Presence of Children

13. Do you have any children?

	Total	%	Yes: Full-time	%	Yes: Part-time	%	No: Inactive	%
TUN								
Yes	1318	85.7	254	63.9	484	92.0	580	94.3
No	220	14.3	143	36.1	72	8.0	35	5.7
Total	1538		397		526		615	
SINGH								
Yes	332	80.4	60	46.9	127	94.1	145	96.7
No	81	19.6	68	53.1	8	5.9	5	3.3
Total	413		128		135		150	
MOLESKIS								
Yes	209	76.6	61	52.1	90	91.8	58	100.0
No	64	23.4	56	47.9	8	8.2	-	-
Total	273		117		98		58	

$\chi^2 = 69.38^{***}$

In the United Kingdom today, one in three new marriages is now likely to end in divorce. One of the major impacts of divorce and separation is the increasing number of one parent families, the majority of which are headed by women (E.G. June 1982 pp. 257). Today, one in eight children are being brought up in a one parent family and nearly one million single parents are caring for one and a half million children. Lone mothers are slightly less likely to be working than other mothers, 46% compared with 52%, and whereas other mothers increasingly entered the labour market during the 1970s, lone mothers have become less likely to do so. When they do work, lone mothers are more likely to work full-time than their married counterparts, which is, in some ways, paradoxical given their single-handed responsibility for child care.

Table 7.24 gives the characteristics of the sample for this particular issue.

Table 7.24 Presence of Children by Marital Status

	Yes	No	Total
Single	2	-	2
Married	187	59	246
Widowed Separated Divorced	20	5	25
Total	209	64	273

Table 7.25 shows the results of a further examination into the presence of children by marital status for each activity sta group.

Table 7.25 Presence of Children by Marital Status (For Each Economic Activity Status Group)

Marital status	Full-time		Part-time		Inactive		Total
	Yes	No	Yes	No	Yes	No	
single	-	-	1	-	1	-	2
Married	51	52	82	7	54	-	246
Widowed Divorced Separated	10	4	7	1	3	-	25
Total	61	56	90	8	58	-	273

The importance and influence of children in the activity rate of their mothers is clearly manifested, not only in terms of their presence, but also in terms of their number and age. The number of children of each activity status group for the three studies is presented in Table 7.26. One common characteristic of the three studies derived from the above Table is that the majority in each status group had two children (42.7%, 50.8% and 50.8% for full-time nurses, 49.4%, 58.6% and 45.1% for part-time nurses and 42.5%, 45.5% and 48.3% for inactive nurses). No significant difference is apparent between the three status groups in terms of the number of children.

Table 7.26 Number of Children of Respondents

TUN

Children	Total		Full-time		Part-time		Inactive	
	N	%	N	%	N	%	N	%
1	336	25.2	67	26.5	114	23.5	155	26.8
2	594	45.1	108	42.7	240	49.4	246	42.5
3	280	21.2	49	19.4	106	21.8	125	21.6
4	69	5.2	19	7.5	15	3.1	35	6.0
5	26	2.0	7	2.8	9	1.9	10	1.7
6	13	1.3	3	1.2	2	0.4	8	1.4
Total	1318		253		486		579	

SINGH

Children	Total		Full-time		Part-time		Inactive	
	N	%	N	%	N	%	N	%
1	102	30.7	19	32.4	34	26.6	49	33.8
2	171	51.5	30	50.8	75	58.6	66	45.5
3	45	13.6	6	10.2	14	10.9	25	17.2
4	12	3.6	4	6.8	4	3.1	4	2.8
5	1	0.3	-	-	-	-	1	0.7
6	1	0.3	-	-	1	0.8	-	-
Total	332		59		128		145	

MOLESKIS

Children	Total		Full-time		Part-time		Inactive	
	N	%	N	%	N	%	N	%
1	59	28.1	15	24.6	21	23.1	23	39.7
2	100	47.6	31	50.8	41	45.1	28	48.3
3	29	13.8	10	16.4	15	16.5	4	6.9
4	17	8.1	2	3.3	13	14.3	2	3.4
5	3	1.4	1	1.6	1	1.1	1	1.7
6	2	1.0	2	3.3	-	-	-	-
Total	210		61		91		58	

$\chi^2 = 19.48^{***}$

7.3.7 Social Class

The most widely used classification of people's position in British society is the Registrar General's five-fold classification first used in 1911.

Since the term social class is a very imprecise concept with differing meanings and interpretations, it has to be emphasised that here social class is not a means of explaining why or how social differential exists, but rather a statistical concept for classifying data. It is used to analyse patterns of social behaviour in a more general way.

The five social classes in the current classification are the following:

i.	Professional Occupations	(including doctors, lawyers, chemists and clergymen, etc.)
ii.	Intermediate Occupations	(including most managerial and senior administrative occupations authors, M.P.s, colliery managers, senior government officials, school teachers, farmers, physiotherapists and nurses)
iii.	Skilled Occupations	
	(N) Non-manual	(including typists, clerical workers, sales representatives and shop assistants)
	(M) Manual	(including cooks, railway guards, plasterers, bricklayers, foremen packers, and foremen in the engineering and allied trades)
iv.	Partly Skilled Occupations	(including barmen, bus conductors, canteen assistants and telephone operators)
v.	Unskilled Occupations	(including office cleaners and stevedors, lorry drivers' mates and labourers).

Using social class as the basic criterion, the two previous studies had shown that differences exist between the economic activity status groups.

Table 7.27 confirms these observations, and at the same time, shows that although a higher proportion of the husbands of inactive nurses were in a higher social class than the husbands of the two other activity groups of nurses, the proportion of the two active groups (full-timers, part-timers) is developing independently. So the proportion of nurses working full-time is higher as their social groups become lower while that of the part-time nurses remains steady throughout. It is, therefore, reasonable to conclude that the probability of a married nurse not working is higher if she is married to someone in the upper social classes than if her spouse is someone in a lower social class, and part-time nursing can be taken on by the 40% approx. of qualified nurses, always provided that work opportunities are available.

Table 7.27 Social Class of Married Nurses (Based on Husband's Occupation)

	TUN				SINGH				MOLESKIS			
	Number of Nurses	F.T.	P.T.	I.A.	Number of Nurses	F.T.	P.T.	I.A.	Number of Nurses	F.T.	P.T.	I.A.
Professional	393	16.5	31.8	51.7	103	28.2	32.0	39.8	33	39.4	33.3	27.3
Intermediate	580	27.2	35.0	37.8	103	29.1	36.9	34.0	80	42.5	37.5	20.0
Skilled (Non Manual)	63	23.8	46.0	30.2	54	38.9	24.1	37.0	66	43.9	42.4	13.7
Skilled (Manual)	348	27.9	35.3	36.8	105	30.5	34.3	35.2	61	41.0	37.7	21.3
Semi Skilled	27	33.3	48.1	18.6	23	17.4	26.0	56.6	20	45.0	15.0	40.0
Unskilled	3	-	-	-	8	25.0	62.5	12.5	4	25.0	50.0	25.0
Others	46	-	-	-	3	-	-	-	2	-	-	-

Support for the above finding comes from the self-explanatory information given below in Table 7.28.

Table 7.28 Comparison of Social Class (Defined by Husband's Occupation Between the Present and Other Studies)

	(1) O.P.C.S. %	TUN %	SINGH %	MOLESKIS %	(2) Husbands in General Pop. %
Professional	19.0	26.9	25.8	12.4	5.3
Intermediate	31.0	39.7	25.8	30.1	19.8
Skilled (Non Manual)	13.0	23.8	13.5	24.8	11.3
Skilled (Manual)	27.0	23.8	26.3	22.9	39.0
Semi-skilled (Non-Manual)	2.0	1.9	5.8	7.5	17.5
Semi-skilled (Manual)	6.0				
Unskilled	*	*	2.0	1.5	7.1
Others	2.0	3.2	0.8	0.8	-
Base	565	1460	399	266	12,365,000

(1) Cut-Off Point 51 Years of Age

(2) Census of Population, 1971 Economic Activity Tables

* Less than 0.5%

It can also be recorded that there is a "hidden advantage" for someone going into nursing which is that the chances are higher that she will marry somebody from the upper social classes, or in any event, from a higher social class than her father's occupation determined as Table 7.29 shows.

Table 7.29 Social Class Based on Husband and Father Occupations

Husband's Occupation	Father's Occupation												Total
	Professional	%	Intermediate	%	Skilled (Non-Manual)	%	Skilled (Manual)	%	Partly Skilled	%	Unskilled	%	
Professional	6	35.3	9	20.0	8	14.5	4	4.5	3	8.3	1	7.7	31
Intermediate	3	17.7	19	42.2	15	27.3	27	30.3	9	25.0	2	15.4	75
Skilled (Non-Manual)	7	41.2	10	22.2	15	27.3	18	20.2	10	27.8	4	30.8	64
Skilled Manual	1	5.9	7	15.6	13	23.6	26	29.2	7	19.4	5	38.5	59
Partly Skilled	-	-	-	-	3	5.5	10	11.2	6	16.7	1	7.7	20
Unskilled	-	-	-	-	1	1.8	2	2.2	1	2.8	-	-	4
Others	-	-	-	-	-	-	2	2.2	-	-	-	-	2
Total	17		45		55		89		36		13		

$\chi^2 = 44.5^*$

7.3.8 Age of Youngest Child

Thus far we have considered the impact that the presence and number of children have on the activity status of nurses. We now turn our attention to the other factor which would be expected to have an influence on the domestic responsibilities of the nurse, i.e. the age of the youngest child.

Table 7.30 shows the age of the youngest child of the nurses in each activity status group.

Table 7.30 Age of Youngest Child (Years) of Nurses

Years	Total	%	F.T.	%	P.T	%	Inactive	%
1	60	28.6	2	3.3	18	19.8	40	69.0
2	26	12.4	1	1.6	16	17.6	9	15.5
3	7	3.3	1	1.6	6	6.6	-	-
4	8	3.8	1	1.6	6	6.6	1	1.7
5	9	4.3	3	4.9	6	6.6	-	-
6-10	27	12.9	7	11.5	18	19.8	2	3.4
11-15	34	16.2	22	36.1	10	11.0	2	3.4
16-20	18	8.6	11	18.0	6	6.6	1	1.7
21&over	21	10.0	13	21.3	5	5.5	3	5.2
Total	210		61		91		58	
1-5	110	52.4	8	13.0	52	57.2	50	86.2

Statistical results show as would be expected that there are significant differences in the age of the youngest child in relation to economic activity status ($\chi^2 = 120.3^{***}$).

It is most revealing to look at the activity status of nurses with a child under the age of five; 86.2% of the inactive nurses had a child under five. Looking at it from a different point of view, 45.5% of the nurses with a child under five were inactive, 47.3% were working part-time and an even much smaller proportion, 7.2%, worked full-time. It is even more revealing when one looks at the nurses

with a child under one year, 69.0% were inactive, 30% worked part-time and only 3.3% full-time. With a child under two years of age, the pattern is transformed as follows: 34.6% were inactive, 61.5% worked part-time and 3.8% full-time. In subsequent years, the proportion increases steadily for the part-timers and full-timers and decreases for the inactive nurses. The same pattern is followed for the three studies, as can be seen from Table 7.31. These results confirm Tun's findings that the presence of pre-school children is the dominant factor affecting a nurse's decision to work, and at the same time reveal that nurses became increasingly available for part-time work after their child reaches a year old.

In a recent analysis, of the varying experience of different cohorts of employment profiles of men and women, Rimmer et. al. (1982) have shown that successive cohorts of women have had increasing levels of labour force participation, and that the full-in-activity rates during the child bearing period has been compressed into a shorter period of time. This partly reflects the fact that families are smaller today, but also that children may be spaced through the use of contraception. It is now the case that women are less likely than previously to give up work upon marriage. They still tend to do so at the birth of their first child, but more women are returning to work within a year of their child's birth. Whereas the 1977 labour force survey showed that only 9% of mothers with new babies were economically active 12 months after the birth, the national survey of mothers of new babies in 1979 showed that almost a quarter were economically active by the time their babies were eight months old. Not only do such changes have implications for levels of participation at various ages, they also affect the reduction in a woman's working life-time spent caring for children.

Table 7.31 Proportion of Activity Status groups by the age of youngest child

Age of Child (Year)	MOLESKIS Number of Nurses	F.T. %	P.T. %	I.A. %	TUN Number of Nurses	F.T. %	P.T. %	I.A. %	SINGH Number of Nurses	F.T. %	P.T. %	I.A. %
1	60	3.3	30.0	69.0	250	4.0	20.4	75.6	92	7.6	23.9	68.5
2	26	3.8	61.6	34.6	131	2.3	48.1	49.6	46	8.7	30.4	60.9
3	7	14.3	85.7	-	106	8.5	38.7	52.8	33	12.1	51.5	36.4
4	8	12.5	75.0	12.5	91	8.8	37.4	53.8	24	-	54.2	45.8
5	9	33.3	66.7	-	63	12.7	52.4	34.9	20	20.0	55.0	25.0
6 - 10	27	25.9	66.7	7.4	296	24.7	44.3	31.0	73	20.5	49.3	30.2
11 - 15	34	64.7	29.4	5.9	172	39.5	36.6	23.9	37	54.1	37.8	8.1
16 - 20	18	61.1	33.3	5.6	97	33.0	36.0	31.0	4	75.0	-	25.0
Over 21	21	61.9	23.8	14.3	112	37.5	31.3	31.2	3	67.0	33.0	-
1 - 5	110	7.2	47.3	45.5	641	5.9	34.6	59.5	215	8.8	35.8	55.4

The strength of the respondents' attitudes towards work and maternal duties is presented in Table 7.32.

Fig. 7.5 shows the similarity of patterns between the three studies for the different activity status groups.

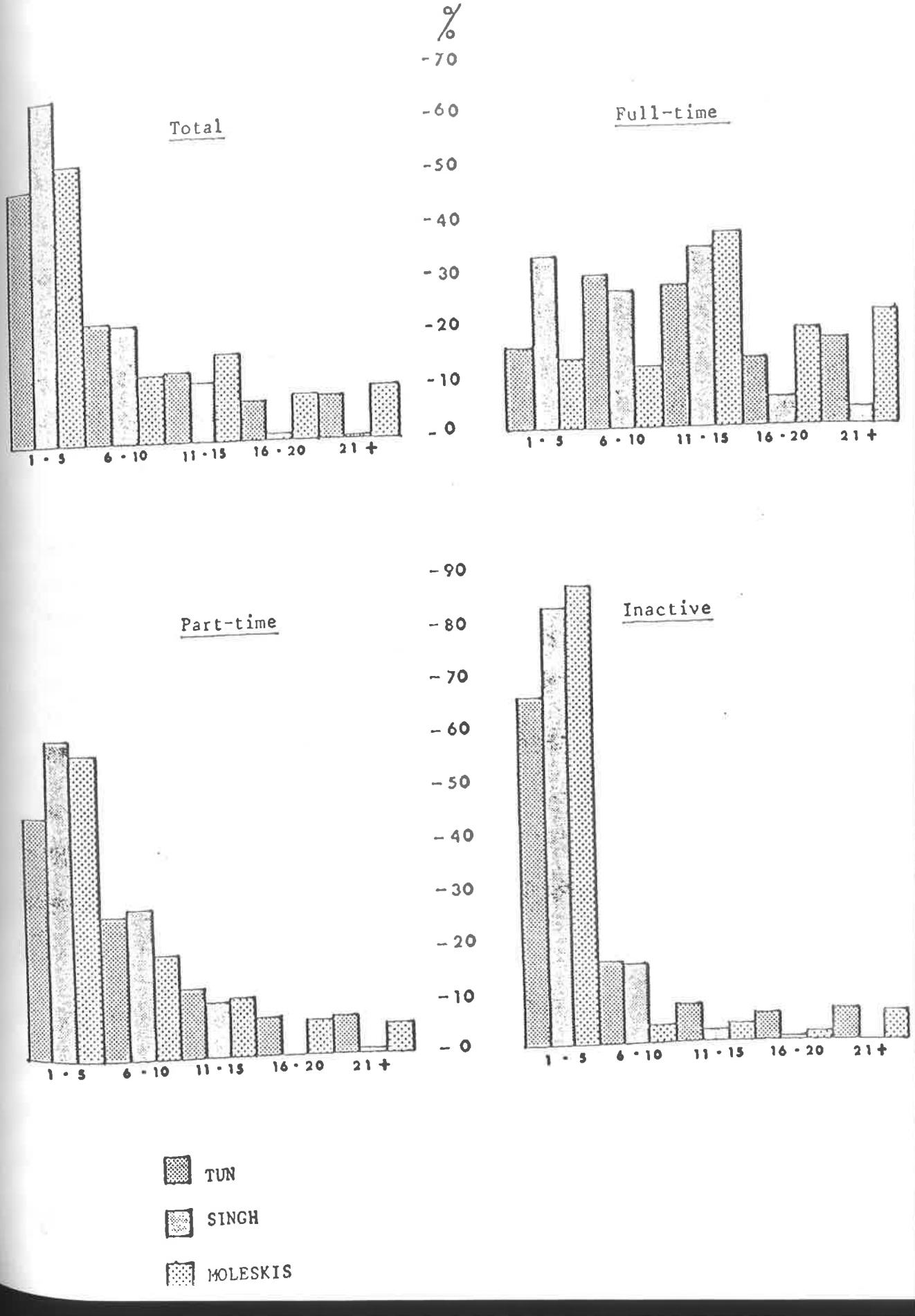
Table 7.32 Respondents' attitudes towards married women and work by activity status

27. Below are some opinions people have expressed about married women going out to work, whether they are nurses or not. Would you indicate which statement comes closest on the whole to matching your own opinion on this matter. (Please tick one box in each group).

	If the woman has no Children		If the woman's children at school		If the woman's children under school age	
	N	%	N	%	N	%
Ought to work	29	8.9	7	2.2	-	-
Has the right to work	296	91.1	302	92.9	152	46.8
Work if needs money	-	-	13	4.0	87	26.8
Ought to stay at home	-	-	3	0.9	86	26.5

There is no statistical significance between the responses of the three activity status groups.

Fig. 7.5 Age of Youngest Child (Years) of Nurses by Activity Status



It has been demonstrated by almost every study that the one single factor dominating the decision of a married woman to enter or re-enter the labour force is the age of her youngest child. The attention of the researcher should, therefore, be concentrated in tracing other or related factors of women's labour force participation since the effort to restate the importance of this factor would add little to our understanding.

7.3.9 Income and expenditure

As it has already been noted earlier, for the individual, his labour force status is one of the major influences on his entire way of life. For the country at large, the proportions of various population groups in the labour force both affects and reflects the overall rate of economic growth, the economic circumstances of minority groups, and the role of women in society - to mention just three issues of some interest.

One of the primary objectives of this study is to explain the effects of various factors on the decision to seek work in the market place as opposed to working in the home or enjoying leisure. Labour supply depends, of course, on the degree of labour force participation, as reflected in annual hours worked, or on the number of individuals participating in the labour force at a point in time. Income is an important consideration of most people and in attempting to explain patterns of labour force participation economic determinants, among other things, were taken into consideration. As the majority of nurses in the sample are married, by examining the income levels of nurses in this category, it suffices to highlight this factor. Information was gathered on total income per month (after deductions of tax, insurance, etc.) and the data obtained is summarised in Table 7.33.

Table 7.33 Total Monthly Income (for each status group) in the three studies

45* One of the purposes of this project is to reveal the relative importance of the various factors which might determine whether or not a married woman works. It seems reasonable to suppose that economic considerations might influence the decision to some extent, and to help test out this theory, there now follow three questions for married women which you might feel are a gross invasion of your privacy. If this is the case and you therefore feel you would prefer not to answer, please ignore them. It is perhaps worth reiterating that the information you provide will, in common with all other answers, be treated in the strictest confidence. In view of this we are hoping that not all respondents will contract out of responding as the material we gain from the three questions will be very important.

(a) What is your husband's Net Income,
per month: .....
or per week: .....

(i.e. after deduction of tax, insurance, etc.)

(b) Other family income (your income, property income, etc.) per month: .....

(c) What is your household's monthly outlay on:

Mortage .....
Rates .....
Rent .....

	TUN			SINGH			MOLESKIS		
	F.T.	P.T.	I.A.	F.T.	P.T.	I.A.	F.T.	P.T.	I.A.
Up to 100	5.1	1.9	2.2	-	-	- -	-	-	-
100 - 200	66.6	50.3	37.2	-	-	-	4.3	1.6	2.3
201 - 300	25.3	36.1	45.5	19.6	3.3	-	4.3	3.2	14.0
301 - 400	2.5	7.1	7.4	21.7	21.7	20.0	4.3	6.5	30.2
401 - 500	0.5	2.9	4.7	30.4	26.7	20.0	8.7	17.7	27.9
More than 500 -	-	1.7	3.0	28.3	48.3	60.0	78.4	71.0	25.6

* This was, of course, the question which provoked the adverse reaction commented on earlier.

It is clear from Table 7.33 that full-time nurses are in higher income groups than part-time or inactive nurses. This finding is quite different from the previous studies where full-time nurses are in lower income groups than part-time or inactive nurses.

This contradiction could either be the result of the relatively young age composition of the sample, that is the "inactive" nurses are temporarily out of work because of family reasons or, because of the resentment to this particular question (as it has already been discussed in Chapter 5) so that the response to this part of the questionnaire is simply not representative.

The small size of this sub-group of respondents discourages any attempt for further analysis into this highly sensitive issue. The same, unfortunately, applies to the analysis of expenditure (mortgage, rates, rent, total family outlay). Even with these reservations in mind, several unsuccessful attempts have been made in order to detect any statistically valid relationship between the various income and expenditure groups and the three economic activity status groups or between these groups and the social class or age of respondents. In Tables 7.34 to 7.38 some of the results are presented.

Table 7.34 Income and Expenditure by Activity Status

	F.T.	P.T.	I.A.
Mean Husband's Income	399	421	424
Mean other Family Income	331	209	201
Mean Total Family Income	730	630	625
Mean Monthly Mortage	91	99	86
Mean Monthly Rates	15	20	19
Mean Monthly Rent	46	-	38
Mean Monthly Total Outlay	94	107	95

Table 7.35 Monthly Husband's Income by Activity Status

	Total		F.T.		P.T.		I.A.	
INCOME ( )	N	%	N	%	N	%	N	%
Up to 200	4	2.5	3	4.8	-	-	1	2.4
201 - 300	25	15.4	9	14.5	8	13.8	8	19.0
301 - 400	60	37.0	29	46.8	17	29.3	14	33.3
401 - 500	46	28.4	11	17.7	24	41.4	11	26.2
501 - 600	13	8.0	6	9.7	4	6.9	3	7.1
601 - 700	5	3.1	1	1.6	2	3.4	2	4.8
701 - 800	5	3.1	2	3.2	2	3.4	1	2.4
801 - 900	3	1.9	1	1.6	-	-	2	4.8
More than 900	1	0.6	-	-	1	1.7	-	-
Total	162		62		58		42	

There is no statistical significance.

Table 7.36 Annual/Monthly Rates by Activity Status

	Total		F.T.		P.T.		I.A	
	N	%	N	%	N	%	N	%
Up to 50	7	4.4	2	3.3	2	3.4	3	7.9
51 - 100	38	24.1	16	26.2	11	18.6	11	28.9
101 - 150	24	15.2	18	29.5	3	5.1	3	7.9
151 - 200	25	15.8	11	18.0	9	15.3	5	13.2
201 - 250	28	17.7	6	9.8	14	23.7	8	21.1
251 - 300	7	4.4	-	-	5	8.5	2	5.3
301 - 350	4	2.5	1	1.6	3	5.1	2	-
351 - 400	8	5.1	2	3.3	6	10.2	-	-
More than 400	17	10.8	5	8.2	6	10.2	6	15.8
Total	158		61		59		38	

$\chi^2 = 47.29***$

Table 7.37 Other Family Monthly Income by Activity Status

	Total		F.T		P.T.		I.A	
	N	%	N	%	N	%	N	%
Up to 100	18	12.9	2	3.1	6	10.2	10	58.8
101 - 200	35	25.0	3	4.7	30	50.8	2	11.8
201 - 300	38	27.1	20	31.3	16	27.1	2	11.8
301 - 400	33	23.6	30	46.9	2	3.4	1	5.9
401 - 500	12	8.6	8	12.5	4	6.8	-	-
501 - 600	-	-	-	-	-	-	-	-
601 - 700	-	-	-	-	-	-	-	-
701 - 800	1	0.7	-	-	1	1.7	-	-
801 - 900	1	0.7	1	1.6	-	-	-	-
More than 900	2	1.4	-	-	-	-	2	11.8
Total	140		64		59		17	

$\chi^2 = 109.44***$

Table 7.38 Monthly Mortgage by Activity Status

	Total		F.T.		P.T.		I.A.	
	N	%	N	%	N	%	N	%
Up to 50	45	31.0	13	22.8	17	30.9	15	45.5
51 - 100	47	32.4	23	40.4	14	25.5	10	30.3
101 - 150	32	22.1	17	29.8	12	21.8	3	9.1
151 - 200	15	10.3	3	5.3	10	18.2	2	6.1
201 - 250	5	3.4	1	1.8	2	3.6	2	6.1
Over 250	1	0.7	-	-	-	-	1	0.7
Total	145		57		55		33	

$\chi^2 = 19.3*$

7.3.10 Taking up a career other than nursing

When asked whether they had considered taking up any career other than nursing, 30.2% of the respondents, indicated that they had, and 69.8% that they had not. These figures are very different from those of the other studies where 44.5% of Tun's respondents indicated that they had though of taking up another job, and an even greater proportion (50.8%) in Singh's research.

When the desired occupations are examined, the one which predominates is teaching (Table 7.39). This was the single occupation which had been competing with nursing in the preferences of young people during their job-choice time, as the previous studies confirm. Spearman's rank correlation coefficients indicate a similarity of the preferences of the three activity status groups. It seems that this striking similarity of job preferences might have been a common factor in their decision to enter nursing. One point which broke this almost absolute agreement, however, was found when a job-to-job examination was made with regard to the three activity status groups.

Table 7.39 Type of Other Careers Considered

24. *Had you ever thought of taking up any of the following jobs and if so how much serious consideration did you give to each alternative?*

If Yes — Yes A Lot / No A Little

Job Considered	TOTAL						Rank		
	A Lot	%	A Little	%	Total*	Rank	Full-time	Part-time	Inactive
Bank Clerk	3	1.4	15	5.4	21	10	10	8	9
Air Hostess	10	4.7	48	17.3	68	4	3	6	4
Hairdresser	22	10.4	29	10.5	73	3	4	5	2
Typist	18	8.5	29	10.5	65	5	4	4	7
Physiotherapist	20	9.4	20	7.2	60	7	7	3	6
Teacher	50	23.6	44	15.9	144	1	1	1	1
Secretary	22	10.4	16	5.8	60	7	5	7	5
Dress Designer	7	3.3	9	3.2	23	9	9	9	8
Social Welfare Worker	27	12.8	30	10.8	84	2	2	3	3
Cosmetics Demonstrator	1	0.5	2	0.7	4	11	11	–	–
Office Worker	21	9.9	21	7.6	63	6	6	2	7
Pharmacist (chemist)	10	4.7	14	5.0	34	8	8	7	10
Youth employment officer	1	0.5	–	–	2	12	–	10	–
Total	212		277						

* A lot was scored 2 and A little was scored 1.

Spearman Rank Correlation Coefficient

	FT/PT	FT/IA	PT/IA
rs	0.85	0.94	0.80
Z	2.96	3.25	2.78

7.3.11 Reasons for choosing nursing

Information was gathered on the reasons for choosing nursing as a career. The most important reason was the desire to help other people. Second in importance was the desire to have a stable and secure job. Third was ranked "I always fancied it", (Table 7.40). Comparing the results of the two previous studies, the clear conclusion emerging is the importance now paid to the extrinsic factor "Stable and secure job". Although this is not too surprising in the prevailing economic and employment situation, it does constitute a shift towards the less "idealistic" and more "job-oriented" factors of the nursing profession. This is re-enforced by comparing the second most important factor with those of the other researchers.

There is no significant difference between the three economic activity status groups in terms of the reasons for choosing nursing as reflected in the Spearman's Rank Correlation Coefficients shown in the table. It could therefore be concluded that all nurses come into nursing for similar sets of reasons, and the difference in their economic status is due to other influences and circumstances which are manifested after they have become nurses. This observation could appear to agree with what might reasonably have been expected.

Table 7.40 Reasons for Choosing Nursing as a Career

28. *The following is a related short list of reasons given to us by nurses for their having worked in nursing. Please indicate which four of them you feel came closest to impacting upon your decision to become a nurse. Put them in order of importance by using the corresponding letters.*

1. ..... 2. ..... 3. ..... 4. .....

Statement	Order of importance 1	2	3	4	Total*	Rank*** Moleskis	Singh	Tun
Being a nurse helps you to bring up a family	2	2	3	4	24	14	12	11
I wanted a stable and secure job	56	63	67	35	582	2	7	7
I could earn more money as a nurse than in any other job	–	1	1	–	5	16	14	14
You can work different hours each day; it is not a 9 to 5 job	8	27	23	20	179	5	11	12
You are paid while you are training	9	14	16	16	126	7	9	8
A nurse holds a position of some status in the community	6	16	23	38	156	6	10	9
It provides the opportunity for overseas travel	8	8	20	18	114	8	8	10
You can always return to nursing later in life	8	44	58	85	365	4	4	4
Helping people makes life more agreeable**	113	61	46	24	751	1	1	1
The hospital/school of nursing was near home	–	8	12	10	58	13	–	–
I always fancied it	88	35	17	17	508	3	–	–
The school of nursing was away from home	1	3	2	2	19	15	–	–
I did not like my previous job	4	6	8	10	60	12	–	–
I had to work to help my family	6	11	6	7	76	10	–	–
Being a patient in a hospital convinced me that nursing was for me	13	13	5	6	107	9	–	–
I had occasion to look after relatives who were ill	1	10	10	9	63	11	–	–

* The total score was computed in the following manner: 1 was scored 4, 2 was scored3, 3 was scored 2 and 4 was scored 1.

** Tun and Singh used the statement: "You work with people rather than things". The statement "You meet a wide variety of people" came 2nd in Singh's and 3rd in Tun's analysis.

*** Tun's 2 and Singh's 3 in the rank order came the statement: "It opens up an interesting range of opportunities" while 5 was "There is little chance of being bored" and 6 was "You can use your own initiative at work" in both analyses.

– No such questions in previous studies.

7.3.12 Advantages and disadvantages of nursing

The attractiveness or not of nursing as an occupation can also be examined from the answers given to the question about advantages and disadvantages of nursing (Table 7.41 and Fig. 7.7). It is clear that nurses hold values that are "people oriented" (Meeting with a variety of people, or you work with people rather than things as the question was in the two previous surveys).

Again the importance of the job-oriented factors confirms the shifting of nurses' attitudes. As can by seen, while the "people oriented" factor comes first, the next five factors are very enlightening in the sense that they pin-point very important areas of women's working patterns; i.e. security in the job, part-time arrangements, working near the place of residence, and working different hours to facilitate keeping the traditional housewife role. Another point of interest which arises from the same table is that Pay is considered the second most important disadvantage after the cost of travelling to and from work. It is also interesting to note that the opinion of the respondents seems to be divided with respect to the factor of "Varied hours of work". In Herzberg's terminology, "motivations" and "hygiene" factors are not necessarily opposite. This can be seen by a more careful examination of the differences between married and single nurses' responses with respect to the consideration of "family commitments" on the one hand, and "unsocial hours" on the other.

Table 7.41 Advantages and Disadvantages of Nursing

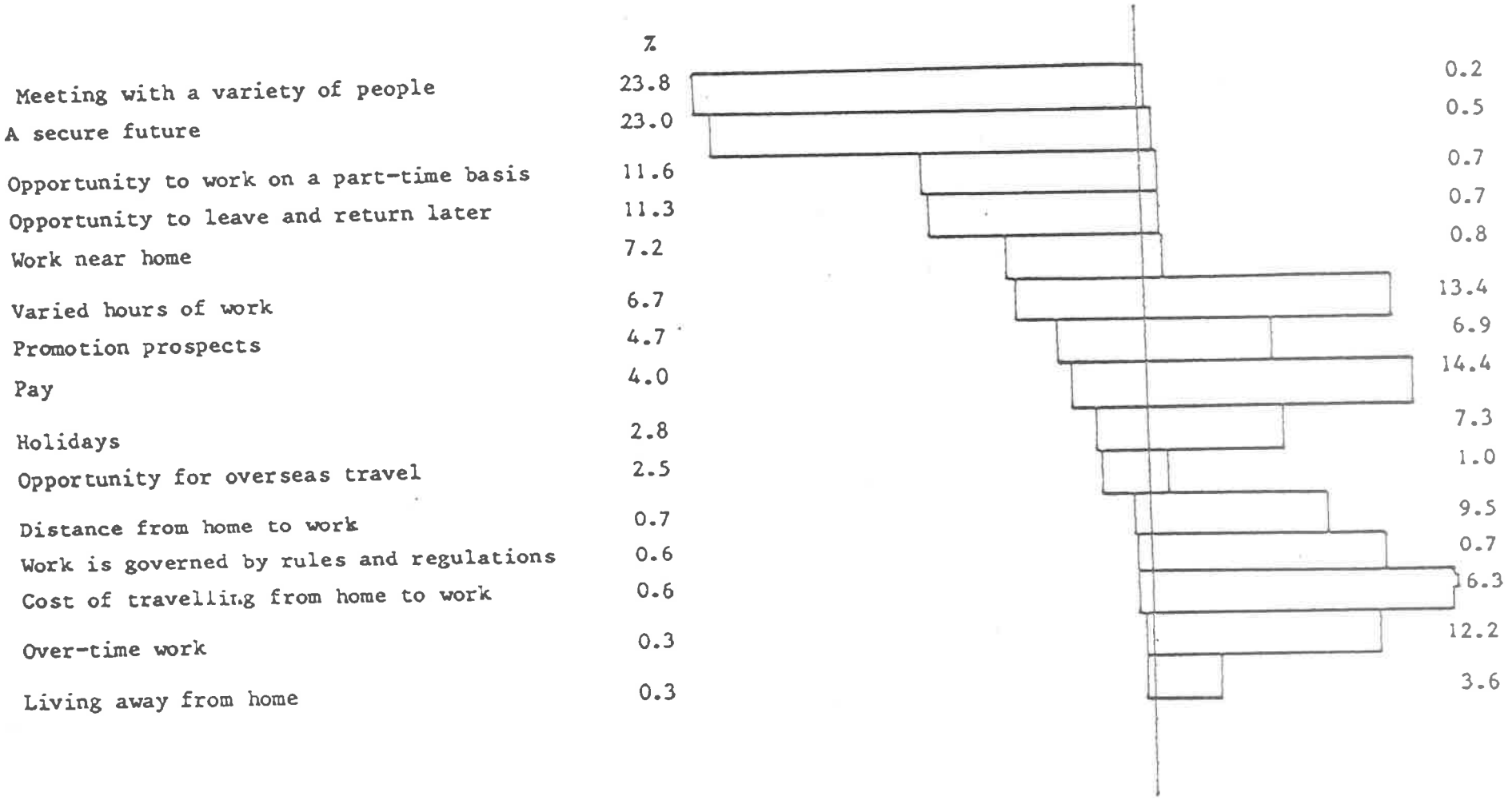
31. *The following are some of the factors generally associated with jobs and hence with nursing. Some of these may be considered to be advantageous i.e. you will see them in a positive light; and others as disadvantages. Which of them do you think are the four most important advantages of nursing and which, if any, do you think are the four greatest disadvantages of nursing (Please indicate by letter in rank order)*

Advantages: 1. ..... 2. ..... 3. ..... 4. .....
Disadvantages 1. ..... 2. ..... 3. ..... 4. .....

	ADVANTAGES Order of importance				* Total	Rank	DISADVANTAGES Order of importance				* Total	Rank
	1	2	3	4			1	2	3	4		
a) Working near home	26	25	18	14	229	5	3	1	–	1	16	11
b) A secure future	118	63	32	25	750	2	1	1	1	–	9	14
c) Pay	9	13	19	18	131	8	34	29	24	13	284	2
d) Cost of travelling from home to work	1	2	4	2	20	13	40	30	17	6	320	1
e) Opportunity to work on a part-time basis	36	37	44	35	378	3	1	1	2	2	13	13
f) Distance from home to work	–	4	4	3	23	11	18	28	11	10	188	6
g) Holidays	–	7	19	33	92	9	16	14	12	14	144	7
h) Varied hours of work	5	38	29	28	220	6	41	24	10	8	264	3
i) Over-time work	1	1	1	–	9	14	29	28	17	7	241	5
j) Living away from home	1	1	1	–	9	15	7	8	7	4	70	9
k) Opportunity to leave and return later	8	50	65	55	367	4	1	2	1	2	14	12
l) Work is governed by rules and regulations	2	3	1	2	21	12	39	12	20	17	249	4
m) Meeting with a variety of people	113	57	54	45	776	1	–	–	1	1	3	15
n) Opportunity for overseas travel	3	8	9	27	81	10	1	3	2	2	19	10
o) Promotion prospects	7	19	24	35	154	7	11	15	14	18	135	8

* The total score was computed as follows: 1 was scored 4, 2 was scored 3, 3 was scored 2 and 4 was scored 1.

Fig. 7.6 Advantages and Disadvantages of Nursing



In Table 7.42 the response given to the particular question by the three marital status groups is presented.

Table 7.42 Varied Hours of Work by Marital Status

Disadvantage	Single	Married	W/S/D
First	23.1	55.2	33.3
Second	30.8	28.4	33.3
Third	46.2	6.0	-
Fourth	-	10.4	33.3

$\chi^2 = 20.49$ ***

In order to examine the similarity or not between the responses of the three economic status groups to this question (Question 31), Kendall's Coefficient of Concordance (W) was used. The value of 0.94 being associated with a $\chi^2 = 20.75$ with 14 degrees of freedom is not significant at the 5% level.

The opposite is the case for the rankings assigned to the disadvantages of nursing, here W=0.70, $\chi^2 = 29.52$ with 14 degrees of freedom. The null hypothesis is rejected, i.e. the evidence suggests that among the three activity status groups there is some community of preference as far as the disadvantages of nursing is concerned, accounting for the first five disadvantages: Pay, Cost of travelling from home to work (Distance from home to work), Varied hours of work, Overtime work, Work governed by rules and regulations.

Examining pairs of observations between the activity status groups using Spearman's rank correlation coefficient (r_s) it is found that there is a higher degree of agreement between the two groups Part-Time and Inactive ($r_s = 0.89$ and $Z = 3.35$) in their ranking order of the advantages of nursing. They considered as the first five advantages of nursing the following: Meeting with a variety of people,

A secure future, Opportunity to work on a part-time basis, Opportunity to leave and return later, Varied hours of work. The same pair of respondents (PT/IA), however, has the least degree of agreement in order of the ranks regarding the disadvantages of nursing (r_s = 0.77) compared with r_s = 0.84 for FT/IA and r = 0.80 for FT/PT groups of pairs. It is perhaps interesting to mention the different ranks the activity status groups give. For those nurses working full-time, the first advantage of nursing is A secure future, while for those working part-time, the first advantage, not surprisingly, is Opportunity to work on a part-time basis, and for the "inactive" nurses Meeting with a variety of people is the first advantage of the profession they have been trained for. The first disadvantage of nursing for those respondents working full-time is considered to be Pay while for "part-time" and "Inactive" nurses it is Cost of travelling from home to work.

Whatever the particular differences, however, overall there is strong evidence to suggest that nurses who enter nursing are a homogeneous group, i.e. having the same aspirations, the same reasons for, and the same reservations against for entering the service. Only the experience of the work situation and changing familial circumstances lead into the different activity status groups.

7.4 Active Nurses

This section deals with future career options of active nurses, those nurses who were working either full-time of part-time in nursing at the time of this survey. In question 34, twelve options were presented and the respondents were asked to indicate by selecting only one, which of them they were most likely to follow within the next couple of years. From the total subsample of 264 (full-time = 170, part-time = 94) nurses, 252 (95.5%) responded to the question. All the 12 not responding worked on a part-time basis. Looking at Table 7.43 we find that in total more than 40% of the respondents are prepared to carry on in their present job.

However, there is an important difference between the two activity status groups (full-time or part-time nursing) in the order of more than 20 percentage points, i.e. 34,4% of full-timers and 56.0% of part-timers. 15.3% of full-time nurses indicated the option Hopes for promotion but only 2.4% of the part-timers, presumably recognising the unequal but almost inevitable promotion prospects between P.T. and F.T. nursing. It has to be stated that in some cases, the absolute figures were very low and therefore little can be drawn from them. Kendall's coefficient of Concordance was considered to be an appropriate statistical test. Although each respondent was asked to indicate only one option, totally the number of responses to each option led to a suitable ranking procedure. The statistical results from Table 7.43 show that Kendall's coefficient of Concordance W = 0.25 and X^2 = 5.5 Such a low figure does not allow us to reject the null hypothesis that there is no community of preference.

Table 7.43 Future Career Options of Nurses who are Currently Nursing

34. *Over the next couple of years which of the following options is the most likely to be the one you will follow? Please tick one only.*

Options	MOLESKIS						SINGH	TUN
	Total		Full-time		Part-time		Total	Total
	N	%	N	%	N	%	%	%
To get married	6	2.4	5	2.9	1	1.2	1.1	1.7
Further training	26	10.3	17	10.0	9	11.0	14.0	10.8
From Hospital to Community	13	5.1	10	5.9	3	3.7	5.0	5.2
From Community to Hospital	-	-	-	-	-	-	0.6	1.2
Give up Nursing	8	3.1	4	2.4	4	4.9	1.4	5.9
Job outside nursing	3	1.2	2	1.1	1	1.2	1.4	1.0
Start family	32	12.7	24	14.4	8	9.8	10.1	7.4
Carry on present job	104	41.3	58	34.4	46	56.0	43.6	49.5
From part-time to full-time	4	2.0	-	-	4	4.9	5.0	4.3
From full-time to part-time	12	4.4	11	6.5	-	-	3.9	3.4
Hopes for promotion	28	11.1	26	15.3	2	2.4	-	-
Other options	16	6.3	13	7.1	4	4.9	10.3	7.7
Total	252		170		82			

This seems to confirm the results from the previous studies. (The options Carry on in present job and Hopes for promotion were combined as a single one in the previous studies).

The conclusion of all three studies is that full-time nurses and part-time nurses have different but realistic work aspirations and plans; probably because of marital status, age, social class, children or any other factors. As Table 7.44 shows, relatively more part-timers are planning to give up nursing than full-timers, but, at the same time, some indicated a desire to switch to full-time nursing. This evidence seems to suggests that part-time nursing can be seen as a transitional stage which may lead either to a stable workforce (56% are planning to carry on) or to a more career-oriented commitment (full-time nursing) or withdrawal from service (giving up work altogether). The analysis of future career options of "active" nurses was further extended by examining the responses to Question 34, in relation to a number of variables.

7.4.1 Age of respondents

In order to analyse the relationship between future options and age of the respondents, the Variable Age is classified into five groups; (Table 7.44). Of those below the age of 25, 12.5% would like to continue in their present position while 25.0% would like to leave to start a family. Further examination of this group of respondents reveals that they are the most ambitious group with 18.8% of them expressing hopes for promotion (although considering the promotion ladder in nursing it is not unusual for this to dominate the plans in this age-group) compared with only 12.7%, 12.0%, 10% and 3.2% for the age-groups 26-30, 31-35, 36-40 and over 40 respectively. It can also be observed that the "job-oriented" option, further training, is considered to be important by the under 25 and 26-30 age groups. In relation to age, another interesting observation is that, as the respondents get older, the proportion switching from full-time to part-time increases.

Table 7.44 Future Career Options of 'Active' Nurses by Age

Options	up to 25		26-30		31-35		36-40		over 40	
	N	%	N	%	N	%	N	%	N	%
To get married	4	8.3	1	1.6	-		1	3.3	-	
Further training	7	14.6	10	15.9	6	10.3	2	6.7	1	1.7
From Hospital to Community	3	6.2	3	4.8	2	3.4	1	3.3	4	6.6
From Community to Hospital	-		-		-		-		-	-
Give up Nursing	-		-		1	1.8	-		7	11.4
Job outside nursing	1	2.0	-		-		-		2	3.2
Start family	12	25.0	15	23.9	4	6.9	1	3.3	1	1.7
Carry on present job	6	12.5	20	32.8	29	50.0	15	50.0	35	57.3
From Part-time to full-time	1	2.0	-		3	5.1	1	3.3	-	
From Full-time to part-time	1	2.0	2	3.1	2	3.4	4	13.3	2	3.2
Hopes for promotion	9	18.8	8	12.7	7	12.0	3	10.0	2	3.2
Other options	4	8.3	4	6.3	4	6.7	2	6.7	7	11.4
Total	48		63		58		30		61	

In general, the patterns follow the expected relationship between age and future career options. Statistical results are: Kendall's coefficient of Concordance W = 0.63 with a value χ^2= 34.9. The null hypothesis: Ho (there is no community of preference) is rejected at 0.05 level of significance which suggests that there is some community of preference among the respondents.

7.4.2 Presence of children

As can be seen from Table 7.45, more than half of the respondents with children intend to carry on in their present job, while for those without children, their main concern seems to be their plans to start a family. These patterns follow very closely the findings of the previous studies. There is also a similarity of career plans and, more specifically, of giving up nursing for those with children. Surprisingly, no difference seems to appear in regard to future intentions of going into further training between those nurses who have children and those who do not. As far as the option switching from full-time to part-time is concerned, the pattern which was detected in the two previous studies (of more women without children going into part-time than with children), is not confirmed in the present one. Statistical results show that for the three pairs of variables there is a similarity of relationship. Spearman's rank correlation coefficients have been calculated for the three studies and the null hypothesis Ho=Pr=0 is rejected, for the three cases, at the 0.05 level of significance i.e. evidence suggests that there is some agreement between the two variables (with and without children).

The question whether there is any community between the preferences given by the three studies could be answered by calculating W (Kendall's coefficient of Concordance). For the three studies, the respondents with children and those without were studied and the results are:

$$W_{\text{with children}} = 0.79 \text{ and } \chi^2 = 26.23$$

$$W_{\text{without children}} = 0.85 \text{ and } \chi^2 = 27.97$$

Table 7.45 Future Career Options of 'Active' Nurses by Presence of Children

Options	MOLESKIS				SINGH		TUN	
	with children		without children		with children	without children	with children	without children
	N	%	N	%	%	%	%	%
To get married	1	0.7	–	–	0.5	–	–	–
Further training	11	8.2	6	9.4	13.2	9.3	10.3	11.7
From Hospital to Community	5	3.7	4	6.3	6.6	4.0	6.2	2.8
From Community to Hospital	–	–	–	–	0.5	1.3	2.0	1.1
Give up Nursing	7	5.2	–	–	1.1	1.3	7.6	2.2
Job outside Nursing	1	0.7	–	–	1.6	1.3	1.0	1.1
Start family	7	5.2	23	35.9	3.3	34.7	2.0	34.1
Carry on present job	73	54.5	11	17.1	48.3	24.0	54.0	34.1
From part-time to full-time	4	3.0	1	1.6	9.9	–	6.6	–
From full-time to part-time	6	4.5	3	4.7	2.7	6.7	2.5	5.6
Hopes for promotion	8	6.0	11	17.1	–	–	–	–
Other options	11	8.2	5	7.8	10.4	16.0	7.4	7.3
Total	134		64					
			r_s = 0.83		r_s = 0.71		r_s = 0.70	
			Z = 2.74		Z = 2.34		Z = 2.32	

In both cases the null hypothesis that there is no community of preferences is rejected at the 0.01 level of significance i.e. the evidence suggests that there is community of future career's options among the categories of respondents from the three different studies.

7.4.3 Number of children

Table 7.46 presents the results of active nurses with the number of children in relation to their future intentions at work. The information given confirms the findings of the previous studies (which had been expected) that after having two children, none of the nurses is considering having more. It also shows the increasing number of respondents staying on at their job as the number of children increases. For the nurses who have one child only, their consideration of part-time employment is striking in comparison with those with more than one child.

Table 7.46 Future Career Options of 'Active' Nurses by Number of Children

Options	Number of children					
	1		2		3	
	N	%	N	%	N	%
To get married	-	-	1	1.4	-	-
Further training	3	9.3	6	8.7	2	5.8
From Hospital to Community	1	3.1	3	4.3	1	2.9
From Community to Hospital	-	-	-	-	-	-
Give up Nursing	2	6.2	3	4.3	2	5.8
Job outside Nursing	-	-	-	-	1	2.9
Start family	6	18.7	-	-	-	-
Carry on present job	14	43.7	39	56.5	22	62.9
From part-time to full-time	-	-	2	2.9	3	8.5
From full-time to part-time	3	9.3	3	4.3	-	-
Hopes for promotion	1	3.1	5	7.2	2	5.8
Other options	2	6.2	7	10.1	2	5.8
Total	32		69		35	

7.4.4 Age of youngest child

Career intentions in relation to the age of the youngest child were also examined. In Table 7.47 the results of this analysis, together with those from the previous studies are presented for comparison. The clearest pattern which emerged was that as the youngest children became older, more and more nurses felt inclined to continue in their present jobs; a pattern confirmed by the other studies. It is therefore true to conclude that the most vulnerable age of the youngest child, in terms of nursing participation, appears to be group 2-5 years. With regard to other options mentioned by active nurses, this study appears to be rather at odds width the two previous ones. Statistical results, however, showed that the null hypothesis that there is no community of preference between the three age groups cannot be rejected ($W = 0.5$ and $\chi^2 = 16.67$).

7.4.5 Marital status

When studying female employment it has always been assumed that marital status plays a strong influence, not only on the labour force participation rate of women, but also on their career intention/plans once they have been in a job. Table 7.48 presents the results of the cross tabulation of career intentions by marital status. Statistical results show $W = 0.69$ and $\chi^2 = 22.74$ with 11 degrees of freedom. The null hypothesis is rejected at the 0.05 level of significance i.e. the career intentions between the three marital status groups have some community of preference. Although the absolute figures are very low, overall, the results in this table are consistent with those of Tun and Singh, but with Carry on in present job appearing to be a lower choice in this study than the previous ones.

Table 7.47 Future Career Options of 'Active' Nurses by Age of Youngest Child

	AGE GROUP											
	MOLESKIS						SINGH			TUN		
	2 - 5		6 - 11		12 - 25		2-5	6-11	12-25	2-5	6-11	12-25
	N	%	N	%	N	%	%	%	%	%	%	%
To get married			1	3.3			1.1					
Further training	8	15.4	3	10.0			6.3	18.6	25.0	9.0	17.0	5.5
From Hospital to Community			2	6.7	3	6.8	7.4	6.8	3.6	9.4	6.1	2.6
From Community to Hospital								1.7		1.6	2.2	2.6
Give up Nursing			1	3.3	3	6.8	2.1		3.6	4.3	2.6	14.3
Job outside Nursing	1	1.9					2.1	1.7		0.4	1.8	1.0
Start family	5	9.6			1	2.3	4.2			5.0		0.5
Carry on present job	28	53.8	18	60.0	27	61.4	49.5	45.8	57.1	47.4	56.3	60.2
From part-time to full-time	3	5.8	1	3.3			9.5	13.6	3.6	8.6	5.7	5.6
From full-time to part-time	1	1.9			3	6.8	3.2	3.4		2.3	2.2	2.6
Hopes for promotion	3	5.8	1	3.3	4	9.0	-					
Other options	3	5.8	3	10.0	3	6.8	14.7	5.1	7.1	10.6	5.7	4.5
Total	52		30		44							

Table 7.48 Future Career Options of 'Active' Nurses by Marital Status

	Single		Married		Widowed/ Separated/Divorced	
	N	%	N	%	N	%
To get married	5	8.5	-	-	1	4.3
Further training	9	12.2	16	9.0	-	-
From Hospital to Community	4	6.8	7	4.0	2	8.7
From Community to Hospital	-	-	-	-	-	-
Give up Nursing	1	1.7	4	2.3	3	13.0
Job outside Nursing	2	3.4	1	0.5	-	-
Start family	2	3.4	30	17.0	1	4.3
Carry on present job	19	32.2	79	44.9	6	26.0
From part-time to full-time	-	-	5	2.9	-	-
From full-time to part-time	2	3.4	7	4.0	2	8.7
Hopes for promotion	10	16.9	16	9.0	3	13.0
Other options	5	8.5	11	6.2	5	21.8
Total	59		176		23	

7.4.6 Factors which might cause "active" nurses to leave nursing

Question 35 relates to the factors which were thought might cause active nurses to leave nursing. Since the question was an open-ended one, a wide range of reasons were proffered. These were classified into seven major categories. In Table 7.49, the analysis of these factors is presented. The seven factors were further divided into two major categories, "Internal" and "External". Internal items are those related to the work/Service:

Economic considerations

Relationships within the place of work

Working conditions

These factors could be considered as controllable by the influence of decisions taken within the organisation.

External items, on the other hand, are those variables over which the organisation has no control:

Personal reasons

Family commitments

Moving, Emigrating and retirement.

Table 7.49 shows that, for the first factor, the predominant cause mentioned was Having Children. This reason is the first for those working full-time while for the nurses who are working part-time Family Commitments (mainly the ill or elderly in the family who would need care) comes first. For factor one, however, the external reasons together constitute 70.8% for those in full-time employment and 63.2%

Table 7.49 Factors Which Might Cause 'Active' Nurses to Leave Nursing

35. *What are some of the factors that might cause you to leave nursing?*

1. .....

2. .....

3. .....

Reasons	FACTOR ONE						FACTOR TWO						FACTOR THREE					
	Total		F.T.		P.T.		Total		F.T.		P.T.		Total		F.T.		P.T.	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Having children	61	29.9	52	38.2	9	13.2	15	11.4	9	10.5	6	13.0	5	7.2	4	8.3	1	4.8
Health Reasons	33	16.2	23	16.9	10	14.7	18	13.6	11	12.8	7	15.2	11	15.9	6	12.5	5	23.8
Family Commitments	37	18.1	17	12.5	20	29.4	12	9.1	5	5.8	7	15.2	9	13.0	5	10.4	4	19.0
Worsening Working Conditions	38	18.6	24	17.6	14	20.6	40	30.3	27	31.4	13	28.3	19	27.5	14	29.2	5	23.8
Husband's Career	7	3.4	3	2.2	4	5.9	12	9.1	8	9.3	4	8.7	3	4.3	1	2.1	2	9.5
Upon Becoming Rich	10	4.9	7	5.1	3	4.4	15	11.4	11	12.8	4	8.7	5	7.2	2	4.2	3	14.3
Other	18	8.8	10	7.4	8	11.8	20	15.2	15	17.4	5	10.9	17	24.6	16	33.3	1	4.8
Total	204		136		68		132		86		46		69		48		21	
			FT/PT				FT/PT						FT/PT					
r_s			0.64				0.18						0.29					
Z			1.57				0.44						0.70					

for those working part-time. It is, therefore, clear that the most likely conclusion is the one which the previous studies identified i.e. "external" factors are more important to "active" nurses in their decision to leave nursing. The first single reason which dominates the second most important factor (see Question 35) and which could cause a nurse to leave nursing, (both for the F.T. and P.T.) is the Worsening Working Conditions. Overall, more than 40% consider this to be the most important reason, the differences between F.T. and P.T. being insignificant. The third most important factor again highlights the Worsening Working Conditions although the importance of personal considerations cannot be ignored. These findings must surely cause some concern to the Health Authorities since the present study reveals a striking difference from the previous studies' rankings regarding the importance attached by the respondents to that single "internal" factor, Worsening Working Conditions.

7.5 Inactive Nurses

The central theme of a number of studies which have been conducted over the years here at UMIST with respect to nursing, has revolved around the reasons for the non-participation in the labour force of so many qualified nurses.

In an attempt to ascertain the extent to which economic, family and behavioural considerations impact upon a nurse's decision to stay away from employment, information was gathered for the reasons for their present inactivity. Section Three of the questionnaire is primarily concerned with "inactive" nurses i.e. those who are qualified, but not working as nurses at the time of the survey.

7.5.1 Reasons for present inactivity

In this particular question, the factors which are believed to contribute to their inactive status were listed and the respondents were asked to indicate which were of "primary" or "secondary" importance. The responses are shown in Table 7.50 together with the corresponding rank order from the previous studies for comparison. The most important factor for the present inactivity of nurses is the belief that a mother should be at home while her children are young. The second most important factor is the"inability" of the "inactive" nurses - mainly young mothers - to make suitable arrangements for the care of their children. The third most important factor is the inflexibility of the hospitals in respect of hours they were prepared to accept.

The demonstration of maternal duties and responsibilities in contrast to the inflexibility of working practices in the hospitals, couldn't be stronger if one couples the findings of the present study with those of the two previous studies. Both "primary" and "secondary" factors are in agreement as to the reasons of the qualified nurses not working. A W = 0.91 value associated with a χ^2 = 32.84 allows the null hypothesis that there is no community of preference to be rejected at the 0.01 level.

Other reasons (i.e. other than those specifically stated in Question 37)appear to be important both as primary and secondary factors.

A random sample of these additional responses includes:

"I feel I gained experience and learned a lot in nursing in the past and I would like to try something different in the future".

Table 7.50 Reasons for present inactivity of completely inactive nurses

37. *We realise that there might well be several reasons leading to your present inactivity. However, please indicate below, the single main reason by putting a 'P' in the appropriate box, and insert an 'S' in any other boxes, relating to factors which, whilst not being of paramount importance, are relevant.*

	P*	S**	Total	Rank		
				Moleskis	Singh	Tun
I cannot make suitable arrangements for the care of my child or children	11	20	42	2	2	3
I believe a mother should be at home while her children are young	29	12	70	1	1	1
I am reluctant to return to nursing as I have not worked as a nurse for so long	3	8	14	4	5	5
My husband prefers me to stay at home	1	9	11	6	7	6
The salary I would get does not make it worthwhile	-	5	5	9	11	10
I prefer to be a housewife	2	4	8	7	12	8
Hospitals are too inflexible in the hours they are prepared to accept	2	19	23	3	3	2
I am not allowed to work for health reasons	3	1	7	8	9	9
School holidays make it impossible to provide continuity of service	-	14	14	5	4	4
The transport problems are insurmountable	1	4	2	13	8	11
I would not enjoy working in a hospital	-	3	3	11	13	12
Part-time nurses do not get equal status with full-time staff in all appointments	-	5	5	10	6	7
I am not at present interested in nursing as an occupation	1	1	3	12	10	13

* P = primary (assigned a value of 2)
** S = secondary (assigned a value of 1)

"Much information would be obtained if you asked about nurse managers as surely this is something a nurse is not trained in and, as you know, some make good managers and some make very bad ones. This can affect a nurses attitude to her job tremendously. Once a nurse is qualified she is on her own and without the "back up" she can be really disillusioned. Nurse managers give the impression that all they care about is "if the area is covered" and what she should be really concerned about should be "if the area is covered by the right kind of people and that those there are happy".

"I feel very disillusioned with nursing at the moment as I recently had to grovel on my hands and knees to obtain maternity leave which should never happened simply because I was unfortunate enough to have a very poor nurse manager to deal with. This sort of thing would never happen in industry. This experience has left me very bitter and made me feel that at the moment I am glad to be out of it."

"My husband is self-employed and I will be required in the future to become more involved in his business".

"After 10 years in the N.H.S. and 4 years as a nurse in a health centre I can afford to be a housewife and I enjoy it".

"Travelling is difficult as I live in the country. I can not drive so I would have to depend on buses".

"I think that the whole attitude in nursing has changed so much that I would find it difficult to adapt to the present attitude".

"I enjoyed my years as a Sister but I was always unattracted by further promotion as NO's and above never seem happy. Eventually found the work too physically wearing".

"The reason I am not working is simply that there are no jobs available (part-time), therefore none of the answers are appropriate. There are many trained nurses in Othello District and surrounding areas who, like me, have been trying to get a job for months. In my case, I have been looking since May 1980".

"This does not apply only to part-time jobs, but also full time. Because of cut-backs in N.H.S. spending, nurses leaving their jobs are not being replaced. This therefore leads to poor staffing-levels, and I have twice done temporary work to relieve this situation on wards which have been threatened with closure because of shortage of staff. Therefore, I think, speaking from the point of view of the Othello group of Hospitals, that a lot of the dissatisfaction expressed is not due to pay only, but to a great degree the shortage of staff and inability to do the job properly".

7.5.2 Future career intentions of "inactive" nurses

88.7% of the inactive nurses who responded to this specific question "Would you like to go back into nursing?" replied "Yes". Interestingly, this particular question was answered by all "inactive" nurses (those who worked in non-nursing jobs and those who didn't work al all). The obvious conclusion is that there is indeed a high degree of loyalty and attachment to the profession. Table 7.51 shows these results, together with the two studies under comparison, which seem to further re-enforce the above conclusion.

Table 7.51 Future Career Intentions of 'Inactive' Nurses (Like to Return to Nursing)

39. Would you like to go back to nursing?

	YES		NO	
	TUN	SINGH	MOLESKIS	
	%	%	N	%
YES	85.2	98.0	63	88.7
NO	14.8	2.0	8	11.3

Considering the possible disparity between desire and action, a number of questions were asked which were focused on the intention to return. As Table 7.52 shows, inactive nurses not only desire to go back to nursing, but are seriously planning to do so.

Table 7.52 Future Career Intentions of 'Inactive' Nurses (Intend to Return to Nursing)

42. Do you intend to go back to nursing?

YES NO

	TUN	SINGH	MOLESKIS	
	%	%	N	%
YES	72.7	88.0	59	83.1
NO	27.3	12.0	12	16.9

They were also asked to give the time frame within such intentions could be implemented. In Table 7.53 the results of the responses are presented. Almost one third of the inactive nurses intended to go back to "active" status within a year and more than 50% were planning to return within 3 years. The results of the two earlier studies reveal surprisingly similar patterns.

Interestingly, almost 90% of those in all three studies are willing to return on a part-time basis.

Table 7.53 Number of Years within which 'Inactive' Nurses Intend to return to Nursing

43. If your answer to question 42 is YES

(a) in how many years? .....

	TUN	SINCH	MOLESKIS	
Years	%	%	N	%
1	32.2	32.1	15	30.0
2	14.5	9.8	4	8.0
3	11.0	14.3	7	14.0
4	7.6	10.7	8	16.0
5	17.5	17.9	8	16.0
6+	17.2	15.2	8	16.0

The majority of "inactive" nurses intend to return to hospital nursing (54.8%) (Table 7.54) A significantly higher percentage of nurses want to return to work as Community Nurses than as was shown in the previous studies. However, the patterns are generally similar and any difference could well be due to the local situation rather than a general trend.

Table 7.54 Branch of Nursing which 'Inactive' Nurses Intend to Return to

37(C) To which branch of nursing would you like to return

	TUN	SINGH	MOLESKIS	
BRANCH	%	%	N	%
Hospital	70.3	67.9	34	54.8
Community	20.7	14.6	18	29.0
Industrial	1.1	1.5	2	3.2
School	3.7	8.0	3	4.8
Agency	0.2	1.5	1	1.6
Research	0.2	2.2	1	1.6
Teaching	1.9	2.2	-	-
Others	1.9	2.2	3	4.8

7.5.3 Desire to attend refresher courses and attitudes about recruitment of ''inactive'' nurses.

86.8% of the inactive nurses who responded to this question were ready to attend refresher courses in order to make their returning to active nursing easier (Table 7.55). The same high proportion expressed the same readiness in the previous studies. As far as their attitudes about the efforts made for the recruitment of ''inactive'' nurses were concerned, only 4.3% thought that enough had been done (Table 7.56).

Table 7.55 Desire of 'Inactive' Nurses to Attend Refresher Courses

	TUN	SINGH	MOLESKIS	
	%	%	N	%
YES	79.8	87.8	33	86.8
NO	20.2	12.2	5	13.2

Table 7.56 Attitudes of 'Inactive' Nurses about Efforts Made to Recruit 'Inactive' Nurses to Nursing

40. Do you think enough has been done to recruit inactive nurses back into nursing?

	YES		NO	
	TUN	SINGH	MOLESKIS	
	%	%	N	%
YES	8.7	5.3	3	4.3
NO	91.3	94.7	67	95.7

7.5.4 Salary to return

The respondents were then asked to indicate the salary in pence per hour at which they would begin to start thinking about a return to nursing. The answers given are shown in Table 7.57. The majority of nurses indicated a salary above 2.50 per hour and a third a salary between 1.51 and 2.00. The figures for the other studies are presented in the same Table without deflating them simply because the group above 250 in Singh's study which represents 33.8% of his responses, cannot be decomposed.

Table 7.57 Salary (pence per hour) which could cause thinking about a return to nursing

	TUN*	SINGH**	MOLESKIS	
Salary level (pence per hour)	%	%	N	%
50-100	52.2	1.4	-	-
101-150	31.6	2.7	7	21.2
151-200	12.0	36.5	11	33.3
201-250	2.7	25.7	3	9.1
above 250	1.5	33.8	12	36.4

* figures referred to 1974

** figures referred to 1980

7.5.5 Reasons for present inactivity in relation to future career intentions

In examining the reasons which forced a qualified nurse to be out of her profession in relation to her intentions to return, the ''duty'' of mother to be at home while her child is young comes first in both groups (i.e those intending and those not intending to return) as Table 7.58 shows. The second most important reason proffered by those who are planning to return was the lack of suitable arrangements for the care of their children while for those not intending to return the long period away from nursing has a considerable influence on their decision not to come back to nursing. Inflexibility in the working hours in the hospitals is the third most important reason suggested by both groups for being ''inactive''. Comparison with the findings of previous studies confirmed the reasons for those nurses being out of nursing and statistical results for the group who intended to return showed W= 0.83 with an associated χ^2 =29.93**.

Table 7.58 Reasons for Present Inactivity of Nurses with Reference to Future Intentions of Returning or not Returning to Nursing

$W_2 = 0.83$ $X^2 = 29.93$ $W_2 = 0.62$ $X^2 = 22.33$

Reasons	Intentions to Return: YES						Intentions to Return: NO					
	P*	S**	Total	Rank: Moleskis	Singh	Tun	P*	S**	Total	Rank: Moleskis	Singh	Tun
I cannot make suitable arrangements for the care of my child or children	14	20	48	2	2	3	–	1	1	13	6	3
I believe a mother should be at home while her children are young	28	12	68	1	1	1	4	4	9	1	1	7
I am reluctant to return to nursing as I have not worked as a nurse for so long	5	8	18	4	5	4	–	6	6	2	2	5
My husband prefers me to stay at home	–	8	8	6	7	8	1	2	4	5	7	6
The salary I would get does not make it worthwhile	–	5	5	7	9	10	–	1	1	12	12	8
I prefer to be a housewife	1	3	5	8	13	9	1	2	4	4	9	10
Hospitals are too inflexible in the hours they are prepared to accept	6	21	33	3	3	2	–	5	5	3	3	1
I am not allowed to work for health reasons	2	–	4	13	11	6	1	1	3	7	8	13
School holidays make it impossible to provide continuity of service	–	13	13	5	4	5	–	3	3	8	4	2
The transport problems are insurmountable	–	3	3	9	8	11	1	–	2	10	10	9
I would not enjoy working in a hospital	–	2	2	10	12	13	–	1	1	11	13	12
Part-time nurses do not get equal status with full-time staff in all appointments	–	3	3	11	6	12	–	3	3	9	11	4
I am not at present interested in nursing as an occupation	1	1	3	12	10	7	2	–	4	6	5	11

P* = primary (assigned a value of 2)
S** = secondary (assigned a value of 1)

Statistical results for the other group of "inactive" nurses who are not planning to return suggest that there is, again, similarity of reasons expressed by the respondents ($W = 0.62$ and $\chi^2 = 22.33$).

7.5.6 Examination of the characteristics of the "inactive" nurses with reference to future career intentions

In this section the comparative data on "Inactive" nurses who planned to return to nursing and those who did not, are examined.

Age Group: More than 80% of those who intend to return to nursing are under 35 years of age, in contrast to only 25% of those not intending to return. Table 7.59 shows this clear conclusion by comparing the results of other studies which follow the same pattern. While it is obvious that nurses who are currently "inactive" but who intend to return are mainly out of nursing due to familial reasons, the delay of returning back "halves" their interest as the differences between the age groups 31-35 years and 36-40 years show. It should be noted that there is statistical significance in the differences in the age group and intentions.

Marital Status: The marital status of the"inactive" nurses and their intentions to return to the "active" status is shown in Table 7.60. It is clear that this factor (marital status) is an important one as far as future intentions to return are concerned.

Table 7.59 Age of 'Inactive' Nurses with Reference to Future Intentions of Returning or not Returning to Nursing

Age (Years)	TUN		SINGH		MOLESKIS	
	Intend to Return %	Not Intend to Return %	Intend to Return %	Not Intend to Return %	Intend to Return %	Not Intend Return %
Up to 25	11.5	3.7	6.1	-	25.4	-
26 - 30	37.8	11.7	32.8	26.3	45.8	16.7
31 - 35	23.3	9.2	40.5	31.6	11.9	8.3
36 - 40	15.7	12.3	15.3	36.8	8.5	8.3
41 - 45	6.9	10.4	5.3	5.3	8.5	66.7
Over 45	4.9	52.7	-	-	-	-
	N = 597		N = 150		N = 71	

Table 7.60 Marital Status of 'Inactive' Nurses with Reference to Future Intentions of Returning or Not Returning to Nursing

Marital Status	TUN Intention to Return		SINGH Intention to Return		MOLESKIS Intention to Return	
	YES(%)	NO(%)	YES(%)	NO(%)	YES(%)	NO(%)
Single	3.0	13.0	1.5	10.0	6.8	8.3
Married	94.2	81.5	96.2	90.0	88.1	91.7
Widowed Separated Divorced	2.8	5.5	2.3	-	5.1	-
	N = 597		N = 152		N = 72	

Children: In Table 7.61, the effect of the presence of children in relation to the intention of "inactive" nurses to return is shown. Almost all "inactive" nurses with or without children are intending to return to nursing. The results of the two other studies, in general, confirm this pattern although the figures in the case of "inactive" nurses without children are so small as to render any interpretation meaningless.

Table 7.62 extends the analysis of the presence of children into the number of children an "inactive" nurse has in relation to her plans to return to nursing. Here there seem to be significant differences between those with one or two children on the one hand, and those with more than two children on the other. These differences, however, may well be due to the differences in the ages of the two groups.

Social Class: Table 7.63 presents the analysis of data in order to ascertain whether there exists any significant difference between social class and intentions to return. A comparison with the results of the other studies reveals a picture with similar proportions of nurses intending to return irrespective of their particular social class. The only substantial deviation from this pattern is the low proportion of those belonging to the social class "Skilled-Non-Manual" who are intending to return, which phenomenon is repeated in all three studies, i.e. no's outnumber yes's.

Table 7.61 Presence of Children of 'Inactive' Nurses with Reference to Future Intentions of Returning or not Returning to Nursing

Presence of Children	TUN		SINGH		MOLESKIS	
	Intention to Return YES(%)	NO(%)	Intention to Return YES(%)	NO(%)	Intention to Return YES(%)	NO(%)
YES	96.0	4.0	88.1	11.9	98.2	1.8
NO	89.5	10.5	80.0	20.0	100.0	-
	N = 566		N = 148		N = 67	

Table 7.62 Number of Children of 'Inactive' Nurses with Reference to Future Intentions of Returning or not Returning to Nursing

Intention to Return	TUN						SINGH					MOLESKIS				
	NUMBER OF CHILDREN						NUMBER OF CHILDREN					NUMBER OF CHILDREN				
	1	2	3	4	5	6	1	2	3	4	5	1	2	3	4	5
YES(%)	28.8	41.6	21.9	4.7	1.7	1.2	33.3	45.2	17.5	3.2	0.8	41.8	45.5	10.9	1.8	-
NO(%)	20.3	43.8	22.7	10.2	1.6	1.6	35.3	52.9	11.8	-	-	-	36.4	45.5	9.0	9.1
	N = 534						N = 143					N = 66				

Table 7.63 Social Class of 'Inactive' Nurses with Reference to Future Intentions of Returning or Not Returning to Nursing

SOCIAL CLASS	TUN		SINGH		MOLESKIS	
	Intentions to Return YES(%)	NO(%)	Intentions to Return YES(%)	NO(%)	Intentions to Return YES(%)	NO(%)
Professional	31.4	38.1	27.3	33.3	16.4	9.0
Intermediate	38.1	37.3	22.7	11.2	30.9	27.3
Skilled (Non-Manual)	2.7	4.5	12.5	33.3	14.5	27.3
Skilled (Manual)	24.6	12.7	25.8	22.2	25.5	9.3
Partly Skilled	1.2	-	10.2	-	10.9	27.3
Unskilled	2.0	6.7	0.8	-	1.8	-
Others	-	-	0.7	-	-	-
	N = 541		N = 146		N = 66	

7.5.7 Proposals to encourage a return to nursing

The proposals put forward by both groups of inactive nurses are presented in Table 7.64.

Both groups feel that flexibility of hours is the single most important measure which has to dealt with in order to facilitate a return to active status. For those who intend to return, the second most important measure is the provision of creches or nurseries, while for those not intending, "Greater choice of working hours" was proposed. There is a high degree of similarity between the two groups, Spearman's rank correlation coefficient being $r_s = 0.75^{**}$. Concerning the degree of agreement between the respondents of the three studies, the Coefficient of Concordance for those who intend to return was $W = 0.73^{*}$. For those not intending to return, the corresponding coefficient of concordance of 0.90 is significant at the .01 level.

In further examining the desires to attend refresher courses in relation to future intentions of returning to nursing, the readiness of those who intend to return to participate in refresher courses is overwhelming as Table 7.65 shows.

In responding to the question whether enough has been done to recruit back "inactive" nurses, both groups expressed almost identical feelings i.e. not enough has been done in this regard. In Table 7.66 the results of this exercise are presented together with those of the previous surveys which point to a very firm conclusion.

Table 7.64 Proposals to Encourage a Return to Nursing with Reference to Future Intentions of Returning or not Returning to Nursing

PROPOSALS	INTENTIONS TO RETURN														
	YES(%)							NO(%)							
	Order of Importance				Rank			Order of Importance				Rank			
	1	2	3	Total*	Moleskis	Singh	Tun	1	2	3	Total*	Moleskis	Singh	Tun	
Increased rates of pay	3	2	5	18	5	7	5	2	-	-	6	4	4	5	
Greater choice of working hours	7	12	5	50	4	5	2	5	2	1	20	2	3	2	
Refresher training	10	12	11	65	3	4	4	1	2	2	9	3	2	3	
Flexibility of hours to allow for family commitments	17	19	7	96	1	1	1	3	5	1	20	1	1	1	
Opportunities to specialise	-	-	3	3	9	2	10	-	-	-	-	10	10	9	
Opportunity to gain further qualifications	-	1	4	6	7	3	9	-	-	-	-	9	8	10	
Help with transport	-	2	1	5	8	9	8	-	-	5	5	5	6	7	
Equal status with full-time staff in all appointments	-	-	-	-	10	8	6	-	-	-	-	11	9	6	
Creche or nursery	19	6	16	85	2	6	3	-	1	2	4	6	5	4	
Opportunity for responsibility and/or promotion	-	2	3	7	6	10	7	-	1	-	2	8	7	8	
Other (please specify)	-	-	-	-	11	11	11	1	-	-	3	7	11	11	

+ 1 was scored 3, 2 was scored 2 and 3 was scored 1 and the total scores were summed up for each proposal.

Table 7.65 Desire to Attend Refresher Courses with Reference to Future Intention of Returning or not Returning to Nursing

Attend Refresher Courses	TUN		SINGH		MOLESKIS	
	Intention to Return		Intention to Return		Intention to Return	
	YES(%)	NO(%)	YES(%)	NO(%)	YES(%)	NO(%)
YES	91.5	38.5	90.7	76.5	86.8	13.2
NO	8.5	61.5	9.3	23.5	13.2	86.8

Table 7.66 Attitudes Towards Recruitment of 'Inactive' Nurses with Reference to Future Intentions of Returning or not Returning to Nursing

Enough Done to Recruit 'Inactive Nurses'	TUN		SINGH		MOLESKIS	
	Intention to Return		Intention to Return		Intention to Return	
	YES(%)	NO(%)	YES(%)	NO(%)	YES(%)	NO(%)
YES	5.4	17.6	5.3	5.3	3.4	9.1
NO	94.6	82.4	94.7	94.7	96.6	90.9

7.5.8 Desire to return to part-time or full-time nursing

Of those inactive nurses who stated their intention to return to nursing, an overwhelming majority of 91.4% expressed the wish to do so on a part-time basis. The same high figures were found to be the case in previous studies (91% by Singh and 93% by Tun). In Fig. 7.7 the responses to that particular question are presented. It is perhaps worth stressing the rather obvious but very important feature which emerges from the same feature, i.e. more nurses want and are planning to return to nursing now (Singh's survey took place in 1980) than 6 or 7 years ago when Tun collected his data. The willingness to work on a part-time basis, on the other hand, does not come as a surprise if one examines the rapid increase in the number of women working part-time in the past 30 years. One can conclude that more qualified nurses are ready to return provided that they can work on a part-time basis which is of course more compatible with their domestic commitments.

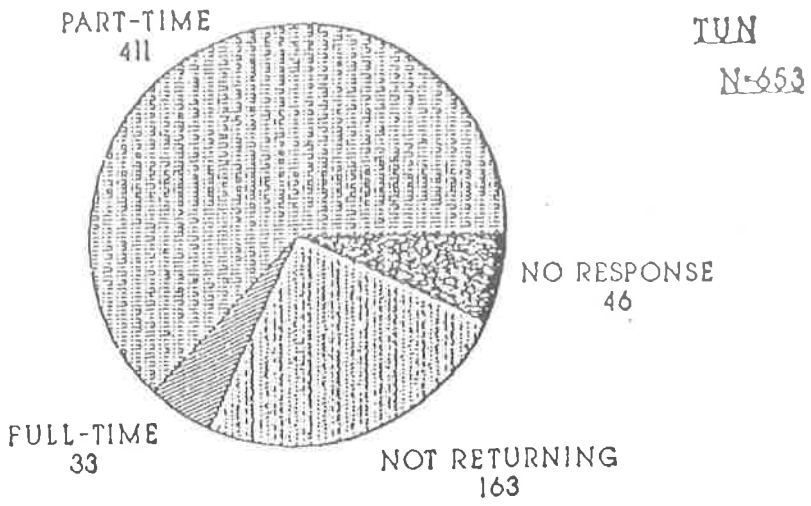
7.6 Attitudes and Job

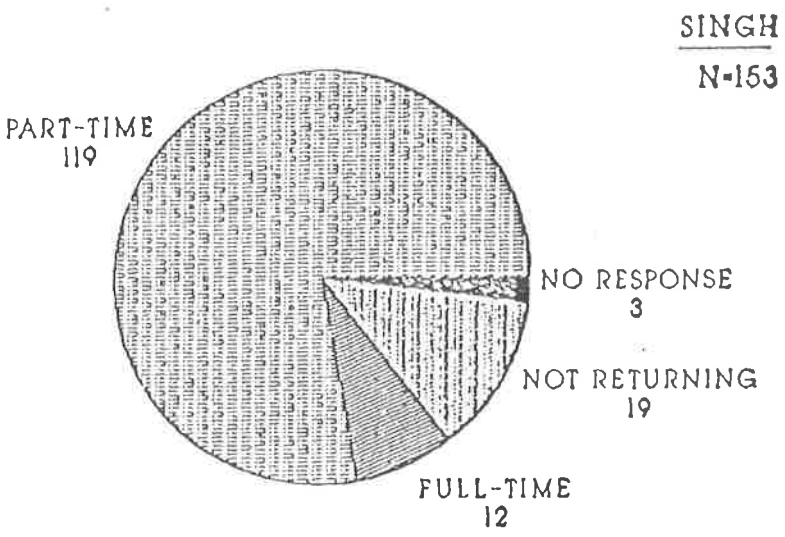
It has been widely supported over the past thirty years that the attitudes towards a job and economic activity status are related. In the context of the present study, this would mean that the differences in the economic activity status of nurses (full-time, part-time and "inactive") may be explained to some extent by the differences in the attitudes towards facets of the nursing service.

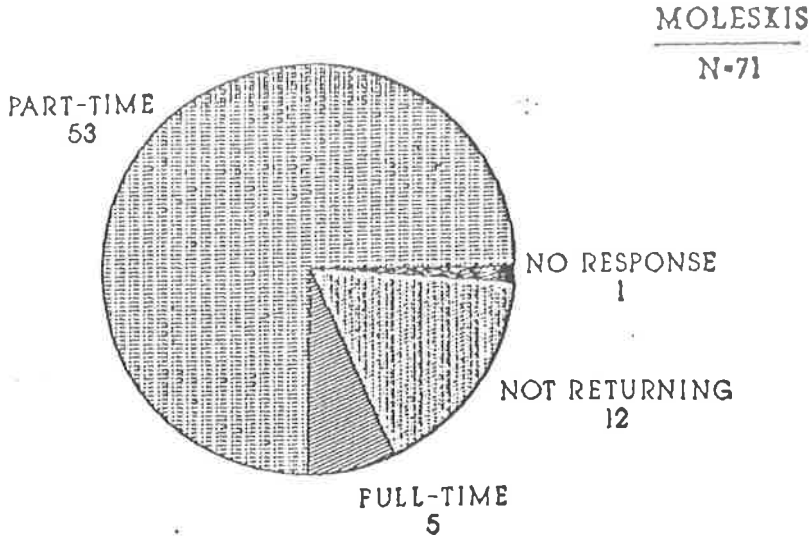
The literature which relates the individual withdrawal effects of satisfaction and dissatisfaction with job characteristics has revolved around the pioneer work of Hertzberg et. al. (1957). In simple words, this theory of the social-psychological approach involves increasing the forces binding an individual into the profession and decreasing the forces that drive him out. March and Simon (1968) found that the greater the conformity of the job characteristics to the self image of the job, the more satisfied the employee is. The following factors were found to be related to the conformity of the job to the self image.

Fig. 7.7 Future Career Intentions of 'Inactive' Nurses with Reference to Part time or Full - time Nursing

NURSING







(i) Supervision: The greater the consistency of supervisory practices with employee independence, the less the conflict between job characteristics and the individual's self-image. It can be concluded, therefore, that when supervision is inadequate and morale is low, there is high turnover; the importance of the first lines supervisor is, undoubtedly, considerable.

(ii) Rewards: High turnover has been found to be associated with low wages (Kerr et. al. (1951)) and dissatisfaction with pay has been pointed to as the major part of dissatisfaction. Therefore, the larger the amount of rewards offered by the organisation the less the conflict between the job and the individual's self-image and the lower the turnover rate.

(iii) Education: It has been suggested that the higher the level of education the greater the conflict between the job and the individual's self-image, within a given occupational level. Morse et.al. (1955).

(iv) Involvement: Wickert (1951) found that the turnover of young female employees was lower when they were allowed to take an active part in decisions affecting their jobs. The greater the participation in job assignment, therefore, the less the conflict between the job and the individual's self-image and hence, the lower the rate of turnover.

(v) Working Conditions: Good working conditions such as methods of wage payments, promotion prospects and the rate of change of status and income, management - employee relations and industrial relations within the firm-are conducive to a low turnover rate (Broadbent and Lettle (1960)).

The degree of specialisation and the type of training is also related to turnover rates. Becker (1962) differentiates between general and specific training. General training is useful to other firms in addition to the firm providing it, while specific yields positive effects only to the firm providing it. Job motivation studies have revealed that turnover often results from inadequate rewards and incentives and if the individual desires the rewards offered by the organisation, he will be motivated to work for the organisation.

Hertzberg's (ibid) Motivation-Hygiene theory makes a distinction between two types and sets of job factors. One set revolves around the actual doing of the job, the content or the intrinsic aspects of the job. These factors, which are called "motivators" include achievement, recognition for achievement, work itself, responsibility, advancement and growth. The other set revolves around the environmental settings of the job. These factors are extrinsic to the job and include company policy and administration, supervision, salary, interpersonal relations, working condition, status and security. These are labelled hygiene or maintenance factors.

The two factors relate differentially to two separate sets of human needs; pain avoidance and growth. The common element of pain avoidance needs is that their satisfaction can bring about an elimination of either physical or psychological deficiency, pain or discomfort. However, it cannot lead to a growth experience. The growth needs are those which have to do with self-actualisation. The basic proposition of Motivation-Hygiene theory is that the motivation factors can act as incentives in the satisfaction of growth needs and the hygiene factors in the satisfaction of pain avoidance needs. Hygiene factors cannot cause fulfilment. At high level, they will bring about relief, at the low level discomfort. Motivators, on the other hand, can bring about fulfilment or absence of it, but cannot cause discomfort. If a job is to contribute to the mental well-being of workers, both types of needs have to be satisfied.

7.6.1 Nurses (sample) attitudes

Statements relating to the nursing service were presented to the respondents in order to ascertain the attitudes of the sample nurses. The questions are related to aspects of the profession which are felt to influence nursing morale and a four point Likert-type response scale is used.

The overall responses are summarised in Table 7.67. A number of interesting points are highlighted:

(i) The majority of respondents (56%) agree (both strongly agree and agree) with the statement "The nursing profession as a whole is reasonably well paid".

(ii) 74% of the sample feel that "The recent vocal concern over nurses' pay is symptomatic of a degree of underlying dissatisfaction among nurses". This is reinforced by the answers given to a number of related statements, for example, statement 3, 5, 7, 8, 9.

(iii) More than three quarters of respondents (78%) agree or strongly agree with the statement "All in all nursing fulfilled all my expectations".

A more detailed examination of the responses reveals a rather "negative" feeling on the part of the nurses.

Using Hertzberg's terminology and accepting the dimensions most often given to the Motivational factors (achievement, recognition, work itself, advancement and growth) with the end points "no satisfaction-satisfaction" and the dimensions given to the Hygiene factors (administration, supervision, interpersonal relations, working conditions) "no dissatisfaction-dissatisfaction" the conclusion in just three words is the following: no satisfaction, dissatisfaction.

This conclusion, if anything, is a clear call for the management side to reconsider its policies and working practices. At the end of the day, the aim is to reduce dissatisfaction, to give incentives and good working conditions to the workforce, which in its turn, brings reduction of the wastage of qualified nurses; and wastage costs money.

It costs not only in recruitment and administrative expenses, but also costs in training another nurse. In many cases this additional cost of training is really wasted because once a qualified nurse has gone out of nursing, it is very difficult for this nurse to return to the profession as the previous paragraphs have demonstrated.

Table 7.67 Attitudes of Nurses Towards Statements Concerning the Hospital Service

26. *Below are series of statements made by nurses. Would you indicate the extent to which you agree or disagree with each, by putting a tick in the appropriate box. Please respond on the basis of your overall hospital/ nursing experience. (Tick one box in each line)*

Descriptions	Strongly Agree		Agree		Disagree		Strongly Disagree		Missing
	N	%	N	%	N	%	N	%	N
1.The nursing profession as a whole is reasonably well paid	10	3	175	53	121	37	22	7	8
2.Many nurses are just interested in their work	14	4	116	35	168	51	33	10	5
3.A Nurse's career is rarely unfairly damaged by a 'bad' report	11	3	192	60	105	33	12	4	16
4.All in all nursing fulfilled all my expectations	65	20	194	58	57	17	15	5	5
5.Most senior nurses all too often behave as though they have forgotton what it was like to be a junior nurse	78	23	143	143	105	32	6	2	4
6.One suspects that promotions are based on length of service rather than on ability	20	6	79	24	196	60	38	11	3
7.The physical conditions of most hospitals seriously undermine the morale of nurses	38	12	134	41	144	44	10	3	10
8.Nursing administrators generally organise things to make good use of staff, time or skills	6	2	113	35	157	48	50	15	10
9.Promotion is very slow once one has passed the level of sister/charge nurse	41	13	204	63	72	22	6	2	13
10.There ought to be more information and advice for nurses who want to further their careers	93	28	179	54	58	17	2	1	4

Descriptions	Strongly Agree		Agree		Disagree		Strongly Disagree		Missing
	N	%	N	%	N	%	N	%	N
11.The recent vocal concern over nurses' pay is symptomatic of a degree of underlying dissatisfaction among nurses	40	12	202	62	80	25	2	1	12
12.It is only natural that women devote their lives to looking after home and family	9	3	72	22	172	52	79	24	4
13.Most married women only go out to work because of financial pressure	12	4	97	29	185	56	36	11	6
14.It is a waste that highly trained women devote their lives to looking after a home	31	9	111	34	151	46	35	11	8
15.For men, work is a central life concern, while for women it is no more than a stop-gap measure	4	1	28	9	219	66	80	24	5
16.Being at home all day is boring and frustrating	72	22	105	32	115	35	38	11	6

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary, Conclusions and Recommendations

Manpower policy, like other policies in the socio-economic field, has evolved over the years. In the early decades of this century, governments felt that they were correctly interpreting the social conscience of the time, if they provided social services to remove, or at least alleviate, the insecurity experienced by workers and their families in the operation of the industrial system. Primary emphasis was focussed on aiding victims of unemployment and underemployment by setting up placement services through public employment exchanges, providing out of work payments during periods between jobs, and providing employment through public works in times of general depression. Some experiments were made in the early 1900's to rehabilitate and retrain the unemployed for jobs, for which workers were in short supply, but these experments were on a small scale. Attempts were also make, again on a small scale, to encourage industrial investment in areas of chronic unemployment, and a little progress was made towards making vocational and technical training conform with the changing character of the occupational structure. In point of fact the guiding philosophy was one of insignificant interference by the Government in the affairs of the market place, laissez faire slightly amended so to speak. Today, however, we have reached a situation where Government interest in manpower affairs bears no relation to what it was fifty years ago. This interest in labour matters is not confined to Government but is shared by employers, trade unionists and others. The significance of the formation of trade unions and their struggles against the low wages, long hours and abominable conditions which marked the early years of the factory system have had a universal impact.

Moreover the vigorous use of scientific methods is another distinctive characteristic of manpower planning. In the study of manpower requirements, for example, psychology, ergonomics and work-study help to define the relationship between the individual and these tasks:

social physiology and sociology contribute to an understanding of the effectiveness of different forms of work organisation; and econometric techniques such as regression analysis may establish correlations between manpower and output. There is a growing awareness that manpower planning techniques have a part to play in the determination of policies intended to bring about a balancing of the supply and demand for particular professional groups.

Aspects of employment of women have been the focus of attention primarily because, for some women, marriage means an end to their careers. Others who choose to work and have children, simultaneously occupy two roles which impose competing demands. They are faced with the substantial time and energy requirement of homemaking and childcare while at the same time, they must meet the responsibilities of their occupational role. Although it has been shown in some studies that husbands of working women are more likely to contribute to household management and childcare than are husbands of unemployed women, the burden still tends to fall unequally on the wife. Consequently many women are forced to formulate their occupational decisions in light of their familiar responsibilities. It also been suggested that, where conflicts between the demands of these two roles occur, cultural prescriptions generally produce a resolution which favours the requirements of the family. Thus precedence of the family over women's occupational commitments has the positive effect of minimizing disruptions within the family, but they may have negative consequences for women's occupational aspirations, attainments and earnings. Non-economic considerations loom large in the literature relating to the labour force behavior of women but undoubtedly, economic reasons are the major determinants of the labour force participation of women. Women work to support dependents and sometimes to support themselves; they may also work to supplement the family income.

For several decades, the expansion of the community's efforts as regards the care of the sick, the aged, the children, the handicapped and other groups in need, has been a political aim with a high priority in almost all advanced industrial countries.

This political investment has resulted in a growth which has been impressive by any standards.

As a consequence of the increase in volume and the number of employees employed by the care sector, the costs, have, of course, also increased. There has been, in almost all western democracies, a broad consensus of political opinion on the importance of the community being given the resources to sponsor those in need of care and treatment.

Suddenly, at the beginning of the 1980s, the situation appears to have greatly changed. The public sector is now depicted as the villain in the economic drama. The too rapid expansion of public expenditure is declared by economists and government representatives to be the main cause of the problems of disequilibrium in the national economy. No task is considered to be more urgent than that of radically restricting this expansion. Only when this has been done can the budget deficits be reduced, the inflation brought under control, the taxes reduced, industry be expanded and the balance of payments be restored.

However, the attacks on the public sector have not remained unanswered. It has been pointed out instead that the services provided by the public sector are needed in order that the rest of the production apparatus may function properly. The expansion has been and will continue to be necessary in order to make jobs secure in a period of declining employment in trade and industry.

Moreover, there is an apparent difficulty of controlling and restricting the growth of the care sector. This is connected with the fact that this growth is governed so largely by automatic factors which are built into the development of society and the structure of the care sector. The growth of the care sector is, of course, in part only a reflection of the fact that taking care of people has become paid work. Women, who were formerly responsible for the care of children, the sick and the aged and who received no pay for this work, have now gone over to doing the same work for a wage, which is paid by the community. This is, in its turn, an element in a larger pattern,

viz. the entry of women on the labour market. The more women who are gainfully employed, the greater will also be the demand for the services provided by the care sector. But the care sector also includes a dynamic element, which is connected with the professionalization of care. The professional ambitions and special interests of the practitioners of care are another important driving-force operating in favour of growth.

Besides these and other internal factors the conditions for the future growth of the care sector are largely determined by three long-term, ''external'' trends, namely the increasing labour force, the decreasing working hours, and the shrinking volume of employment in trade and industry.

(i) The increase in the labour force is simply a consequence of the fact that women are increasingly going over to supporting themselves by paid work. This process is by no means concluded.

(ii)The decrease in the working hours is a very long-term trend, which can be directly linked with the increase of productivity, i.e. the value of production per man-hour, which mechanization, rationalization and automation have involved. Owing to the fact that productivity is growing more rapidly than production, the latter requires less and less time. This decrease may be manifested in the form of shorter working hours and/or a smaller number of employees. In practice, both these alternatives have been made use of. Most of the evidence argues that productivity in trade and industry will continue to increase. Most of the experts are agreed that computerization and robotization will characterize trade and industry in the next few decades.

(iii) The shrinking volume of employment in trade and industry - primarily in the production of commodities - is accordingly also due to the increase in productivity. This phenomenon - that a smaller and smaller proportion of employed persons is engaged in the production of commodities - is usually said to characterize what is known as ''the post-industrial society'. We have by now gone a long way towards this society of the future, if we are not already infact in it.

However, the growing financial difficulties are only a reflection of structural conditions, primarily the growth of productivity and the associated reduction of working hours.

The increasing cost of health care is due to the fact that it is to so great an extent simply a matter of devoting time to people, to children, the sick, the aged, etc. This time cannot be reduced very much by using machinery or other technical aids. The more efficient the productive work becomes, the more expensive the time devoted to care will be, if it is to be assigned an equally great value. The result will be that care will require increased resources.

Hence the need for more effective utilisation of available resources and in particular of human resources which constitute the greatest part of the total expenditure in this highly labour intensive sector.

Over one million people are employed in the N.H.S. in the U.K, and 430.500 or 43% are Nursing and Midwifery staff. Since 1942 a total of 458.392 persons have qualified as SRN.s but only 120.000 are currently employed in the N.H.S.

The N.H.S. probably relies far too much on trainee nurses as a source of labour. While students and pupils might well have been such a cheap source of labour in earlier years, this is certainly not the case now when, in fact, trainees represent the most expensive way of providing nursing care. Research conducted here at UMIST reveals that the proportion of nursing care delivered by trainees is well in excess of 50%.

Some 18,000 SRN.s are now produced annually. This is a higher figure than that prevailing in earlier years. While the number of nurses employed in the N.H.S. has continually increased since the war what must be of considerable concern to nurses is that the supply and demand situation might change quite dramatically with the result that

the future demand for nurses will be out of line with their availability. It has, in fact, been argued that a major reason why some hospitals rely so heavily on trainees for the delivery of direct patient care is that they find it more convenient to recruit trainees than to employ qualified nurses who, unlike their predecessors, are very likely to experience the normal life events associated with being female i.e. marriage and pregnancy.

Back in 1959 more than 60% of qualified nurses were single and were working full-time. These figures are in sharp contrast to the current situation where the majority are married and working part-time.

This in turn must be seen against a back-drop of quite massive changes in the employment patterns of married women in general. Over the 30 years from 1951 the labour force participation rate of this group has shot up from 22% to its current level of 50%.

These figures taken together could suggest that there is a very real likelihood of an increasing proportion of qualified nurses not being able to obtain employment in the profession for which they have been trained.
It has to be emphasized, however, that it is impossible with our present knowledge to say how many workers the N.H.S needs and of what type: roles are not always clearly defined, the level of training required may not be clear, and the difficulty of establishing standards of quality is reflected in the absence of generally accepted staffing standards.

This lack also makes it difficult to monitor effectively over - and under - manning, even locally. Nor do international comparisons of staffing levels offer much quidance. Finally, calculation about numbers of staff needed must take account of their relative cost and the availability of cash to pay for them. The aim should be to provide as much good quality care as possible from a given budget.

Many hospitals are now experiencing no difficulties in recruiting both trainees and qualified staff and, as noted already, some of these authorities have lost interest in manpower planning issues. They

clearly do not appreciate that manpower planning is about balancing supply and demand. If there is a change in this relationship then not only would employment prospects for qualified nurses be put in some jeopardy but it could have a significant impact upon the negotiating strength of nurses at the time of salary settlements.

When we were first approached by the then District Nursing Officer for the Othello Health District such thoughts did not, presumably, loom large in her thinking. The perceived problem related to one of recruiting a sufficient number of student and pupil nurses. The employment situation is, of course, now very different. Indeed at the meeting with the shop stewards the view was expressed by one of their number that little potential benefit was likely to occur from the exercise as a result of this situation. It was this observation which made us realise that this study and its predecessors were now probably of more relevance to staff associations than to health service managers most of whom now naively seem to believe that all their manpower planning problems have disappeared overnight. Using the survey questionnaire we have attempted to find out why qualified nurses are not employed in the labour force to the extent that one might have anticipated. On the one hand they might have had such a disagreeable time during their training that hospital is a place that they only want to go back to in the event of their own illness. They might not be working because they are in the process of bringing up a young family and feel that a mother should be at home during these formative years. They might not be engaged professionally because they are in the fortunate position of not needing a second income.

Alternatively the absolute necessity for such income might be the over-riding reason for their being in employment. Obviously all three factors: familial, economic and sociological have a bearing on any one individual's decisions, always assuming that work opportunities exist. Our ultimate intention is to measure the relative influences of these different factors at a distinctive locality. It is, however, a fact of life that the presence or absence of a young child so dominates the results that measuring secondary effects is very difficult.

One way of solving this difficulty is by comparing the newly gathered data with the previous one, and in that way our data base is being continually expanded thereby enabling the statistical analysis to be more revealing.
The other, equally important and particularly relevant to the present case, is by studying the situation at a local level and comparing it with the macro-picture in order to confirm certain practices and employment patterns.

As far as the current occupation of the respondents is concerned and on examining it by activity status, there emerged a very important point, that of the part-time nature of the employment status of married nurses as it is represented among the staff nurse grade. If this reflects the situation prevailing nation-wide then it is particularly interesting, for 22 years ago it was found that 60% of staff nurses were single and were working full-time. One cannot help but conjecture upon whether trainee recruitment policies, particularly insofar as numbers are concerned, have adapted to such a radical shift in employment patterns that they mirror the underlying trend in married women employment participation rates.

As regards the age structure of the respondents from all the three samples there is a striking similarity between the full-time and part-time groups. This also clearly reveals the relatively young age of the population of ''active'' nurses.

By examining the age distribution of economic activity of the sample using the three zone formula suggested by Donald et al.(ibid) the well-established pattern is confirmed in the present study as well.
The first period/zone includes up to 30 years of age and is related to the period of maximum occupational and geographical mobility. For the majority of married nurses this period is seen as the first exit from employment due to family reasons. During the second period/zone (which includes up to 50 years of age), in the early phase, women continue to withdraw from employment for domestic reasons, but later, a rising proportion return to full or part-time work. During the last zone/period (over 50 years) an increasing immobility occurs because of approaching retirement and failing health.

Another set of figures refers to factors which impact upon a nurse's decision to take up nursing and it was found that 22% of all samples had somebody in their immediate family who had formerly trained as a nurse. A further question revealed that for those who had somerelation as a nurse, it was a mother in 35% of such cases, and a sister in 27%. Another 13% stated that they had a close friend working or training as a nurse when they started training.

While answering the question whether they would advice a close relative to take up nursing upon and analysing the replies to this question according to economic status, there was found to be almost complete absence of any differences. This finding adds further support to the observation made to the effect that satisfaction with the job does not appear to be too strong an influence upon whether or not a nurse participates in the labour force. Almost 85% are advising a close relative to go into nursing.

The replies to the question of the age of decision for joining nursing show that almost two-thirds of the respondents from the three studies had decided to become nurses before reaching their 15th year of age. It is clear, therefore, that the activities of the vocational guidance authorities could, perhaps, usefully start at an earlier stage. In addition to that, less than half of the respondents received any information at school about the profession which they finally decided to follow. This figure suggests, if anything, an obvious need for career teachers to be better informed about the nature of nursing as a career. If such a need exists it might not manifest itself in reducing the flow of recruits who are already set on the nursing profession but it could well be inhibiting the numbers who, although suited to nursing, might never have contemplated the idea.

On asking the respondents whether they had considered taking up any career other than nursing, it was found that teaching was the desired occupation which predominated. This is the single occupation which had been competing with nursing in the preference of young people during their job-choice time. Considering the prevailing situation in the teaching profession today, where more and more teachers are becoming unemployed, mainly because of an over-production

in the previous years plus an increased number of redundancies lately, it is reasonable to assume that more and more youngsters are looking to nursing for their employment settlement.

The impact that the presence of children has on the labour force behaviour of nurses is obvious and the similarity of patterns of responses between the previous studies and the present is noticeable. The evidence from the results suggests that the presence of children has a major impact on the activity status. The quantitative impact of the presence of children and thus the overall net effect of them, should be expected to vary according to both the age and number of children, and also to vary as a result of interactions with other variables.

Almost 60% of those working full-time had at least one child whereas 93% of those working on a part-time basis had a child. There is quite a significant shift across the first and this last survey with respect to the age of the youngest child. This would suggest that not only does society now more readily accept (or expect?) mothers of young children to be working but clearly more of them are able to secure employment.

For those nurses who were married it was possible to categorise the household in terms of social class on the basis of the husband's occupation. Clearly married nurses are not at all typical of the population at large. There is one direct consequence of this which is relevant to the issue of labour force participation, namely the extent to which the social class in which a married nurse finds herself impacts upon her economic status. There is the suggestion that a major determinant in the nurse's decision to work is to some extent determined by financial necessity.

After examining the reasons for choosing nursing as a career, it is obvious that the most important one is the desire to help other people. Second in importance is the desire to have a stable and secure job and third was ranked ''I always fancied it''. Comparing the results of the two previous studies it is clear that there is a shift towards the less ''idealistic'' and more ''job-oriented''

factors of the nursing profession which, however, is not a surprise given the prevailing economic and employment situation.

The attractiveness or not of nursing as an occupation was also examined from the answers given to the question about the advantages and disadvantages of nursing. Again the importance of the job-oriented factors confirms the shifting of nurses attitudes. Another point of interest is that Pay is considered the second most important disadvantage after the cost of travelling to and from work. It could be argued that forcing people to reflect on the negative features of their jobs provide more insight than simply asking them to reflect on what are seen as positive features. Indeed this approach was adopted by Hertzberg in the development of his motivation/hygiene theory of work.

Examining the career options of active nurses the conclusion which has been confirmed by the results from the previous studies is that full-time nurses and part-time nurses have different but realistic work aspirations and plans, i.e. relatively more part-timers are planning to give up nursing than full-timers but at the same time some indicated a desire to switch to full-time nursing. In relation to the variable age another observation is that as the respondents get older the proportion switching from full-time to part-time increases. For the nurses with one child only their consideration of part-time employment is striking in comparison with those with more than one child. Considering the career intentions in relation to the age of the youngest child, the clearest pattern which emerged was that as the child becomes older, more and more nurses settle down to continuing in their present job.

In an attempt to ascertain the various reasons (economic, family and behavioral) for the non-participation in the labour force of so many qualified nurses, information was gathered for the reason for their present inactivity. The demonstration of maternal duties and responsibilities in contrast to the inflexibility of working practices in the hospitals predominates over any other.

Concerning the level of nurses' pay the responses to the corresponding question provide a little food for thought. However, it ought perhaps to be of some concern to those responsible for recruitment and even for those negotiating pay and conditions that so many inactive nurses are apparently prepared to return to work for such surprisingly low returns; the average figure in 1982 being less than 2.30 per hour.

The strong desire to return is attested to by the answers to the question''Would you like to return to nursing?'' More than 90% responded YES and almost 80% answered in a similar positive vein when the question was changed to ''Do you intend to return to nursing?''

Insight is gleaned when this intention was explored in a little more detail i.e. ''Would you work part-time or full-time?'' In all surveys the part-time answer accounted for almost 90% of the responses.

With respect to re-entry three questions were asked on this theme. The overwhelming majority of inactive nurses (80%, 88% and 87% in the three surveys) would like to attend refresher courses and somewhat surprisingly even larger percentages (91%, 95% and 96%) felt that not enough had been done to recruit inactive nurses back to nursing. When this was pursued further through a request for specific proposals, Pay is seen to take very much of a middle seat to flexibility.

All in all, the results almost speak for themselves. They certainly reflect changing moves particularly with respect to the labour force participation levels of married women. The number of qualified nurses desirous of seeking employment must, over the country as a whole, be enormous. Couple this pool with the ever reducing wastage rate among trainees and the fairly stable admission rates to schools of nursing, one is left with the very uncomfortable impression that in the medium term the pool of qualified nurses unable to practice their expensively acquired skills will certainly not decrease and could conceivably increase at an embarrassingly fast rate.

Given the radical change which occurred in the Othello Health District on the recruitment front, it was felt appropriate to use whatever information was available to ascertain, albeit crudely, whether this pattern was likely to occur elsewhere and with increasing regularity. In fact, over the past few months, it has become apparent that many health authorities have found it extraordinarily difficult to offer positions to all those nurses qualifying. And yet, somewhat surprisingly, there appears to be no let up in the numbers admitted to training. Another important development was the changed attitude of government towards hospital staffing levels. Without becoming embroiled in a discussion as to whether the recently announced staffing cuts are justified or not, it is a fact that the period of steady growth is at an end. In the recently published report of the Management Enquiry Team led by Griffiths, a concern is expressed implicitly that nurse staffing levels be determined fairly arbitrarily. Couple this observation with the growing evidence that the deployment of those nurses employed in the N.H.S could be considerably improved and one could anticipate a scenario in which a zero growth in numbers would be viewed as appropriate by an agency charged with making the most effective use of resources. Should the Griffiths proposals be accepted and implemented it is more than likely that the efforts of the enhanced personnel function could well be channeled in that direction.

Should that be the case a veritable vacuum will be found with respect to information which facilitates the approach. This is not the place to consider the situation with respect to deployment where some pressure will undoubtedly be manifested with respect to workload measurement. At the more macroscopic level a shortage of figures relating to the wider manpower planning issue will also become evident if indeed it has not already done so.

If one were estimating staffing vacancies likely to occur over some reasonable planning horizon then one very important item would be "survival" curves. Few health authorities can produce such curves for any grade of nursing staff. The effort involved in collecting the raw data needed for the production of these figures bears testimony to the fact that no-one had felt it worthwhile producing such data.

In the North Western region a nurse manpower planning information system (SNIPPET) has been introduced. From discussion with users it is apparent that it is still seen as a computerised means of collecting and reporting on nurses employed in ways not dissimilar from those used in the previous manual systems. When, for example, information was sought from health authorities on the age profile of qualified nurses this was eventually forthcoming but the computer had never experienced this request before.

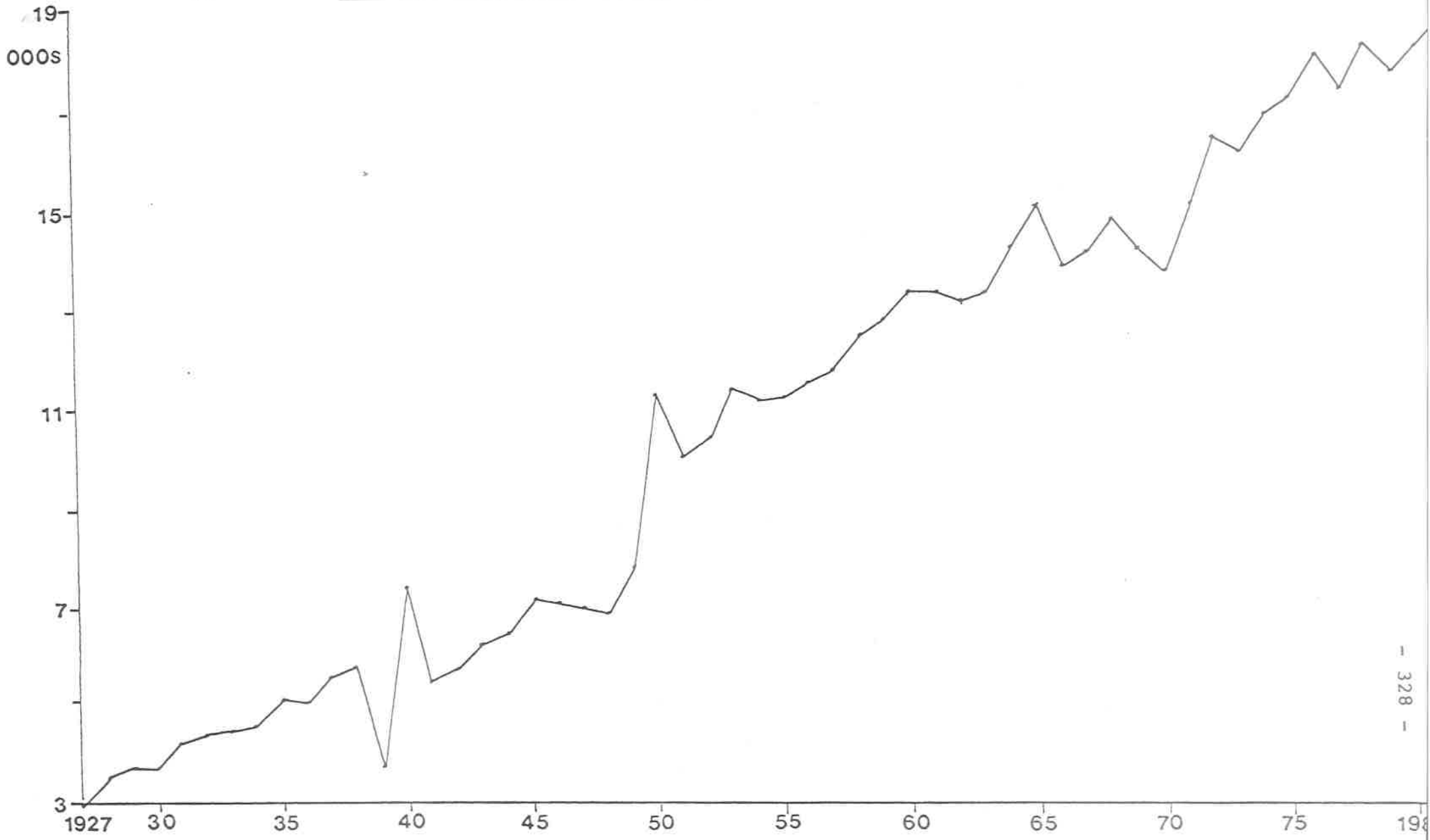
An added complication with respect to the nursing situation is that one might reasonably imagine that the "survival" curves would have been changing over time. Back in the days when most State Registered nurses employed in the N.H.S. were single the probability that a qualified nurse would still be working in the N.H.S after 20 or 30 years would be very different from the corresponding figure for someone from say the 1970 cohort. Someone has only to refer to the trends in the labour force participation rate of married women to know that to be true. Unfortunately such information is not readily to hand. A "live" register would enable such participation rate profiles to be produced. But even more simply if the GNC number of each employed nurse were to be recorded by the employing authority these curves could readily be determined given that one has readily available the numbers of qualified nurses produced annually. Indeed, in view of the current employment situation, it is suggested that such an exercise should be undertaken as a matter of some urgency.

The numbers of state Registered nurses produced each year are in fact, depicted diagramatically in Fig. 8.1. The urgency associated with this proposal relates to the danger that the situation might well be undergoing a dramatic change. It could be argued that, thus far, the decision as to whether or not a nurse participates in the labour force has, to a large extent, been hers. Obviously there will have been exceptions to this sweeping generalization but a situation in which employment opportunities of a full-time nature are restricted by the authorities is a quite recent phenomenon. The questionnaire used in this study enables actual rates of qualified nurses to be deduced from an analysis of the responses to questions where details of career histories were sought.

The responses when suitably coded can be interrogated by the computer to produce the activity rates by cohort. A composite picture of those stemming from this present work, and that of Tun, are depicted in Fig.8.2.

The use of such a curve would, however, be based on the assumption of an unchanging pattern which is, of course, at variance with the belief that the pattern might have changed fundamentally. In view of the method whereby those data were collected it is reasonable to believe that the outcome is a bias towards the respondents being in gainful employment, simply because these individuals were more likely to be contacted.

Fig. 8.1 Annual Additions to the Register 1927 – 1981



An alternative approach has been adopted to the determination of an "activity" rate profile but this too suffers from an underlying steady state assumption. From data made available by three health authorities using the SNIPPET system it was possible to construct the cumulative frequency distribution shown in Fig.8.3. From that, it is possible to determine, for example, that 80% of those SRN's employed in the authorities were aged 45 or less and 45% were aged 35 or more. Assuming that there was no reason to believe that the production of SRN's in the three authorities had differed fundamentally from the national pattern the proportion of any similar age could be contrasted with the numbers produced in the corresponding year (making the further simplifying assumption that all nurses qualify at age 21). Thus, for example, from Fig.8.3 we can determine that 68.4% of SRN's employed in these three authorities are older than 40 while 71.2% exceed 40, i.e 0.8% are aged 40.

These figures were obtained in 1982 and so the corresponding base figures are thus relating to the production of SRN's between 1942-1982.

The nursing establishment is the consequence of a large number of independent and interdependent factors and as such one comes to the conclusion that the determination of the number of nurses required in the society or in a region of the country can never be an easy solution. The answer will invariably arise out of countless compromises which reflect local circumstances. This is not, however, to say that there is not a necessity to understand the influences of the various factors involved in the process. It is believed that this could best be achieved by the consideration of the dynamic nature of the process through the development of computer models of the history of manpower systems under different inputs, policies and environmental conditions.

Fig. 8.2 Activity rates of SRNs based on data produced by Tun and Moleskis

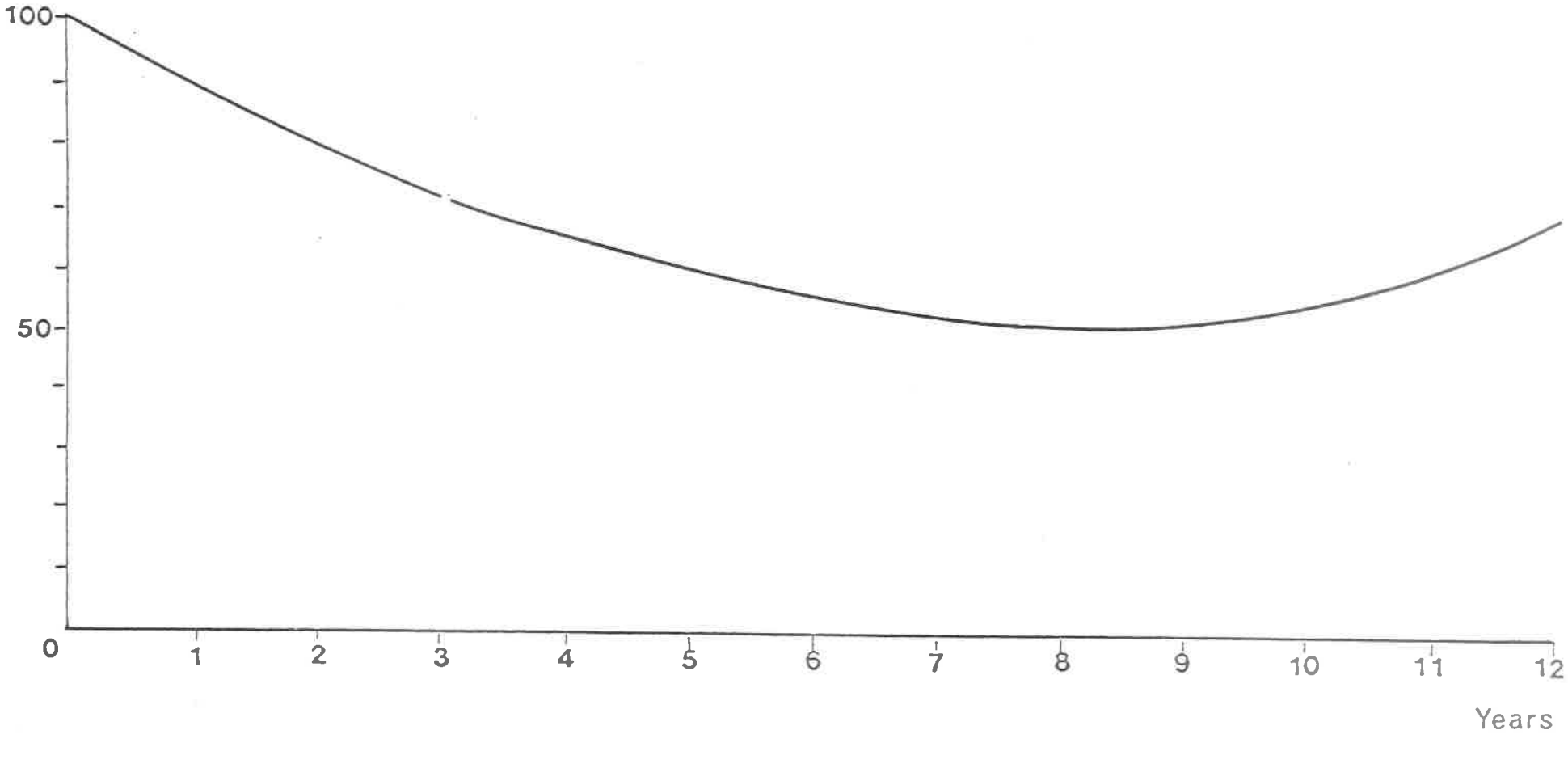
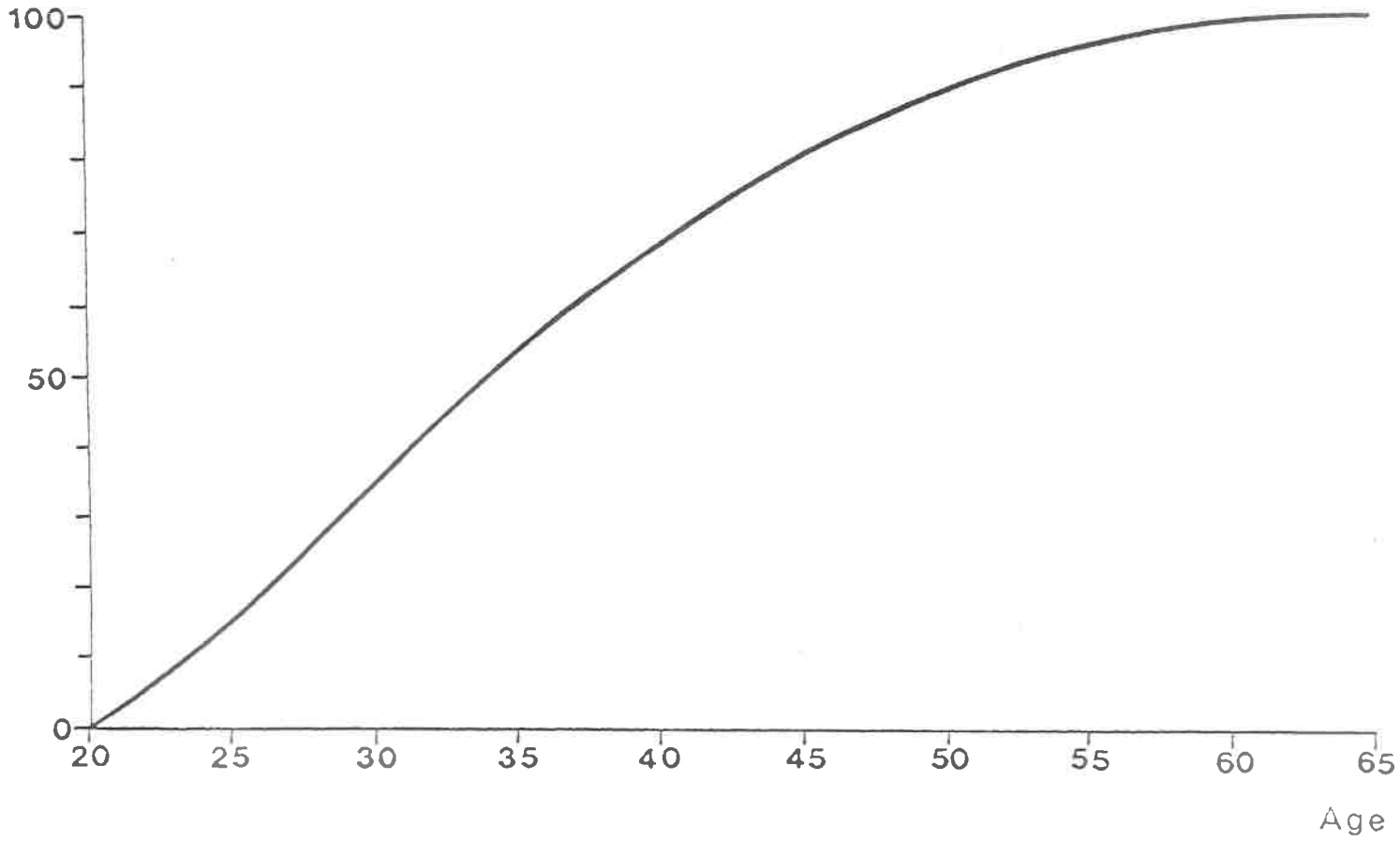


Fig. 8.3 Cumulative distribution by age of SRNs employed in 3 Health Districts



This will facilitate the identification of the Key factors. There is an urgent need for this approach and unless and until there is a better understanding of the service, there will not be any improvement in the standard or scope of the Health Service.

In the N.H.S a pattern of working has evolved which relies heavily on the contribution of trainee nurses to provide bedside nursing care. The availability of trainees in substantial numbers has probably mitigated against the service evolving newer manpower policies, especially in view of the fact that many nursing administrators appear to still view trainee nurses as a cheap source of labour. One was able to determine empirically the "optimal" nursing mix and to achieve any necessary changes, it is suggested that the huge reservoir of "inactive" nurses should be effectively brought into the nursing services. Based on the responses from the survey, and the previous surveys, it is anticipated that such reactivation of nurses is possible.

There is therefore an urgent necessity for the establishment of an up-to-date register of "inactive" nurses.

Some 300,000 qualified nurses are currently inactive in the U.K.

The development of a nurse manpower planning model incorporating important facets of the situation, would enable health care planner to secure a more quantitative understanding of the consequences of current detectable trends and to also secure an assessment of the full implications of alternative strategies.

Unfortunately, however, such a model lies beyond the scope of the present study. Nevertheless, it is envisaged that findings from this study will be useful in identifying and quantifying some important parameters which can be incorporated into such a model. Using an inter-disciplinary approach, drawing from the field of labour economics for the theoretical foundations, factors influencing the labour force behavior of nurses have been identified.

Given the overwhelming desire of "inactive" nurses to return to nursing, insight is gained regarding the necessary attitudinal and organisational changes, which the authorities need to make to facilitate the reactivation of nurses.

The attempt to describe the manpower situation in the NHS in the previous paragraphs might be considered too pessimistic. However, a reference to a study conducted by the United Kingdom Central Council for Nursing Midwifery and Health Visiting in collaboration with the Price Waterhouse Consultants describes the situation in the following terms (UKCC Press Notice 20-11-1986) there are by no means so very much different with the author's conclusions which were written a few years earlier.

In manpower terms the situation is bleak. With or without Project 2000, the NHS has to solve a nursing manpower crisis and it must start to address this straight away.

A simplified picture of Price Waterhouse's manpower model shows that the NHS needs to recruit over 30,000 additional staff each year. Currently the vast majority of recruitment (70%) comes from training and about 30% of joiners are qualified staff returning to work. Of those entering training today roughly 40% are females aged 18 with between 5 '0' levels and 2 'A' levels.

The fall in the number of qualified 18 year olds which is upon us already will reach its lowest point in 1995. Price Waterhouse calculates that if nursing contiues to recruit the same proportion of this diminishing pool, and continues to recruit in the same way from other sources - there will be a shortfall of 3,000 entrants to training per year by 1995 if qualified nursing manpower is to grow by 0.5% per year.

Case studies in the four countries of the UK allowed Price Waterhouse to add local plans for service development and their staffing implications into the equation. On this basis, achieving targets in some localities is going to be more feasible than in others. But all authorities are going to need to take action fast.

Where does Project 2000 fit? Put bluntly, it makes the manpower problems worse, at least in the short-term. Additional staff must be found to replace the students who will become supernumerary.

Recruitment must be stepped up to replace enrolled nurse training. There are staffing implications of conversion programmes for enrolled nurses, improving the conditions of teaching staff has implications for the numbers of teachers and so on.

The Price Waterhouse team did not cut any corners in calculating the true staffing needs which would result from the implementation of Project 2000's proposals. They calculated student replacement figures based on an estimate egreed with the Council as to the effective amount of student contribution to service and on a realistic level of replacement. They ensured that their figures would result in an acceptable skill mix. They worked though the proposals one by one, getting the Council to state for example, what the desired teacher/student ratio would be. They then developed a transition model - supposing Project 2000 started in 1990 and the proportion of Project 2000 students grew at 10% points per annum.

The net result of this was a projected maximum UK shortfall in entrants to training of 16,000 in 1995, again based on 0.5% growth. This would lead to a cumulative shortfall of qualified staff of 77,000 - or almost 25% of the total staff - by the year 2004.

Finally the main aspects and findings of the present thesis are summarised below in the belief that in the course of the application of "Project 2000" any suggestion based on a scientific approach would be usefull to the success of the project.

- Awareness of Nursing Personnel Officers and Nursing Authorities in general of the various techniques/methods/approaches of manpower applications.

- Collecting and analysing manpower information.

- Knowledge of the main factors influencing the decision of a woman to start and retain a job.

- Knowledge of the Prospects of the future demand of nursing personnel and employees in the caring sector in general.

- Full knowledge of the arguments concerning the discussions of funds available and controversies surrounding the financing of the Health/Caring Services.

- The world of the trade unionists and hence the way to treat them. This is better understood when comprehensive knowledge of the evolution of the trade unions movement is Known instead of evaluating them by their party/political affiliations.

More practically the usefulness of this thesis will be considerable if it succeeded to codify and varify certain characteristics of young women likely to be employed in nursing. More specifically, the person responsible for selection of applicants to nursing and managing nursing personnel will be helped if he/she takes into consideration the following.

- It is preferable for an applicant to become a nurse if she has had somebody from her immediate family as a nurse, or/and if she has followed cadet nursing lessons in a College of Further Education or/and if she is sociable ("Likes work with people")

- The existence of so many inactive nurses and their expressed desire to return to nursing which would save a lot of money for the training of new nurses.

- A methology for tracing qualified nurses whose whereabouts are not known.

- Part-time nursing has been almost monopolised by married nurses and a large proportion of married nurses are also in the inactive group.

- The presence of Pre-School children is the dominant factor negatively affecting nurses' decision to work. Secondary factors are the inflexibility of the hospitals in respect of hours they are prepared to accept.

- Nurses become increasingly available for part-time work after their youngest child reaches a year old.

- Lone mothers are more likely to work full-time when they do work.

- Almost 90% of inactive nurses would like to go back into nursing and 83% intended to return to nursing

- 90% of inactive nurses are willing to return on a part-time basis.

- Within 3 years -after they gave up work- more than 50% of inactive nurses intended to return into nursing.

- 87% of those who intended to return are ready to take refresher courses.

- More than 80% of those who intend to return are under 35 years of age.

* * * * *

BIBLIOGRAPHY

1. Abrahams, G. (1968) Trade Unions and the Law Cassell (London).

2. Ahamad, B. and Blang, M. (1973) The Practice of Manpower Forecasting (A collection of Case studies) E.S.P.C. (New York).

3. Aiken, L., Blendon, J.R., and Rogers, E.D. (1971) The Shortage of Hospital Nurses: A new perspective. American Journal of Nursing, Sept.

4. Altman, H.S. (1972) Present and Future Supply of Registered Nurses U.S. Department of Health, Education, and Welfare (Maryland).

5. American Economic Review (1980) What is Labor Supply and Do Taxes Affect it? Harvey S. Rosen. Vol. 70. No. 2.

6. American Economic Review (1980) Consequences of the Rise of the Two Earner Family: The Breakdown of the Sexual Division of Labour. Julie A. Matthaei. Vol. 70. No. 2.

7. American Economic Review (1980) Real Income Equivalence Among One-Earner and Two-Earner Families. Edward P. Lazear and Robert T. Michael. Vol. 70. No. 2.

8. Barron, R.D. and Morris, G.M. (1976) Sexual Divisions and the Dual Labour Market in D. Barker and S. Allen (eds), Dependence and Exploitation in Work and Marriage. Longmans, (London).

9. Bartholomew, D.J. (1976) Manpower Planning Penguin Modern Management Readings, (New York).

10. Bartholomew, D.J. and Morris, B.R. (ed) (1971) Aspects of Manpower Planning. p. 11, (London).

11. Beals, H.L. (1958) The Industrial Revolution 1750-1850, Frank Cass, (London).

12. Becker, G.S. (1975) Human Capital. Second Edition, N.B.E.R., (New York).

13. Bell, D.J. (1974) Planning Corporate Manpower. Longman Group Ltd., (London).

14. Benet, M.K. (1972) Secretary: An Enquiry into the Female Ghetto, Sidgwick & Jackson, (London).

15. Benham, L. (1972) "The Labour Market for Registered Nurses: A Three Equation Model", Rev. Econ. Stats., Vol. LIII, pp. 246-254.

16. Beardshaw and Ray Robinson (1990). King's Fund Institute, Virginia. New for Old? Prospects for Nursing in the 1990s.

17. Bergman, R. et. al. (1975) "Work-life of Israeli Registered Nurse", Int. J. Nurs. Stud. Vol. 23, pp. 133-168.

18. Beveridge, W.H. (1942) Social Insurance and Allied Services (Beveridge Report) HMSO, Cmnd 6404.

19. Bishop, C.E. (1973) "Manpower Policy and the Study of Nurses", Ind. Relat., 12(1), pp. 86-94, February.

20. Bloch, F. (1973) "The Allocation of Time to Market and Non-Market Work within a Family Unit". Technical Report No. 114. Inst. Math. Studies Soc. Sci., November. (Stanford University).

21. Blyton, P. and Hill, St. (1981) National Westminster Bank Quarterly Review, November, (London).

22. Bognanno, M.F. (1969) An Economic Study of the Hours of Labour Offered by the Registered Nurses. Doctoral dissertation, University of Iowa, (Iowa).

23. Bognanno, M.F. et. al. (1974) "The Short Run Supply of Nurses' Time", J. Hum. Res., 9(1), Winter, pp. 80-94.

24. Bolton Community Health Council (1982) Unemployment and Health. (Report of a seminar organised by Bolton).

25. Bowen, W.G. and Finegan, J.A. (1967) The Economics of Labour Force Participation, Princeton University Press, (New Jersey).

26. Bradshaw, U. (1980) Equity and Family Incomes - Occasional Paper 5 - An Analysis of Current Tax and Benefit Policy - Study Commission on the Family. Witley Press Limited, (London).

27. Brakett, M.E. and Spaney, E. (1957) "What Nurses Like and Dislike about their Jobs", Modern Hospital, 89, pp. 52-58.

28. Briggs Committee (1972) Report of the Committee on Nursing. H.M.S.O., London.

29. Broverman, I.K. et. al. (1972) "Sex-Roles Stereotypes: A Current Appraisal", J. Social Issues, 28(2) pp. 59-78.

30. Bryant, D.T. (1965) A survey of the Development of Manpower Planning. British Journal of Industrial Relations. Vol. 3, pp. 279-90.

31. Cain, G.C. (1966) Married Women in the Labour Force, Chicago: University of Chicago Press.

32. Cain, G.S. and Watts, M.W. (1974) Income Maintenance and Labour Supply, Markham, (Chicago).

33. Cain, G.S. et. al. (1974) "The Labour Supply Response of Married Women: Husband Present", J. Hum.Res., 9(2), Spring, pp. 201-222.

34. CASPE (Research Project) (1981) Cost Planning for Nursing Services (A Report of a Seminar) King's Fund College.

35. Catania, J.J. (1964) "Why Do Nurses Change Jobs? "Hospital Management, 97 (Aug.) pp. 93-94.

36. Chiplin, B. and Sloane, J.P. (1976) Sex Discrimination in the Labour Market, Billing and Sons Ltd. (London).

37. C.I.S. Information Paper No. 8 (1972) The Analysis and Control of Labour Turnover. Department of Employment - Industrial Division (London).

38. Clark, A. (1968) The Working Life of Women in the Seventeenth Century, G. Routledge & Sons, London, (First published in 1919).

39. Cole, G.D.H. and Postgate, R. (1961) The Common People 1746-1946, Methuen, London.

40. Coser, A.L. (1977) Masters of Sociological Thought: Harcourt Brace Jovanovich, Inc. (New York).

41. Cohen, et. al. (1970) A Micro Model of Labour Supply. BLS Staff Paper 4, Washington D.C.: U.S. Government Printing Press.

42. Concepcion, M.B. (1974) "Female Labour Force Participation and Fertility", Ind. Lab. Rev., May-June, 109(5,6), pp. 503-517.

43. Cooper, M.H. and Culyer, A.J. (1973) Health Economics: Selected Readings. (eds.) Penguin Books.

44. Corina, J. (1972) Labour Market Economics. A short survey of recent theory. Heinemann Educational Books (London).

45. CSE Pamphlet No. 1 (1978) The Labour Process and Class Strategies, Whitstable Litho Ltd. (London).

46. CSO (1980) Regional Statistics 15. A Publication of the Government Statistical Service, HMSO (London).

47. DEG (July 1979) Department of Employment Gazette (London).

48. DEG (February 1982) Department of Employment Gazette (London).

49. DEG (March 1982) Department of Employment Gazette (London).

50. DEP (1968) Department of Employment and Productivity. Company Manpower Planning Papers No. 1 (London).

51. Derck J. Dean (1987). Royal College of Nursing. Manpower Solutions.

52. Department of Education & Science (1980) Continuing Education - Post-experience vocational provision for those in employment, (London).

53. Department of Employment (DE) (1976) British Labour Statistics. A publication of the Government Statistical Service HMSO, (London).

54. Department of Employment (1968) Company Manpower Planning Manager Papers No. 1 (London).

55. D.H.S.S. (1977) Absence from Work. Second report of joint DHSS/NHS Sub-Group. (London).

56. D.H.S.S. (1979) Health Trends No. 3 Vol. 11 (London).

57. D.H.S.S. (1980) Management Services and the Nurse. A Seminar Report (Harrogate).

58. Dilley Carol (1989). Continuity Professional Education for Qualified Nurses Working in Private Nursing Homes. A Report of A Surrey, University of Surrey.

59. Doeringer, P.B. and Piore, M.J. (1971) Internal Labour Markets and Manpower Analysis, Heath Lexington Books, U.S.A.

60. Dominian, J. (1980) Marriage in Britain 1945-80. Occasional Paper Number 1. Study Commission on the Family. Witley Press Ltd. (Hunstanton).

61. Donald, B.L. et. al. (1971) The Analysis of Hospital Manpower Problems. Department of Sociology and Social Administration, University of Southampton.

62. Dowdall, J.A. (1974) "Structural and Attitudinal Factors Associated with Female Labour Force Participation", Soc. Sci.Q., 55(1), June, pp. 121-130.

63. Doyal, L. with Pennel, I. (1979) The Political Economy of Health. Pluto Press (London).

64. Economic Journal (Dec. 1980 Male-Female Wage Differentials in Great Britain: Is Marriage an Equal Opportunity? C. Greenhalgh. Cambridge University Press.

65. Economist (1969) An Intellectual Revolution. 6 September.

66. Edinburgh Group Report (1969) Perspectives in Manpower Planning. Institute of Personnel Management, (London).

67. Ehrenreich, B. and English, D. (1978) Complaints and Disorders: The Sexual Politics of Sickness. Writers and Readers Publishing Co-op.

68. Elliot, J. (1978) Conflict or Co-operation? The Growth of Industrial Democracy. Kogan Page (New Jersey, U.S.A).

69. Employment Gazette (July 1980) Measuring Labour Slack. Angus Maddison. (London).

70. Etzkowitz, H. (1971) "The Male Sister: Sexual Separation of Labour in Society", Journal of Marriage and the Family.

71. Evans, A. (1980) A Guide to Manpower Information. Institute of Personnel Management (London).

72. Everest, et. al. (1979) What Happens to Maudsley Nurses? A Follow-up Study. Int. J. Nurs. Stud. Vol. 16 pp. 253-266.

73. Equal Opportunities Commission (1979) Education of Girls (Mancester).

74. Equal Opportunities Commission (1981) Higher Education into the 1990's (Manchester).

75. Federspiel, L. et. al. (1969) "Retraining Inactive Nurses: Survey and Analysis", Southern Hospitals, 37(2), pp. 10-16.

76. Field Frank (MP) (1980) Fair Shares for Families (The need for a Family impact statement). Study Commission on the Family. Witley Press Ltd.

77. Fleisher, B.M. (1970) Labour Economics: Theory and Evidence. Prentice Hall.

78. Fogarty, M. et. al. (1971) Women in Top Jobs, George Allen and Unwin, (London).

79. Friedman, M. (1977) Unemployment versus Inflation? The Institute of Economic Affairs, (London).

80. Friedlander, F. and Walton, E. (1973) "Positive and Negative Motivatios towards Work", Admn. Sci.Q., pp. 194-207.

81. Fuchs, R. (1971) "Different Meanings of Employment for Women", Hum. Relat., Vol. 24(6).

82. Garbutt, D. (1969) Training Costs (with reference to the Industrial Training Act). Gee & Co. (Publishers Ltd., (London).

83. Garner, L. (1979) The NHS: Your Money or Your Life. Penguin Books (London).

84. George V. and Wilding, P. (1972) Motherless Families, Routledge & Kegan Paul (London).

85. Ginzberg. E. (1966) The Development of Human Resources, McGraw Hill Inc.

86. Goodman, J.F.B. (1970) The Definition and Analysis of Local Labour Markets: Some Empirical Problems. B.J.I.R. Vol. 8 No. 2pp. 179-196.

87. Graham, T.H. (1979) Human Resources Management. Mac-Donald and Evans Ltd. Plymouth.

88. Gramm, W.L. (1974) "The Demand for the Wife's Non-Market Time", Southern Econ.J., 41(1) July pp. 124-133.

89. Gramm, W.L. (1975) "Household Utility Maximisation and the Working Wife". Amer.Econ.Rev., 65(1), March, pp. 99-100.

90. Gray, M. (1976) Angels with no Muscle. Health and Social Service Journal. 29 October. p. 1934.

91. Greenhalgh, C. (1977) "A Labour Supply Function for Married Women in Great Britain" Economica, Vol. 44, pp. 249-265, Nos. (173-176).

92. Grimold, R.C. and Marshal KT 1977 Manpower planning models North Holland ORCA, Saul Z. Gassed.

93. Gronau, R. (1973) "The Intrafamily Allocation of Time: The Value of Housewives Time", Amer.Econ.Rev., 63(4), Sept., pp. 634-651.

94. Guardian (1978) 8 May.

95. Guardian (1980) 24 November.

96. Guardian (1982) 11 February.

97. Halsey, A.H. (1978) Change in British Society, Oxford University Press.

98. Hamilton, H. (1965) History of the Homeland, Allen & Unwin (London).

99. Hammond, J.L. and Hammond, B. (1919) The Town Labourer 1760-1832, Longmans, Green & Co., (London).

100. Hayes, J. and Nutman, P. (1981) Understanding the Unemployed - The psychological effects of unemployment - Tavistock Publications (London and New York).

101. Hayghe, H. (1973) "Labour Force Activity of Married Women", Mon.Lab.Rev., 96(4) April. pp.31-36.

102. Hayghe, H. (1976) "Families and the Rise of Working Wives - an Overview". Mon.Lab.Rev. May, 99(5), pp. 12-19.

103. Hedges, J.N. and Barrett, J. (1972) "Working Women and the Division of Household Tasks", Mon.Lab.Rev., 95(4), April. pp. 9-14.

104. Harris, C.C. (1969) The Family, Allen & Unwin, (London).

105. Herzberg, F. (1974) Work and the Nature of Man, Grosby Lockwood Staples, (London).

106. Hill, G. (1896) Women in English Life from Mediaeval to Modern Times, Richard Bentley & Sons, (London).

107. Hockey, L. (1976) Women in Nursing. A descriptive study. Hodder and Stoughton, (London).

108. H.S.S.J. (March 1982) Health and Social Services Journal (London).

109. Hughes, B.D. (1971) Aspects of Manpower Planning, English Universities Press and American Elsevier. D.J. Bartholomew and B.R. Morris (eds.) (London).

110. Hutt, A. (1975) "British Trade Unionism". Laurence & Wishart, (London).

111. Hyman, R. (1972) Strikes, Fontana.

112. IMS (1977) Redundancies and Displacement: A Study of the Maidstone Labour Market.

113. IMS (1981) The IMS Approach to Manpower Planning. IMS Report No. 8. University of Sussex (Brighton).

114. International Institute for Labour Studies (1979) Labour and Society Quarterly Journal, Geneva, Switzerland.

115. International Labour Office (1967a) Recent Events and Developments Affecting Salaried Employees and Professional Workers, (Geneva).

116. International Labour Office (1967b) The impact of Social and Economic Developments on Working and Living Conditions in the Distributive Trades, (Geneva).

117. International Labour Office New forms of work organisation, (Geneva).

118. International Labour Office (1979) International Labour Review 1979 Vol. 118, No. 1, (Geneva).

119. Institute of Personnel Management (1980) Employee Potential - issues in the development of women (London).

120. Irvine. E1. (1980) The Family in the Kibbutz - Occasional Paper 4 - Study Commission on the Family. Witley Press Ltd., (Hunstanton).

121. Jones. E.R. (1965) New Estimates or Hours per Week and Hourly Earnings: 1900-1957. Rev.Econ.Stats. 45, pp. 175-182.

122. Kraft, A. (1973) Preference Orderings as Determinants of Labour Force Behaviour of Married Women, Western Econ. J., ii(3), Sept. pp. 270-284.

123. Kelsall, R.K. (1979) Aspect of Modern Sociology: the social structure of modern Britain - Population. 4th ed. Longman Group Ltd., (London).

124. Keynes, J.M. (1961) The general theory of employment, interest and money. MacMillan (London). (first pulbished in 1936).

125. King, A.G. (1978) "Industrial Structure, the Flexibility of Working Hours, and Women's Labour Force Participation", Rev.Econ.Stats., August, 60(3), pp. 399-407.

126. King's Fund Institute (1989). Efficiency in the NHS. Occasional Paper (2).

127. Knoft, L. (1972) From Student to RN - A Report of the Nurse Career - Pattern Study - U.S. Department of Health, Education, and Welfare (Maryland, USA).

128. Lagergren, M. (1982) The Costly Care-Millstone for Sheet-Anchor? Secretariat for Future Studies, (Stockholm).

129. Laslett, R.E. (1972) A Survey of mathematical methods of estimating the supply of and demand for manpower. Engineering Industry Training Board. Occasional Paper No. 1.

130. Landsberger, S. (1973) "Children's Age as a Factor Affecting the Simultaneous Determintation of Consumption and Labour Supply". Southern Econ.J., 40(2), Oct., pp. 279-283.

131. Lee, C.H. (1979) British Regional employment statistics, 1841-1971, Cambridge University Press, (London).

132. Lee, K. and Mills, A. (1982) Policy-Making and Planning in the Health Sector Croom Helm, (London).

133. Leisure Consultants (1982) The choices for 1991-2001. Lint Growis, Focearth, (Suffolk).

134. Leuthold, J.H. (1978) "The Effect of Taxation on the Hours Worked by Married Women". Industrial and Labour Relations Review. 4 July Vol. 31, pp. 520-525.

135. Levin, I.R. (1978) Statistics for Management. Prentice-Hall Inc. Englewood Office, (N.J., USA).

136. Lewis, B.R. (1979) The Marketing of Nursing. Ph.D. Thesis. Department of Management Sciences, UMIST.

137. Lewis, C.G. (ed.) (1969) Manpower Planning. A bibliography. The English Universities Press Ltd., (London).

138. Long, C.D. (1958) The Labour Force Under Changing Income and Employment. N.B.E.R. Princeton University Press, (N.J. Princeton).

139. Long, A.F. and Mercer, G. (eds.) (1981) Manpower Planning in the NHS. Gower.

140. Long, J.E. and Jones, E.B. (1980) Labour Force Entry and Exit by Married Women: A Longitudinal Analysis. Rev.Econ.Stats. Vol. IXII No. 1, Febr.

141. Lyons, T.F. (1965) Nursing Attitudes and Turnover: The Relation of Social-Psychological Variables to Turnover, Propensity to Leave and Absenteeism among Hospital Staff Nurses. Doctoral dissertation. Industrial Relations Centre, Iowa State University. (Ames, Iowa).

142. Macdonald and Evans Ltd., ed. (1979) Human Resources Management. H.T. Graham. Second edition.

143. MackKay, D.I., Boddy, D., Brack, K., Piack, J. and Jones, N. (1971) Labour Markets, Allen and Unwin, London.

144. Manis, G.J. (1976) Analysing Social Problems, Praeger Publishers, (New York).

145. Manpower Papers No. 1 Company Manpower Planning, Department of Employment and Productivity, HMSO, (London).

146. Manpower Paper No. 12 (1975) Women and Work: Overseas Practice. Department of Employment, HMSO, (London).

147. Manpower Planning Series No. 5 (1982) A Maplin Sub-Group Report -Presentation of Data Handbook-

148. Manpower Services Commission (MSC) (1976) Annual Report - Towards a Comprehensive Manpower Policy, HMSO, (London).

149. Manpower Sevices Commission (MSC) (1977) Annual Report, 1976-77, HMSO, (London).

150. Manpower Services Commission (MSC) (1977) Review and Plan, 1977, HMSO, (London).

151. Manpower Services Commission (MSC) (1979) Annual Report, 1978-79, HMSO, (London).

152. Manpower Services Commission (MSC) (1980) Annual Report, 1979-80, HMSO, (London).

153. Martin J.P. and Jill Mackean (1988). Can we Keep Nurses in the Health Service? Institute for Health Policy Studies.

154. Marks Linda (1988). Promoting Better Health? An Analysis of the Government's Programme for Primary Health Care. King's Fund Institute.

155. Maxwell J. Robert (1987). Shaping the NHS for the 1990s. (The Gloucester Lectures) (1987).

156. McCloskey, J. (1974) Influence of Rewards and Incentives on Staff Nurse Turnover Rates, Nurs.Res., 23(3), May-June.

157. McCormick ed. (1968) The Labour Market: Penguin Modern Economics Readings.

158. McCreadie, J.J. and Phelan, B.K. (1947) A Study of Labour Turnover. Bull.Ind.Psychol.Person.Practice, 3. pp. 12-17.

159. McGurie, J. (1969) Threshold to Nursing: A Review of the Literature of Recruitment to and withdraw from Nurse Training Programmes in the U.K., 9 Bell and Sons Ltd., (London).

160. McNally, B.J. (1975) Women in the Labour Force. Mon.Lab.Rev., 98(1), (Jan.), pp. 17-24.

161. McNay, M. and Poud, C. (1980) Low Pay and Family Poverty. Study Commission on the Family, Witley Press Ltd., (Hunstanton).

162. McNabb, R, (1977) The Labour Force Participation of Married Women. The Manchester School of Economic and Social Studies. Vol. XLV No. 3, Sept.

163. Mead, M. (1953) The Contemporary American Family as an Anthropologist Sees it. In Judson T. Landis and Mary G. Landis (eds.), Readings in Marriage and the Family, Prentice-Hall, (New Jersey).

164. Mercer, G. (1979) The Employment of Nurses: Nursing Labour Turnovers in the NHS. Croom Helm, (London).

165. Millett, K. (1972) Sexual Politics. Rupert Hart-Davis, (London).

166. Mincer, J. (1962) Labour Force Participation of Married Women. In Aspects of Labour Economics, N.B.E.R., Princeton University Press, (Princeton).

167. Mincer, J. (1963) Market Opportunity Costs, and Income Effects. C. Crist (ed.) Measurement in Econmics, pp. 67-82. Stanford University Press. (Stanford).

168. Ministry of Reconstruction (1944) "Employment Policy", Cmd 6527.

169. Moores, B. (1971) Reallocation of Student Nurses to Match Patient Requirements in Different Hospitals on the Assumption that a Shortage of Staff Leads to Increased Wastage. Doctoral dissertation, The John's Hopkinns University, (Baltimore, Maryland, USA).

170. Moores, B. (1979) The cost and Effectiveness of Nurse Education. Nursing Times, Vol. 75, No. 16.

171. Moores, B. and Moult, A. (1979) The Relationship between the level of Nurse Staffing, and the Patterns of Patient Care and Staff Activity. J. of Advanced Nursing. Vol. 4, pp. 299-306.

172. Moores et. al. (1971) Trends in Labour and Leisure. Mon.Lab.Rev., 95(4), June. pp. 45-52.

173. Moore, F.L. The nature of manpower planning. ed. University of British Columbia.

174. Morgenstern, R.D. and Hamovitch (1976) Labour Supply of Married Women in Part-Time and Full-Time Occupations. Ind.Lab.Relat.Rev., October, 30(1), pp. 59-67.

175. Moroney, J.M. (1980) Facts from Figures. Penguin Books (Reading).

176. Morrison, R.L. (1962) Self-Concept Implementation in Occupation Choice, J.Counsel.Psychol. Vol 9.

177. Moult, A. (1977) A Study of Different Nurse Staffing Levels and Their Relationships with Nurse Activity and Patterns of Patient Care. Master's dissertation, Department of Mangement Sciences, U.M.I.S.T.

178. MSC (1976) Manpower Service Commission, HMSO, (London).

179. MSC (1977) Manpower Services Commission Review and Plan, HMSO, (London).

180. MSC (1979) Manpower Services Commision Annual Report 1978-79, HMSO, (London).

181. MSC (1980) Manpower Services Commission Annual Report 1979-80, HMSO, (London).

182. Musgrave, P. (1967) Towards a Sociological Theory of Occupational Choice, Social.Rev., Vol. 15(1).

183. Myers, L.A. and Schultz, G.P. (1948) Pattern of Mobility of Skilled Workers and Factors Affecting Their Occupational Choice, Six Cities: 1940-1951, M.I.T. Industrial Relations Section, Mass.

184. NALGO (1981) The Unequal Health of the Nation - A TUC Summary of the Black Report - (London).

185. National Economic Development Office (NEDO) (1968) A Study of Labour Turnover (London).

186. National Economic Development Office (NEDO) (1968) Costing your Labour Turnover (London).

187. Naff, W.F. (1966) Victorian Working Women, Allen & Unwin, (London) (First published in 1929).

188. Nie, N.H. et. al. (1975) Statistical Package for the Social Sciences, 2nd Edition, McGraw Hill Book Co.

189. Nightingale, F. Notes on Nursing What it is and what it is not, (First published in 1860) Dover Publications Inc, 1969 edition.

190. Nursing Times (1981) The role and function of the registered nurse, 19/29 February, No. 8, Vol. 77.

191. Oakley, A. (1980) House Wife (High Value-Low Cost) Penguin Books Ltd., (Harmondsworth, Middlesex).

192. OECD (1962) Forecasting Educational Needs for Economic and Social Development. The Mediterranean Regional Project, (Paris).

193. OECD (1965) Wages and Labour Mobility, (Paris).

194. OECD (1981) Organisation of Econonmic Cooperation and Development, Observer No. 109 (March).

195. Ohlbaum, L.S. (1971) "Self-concepts, Value Characteristics and Self-Actualisation of Professional and Non-Professional Women". Unpublished Doctoral Dissertation. U.S. International University.

196. Owen, J.D. (1971) "The Demand for Leisure", J. Polit. Econ., 79, pp. 196-206.

197. Papakyriakou, J.K. (1977) A Quantitative Examination of some of the factors relevant to the Determination of Manpower Planning Policy for Midwives at Health District Level. M.Sc. Thesis. Department of Management Sciences, UMIST.

198. Parnes, H.S. et. al. (1970) Dual Careers: A Longitudinal Study of Labour Market Experiences of Women (Vol. 1) Manpower Research Monograph 21, Government Printing Office. (Washington D.C.).

199. Patients First (Dec. 1979) Consultative paper on the structure and management of the NHS in England and Wales, HMSO, (London).

200. Pinchbeck I. (1969) Women Workers and the Industrial Revolution 1750-1850, Routledge & Kegan Paul, (London).

201. Pinelli, A. (1971) "Female Labour and Fertility in Relation to Social and Economic Conditions", Hum. Relat. Vol. 24(6) pp. 603-611.

202. Populi (1979) Journal of the United Nations Fund for Population Activities (New York).

203. Practical Manpower Planning for Nurses (1974) Scottish Home and Health Department Report No. 2.

204. Price, I.J. and Mueller, W.C. (1981) Professional Turnover: The Case of Nurses. SP Medical and Scientific Books, (New York).

205. Price Waterhouse (1988).
Nurse Retention and Recruitment. A matter of priority.

206. Psathas, G. (1962) "Towards a Theory of Occupational Choice for Women", Sociol.Soc.Res., Vol. 52, No. (2).

207. RCN (UK) (1985). Annexe of Research Studies for Commission on Nursing Education. The education of nurses: a new dispensation.

208. Ramsden, G.A. and Skeet, M.H. (1967) Marriage and Nursing: A Survey of State Registered and State Enrolled Nurses. National Florence Nightingale Memorial Committee of Gt. Britain and Northern Ireland. (London).

209. Rapport, R. & Rapport R.N 1974 "The dual career family" Human Relations Journal Vol. 22.

210. Rees, A. (1973) The Economics of Work and Pay. Harper and Row.

211. Reese, D.E. (1964) "The Inactive Nurse", Amer.J.Nurs., 64 (Nov.) pp. 124-127.

212. Resource Allocation Working Party (1975) D.H.S.S., HMSO, (London).

213. Review of Economics and Statistics (Feb. 1980) Labor Force Entry and Exit by Married Women: A Longitudinal Analysis, James E. Long and Ether B. Jones. Vol. LXII. No. 1.

214. Robertson, D.J. and Hunter, L.C. (eds.) (1970) Labour Market Issues of the 1970s. Oliver and Boyd, Edinburgh.

215. Robinson, Derek. (1968) Labour Mobility Wage drift, fringe benefits and manpower distribution. OECD, (Paris).

216. Robinson, D. (1974) Research into Labour Market Behaviour, OECD, (Paris).

217. Robinson Ray and Ken Judge (1988). Public Expenditure and the NHS:: Trends and Prospects. King's Fund Institute.

218. Rosen, H.S. (1976) "Tax Illusion and the Labour Supply of Married Women". Rev.Econ.Statist. May, 58(2), pp. 167-172.

219. Rossiter, C. (1980) Women, Work and the Family. A report on a survey of "Townswoman readers. Study Commission on the Family (London).

220. Rottenberg (1956) In the Labour Market (ed.) B.J. McCormick, Penguin Books.

221. Salder, J. and Whitworth, T. (1975) Reserves of Nurses. Office of Population Censuses and Surveys, HMSO, (London).

222. Sapsford, D. (1981) Labour Market Economics. George Allen & Unwin, (London).

223. Scottish Home and Health Department. Nursing Manpower Planning Reports. Nos. 1,2 and 3.

224. Scotish Home and Health Department (1967). Nurses' work in in hospitals in the N.E Region. (ShSS No.3 Edinburgh.

225. Shipp, P.J. and Richards-Carpenter, C. (1980) Institute of Manpower Studies. University of Sussex.

226. Singh, B,B, (1981) A Labour Force Participation Study Amongst Those Nurses Qalifying from Four Schools of Nursing Over Twenty-One Year Period. M.Sc. Thesis. Department of Management Sciences, UMIST.

227. Sketris Ingrid (1988). Health Service Accrediation - An International Overview. King's Fund Centre.

228. Sleigh, J., Boatwright, B., Irwin, P. and Stanyon, R. (1979) The Manpower Implications of Micro-Electronic Technology, HMSO, (London).

229. Smith, A.R. ed. (1970) Some Statistical Techniques in Manpower Planning, (HMSO), London.

230. Smith, A.R. (1971) The philosophy of manpower planning. Personnel Review Vol. 1. No. (Autumn) pp. 44-45.

231. Smith, A.R. (1971) Developments in Manpower Planning: Manpower Planning for Canadians, An Athology. Larry F. Moore. University of British Columbia.

232. Smith, A.R. (1976) The Philosophy of Manpower Planning (In Manpower Planning (ed.) D.J. Bartholomew, Penguin Books).

233. Social Trends 10 Central Statistical Office, HMSO, (London), 1980.

234. Social Trends 12 Central Statistical Office, HMSO, (London), 1982.

235. Spencer, G.G. (1973) Determinants of Labour Force Participation of Married Women: A Micro Study of Toronto Households. Cna.Econ.J., 6(2), May, pp. 222-238.

236. Stein, B. (1976) Work and Welfare in Britain and the USA. The MacMillan Press Ltd., (London).

237. Steward, M. (1967) "Keynes and After", Harmondsworth, Mddx: Penguin Books.

238. Stone Richard (1970) Mathematical Models of the Economy and other Essays. Chapman and Hall Ltd., (London).

239. Study Commission on the Family (Oct. 1980) Fair Shares for Families. The Need for a Family Impact Statement. Frank Field MP, Occasional Paper No. 3. 231 Baker St., (London).

240. Study Commission on the Family (Feb. 1981) Family Finances. An Interim Report from the Working Party on the Financial Circumstances of Mailty. 231, Baker St., (London).

241. Study Commision on the Family (Sept. 1980) Happy Families? 231, Baker St., (London).

242. Swan, N. (1974) The Response of Labour Supply to Demand in Canadian Regions. Can.Econ.J., August, 7(3) pp. 418-433.

243. Timbury, M.C. and Timbury, G.C. (1971) "Glasgow Women Medical Students: Some Facts and Figures", British Medical Journal.

244. Torrington D. and Chapman J. (1979) Personnel Management, Prentice Hall International.

245. Tun, A. (1977) Aspects of Nurse Manpower Planning with Particular Reference to the Non-Participation of Married Nurses in the Labour Force. Ph.D. Thesis. Department of Management Sciences, UMIST.

246. UKCC (1986). Project 2000, A new Preparation for Practice.

247. Vincens, J. (1974) Research into Labour Market Behaviour. OECD, (Paris).

248. Waite Richard and Rosemary Hutt (1987). Attitudes, Jobs and Mobility of Qualified Nurses:: A report for the RCN IMS Report No.130.

249. Weber, M. (1967) The Protestant Ethic and the Spirit of Capitalism. Allen and Unwin, (London).

250. Werneke, D. (1978) "The Economic Slowdown and Women's Employment Opportunities". International Labour Review. Jan-Feb. Vol. 117 pp. 37-52.

251. White, S. (1968) "The Process of Occupational Choice", Brit.J.Ind.Relat., Vol. 6, No. 2, pp. 166-184.

252. W.H.O. (1975) A Study of Manpower Planning for Nurses (South-East Asia Region).

253. W.H.O. (1979) Nursing and Midwifery in the context of Health Care Delivery Systems, Report on a Working Group, (Brussels).

254. W.H.O. (1980) Nursing Services Report on a WHO Symposium. Regional Office for Europe, (Copenhagen).

255. W.H.O. (1980) Public Health in Europe. Information Systems for Health Services. Regional Office for Europe, (Copenhagen).

256. Wilcocks, A.J. (1967) The Creation of the National Health Service. Humanities Press, (New York).

257. Wild, R. and Hill, A.B. (1970) "Women in the Factory. A Study of Job Satisfaction and Labour Turnover" Institute of Personnel Management, (London).

258. W.H.O. (1979) A position paper on nursing. D.C. Hall. Regional Office for Europe, (Copenhagen).

259. W.H.O. (1980) Information Systems for Health Services. Regional Office for Europe, (Copenhagen).

260. W.H.O. (1980) Nursing Services. Report on a WHO Symposium, Regional Office for Europe, (Copenhagen).

261. Worsley, P. (1978) (ed.) Introducing Sociology. Penguin Books Ltd., (Harmondsworth, Middlesex).

262. Wright, J.D. (1978) "Are Women Really Satisfied Evidence from Several National Surveys". Journal of Marriage and the Family Vol. 40, No. 2, (May).

263. Study Commission on the Family (Nov. 1980) The Family in the Kibbutz, Occasional Paper No. 4, 231, Baker St. (London).